

**DAV Institute of Engineering & Technology**  
**Jalandhar (Punjab)**

# **SELF-STUDY REPORT**

**For**

**Accreditation (Cycle-1)**

**2016-17**

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## **PREFACE**

It is a matter of immense pride for me, as the head of the institution, to present the Self Study Report (SSR) of DAV Institute of Engineering and Technology, Jalandhar that has been serving the cause of Technical Education for the last 16 plus years. The Institute is managed by DAV College Trust & Management Society, New Delhi that got established way back in the year 1886 and is managing more than 900 educational institutions in the country. The institute has matured as one of the most preferred Engineering Institutes in the state of Punjab. Today, its name is synonymous with the quality professional education.

My first and foremost concern is to uphold the 131 years old legacy and prestige of DAV and to elevate the Institute to a level, so that it becomes relevant in today's competitive world. The institute has envisioned keeping pace with the changing social needs while trying to achieve the global standards of education.

NAAC has provided us with an opportunity to assess, introspect, evaluate and further improve upon our performance in the field of professional education by understanding the latest requirements as per global scenario. Seven criteria provided by NAAC to understand and evaluate our performance have literally helped us in scrutinizing our strengths and weaknesses. Writing of the Self-Study Report of the Institute has taken us one step further in that direction. The process has been long and tedious, but has yielded outstanding results. The staff of the institute has had marathon discussions, meetings and brain storming sessions to get insight into new ideas, collect information and to give a final shape to the report.

Finally, as head of the institution, I can envisage the path that the institution is supposed to tread. We present ourselves for assessment and accreditation and reiterate our commitment to come true to the expectations from all the stake holders and visiting NAAC Peer team.

Thank You.

**Dr. Manoj Kumar**  
**Principal**  
**DAV Institute of Engineering & Technology**  
**Jalandhar**

N<sup>o</sup> 015315



0181-2343400, 2207650  
Tel/Fax : 0181-2205851,2205852  
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www.davietjal.org

# D.A.V. INSTITUTE OF ENGINEERING & TECHNOLOGY (DAVIET)

KABIR NAGAR, JALANDHAR. - 144008  
(ISO 9001:2008 Certified)

Approved by : All India Council for Technical Education, New Delhi & Govt. of Punjab  
Affiliated to : Punjab Technical University, Jalandhar  
Managed by : DAV College Managing Committee, New Delhi

Ref. No. DAVIET/

Dated.....

## Declaration by the Head of the Institution

I certify that the data included in this Self-Study Report (SSR) are true to the best of my knowledge.

This SSR is prepared by the institution after internal discussions, and no part thereof has been outsourced.

I am aware that the Peer Team will validate the information provided in this SSR during the Peer Team visit.

Dr. Manoj Kumar  
Principal  
DAV Institute of Engineering & Technology  
Jalandhar

Place : Jalandhar

Date : 23<sup>rd</sup> March, 2017

N<sup>o</sup> 015308



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Ref. No. DAVIET/

Dated.....

## Certificate of Compliance

(Affiliated/Constituent/Autonomous Colleges and Recognized Institutions)

This is to certify that DAV Institute of Engineering & Technology, Jalandhar fulfills all norms

1. Stipulated by the affiliating University and/or
2. Regulatory Council/Body [such as UGC, NCTE, AICTE, MCI, DCI, BCI etc.] and
3. The affiliation and recognition (if applicable) is valid as on date.

In case the affiliation/recognition is conditional, then a detailed enclosure with regard to compliance of conditions by the institute will be sent.

It is noted that NAAC's accreditation, if granted, shall stand cancelled automatically, once the institution loses its University affiliation or Recognition by the Regulatory Council, as the case may be.

In case the undertaking submitted by the institution is found to be false then the accreditation given by NAAC is liable to be withdrawn. It is also agreeable that the undertaking given to NAAC will be displayed on the college website.

Dr. Manoj Kumar  
Principal

Date : 23<sup>rd</sup> March, 2017

Place : Jalandhar

## **EXECUTIVE SUMMARY**

DAV Institute of Engineering & Technology (DAVIET) Jalandhar got established in the year 2000, under the aegis of DAV College Trust & Management Society, New Delhi. The Institute is approved by AICTE and affiliated to IKG Punjab Technical University, Jalandhar. The Institute is located in the heart of city on a prime piece of land adjacent to DAV College, Jalandhar on the left side of Jalandhar-Amritsar National Highway and is spread over an area measuring 11.6 acres possessing extremely beautiful landscape with a running canal on its back and historical Burlton Park on its front. In a short span of time, the Institute has been able to make a niche for itself in the field of Technical Education in the state of Punjab. The Institute is one of the most preferred Institutes in the state. The Institute has been bestowed with 'Best Engineering College Award' by the affiliating University i.e. IKG Punjab Technical University.

In order to revisit its vision and mission, the Institute organized a two-day deliberation session in September, 2015. In this workshop, all the stakeholders viz. management, faculty, students, alumni and industry were actively involved. During this session a SWOC analysis of the Institute was carried out. The Strengths, Weaknesses, Opportunities and Challenges are given in the following paragraphs.

### **DAVIET - SWOC Analysis**

#### **STRENGTHS**

- IMC-RBNQ Award from Industry for Academic Excellence in 2007.
- Bestowed with "Best Engineering College" of Punjab Technical University, Jalandhar in the year 2013.
- Ranked 10<sup>th</sup> amongst "Top Engineering Colleges of Excellence" in India as per CSR-GHRDC Engineering College Survey 2016.
- Wipro Accredited for Placements & Project Activities since 2009.
- ISO 9001:2008 certified Institute.
- First Preference Institute for Admissions amongst all PTU affiliated colleges being an innovative, creativity-oriented, enterprising and globally recognised Engineering Institute.
- Governed by the Visionary Luminaries of DAV College Managing Committee New Delhi – the oldest and largest non-government educational organization in the country.
- DAVIET has created 07 Patents and ours is the first Institute to establish a Research Centre of Nanotechnology in the state of Punjab.
- MoUs with institutions of National Importance viz. NIT Jalandhar, NIT Hamirpur, NIT Delhi etc. and the corporate giants like CISCO, IBM, Microsoft, Oracle, Rsoft etc.

- Galileo Meridian Computerized and Digitized Library with E-Resources/ learning for students & faculty through IEEE Xplore, McGraw Hill Access Library, Access Method for Science Direct, Access Methods for J-Gate, ASTM collection list, Springer Link, Access Methods for ASCE Journals, EBSCO and NPTEL Video Lectures.
- DAVIET publishes The Literati – A Transnational Peer Reviewed Research Journal devoted to English Language & Literature.
- Excellent Faculty Retention Ratio i.e. 98.02% coupled with implementation of 6<sup>th</sup> Pay Recommendations w.e.f. 01.01.2006.
- Sponsorship to faculty and students to present research papers in international conferences abroad.
- Well qualified, synergized and Research-oriented Faculty; of which 24 are Ph.D.; 50 are pursuing Ph.D. and 20 with PG qualification in Sciences/Humanities/Management etc., with most of the Ph.D. Qualified Faculty registered as Research Supervisors with Punjab Technical University, Jalandhar.
- Centre of Incubation and Entrepreneurship promoting pan DAV Business start-ups involving the DAV Alumni.
- More than 50 students from DAVIET cleared GATE examination in the year 2014 – the ultimate test of an engineering graduate for seeking higher education and employment with PSUs.
- Excellent Placement Track Record with offered pay package up-to Rs. 20.5 lakhs per annum.
- Excellent Track Record of Achievements in co-curricular and extra-curricular activities – we are the over-all champions in University inter-zonal youth festivals and hold winners/runners-up position in University Sports every year.
- Well-knit programme for moral and value based education.

## **WEAKNESSES**

- Industry-Institution Interaction needs to be strengthened further.
- Senior Faculty with industry experience/background is less in number on account of non-availability thereof.
- The College is affiliated to the IKG-Punjab Technical University and hence has limitations on up-gradation of the curriculum as per the requirement of the Industry.
- Consultancy and extension activities need enhancement.
- Technology incubation to transfer the technology to industries.

- Less GATE-qualified students available for our PG courses currently.
- Focus on Research & Development, Consultancy, Training needs to be enhanced at institutional level through collaborations with the other Research based organizations.
- International academic tie-ups need to be strengthened at institutional level.
- Lack of Research Project grants from Govt. agencies for developmental projects.

## **OPPORTUNITIES**

- NAAC/NBA Accreditation and autonomous status from UGC.
- MoUs with foreign universities for student/faculty exchange programmes to provide them an International exposure for a wider knowledge and skill set.
- To enhance employability of our existing students with domain specific industry-oriented training.
- Inter-disciplinary research in contemporary areas of global concern.
- To provide consultancy to industry using Industry-Academia Linkage for Resource Generation of the institution and offering industry exposure to the students.
- To innovate and revise the curricula strictly according to the contemporary requirements of the industry, after attaining the autonomous status.
- To tailor-make a program for skill development of students including Personality Development and training for Competitive examinations.
- To strengthen Alumni Linkage.
- To establish a Faculty Development Centre for continuous development and skill enhancement for the existing faculty coupled with a comprehensive orientation program for the newly recruited faculty.
- Collaborative proposals with Govt./Govt. Aided institutions for research projects/grants.
- Improvement of Teaching-Learning Process by introducing Action & Project Based Learning.
- To start Second Shift for UG Engineering Courses in the currently offered Programmes.
- Bigger Role under CSR/ISR.
- To set-up new Centre(s) of Excellence in the emerging areas of Engineering & Technology.



- To explore possibilities for non-conventional energy sources as alternatives to meet growing energy demands to make DAVIET self-reliant, green and clean campus.
- To introduce online research journals in the field of Engineering, Technology, and Management for promotion of research work by the PG students and the Faculty of DAVIET and other Institutions.

## **CHALLENGES**

- To cope-up with the challenge of rapid technology advances and obsolesce thereof.
- Non-availability of quality senior faculty.
- Mushroomed growth and commercialization of engineering colleges/ Private Universities.
- Lack of Research funding and policies thereof by the AICTE/affiliating University for Private unaided educational institution unlike UGC.
- Falling interest amongst the aspiring students to opt for Engineering as a Career option.

# 1. Profile of the Affiliated/Constituent College

## 1. Name and Address of the College:

Name :	DAV Institute of Engineering & Technology		
Address :	Kabir Nagar		
City : Jalandhar	Pin : 144008	State : Punjab	
Website :	www.davietjal.org		

## 2. For communication :

Designation	Name	Telephone with STD code	Mobile	Fax	Email
Principal	Dr. Manoj Kumar	O:0181-2207650 R:0181-2233898	9478101102	0181-2205852	principal@davietjal.org
Vice Principal	Dr. Sonia Chawla	O: 0181-2207650 R:	9888250412	0181-2205852	mba@davietjal.org
Steering Committee Co-ordinator	Dr. Anil Soni	O: 0181-2207650 R: 0181-4010700	8146100679	0181-2205852	anil.daviet@gmail.com

## 3. Status of the Institution:

Affiliated College

Constituent College

Any other (specify)

✓

## 4. Type of Institution:

a. By Gender

i. For Men

ii. For Women

iii. Co-education

✓

b. By Shift

i. Regular

ii. Day

iii. Evening

✓

5. It is a recognized minority institution?

Yes

No

Yes
No <input checked="" type="checkbox"/>

If yes specify the minority status (Religious/linguistic/ any other) and provide documentary evidence.

--

6. Sources of funding:

Government

Grant-in-aid

Self-financing

Any other

Government
Grant-in-aid
Self-financing <input checked="" type="checkbox"/>
Any other

7. a. Date of establishment of the college: 27/09/2000..... (dd/mm/yyyy)

b. University to which the college is affiliated /or which governs the college (If it is a constituent college)

IKG Punjab Technical University, Jal.
---------------------------------------

c. Details of UGC recognition:

Under Section	Date, Month & Year (dd-mm-yyyy)	Remarks(If any)
i. 2 (f)	A/F	
ii. 12 (B)	N.A	

(Enclose the Certificate of recognition u/s 2 (f) and 12 (B) of the UGC Act)

d. Details of recognition/approval by statutory/regulatory bodies other than UGC (AICTE, NCTE, MCI, DCI, PCI, RCI etc.)

Under Section/ clause	Recognition/Approval details Institution/Department Programme	Day, Month and Year (dd-mm-yyyy)	Validity	Remarks
i.	F. No. North-West /1- 2813782241/2016/EOA/Corrigndum-1	18-5-2016	2016-17	
ii.				
iii.				
iv.				

(Enclose the recognition/approval letter)



All India Council for Technical Education  
(A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Chandralok Building, Janpath, New Delhi- 110 001  
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 [www.aicte-India.org](http://www.aicte-India.org)

F.No. North-West/1-2813782241/2016/EOA/Corrigendum-1

Date: 18-May-2016

Corrigendum

To,  
The Principal Secretary (Technical),  
Govt. of Punjab.,  
Room No 223, 2nd Floor, Sector-9,  
Chandigarh-160009

Sub: Extension of approval for the academic year 2016-17.

Ref: Application of the Institution for Extension of Approval for the Year 2016-17

EOA Issued on	F.No. North-West/1-2813782241/2016/EOA	30-Apr-2016
EOA Printed on	F.No. North-West/1-2813782241/2016/EOA	18-May-2016
Corrigendum 1	F.No. North-West/1-2813782241/2016/EOA/Corrigendum-1	18-May-2016

Sir/Madam,

In partial modification of the letter F.No. North-West/1-2813782241/2016/EOA and in terms of the provisions under the All India Council for Technical Education (Grant of Approvals for Technical Institutions) Regulations 2012 notified by the Council vide notification number F-No.37-3/Legal/2012 dated 27/09/2012 and norms standards, procedures and conditions prescribed by the Council from time to time, I am directed to convey the approval to

Regional Office	North-West	Application Id	1-2813782241
Name of the Institute	DAV INSTITUTE OF ENGINEERING & TECHNOLOGY	Permanent Id	1-8277341
Name of the Society/Trust	DAV COLLEGE TRUST AND MANAGEMENT SOCIETY	Institute Address	KABIR NAGAR, JALANDHAR, JALANDHAR, Punjab, 144008
Institute Type	Unaided - Private	Society/Trust Address	CHITRA GUPTA ROAD, NEW DELHI, NEW DELHI, Delhi, 110055

Opted for change from Women to Co-ed and Vice versa	No	Opted for change of name	No	Opted for change of site	No
Change from Women to Co-ed approved and Vice versa	Not Applicable	Change of name Approved	Not Applicable	Change of site Approved	Not Applicable



To conduct following courses with the intake indicated below for the academic year 2016-17\*

Application Id: 1-2813782241			Course	Full/Part Time	Affiliating Body	Intake 2015-16	Intake Approved for 2016-17	NRI Approval status	PIO / FN / Gulf quota Approval status	Foreign Collaboration/Twining Program Approval status*
Program	Shift	Level								
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	CIVIL ENGINEERING	FULL TIME	Punjab Technical University, Jalandhar	18	18	NA	No	N
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	COMPUTER SCIENCE & ENGINEERING	FULL TIME	Punjab Technical University, Jalandhar	18	18	NA	No	N
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	ELECTRICAL ENGINEERING	FULL TIME	Punjab Technical University, Jalandhar	18	18	NA	No	N
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	NANO SCIENCE & TECHNOLOGY	FULL TIME	Punjab Technical University, Jalandhar	18	18	NA	No	N
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	CIVIL ENGINEERING	FULL TIME	Punjab Technical University, Jalandhar	60	60	NA	No	N
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	COMPUTER SCIENCE & ENGINEERING	FULL TIME	Punjab Technical University, Jalandhar	60	60	NA	No	N
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	ELECTRICAL ENGINEERING	FULL TIME	Punjab Technical University, Jalandhar	60	60	NA	No	N
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	ELECTRONICS AND COMMUNICATIONS ENGINEERING	FULL TIME	Punjab Technical University, Jalandhar	120	120	NA	No	N



All India Council for Technical Education  
(A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Chandralok Building, Janpath, New Delhi- 110 001  
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 [www.aicte-India.org](http://www.aicte-India.org)

ENGINEERING AND TECHNOLOGY	1st Shift	UNDERGRADUATE	INFORMATION TECHNOLOGY	FULL TIME	Punjab Technical University, Jalandhar	60	60	NA	No	N
ENGINEERING AND TECHNOLOGY	1st Shift	UNDERGRADUATE	MECHANICAL ENGINEERING	FULL TIME	Punjab Technical University, Jalandhar	60	60	NA	No	N
MANAGEMENT	1st Shift	POSTGRADUATE	MASTERS IN BUSINESS ADMINISTRATION	FULL TIME	Punjab Technical University, Jalandhar	60	60	NA	No	N
MCA	1st Shift	POSTGRADUATE	MASTER OF COMPUTER APPLICATIONS	FULL TIME	Punjab Technical University, Jalandhar	60	60	NA	No	N

\*Corrigendum for- 1. Restoration of Intake

The above mentioned approval is subject to the condition that DAV INSTITUTE OF ENGINEERING & TECHNOLOGY shall follow and adhere to the Regulations, guidelines and directions issued by AICTE from time to time and the undertaking / affidavit given by the institution along with the application submitted by the institution on portal.

In case of any differences in content in this Computer generated Extension of Approval Letter, the content/information as approved by the Executive Council / General Council as available on the record of AICTE shall be final and binding.

Strict compliance of Anti-Ragging Regulation:- Approval is subject to strict compliance of provisions made in AICTE Regulation notified vide F. No. 37-3/Legal/AICTE/2009 dated July 1, 2009 for Prevention and Prohibition of Ragging in Technical Institutions. In case Institution fails to take adequate steps to Prevent Ragging or fails to act in accordance with AICTE Regulation or fails to punish perpetrators or incidents of Ragging, it will be liable to take any action as defined under clause 9(4) of the said Regulation.

**Note: Validity of the course details may be verified at [www.aicte-india.org](http://www.aicte-india.org)**

**Prof. Alok Prakash Mittal**  
**Member Secretary, AICTE**

Copy to:

- The Regional Officer,**  
All India Council for Technical Education  
  
Plot No. 1310, Sector 42-B  
Chandigarh-160 036
- The Director Of Technical Education,**  
Punjab
- The Principal / Director,**  
DAV INSTITUTE OF ENGINEERING & TECHNOLOGY



All India Council for Technical Education  
(A Statutory body under Ministry of HRD, Govt. of India)

7th Floor, Chandralok Building, Janpath, New Delhi- 110 001  
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 [www.aicte-India.org](http://www.aicte-India.org)

KABIR NAGAR,  
JALANDHAR, JALANDHAR,  
Punjab, 144008

4. **The Secretary / Chairman,**  
DAV COLLEGE TRUST AND MANAGEMENT SOCIETY  
CHITRA GUPTA ROAD,  
NEW DELHI, NEW DELHI,  
Delhi, 110055
5. **Guard File(AICTE)**

8. Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?

Yes  No

If yes, has the College applied for availing the autonomous status?

Yes  No

9. Is the college recognized

a. by UGC as a College with Potential for Excellence (CPE)?

Yes  No

If yes, date of recognition: ..... (dd/mm/yyyy)

b. for its performance by any other governmental agency?

Yes  No

If yes, Name of the agency ...IKG PTU..... and

Date of recognition: ...16/01/2014..... (dd/mm/yyyy)

10. Location of the campus and area in sq.mts:

Location *	Urban
Campus area in sq. mts.	11.6 Acres
Built up area in sq. mts.	42,100

(\* Urban, Semi-urban, Rural, Tribal, Hilly Area, Any others specify)

11. Facilities available on the campus (Tick the available facility and provide numbers or other details at appropriate places) or in case the institute has an agreement with other agencies in using any of the listed facilities provide information on the facilities covered under the agreement.

- Auditorium/seminar complex with infrastructural facilities

- Sports facilities

- \* play ground Yes

- \* swimming pool Yes

- \* gymnasium Yes



• Hostel

\* Boys' hostel

- i. Number of hostels 02
- ii. Number of inmates 402
- iii. Facilities (mention available facilities)

- \* 24 Hours Power Back Up
- \* 24 Hours Free Wi-Fi Services
- \* Hostel Mess
- \* Hostel Canteen
- \* Indoor Games
- \* Medical Facilities
- \* Health Insurance
- \* 24 Hours Security
- \* Air Conditioned Recreational and Study Rooms
- \* Guest Rooms
- \* RO Purified and Cooled Drinking water
- \* Elevator
- \* Air conditioned & Non Air conditioned rooms

\* Girls' hostel

- i. Number of hostels 01
- ii. Number of inmates 188
- iii. Facilities (mention available facilities)

- \* 24 Hours Power Back Up
- \* 24 Hours Free Wi-Fi Services
- \* Hostel Mess
- \* Hostel Canteen
- \* Indoor Games
- \* Medical Facilities
- \* Health Insurance
- \* 24 Hours Security
- \* Air Conditioned Recreational and Study Rooms
- \* Guest Rooms
- \* RO Purified and Cooled Drinking water

\* Working women's hostel

i. Number of inmates

ii. Facilities (mention available facilities) N/A

• Residential facilities for teaching and non-teaching staff (give numbers available – cadre wise)

• Principal Residence 01

• Hostel Wardens 03

• Driver 01

• Grounds man 01

• Security Supervisor 01

First aid, Inpatient, Outpatient, Emergency care facility, Ambulance.....

Health centre staff –

Qualified doctor	Full time	Part-time
------------------	-----------	-----------

Qualified Nurse	Full time	Part-time
-----------------	-----------	-----------

• Facilities like banking, post office, book shops

• Transport facilities to cater to the needs of students and staff

• Animal house

• Biological waste disposal

• Generator or other facility for management/regulation of electricity and voltage

- Solid waste management facility
- Waste water management
- Water harvesting

12. Details of programmes offered by the college (Give data for current academic year)

Sl. No.	Programme Level	Name of the Programme/ Course	Duration	Entry Qualification	Medium of instruction	Sanctioned/ approved Student strength	No. of students admitted
	Under-Graduate	B.Tech.	4 Years	10+2 (NM)	English	420	451
	Post-Graduate	M.Tech. M.B.A M.c.A	2 Years 2 Years 3 Years	B.Tech. Graduation Graduation	English	72 60 60	18 60 28
	Integrated Programmes PG						
	Ph.D.						
	M.Phil.						
	Ph.D						
	Certificate courses						
	UG Diploma						
	PG Diploma						
	Any Other (specify and provide details)						

13. Does the college offer self-financed Programmes?

Yes  No

If yes, how many?

14. New programmes introduced in the college during the last five years if any?

Yes	No	Number
<input type="text"/>	<input type="text"/>	<input type="text"/>

15. List the departments: (respond if applicable only and do not list facilities like Library, Physical Education as departments, unless they are also offering academic degree awarding programmes. Similarly, do not list the departments offering common compulsory subjects for all the programmes like English, regional languages etc.)

Faculty	Departments eg. Physics, Botany, History etc.)	UG	PG	Research
Science				
Arts				
Commerce				
Management	Department of Management	NO	YES	NO
Computer Applications	Department of Comp. App.	NO	YES	NO
Engineering	1. Dept. of Mechanical Engg. 2. Dept. of Civil Engg. 3. Dept. of Comp.Sc. & Engg. 4. Dept. of IT Engg. 5. Dept. of Electrical Engg. 6. Dept. of Elect.Comm.Engg. 7. Dept. of Nano Sc. & Tech.	YES YES YES YES YES YES NO	NO YES YES NO YES NO YES	NO NO NO NO NO NO NO

16. Number of Programmes offered under (Programme means a degree course like BA, BSc, MA, M.Com...)

- a. annual system NIL  
 b. semester system 12  
 c. trimester system NIL

17. Number of Programmes with

- a. Choice Based Credit System 12  
 b. Inter/Multidisciplinary Approach 06  
 c. Any other ( specify and provide details)

6. Does the college offer UG and/or PG programmes in Teacher Education?

Yes No

If yes,

- a. Year of Introduction of the programme(s).....<sup>N/A</sup>..... (dd/mm/yyyy)  
 and number of batches that completed the programme

- b. NCTE recognition details (if applicable)

Notification No.: .....<sup>N/A</sup>.....

Date: ..... (dd/mm/yyyy)

Validity:.....

c. Is the institution opting for assessment and accreditation of Teacher Education Programme separately?

Yes  No

19. Does the college offer UG or PG programme in Physical Education?

Yes  No

If yes,

a. Year of Introduction of the programme(s).....<sup>N/A</sup>..... (dd/mm/yyyy)  
and number of batches that completed the programme

b. NCTE recognition details (if applicable)

Notification No.: .....<sup>N/A</sup>.....

Date: ..... (dd/mm/yyyy)

Validity:.....

c. Is the institution opting for assessment and accreditation of Physical Education Programme separately?

Yes  No

20. Number of teaching and non-teaching positions in the Institution

Positions	Teaching faculty						Non-teaching staff		Technical staff	
	Professor		Associate Professor		Assistant Professor		*M	*F	*M	*F
	*M	*F	*M	*F	*M	*F	*M	*F	*M	*F
Sanctioned by the UGC / University / State Government <i>Recruited</i>										
<i>Yet to recruit</i>										
Sanctioned by the Management/ society or other authorized bodies <i>Recruited</i>	1	1	8	3	50	31	29	11	28	5
<i>Yet to recruit</i>										

\*M-Male \*F-Female

21. Qualifications of the teaching staff:

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
D.Sc./D.Litt.							
Ph.D.	1	1	7	2	9	3	23
M.Phil.					3	1	4
PG			1	1	32	20	54
Temporary teachers							
Ph.D.						1	1
M.Phil.							
PG					6	6	12
Part-time teachers							
Ph.D.							
M.Phil.							
PG							

22. Number of Visiting Faculty /Guest Faculty engaged with the College. 25

23. Furnish the number of the students admitted to the college during the last four academic years.

Categories	Year 1 (2012)		Year 2 (2013)		Year 3 (2014)		Year 4 (2015)	
	Male	Female	Male	Female	Male	Female	Male	Female
SC	69	14	66	14	81	31	42	6
ST	0	0	0	0	0	0	0	0
OBC	17	6	16	3	21	9	17	4
General	374	157	297	174	327	187	348	159
Others	1	0	21	8	0	0	5	5

24. Details on students enrollment in the college during the current academic year:

Type of students	UG	PG	M. Phil.	Ph.D.	Total
Students from the same state where the college is located	373	91			464
Students from other states of India	77	15			92
NRI students					
Foreign students	1				1
Total	451	106			557

25. Dropout rate in UG and PG (average of the last two batches)

UG

PG

26. Unit Cost of Education

*(Unit cost = total annual recurring expenditure (actual) divided by total number of students enrolled)*

**(a) including the salary component**

**(b) excluding the salary component**

27. Does the college offer any programme/s in distance education mode (DEP)?

Yes

No

If yes,

a) is it a registered centre for offering distance education programmes of another University

Yes

No

b) Name of the University which has granted such registration.

c) Number of programmes offered

d) Programmes carry the recognition of the Distance Education Council.

Yes  No

28. Provide Teacher-student ratio for each of the programme/course offered

B.Tech, MBA, MCA = 1:15 M.Tech = 1:12

29. Is the college applying for

Accreditation : Cycle 1  Cycle 2  Cycle 3  Cycle 4

Re-Assessment:

*(Cycle 1 refers to first accreditation and Cycle 2, Cycle 3 and Cycle 4 refers to re-accreditation)*

30. Date of accreditation\* (applicable for Cycle 2, Cycle 3, Cycle 4 and re-assessment only)
- Cycle 1: ..... (dd/mm/yyyy) Accreditation Outcome/Result.....
- Cycle 2: ..... (dd/mm/yyyy) Accreditation Outcome/Result.....
- Cycle 3: ..... (dd/mm/yyyy) Accreditation Outcome/Result.....

**\* Kindly enclose copy of accreditation certificate(s) and peer team report(s) as an annexure.**

31. Number of working days during the last academic year.

291
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32. Number of teaching days during the last academic year

*(Teaching days means days on which lectures were engaged excluding the examination days)*

176
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33. Date of establishment of Internal Quality Assurance Cell (IQAC)

IQAC 18/09/2015 ..... (dd/mm/yyyy)

34. Details regarding submission of Annual Quality Assurance Reports (AQAR) to NAAC.

AQAR (i) N/A ..... (dd/mm/yyyy)

AQAR (ii) N/A ..... (dd/mm/yyyy)

AQAR (iii) N/A ..... (dd/mm/yyyy)

AQAR (iv) N/A ..... (dd/mm/yyyy)

35. Any other relevant data (not covered above) the college would like to include. (Do not include explanatory/descriptive information)

N.A.



# CRITERION I: CURRICULAR ASPECTS

## 1.1 Curriculum Planning And Implementation

### 1.1.1 State the vision, mission and objectives of the institution, and describe how these are communicated to the students, teachers, staff and other stakeholders.

#### Vision

To attain the coveted status of a growth oriented resource of national importance known for quality professional education, research and innovation. (Revised 2015)

#### Mission

To provide professional education with a difference confirming a confluence of inter/multi-disciplinary knowledge domains; targeting excellence in collaboration with industry; promoting creative competence and innovation aimed at producing skilled human resource and entrepreneurs; sustaining Indian ethics and moral values. (Revised 2015)

#### Core Values

- Integrity
- Competence
- Creativity
- Innovation
- Trust
- Excellence
- Community

#### Objectives

- To provide an academically ambient environment for its stakeholders to develop as technologically superior, socially conscious & nationally responsible citizens.
- To generate industry oriented competent manpower to meet the needs of globalization and cut-throat competition.
- To provide state-of-the-art equipment for R & D facilities in specific areas of Engineering & Technology for intra-mural research & development, education and training.
- To provide effective linkage between industry and our Institute for sponsored research and consultancy.
- To ensure regular up-gradation of knowledge and skills of faculty to keep pace with the fast changing technology.

- To acquire national and international accreditation.
- To develop centers of excellence in the emerging areas of technology.
- Fusion of learning with universal spirit of common good ethics and vedic preaching.

**How they are communicated to the students, teachers, staff, and other stakeholders**

1. Through Display Boards at all important locations in the Institute.
2. Website of the Institute.
3. College Prospectus.

**1.1.2 How does the institution develop and deploy action plans for effective implementation of the curriculum? Give details of the process and substantiate through specific example(s).**

- A. A course file is maintained for each subject comprising the following documents:
- Day-wise Teaching Plan for the whole course curriculum to be covered in the semester.
  - Planning of monthly assignments and weekly tutorial sheets to be given to the students.
  - Study Material.
  - Academic calendar showing the schedule of academic support activities of the semester. Department-wise timetable is prepared well before the start of the classes and is followed throughout the semester.
- B. Curriculum is divided into three parts. After completion of each part, MSTs are conducted.
- C. Students are given assignments and tutorials as per the plan contained in the course file(s).

**1.1.3 What type of support (procedural and practical) do the teachers receive (from the University and/or institution) for effectively translating the curriculum and improving teaching practices?**

- A. The Institute is having a well-stocked library with over 36000 books. In addition to this, the Institute has also access to various e-resources. Galileo Meridian Digital Library is established in the Institute from where the teachers/students can access and download e-books, journal articles, NPTEL videos and other research materials on their laptops, tabs and mobile phones.
- B. The Institute has subscribed to 96 print journals and more than 2000 online journals.

- C. The class rooms are ICT enabled.
- D. Dedicated Internet and Wi-Fi facilities are provided in the academic area, library, laboratories, faculty rooms and throughout the campus.
- E. The computing facilities are provided in faculty rooms/cabins.
- F. The faculty members are allowed and sponsored to attend the Faculty Development Programmes, Seminars, and Conferences in India as well as abroad.
- G. The faculty members are using MOOCs, virtual labs and QEEE labs.
- H. The workshops on teaching pedagogy are regularly arranged for faculty of the Institute.
- I. Faculty and students are provided support to plagiarism check through IKGPTU software i.e. turnit in original.

**1.1.4 Specify the initiatives taken up or contribution made by the institution for effective curriculum delivery and transaction on the Curriculum provided by the affiliating University or other statutory agency.**

- A. The Programme Educational Objectives (PEOs), Programme Specific Objectives (PSOs) and Course Outcomes (COs) have been defined for all the programmes and courses.
- B. The mapping of Vision, Mission, PEOs, POs, PSOs and Course Outcomes (COs) is done.
- C. The Course objectives and outcomes are designed on the basis of Bloom's Taxonomy.
- D. Seminars/Expert lectures by the faculty from other reputed Institutes and industry are arranged for the students and faculty members.
- E. To provide the students with hands on experience minimum 01 industry visit per semester is made mandatory for all the students.
- F. The continuous evaluation of the students is done through 03 Mid Semester Tests (MSTs) every semester.
- G. 20 percent of the total faculty is appointed as adjunct faculty.

**1.1.5 How does the institution network and interact with beneficiaries such as industry, research bodies and the university in effective operationalisation of the curriculum?**

- A. The industrialists, educationists and professionals are the members of the Governing Body of the Institute.
- B. The Industry experts are invited for interaction with students and faculty of the Institute.
- C. The Institute is having the membership of Confederation of Indian Industry (CII).

- D. The Institute has signed MOUs with other Institutes of National Importance such as National Institute of Technology, Jalandhar, Hamirpur and New Delhi.
- E. The Institute is a coveted member of the Council of Associates, IIT, Ropar.
- F. The Industry week is organized by all the departments during which the people from industry are invited to interact with the students.
- G. 20 percent of the total faculty is appointed as adjunct faculty from industry.
- H. The Industry Advisory Board of the Institute comprises representatives from leading companies viz. Microsoft, WIPRO, Hauwei, Oracle India Pvt. Ltd, IBM India Pvt. Ltd, Ambuja Cement, International Tractors Ltd. etc.
- I. The Academic Advisory Council of the Institute has a fair representation of academicians from the various Institutes viz. Thapar University Patiala, MDU Rohtak, IIT Roorkee, NIT Delhi, NIT Jalandhar, MDI Gurgaon, NITIE Mumbai etc.
- J. The Institute has signed MOUs with many industrial houses such as Wipro Technologies, Microsoft, CISCO, Texas Instruments, Sedulity Solutions, Sofcon Industries and Oracle.
- K. The B.Tech/MCA students are required to undergo Six Months Industrial Training during their Pre-final/Final Semester.
- L. The MBA students are required to undergo 6-8 weeks Summer Training after their second semester.

**1.1.6 What are the contributions of the institution and/or its staff members to the development of the curriculum by the University? (number of staff members/ departments represented on the Board of Studies, student feedback, teacher feedback stakeholders feedback provided, specific suggestions etc.**

- A. The Institute is affiliated to IKG Punjab Technical University; and thus the designing of the curriculum is the domain of the University. However, 07 faculty members of the Institute are the members of board of studies for 06 programs of the University.
- B. The feedback is taken from the students about the teachers and infrastructure. This feedback is taken during and at the end of every semester.
- C. The Suggestion Boxes, under the direct control of Principal, are installed in the reception area, library and hostels to enable the students and members of the staff to give their suggestions/feedback.

**1.1.7 Does the institution develop curriculum for any of the courses offered (other than those under the purview of the affiliating university) by it? If ‘yes’, give details on the process (Needs, Assessment’, design, development and planning) and the courses for which the curriculum has been developed.**

In principle, No; however, based on the feedback of the recruiters and alumni, the ‘Additional’ topics are taught to the students. Recently, on the basis of the feedback from our major recruiter, i.e., Wipro Technologies, the students of Non-IT branches were offered the courses in C and C++. Other value added courses relate to oracle certification, Cisco certification, Microsoft certification etc.

**1.1.8 How does institution analyze/ensure that the stated objectives of curriculum are achieved in the course of implementation?**

- A. The Institute conducts 03 Mid Semester Tests (MSTs) to assess the performance of the students in the various subjects.
- B. The subject related quiz(es) are organized periodically.
- C. The students are given tutorial sheets and assignments regularly.
- D. The seminars are given by the students on routine basis.
- E. The regular feedback from the students is obtained.
- F. End semester examination and result analysis.
- G. Performance analysis and evaluation.

**1.2 Academic Flexibility**

**1.2.1 Specifying the goals and objectives give details of the certificate/diploma/skill development courses etc. offered by the institution.**

In order to improve the employability of the students, the Institute provides Employability Skill Training (EST) to the students. The professionals are invited from industry also to hone the soft skills, aptitude and analytical skills of the students. In addition to this, the workshops are also arranged for the students on the latest software/technologies.

The Institute has got approval under Pradhan Mantri Kaushal Vikas Yojana (PMKVY) to train the first batch of 25 students in sectoral/specialization titled “CNC Operator Machining Technician L3”. The first batch completed training from 10.12.16 to 22.03.17.

The governing body of the Institute has approved to adopt a village (BAL village) nearby and work jointly to make it digitally literate. The Institute has received a letter from M/s. CSC, e-Governance India Ltd. (CSV SPV), and through this letter CSC has proposed unique joint

collaboration with the Institute to be part of Digital India Initiative. The Institute has become an empanelled training partner/centre of the scheme.

In addition, students are prepared for certifications like Oracle, Cisco, MOOCs based courses etc.

**1.2.2 Does the institution offer programmes that facilitate twinning/dual degree? If ‘yes’, give details.**

No, the Institute does not offer twinning/dual degree programs.

**1.2.3 Give details on the various institutional provisions with reference to academic flexibility and how it has been helpful to students in terms of skills development, academic mobility, progression to higher studies and improved potential for employability. Issues may cover the following and beyond:**

- Range of Core/Elective options offered by the University and those are opted by the college
  - Choice Based Credit System and range of subject options.
  - Courses offered in modular form.
  - Credit transfer and accumulation facility.
  - Lateral and vertical mobility within and across programmes and courses.
  - Enrichment courses.
- A. The Institute offers second year lateral entry admission to MCA & B.Tech. Courses.
- B. In B.Tech., the students are offered three elective courses in third and fourth year.
- C. In MBA, the students are offered specialization(s) in second year.
- D. After completion of first year, students are offered to upgrade/change their stream/ branch based on merit and the seats availability.
- E. Additional certifications are provided related to cyber security and forensic sciences, Oracle, C++ etc.

**1.2.4 Does the institution offer self-financed programmes? If ‘yes’, list them and indicate how they differ from other programmes, with reference to admission, curriculum, fee structure, teacher qualification, salary etc.**

No

**1.2.5 Does the college provide additional skill oriented programmes, relevant to regional and global employment markets? If ‘yes’ provide details of such programme and the beneficiaries.**

- A. The students are provided the Employability Skill Training to enhance their employability.
- B. The students are also offered need based domain specific value added courses such as Oracle, C++, Robotics, cyber security, etc.

**1.2.6 Does the University provide for the flexibility of combining the conventional face-to-face and Distance Mode of Education for students to choose the courses/combination of their choice” If ‘yes’, how does the institution take advantage of such provision for the benefit of students?**

No

### **1.3 Curriculum Enrichment**

**1.3.1 Describe the efforts made by the institution to supplement the University’s Curriculum to ensure that the academic programmes and Institution’s goals and objectives are integrated?**

In order to integrate the academic programmes and institution’s goals and objectives, the following efforts are being made by the institution:

- A. The Institute has made a transition from input based education to outcome based education.
- B. The minor and major projects, assignments, tutorial sheets are given to the students as per Bloom’s Taxonomy.
- C. The contents beyond syllabus are identified as gap areas in the curriculum and Contemporary issues relevant to the domain are taught in the classroom.
- D. In order to make the students aware about the practices being followed in industry, the persons from industry and adjunct faculty (from industry) are invited for delivering expert lectures to the students and faculty of the Institute.
- E. The training workshops are arranged for the students from time to time.
- F. The students undergo six months industrial training in pre-final/ final semester.
- G. Peer-to-peer learning and project based learning are encouraged.

**1.3.2 What are the efforts made by the institution to enrich and organize the curriculum to enhance the experiences of the students so as to cope with the needs of the dynamic employment market?**

- A. In-house practical training is given to the students in the labs and workshops of the Institute.
- B. The Institute has set up Center(s) of Excellence in association with industry where training is provided to the students as per the industry requirements. The workshop(s) are arranged and industry based project(s) are given to the students in these Center(s) of Excellence.
- C. The various technical event(s)/competition(s) are organized by all the departments.
- D. The Institute organizes an annual Tech-fest 'aDavitya' in which students get an opportunity to showcase their talent. The students from other Institutes also participate in this fest.
- E. The faculty members cover some contents beyond syllabus as per the industry requirements.
- F. The Institute has subscribed to various reputed international and national journals (Both offline and online).
- G. The faculty members and students are encouraged to get their research work published.
- H. The faculty members are sponsored for attending Faculty Development Courses to harness their skills.

**1.3.3 Enumerate the efforts made by the institution to integrate the cross cutting issues such as Gender, Climate Change, Environmental Education, Human Rights, ICT etc., into the curriculum?**

In order to integrate the cross cutting issues such as Gender, Climate Change, Environmental Education, Human Rights, ICT etc. into the curriculum, the following efforts are being made by the Institute:

- A. The Gender Sensitization Cell has been set up in the Institute.
- B. There is a Human Value Cell working in the Institute.
- C. The NSS Unit is working in the Institute.
- D. The Blood Donation Camp is organised every year in the Institute.
- E. Our University i.e. IKG Punjab Technical University has introduced the following compulsory subjects in the curriculum:
  - Human Values
  - Environmental Science
  - Fundamental of Computer Programming and Information Technology



**1.3.4 What are the various value-added courses/enrichment programmes offered to ensure holistic development of students?**

- Moral & Ethical Values
  - Employability & Life Skills
  - Better Career options
  - Community Orientation
- A. Employability Skill Training (EST) is being provided to the students.
- B. The aptitude tests and mock interviews are conducted.
- C. A large number of students participate in Blood Donation Camp.
- D. Students are encouraged to participate in various activities to promote the cause of Swachh Bharat Abhiyan.
- E. The Hawan Yajna is organized in the Institute on first Tuesday of every month by all the Departments on rotation basis.
- F. The workshops on Human Values are organised from time to time.

**1.3.5 Citing a few examples enumerate on the extent of use of the feedback from stakeholders in enriching the curriculum?**

- A. **Current Students:** The regular feedback of the teachers is taken from the students twice in every semester. The feedback is shared with the concerned faculty member and corrective action is taken.
- B. **Employers:** The passed out students who are working in the industry, their feedback is taken from the employers on the PEO(s) of the respective Departments.
- C. **Alumni:** The feedback is taken from the alumni working in industry and their suggestions are well considered by the Institute. Annual alumni meet is organized in order to share experiences and get feedback. Some of the alumni members have been appointed as the adjunct faculty as well.

**1.3.6 How does the institution monitor and evaluate the quality of its enrichment programmes?**

The Institute monitors and evaluates the quality of its enrichment programmes in the following manners:

- A. University Merit Positions.
- B. Quality and number of Placements.
- C. No. of companies conducting campus placements on/off campus.
- D. Innovative/Industry defined projects (IDPs) by the students.

- E. Feedback from the Students/Alumni/Industry.
- F. Students who have started their own business ventures.
- G. Students qualifying various competitive exams viz. GATE, CAT, GRE etc.
- H. Students pursuing higher education in India or abroad.

## **1.4 Feedback System**

### **1.4.1 What are the contributions of the institution in the design and development of the curriculum prepared by the University?**

Our Institute is affiliated to IKG Punjab Technical University. Hence, the design and development of the curriculum is not the subject matter of the Institute. However, 07 faculty members of the Institute are the members on the Board of Studies of 06 Department(s) of the University. In addition to this, the feedback received from the industry based on the gap(s) in study curriculum is also conveyed to the University from time to time.

### **1.4.2 Is there a formal mechanism to obtain feedback from students and stakeholders on Curriculum? If 'yes', how is it communicated to the University and made use internally for curriculum enrichment and introducing changes/new programmes?**

Yes, the feedback from students is taken twice every semester. The teaching-learning gap is communicated to the concerned faculty member and corrective action is taken. The feedback is also taken from the employers and the gap is communicated to the University.

### **1.4.3 How many new programmes/courses were introduced by the institution during the last four years? What was the rationale for introducing new courses/programmes?)**

**Any other relevant information regarding curricular aspects which the college would like to include.**

No Programme/Course has been introduced by the institution during the last four years. Keeping in view the changing preferences and needs, the Institute is planning to diversify in other professional programs such as Bachelor of Business Administration and Bachelor of Computer Applications from the next academic year i.e. 2017-18.

## **CRITERION II: TEACHING - LEARNING AND EVALUATION**

### **2.1 Student Enrollment and Profile**

#### **2.1.1 How does the college ensure publicity and transparency in the admission process?**

The admission to various courses is done at two levels i.e. at the level of the University and at the level of the Institute (under management quota/ direct admission). In the first phase, the admission is done by the university through online centralized counseling based on JEE (Mains) rank. The whole process is completed by the University. The students who are allotted this Institute, they report for admission at the Institute. The advertisements for admission are given by the University in all the leading newspapers. The information for admission is also put on the website of the university.

The Institute is entitled to have a quota of 33% towards management seats. However, Institute retains a quota of 15% only and the remaining seats are surrendered to the University for admission through University counseling procedure. The Institute conducts the counseling for Management seats only. The advertisements are given in the newspapers. The admissions are done on the basis of the merit in the entrance test or merit in the qualifying exam.

#### **2.1.2 Explain in detail the criteria adopted and process of admission (Ex. (i) merit (ii) common admission test conducted by state agencies and national agencies (iii) combination of merit and entrance test or merit, entrance test and interview (iv) any other) to various programmes of the Institution.**

**For B.Tech. Courses :** Rank in the Common Entrance Test i.e. JEE (Mains) conducted by CBSE.

**For M.Tech. Courses :** Merit in GATE/Merit in the Qualifying Exam.

**For MBA :** Rank in the entrance test (CMAT) conducted by AICTE/Merit in the qualifying exam.

**For MCA :** Merit in the qualifying exam.

#### **2.1.3 Give the minimum and maximum percentage of marks for admission at entry level for each of the programmes offered by the college and provide a comparison with other colleges of the affiliating university within the city/district.**

Programme	St. Soldier	CT	LKCE	RIET	DAVIET
B.Tech. (Civil Engg.)	1003035	389281	1045106	770749	335794
B.Tech. (Electrical Engg.)	1114474	--	--	--	392092
B.Tech. (Mechanical Engg.)	903707	189461	1120409	1006986	245720
B.Tech. (Information Technology)	--	1051310	--	1108905	143265

<b>B.Tech. (Computer Science &amp; Engg.)</b>	1120698	1052996	958051	771101	69283
<b>B.Tech. (Electronics &amp; Comm. Engg.)</b>	--	996404	1095952	--	324757
<b>Masters of Business Administration</b>	155	121	146	111	94

**2.1.4 Is there a mechanism in the institution to review the admission process and student profiles annually? If yes, what is the outcome of such an effort and how has it contributed to the improvement of the process?**

Admission to various courses offered by this Institute is done through centralized admission process conducted by IKG Punjab Technical University. The govt. of Punjab vide notification no: 13/129/2003-1TE2/1247 has approved 33.33% seats as management quota but in order to prefer meritorious candidates in B. Tech, DAVIET has retained only 15% management seats and the remaining 18.33% seats have been surrendered to IKG PTU for filling up through centralized counseling. For smooth conduct of these admissions in the Institute, an Admission Committee is constituted. This committee is responsible for the admission process. Once the admissions are over, the suggestions/feedback is obtained from the members of the committee and the corrective actions are taken accordingly. The student profile is also reviewed on the basis of their ranks in the entrance test and marks obtained in the qualifying exam.

In order to secure better merit under management quota, the admission process is critically reviewed in the light of the feedback from various stakeholders. The merit/rank of such students is scrutinized. During the admission process for the session 2015-16, it was observed that the many candidates were not aware about career opportunities after engineering and were in a great dilemma regarding selection of appropriate branch. In order to address these issues, following key initiatives were taken before/during admissions for the session 2016-17:-

1. Admission Counseling Cell: This cell provides guidance and help to admission aspirants in the selection of appropriate branch.
2. Engineering Awareness Program: Team of faculty members was constituted for this purpose. This team conducted awareness programs in various schools/colleges for 10+2 (Non-medical) students to make them aware about the opportunities in various branches of engineering in private as well as government sector. The students were also made aware of the academic practices being followed at DAVIET.

As a result, candidates with higher merit opted for DAVIET in 2016-17 in comparison to 2015-16.

**2.1.5 Reflecting on the strategies adopted to increase/improve access for following categories of students, enumerate on how the admission policy of the institution and its student profiles demonstrate/reflect the National commitment to diversity and inclusion**

- SC/ST
- OBC
- Women
- Differently abled
- Economically weaker sections
- Minority community
- Any other

The Institute follows the reservation policy of the Central Government/ State Government/ PTU for admission to various courses. The fee concession is given to the economically weaker, meritorious and differently abled students as per the policy of the Institute.

**2.1.6 Provide the following details for various programmes offered by the institution during the last four years and comment on the trends. i.e. reasons for increase/decrease and actions initiated for improvement.**

Programmes	Year	No. of Applications*	No. of Students Admitted	LEET	Total	Demand Ratio
<b>B.Tech. (Computer Science &amp; Engg.)</b>	2013		53	10	63	
	2014		60	11	71	
	2015		59	12	71	
	2016		62	10	72	
<b>B.Tech. (Electronics &amp; Comm. Engg.)</b>	2013		99	27	126	
	2014		114	29	143	
	2015		113	14	127	
	2016		105	9	114	
<b>B.Tech. (Electrical Engg.)</b>	2013		57	21	78	
	2014		62	23	85	
	2015		54	14	68	
	2016		42	10	52	
<b>B.Tech. (Information Technology)</b>	2013		59	16	75	
	2014		60	21	81	
	2015		60	4	64	
	2016		57	5	62	
<b>B.Tech. (Mechanical Engg.)</b>	2013		56	13	69	
	2014		58	15	73	
	2015		62	12	74	
	2016		58	13	71	

<b>B.Tech. (Civil Engg.)</b>	2013		56	13	69	
	2014		56	14	70	
	2015		58	14	72	
	2016		61	19	80	
<b>Masters of Business Administrati on (MBA)</b>	2013		38		38	
	2014		60		60	
	2015		60		60	
	2016		60		60	
<b>Masters of Computer Applications (MCA)</b>	2013		19	19	38	
	2014		24	53	77	
	2015		3	26	29	
	2016		9	18	27	
<b>M.Tech. (Computer Science &amp; Engg.)</b>	2013		18		18	
	2014		18		18	
	2015		16		16	
	2016		14		14	
<b>M.Tech. (Electrical Engg.)</b>	2013		18		18	
	2014		11		11	
	2015		0		0	
	2016		3		3	
<b>M.Tech. (Civil Engg.)</b>	2013		7		7	
	2014		2		2	
	2015		5		5	
	2016		2		2	
<b>M.Tech. (Nano Tech.)</b>	2013		1		1	
	2014		0		0	
	2015		0		0	
	2016		0		0	

**\*85% seats are filled through centralized counseling by IKG Punjab Technical University, the Institute calls applications for the left over and rest of the 15% management quota seats.**

## **2.2 Catering to Student Diversity**

### **2.2.1 How does the institution cater to the needs of differently-abled students and ensure adherence to government policies in this regard?**

- A.** The seats are reserved for differently abled students as per the policy of the State Government.
- B.** Elevators (lifts) and escalators are provided in the Institute.

C. Ramps are provided at the appropriate places.

**2.2.2 Does the institution assess the students' needs in terms of knowledge and skills before the commencement of the programme? If 'yes', give details on the process.**

Yes, the admission to B.Tech. Courses is made on the basis of the entrance test JEE (Mains) conducted by the national agency. During their induction program at the Institute, students are assessed based on their learning style index and aptitude test.

**2.2.3 What are the strategies adopted by the institution to bridge the knowledge gap of the enrolled students (Bridge/Remedial/Add-on/Enrichment Courses, etc.) to enable them to cope with the programme of their choice?**

In order to bridge the knowledge gap of the enrolled students, the following strategies are adopted by the Institute:

- A. Subject-wise remedial classes are arranged for weak students after analysis of the result in the Mid Semester Tests. If a large number of students fail in any particular subjects in the University examination, remedial classes are also arranged for the same.
- B. Employability Skill Training is provided to the students.
- C. Students are exposed to the latest software and training either in the center(s) of excellence established in the Institute or industry; as per the industry requirement and feedback of the industry.

**2.2.4 How does the college sensitize its staff and students on issues such as gender, inclusion, environment etc.?**

A Gender Sensitization Cell has been set up in the Institute. The main objectives of the this cell are:

- To make the young boys and girls gender sensitive and create positive values that support the girls and their rights.
  - To provide the overall guidance to the peer group in integrating/mainstreaming gender in all activities of the institution in the form of focused group discussions, debates, poster making competitions, panel discussions, art exhibitions etc.
  - To generate the awareness in regard to equality in law, social system and democratic activities.
- A. The course of Human Values is compulsory for B.Tech., MBA and MCA Courses.

- B. The course of Environmental Science is compulsory for all B.Tech. Students in first year.
- C. The NSS unit is very active in the Institute.

**2.2.5 How does the institution identify and respond to special educational/learning needs of advanced learners?**

In order to identify the advanced learners, the following criteria is used:

- A. Marks obtained in the previous exam
- B. Participation in the class
- C. Performance in the Mid Semester Tests
- D. Performance in major and minor projects
- E. Performance in tutorials

After identifying the advanced learners, they are encouraged to get their research papers published in good journals. They are also motivated to present their research papers in International Conferences abroad. The students are encouraged and helped for preparing various competitive exams. Based on the performance of the students in the MST(s), the first and second ranking students of all the classes are offered the choice of purchasing books suiting to their requirement(s) for price range of Rs. 500/- for 1<sup>st</sup> position and Rs. 300/- for 2<sup>nd</sup> position.

**2.2.6 How does the Institute collect, analyze and use the data and information on the academic performance (through the programme duration) of the students at risk of drop out (students from the disadvantaged sections of society, physically challenged, slow learners, economically weaker sections etc. who may discontinue their studies if some sort of support is not provided)?**

The academic performance of the students is assessed through 03 Mid semester tests and an End Semester examination conducted by the affiliating university. The performance report of each Mid Semester test along with the attendance record is mailed to the parents of the students with specific remarks regarding their performance, punctuality and scope of improvement etc. Based on the result analysis of Mid semester test, the concerned faculty members take necessary remedial actions. Special attention is given to the slow learners during tutorial sessions. In case of disability, Institute recommends the case of such students to the University for providing extra time for writing examination. It is on record that university has acceded to the requests of the Institute and provided 30 minutes extra time in two such cases. After the declaration of the University Result, the same is analyzed at



department level. If there is problem in any subject, the remedial classes are arranged for that subject. These classes are held free of cost without any financial liability on the students. However, our University follows the carry on system and there is no drop out.

This Institute has a set policy in place to provide financial aid to the meritorious and/or economically weak students. Student welfare committee critically and sympathetically analyses such cases and provides fee concession to deserving students. This committee also contacts potential donors/business houses/NGOs/etc. to collect donations for fee payment of economically weaker students so that they do not drop out just because of scarcity of funds. This practice is in place since the inception of the Institute. Record of fee concession provided by the Institute out of its own resources to the students is as under:-

Session	Amount of Fee Concession
2013-14	Rs. 09.43 Lakh
2014-15	Rs. 14.55 Lakh
2015-16	Rs. 11.09 Lakh
2016-17	Rs. 15.96 Lakh

## 2.3 Teaching-Learning Process

### 2.3.1 How does the college plan and organize the teaching, learning and evaluation schedules? (Academic calendar, teaching plan, evaluation blue print, etc.)

- A. An Academic Calendar is prepared before the start of the semester taking into consideration the Academic Calendar of the affiliating University.
- B. The Academic Calendar consists of the curricular, co-curricular and extra-curricular activities to be carried out during the semester.
- C. The teacher in-charge prepares the teaching plan of the concerned subject in the form of a course file. The course file is prepared before the start of the classes.
- D. Teaching and evaluation plans are finalized on the basis of the instructions issued by the affiliating University.

### 2.3.2 How does IQAC contribute to improve the teaching –learning process?

IQAC in co-ordination with the Academic Affairs Committee monitors and analyses the strength and weakness of various departments and makes its suggestion for necessary improvements wherever required. The IQAC also co-ordinates with the all departments regarding implementation of the various orders issued by the competent authority.

**2.3.3 How is learning made more student-centric? Give details on the support structures and systems available for teachers to develop skills like interactive learning, collaborative learning and independent learning among the students?**

- A. The interactive question-answer sessions/quizzes are arranged by the teachers. Students are encouraged to ask more and more questions in the class.
- B. The Institute has made a transition from input based education to outcome based education.
- C. The Institute follows the Bloom's Taxonomy and emphasis is laid on action learning and project based learning.
- D. The Course objectives and outcomes are designed on the basis of Bloom's Taxonomy.
- E. In order to develop the collaborative learning, the students are given group assignments, minor/major projects and group presentations. In addition to this, industrial training/visits for the students are also arranged.
- F. To promote independent learning, the students are given assignments and tutorial sheets. Peer-to-peer learning and project based learning are encouraged as well. The Institute has got well stocked library along with Galileo digital library, the 110 MBPS internet connectivity and Wi-Fi PAN campus facility so that student may access the resources as and when s/he wishes.

**2.3.4 How does the institution nurture critical thinking, creativity and scientific temper among the students to transform them into life-long learners and innovators?**

- A. The students' chapters of ISTE, IET, IETE and CSI are functional in the Institute.
- B. The 'aDAVitya' is an annual technical fest organized by the Institute where students are encouraged to showcase their creativity and talent.
- C. The students are motivated to participate in the technical events being held at other Institutes.
- D. It is mandatory for all the B.Tech students to undergo six months industrial training where they handle live projects/problems.
- E. There are various clubs/societies in the different departments that organize various events catering to innovation.
- F. The expert lectures are also held by the faculty from industry and from other reputed Institutes.
- G. Institute has set up a Center for incubation and entrepreneurship to promote the entrepreneurial spirit in the Institute. Workshops are organized in order to prepare the students to set up their own ventures.

**2.3.5 What are the technologies and facilities available and used by the faculty for effective teaching? Eg: Virtual laboratories, e-learning - resources from National Programme on Technology Enhanced Learning (NPTEL) and National Mission on Education through Information and Communication Technology (NME-ICT), open educational resources, mobile education, etc.**

- A. The Institute subscribes to a large number of reputed online and print journals in various disciplines. In addition to this the Institute has got a well stocked library. Galileo Centre for Academic Excellence and Digital Library is also established along with departmental libraries in each department.
- B. K-Hub offers a comprehensive compilation of databases covering e-journals, e-books, e-articles, e-newspaper, e-newsletter, case reports etc. K-Hub also provides information regarding Jobs, recent news, recent events/conferences.
- C. The virtual labs are also being used by the students and faculty.
- D. The faculty members are using QEEE, NPTEL and MOOCs also.
- E. The Institute has got smart class rooms equipped with smart boards and multimedia projectors.

**2.3.6 How are the students and faculty exposed to advanced level of knowledge and skills (blended learning, expert lectures, seminars, workshops etc.)?**

- A. The expert lectures/invited talks are arranged by top academicians as well industry experts from time to time.
- B. The national/international conferences/seminars/workshops are organized.
- C. The faculty and students are encouraged to participate in conferences/seminars in other Institutes.
- D. Every department celebrates industry week whereby students interact with the people from the industry, visit various companies as well as workshops are organized to prepare them for various competitive examinations.
- E. Adjunct faculty from industry has also been appointed to share their real life experiences with the students.

**2.3.7 Detail (process and the number of students \benefitted) on the academic, personal and psycho-social support and guidance services (professional counseling/mentoring/academic advise) provided to students?**

- A. The Institute has appointed a part-time Counseling Psychologist. Students are counseled for various psychological and emotional stressors and taught coping skills. Students are counseled individually as well as in groups, where discussions and presentations by the students on the topics, which affect them, are encouraged.

- B. Faculty mentors are appointed for major projects of the students.
- C. There is a provision in the curriculum about the appointment of Group Advisors.
- D. Department of Training and Placement counsels the students about career opportunities and higher education.
- E. Students are informed from time to time about career options in diverse fields such as defence services, public sector undertaking job options, corporate openings etc.

**2.3.8 Provide details of innovative teaching approaches/methods adopted by the faculty during the last four years? What are the efforts made by the institution to encourage the faculty to adopt new and innovative approaches and the impact of such innovative practices on student learning?**

- A. The faculty members make use of Bloom's Taxonomy in teaching and promote action based learning and project based learning.
- B. The various online resources such as MOOCs and virtual labs are being used.
- C. The case study/role play/ Group discussions/quizzes/crossword puzzles and various other action learning techniques are used by the faculty.
- D. The subject quizzes are being used.
- E. The latest technological innovations are discussed in the classes.

**2.3.9 How are library resources used to augment the teaching learning process?**

- A. The Institute has got a well stocked library with over 8,400 titles and more than 36,000 volumes.
- B. The Galileo Meridian Digital Library is functional in the Institute from where the readers can access and download e-books, journal articles, NPTEL and other research materials on their laptops, tabs and mobile phones.
- C. The Institute subscribes to a large number of national and international journals.
- D. The library is connected through internet and computers on LAN are also available in the library.
- E. The Institute subscribes e-books too.
- F. The faculty and students visit the library frequently.

**2.3.10 Does the institution face any challenges in completing the curriculum within the planned time frame and calendar? If 'yes', elaborate on the challenges encountered and the institutional approaches to overcome these.**

- A. No, primarily the lectures are planned in such a manner that the curriculum is completed within the working days prescribed by the University.
- B. If any teacher is not able to complete the curriculum within the prescribed time, the extra classes are held during Saturdays/holidays/during the free periods or supplementary lectures or zero period in the morning on teaching days.

**2.3.11 How does the Institute monitor and evaluate the quality of teaching learning?**

- A. The Institute conducts 03 Mid Semester Tests during every semester.
- B. The home assignments are given to the students.
- C. The tutorial sheets are given to the students.
- D. The subject quizzes are held in the classes.
- E. Minor and major projects are given to the students.
- F. Group presentations are made by the students.
- G. The feedback is taken from the students during and at the end of every semester.

## **2.4 Teacher Quality**

**2.4.1 Provide the following details and elaborate on the strategies adopted by the college in planning and management (recruitment and retention) of its human resource (qualified and competent teachers) to meet the changing requirements of the curriculum**

The following strategies are adopted by the Institute on planning and management of human resource:

- A. The faculty members are encouraged to pursue higher studies and there exist provisions for leave with pay for the same.
- B. The faculty members are recruited from time to time as per the requirement.
- C. The retention ratio of the Institute is more than 98%. So, retention is not a problem.

- D. The faculty members are paid salaries as per norms and at par with the government scales.
- E. The faculty members are sponsored for attending conferences/seminars/Faculty Development Programmes.

**2.4.2 How does the institution cope with the growing demand/scarcity of qualified senior faculty to teach new programmes/modern areas (emerging areas) of study being introduced (Biotechnology, IT, Bioinformatics etc.)? Provide details on the efforts made by the institution in this direction and the outcome during the last three years.**

- A. There are 24 faculty members having doctoral degree.
- B. 50 faculty members are pursuing their Ph.D. at present.
- C. The Institute has set up center(s) of excellence in the emerging areas of technology.
- D. The Institute has tied up with various Institutes of national and international eminence for the faculty exchange as well as student exchange programs.
- E. Faculty members are encouraged and sponsored to attend Faculty Development Programmes, Seminars, Conferences and other academic activities.
- F. Faculty is encouraged to go for post doctoral fellowships.
- G. AICTE sponsored, DST sponsored and PTU sponsored seminars and conferences are organized on the latest developments in the respective fields.
- H. Workshops are organized to sensitize the faculty and students on intellectual property rights and other relevant issues.

**2.4.3 Providing details on staff development programmes during the last four years elaborate on the strategies adopted by the institution in enhancing the teacher quality.**

**A. Nomination to staff development programmes**

<b>Academic Staff Development Programmes</b>	<b>Number of Faculty Nominated</b>
Refresher Courses	7
Orientation Programmes	13
Staff Training Conducted by the University	6
Staff Training Conducted by other institutions	54
Summer/winter schools, workshops etc.	37

**B. Faculty Training programmes organized by the institution to empower and enable the use of various tools and technology for improved teaching-learning**

- Teaching learning methods/approaches
- Handling new curriculum
- Content/knowledge management
- Selection, development and use of enrichment materials
- Assessment
- Cross cutting issues
- Audio Visual Aids/multimedia
- OER's
- Teaching learning material development, selection and use

Sr. No.	Title of the Programme	Department	Date(s)	Resource Person
1	OBE & Bloom's Taxonomy	Various Departments	12/8/16	Dr. Manoj Kumar, Principal
2	Research Methodology	Information Technology	6/6/2016 to 17/6/2016	Online, In collaboration with NITTR, Chandigarh
3	Interactive Teaching Methodology	Faculty	19/9/2015	Dr. Manoj Kumar, Principal
4	Workshop on Case Study	Business Management	13/9/2014	Dr. Neeraj Pandey, NITIE, Mumbai.

**C. Percentage of faculty**

- Invited as resource persons in Workshops / Seminars/ Conferences organized by external professional agencies  
**14%**
- Participated in external Workshops / Seminars / Conferences recognized by national/ international professional bodies  
**54%**
- Presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies  
**62%**

**2.4.4 What policies/systems are in place to recharge teachers? (eg. providing research grants, study leave, support for research and academic publications teaching experience in other national institutions and specialized programmes industrial engagement etc.)**

- A.** Faculty members are sponsored for attending conferences abroad and within India.
- B.** Faculty members are granted leave with pay for Ph.D. course work and for writing Ph.D. thesis.

- C. The faculty members are allowed to use the Institute's infrastructure for their research work.
- D. The consultancy fee is shared between the Institute and the concerned faculty member(s) from the revenue generated out of consultancy work.
- E. Seed grant up-to Rs. 10 lakhs is provided to the faculty for the purpose of research proposals.

**2.4.5 Give the number of faculty who received awards / recognition at the state, national and international level for excellence in teaching during the last four years. Enunciate how the institutional culture and environment contributed to such performance/achievement of the faculty.**

05 faculty members have received awards during the last four years. The Institute provides a congenial environment for teaching and research. The financial support is also provided on case to case basis.

**2.4.6 Has the institution introduced evaluation of teachers by the students and external Peers? If yes, how is the evaluation used for improving the quality of the teaching-learning process?**

The feedback from students is taken during and at the end of the semester. The feedback is shared with the concerned teacher. The teachers are counseled to make the improvement, wherever required.

## **2.5 Evaluation Process and Reforms**

**2.5.1 How does the institution ensure that the stakeholders of the institution especially students and faculty are aware of the evaluation processes?**

The progress reports of the students after every mid semester test are communicated to the students and their parents. The reports are sent to the parents of the students after first and second mid semester test. The evaluation process is displayed on the Institute's website. Students are informed about the evaluation criterion during the orientation program at the start of the classes as well.

**2.5.2 What are the major evaluation reforms of the university that the institution has adopted and what are the reforms initiated by the institution on its own?**

- A. The institution has adopted the Outcome based system of education. The internal assessment of the students is based on the marks obtained in the mid semester tests, their participation in the class, quality of the assignments, subject quiz and the percentage of attendance.



- B. Choice based credit system has been adopted.
- C. The internal marks and attendance of the students is sent to the University online.
- D. The Institute has implemented the ERP system for efficient management of the academic records of the students.
- E. The complete evaluation records of the students are maintained by the COE office.
- F. Special tests are conducted for the students who are not able to appear in the MSTs due to health constraints or due to participation in other co-curricular or extra-curricular activities.

**2.5.3 How does the institution ensure effective implementation of the evaluation reforms of the university and those initiated by the institution on its own?**

- A. Any reform initiated by the University is communicated to all the faculty members and they are provided necessary training, if required.
- B. The university also conducts the orientation programmes for the faculty members.

**2.5.4 Provide details on the formative and summative assessment approaches adopted to measure student achievement. Cite a few examples which have positively impacted the system.**

- A. The Institute conducts the 03 Mid Semester Tests (MSTs) every semester.
- B. The class assignments are given to the students which are evaluated on the basis of content writing, problem solving abilities, logical and analytical abilities.
- C. The tutorial sheets are also given to the students which are formulated keeping in mind Bloom's taxonomy and level of difficulty.
- D. The students are motivated to attend classes regularly and a maximum of 06 marks are given in internal assessment for attendance.
- E. The students are encouraged to take part in extra-curricular and co-curricular activities.
- F. The students are also evaluated on the basis of minor and major projects.

**2.5.5 Detail on the significant improvements made in ensuring rigor and transparency in the internal assessment during the last four years and weightages assigned for the overall development of students (weightage for behavioral aspects, independent learning, communication skills etc.**

- A. The evaluated MST sheets are shown to the students.
- B. The progress of the students in MSTs is also communicated to the parents of the students through mail.
- C. The internal assessment of the students is displayed on the notice board before being forwarded to the university thus maintaining transparency.
- D. The answer sheets are evaluated within one week of the end of each MST.
- E. The General Fitness marks carry a very high weightage in B.Tech. Programme. There are 400 marks for General Fitness in the entire Programme. The students get marks on the basis of their participation in co-curricular and extra-curricular activities, personal and behavioral traits, communication skills and participation in NSS / ISR related activities.

**2.5.6 What are the graduate attributes specified by the college/affiliating university? How does the college ensure the attainment of these by the students?**

The Institute has adopted the graduate attributes as specified by NBA and all international accreditation agencies as per the Washington Accord. The graduate attributes are listed below:

1. **Engineering Knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialisation for the solution of complex engineering problems.
2. **Problem Analysis:** Identify, formulate, research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design/Development of Solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for public health and safety, and cultural, societal, and environmental considerations.
4. **Conduct Investigations of Complex Problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. **Modern Tool Usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modelling to complex engineering activities, with an understanding of the limitations.

6. **The Engineer & Society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. **Environment & Sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of and need for sustainable development.
8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and Team Work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with t h e society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. **Project Management and Finance:** Demonstrate knowledge and understanding of t h e engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. **Life-long Learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

In order to ensure attainment of graduate attributes, they are mapped with the course outcomes of various courses. The mapping of graduate attributes along with course outcomes is reflected in the course files as well.

**2.5.7 What are the mechanisms for redressal of grievances with reference to evaluation both at the college and University level?**

- A. The grievances are redressed in the hierarchical level comprising the subject teacher, concerned head of the department, Controller of Examination, Dean Academics, Principal.
- B. Grievance redressal committee has been constituted at the Institute level.
- C. The University has the provision for re-evaluation of the answer sheets.

## 2.6. Student Performance and Learning Outcomes

### 2.6.1 Does the college have clearly stated learning outcomes? If 'yes' give details on how the students and staff are made aware of these?

Yes, each department of the Institute has its own Program Specific Outcomes (PSOs) and they are displayed on the Institute website. Learning Outcomes referred in here as 'Course Outcomes' are mentioned in the course files as well.

### 2.6.2 Enumerate on how the institution monitors and communicates the progress and performance of students through the duration of the course/programme? Provide an analysis of the students' results/achievements (Programme/course wise for last four years) and explain the differences if any and patterns of achievement across the programmes/courses offered.

The students' performance is evaluated on the basis of 03 MSTs, assignments, tutorials, minor/major projects and the final examination by the University. The results of the students are communicated to the students and their parents. The internal assessment of the students is displayed on the notice board. The final result of the examination is declared by the University. The result of every student is posted in his login id given by the University. The analysis of the results for the past four years is given below:

#### Pass Percentage

##### B.Tech. (Computer Science and Engineering)

Batch	Pass %
2009-13	100
2010-14	100
2011-15	98.5
2012-16	98.5

##### B.Tech. (Electronics and Communication Engineering)

Batch	Pass %
2009-13	100
2010-14	98.5
2011-15	95
2012-16	96

**B.Tech. (Electrical Engineering)**

<b>Batch</b>	<b>Pass %</b>
2009-13	98.5
2010-14	98.5
2011-15	93
2012-16	91

**B.Tech. (Information Technology)**

<b>Batch</b>	<b>Pass %</b>
2009-13	98
2010-14	100
2011-15	93
2012-16	95

**B.Tech. (Mechanical Engineering)**

<b>Batch</b>	<b>Pass %</b>
2009-13	100
2010-14	98.5
2011-15	96
2012-16	91

**B.Tech. (Civil Engineering)**

<b>Batch</b>	<b>Pass %</b>
2009-13	100
2010-14	97
2011-15	97
2012-16	91

**MBA**

<b>Batch</b>	<b>Pass %</b>
2011-13	100
2012-14	98
2013-15	100
2014-16	96

**MCA**

<b>Batch</b>	<b>Pass %</b>
2010-13	100
2011-14	100
2012-15	100
2013-16	97

**2.6.3 How are the teaching, learning and assessment strategies of the Institution structured to facilitate the achievement of the intended learning outcomes?**

- A. Academic calendar of the Institute is prepared well before the start of the every semester.
- B. The various co-curricular and extra-curricular activities are organized to achieve the intended learning outcomes.
- C. The assessment of the students is done in the form of MSTs, Quizzes, Assessments and Tutorial Sheets etc. The internal weightage is 40% in theory and 60% in practical.
- D. The external assessment is done by the University and it carries a weightage of 60% in theory and 40% in practical.

**2.6.4 What are the measures/initiatives taken up by the institution to enhance the social and economic relevance (student placements, entrepreneurship, innovation and research aptitude developed among students etc.) of the courses offered?**

- A. There is a dedicated Department of Training & Placement in the Institute.
- B. The Employability Skills Training is provided to the students.
- C. The Aptitude Test, Group Discussion, Role Plays, Mock Interviews and other Personality development sessions are conducted.
- D. The expert lectures are arranged by inviting resource persons from industry.
- E. The Centre for Incubation and Entrepreneurship (CIE) has been set up in the Institute. The main objective of this cell is to encourage the students to become job givers and not job seekers.
- F. The Texas Instruments Innovation Lab has been set up in the Institute.
- G. The students are given innovative projects which meet level K5 of the Bloom's Taxonomy.
- H. Student work on real life problems by undertaking industry defined projects.
- I. The students are encouraged to present papers in national and international conferences and get them published in the journals of repute.

**2.6.5 How does the institution collect and analyse data on student performance and learning outcomes and use it for planning and overcoming barriers of learning?**

- A. The data pertaining to attendance and marks obtained by the students is collected by the concerned class in-charge and the same is communicated to the students and their parents.
- B. The analysis of the performance in MST is done at the level of HoD and remedial classes are arranged in case of poor performance in a particular subject.
- C. The analysis of the final result is done at the department and Institute level and corrective action is taken in case of any shortfall/deficiency in order to further strengthen academics.

**2.6.6 How does the institution monitor and ensure the achievement of learning outcomes?**

- A. The course outcomes have been defined for every course.
- B. The Programme Outcomes (POs) of various programmes are well defined.
- C. The Programme specific outcomes (PSOs) are defined for each programme.
- D. The POs and PSOs are mapped with the course outcomes.
- E. The direct measures of learning outcomes include performance in the MSTs, Assignment marks and class participation.
- F. The indirect methods include alumni surveys and employer surveys.

**2.6.7 Does the institution and individual teachers use assessment/evaluation outcomes as an indicator for evaluating student performance, achievement of learning objectives and planning? If 'yes' provide details on the process and cite a few examples.**

Yes, the marks obtained by a student in MSTs and assignments carry a weightage in the internal assessment. The marks obtained by a student in MSTs carry a weightage of 60% in internal assessment.

If some students do not fare well in the MSTs, the remedial/extra classes are arranged for the weak students.

## **CRITERION III: RESEARCH, CONSULTANCY AND 0EXTENSION**

### **3.1 Promotion of Research**

#### **3.1.1 Does the institution have recognized research center/s of the affiliating University or any other agency/organization?**

Yes, the Institute has established two recognized research centers as per the following:-

1. Nano Technology and Nano Sciences
2. Light wave Communication

#### **3.1.2 Does the Institution have a research committee to monitor and address the issues of research? If so, what is its composition? Mention a few recommendations made by the committee for implementation and their impact.**

Yes, the institution has a research committee and following is its composition:

<b>Sr. No.</b>	<b>Name</b>	<b>Designation</b>
<b>1</b>	Dr. Sudhir Sharma, Asst. Professor (EE)	Dean (RIC)
<b>2</b>	All HoDs/Officer In charges M.Tech. (PT) Programmes	Members
<b>3</b>	Dr. Rajni Sharma, Asstt. Professor (AS)	Member
<b>4</b>	Mr. Kamal Kishore, Asstt. Professor (AS)	Member
<b>5</b>	Ms. Chintu Rza, Asstt. Professor (EE)	Member
<b>6</b>	Dr. Sanjay Goel, Asstt. Professor (CE)	Member
<b>7</b>	Dr. Devinder Priyadarshi, Asstt. Professor (ME)	Member
<b>8</b>	Mr. P.S. Mann, Asstt. Professor (IT)	Member
<b>9</b>	Mr. N.S. Rekhi, Asstt. Professor (ECE)	Member
<b>10</b>	Dr. Vinay Chopra, Asstt. Professor (CSE)	Dy. Dean (RIC)

#### **Recommendations:**

1. Joint Research Projects by Ph.D. faculty with the faculty of the Institutes with whom the Institute has signed MOUs.



2. Starting of online journal for Sciences, Management and Engineering Disciplines.
3. To organize FDPs/ Workshops/ Expert Lectures in association with mentor Institute i.e. IIT Ropar by DAVIET being the member of “Council of Educational Associates”.
4. To organize National and International Conferences to promote the culture of research in niche areas.
5. Workshops for faculty on IPR and Patent Filing.
6. Software for checking plagiarism. Guidelines and anti-plagiarism policy for ethical conduct in research.
7. Faculty Student exchange with Institutes/ industry having MoUs with DAVIET.
8. Organizing activities jointly with Institutes under various Govt. funding schemes.

**3.1.3 What are the measures taken by the institution to facilitate smooth progress and implementation of research schemes/projects?**

- Autonomy to the principal investigator : Yes
- Timely availability or release of resources : Yes
- Adequate infrastructure and human resources : Yes
- support in terms of technology and information needs:

Yes, all the computing and lab facilities are provided to the teachers. The Institute subscribes to a large number of online and print journals of repute.

- facilitate timely auditing and submission of utilization certificate to the funding authorities : Yes
- any other

Teachers are sponsored for attending the FDPs and presenting papers in National and International Conferences in India and abroad.

- Time-off, reduced teaching load, special leave etc. to teachers:

Yes, the leave with pay is granted for attending the Ph.D. Course work, writing thesis, participating in conferences, seminars and workshops. The details of faculty having availed study leave is as follows:-

## **Department-wise Study Leave Record under Faculty Development Programme**

### **Department of Electronics & Communication Engineering**

1. Dr. Kiran Ahuja : for two years from 15/05/2016
2. Mr. Ramnik Singh : 18/01/2016 to 17/03/2016

### **Department of Electrical Engineering**

1. Dr. Sudhir Sharma : 25/5/2012 to 24/7/2012
2. Mrs. Chintu Rza : 20/12/2013 to 27/12/2013
3. Mr. Gagandeep Sharma : 17/8/2011 to 16/10/2011 & from 20/11/2016 to 19/11/2018.

### **Department of Applied Sciences**

1. Dr. Rajni Sharma : 21/2/2011 to 20/4/2011
2. Dr. Narinder K. Sharma : 18/1/2016 to 17/3/2016
3. Mr. Anand Bajaj : 14/3/2017 to 12/4/2017

### **Department of Mechanical Engineering**

1. Mr. Gaurav Dhuria : 25/4/2016 to 9/5/2016 & 25/11/2016 to 9/12/2016
2. Mr. Pankaj Sadana : 9/3/2016 to 8/4/2016
3. Dr. Devinder Priyadarshi : 14/1/2016 to 13/2/2016
4. Mr. Ramandeep Singh Johal : 11/6/2013 to 1/7/2013 & 4/7/2013 to 12/7/2013 & 4/12/2013 to 7/1/2014 & 1/6/2015 to 5/7/2015
5. Mr. Gurveen Singh : 25/11/2016 to 24/12/2016

### **Department of Business Management**

1. Ms. Vandana Narang : 2/2/2016 to 1/6/2016

#### **3.1.4 What are the efforts made by the institution in developing scientific temper and research culture and aptitude among students?**

- A. Students are given innovative major projects which conform to the K5 level of Bloom's Taxonomy.
- B. Students are encouraged to present/submit research papers in national and international conferences and journals.
- C. The technical fest is an annual feature of the Institute where students get an opportunity to showcase their research talent.
- D. Students are free to use the Institute infrastructure for their research work.
- E. CIE cell is established in the Institute and it facilitates aptitude and research culture among the students.
- F. SEED grant amounting to Rs. 10.00 lakhs every year and limited to Rs. 1.5 lakh for minor projects to the faculty of the Basic Science/ Engineering & Technology, Management & Environmental Sciences department and SEED Grant up-to Rs. 0.75 lakhs for Humanities department.

G. Vide item no. 15.27 dated 7/12/2016, it was resolved that a budget provision of Rs. 2 lacs in the annual budget be made for funding industry defined/research projects to DAVIET students every year. The Institute finances maximum up-to Rs. 25000/- for each Industry Defined/ Research Project.

**3.1.5 Give details of the faculty involvement in active research (Guiding student research, leading Research Projects, engaged in individual/ collaborative research activity, etc.**

The faculty of the Institute is actively engaged in the research. A large number of faculty members are guiding M.Tech. and Ph.D. students. The detailed information is as follows:

**Faculty Involvement in Research**

**Department of Electronics and Communication Engineering**

Name	Designation	Specialization	No. of M.Tech. thesis guided	No. of M.Tech. thesis in Progress	No. of Ph.D thesis guided	No. of Ph.D thesis in Progress
Dr. Manoj Kumar	Principal	Optical Fiber, Wireless Communication	13		2	5
Dr. Neeru Malhotra	Associate Professor	Bio-electromagnetics applications	17			
Dr. Jagjit Malhotra	Associate Professor	Multichannel optical communication systems	10			2
Dr. Jagroop Singh	Associate Professor	Image Compression, Signal Processing	16			6
Ms. Bindiya Jain	Assistant Professor	Optical Communication, wireless sensor network	3	2		
Ms. Aarti Kochher	Assistant Professor	Image Processing using MATLAB	4			
Dr. Kiran Ahuja	Assistant Professor	Wireless Communication and networks	13			2
Mr. Rammik Singh	Assistant Professor	Wireless sensor network	5			
Mr. Amit Arora	Assistant Professor	Microwave and antenna system	1	2		
Mr. Rajesh Wadhwa	Assistant Professor	Wireless Communication and networks		4		

### Department of Information Technology

Name	Designation	Specialization	No. of M.Tech. thesis guided	No. of M.Tech. thesis in Progress	No. of Ph.D thesis guided	No. of Ph.D thesis in Progress
Dr. Dinesh Kumar	Associate Professor	Machine Learning, Natural Language Processing	30	4	1	6
Mr. P S Mann	Assistant Professor	Wireless Sensor Network	16	4		
Dr. Rajeev Kumar	Assistant Professor	Wireless Sensor Network	25	5		
Mrs. Avani Bhatia	Assistant Professor	Watermarking	2	3		
Mr. Rajesh Kochher	Assistant Professor	Wireless Sensor Network, DIP, MANET	8	3		

### Department of Electrical Engineering

Name	Designation	Specialization	No. of M.Tech. thesis guided	No. of M.Tech. thesis in Progress	No. of Ph.D thesis guided	No. of Ph.D thesis in Progress
Dr. Sudhir Sharma	Associate Professor	Power Quality, Induction Generator	8	8		3
Ms. Chintu Rza	Assistant Professor	FACTS Devices	7	7		
Ms. Shivani Mehta	Assistant Professor	Power System Optimization	11	7		
Mr. Sushil Prashar	Assistant Professor	Soft Computing Technique	5	5		
Mr. Baljit Singh	Assistant Professor	HVDC	5	2		

### Department of Computer Science & Engineering

Name	Designation	Specialization	No. of M.Tech. thesis guided	No. of M.Tech. thesis in Progress	No. of Ph.D thesis guided	No. of Ph.D thesis in Progress
Ms. Harpreet Bajaj	Assistant Professor	Wireless Communication, Computer Networks	5	5		
Parveen Kakkar	Assistant Professor	Information Security	7	5		
Dr. Vinay Chopra	Assistant Professor	Software engineering	30	5	1	5
Ms. Shaveta Angurala	Assistant Professor	Computer Networks, RDBMS	4	1		

### Department of Civil Engineering

Name	Designation	Specialization	No. of M.Tech. thesis guided	No. of M.Tech. thesis in Progress	No. of Ph.D thesis guided	No. of Ph.D thesis in Progress
Dr. Sanjeev Naval	Associate Professor	Soil Mechanics and Foundation Engineering	11	3		6
Dr. M.K. Kaushik	Assistant Professor	Geoenvironmental Engineering	5	1		
Dr. Sanjay Goel	Assistant Professor	Concrete Technology	2	2		2
Mr. Manish Bhutani	Assistant Professor	Soil Mechanics and Foundation Engineering	2	3		
Mr. J Sudheer Kumar	Assistant Professor	Geotechnical and concrete composites	3	3		
Mrs. Sonia Chutani	Assistant Professor	Structural Analysis	3	2		
Mr. Gobind Khurana	Assistant Professor	Structural Engineering	1	2		

### Department of Mechanical Engineering

Name	Designation	Specialization	No. of M.Tech. thesis guided	No. of M.Tech. thesis in Progress	No. of Ph.D thesis guided	No. of Ph.D thesis in Progress
Mr. Gaurav Dhuria	Associate Professor	Advance Materials and Manufacturing Processes	4			
Dr. Sanjeev Saini	Assistant Professor	Manufacturing	3			4

### Department of Applied Sciences

Name	Designation	Specialization	No. of M.Tech. thesis guided	No. of M.Tech. thesis in Progress	No. of Ph.D thesis guided	No. of Ph.D thesis in Progress
Dr. Kanchan L Singh	Associate Professor	Material Science & Nanotechnology	9			5
Dr. Ashok Kumar	Associate Professor	Medicinal Chemistry & Nanotechnology	4		1	
Dr. Rajni Sharma	Assistant Professor	Numerical Analysis				5
Dr. Bhupinder Singh	Assistant Professor	Nanochemistry and organic chemistry	1			1

## Department of Business Management

Name	Designation	Specialization	No. of Ph.D thesis guided	No. of Ph.D thesis in Progress
Dr. Sonia Chawla	Professor	Finance/Marketing	2	6
Dr. Anil Soni	Associate Professor	Marketing	-	10

### 3.1.6 Give details of workshops/ training programmes/sensitization programmes conducted/organized by the institution with focus on capacity building in terms of research and imbibing research culture among the staff and students.

- A. DAVIET is organizing International Interdisciplinary conference on Science, Technology, Engineering, Management, Pharmacy and Humanities in collaboration with Nanyang Technological University, Singapore on 22-23 April 2017.
- B. Department of Applied Sciences (Mathematics) is organizing DST-SERB sponsored A Two-day National Conference on Recent Trends in Numerical Analysis and Computational Techniques on 28<sup>th</sup> & 29<sup>th</sup> March, 2017.
- C. National Science Day was celebrated on 6<sup>th</sup> March, 2017. This event was funded by Punjab State Council for Science & Technology, Chandigarh.
- D. Department of RIC organized a workshop to sensitize the faculty and students on 'Intellectual Property Rights' on 18<sup>th</sup> February, 2017
- E. DAVIET organized an International interdisciplinary conference on Engineering science & Management at Goa in collaboration with Biju Patnaik University of Technology (BPUT) and Nagarjuna College Bangalore on 17<sup>th</sup> & 18<sup>th</sup> December, 2016.
- F. DAVIET organized 3rd DAV National Congress on Sciences, Technology, Engineering, Humanities & Management (STEHM-2016).
- G. A seminar on "Opportunities in Material Sciences and Nanotechnology" was organized by Department of Applied Sciences on 20<sup>th</sup> February, 2016. The seminar aimed at sensitizing the faculty members from different branches of Engineering and Sciences about the emerging field of nano-technology.
- H. PTU Sponsored FDP on "Innovation and Futuristic Trends in Advance manufacturing and Nanotechnology" was organized by Department of Applied Sciences from 7-11 July, 2014 along with four day lecture series.
- I. A National Conference titled "Physical Sciences: Advances, Challenges And Sustainable Futuristic Trends" was held under the umbrella of NCST-2013 on 30-31 May, 2013.
- J. DST Sponsored FDP on "Numerical and Computational Techniques in Engineering" was organized by Department of Applied Sciences DAVIET, Jalandhar.
- K. A two-day National Workshop on 'Applications of Mathematical Modeling' was organised by the Department of Applied Sciences of DAVIET.

**3.1.7 Provide details of prioritized research areas and the expertise available with the institution. The following are the prioritized research areas where expertise is available in the institution**

- Optical fiber communication
- Wireless communication
- Bio-electromagnetic
- Multichannel optical communications systems
- Image Compression
- Microwave and antenna system
- Machine Learning
- Wireless sensor network
- Information Security
- Software Engineering
- Computer Graphics
- Cloud Computing
- Data Mining
- Power quality
- FACTS Devices
- Power System Optimization
- HVDC
- Soil Mechanics
- Foundation Engineering
- Concrete Technology
- Geotechnical
- Structural Analysis
- Environmental Engineering
- Material Science
- Nanotechnology
- Medicinal Chemistry
- Numerical Analysis
- Organic Chemistry
- Marketing
- English Literature & Applied Linguistics
- Finance

**3.1.8 Enumerate the efforts of the institution in attracting researchers of eminence to visit the campus and interact with teachers and students?**

The policy of our institution is to organize maximum number of expert talks and arrange for research interactions with leading academician from India and abroad in all programmes/courses with an aim to boost academic and research standards of both faculty and students. Hence, departments regularly conduct expert talks by prominent resource persons from different research institutions such as IITs, NITs, MDI

and top universities. A few note-worthy resource persons who recently visited our Institute are:

- Dr. H.S. Virk an eminent scientist, Formerly Director Research in Nano-research at DAVIET.
- Prof. Suprakas Sinha Ray, Chief Research Scientist and Director, DST/CSIR Nanotechnology Innovation Centre for Nano structured Materials, Council for Scientific and Industrial Research, Pretoria, South Africa.
- Dr. Ravi Kumar, Director, BCET, Gurdaspur.
- Dr. Sanjeev Sharma, Dongcuk University South Korea.
- Mr. Anand Choubey, & Mr. S.K. Srihari, from K&S Partners Gurgaon.
- Dr. Sudhir Sharma visited UOIT Canada in January, 2016 to explore opportunities of academic collaborations. This visit resulted into an MoU for joint research, academic faculty & student exchange. Further under this MoU Dr. V.K. Sood from UOIT is appointed as Adjunct Professor in Department of Electrical Engineering at DAVIET. Also, Sh. Gagandeep Sharma Assistant Professor at DAVIET joined UOIT for higher studies.
- Dr. Sunita Gakkhar, Professor, Department of Mathematics, Indian Institute of Technology, Roorkee.
- Dr. J N Sharma, Professor and Head, Department of Mathematics, National Institute of Technology, Hamirpur.
- Dr. Rangan K Guha, Department of Mathematics, SLIET, Longowal.
- Dr. Joydip Dhar, ABV-Indian Institute of Information Technology & Management, Gwalior.
- Dr. Peeyush Chandra, Indian Institute of Technology, Kanpur.
- Prof. R. Thangaraj from GNDU, Amritsar.
- Dr. R.C. Mittal, Head, Department of Mathematics, Indian Institute of Technology, Roorkee.
- Dr. S.K. Tomar, Head, Department of Mathematics, Panjab University, Chandigarh.
- Dr. J.R. Sharma Department of Mathematics, SLIET, Longowal.



**3.1.9 What percentage of the faculty has utilized Sabbatical Leave for research activities? How has the provision contributed to improve the quality of research and imbibe research culture on the campus?**

Currently there are 50 faculty members who are doing their part-time research. It comes to nearly 50% of the total faculty. Two of our faculty members have availed the leave for higher studies.

**3.1.10 Provide details of the initiatives taken up by the institution in creating awareness/ advocating/transfer of relative findings of research of the institution and elsewhere to students and community (lab to land)**

Our institution gives special emphasis on academic extension activities. All departments of the Institute are actively involved in conducting awareness classes and outreach programs to transfer the knowledge and findings to the local community.

- A. Entrepreneur/Skill Development Program : Department of Management
- B. Survey of Water quality of samples from different sources : Water management cell.
- C. Computer literacy/digital literate village program under digital India : IT Department
- D. Dr. M. K. Kaushik conducted research for the beneficial and relatively safe end use of waste scrap rubber tyres.
- E. Dr. Sanjay Goel conducted research on Self compacting Concrete(Green Concrete) which helps in reducing air, noise pollution and reducing health hazards for labors and other field workers.
- F. Institute gives Sponsorships to Faculty and Students for attending Conferences/ Workshops/ FDP's at national and international Level.

**3.2 Resource Mobilization for Research**

**3.2.1 What percentage of the total budget is earmarked for research? Give details of major heads of expenditure, financial allocation and actual utilization.**

- The Institute has made provision for research activities and earmarked a total annual budget of Rs 10 lakhs. SEED grant of Rs. 1.5 lakh for minor projects to the faculty of the Basic Science/Engineering and

Technology, Management/Environmental Sciences department and SEED Grant up- to Rs. 0.75 lakhs for Humanities department is approved by the governing body of the Institute.

- A budget provision of Rs. 2 lakhs in the annual budget for funding industry defined/ research projects of DAVIET students every year. The Institute finances maximum up-to Rs. 25,000/- for each Industry Defined/ Research Project.
- The other major heads of expenditure include travel grant to the faculty for presenting papers in conferences in India and abroad, sponsoring faculty for attending Faculty Development Programmes, Orientation Courses and Refreshers courses, purchase of computing facilities for research, subscription to online and print journals, amount spent on organizing conferences, workshops and expert lectures.

Expenditure Head	2012-13	2013-14	2014-15	2015-16
	Amount (in Lakhs)			
Organizing National Conferences		6.71	3.98	.....
Faculty Development	0.51	0.42	0.37	1.24
Purchase of Computers				16.36
Software			5.33	11.36

**3.2.2 Is there a provision in the institution to provide seed money to the faculty for research? If so, specify the amount disbursed and the percentage of the faculty that has availed the facility in the last four years?**

Yes, the Institution Governing body had made provisions to provide seed money up-to Rs. 1.50 lakhs to the faculty for research with an annual ceiling of Rs. 10 lakhs.

**3.2.3 What are the financial provisions made available to support student research projects by students?**

Yes, the Institute has financial provisions to support student research projects. A budget provision of Rs. 2 lakhs in the annual budget for funding industry defined/research projects of DAVIET students every year. The Institute finances (maximum) up-to Rs. 25000/- for each Industry Defined/Research Project. This is in addition to affiliating university Scheme of funding Industrial defined projects.

**3.2.4 How does the various departments/units/staff of the Institute interact in undertaking inter-disciplinary research? Cite examples of successful endeavors and challenges faced in organizing interdisciplinary research.**

There is an affirmative interaction among the various departments of the Institute in undertaking inter-disciplinary research. Our Institute has distinct labs established with joint enterprise among the departments of the Institute and/or industry. These labs are:

Sr. No.	Name of the Research Lab	Departments Associated	Lab Set up provided by:	Assistance
1	Texas Instruments Innovation centre	ECE,EE	M/s EdGate Technologies Pvt. Limited/ Texas Instruments, India	Teaching lab facility using analog system design kits and training.
2	Robotics lab	ECE, ME, EE	Robolab Technologies Pvt. Ltd	12 months of Technical Assistance by the Engineers.
3	Industrial Automation centre	ECE, ME, EE	Sofcon India Pvt. Ltd. Noida	MOU for providing 6 weeks and 6month industrial training to students.
4	Galileo Centre for Academic Excellence and Digital Library	All departments	Meridian Digital world, Hyderabad	The Institute subscribes to a large number of reputed online and print journals in various disciplines for Research and other academic activities.
5	Huwei lab	ECE, CSE, IT	Huwei India	Training Lab/ equipments for students.
6.	Cyber security Lab	CSE, IT, MCA, ECE	Sedulity solution and Technologies310, Suneja Tower-II, District Centre, Near Janak Puri West Metro Station, Janak Puri, New Delhi-110058	MOU for providing 6 weeks and 6month industrial training to students.
9.	CCNA Lab	All departments	CISCO	Training Lab equipments for students.
10.	Oracle Academy	CSE, IT, MCA	Oracle	Oracle Technical Support Service and Product.

**3.2.5 How does the institution ensure optimal use of various equipment and research facilities of the institution by its staff and students?**

- Instrument labs and computational labs are centralized and available 24x7. It ensures the optimal use of various equipments by research students and staff from different departments.
- Research students and staff members doing research can approach other departments to make use of the specialized facilities available there.
- The staff and students of the institution are allowed to use the equipment and research facilities of the Institute.

**3.2.6 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facility? If 'yes' give details.**

Yes,

- Kirloskar Oil Engines Ltd has agreed in principle to set-up a centre of excellence at DAVIET campus which is to be fully funded by KOEL. The process of setting up this facility has been started. .

**3.2.7 Enumerate the support provided to the faculty in securing research funds from various funding agencies, industry and other organizations. Provide details of ongoing and completed projects and grants received during the last four years**

Govt. funding agencies provide grants to the Govt./Govt. Aided/ Autonomous institutions. NAAC/NBA Accreditation is mandatory for receiving research grants for private self-financed institutions. However our Institute has received grants for conducting seminars/FDPs and workshops from Government Agencies/ AICTE/ University. Further the Governing Body of the institution, in order to promote the research in the Institute, provides seed money to the faculty for securing research projects.

- The affiliating university i.e. IKG PTU has provided research grant of Rs 25,000/- to the following students of B.Tech. (Electrical Engg.) – 7<sup>th</sup> Semester for their project work under IDP Scheme:-

<b>Name</b>		<b>University Regd. No.</b>
○ Amritpal Singh	-	1308501
○ Jasmeet Singh	-	1308517
○ Amit Mahay	-	1308500
○ Varinder Singh	-	1308548

- IKG-PTU Regional Centre at DAV Institute of Engg. & Technology, has given a grant of Rs. 12 lakhs for developing Infrastructure of Incubation Centre.
- CNC Machine costing Rs. 13,89,780/- has been purchased under IKG PTU Regional Centre at DAVIET, Jalandhar.

### **3.3 Research Facilities**

#### **3.3.1 What are the research facilities available to the students and research scholars within the campus?**

- A. There are more than 50 labs in different departments of the Institute which are used for carrying out research.
- B. The Institute has a separate research centre for Nano-Technology & Nano Sciences and Light Wave Communications.
- C. 96 print and more than 2000 online journals are subscribed by the Institute.
- D. The Institute has a good number of software which are used in research.
- E. The Institute library is well stocked with latest text and reference books. In addition to this, every department has its own departmental library.
- F. The latest computing facilities have been made available to the faculty and students.

#### **3.3.2 What are the institutional strategies for planning, upgrading and creating infrastructural facilities to meet the needs of researchers especially in the new and emerging areas of research?**

The students get help from other Institutes such as IIT Ropar, IIT Roorke, IIT Delhi, NIT Delhi, NIT Jalandhar, NIT Hamirpur, NITTTR Chandigarh. The Institute has collaborations/MOUs with IIT Ropar, NIT Jalandhar and NIT Delhi for sharing research facilities. Mr. Gagandeep Sharma, Asstt. Professor, EE department joined PG course at UOIT, Canada under MoU signed between UoIT, Canada and DAVIET, Jalandhar.

- The infrastructural facilities in the Institute are continuously upgraded as per recommendations/ requirement each department and research committee. All the labs are fully equipped with the latest equipments as required under the syllabi of the various courses and beyond the syllabi as per the need of the industry.
- Information regarding different research funding agencies is gathered and disseminated.
- Researchers in departments are encouraged to apply for research projects.

- Awareness classes are conducted to enhance research atmosphere in the campus.
- Researchers are motivated to ask for infrastructural improvement to be included in their budget proposal.

**3.3.3 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facilities?? If 'yes', what are the instruments / facilities created during the last four years.**

Yes, the institution has received special grants from industry and other beneficiary agencies for facilitating research in the Institute premises. These are:

Sr. No.	Industry Name	Instruments/ Facilities provided
1	TI labs	Donated ASLK PRO- 6 Kits to the Institute.
2	SOFCON	Established lab for Electrical Engg. and Electronics and Communication Engg. Students for providing training on PLC, SCADA and Industrial Automation.
3	Sedulity Solutions	Established a Centre of Excellence for Cyber Security.
4	Huawei	Model no. N/W equipment Huawei serial No. F55-007-M00 AR 151, Model no. N/W equipment Huawei serial No. F55-0670-M00 S5700-28P-LI-AC (02353836) AND Model no. N/W equipment Huawei serial No. F55-0792-M00 S5700-10P-LI-AC (2354036).
5	CCNA	Provided Training lab and equipments such as Routers Model No. CISCO1841 (6 no.) and Switches Model no.2950 (24 Port (3no.) for students and Teachers.
6	Oracle	Oracle Technical Support Service and Product via order no. 38024424 for the duration from 21/12/2015-20/12/2018.
7	EdGate Technologies Pvt. Ltd.	ASLK PRO – 6 Numbers.

**3.3.4 What are the research facilities made available to the students and research scholars outside the campus /other research laboratories?**

The students get help from other Institutes such as IIT Ropar, IIT Roorke, IIT Delhi, NIT Delhi, NIT Jalandhar, NIT Hamirpur, NITTTR Chandigarh. The Institute has collaborations/MOUs with IIT Ropar, NIT Jalandhar and NIT Delhi for sharing research facilities. Mr. Gagandeep Sharma, Asstt. Professor, EE department joined PG course at UOIT, Canada under MoU signed between UoIT, Canada and the Institute.

**3.3.5 Provide details on the library/ information resource center or any other facilities available specifically for the researchers?**

The Institute subscribes to a large number of reputed online and print journals in various disciplines. In addition to this, the Institute has got a well stocked library. Galileo Centre for Academic Excellence and Digital Library is also established along with departmental libraries in each department.

K-Hub offers a comprehensive compilation of databases covering e-journals, e-books, e-articles, e-newspaper, e-newsletter, case reports, videos, online sample issues. K-Hub also provides information to Jobs, recent news, recent events/conferences.

All the faculty members & students can access these journals from anywhere within the Institute:

1. EBSCO Business Source Elite
2. Science Direct
3. IEEE Explorer
4. ASCE
5. ASME
6. McGraw Hill Reference Access Engineering
7. Springer Mechanical
8. Springer CSE, ECE, EE & IT
9. ASTM Digital Library
10. J-Gate Engineering, Management

**3.3.6 What are the collaborative research facilities developed/created by the research Institutes in the college. For e.g. Laboratories, library, instruments, computers, new technology etc.**

1. M/s. EdGate Technologies Pvt. Ltd., the University Partner of Texas Instruments, India has set up a lab in the Institute and has donated ALSK PRO-6 numbers to the Institute.

2. M/s. Sedulity Solutions and Technologies, New Delhi has established a Centre of Excellence for Cyber Security and Cyber Forensics via MOU on 10<sup>th</sup> Day of December 2015 to organize various R&D and Training Programs.
3. Meridian Digital World, Hyderabad has established a Galileo Centre for Academic Excellence and Digital Library in the Institute.
4. Institute has tied-up and established labs with Huawei for the purpose of Training and testing. The details of the equipments are Model no. N/W equipment Huawei serial No. F55-007-M00 AR 151, Model no. N/W equipment Huawei serial No. F55-0670-M00 S5700-28P-LI-AC (02353836) AND Model no. N/W equipment Huawei serial No. F55-0792-M00 S5700-10P-LI-AC (2354036).
5. Oracle Technical Support Service and Product via order no. 38024424 for the duration from 21/12/2015 to 20/12/2018.
6. The Institute has established CISCO academy for training of students for all departments.
7. Rsoft collaborated with DAV Institute of Engineering and Technology, Jalandhar to promote research in the area of optical fiber communication and has provided the “optisim” tool for the said purpose.

### 3.4 Research Publications and Awards

#### 3.4.1 Highlight the major research achievements of the staff and students in terms of

- Patents obtained and filed (process and product)
- Original research contributing to product improvement
- Research studies or surveys benefiting the community or improving the services
- Research inputs contributing to new initiatives and social development

**The faculty members with their patents are mentioned in the following table:**

S. No.	Faculty	Title	Patent/ Application No.	National/ International	Date of Filing	Date of Publication
1	Dr. Amit Kohli	Heat Treatment Tray for Hardening of Steel	Design No.254948	National	-----	03/7/2013



2	Dr. Amit Kohli	Door Handle	Design No.265973	National	----	24/9/2014
3	Dr. Kanchan L. Singh	Manufacturing of Fully Cubic Zirconia at Low Temperature using Microwave Energy	Patent No. 268892	National	28/10/2004	22/9/2015
4	Dr. Sanjeev Saini	Design and Fabrication of Hexagonal Cutting Lathe Machine	Application No. 2016110133 60 A	National	18/04/2016	-----
5	Dr. Sanjeev Saini	Design and Development of High Capacity Gear Assembly Used for Large Size High Torque Industrial Valves	Application No. 2016110133 61 A	National	18/04/2016	-----
6	Dr. Kanchan L. Singh and Ms. Payal Sharma	A process for preparing YZT a mixed conductor	Application No. 2016110277 79	National	15/08/2016	-----
7	Dr. Sanjiv Naval	Concrete Mix	Application No. 1467/DEL-2015A C04B20-00(International Classification)	National	23/05/2015	-----

- **Original research contributing to product improvement**

The research performed by Dr. Sanjay Goel portrays that the use of self-compacting fibre reinforced concrete may help in improving the performance and enhancement of the life of infrastructures like bridges, flyovers, offshore structures and airport pavements.

Patent of Dr. Amit Kohli “Heat Treatment Tray for Hardening of Steel” is used by the Industry.

Patent of Dr. Sanjeev Saini “Design & Development of High Capacity Gear, Assembly used for Large Size High Torque Industrial Valves” is used by The Leader Valves Ltd., Jalandhar.

- **Research studies or surveys benefitting the community or improving the services**

The research work completed by faculty members with their research description is as under:

S. No.	Faculty	Area of Research	Research studies benefitting the community- improving the services
1.	Dr. Sanjay Goel	Concrete Technology	The use of self compacting fibre reinforced concrete may help in improving the performance and enhancing the life of infrastructures like bridges, flyovers, offshore structures and airport pavements. This may further help in reducing the maintenance cost and will prove more safe, and healthy alternative to other construction materials used for the construction of above said structures.
2.	Dr. M. K. Kaushik	Environment Sciences	A beneficial and relatively safe end use of waste scraps/rubber tyres.

**3.4.2 Does the Institute publish or partner in publication of research journal(s)? If ‘yes’, indicate the composition of the editorial board, publication policies and whether such publication is listed in any international database?**

Yes.

- The Institute publishes Biannual Journal ‘The Literati’. This journal is devoted to English Language and Literature. Some of the eminent persons on its editorial board include:
  - a) Professor Gurupdesh Singh, Formerly Head, Department of English, GNDU, Amritsar.
  - b) Professor Tajinder Kaur, Dean, Faculty of Languages, Punjabi University, Patiala.
  - c) Professor Stephen Gill, York University, Toronto, Canada.
  - d) Professor Alessandro Monti, Department of Oriental Studies, University of Turin, Turin, Piedmont (Italy).
  - e) Professor Deepti Gupta, Department of English, Panjab University, Chandigarh.
  - f) Professor Z.N. Patil, Former Professor of English, Training, Development & Education, EFL University, Hyderabad.
  - g) Dr. Yubee Gill, Associate Professor, Department of English, GNDU, Amritsar.

- h) Dr. Manjitinder Singh, Former Professor, Department of English, Punjabi University, Patiala.
  - i) Dr. Deepak Dharmani, Associate Professor, Department of English, CDLU, Sirsa.
  - j) Dr. G.R. Taneja, University of Delhi, Editor, In-between; Essays and Studies in Literary Criticism.
  - k) Dr. Vivek Sachdeva, School of Humanities and Social Sciences, GGS Indraprastha University New Delhi.
  - l) Dr. Binod Mishra, Associate Professor, Department of Humanities and Social Sciences, IIT, Patna.
- The Institute plans to start online journals for Sciences, Management and Engineering disciplines shortly.

### **3.4.3 Give details of publications by the faculty and students:**

- a) Publication per faculty
- b) Number of papers published by faculty and students in peer reviewed journals (national / international)
- c) Number of publications listed in International Database (for Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)
  - Monographs
  - Chapter in Books
  - Books Edited
  - Books with ISBN/ISSN numbers with details of publishers
  - Citation Index
  - SNIP
  - SJR
  - Impact factor
  - h-index

#### **As per Annexure - I**

### **3.4.4 Provide details (if any) of**

- Research awards received by the faculty
- Recognition received by the faculty from reputed professional bodies and agencies, nationally and internationally
- Incentives given to faculty for receiving state, national and international recognitions for research contributions.

### Research awards received by the faculty

Sr. No.	Name of the Person	Name of Award	Agency	Date/Year
1.	Dr. Sanjeev Naval	Geotechnical achievement	NITTR	2014
2.	Dr. Sanjay Goel	Best Ph.D thesis award	ICI	2012
3.	Dr. Sanjay Goel	Outstanding Young Technologist Award	ICI	2013

### Recognition received by the faculty from reputed professional bodies and agencies, nationally and internationally

Sr. No.	Name of the Faculty	Name of the Award	Organization	Year
1.	Dr. Sanjeev Saini	Best Teacher	ISTE	2014
2.	Mr. Gaurav Dhuria	Best Teacher	ISTE	2015
3.	Dr. M.K. Kaushik	Best Teacher	ISTE	2015
4.	Dr. Sudhir Sharma	Best Teacher	ISTE	2016
5.	Dr. Jagjit Malhotra	Best Teacher	ISTE	2016
6.	Dr. Sanjeev Saini	Most Cited Article Award	IJEE & M	2016

## 3.5 Consultancy

### 3.5.1 Give details of the systems and strategies for establishing Institute industry interface?

-

There is a dedicated Department of Training & Placement in the Institute which keeps a close liaison with the industry. All departments of the Institute also interact with the various industries. To promote the Institute-industry interface, the following steps are taken by the Institute:

- The persons from industry are invited for delivering expert lectures to the students/faculty.
- The workshops in collaboration with the industry are organised in the Institute from time to time.
- The industrial visits of the students are arranged by all the departments.
- The students are sent to industry for undergoing their training.
- The Institute has the memberships of CII (Confederation of Industry) and AIMA/JMA (Jalandhar Management Association).
- The Institute has signed MOUs with various industries such as Wipro Technologies, Texas Instruments, Sofcon India Pvt. Ltd. etc.

- The Industry is contacted for Consultancy/Testing/ Production related work.

**3.5.2 What is the stated policy of the institution to promote consultancy? How is the available expertise advocated and publicized?**

The Institute interacts with various Government, Semi-Government and private organizations for promoting consultancy. The details of the various labs and expertise of the faculty is communicated to the other organizations through written correspondence, e-mails and personal visits of the faculty.

**3.5.3 How does the institution encourage the staff to utilize their expertise and available facilities for consultancy services?**

The staff of the Institute is encouraged to undertake consultancy work; the consultancy fee received is shared between the Institute and the concerned staff as per the stated policy of the Institute. The staff can use the institutional infrastructure for the consultancy work.

**3.5.4 List the broad areas and major consultancy services provided by the institution and the revenue generated during the last four years.**

Year	Broad Area of Consultancy	Revenue Generated (Lacs)
2012-13	Material Testing	0.86
2013-14	Material Testing	0.57
2014-15	Material Testing	0.17
2015-16	Material Testing	0.43

**3.5.5 What is the policy of the institution in sharing the income generated through consultancy (staff involved: Institution) and its use for institutional development?**

The Institute has identified two major types of consultancy assignments:

**Type-I** It involves participation of a teacher or group of teaches, who use institutional infrastructure facilities as workshop, laboratories, computers etc. for work. In this case, revenue is shared in the following manner:

- a) 50% to the Development Fund of the Institution.
- b) 50% to be shared by the team involved in the work.

**Type-II** It involves participation of teacher(s) without using institutional infrastructure. The revenue for this type of consultancy is shared in the following manner:

- a) 30% to the Development Fund of the Institution.
- b) 70% to be shared by the team involved in the work.

### **3.6 Extension Activities and Institutional Social Responsibility (ISR)**

#### **3.6.1 How does the institution promote institution-neighbourhood community network and student engagement, contributing to good citizenship, service orientation and holistic development of students?**

The Institute ensures that its students actively participate in the community services. The following activities are done by the students for the community:

1. The Institute organized a “Bharat Jago Daud” of the NSS Volunteers of the Institute to celebrate the 150th Birth Anniversary of Swami Vivekananda on 11-09-2013.
2. The NSS Unit of the Institute in association with Civil Hospital, Jalandhar organises Blood Donation Camp every year. In this camp, a large number of students donate blood voluntarily.
3. The students of the Institute actively participate in the cleanliness drive under Swachh Bharat Abhiyan.
4. The students participate in Jan Chetna Rallies for promoting various social causes.
5. The classes for school children are held in the Institute in the evening and students of the Institute teach the school children.
6. The students participated in career counseling fair ‘Spark’ to motivate, guide and counsel the students of nearby schools for higher studies.
7. DAVIET has adopted village “Bal”, Dist. Jalandhar under National Digital Literacy Mission (NDLM), which is an initiative of Ministry of electronics and IT, Govt. of India to enable at least one person from each family to become computer literate. Under this initiative, a survey was conducted at Village Bal to enroll villagers for computer literacy programme. Around 40 NSS volunteers took part in this exercise to collect the data from around 400 houses, which were willing to enroll for the course. After successful completion of course and qualifying in exam, participants will be given certificates by Ministry of electronics and IT, Govt. of India.
8. 1 km long human chain was made for voting awareness by the students of Institute from Verka Milk Plant, Jalandhar. Around 1500 students of various streams took part in this formation on 31.1.17.

9. 61 old computers were donated to various needy societies such as Vishveshvaranand Vedic Research Institute P.O. Sadhu Ashram Hoshiarpur, DAV Centenary Public School. Theog, Shimla, Daulat Ram ABBI D.A.V. Public School, Goraya, Lala Harichand Bhalla Technical Education Welfare Society (Regd.), Jalandhar and Niskam Sewa Bharti Trust, Jalandhar to promote institution-neighbourhood community network.
10. The students & staff of our campus have participated with full dedication to promote Jalandhar to figure in the list of Smart Cities.
11. Municipal Corporation Jalandhar allotted the work of maintenance of central verge of the road and triangle at workshop Chowk vide its letter number 65/CE(H) dated 9/8/2016.
12. Doordarshan Kendra, Jalandhar organized Election based “Janvani” Programme involving representatives of political parties with an audience of about 100 persons on 28/1/2017 at DAVIET campus.

**3.6.2 What is the Institutional mechanism to track students’ involvement in various social movements/activities which promote citizenship roles?**

The Institute has appointed a teacher in-charge as NSS Nodal officer who keeps a record of the social activities of the students through students’ committee. The students’ records are also maintained in their respective departments.

**3.6.3 How does the institution solicit stakeholder perception on the overall performance and quality of the institution?**

The Institute obtains feedback from various stakeholders such as students, parents, alumni, faculty and employers. While developing the Vision and Mission of the Institute, all the stakeholders actively participated in the same. The Institute has created a 360 degree Campus Development Plan with active participation of all the stakeholders.

**3.6.4 How does the institution plan and organize its extension and outreach programmes? Providing the budgetary details for last four years, list the major extension and outreach programmes and their impact on the overall development of students.**

The Institute prepares the Academic Calendar in the beginning of the session. All the activities are planned in advance and efforts are made that the activities are held as per schedule.

- The governing body of the Institute has resolved to undertake the course under Prime Minister Kaushal Vikas Yojana (PMKVY). The Institute started a batch of 25 students for providing training on ‘CNC Operator Machining Technician L3’ for drop out students. This course was started to cater the need of the local

industries to provide them the skilled manpower. AICTE provided funding of Rs. 3,24,000/- for the said programme.

- The governing body of the Institute has approved proposal received from M/s. CSC, E-Governance Services India Ltd., a company promoted by the Ministry of Communications and Information Technology, Govt. of India New Delhi. In this proposal, CSC has proposed a unique joint collaboration with our Institute where Institute will adopt a village nearby and work jointly to make it digitally literate. Accordingly, the Institute has adopted village “BAL” for the said purpose.
- The students of the Institute under NSS organize special classes under the mission “Education for socially deprived and under privileged children”.
- Institute plans and organizes survey camp at various locations of different terrain conditions as an extension and outreach programme.
- Institute organizes Six Week/ Six Months industrial/ institutional training of students at various locations in different Companies as an extension and outreach programme.

### **3.6.5 How does the institution promote the participation of students and faculty in extension activities including participation in NSS, NCC, YRC and other National/ International agencies?**

The Institute makes all possible efforts to promote the participation of students and faculty in extension activities. The following steps are taken to encourage the students for participation in extension activities:-

1. The NSS Nodal officer and NSS volunteers of the Institute go to every class and encourage the students to join NSS wing of the Institute as per the guidelines of the affiliating university.
2. The efforts and contributions of the students are acknowledged by giving them appreciation certificates in annual function.
3. The participation by the students in extension activities carry a weightage in general fitness marks.
4. In the beginning of the new session, in order to bring out the hidden talent of the students, the Institute organizes talent hunt for the new entrants.

### **3.6.6 Give details on social surveys, research or extension work (if any) undertaken by the college to ensure social justice and empower students from under-privileged and vulnerable sections of society?**

The students of the Institute participated in a survey conducted in association with Sarv Hitkari Society in March, 2016 in two slum areas of Jalandhar City. The purpose of the survey was to collect the



preliminary information regarding the living status, health issues, drug addiction in these areas.

**3.6.7 Reflecting on objectives and expected outcomes of the extension activities organized by the institution, comment on how they complement students' academic learning experience and specify the values and skills inculcated.**

The participation by the students in the extension activities inculcates the following values among students:

- Leadership qualities
- Consciousness about the environment
- Team Spirit
- Spirit of social work
- Patriotism
- Discipline
- Positive attitude towards life
- Self confidence

**3.6.8 How does the institution ensure the involvement of the community in its reach out activities and contribute to the community development? Detail on the initiatives of the institution that encourage community participation in its activities?**

The institution ensures the involvement of the community in the following manner:

1. Organizing Blood Donation and Eye-Checkup Camps in association with Civil Hospital, Jalandhar and other NGOs.
2. Participation in Swachh Bharat Abhiyan.
3. Provided skill development training to a group of 25 people under Prime Minister Kaushal Vikas Yojana from December 2016 to March 2017.
4. Donating computers to the other Institutes/NGOs.
5. Participating in the various activities of Arya Samaj.
6. Hosting Annual Scholarship Distribution function of Ram Navami Utsav Committee.

**3.6.9 Give details on the constructive relationships forged (if any) with other institutions of the locality for working on various outreach and extension activities.**

The Institute does not have any formal relationship in the form of MoU with other institutions of the locality. However, the Institute has informal relationship(s) with the following organizations:

- The Institute is having a constructive relationship with Red Cross Society and Civil Hospital, Jalandhar for arranging Blood Donation Camps.
- The Institute has a strong association with Rotary Club for arranging Blood Donation Camps.
- The local Ram Navami Utsav Committee organizes its annual scholarship distribution programme in association with the Institute.
- The Institute has also tied-up with an NGO 'Pahal' for organising blood donation camps and awareness programmes.

**3.6.10 Give details of awards received by the institution for extension activities and/contributions to the social/community development during the last four years.**

The Rotray Club, Civil Hospital and NGO 'Pahal' has honored NSS Programme Officer for promoting voluntarily blood donation in the Institute and adjoining areas in 2014, 2015 and 2016.

### **3.7 Collaboration**

**3.7.1 How does the institution collaborate and interact with research laboratories, Institutes and industry for research activities. Cite examples and benefits accrued of the initiatives – collaborative research, staff exchange, sharing facilities and equipment, research scholarships etc.**

1. Department of Information Technology organized Two Week Short Term Course (STC) on "Research Methodology" from 6<sup>th</sup> to 17th June, 2016 through ICT in collaboration with NITTTR, Chandigarh as a remote centre in the Institute.
2. DAVIET organized an International interdisciplinary conference on Engineering science & Management at Goa in collaboration with Biju Patnaik University of Technology (BPUT) and Nagarjuna College Bangalore on 17-18 December, 2016.
3. DAVIET is organizing International Interdisciplinary conference on Science, Technology, Engineering, Management, Pharmacy and Humanities in collaboration with Nanyang Technological University, Singapore on 22-23 April, 2017.

**3.7.2 Provide details on the MoUs /collaborative arrangements (if any) with institutions of national importance/other universities/ industries/Corporate (Corporate entities) etc. and how they have contributed to the development of the institution.**

Following are the details of Memorandum of Understanding which were signed between the Institute and institutions of national importance/ other universities/ industries/corporate (corporate entities):

S. No.	MoU (Date / Place)	Duration of MoU (In years)	Concerned Organizations with their representatives		Contribution to the Institute	Institute (or) Departments implicated
1.	18.03.2017	5	DAV Institute of Engg. & Technology, Jalandhar	Dr. B.R Ambedkar National Institute of Technology, Jalandhar	Various collaborative activities of mutual interest	For the Institute
2	16.03.2017	3	DAV Institute of Engg. & Technology, Jalandhar	Tagore Hospital & Heart Care Centre Pvt. Ltd., Jalandhar	Health Care	For Institute (DAVIET)
3	10.03.2017	3	DAV Institute of Engg. & Technology, Jalandhar	DAV College, Jalandhar	Sports Facilities	For Institute (DAVIET)
4	01.02.2016	5	DAV Institute of Engg. & Technology, Jalandhar  Representative: Prof. (Dr.) Manoj Kumar, Principal  Liaison Officer: Dr. Manoj Kumar, Principal	University of Ontario Institute of Technology Oshawa (Canada) Representative: Dr. Vijay K. Sood, NSERC-OPG Co-Chair in innovative Design Engg., faculty of Engineering and Applied Science. Liaison Officer: Dr. Vijay K. Sood, NSERC-OPG Co-Chair in innovative Design Engg.	Various collaborative activities of mutual interest	For Institute (DAVIET)
5	29.01.2016	2	DAV Institute of Engg. & Technology, Jalandhar  Representative: Prof. (Dr.) Manoj Kumar, Principal	IBM India pvt. Ltd.  Representative: Mr. Jagadisha Byos	Agreement for exchange of confidential information	For the Institute (DAVIET)
6	15.01.2016	5	DAV Institute of Engg. & Technology, Jalandhar	National Institute of Technology, Delhi	Various collaborative activities of mutual	For the Institute (DAVIET)

			Representative: Prof. (Dr.) Manoj Kumar, Principal	Representative: Dr. Ajay K. Sharma, Director	interest	
7	21.12.2015	15	DAV College Trust & Management Society, Chitra Gupta Road, New Delhi  Representative: Prof. (Dr.) Manoj Kumar, Principal, DAV Institute of Engg. & Technology, Jalandhar	Reliance Jio Infocomm Limited.  Representative: Mr. Puneet Rai	For Better Tele- communicatio n Services	For Institute (DAVIET)
8	17.12.2015	5	Sedulity Solutions & Technologies (SEDULITY)  Representative: Dr. Anup Girdhar, CEO-Founder  Operations In-charge: Mr. Mukul, Vice President	DAV Institute of Engg. & Technology, Jalandhar  Representative: Prof. (Dr.) Manoj Kumar, Principal Operations In-charge: Mr. Vinay Chopra, A.P.	Opening of a 'Centre of Excellence' for cyber security &Cyber Forensics	Department of CSE, Department of IT and Department of Computer Applications of the Institute.
9	21.09.2015	-	DAV Institute of Engg. & Technology, Jalandhar  Representative: Prof. (Dr.) Manoj Kumar, Principal	M/s EdGate Technologies Pvt. Limited (permission to publicize is required)  Representative: Mr. Gurpreet Singh, M/s EdGate Technologies Pvt. Limited	Donate ASLK- 6 nos. To the Institute Organize faculty development program	For Department of EE and ECE of the Institute.
10	03.01.2009	3	DAV Institute of Engg. & Technology, Jalandhar	National Institute of Technology, Hamirpur	Various collaborative activities of mutual interest	For Institute (DAVIET)

**3.7.3 Give details (if any) on the industry-institution-community interactions that have contributed to the establishment/creation/up-gradation of academic facilities, student and staff support, infrastructure facilities of the institution viz. laboratories / library/new technology/ placement services etc.**

1. M/s. EdGate Technologies Pvt. Ltd., the University Partner of Texas Instruments, India has set up a lab in the Institute and has donated ALSK PRO-6 numbers to the Institute.
2. M/s. Sedulity Solutions and Technologies New Delhi have established a Centre of Excellence for Cyber Security and Cyber Forensics via MOU on 10<sup>th</sup> December, 2015 to organize various R&D and Training Programs.
3. Meridian Digital World, Hyderabad has established a Galileo Centre for Academic Excellence and Digital Library in the Institute.
4. Institute has established labs with Huawei for the purpose of Training and testing. The details of the equipments are Model no. N/W equipment Huawei serial No. F55-007-M00 AR 151, Model no. N/W equipment Huawei serial No. F55-0670-M00 S5700-28P-LI-AC (02353836) AND Model no. N/W equipment Huawei serial No. F55-0792-M00 S5700-10P-LI-AC (2354036).
5. Oracle Technical Support Service and Product via order no. 38024424 for the duration from 21/12/2015- 20/12/2018.
6. The Institute has established CISCO Network Academy for training of students for all departments.

**3.7.4 Highlighting the names of eminent scientists/participants, who contributed to the events, provide details of national and international conferences organized by the college during the last four years.**

Yes, the Institute has organized three national conferences during the last three years, the details of which are given below:

- Organised DAV National Congress on Science and Technology from May 30-31, 2013.
- Organised DAV National Congress on Science, Technology and Management from June 26-27, 2014.
- Organised 3<sup>rd</sup> DAV National Congress on Science, Technology, Engineering, Humanities & Management (STEHM'16) from May 20-21, 2016.

The following eminent scientists/participants contributed to the events:

S. No.	Name	Designation	National/ International	Organization
1	Dr. Sukumar Mishra	Professor	National	IIT, Delhi
2	Dr. S.K. Das	Director	National	IIT, Ropar
3	Dr. A.K. Paul	Vice Chancellor	National	DAV University, Jalandhar
4	Dr. Arvind Kumar Agnihotri	Professor	National	NIT, Jalandhar
5	Dr. A.P. Singh	Dean (RIC)	National	Punjab Technical University
6	Dr. K.S. Sandhu	Professor	National	NIT, Kurukshetra
7	Dr. Sunita Ghakhar	Professor	National	IIT, Roorkee
8	Dr. Buta Singh	Dean (Academics)	National	Punjab Technical University
9	Dr. D.P. Goel	Professor	National	MDI, Gurgaon
10	Dr. Ajay Sharma	Director	National	NIT, Delhi
11	Dr. A.S. Arora	Professor	National	SLIET, Longowal
12	Dr. Hardeep Singh	Professor	National	GNDU, Amritsar
13	Dr. Ravi Kumar	Director	National	BCET, Gurdaspur
14	Dr. R.K. Garg	Professor	National	NIT, Jalandhar
15	Dr. Sanjay Marwaha	Professor	National	SLIET, Longowal
16	Dr. Ajay Sharma	Professor	National	NIT Delhi
17	Dr. Lalit Kumar	Professor	National	NIT Delhi
18	Dr. Y.S. Brar	Professor	National	IKG-PTU
19	Mr. Deepak Vohra	Ambassador	National	MoE
20	Mr. Jagat Shah	CEO	National	Global Network
21	Dr. Juhani Niemien	Sr. Advisor	Inter-national	Lahti University of Applied Sciences, Finland
22	Mr. Mahesh Munjal	Managing Director	National	Majestic Auto Ltd.
23	Ms. Kamna Raj Aggarwal	Ex-Chairperson	National	CII Punjab State Council & Director GDPA Fasteners
24	Mr. Deepak Vohra	Diplomat	National	Govt. of India
25	Mr. Shadan Zeb Khan	Sr. Divisional Security Commissioner	National	Railway Protection Force
26	Dr. Sumit D Chowdhury	Founder & CEO	National	Gala Smart Cities
27	Mr. Ibadat Singh	Vice President	National	Operations Datawind Ltd.
28	Prof. Ajay K Sharma	Director	National	National Institute of Technology, Delhi
29	Mr. Dinkar Adkakhia	Vice President	National	Govt. & PSU EMC India
30	Mr. Himanshu Shekhar	DGM	National	Smarter Cities North & East, IBM
31	Ms. Aastha Sayal	Director	National	Gala Smart Cities
32	Mr. Alok Srivastava	Sr. Scientist	National	ISRO

- DAVIET organized an International interdisciplinary conference on Engineering, Science & Management at Goa in collaboration with Biju Patnaik University of Technology (BPUT) and Nagarjuna College Bangalore on 17-18 Dec, 2016.
- DAVIET is organizing International Interdisciplinary conference on Science, Technology, Engineering, Management, Pharmacy and Humanities in collaboration with Nanyang Technological University, Singapore on 22-23 April 2017.

### **International Keynote Speakers:**

- Prof Dr. Ma Maode, Associate Professor, School of Electrical & Electronic Engineering, College of Engineering, NTU, Singapore
- Gopi Krishna Durbhaka, Senior Member IEEE, Fellow of ISECE, MISTE, MIAENG, TCS, India

### **3.7.5 How many of the linkages/collaborations have actually resulted in formal MoUs and agreements? List out the activities and beneficiaries and cite examples (if any) of the established linkages that enhanced and/or facilitated -**

- a) Curriculum development/enrichment
- b) Internship/ On-the-job training
- c) Summer placement
- d) Faculty exchange and professional development
- e) Research
- f) Consultancy
- g) Extension
- h) Publication
- i) Student Placement
- j) Twinning programmes
- k) Introduction of new courses
- l) Student exchange
- m) Any other

The Institute has signed 4 MoUs with premier higher education Institutes/university and 6 MoUs with leading industries.

#### **a) Curriculum development /enrichment**

- Dr. Sudhir Sharma, Dean RIC of DAVIET visited University of Ontario Institute of Technology, Canada which resulted in an MoU between DAVIET and UOIT for research sharing and faculty student exchange. Mr. Gagandeep Sharma, Assistant Professor, Electrical Engineering joined UOIT for higher studies under the said MoU.
- The Institute has signed MoU with NIT Jalandhar, NIT Hamirpur, NIT Delhi for curriculum development, faculty, staff and student exchange and research collaborations.

**b) Internship/ On-the-job training**

The Institute has signed MoUs with leading industries for Internship/On-the-job training. The details of the MoU are given below:

1. M/s. EdGate Technologies Pvt. Ltd., the University Partner of Texas Instruments, India has set up a lab in the Institute and has donated ALSK PRO-6 numbers to the Institute.
2. M/s. Sedulity Solutions and Technologies New Delhi have established a Centre of Excellence for Cyber Security and Cyber Forensics via MOU on 10th Day of December 2015 to organize various R&D and Training Programs.
3. Meridian Digital World, Hyderabad has established a Galileo Centre for Academic Excellence and Digital Library in the Institute.
4. The Institute has tied-up and established labs with Huawei for the purpose of Training and testing .The details of the equipments are Model no. N/W equipment Huawei serial No. F55-007-M00 AR 151, Model no. N/W equipment Huawei serial No. F55-0670-M00 S5700-28P-LI-AC (02353836) AND Model no. N/W equipment Huwai serial No. F55-0792-M00 S5700-10P-LI-AC (2354036).
5. Oracle Technical Support Service and Product via order no. 38024424 for the duration from 21/12/2015- 20/12/2018.
6. The Institute has established CISCO academy for training of students for all departments.

**c) Summer placement:**

Project works are done by the B.Tech. students at different Institutes/ Industry/ Govt. organization / Research organizations like DRDO, ISRO etc. during the semester Break.

**d) Faculty exchange and professional development**

Research, Innovation and Consultancy Cell takes care of updating the latest technology available in teaching for the staff members. They also invite experts for interacting with staff members in the field of innovative teaching. Office staff members are often given training in the latest IT skills.

**e) Research**

The Institute has established two recognized research centers as per the following:

- Nano Technology and Nano Sciences.
- Light wave Communication.



- f) Consultancy**  
The Department of Civil Engineering and Department of Mechanical Engineering of the Institute are actively involved in providing consultancy.
- g) Extension**  
Each department has its own extension program(s) depending on the areas of interest. Some of them have even converted it to an MoU. For example, M/s. CSC, E-Governance Services India Ltd., a company promoted by the Ministry of Communications and Information Technology, Govt. of India New Delhi has proposed a unique joint collaboration with our Institute where Institute will adopt a village nearby and work jointly to make it digitally literate. Accordingly the Institute has adopted village “BAL” for the said purpose.
- h) Publication**  
The details of faculty and student publications resulted are enclosed as Annexure – I.
- i) Student Placement**  
There are a few companies which regularly visit DAV Institute of Engineering & Technology, Jalandhar for placements as we have formal agreements with them.
- j) Twinning programmes**  
Under the present University system, twinning programs are not possible to conduct. But the Institute has signed MoU with Universities/Institutes for student exchange.
- k) Introduction of new courses**  
The Institute has undertaken a course under Prime Minister Kaushal Vikas Yojana (PMKVY) and started a batch of 25 students for providing training to them on ‘CNC Operator Machining Technician L3’ (for drop out students). This course is started to cater the need of the local industries to provide them the skilled manpower. AICTE has provided funding for the said programme. The new B.Voc. programs will be introduced shortly in consultation with industrialists from fields like alternative energy sources and logistics.
- l) Student exchange**  
At present, the Institute has signed one MoU with international university in Canada for student exchange and 03 MoU’s with NITs for student exchange programme to enables students from both Institutes to visit their campus for sharing knowledge.

**m) Any other**

The Institute in line with the Govt. of India policies is working for startups, incubation centers, entrepreneurship and has tied up with various Govt. organizations for the same.

**3.7.6 Detail on the systemic efforts of the institution in planning, establishing and implementing the initiatives of the linkages/collaborations. Any other relevant information regarding Research, Consultancy and Extension which the college would like to include.**

The Institute makes sincere efforts in planning, establishing and implementing the initiatives of the linkages/collaborations. During the last few years, the Institute has signed eight MOUs with industry, the Institutes of national importance and another university abroad. Many faculty members have obtained their Ph.D. degrees while being in service of the Institute. The Institute provides all possible help to the faculty and the students for carrying out research activities.

## **CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES**

### **4.1 Physical Facilities**

#### **4.1.1 What is the policy of the Institution for creation and enhancement of infrastructure that facilitate effective teaching and learning?**

The Institute is having a state-of-the-art infrastructure; the development of the infrastructure is done as per the need of the various courses.

#### **4.1.2 Detail the facilities available for**

- a) **Curricular and co-curricular activities classrooms, technology enabled learning spaces, seminar halls, tutorial spaces, laboratories, botanical garden, Animal house, specialized facilities and equipment for teaching, learning and research etc.**

The campus is spread over an area of 11.6 acres. The campus has got various academic blocks, administrative block, hostels, bank, playgrounds, auditorium, convention hall, conference room, seminar halls, cafeteria, guest house, principal residence etc. The detail is as under:

<b>Type of Building</b>	<b>Units</b>
Workshops	03
Class Rooms	33
Tutorial Room	17
Drawing Halls	03
Laboratories	67
Seminar Hall	08
Workshop	01
Boys Hostel	02
Girls Hostel	01
Bank	01
Guest House	01
Auditorium	01
Library	01
Administrative Block	01
Principal's Residence	01
Staff Quarters	03
Convention Hall	01

b) **Extra-curricular activities – sports, outdoor and indoor games, gymnasium, auditorium, NSS, NCC, cultural activities, Public speaking, communication skills development, yoga, health and hygiene etc.**

The Institute has got the facilities for indoor and outdoor games. The facilities for the following games are available in the Institute:-

- Basketball
- Lawn Tennis
- Table Tennis
- Badminton
- Athletics
- Cricket
- Football
- Volleyball
- Handball
- Chess
- Swimming

The gymnasium facility is provided in all the three hostels. The gymnasiums are equipped with the latest equipments.

The Institute has a multipurpose auditorium with a seating capacity of 1200 persons. In additions to this, there is a convention hall in the Institute with a seating capacity of 250 persons.

The NSS wing of the Institute is very active. The NSS unit is headed by NSS Nodal officer. The blood donation camp is organized by the NSS wing every year. In the blood donation camp, students take part very enthusiastically. The NSS volunteers of the Institute take part in Swachh Bharat Mission.

The Human Value Cell of the Institute in association with “**Art of Living**” organised **A Happiness Program** on 7-12 March, 2016. Happiness program is a life skills program offered for improving the overall performance, to release stress, tension, anxiety, improve relationships, enhancing creativity and communication and in developing leadership and team building skills amongst other areas of self-development.

The Human Value Cell of the Institute organised a one day workshop cum seminar for the students and faculty in which the keynote speaker was Sh. R. K. Singharia from Bharat Swabhiman Trust. He presented few demonstrations of Yoga and with the experience of his life.

On 21<sup>st</sup> March, 2016, the Human Values Cell of DAVIET organized a lecture on 'moral values and education' for the students, in which the keynote speaker and the chief guest was Rajyogi Brahmakumar Bhagwan Bhai from Prajapita Brahma Kumaris Ishwariya Vishwa Vidyalaya, Mount Abu, Rajasthan. He told that the main problem of human conflicts is the deficiency of moral values and education in society.

A three day workshop on human values and professional ethics was organised by human values cell of the Institute in association with IKG PTU Kapurthala on **May 23-25, 2016**. The facilitator of the workshop was **Mr. Jatindra Narula**.

The due importance is given to the cultural activities in the Institute. The Institute has won the IKG PTU Youth Festival for a record 15 times out of 16 times the festival was organized. The students of all the departments the Institute represent the University in the Inter-University Youth Festivals.

The Institute has got a full-fledged language lab for developing the communications skills of the students. The lab is equipped with the latest language software and other relevant equipment.

The health and hygiene is given top priority. All water coolers in the Institute are fitted with RO based water purifiers. Proper cleanliness is maintained in the entire campus. The hygienic food is served in the mess of the hostels and in the cafeteria. A committee consisting of Institute's medical officer, Hostel warden, NSS Nodal Officer, Counseling Psychologist, Residential nurse and Sanitation supervisor has been formed to look into the hygiene and maintenance of the health centre, Messes & Canteen.

**4.1.3 How does the institution plan and ensure that the available infrastructure is in line with its academic growth and is optimally utilized? Give specific examples of the facilities developed/augmented and the amount spent during the last four years (Enclose the Master Plan of the Institution/campus and indicate the existing physical infrastructure and the future planned expansions if any).**

The Institute has got the state-of-the-art infrastructure as required for various courses being offered by the Institute. However, in order to keep pace with the changing technology, the equipments are purchased from time to time. The master plan of the Institute is given hereunder:-



The following table shows the amount spent on the purchase of various equipments during the last four years:-

**Amount spent on the purchase of equipments (Rs. in Lakhs)**

Year	2012-13	2013-14	2014-15	2015-16
Amount Spent	7.99	6.72	1.76	2.00

**Amount spent on the purchase of Computers (Rs. in Lakhs)**

	2012-13	2013-14	2014-15	2015-16
Procurement of Computers	15.00	20.00	18.00	18.00
Maintenance of Computers	3.00	4.00	4.00	3.00

**4.1.4 How does the institution ensure that the infrastructure facilities meet the requirements of students with physical disabilities?**

1. The ramps are provided in the buildings.
2. Elevators/Escalator facility is provided in the academic area, Hostel and Library.
3. Classes of the students with disability are held at the ground floor preferably.

**4.1.5 Give details on the residential facility and various provisions available within them:**

- Hostel Facility – Accommodation available
- Recreational facilities, gymnasium, yoga center, etc.
- Computer facility including access to internet in hostel
- Facilities for medical emergencies
- Library facility in the hostels
- Internet and Wi-Fi facility
- Recreational facility-common room with audio-visual equipments
- Available residential facility for the staff and occupancy Constant supply of safe drinking water
- Security

**Girls' Hostel**

Accommodation Available

Type of Rooms	No.
Single Occupancy	48
Double Occupancy	34
Triple Occupancy	24

### **Facilities Provided in the Girls' Hostel**

- Gymnasium
- Recreational Room
- Power Back-up
- Medical Facilities
- Mess
- Canteen
- Indoor Games
- Health Insurance
- Guest Room
- Study Room
- Warden's Accommodation
- 24 Hours Wi-Fi facilities.
- 24 hours RO treated water

### **UG Boys' Hostel**

Accommodation Available

<b>Type of Rooms</b>	<b>No.</b>
Single Occupancy	64
Triple Occupancy	64

### **Facilities Provided in the UG Boys' Hostel**

- Gymnasium
- Recreational Room
- Power Back-up
- Medical Facilities
- Mess
- Canteen
- Indoor Games
- Health Insurance
- Guest Room
- Study Room
- Warden's Accommodation
- 24 Hours Wi-Fi facilities.
- 24 hours RO treated water
- Elevator

### **PG Boys' Hostel**

Accommodation Available

<b>Type of Rooms</b>	<b>No.</b>
Single Occupancy (Non-AC)	119
Single Occupancy (AC)	57



### **Facilities Provided in the PG Boys' Hostel**

- Gymnasium
- Recreational Room
- Power Back-up
- Medical Facilities
- Mess
- Canteen
- Indoor Games
- Health Insurance
- Guest Room
- Study Room
- Warden's Accommodation
- 24 Hours Wi-Fi facilities.
- 24 hours RO treated water
- AC and Non-AC rooms.

### **Residential Facility for the staff**

Principal's Residence	01
Hostel Wardens	03
Driver	01
Groundsman	01
Security Supervisor	01

The 24 hour RO treated water facility is available in the Institute. Round the clock security staff is posted in all the hostels and main gate of the Institute.

#### **4.1.6 What are the provisions made available to students and staff in terms of health care on the campus and off the campus?**

There is a full-time qualified doctor and a residential nurse in the Institute. The treatment is provided free of cost to the students and staff in the Institute dispensary.

All the students of the Institute are covered under group health insurance policy for cashless treatment at all listed hospitals on the panel of Insurance Company. However, the Institute has also signed a Memorandum of Understanding with Tagore Hospital for cashless treatment of students and on-call ambulance facility. This hospital is located very near to the Institute.

#### **4.1.7 Give details of the Common Facilities available on the campus—spaces for special units like IQAC, Grievance Redressal unit, Women's Cell, Counselling and Career Guidance, Placement Unit, Health Centre, Canteen, recreational spaces for staff and students, safe drinking water facility, auditorium, etc.**

Yes, various special units in the Institute are provided the appropriate space.

IQAC	:	Yes
Grievance Redressal Unit	:	Yes
Women Cell	:	Yes
Counseling and Career Guidance	:	Yes
Placement Unit	:	Yes
Health Centre	:	Yes
Canteen	:	Yes
Recreational Spaces for staff and students	:	Yes
Safe Drinking Water Facility	:	Yes
Auditorium	:	Yes

## 4.2 Library as a Learning Resource

### 4.2.1 Does the library have an Advisory Committee? Specify the composition of such a committee. What significant initiatives have been implemented by the committee to render the library, student/user friendly?

Yes, the Institute library has a Library Committee. The following is the composition of the same:

1. Dr. Rajni Sharma, Assistant Professor (Applied Sciences)
2. Dr. Vinay Chopra, Assistant Professor (CSE)
3. Dr. Kiran Ahuja, Assistant Professor (ECE)
4. Mr. Ganesh Chand, Assistant Professor (ECE)
5. Dr. Harmanpreet Singh, Librarian

The following initiatives have been implemented by the committee to render the library student/user friendly:

- Installation of computers in the library
- A separate E-Learning section in the Library
- Providing internet facility on the computers installed in the library
- Making library a Wi-Fi zone
- Procurement of e-journals & books
- Galileo Meridian Digital Library
- E-Learning Resources

### 4.2.2 Provide details of the following:

- **Total area of the library (in Sq. Mts.)** : 1400 Sq. Mtr.
- **Total seating capacity** : 250
- **Working hours (on working days, on holidays, before examination days, during examination days, during vacation)**

On Working Days	:	8 AM to 6 PM
On Holiday	:	8 AM to 2 PM
Before Examination Days	:	8 AM to 6 PM
During Examination Days	:	8 AM to 7 PM
During Vacations	:	8 AM to 5 PM

- **Layout of the library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources)**

The library is divided into the following sections

- Reference Section
- Reading Area
- Reception/May I Help Section
- Lounge Area for browsing
- IT Zone for e-learning
- Digital Library area
- Faculty Area
- Research Area
- Text Books Section
- Journals/Periodical Section
- Reprographic & Cafe Section
- Computer lab to access e-learning resources.

Since the whole campus is Wi-Fi enabled, the students can access e-resources from anywhere in the campus including Library.

**4.2.3 How does the library ensure purchase and use of current titles, print and e-journals and other reading materials? Specify the amount spent on procuring new books, journals and e-resources during the last four years.**

The faculty or the students who want to have new titles can submit their requisition on requisition slip to the librarian. The requisition for e-resources is obtained from different departments from time to time.

Library Holdings	2012-13		2013-14		2014-15		2015-16	
	No.	Total Cost	No.	Total Cost	No.	Total Cost	No.	Total Cost
Text Books	731	2,18,605	312	78,149	215	69,084	386	1,34,220
Reference Books	20	7,213	27	1,956	27	7,810	52	8,396
Journals/ Periodicals	116	3,02,500	72	82,000	72	85,000	110	1,24,526
e-resources	2000	16,54,808	5000	11,81,384	5000	22,34,987	2000	5,84,000
Any other								

**4.2.4 Provide details on the ICT and other tools deployed to provide maximum access to the library collection?**

- OPAC : Yes
- Electronic Resource Management package for e-journals : Yes
- Federated searching tools to search articles in multiple databases : Yes
- Library Website : There is a separate link for library in the Institute website.
- In-house/remote access to e-publications : Yes
- Library automation : Yes
- Total number of computers for public access : 43
- Total numbers of printers for public access : 1
- Internet bandwidth : 110 Mbps
- Institutional Repository : Yes
- Content management system for e-learning : Yes
- Participation in Resource sharing networks/consortia (like Inflibnet) : Yes

**4.2.5 Provide details on the following items:**

- Average number of walk-ins : 230/day
- Average number of books issued/returned : 270/day
- Ratio of library books to students enrolled : 15:1
- Average number of books added during last three years : 305
- Average number of login to OPAC : 20/day
- Average number of login to e-resources : 45/day
- Average number of e-resources downloaded/printed : 30/day
- Number of information literacy trainings organized : 2
- Details of “weeding out” of books and other materials - 10

**4.2.6 Give details of the specialized services provided by the library**

- Manuscripts : No
- Reference : Yes
- Reprography : Yes
- ILL (Inter Library Loan Service) : Yes
- Information deployment and notification (Information Deployment and Notification) : Yes
- Download : Yes
- Printing : Yes

- Reading list/ Bibliography compilation : No
- In-house/remote access to e-resources : Yes
- User Orientation and awareness : Yes
- Assistance in searching Databases : Yes
- INFLIBNET/IUC facilities : Yes

**4.2.7 Enumerate on the support provided by the Library staff to the students and teachers of the college.**

- Open access system
- Library staff restores the books
- Current Awareness Services
- Selective dissemination of information
- Helpdesk

**4.2.8 What are the special facilities offered by the library to the visually/physically challenged persons? Give details.**

- Elevator facility to reach first floor of library
- Ramp Facility at the entrance of library
- Escalator within the library
- Personalized attention to physically challenged students by the library staff

**4.2.9 Does the library get the feedback from its users? If yes, how is it analysed and used for improving the library services. (What strategies are deployed by the Library to collect feedback from users? How is the feedback analysed and used for further improvement of the library services?)**

The complaint/suggestion box is installed in the library. The box is opened by the staff of the Principal's Office. The Feedback register is maintained in the library and feedback is also obtained through feedback Performa.

### 4.3 IT Infrastructure

#### 4.3.1. Give details on the computing facility available (hardware and software) at the institution.

- Number of computers with Configuration (provide actual number with exact configuration of each available system)

Sr. No.	Configuration	No. of Units
1	i5/4GB/500GB	139
2	i5/8GB/500GB	43
3	C2D/2GB/250GB	49
4	C2D/3GB/320GB	59
5	C2D/2GB/320GB	32
6	P4/2GB/40GB	14
7	P4/3GHz/2GB/80GB	35
8	P4/1.5GB/80GB	49
9	P4/1GB/80GB/40GB	3
10	P4(3GHz)/4GB/500GB	31
11	P4/1GB/80GB	1
12	P4/3GB/80GB	1
13	P4/128MB/40GB	2
14	i3/2GB/250GB	2
15	Wipro 3GHz/1.5GB/80GB	9
16	P3 GHz/2GB/80GB	30
17	HP Workstation/4GB/80GB	31
18	Xeon 3.0/8GB/2TB	2
19	Xeon/32GB/9TB	1
20	SM Xeon 3.0GHz/5B/80GB	1
21	Xeon 3.0GHz/2GB/160GB	1
22	AIO/2GB/500GB	28
23	AIO/2GB/1TB	1
24	Lenovo Think Center	2
25	P4/512MB/80GB	11
26	HP Workstation C2D/1GB/80GB	6
27	HP Workstation C2D/512MB/80GB	2
28	C2D/1GB/250GB	1
29	P4/2GB/80GB	3
30	C2D/512MB/80GB	2

- Computer-student ratio

1:3

- **Stand alone facility**

Yes

- **LAN facility**

Yes, all the computers are connected through LAN

- **Wifi facility**

Yes, the Wifi facility is available throughout the campus

- **Licensed software**

The list of licensed software is as under:

S. No.	Particulars	Deptt.	Qty.
1	TC ++	CSE	1 Pack
2	Corel Draw	CSE	1 Pack
3	Tally Software	CSE	1Pack
4	Visual Studio 6.0	CSE	1 Pack
5	Visual Studio MSDN Library 6.0	CSE	1 Pack
6	MS Office 2001	CSE	1 Pack
7	Antivirus Nortron 2001	CSE	1 Pack
8	Visual Studio Dot Net 4.0	CSE	1 Pack
9	Compaq Server Management	CSE	1 Pack
10	VSNL Server Management Kit	CSE	1 Pack
11	Microsoft Campus Agreement	IT	150 Users
12	Quick Heal Antivirus	IT	400 Users
13	Tally Erp 9	Accounts	1 User
14	IBM Rational Rows	IT	1 Pack
13	Solid Works	ME	1Pack
14	Matlab 2009	EE	10 Users
15	Etap 5.5.6	EE	10 Users
16	PS Cad	EE	05 Users
17	Xclass+DLL	Applied Sciences	16 Users
18	Systat 13	MBA	10 Users
19	Qualnet 5.0	Research	1 User
20	Comm Sim 7.0	Research	1 User
21	Opp Sim 5.1	Research	5 Users
22	Oracle 9i	CSE	1 Pack
22	Oracle 10G	CSE	1 Pack
23	Red Hat Linux	CSE	1 Pack

- **Number of nodes/computers with Internet facility**

All the computers are connected through 110 mbps leased line.

**4.3.2 Detail on the computer and internet facility made available to the faculty and students on the campus and off-campus?**

The computer systems are available in the labs of all the departments and all the computers have internet facility. The computers are provided in all the faculty rooms. All HoDs and other senior faculty members are given laptops. All the computers/laptops are having the internet facility.

**4.3.3 What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?**

The Institute continuously upgrades the IT infrastructure. Recently, the Institute has started ERP system which links all departments and their activities.

**4.3.4 Provide details on the provision made in the annual budget for procurement, up gradation, deployment and maintenance of the computers and their accessories in the institution (Year wise for last four years)**

	2012-13	2013-14	2014-15	2015-16
	Amount in Lacs			
Procurement of Computers	15.00	20.00	18.00	18.00
Maintenance of Computers	3.00	4.00	4.00	3.00

**4.3.5 How does the institution facilitate extensive use of ICT resources including development and use of computer-aided teaching/learning materials by its staff and students?**

Most of the class rooms are equipped with multimedia projectors. The teachers make use of these projectors for delivering their lectures using Power Point Presentations (PPTs).

**4.3.6 Elaborate giving suitable examples on how the learning activities and technologies deployed (access to on-line teaching-learning resources, independent learning, ICT enabled classrooms/learning spaces etc.) by the institution place the student at the centre of teaching-learning process and render the role of a facilitator for the teacher.**



The Institute is having smart class rooms and labs and class rooms are equipped with Multimedia Projectors. The Institute is having a 110 mbps leased line and entire campus is Wi-Fi enabled. The various e-learning resources can be easily downloaded by the students and the faculty.

**4.3.7 Does the Institution avail of the National Knowledge Network connectivity directly or through the affiliating university? If so, what are the services availed of?**

Yes, the Institute avails the knowledge network connectivity. The faculty of the Institute has attended the Global initiative of Academic networks (GIAN) organized by other Institute/universities of national repute. The Institute provides its students the facility of live video lectures by the faculty of IITs in various courses under Quality Enhancement in Engineering Education Programme of Ministry of Human Resource of India.

**4.4 Maintenance of Campus Facilities**

**4.4.1 How does the institution ensure optimal allocation and utilization of the available financial resources for maintenance and upkeep of the following facilities (substantiate your statements by providing details of budget allocated during last four years)?**

<b>a</b>	<b>Building</b>
<b>b</b>	<b>Furniture</b>
<b>c</b>	<b>Equipment</b>
<b>d</b>	<b>Computers</b>
<b>e</b>	<b>Vehicles</b>
<b>f</b>	<b>Any other</b>

The Institute takes due care for the maintenance of building, furniture, equipments, computers and vehicles. The Institute has insured and done Annual Maintenance contracts of equipments, computers, vehicles and infrastructure. The amount spent on the maintenance of building and machines is shown in the following table:

	2012-13	2013-14	2014-15	2015-16
	<b>Actual (Rs. in Lakhs)</b>			
<b>Building</b>	27.97	12.20	50.28	19.35
<b>Furniture</b>	6.58	7.34	3.60	8.55
<b>Equipment</b>	4.95	4.64	2.37	16.82
<b>Computers</b>	2.99	2.82	1.82	2.90
<b>Vehicles</b>	6.14	5.95	4.09	3.25

**4.4.2 What are the institutional mechanisms for maintenance and upkeep of the infrastructure, facilities and equipment of the college?**

1. The Institute has appointed following staff for different maintenance jobs :

Electrician	= 02 Nos.
Plumber	= 01 No.
Carpenter	= 01 No.
Electric substation staff (Water Pump/Genset operator)	= 03 Nos.
Building repair	
Mason	= 01 No.
Helper	= 05 Nos.
Painter	= 02 Nos.
2. The computers and other equipments are covered under AMC.
3. Separate budget is allocated for maintenance purpose.
4. The maintenance work is also outsourced as and when required.

**4.4.3 How and with what frequency does the Institute take up calibration and other precision measures for the equipment/instruments?**

The Maintenance & upkeep of the instruments is a regular feature in the Institute. The calibration of the instruments is done during the summer vacations when no classes are going on. The equipments are repaired & upgraded accordingly.

**4.4.4 What are the major steps taken for location, upkeep and maintenance of sensitive equipment (voltage fluctuations, constant supply of water etc.)?**

**Any other relevant information regarding Infrastructure and Learning Resources which the college would like to include.**

The sensitive equipments are located at appropriate places and under the control of a responsible staff. There are two generators for uninterrupted power supply in the Institute. The Voltage stabilizers, UPS and Protection & control gears are installed for controlling the voltage fluctuations. There is a round the clock water supply in the Institute through its own tube well and over head Reservoir.

## **CRITERION V: STUDENT SUPPORT AND PROGRESSION**

### **5.1 Student Mentoring and Support**

#### **5.1.1 Does the institution publish its updated prospectus/handbook annually? If 'yes', what is the information provided to students through these documents and how does the institution ensure its commitment and accountability?**

Yes, the Institute publishes its updated prospectus annually. The prospectus contains the details like Institute's profile, salient features, placement record, curricular, co-curricular & extra-curricular achievements, various programmes & courses offered by the Institute, fee structure, various departments of the Institute, faculty details, rules and regulations of the Institute etc.

The Institute ensures full enforcement of the commitments made in the prospectus. The various committees of the staff are constituted for implementation of the commitments made in the prospectus.

#### **5.1.2 Specify the type, number and amount of institutional scholarships / freeships given to the students during the last four years and whether the financial aid was available and disbursed on time?**

The Institute provides freeships to the needy students. The number and amount of freeships given to the students during the last four years is given in the following table:

<b>Type of institutional scholarships/freeships</b>	<b>2012-13 Amount in Lacs (No.)</b>	<b>2013-14 Amount in Lacs (No.)</b>	<b>2014-15 Amount in Lacs (No.)</b>	<b>2015-16 Amount in Lacs (No.)</b>
Freeships to Needy Students	10.96 (35)	7.74 (32)	10.92 (45)	5.85(28)
Freeships to Wards of Employees	1.65 (03)	2.70(05)	4.50(08)	6.00(10)
Freeships from other sources (Guru Harkishan Education Society, Navtej Singh Memorial Charitable Trust Sita Ram Jindal & others)	0.06 (01)	0.54(08)	0.43(07)	0.62(10)

### 5.1.3 What percentage of students receives financial assistance from state government, central government and other national agencies?

The financial assistance to the students from state government, central government and national agencies is directly paid to the students in their bank accounts or fee is waived off by the government/ Universities. However, institutional scholarships are given by the Institute from its own resources.

#### Details of the Financial Assistance:

Type of Financial Assistance	No. of Students in 2012-13	No. of Students in 2013-14	No. of Students in 2014-15	No. of Students in 2015-16
Post Matric for SC students	47	80	120	120
Post Matric for OBC students	03	08	22	08
Minority Scholarship	17	20	28	21
Other states Scholarship	09	18	09	03
J & K Scholarship	00	01	02	03
Economically Weaker Section	15	16	11	14
Punjab Technical University Freeships	10	04	--	--
GATE Based Scholarships/Fellowships	--	01	01	01

### 5.1.4 What are the specific support services/facilities available for

- **Students from SC/ST, OBC and economically weaker sections**

Yes, the Institute does not charge any fee from SC/ST students. Hundred percent tuition fee waiver is given to the OBC students and students from economically weaker sections of society.

- **Students with physical disabilities**

Yes, the aid is given to the deserving students. There is provision of ramps, elevators, wheel chair and escalator for persons with physical disabilities.

- **Overseas students**

The overseas students have the provision of filling the admission form online. The online admission guidance is provided to them. Visa support facility and online submission of fee are also made available to them.

- **Students to participate in various competitions/National and International**

Yes, the Institute provides the financial assistance to the students for participating in national and international competitions and for presenting research papers in India and abroad.

- **Medical assistance to students: health centre, health insurance etc.**

Yes, the Institute has got a health centre with a full-time doctor and a nurse to take care of the health of the students. All the students of the Institute are covered under group health insurance policy for cashless treatment at all the hospitals listed in the panel of health policy. However, the Institute has also signed a Memorandum of Understanding with Tagore Hospital for cashless treatment of students and on call ambulance facility. The Institute has constituted a committee to look into the matters of health and hygiene of the students.

- **Organizing coaching classes for competitive exams**

Yes, the coaching classes are arranged for the students for competitive exams.

- **Skill development (spoken English, computer literacy, etc.,)**

Yes, soft skills training is provided to the students. The computer language classes are arranged for non-IT students. There is a dedicated language lab to develop/improve the communication skills of the students.

- **Support for “slow learners”**

Yes, the extra remedial classes are arranged for the weak students.

- **Exposures of students to other institution of higher learning/ corporate/business house etc.**

Yes, the students are encouraged to participate in the technical events organised by other reputed institutions. The industrial visits are arranged for the students from time to time.

- **Publication of student magazines**

Yes, the students are encouraged to publish their articles in Institute magazine.

#### **5.1.5 Describe the efforts made by the institution to facilitate entrepreneurial skills, among the students and the impact of the efforts.**

The Institute has set up CIE (Centre for Incubation and Entrepreneurship) cell. The aim of this cell is to nurture the innovative entrepreneurial ideas of the budding technocrats and to give them the necessary exposure to set up their ventures. The Centre aims at making the engineers and managers job givers rather than job seekers.

### List of Activities of CIE

S. No.	Name of Event	Date	Expert
1	Entrepreneurship Development Cell and Incubation Centre	24 <sup>th</sup> Sep, 2015	Mr. Srinivas Pothapragada, CEO, Ostilio USA
2	Workshop on Role of Ministry of MSME for developing Micro small and medium	31 <sup>st</sup> March, 2016	Mr. Kamal Singh, Deputy Director, MSME, Ludhiana
3	One day Workshop on	26 <sup>th</sup> July, 2016	
4	TAP B- Plan Competition	2016	

**5.1.6 Enumerate the policies and strategies of the institution which promote participation of students in extracurricular and co curricular activities such as sports, games, Quiz competitions, debate and discussions, cultural activities etc.**

- **Additional academic support, flexibility in examinations**
- **Special dietary requirements, sports uniform and materials**
- **Any other**

The Institute has created a niche for itself in extra-curricular and co-curricular activities. The Institute has the following policy for the students who participate in extra-curricular and co-curricular activities:

- a) There are general fitness marks for B.Tech. students at the end every even semester. These marks are given to the students on the basis of their participation in extra-curricular, co-curricular, cultural and sports activities.
- b) Special coaching classes are arranged for such students to compensate their loss of studies due to participation in these activities.
- c) Special tests are arranged for these students.
- d) The Institute provides financial assistance to the students for participating in various activities.
- e) Sports uniforms and sports kits are provided to the students.
- f) Diet is provided to the students as per requirement.

**5.1.7 Enumerating on the support and guidance provided to the students in preparing for the competitive exams, give details on the number of students appeared and qualified in various competitive exams such as UGC-CSIR-NET, UGC-NET, SLET, ATE /CAT/ GRE/TOFEL/GMAT/Central/State services, Defense, Civil Services etc.**

The Institute arranges special classes for the students for improving their soft skills. The various departments of the Institute also arrange expert lectures and orientation sessions for motivation, guidance and necessary support to the students in preparation for GATE/CAT/GRE / TOFEL/GMAT and other competitive exams. A large number of students from the Institute qualify the GATE exam every year.

**5.1.8 What type of counseling services are made available to the students (academic, personal, career, psycho-social etc.)**

The academic, personal, career and psycho-social counseling is done by the faculty members, HODs, Counseling Psychologist, Training & Placement Officer, Dean (Student Affairs) and Principal from time to time. The Institute has appointed a qualified psychologist also to provide psycho-social counseling to the students.

**5.1.9 Does the institution have a structured mechanism for career guidance and placement of its students? If 'yes', detail on the services provided to help students identify job opportunities and prepare themselves for interview and the percentage of students selected during campus interviews by different employers (list the employers and the programmes).**

Yes, there is Department of Training and Placement in the Institute. The main objective of this department is to get the students placed with reputed companies. More than 90% of the eligible and interested students are placed through campus and off campus selections. The Institute arranges mock interviews, Group Discussion etc. The placement record for the last three years is given below:

**Year 2014-15**

S. No.	Name of Company / Organization	E C E	C S E	I T	E E	M E	C E	M B A	M C A	Total
1	DHFL Pramerica							8		8
2	Wipro	37	40	1 7	9	4			6	113
3	L&T Infotech			3	1				1	5
4	Hewlett-Packard India		2	2						4
5	Shapoorji Pallonji & Co. Ltd.				5	5				10
6	Paxcel Technologies Pvt. Ltd.		1	1						2
7	Atos SE		5	5						10
8	Jaro Education							1		1
9	Pic N Farnes								2	2
10	Pact Solution Pvt. Ltd.		1						1	2



11	Technospecs Technology							2	2
12	Ralson India Ltd.	1			2				3
13	Daffodil Software Ltd.			1					1
14	RAH Infotech	1							1
15	Navyug Infosolution		3						3
16	Aon Hewitt			2					2
17	ST Microelectronics		11					1	12
18	Fdieveiss						1		1
19	Sofcon India Pvt. Ltd.				1				1
20	Bajajallianz General Insurance Co. Ltd.						3		3
21	Ceasefire Industries Ltd.					1	5		6
22	CSC India Pvt. Ltd.			3					3
23	Tommy Hilfiger						3		3
24	Image Consulting Group						7		7
25	Kotak Securities						5		5
26	Cavisson		1						1
27	KEC International, Mumbai				1				1
28	Ericsson	2							2
29	Justdial						1		1
30	Trigent Software			1					1
31	Edelweiss Securities Ltd.						1		1
32	E Clerx	1	1						2
33	Practo Technologies	2							2
34	Liberty Videocon General Insurance						5		5
35	Appirio	3		1					4
36	34 soft systems							2	2
37	TCS	2		1					3
38	Solar First Energy Pvt. Ltd.				4				4
39	Tech Mahindra	5							5
40	Aditya Engineeing & GIS Solutions				6		4		10
41	Field Marshall Security				8				8
42	Kent RO						3		3
43	Embrix Infratech Pvt. Ltd.						8		8

44	OM Careers	3	1		2	1		1		8
45	CMS Info Systems Ltd.	1								1
46	HDFC Bank							1		1
47	Sap Lab	1								1
48	Pingaksho Technology		2	1						3

### Year 2015-16

S. No.	Name of Company / Organization	E C E	C S E	I T	E E	M E	C E	M B A	M C A	Total
1	Wipro Technologies	42	31	2 6	1 0	0	1		1	111
2	Paxcel Labs		4							4
3	Prolifics Corporation Ltd.		1							1
4	EME Technologies			2						2
5	SAP Labs		1	1						2
6	Webcom Systems Pvt. Ltd.								2	2
7	Telcocrats Technologies	3								3
8	G Tech Software								4	4
9	Yodlee Infotech Pvt. Ltd.		1							1
10	FuntripMania							18		18
11	Unisys	2			1					3
12	Pingaksho Technologies		5	4						9
13	Capital Via							4		4
14	Shapoorji Pallonji Co. Ltd.				4	3	5			12
15	Ralson India Ltd.				2					2
16	Just Dial							2		2
17	Webnnor Infomatics Pvt. Ltd.								3	3
18	Technospecs Technologies								1	1
19	Biri Infotech								1	1
20	Pic N Frames								3	3
21	Intelgain		1							1
22	Bharti Airtel Ltd.							2		2
23	Bluegape Lifestyle Pvt. Ltd.		1							1

24	Nivia Sports							4		4
25	StratBeans		1	2						3
26	StratBeans							1		1
27	Think & Learn	1								1
28	Corp India		4					12	2	18
29	Ceasefire Industries Ltd.					2		4		6
30	Hi - Tech.				7					7
31	Artech Infosystems Pvt. Ltd.	3	1		1			1		6
32	Hewlett Packard Enterprise India Pvt. Ltd.	1	2							3
33	Lovely Corporation					1				1
34	Nagarro			1						1
35	TCS	1	2	2						5
36	Solar First Energy				3	1				4
37	Beta Soft Systems	1								1
38	Mobilyte India Tech Pvt. Ltd.			2						2
39	Golden Advance Technology Co. GA TECH		1							1
40	Accurate Accounting Services Pvt. Ltd.							5		5
41	eClerx	2								2
42	Axis Bank							5		5
43	AON Services India Pvt. Ltd.			1						1
44	Synapsindia Outsourcing Pvt. Ltd.	2								2
45	Utam Valves					5				5
46	Metro Tyres					2				2
47	JITF Urban Infrastructure Ltd.				1					1
48	Red Support, Inc			1						1
49	IEC Gensets Ltd.				1					1
50	Adobe		1							1
51	HCL Technologies	2								2
52	Amazon	1								1
53	Perfect Belts Pvt. Ltd.					3				3

**Year 2016-17 (In Progress)**

<b>S. No.</b>	<b>Name of Company / Organization</b>	<b>E C E</b>	<b>C S E</b>	<b>I T</b>	<b>E E</b>	<b>M E</b>	<b>C E</b>	<b>M B A</b>	<b>M C A</b>	<b>Total</b>
1	Wipro	15	19	9	3	3				49
2	Just Dial							24		24
3	Tommy Hilfiger							6		6
4	Shapoorji Pallonji				3	3	4			10
5	Zscaler			2						2
6	Jaro							3		3
7	Pisoft Informatics Pvt. Ltd.								2	2
8	Solitaire Infosys Pvt. Ltd.								2	2
9	SAP	1								1
10	Catalyst One		2	3						5
11	Technospecs Technologies								1	1
12	Dezign Suite								2	2
13	G Tech Software								3	3
14	GA Tech (Kuwait)	1	1	1						3
15	HP	1		2						3
16	Click Lab		1	1						2
17	Vertex Infosoft Solutions Pvt. Ltd.	1	2	2						5
18	Code Brew Labs		2	1						3
19	AR Tech Infosystems Pvt. Ltd.	8			1	1		1		11
20	Ralson India Ltd.							5		5
21	Indian Navy									
22	Jaysons Exports					3				3
23	Corp India							2		2

**5.1.10 Does the institution have a student grievance redressal cell? If yes, list (if any) the grievances reported and redressed during the last four years.**

Yes, there is a student ombudsman/grievance redressal cell in the Institute.

**5.1.11 What are the institutional provisions for resolving issues pertaining to sexual harassment?**

The Institute has constituted an Internal Complaint Committee as per the provisions of “Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013”. This committee deals with the issues pertaining to sexual harassment.

There is also a “Women Cell” in the Institute which deals with the problems of the female staff and provides solutions for the same.

Members of the Internal Compliant Committee:

1. Ms Harpreet Kaur Bajaj : Assoc. Prof. & Head CSE
2. Mr M S Bedi : Asstt. Prof., CE
3. Ms Megha Munjal Sharma : Asstt. Prof., BM
4. Ms Alka Juneja : Jr. Ast. (Estb.)
5. Dr Lakhbir Singh : President, PAHAL (NGO, Jalandhar)

**5.1.12 Is there an anti-ragging committee? How many instances (if any) have been reported during the last four years and what action has been taken on these?**

Yes, there is an anti-ragging committee & Squad in the Institute. No incidence of ragging has been reported so far.

**Anti Ragging Committee:-**

S. No.	Name	Designation		Contact Nos.
1	Dr. Manoj Kumar	Principal	Chairman	94781-01102
2	S. Gurpreet Singh	Naib Tehsildar, Jalandhar - 2	Member	98142-00042
3	S. Balbir Singh	SHO, Police Division No. 1, Jalandhar	Member	95929-14111
4	Mr. Sanjeev Shally Punjab Kesari, Jalandhar	Representative of Local Media (Male)	Member	98156-00829
5	Ms. Vandana, Dainik Bhaskar, Jalandhar	Representative of Local Media (Female)	Member	96465-00554
6	Dr. Lakhbir Singh President, PAHAL, Jalandhar	Representative of NGO	Member	0181-2672784 98148-66230

7	Dr. Jagjit Malhotra Dean Student Affairs	Representative of Faculty (Male)	Member	98722-01740
8	Mr. Devinder Priyadarshi Assistant Professor (ME)	Representative of Faculty (Male)	Member	98720-67770
9	Dr. Kanchal L. Singh Associate Professor & Head (Applied Sciences)	Representative of Faculty (Female)	Member	99140-01756
10	Dr. Kiran Ahuja Asstt. Prof. (ECE)	Representative of Faculty (Female)	Member	98729-57792
11	Mr. Sumesh Mahajan Sr. Asstt. (A/cs.)	Representative of Non-teaching staff (Male)	Member	98723-95955
12	Ms. Alka Juneja Jr. Asstt. (Admn.)	Representative of Non-teaching staff (Female)	Member	81468-33411
13	Mr. Om Parkash	Representative of Parents (Male)	Member	94171-13636
14	Ms. Suman Lata	Representative of Parents (Female)	Member	94637-67654
15	Mr. Mohit	Representative of Senior Students (Male)	Member	94784-02101
16	Ms. Shallu	Representative of Senior Students (Female)	Member	85570-71780 90561-50650
17	Mr. Amarjeet	Representative of Freshers' Students (Male)	Member	97806-57844
18	Ms. Niharika Bhanot	Representative of Freshers' Students (Female)	Member	76968-06191

### **Anti Ragging Squad:-**

Sr. No.	Name	Designation		Phone No.
1.	Mr. Pankaj Sadana	Asstt. Prof., Mech. Engg.	Chairman	98724-88990
2.	Mr. M.S. Bedi	Asstt. Prof., Civil Engg.	Member	82838-40304
3.	Mr. Sunil Sachdeva	Asstt. Prof., Applied Sciences	Member	94644-85893
4.	Ms. Shivani Vij	Asstt. Prof., Applied Sciences	Member	96468-31294
5.	Ms. Payal Sharma	Asstt. Prof., Applied Sciences	Member	94653-90017
6.	Mr. Rajiv Kumar	Asstt. Prof., IT	Member	99140-33395
7.	Ms. Reeta Bhardwaj	Asstt. Prof., MCA	Member	84272-33399
8.	Ms. Risha Sharma	Asstt. Prof., Elex. & Comm. Engg.	Member	98887-45246
9.	Mr. Sushil Kumar	Jr. Asstt.	Member	98883-66224
10.	Ms. Kalpana Sharma	Clerk	Member	92178-44826
11.	Mr. Kashish Goyal, ME – 3 <sup>rd</sup> year	Representative of Senior Students (Male)	Member	75891-59361
12.	Ms. Arpandeeep Kaur, CSE – 3 <sup>rd</sup> year	Representative of Senior Students (Female)	Member	97794-16012

The contact numbers of Anti Ragging Squad/HODs/Chief Warden/Hostel wardens have been displayed at all prominent places in the Institute. The students are free to contact on these numbers round the clock to report any incident related to ragging. The student and parents are required to furnish an affidavit as per format available in the Admission Cell of the Institute.

The Institute displays the information regarding anti-ragging provisions made by the Institute and the government at various places in Institute.

In view of the directions of the Hon'ble Supreme Court in SLP No. 24295 of 2006 dated 16-05-2007 and in Civil Appeal number 887 of 2009, dated 08-05-2009 and AICTE notification F.No.37-3/Legal/AICTE/2009 to prohibit, prevent and eliminate the scourge of ragging; ragging in any form is banned in the Institute. It is a criminal offence and FIR shall be registered against the student(s) indulging in this crime.

Students in distress owing to ragging related incidents can access the Toll Free Helpline 1800-180-5522.

The Institute prospectus also contains the following Supreme Court regulation regarding ant-ragging measures.

Directives of the Supreme Court of India issued on May 16, 2007 (Select Extract)

The punishment to be meted out has to be exemplary and justifiably harsh to act as a deterrent against recurrence of such incidents.

Every single incident of ragging where the victim or his parent/guardian or the Head of institution is not satisfied with the institutional arrangement for action, a First Information Report (FIR) must be lodged without exception by the institutional authorities with the local police authorities. Any failure on the part of the institutional authority or negligence or deliberate delay in lodging the FIR with the local police shall be construed to be an act of culpable negligence on the part of the institutional authority. If any victim or his parent/guardian of ragging intends to file FIR directly with the police, that will not absolve the institutional authority from the requirement of filing the FIR.

#### **5.1.13 Enumerate the welfare schemes made available to students by the institution.**

- a) The Institute provides scholarships/freeships to the deserving students.
- b) The cashless treatment under group Health Insurance policy is provided to all the students.
- c) Free medical aid is provided to all students of the Institute.
- d) The hygienic food is served to the students at affordable price.

**5.1.14 Does the institution have a registered Alumni Association? If ‘yes’, what are its activities and major contributions for institutional, academic and infrastructure development?**

Yes, the Institute has an Alumni Association comprising the ex-students of the Institute as its members. The alumni meet is organized from time to time. The suggestions given by alumni are given due weightage and adopted.

**List of Activities**

<b>Sr. No.</b>	<b>Place</b>	<b>Date</b>
<b>1</b>	Alumni meet at Delhi NCR under Delhi Chapter	26 <sup>th</sup> – 27 <sup>th</sup> Oct., 2016
<b>2</b>	Alumni meet at Bangalore under Bangalore Chapter	9 <sup>th</sup> May, 2016
<b>3</b>	Alumni meet at DAVIET, Jalandhar	25 <sup>th</sup> May, 2014

**5.2 Student Progression**

**5.2.1 Providing the percentage of students progressing to higher education or employment (for the last four batches) highlight the trends observed.**

The following table shows the average progression of the students for the last four years:

<b>Student Progression</b>	<b>%</b>
UG to PG	13
PG to M. Phil.	N.A
PG to Ph.D.	0.30
Employed through Campus Selection	68
Employed other than Campus Recruitment	11



**5.2.2 Provide details of the programme wise pass percentage and completion rate for the last four years (course wise/batch wise as stipulated by the university)? Furnish programme-wise details in comparison with that of the previous performance of the same institution and that of the Colleges of the affiliating university within the city/district.**

**Pass Percentage**

**B.Tech. (Computer Science and Engineering)**

<b>Batch</b>	<b>Pass %</b>
2009-13	100
2010-14	100
2011-15	98.5
2012-16	98.5

**B.Tech. (Electronics and Communication Engineering)**

<b>Batch</b>	<b>Pass %</b>
2009-13	100
2010-14	98.5
2011-15	95
2012-16	96

**B.Tech. (Electrical Engineering)**

<b>Batch</b>	<b>Pass %</b>
2009-13	98.5
2010-14	98.5
2011-15	93
2012-16	91

**B.Tech. (Information Technology)**

<b>Batch</b>	<b>Pass %</b>
2009-13	98
2010-14	100
2011-15	93
2012-16	95

**B.Tech. (Mechanical Engineering)**

<b>Batch</b>	<b>Pass %</b>
2009-13	100
2010-14	98.5
2011-15	96
2012-16	91

**B.Tech. (Civil Engineering)**

<b>Batch</b>	<b>Pass %</b>
2009-13	100
2010-14	97
2011-15	97
2012-16	91

**MBA**

<b>Batch</b>	<b>Pass %</b>
2011-13	100
2012-14	98
2013-15	100
2014-16	96

**MCA**

<b>Batch</b>	<b>Pass %</b>
2010-13	100
2011-14	100
2012-15	100
2013-16	97

**M.Tech. Regular**

<b>Batch</b>	<b>Computer Science &amp; Engg.</b>	<b>Electrical Engg.</b>	<b>Geo-Technical Engg.</b>
	<b>Pass%</b>		
2011-13	100	100	--
2012-14	100	100	--
2013-15	100	100	100
2014-16	100	100	100

**Completion Rate (Within maximum time permitted by the University)**

**B.Tech. (Computer Science and Engineering)**

<b>Batch</b>	<b>Completion Rate (%)</b>
2009-13	100
2010-14	100
2011-15	100
2012-16	100

**B.Tech. (Electronics and Communication Engineering)**

<b>Batch</b>	<b>Completion Rate (%)</b>
2009-13	100
2010-14	100
2011-15	100
2012-16	100

**B.Tech. (Electrical Engineering)**

<b>Batch</b>	<b>Completion Rate (%)</b>
2009-13	100
2010-14	100
2011-15	100
2012-16	100

**B.Tech. (Information Technology)**

<b>Batch</b>	<b>Completion Rate (%)</b>
2009-13	100
2010-14	100
2011-15	100
2012-16	100

**B.Tech. (Mechanical Engineering)**

<b>Batch</b>	<b>Completion Rate (%)</b>
2009-13	100
2010-14	100
2011-15	100
2012-16	100

**B.Tech. (Civil Engineering)**

Batch	Completion Rate (%)
2009-13	100
2010-14	100
2011-15	100
2012-16	100

**MBA**

Batch	Completion Rate (%)
2011-13	100
2012-14	100
2013-15	100
2014-16	100

**MCA**

Batch	Completion Rate (%)
2010-13	100
2011-14	100
2012-15	100
2013-16	100

**M.Tech. Regular**

Batch	Computer Science & Engg.	Electrical Engg.	Geo-Technical Engg.
	<b>Completion Rate (%)</b>		
2011-13	100	100	--
2012-14	100	100	--
2013-15	100	100	100
2014-16	100	100	100

**5.2.3 How does the institution facilitate student progression to higher level of education and/or towards employment?**

The Institute has got a dedicated Department of Training & Placement. The Department of Training & Placement guides the students regarding various opportunities in corporate, Govt. departments, Banks and defense services. The Institute invites top companies for campus recruitment of the students. Almost, all the eligible and interested students secure placements. The students are trained in the areas, which are required by the industry. The faculty of the various departments guides the students for higher level of education. The seminars for career guidance are arranged from time to time to motivate the students for higher education/entrepreneurship etc.

#### **5.2.4 Enumerate the special support provided to students who are at risk of failure and drop out?**

- a) The weak students are identified on the basis of their performance in MSTs. The remedial classes are arranged for such students.
- b) The students are counseled by the faculty and Heads of the Department.
- c) The Institute has appointed a counseling psychologist.
- d) Special attention is given to the slow learners during tutorial sessions.
- e) In case of disability, Institute recommends the case of such students to the University for providing extra time for writing examination.
- f) This Institute has a set policy in place to provide financial aid to the meritorious and/or economically weak students. Student welfare committee critically and sympathetically analyses such cases and provides fee concession to deserving students. This committee also contacts potential donors/business houses/NGOs etc. to collect donations for fee payment of economically weaker students so that they do not drop out just because of scarcity of funds. This practice is in place since the inception of the Institute. Record of fee concession provided the students during session 2015-16 and 2016-17 is as under:-

<b>Session</b>	<b>Amount of Fee Concession</b>
2013-14	Rs. 09.43 Lakh
2014-15	Rs. 14.55 Lakh
2015-16	Rs. 11.09 Lakh
2016-17	Rs. 15.96 Lakh

### **5.3 Student Participation and Activities**

#### **5.3.1 List the range of sports, games, cultural and other extracurricular activities available to students. Provide details of participation and program calendar.**

The students of our Institute actively participate in various sports, cultural and extracurricular activities. The Institute is having the facility for the following sports:

- Basketball
- Badminton
- Lawn Tennis
- Cricket
- Athletics
- Table Tennis
- Football
- Volleyball

- Handball
- Chess
- Swimming

The annual athletic & sports meet is organized in the Institute every year. The students show a lot of enthusiasm and participate in large number of sports.

**5.3.2 Furnish the details of major student achievements in co curricular, extracurricular and cultural activities at different levels: University/ State/ Zonal / National / International, etc. for the previous four years.**

- The Institute is the winner of IKG PTU Zonal Youth Festival since its inception in 2001.
- Our Student Mr. Rohit Rawat won Bronze Medal in Inter-University Youth Festival in 2016 in the Fine Arts Category.
- Our Student Ms. Neha Rai won Bronze Medal in Inter-University Youth Festival in 2016 in the Fine Arts Category.
- Our student Mr. Gurpreet Singh won the Gold medal in Mimicry in All India Inter-University National Youth Festival 2016.
- The Lawn-Tennis (Men) team of the Institute is the champion of IKG PTU Inter-college tournament for the last three consecutive years i.e. 2013-14, 2014-15 and 2015-16.
- The Cricket (Boys) team of the Institute won Gold Medal in PTU Inter-College Tournament in 2013-14 and 2014-15 and Silver Medal in 2015-16.
- The Badminton (Men) team won Gold Medal in 2015-16 and Silver Medal in 2013-14 and 2014-15.
- The Chess (Women) team won Gold Medal in PTU Inter-college tournament in 2013-14 and 2015-16.
- The Handball (Girls) team won Gold Medal in IKG PTU Inter-College Tournament in 2013-14 and Silver Medal in 2015-16.
- The Cricket (Women) won Silver Medal in 2014-15, 2015-16 and Bronze Medal in 2013-14 in IKG PTU Inter-College tournament.

**5.3.3 How does the college seek and use data and feedback from its graduates and employers, to improve the performance and quality of the institutional provisions?**

The Institute obtains the feedback from the employers by filling-up online employer feedback form available at web portal of the Institute. The feedback is evaluated at the level of the IQAC and Department of Training & Placement. The feedback is communicated to the concerned department.

**5.3.4 How does the college involve and encourage students to publish materials like catalogues, wall magazines, college magazine, and other material? List the publications/ materials brought out by the students during the previous four academic sessions.**

The Institute encourages the students to get their material published in the Institute's magazine. The Institute publishes its own newsletter Info Plus and students magazine Ripples. The students are encouraged to get their articles published in this newsletter. Presently the Institute has many student clubs viz. Arteso (the fine art club), Alfaaz (the literary club) and cLicker (the photography club).

**5.3.5 Does the college have a Student Council or any similar body? Give details on its selection, constitution, activities and funding.**

There are various clubs/societies of the students in the Institute. These societies/clubs undertake various activities. The details of the clubs are as under:

<b>Name of the Club/Society</b>	<b>Department/Section</b>
Tech-Lit Club	Mechanical Engineering
Robotics Club	Mechanical Engineering
Consortium of Civil & Mechanical Engineers	Civil Engineering
Society of Innovative Electro crackers	ECE
Hubby Expo Club	ECE
Club of Integrated Boards	ECE
S <sup>3</sup> A	Applied Sciences
Manageates	MBA
Arteso	Fine arts
Alfaaz	Literature
cLicker	Photography

The students' chapter of the various societies viz. ISTE, IEI, IETE and CSI are functional in the Institute and various activities are performed by these chapters.

**5.3.6 Give details of various academic and administrative bodies that have student representatives on them.**

The Anti-Ragging Committee and Anti-Ragging Squad of the Institute have student members. There are mess committees for all the hostels having student representatives. The students' chapters of clubs and societies ISTE, IEI, IETE and CSI have student representatives.

**5.3.7 How does the institution network and collaborate with the Alumni and former faculty of the Institution.**

**Any other relevant information regarding Student Support and Progression which the college would like to include.**

There is an active alumni association in the Institute. The alumni meet is organized from time to time. The invitation is sent to the passed out students and former faculty members of the Institute. The different departments of the Institute have their own alumni network. The alumni are invited to motivate/ deliver expert talks to students. They share their experiences and their suggestions are given due consideration.



## **CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT**

### **6.1 Institutional Vision and Leadership**

**6.1.1 State the vision and mission of the Institution and enumerate on how the mission statement defines the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, institution's traditions and value orientations, vision for the future, etc.?**

**Vision:**

To attain the coveted status of a growth oriented resource of national importance known for quality professional education, research and innovation. **(Revised 2015)**

**Mission:**

To provide professional education with a difference confirming a confluence of inter multi-disciplinary knowledge domains; targeting excellence in collaboration with industry; promoting creative competence and innovation aimed at producing skilled human resource and entrepreneurs; sustaining Indian ethics and moral values. **(Revised 2015)**

Our mission statement defines the Institute's distinctive characteristics in the following manner:-

- a) Since the establishment of the Institute in 2000, the Institute in its journey of 17 years has achieved a number of milestones. There have been a lot of changes as to internal/ external environment of the Institute which required us to revisit our vision and mission. Some of these changes included Information technology and new media technologies altering the student experience in fundamental ways, disciplinary silos giving way to more interdisciplinary collaboration, changing expectations of various stakeholders etc. In view of the same, the Institute invited the stakeholders viz. faculty, students, parents, alumni, Hon'ble Members of Governing Body, industrialists, educationalists to contribute towards revisiting and reshaping the vision, mission and core values of the Institute with their participation in the workshop organized by the Institute on 05.12.2015. Keeping in view the valuable comments/ contribution/recommendations of the stakeholders, the Institute reshaped/created new vision and mission of the Institute. In addition, the SWOC Analysis was also executed and 360 Degree Development Plan was conceptualized to fast realize our Mission.

- b) The Institute provides professional education with a focus on multi-disciplinary knowledge domains.
- c) The Institute has got strong tie-ups with the industries of repute.
- d) The emphasis is laid on producing skilled manpower and entrepreneurs.
- e) There is a blend of modern professional education and ethics & moral values.

**6.1.2 What is the role of top management, Principal and Faculty in design and implementation of its quality policy and plans?**

- a) The quality policy and plans are formed at the level of management, Principal and HoDs with active participation of the faculty and staff.
- b) The decisions taken by the Governing Body of the Institute/management are implemented by the Principal through the administrative Heads/In-charges of the faculty and staff.
- c) There is proper delegation of authority and the members of the staff are represented on the various committees of the Institute.
- d) The Academic Affairs Committee regularly monitors the teaching-learning paradigm and takes suitable decisions to further improve the quality of teaching. Important recommendations of the said committee, wherever the need be, are placed before the Heads of all teaching departments so as to multi-dimensionlize, enrich and sharpen the execution of the key resolutions.
- e) Academic Advisory Board is also constituted for enriching the quality policy and plans.

**6.1.3 What is the involvement of the leadership in ensuring?**

- **the policy statements and action plans for fulfillment of the stated mission**  
The policies are framed at the level of Governing Body and Principal for fulfillment of the stated mission. The responsibility for providing necessary resources lies with the management. Before the start of new academic session, the requirements from various departments are taken and accordingly budget is allocated for the same.
- **formulation of action plans for all operations and incorporation of the same into the institutional strategic plan**  
The responsibility for execution and implementation lies with the members of the staff. They are required to form the tactical plans

for achieving the stated objectives. These plans are implemented and controlled through various tools such as:

- a) Academic Calendar
- b) Budgetary Allocation
- c) Review from time to time
- d) Reports on the implementation
- e) Course Plans

- **Interaction with stakeholders**

The various stakeholders of the Institute include students, parents of the students, industry, staff, alumni, the various governmental bodies etc. The top management lays emphasis on interaction with various stakeholders. The interaction is done in the following manners:

- a) There is a continuous interaction with the students during their stay in the campus. The feedback from the students is obtained after the Mid Semester Tests twice in a semester and the same is communicated to the concerned staff. The good and feasible suggestions are implemented as well.
- b) There is interaction with the parents at the time of admission of the students. The progress report of the students is sent to their parents and their comments are sought on the progress report.
- c) The interaction with alumni is done through organizing alumni meet from time to time. The alumni are also invited for delivering expert talks and sharing their experiences.
- d) The Institute's website hosts online Alumni and Employer Survey Forms with intent to strengthen the power of dialogue with the Alumni/Employers for the purpose of conformance/usefulness. The alumni/employers are encouraged to communicate with us by way of communicating to us through this online media.
- e) There is a continuous interaction with the staff through staff meetings and the suggestions given by the staff are given due weightage.
- f) Whenever any dignitary visits the Institute, his/her opinion is recorded.
- g) The feedback is obtained from the employers about the performance of our Alumni working with them.

- **Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders**

Before taking any policy decision, the inputs are received from the various stakeholders. These inputs are analysed properly and final decision is taken after giving due consideration to the pros and cons of the decision.

- **Reinforcing the culture of excellence**

The Institute believes in the best and has set up very high benchmarks for itself. Every stakeholder of the Institute is encouraged to put his/her best in whatever s/he does. The Institute can boast of having established the center(s) of excellence with top industries such as Texas Instruments, Huawei, Microsoft, CISCO, Oracle to mention a few.

- **Champion organizational change**

The Institute believes in the policy that ‘Change is always for the betterment’. The changes are required to keep pace with the time. In view of the above, DAVIET is committed to practice the philosophy of Outcome Based Education (OBE) for its students for achieving the ideals of holistic excellence in the domain of technical education realizing that it shall play a crucial role in the development of our country and thus cause a fundamental economic and social transformation in the society. In this context, our USP’s include contemporarised learning through MOOCs and virtual labs, Employment Skills Training, Innovative Research Projects, Student-centric Learning Environment, ICT, Vibrant focus on Entrepreneurship, Greater Industry-Academia Linkage etc.

#### **6.1.4 What are the procedures adopted by the institution to monitor and evaluate policies and plans of the institution for effective implementation and improvement from time to time?**

There is a defined hierarchy in the Institute for monitoring and effective implementation of the plans. The following steps are taken for monitoring:

- a) The course plan is prepared by the concerned faculty for each subject. The efforts are made to stick to that plan.
- b) The academic calendar is prepared for every semester incorporating the various activities to be undertaken during the semester.
- c) The various committees of the staff are formed for carrying out the different jobs.
- d) The Principal holds meetings with HoDs/HcDs and other members of the staff.
- e) The MSTs are conducted regularly to monitor the progress of the students.
- f) Results of all the classes are analysed at the end of every MST/semester.
- g) The feedback is obtained from the students, employers and alumni.

**6.1.5 Give details of the academic leadership provided to the faculty by the top management?**

The Institute is managed by DAV College Trust & Management Society, New Delhi, which is its apex body. The Principal of the Institute is the administrative and functional head of the Institute. The faculty of the Institute is guided by the respective HoDs and the Principal. The faculty members are encouraged to keep themselves updated. The Institute sponsors faculty for attending the Faculty Development Programmes, Refresher Courses, Orientation Courses, International and national conferences, seminars and workshops etc. In-house training is also arranged for the faculty sometimes. The faculty members are allowed to use the institutional infrastructure for carrying out consultancy and research work.

**6.1.6 How does the college groom leadership at various levels?**

It has been the policy of the Institute to groom leadership at various levels. The various functions in the Institute are decentralized. The Heads of various departments have complete autonomy as far as the functioning of the department is concerned. The important portfolios are occupied by the faculty members such as Dean and Dy. Dean (Academics), Dean and Dy. Dean (Research, Innovation and Consultancy), Dean and Dy. Dean (Students Affairs) Controller of Examinations, Training and Placement, Chief Hostel Warden, Sports President, Convener-IQAC, Nodal Officer (Accreditation), Nodal Officer (NSS), Estate Officer to quote a few.

The faculty members are represented on the various committees of the Institute such as Sports Committee, Cultural Committee, Publication Committee, Grievances Redressal Committee, Women Cell, Internal Complaints Committee, Purchase Committee etc.

The staff members of the Institute manage the different departments such as administration, accounts, stores, establishment etc.

The Institute grooms leadership qualities of the students also. The students are encouraged to organize and participate in different functions and clubs/societies/student chapter activities of the Institute. The annual technical fest of the Institute is largely managed by the students. Students are also heading various clubs/societies viz. tech-lit, alfaaz, arteso, clicker etc.

**6.1.7 How does the college delegate authority and provide operational autonomy to the departments / units of the institution and work towards decentralized governance system?**

The Principal is the administrative head of the Institute. The senior most teacher of the department is designated as Head of the department. The Head has got the complete autonomy regarding functioning of the department. The head has got the authority to

allocate teaching load to the faculty, organize conferences, seminars and FDPs, sanctioning of leave of the faculty, purchases up-to Rs.50,000/- in a financial year and limited to Rs. 10,000/- for a single purchase. The routine decisions of the department are taken by the head of the department. The important decisions are taken by the HoD in consultation with the Principal.

There are various functional committees to carry out the specific functions. These committees are headed by faculty members. The committees enjoy complete autonomy as well.

For carrying out the administrative functions of the Institute, there are various section heads who are responsible for their respective sections e.g. Administration, Accounts, Establishment, Hostels etc. These section heads are given free hand for their routine decisions. The important decisions are taken at the level of the Principal in consultation with the section heads.

**6.1.8 Does the college promote a culture of participative management? If 'yes', indicate the levels of participative management.**

Yes, the Institute strongly believes in the culture of participative management. The various important decisions of the department are taken by the Head of the department in consultation with the faculty members of the staff. The various activities of the department are allocated among the faculty members of the department.

The Institute level decisions are taken by the Principal in consultation with the Heads of the departments, sectional heads and members of the staff. In order to ensure transparency, the meetings are conducted as per agenda followed by the circulation of minutes. The strategic decisions of the Institute are taken by the Governing Body with consensus.

**6.2 Strategy Development and Deployment**

**6.2.1 Does the Institution have a formally stated quality policy? How is it developed, driven, deployed and reviewed?**

Yes, the Institute has a formally stated quality policy which states:

“We shall provide quality education to the entire satisfaction of our students. To achieve this, we shall constantly interact with students/parents/industry periodically and maintain our standards as per the requirement of regulatory authority with consolidated input and teamwork by motivated and trained human resources.”

The quality policy is displayed at all the important offices, reception and notice boards of the Institute.

The quality policy is developed by the Principal and HODs in consultation with all the members of staff. The quality policy is reviewed in the Management Review Meeting of ISO.

**6.2.2 Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.**

Yes, the Institute has a perspective plan for development in academic and non-academic areas. The following aspects are considered for inclusion in the plan:

**Academic Plans**

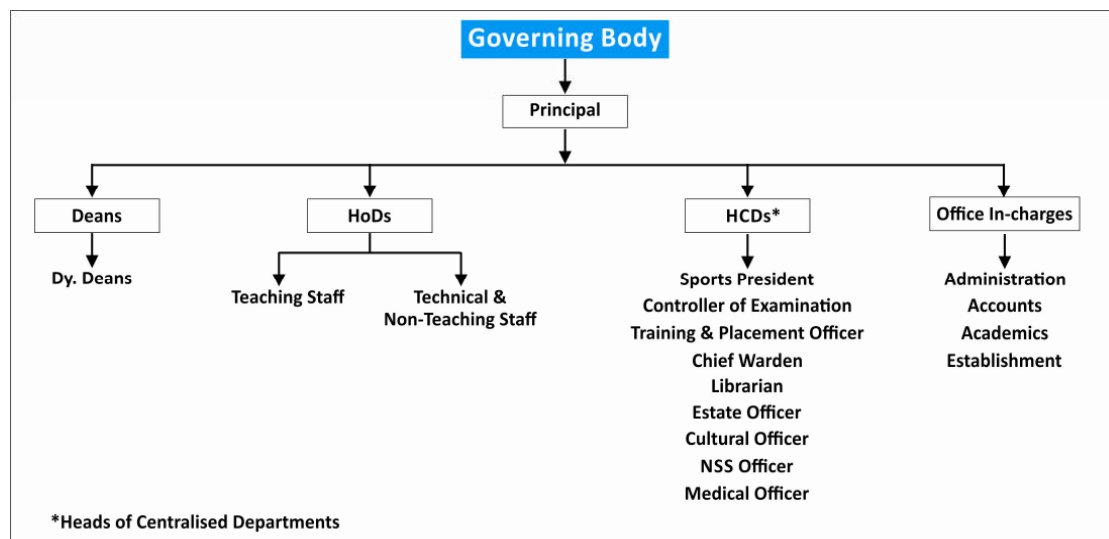
- To obtain NAAC Accreditation.
- To Obtain NBA Accreditation in all the eligible departments.
- To get the Institute recognised under section 2(f) of the UGC Act, 1956.
- To obtain academic autonomy.
- Starting of Vocational Courses and skill development programs in the Institute.
- Starting of new courses/increase in intake for existing course after NBA Accreditation.
- To improve the pass percentage of the students.
- Improving students' participation in class.
- To encourage the faculty and students for research work.

**Non-Academic**

- To collaborate with the leading Institutes in India and abroad.
- To provide more opportunities to the students for placements by inviting a large number of good companies for the purpose.
- To purchase the latest equipment for labs.
- To improve the Institute-industry interaction.
- To implement ERP system in the Institute.
- To make alumni association more vibrant.

### 6.2.3 Describe the internal organizational structure and decision making processes.

#### Organizational chart



The important policy decisions of the Institute are taken in the Governing Body meetings and are implemented by the Principal through Deans/HoDs/Section in-charges.

The other policy decisions are taken by the Principal of the Institute. The HODs take the routine decisions of their departments. For carrying out the various functions, various committees have been formed in the Institute. The teacher in-charges have been appointed for different jobs. These committee in-charges work independently and there is no interference in their day to functioning by the Principal.

### 6.2.4 Give a broad description of the quality improvement strategies of the institution for each of the following

- Teaching & Learning
- Research & Development
- Community Engagement
- Human Resource Management
- Industry Interaction

#### Teaching and Learning

1. The Institute has made a transition from Input Based Education to Outcome Based Education (OBE).
2. The faculty of the Institute follows the Bloom's Taxonomy.



3. The contents beyond syllabus are covered as per the requirements of industry and according to gaps identified in the curriculum.
4. The teachers are using latest teaching aids in the class rooms.
5. The final projects to the students are given as per level K5 of the Bloom's Taxonomy.
6. There is a well-stocked library in the Institute.
7. There is continuous evaluation of the students through three MSTs, assignments, major and minor projects and tutorials.
8. The faculty members are sent for FDPs/Orientation Courses/ Refresher Courses to get themselves updated.
9. The entire campus is Wi-Fi enabled.
10. The Institute has subscribed to a large number of e-resources.

### **Research and Development**

1. The labs of the Institute are equipped with latest instruments to facilitate research.
2. There are 24 faculty members with Ph.D. degree and more than 50 faculty members are pursuing Ph.D.
3. The academic leave is granted to the faculty for attending Ph.D. course work.
4. The leave is granted for writing thesis.
5. The Institute subscribes to 96 print journals and more than 2000 online journals.
6. The library of the Institute is well-stocked.
7. The major research projects by the students conform to level K5 of the Bloom's Taxonomy.
8. The financial assistance is provided to the students for their projects.
9. A good number of faculty members of the Institute are supervising Doctoral Research work.
10. The Texas Instruments of USA has established an Innovation Lab in the Institute to carry out research work.
11. The Institute has got a large number of simulation tools/the latest software and the same are being used for research work.

### **Community Engagement**

1. The NSS unit of the Institute organises Blood Donation Camp in the Institute.
2. The students of the Institute very actively participate in the Swachh Bharat Mission.

3. The Institute has been granted approval under Pradhan Mantri Kaushal Vikas Yojana (PMKVY) to train one batch of 25 students in sectoral/specialization titled “CNC Operator Machining Technician L3”. For this purpose, the first installment of grant-in-aid has been released to the Institute.
4. The Governing Body of the Institute accepted the proposal received from M/s. CSC, e-Governance India Ltd. (CSV SPV). CSC proposed unique joint collaboration with the Institute to be part of Digital India Initiative where Institute will adopt a village nearby and work jointly to make it digitally literate. Hence, the Institute has become an empanelled training partner/centre of the scheme.
5. The Institute donates computers and books to other charitable/ social organizations.
6. Every Year the Institute hosts the “Wazifa Vitran Samaroh” of Ram Naumi Utsav Committee and Nishkam Sewa Trust where utility materials are distributed to the poor and needy students.
7. The students of the Institute teach the poor and needy school students belonging to underprivileged sections of society.

### **Human Resource Management**

Human Resource is the most valuable asset of every organisation. The following steps are taken by the Institute for optimum utilization of Human Resource:

1. The Institute strictly follows the guidelines issued by the Regulatory Authorities and University for appointment of Faculty.
2. The pay scales, DA and HRA are given to the entire staff as per the prescribed norms.
3. There is proper delegation of authority and the Institute has a defined organisational structure.
4. The division of work is done on the basis of the core competence.
5. In order to harness their skills, the training programs are arranged from time to time.
6. The appointments are done in a very fair and transparent manner.

### **Industry Interaction**

1. There is a dedicated Department of Training & Placement in the Institute which is entrusted with the task of interacting with the industry for training and placement of the students.
2. The Institute has got the membership of CII (Confederation of Indian Industry) and JMA (Jalandhar Management Association).
3. The Institute has tied up with various Industrial Houses such as Wipro, Oracle, Texas Instruments, and Sofcon to name a few.

4. The experts from industry are invited for delivering lectures.
5. The Industry Advisory Board of the Institute has eminent persons from industry as members.
6. The persons from industry are represented in the Governing Body of the Institute.
7. The departments of the Institute have got a liaison with the industry at their own level too.
8. The industries have set up their center(s) of excellence in the Institute.
9. The Institute organizes an Industry Week (Department-wise) every semester.

**6.2.5 How does the Head of the institution ensure that adequate information (from feedback and personal contacts etc.) is available for the top management and the stakeholders, to review the activities of the institution?**

The Principal is the head of the Institute who acts as bridge between the students, staff and the top management. The Principal receives the feedback in the following manner:

1. The feedback is obtained from the students twice every semester.
2. The Principal also interacts with the students.
3. The information from parents is received whenever they visit the Institute and through the returned signed copy of the academic-cum-attendance report of their wards by the parents.
4. The principal holds regular meetings with the HODs, Faculty and staff.
5. Whenever a resource person visits the Institute, s/he has interaction with the Principal.

The information received by the Principal is communicated to the top management through written communication/telephone/personal visit. The information to other stakeholders is communicated through media reports, Institute website, internal communication and Institute prospectus.

**6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?**

The Institute believes in the philosophy of 'Participative Management' and there is continuous motivation and encouragement from the Principal. The various functional committees of the Institute are represented by the members of the staff. The Institute has also

appointed teacher in-charges for carrying out the different functions. The organizational structure of the Institute is decentralized and everybody is a part of decision making.

**6.2.7 Enumerate the resolutions made by the Management Council in the last year and the status of implementation of such resolutions.**

<b>Agenda Item</b>	<b>Status</b>
Contractual Appointment of Counseling Psychologist.	Implemented
Contractual Appointment of Residential Nurse.	Implemented
Inclusion of the Institute u/s 2(f) of UGC Act	Applied for
Empanelment/Appointment of Adjunct Faculty	Implemented
Grant of Study Leave of 2 years for post-doctoral fellowship to Dr. Kiran Ahuja, Assistant Professor (ECE)	Implemented
Starting of Non-AICTE courses in the Institute	In Progress
Extension of Ex-India Leave to Mr. Gagandeep Sharma, Assistant Professor (EE)	Implemented
Financial Support to students for Industry Defined/Research Projects	Implemented
Seed Grant to Faculty for Minor Research Projects	Implemented
Proposal for Reservation of seats for admission at DAVIET for the wards of DAVIET Employees under Management Quota Seats giving the benefit of 100% tuition fee waiver	Implemented

**6.2.8 Does the affiliating university make a provision for according the status of autonomy to an affiliated institution? If ‘yes’, what are the efforts made by the institution in obtaining autonomy?**

Yes, the affiliating University IKG PTU has the provision of granting autonomy to an affiliated institution. The Institute is making sincere efforts for the same and shall apply to UGC in the near future.

**6.2.9 How does the Institution ensure that grievances/complaints are promptly attended to and resolved effectively? Is there a mechanism to analyse the nature of grievances for promoting better stakeholder relationship?**

The Institute has got a well-defined mechanism for grievances Redressal. There is a Grievances Redressal Committee working in the Institute comprising the senior members of faculty and staff. Any aggrieved person is free to approach the committee for Redressal of the grievance and the same is attended properly. In addition to this suggestion/ complaint boxes have been put up at appropriate places. There is a Women Cell in the Institute, which takes care of the problems of the female staff working in the Institute.

Any person (Student, Faculty, Staff and Parents of the students) having any grievance is free to see the Principal in his office during working hours.

**6.2.10 During the last four years, had there been any instances of court cases filed by and against the Institute? Provide details on the issues and decisions of the courts on these?**

Yes, some cases have been filed against the Institute and their status is given below:

S. No.	Title of the Case	Where Filed	Status
1	Sahib Singh V/s DAVIET	Labour court	Pending
2	Jasdeep Kaur V/s DAVIET	Civil Court	Pending

**6.2.11 Does the Institution have a mechanism for analyzing student feedback on institutional performance? If yes, what was the outcome and response of the institution to such an effort?**

The Institute obtains the feedback from the students every semester. The feedback so obtained is properly analysed by the Principal. The feedback is reported to the concerned faculty/staff and corrective action is taken, wherever necessary.

### **6.3 Faculty Empowerment Strategies**

**6.3.1 What are the efforts made by the institution to enhance the professional development of its teaching and non-teaching staff?**

The following efforts are made by the institution to enhance the professional development of its teaching and non-teaching staff:

1. The faculty members are encouraged to organize/attend Faculty Development Programmes, Orientation Courses, Refresher Courses, Seminars and Workshops.
2. The faculty members are free to use the institutional resources to carry out research work.
3. The faculty members are sponsored for presenting papers in conferences in India and abroad.
4. The faculty members are granted academic leave with pay for attending the course work for Ph.D.

5. Academic Leave with pay is granted to the faculty for writing thesis dissertation.
6. Various training programmes are arranged for faculty in the Institute.
7. The faculty members are encouraged to pursue higher studies and more than 10 faculty members have obtained their Ph.D. during the last five years while working in the Institute.
8. The Institute encourages the faculty to write research projects for getting grants from various agencies.
9. The faculty members are encouraged to undertake consultancy assignments and there is a provision for sharing revenue out of consultancy work between the faculty and the Institute.
10. In order to facilitate the faculty to carry out their research work and keep them updated, the Institute has got a well stocked library and subscribes to 96 print journals and more than 2000 online journals.
11. The training is provided to the non-teaching staff as per the job requirements from time to time.
12. Non-teaching staff members are also encouraged to pursue higher studies. Some of the non teaching staff members have acquired M.Tech. MBA, MCA, M.Com. and B.Tech degrees while being in service.

**6.3.2 What are the strategies adopted by the institution for faculty empowerment through training, retraining and motivating the employees for the roles and responsibility they perform?**

1. The faculty members are sponsored for attending conferences, workshops and training programmes in India and abroad.
2. The Institute motivates the faculty to attend Faculty Development Programmes, Orientation Courses and Refresher Courses.
3. The domain specific in-house training programmes are also arranged for the faculty.
4. The Institute is having a very high retention rate of more than 98%. A very few number of the faculty have left the Institute.
5. The faculty members are also assigned various administrative responsibilities.

**6.3.3 Provide details on the performance appraisal system of the staff to evaluate and ensure that information on multiple activities is appropriately captured and considered for better appraisal.**

The performance appraisal of the staff is done on the following parameters:

1. The pass percentage of the students in the concerned subject and merit positions in the university.
2. Feedback of the staff by the students.
3. Feedback from the concerned HoD.
4. Participation in co-curricular and extracurricular activities.
5. Additional duties performed by the staff.
6. Research publications.

**6.3.4 What is the outcome of the review of the performance appraisal reports by the management and the major decisions taken? How are they communicated to the appropriate stakeholders?**

The feedback of staff obtained from the students and Head of the Department is analysed by the head of the institution. If there are some problem areas, these are conveyed to the concerned staff and s/he is asked to improve on these parameters. The faculty is also counseled by the HoD/Principal.

**6.3.5 What are the welfare schemes available for teaching and nonteaching staff? What percentage of staff have availed the benefit of such schemes in the last four years?**

1. Contributory Provident Fund as per the provisions.
2. Gratuity to the eligible employees.
3. Free Medical Facility in the Institute Health Centre and group health insurance cover for all the students for cashless treatment in the listed hospitals.
4. Maternity Leave with pay for six months as per rules.
5. Crèche facility for kids of the staff.
6. 100% Tuition Fee Waiver to the wards of staff studying in the Institute.
7. Medical and casual leaves as per rules.
8. ESI facility for the eligible staff.
9. Medical allowance as per rules.
10. Academic Leave with pay for Higher Education.
11. Financial Sponsorships for attending conferences.
12. Seed Grant for Research Projects.

### **6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty?**

The following measures are taken by the institution for attracting and retaining the eminent faculty:

1. The Institute appoints only those persons who fulfill the Minimum Educational Qualifications as per the norms prescribed by the regulatory bodies such as AICTE/UGC/University/State Government.
2. The Pay scales are given as per the norms and presently the Institute is paying salaries as per the recommendations of Sixth Pay Commission.
3. Timely disbursement of salaries and other benefits.
4. Freedom in teaching-learning.
5. Facility of Contributory Provident Fund and Gratuity.
6. Provision of Maternity Leave, Medical Leave and Casual Leave.
7. Fee waiver to the wards of the staff members.
8. Crèche facility.

## **6.4 Financial Management and Resource Mobilization**

### **6.4.1 What is the institutional mechanism to monitor effective and efficient use of available financial resources?**

The Institute has got a very effective mechanism to monitor effective and efficient use of available financial resources. The Institute receives the requirements from the different departments. After this, the tentative budget of the Institute is prepared and is sent to DAV College Managing Committee, New Delhi for its approval. The budget is approved in the budget meeting of DAVCMC. The Institute spends the money as per the provisions of the approved budget.

The Institute uses funds in a very judicious and transparent manner. For making major purchases, the purchase committee is formed and the quotations are invited from the interested suppliers. The quotations are evaluated on various parameters and order is placed on quality cum cost basis. All the vouchers are sent to DAVCMC for its approval.

### **6.4.2 What are the institutional mechanisms for internal and external audit? When was the last audit done and what are the major audit objections? Provide the details on compliance.**



Yes, the internal and external audit of the Institute affairs is conducted. The internal audit is conducted by the staff of DAV College Managing Committee, New Delhi. The external audit is conducted by a firm of qualified Chartered Accountants appointed by DAVCMC, New Delhi. The last external audit for the financial year 2015-16 was conducted in June, 2016. No Major audit objections were raised in the audit.

**6.4.3 What are the major sources of institutional receipts/funding and how is the deficit managed? Provide audited income and expenditure statement of academic and administrative activities of the previous four years and the reserve fund/ corpus available with Institutions, if any.**

Since, this is a self-financed institution; the major source of funding is the fee received from the students. The Institute manages its funds very judiciously and there has been no deficit so far. The copies of the balance sheets and income and expenditure account for the last four years are as follows:

PART B - ANNEXURE B  
**D.A.V. INSTITUTE OF ENGINEERING AND TECHNOLOGY**  
 KABIR NAGAR, JALANDHAR

Balance Sheet as at 31 March, 2013

MAIN A/C

Liabilities	Current Year		Previous Year		Schedule No.	Current Year
	1	2	3	4		
Capital Fund	253,450,029.13	192,347,970.60	265,955,421.13	192,347,970.60	7	177,545,341.60
Reserve & Surplus	8,000,000.00	8,000,000.00	8,000,000.00	8,000,000.00	8	461,428,188.95
Secured Loans	-	-	154,422,401.00	246,449,331.96	9	-
Unsecured Loans	-	-	-	-	-	-
Security Deposits	5,728.00	5,728.00	5,728.00	5,728.00	-	-
Current Liabilities	177,341,545.43	210,592,980.42	210,592,980.42	210,592,980.42	-	-
	<u>438,787,302.56</u>	<u>438,787,302.56</u>	<u>638,976,530.55</u>	<u>438,787,302.56</u>		<u>638,976,530.55</u>

As Per Our Report On Even Date  
 For A.K. Randeve & Co.  
 Chartered Accountants  
 A.K. Randeve (Prop.)  
 M. No. : 086221  
 Place: JALANDHAR CITY  
 Date: 15/07/2013

For D.A.V. INSTITUTE OF ENGINEERING AND TECHNOLOGY  
 Sr. Asstt. A/c  
 PRINCIPAL  
 RG. DIRECTOR

638,976,530.55


**PART B - ANNEXURE B**  
**D.A.V. INSTITUTE OF ENGINEERING AND TECHNOLOGY**  
**KABIR NAGAR, JALANDHAR (MAIN A/C)**  
**Income & Expenditure Account for the Year Ending 31 March, 2013**

	Expenditure		Income	
	Previous Year	Current Year	Previous Year	Current Year
Opening Stock	-	-	125,484,885.00	140,212,950.00
Purchase of Paper	90,381,468.00	103,848,566.00	-	1,718,700.00
Printing of Text Books	1,578,225.00	2,182,850.00	-	311,900.00
Packing & Forwarding	-	-	-	-
Others	-	-	-	-
Establishment	2,494,370.00	2,352,433.00	-	-
Administration Charges and Grant To Institutions	308,612.00	247,199.00	-	-
Rent, Rates & Taxes	194,244.00	255,200.00	-	-
Utilities	-	-	-	-
Communication Expenses	-	-	-	-
Travelling and Conveyance	395,799.00	254,700.00	-	-
Welfare, Entertainment and Other Recreational Activities	-	-	-	-
Stationery and Supplies	-	-	-	-
Membership and Subscription	-	-	-	-
Advertisements	1,897,452.00	1,787,298.00	-	-
Insurance	341,686.00	398,638.00	-	-
Vehicle Maintenance Charges	319,689.00	398,846.00	-	-
Lab Maintenance and Running Expenses	-	-	-	-
Maintenance Expenses	1,596,271.00	712,131.00	-	-
Interest Paid on Loans	173,185.00	-	-	-
Legal, Professional, House Keeping and Agency Support	12,700.00	-	-	-
Audit Fees	-	-	-	-
Assistance	-	-	-	-
Depreciation	19,031,535.00	12,700.00	-	-
Other Expenses	522,269.00	16,934,320.00	-	-
Expenses of Exceptional Nature	-	394,357.00	-	-
Prior Period Expenses	-	-	-	-
Deferred Revenue Expenditure Written off	-	-	-	-
Excess of Income over Expenditure (Surplus) Transferred to Income & Expenditure Appropriation Account	9,339,636.00	12,505,392.00	128,685,169.00	142,243,550.00
	<u>128,685,169.00</u>		<u>128,685,169.00</u>	<u>142,243,550.00</u>
<b>Income &amp; Expenditure Appropriation Account</b>				
Excess of Expenditure over Income (Deficit) Transferred to Income & Expenditure Appropriation Account	-	9,339,636.00	9,339,636.00	12,505,392.00
Depreciation Reserve	-	-	-	-
Salary Reserve	-	-	-	-
Contingency Reserve	-	-	-	-
Transfer To Pupil Fund	-	-	-	-
Other Reserve	-	-	-	-
Balance Transferred to Capital Fund	9,339,636.00	12,505,392.00	9,339,636.00	12,505,392.00
	<u>9,339,636.00</u>	<u>12,505,392.00</u>	<u>9,339,636.00</u>	<u>12,505,392.00</u>

For D.A.V. INSTITUTE OF ENGINEERING AND TECHNOLOGY

 Sr. Asstt. A/c  
 PRINCIPAL  
 R.G. DIRECTOR

As Per Our Report On Even Date  
 For A.K. Randeja & Co.  
 Chartered Accountants.

  
 A.K. Randeja (Prop.)  
 M. No. : 086221  
 Place : Jalandhar.

PART B - ANNEXURE B

DAV Institute of Engineering & Technology, (Main)  
Kabir Nagar, Jalandhar City

Balance Sheet as at 31 March, 2014

Schedule No.	Liabilities		Assets	
	Previous Year	Current Year	Previous Year	Current Year
1	265,955,421.13	280,657,123.03	177,548,341.60	161,063,287.60
2	8,000,000.00	8,000,000.00	Investments	8
3	154,422,401.00	39,770,292.00	461,428,188.95	396,482,325.65
4			Current Assets Loans & Advances	9
5	5,728.00	5,728.00		
6	210,592,980.42	232,112,470.42		
	<u>638,976,530.55</u>	<u>560,545,613.45</u>		<u>560,545,613.45</u>



As Per Our Report On Even Date  
For Vasu Aggarwal & Associates  
Chartered Accountants  
Vasu Aggarwal (Prop)  
Membership No. 081144  
Place : Jalandhar  
Date : 31.07.2014

For D.A.V. INSTITUTE OF ENGINEERING AND TECHNOLOGY

*[Signature]*  
Sr. Asst. A/c's

*[Signature]*  
PRINCIPAL

*[Signature]*  
Rg. DIRECTOR

PART B - ANNEXURE B  
**DAV INSTITUTE OF ENGINEERING & TECHNOLOGY, (M. Jc)**  
**KABIR NAGAR, JALANDHAR**  
 Income & Expenditure Account for the Year Ending 31 March, 2014

(Mch)

Previous Year	Expenditure		Income		Schedule No.	Current Year
	Year	Current	Previous	Year		
	Opening Stock		140,212,950.00		10	149,022,824.00
	Purchase of Paper		1,715,700.00		11	3,380,813.90
	Purchase of Text Books from DAV CMC Publication Division					
	Purchase of Text Books from others					
	Other Purchases					
	Publication of Students World and Aryan Heritage					
	Printing of Library Books					
	Purchase of Audio CD					
	Printing of Text Books					
	Packing & Forwarding					
	Others					
103,848,956.00	Establishment	112,340,909.00				
2,162,890.00	Administration Charges and Grant To Institutions	2,064,832.00				
	Rent, Rates & Taxes					
	Utilities					
2,352,433.00	Communication Expenses	2,977,533.00				
247,189.00	Travelling and Conveyance	232,109.00				
255,200.00	Welfare, Entertainment and Other Recreational Activities	240,365.00				
254,700.00	Stationery and Supplies	312,572.00				
	Membership and Subscription					
1,767,298.00	Advertisements	2,139,823.00				
396,638.00	Insurance	423,538.00				
398,846.00	Vehicle Maintenance Charges	406,237.00				
	Lab Maintenance and Running Expenses					
712,131.00	Maintenance Expenses	914,088.00				
	Interest Paid on Loans					
	Legal, Professional, House Keeping and Agency Support					
12,700.00	Audit Fees	20,000.00				
	Assistance					
16,934,320.00	Depreciation					
394,657.00	Other Expenses	15,306,587.00				
	Expenses of Exceptional Nature	321,343.00				
	Prior Period Expenses					
	Deferred Revenue Expenditure Written off					
12,505,392.00	Excess of Income over Expenditure (Surplus) Transferred to Income & Expenditure Appropriation Account					
142,243,550.00		14,701,701.90	142,243,550.00			152,403,637.90

Income & Expenditure Appropriation Account			
Excess of Expenditure over Income (Deficit) Transferred to Income & Expenditure Appropriation Account			
Depreciation Reserve			
Salary Reserve			
Contingency Reserve			
Transfer To Pupil Fund			
Other Reserve			
Balance Transferred to Capital Fund	12,505,392.00	14,701,701.90	14,701,701.90
	12,505,392.00	14,701,701.90	14,701,701.90

As Per Our Report On Even This  
 For Vasu Aggarwal & Associates  
 Chartered Accountants  
 Vasu Aggarwal (Pvt.)  
 Membership No-681843  
 Place - Jalandhar

For D.A.V. INSTITUTE OF ENGINEERING AND TECHNOLOGY  
 Sr. Asst A/c  
 PRINCIPAL  
 Rg. DIRECTOR

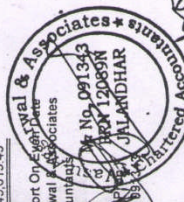
PART B - ANNEXURE B

DAV Institute of Engineering & Technology, (Main)  
Kabir Nagar, Jalandhar City

Balance Sheet as at 31 March, 2015

	Liabilities		Assets	
	Previous Year	Current Year	Previous Year	Current Year
280,657,123.03 Capital Fund	282,780,542.03	184,063,287.60	Fixed Assets	
8,000,000.00 Reserve & Surplus	8,000,000.00	-	Investments	7
38,770,292.00 Secured Loans	-	396,482,325.85	Current Assets Loans & Advances	8
Unsecured Loans	-	-		9
5,728.00 Security Deposits	5,728.00	-		
232,770,292.00 Current Liabilities	255,938,778.42	-		
<b>560,545,613.45</b>	<b>546,726,048.45</b>	<b>560,545,613.45</b>		
				<b>546,726,048.45</b>

As Per Our Report On 18/03/2015  
For Vasu Aggarwal & Associates  
Chartered Accountants  
Vasudha, Jalandhar  
FRN 12085N



For D.A.V. INSTITUTE OF ENGINEERING AND TECHNOLOGY  
Sr. Asst A/c  
PRINCIPAL  
Rg. DIRECTOR

PAR - B - ANNEXURE B

DAV INSTITUTE OF ENGINEERING & TECHNOLOGY, (Main AC)  
KABIR NAGAR, JALANDHAR

Income & Expenditure Account for the Year Ending 31 March, 2015

	Previous Year	Current Year	Previous Year	Current Year	Schedule No.
Opening Stock			149,022,824.00		10
Purchase of Paper					
Purchase of Text Books from DAV CMC Publication Division					
Purchase of Text Books from others			3,380,813.90		
Other Purchases					
Publication of Students' Word and Aryan Heritage					
Printing of Library Books					
Purchase of Laser CD					
Printing of Text Books					
Packing & Forwarding					
Others					
112,340,808.00		125,259,544.00			
Establishment					
2,064,632.00		2,343,243.00			
Administration Charges and Grant To Institutions					
Rent, Rates & Taxes					
Utilities					
2,977,533.00		2,839,137.00			
Communication Expenses					
232,109.00		193,811.00			
Travelling and Conveyance					
240,365.00		323,119.00			
Welfare, Entertainment and Other Recreational Activities					
312,572.00		291,025.00			
Stationery and Supplies					
Membership and Subscription					
2,139,823.00		2,493,905.00			
Advertisements					
423,538.00		401,006.00			
Insurance					
406,237.00		289,614.00			
Vehicle Maintenance Charges					
23					
Lab Maintenance and Running Expenses					
24A					
914,068.00		777,577.00			
Maintenance Expenses					
25					
Interest: Paid on Loans					
26					
Legal, Professional, House Keeping and Agency Support					
27					
20,000.00		20,000.00			
Audit Fees					
Assistance					
28					
15,308,587.00		14,386,747.00			
Depreciation					
321,343.00		374,903.00			
Other Expenses					
Expenses of Exceptional Nature					
Prior Period Expenses					
30					
Deferred Revenue Expenditure Written off					
31					
Excess of Income over Expenditure (Surplus) Transferred to Income & Expenditure Appropriation Account					
14,701,701.90		2,123,419.00			
152,403,637.90		152,403,637.90			

Income & Expenditure Appropriation Account

Excess of Expenditure over Income (Deficit) Transferred to Income & Expenditure Appropriation Account				
Depreciation Reserve				
Salary Reserve				
Contingency Reserve				
Transfer To Pupil Fund				
Other Reserve				
14,701,701.90		2,123,419.00		
Balance Transferred to Capital Fund				
14,701,701.90		14,701,701.90		

As Per Our Report On Even Date  
For Vasu Aggarwal & Associates  
Chartered Accountants  
No. 091343  
P.O. Box 42089N  
Jalandhar

Vasu Aggarwal (Partner)  
Membership No. 091343  
Jalandhar  
Date: 26.07.2015

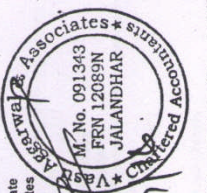
For D.A.V. INSTITUTE OF ENGINEERING AND TECHNOLOGY

Sr. Asst. A/c  
PRINCIPAL  
Rg. DIRECTOR

**PART B - ANNEXURE B**  
**DAV Institute of Engineering & Technology, (Main)**  
**Kabir Nagar, Jalandhar City**  
**Balance Sheet as at 31 March, 2016**

	Liabilities		Assets	
	Previous Year	Current Year	Previous Year	Current Year
282,780,542.03 Capital Fund	272,971,560.43	151,671,529.60	Fixed Assets	141,890,699.00
8,000,000.00 Reserve & Surplus	8,000,000.00		Investments	
Secured Loans		395,054,518.85	Current Assets Loans & Advances	410,727,813.96
Unsecured Loans	5,728.00	5,728.00		
Security Deposits		271,641,224.43		
255,939,778.42 Current Liabilities				
	<u>546,726,048.45</u>	<u>552,618,512.86</u>		<u>552,618,512.86</u>

As Per Our Report On Even Date  
 For Vasu Aggarwal & Associates  
 Chartered Accountants



Vasu Aggarwal (Copy)  
 Membership No-091343  
 FRN 12089 N  
 Place : Jalandhar  
 Date : 28.07.2016

For D.A.V. INSTITUTE OF ENGINEERING AND TECHNOLOGY

*[Signature]*  
 Sr. Asst A/c

*[Signature]*  
 PRINCIPAL



#### **6.4.4 Give details on the efforts made by the institution in securing additional funding and the utilization of the same (if any).**

Govt. funding agencies provide grants to the Govt./Govt. Aided/Autonomous institutions. NAAC/NBA Accreditation is mandatory for receiving research grants for private self-financed institutions. However, our Institute has received grants for conducting seminars/ FDP's and workshops from Government Agencies/ AICTE/University. Further, the Governing Body of the institution in order to promote the research in the Institute provides seed money up-to Rs. 10 lakhs to the faculty for research projects.

- The affiliating university i.e. IKG PTU provided research grant of Rs. 25,000/- to the following students of Electrical Engg. for project work under IDP Scheme.
  - Amritpal Singh
  - Jasmeet Singh
  - Amit Mahay
  - Varinder Singh
- IKG-PTU Regional Centre at DAV Institute of Engg. & Technology Jalandhar gave a grant of Rs. 12 lacs for developing Infrastructure of Incubation Centre.

### **6.5 Internal Quality Assurance System (IQAS)**

#### **6.5.1 Internal Quality Assurance Cell (IQAC)**

- a. **Has the institution established an Internal Quality Assurance Cell (IQAC)? If 'yes', what is the institutional policy with regard to quality assurance and how has it contributed in institutionalizing the quality assurance processes?**
- b. **How many decisions of the IQAC have been approved by the management / authorities for implementation and how many of them were actually implemented?**
- c. **Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.**
- d. **How do students and alumni contribute to the effective functioning of the IQAC?**
- e. **How does the IQAC communicate and engage staff from different constituents of the institution?**

- a) Yes, the institution has established an internal Quality Assurance Cell vide office order no. DAVIET/2015-16/74 dated 18/9/2015. It is headed by an Associate Professor and has 13 other members representing different departments. The main objectives of IQAC are:
- To encourage and guide the Institute on quality related issues.
  - Improve quality in teaching, administrative, co-curricular and extra-curricular activities.
  - Support the implementation of quality systems and standards at all levels in the Institute.
  - To prepare the Internal Quality Assurance Reports for the purpose of accreditation.
- b) Since, IQAC was established recently and no major decisions have been taken by it. However, all the recommendations made by IQAC have been implemented.
- c) As of now, there is no external member in its committee. However, the Institute proposes to include some external members in the near future.
- d) The feedback received from students and alumni is given due consideration and all the feasible suggestions are implemented.
- e) There is representation of every department in the IQAC. The meetings of IQAC are held from time to time.

**6.5.2 Does the institution have an integrated framework for Quality assurance of the academic and administrative activities? If ‘yes’, give details on its operationalisation.**

Yes, the institution has an integrated framework for quality assurance of the academic and administrative activities. The Institute is having ISO 9001: 2008 certification and has proper quality procedures for carrying out various academic and administrative activities. The Institute prepares the academic calendar for academic, co-curricular and extra-curricular activities. Periodic Action Taken Reports are prepared by IQAC to monitor & implement various administrative decisions.

The Institute is known for providing quality education. The proper emphasis is laid on the teaching-learning processes. It is ensured that all the classes and labs are held as per the schedule. The performance of the students is evaluated on the basis of their performance in MSTs, Projects, Assignments, Tutorials, and Class Participation etc. The Institute conducts three MSTs every semester. The weak students are identified on the basis of their performance in MSTs and remedial classes are conducted for them.

In order to improve the teaching learning process, the feedback from students is obtained twice during every semester. The observations made by the students are communicated to the concerned faculty and corrective action is taken wherever necessary. The faculty is encouraged and counseled to improve upon their weak areas.

**6.5.3 Does the institution provide training to its staff for effective implementation of the Quality assurance procedures? If 'yes', give details enumerating its impact.**

Yes, the Institute provides training to its staff for effective implementation of Quality Assurance Procedures. The induction programme is conducted for the newly recruited staff to acquaint them with the procedures, rules and regulations of the Institute. The induction programme helps the newly recruited staff discharge their duties in an effective and efficient manner. Whenever there is any change in the procedures, the same is communicated well in advance and proper training is provided for the same. The faculty is imparted training on teaching pedagogy and various interactive & active learning techniques and the Bloom's taxonomy.

**6.5.4 Does the institution undertake Academic Audit or other external review of the academic provisions? If 'yes', how are the outcomes used to improve the institutional activities?**

Yes, the Academic Audit is conducted twice during every semester. The audit is conducted by a committee constituted by the Principal of the Institute. The scope of the audit includes:

- a) Course files
- b) Lecture Plans
- c) Actual Delivery
- d) Assignments
- e) Tutorial Sheets
- f) MSTs
- g) Lab Manuals
- h) Maintenance of Proper Records

Since the Institute is ISO 9001: 2008 certified, the external audit is also conducted by the certifying agency. This audit is conducted every year. The observations/ recommendations made by the auditors are implemented in letter and spirit.

**6.5.5 How are the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?**

The Institute strictly adheres to the rules and regulations of the regulatory authorities. The Institute follows the guidelines issued by AICTE and of the affiliating University i.e. IKG Punjab Technical University. The various positions in the Institute are filled on the basis

of qualifications prescribed by AICTE/UGC/University. The infrastructure of the Institute is established as per the guidelines issued by AICTE.

**6.5.6 What institutional mechanisms are in place to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome?**

The Institute adopts a very effective mechanism to review the teaching- learning process. The following steps are taken to review the teaching- learning process:

1. The Dean and Dy. Deans and members of the Academic Affairs Committee are entrusted with the responsibility to regularly review, update and contemporize the teaching-learning paradigm in the best interests of the stakeholders of the Institute.
2. We have signed MoUs with the Institutions/organizations of Importance for student/faculty exchange programmes to internationalize their exposure for knowledge and skill set.
3. We have ensured improvement of Teaching-Learning Process by introducing interactive teaching methodologies, project based learning and peer-to-peer learning.
4. We have set up Centre(s) of Excellence in the emerging areas of engineering & technology in order to lend a quality dimension to the existing teaching-learning paradigm.
5. Our Institute has appointed 20% Adjunct Faculty from top academia and industry so as to address the gaps between academia and industry.
6. The course file and lecture plan for each subject are prepared before the start of the classes.
7. The report on the syllabus coverage is received from the concerned teacher from time to time.
8. The innovative/industry defined projects are given to the students and there is continuous follow-up by the concerned faculty about the progress of such projects.
9. The tutorial sheets and analytical home assignments are given to the students.
10. The results are analysed subject-wise and teacher-wise.

11. The Institute gets the feedback from the students twice during every semester. The feedback is analysed and corrective action is taken, wherever necessary.

12. The academic audit is another routine feature of our Institute.

**6.5.7 How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders?**

**Any other relevant information regarding Governance Leadership and Management which the college would like to include.**

The Institute communicates with internal and external stakeholders in a number of ways. The Institute communicates with the students and staff through notice boards, Institute website, Institute prospectus and office orders. The parents are communicated by sending the MST reports of their wards at their address, by inviting the parents to various functions of the Institute, reports in newspapers and electronic media and in some cases the parents are personally called for.

The communication with external stakeholders takes place through media reports and inviting them to various functions of the Institute. The communication with industry is done by arranging industry week, inviting the companies for campus placement and industrial training of the students, personal visits by the staff and inviting the industry people for delivering expert lectures.

## **CRITERIA VII: INNOVATIONS AND BEST PRACTICES**

### **7.1 Environment Consciousness**

#### **7.1.1 Does the Institute conduct a Green Audit of its campus and facilities?**

The Institute is committed to maintain the campus green. For this purpose, more and more plants are planted in the campus. The NSS unit of the Institute creates awareness about the benefits of the pollution free environment. The green audit is done to improve plantations and landscaping. In addition, a log book of all the trees is being maintained in the Institute. All the trees are numbered alongwith their botanical names. We have also established an Herbal Garden in the campus. To support this stance, we have already obtained the requisite environmental clearance (air, water and hazardous) from the Punjab Pollution Control Board.

#### **7.1.2 What are the initiatives taken by the college to make the campus eco-friendly?**

- ✓ **Energy conservation**
- ✓ **Use of renewable energy**
- ✓ **Water harvesting**
- ✓ **Check dam construction**
- ✓ **Efforts for Carbon neutrality**
- ✓ **Plantation**
- ✓ **Hazardous waste management**
- ✓ **e-waste management**

**Energy Conservation:** The Institute has taken the following steps for energy conservation:

- The staff of the Institute has been instructed through an office order that lights and other equipment should be switched off when they have to go out of office. In addition, stickers are pasted on all switchboards advising for energy conservation.
- The Institute purchases the energy efficient equipment(s).
- More and more use of LEDs and CFLs.
- Energy Audit equipment has been purchased and Energy Audit is conducted on regular basis.

**Use of Renewable Energy:** The Institute is making use of solar lights at some locations in the Institute. The solar water heaters have been installed in the hostels. The Institute has plans to commission 1 MW solar power plant.

**Water Harvesting:** Yes, the Institute is having the facility of Rain water harvesting.

**Check dam Construction:** N.A.

**Efforts for Carbon neutrality:** The following steps are taken for carbon neutrality:

- The students staying in the hostels are not allowed to keep vehicles.
- More and more use of LEDs and CFLs in place of traditional lamps.
- The vehicles to be parked in the Institute have to get the pollution free certificate.
- Smoking is prohibited in the campus.

**Plantation:** The trees are planted at every possible location in the Institute.

**Hazardous waste management:** The hazardous waste is disposed off as per the standard procedure notified by the Punjab Pollution Control Board. As per the guidelines/directions, a separate room (with the mark of DANGER on it) is provisioned for storing the waste oil followed by its timely disposal to the authorized buyers as approved by Punjab Pollution Control Board.

**e-waste management:** The e-waste is disposed off to the notified buyers as per the standard procedure notified by the Punjab Pollution Control Board.

## 7.2 Innovations

### 7.2.1 Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the college.

- Action Learning and Introduction to Bloom's Taxonomy.
- The entire campus has been made Wi-Fi enabled so that students can download various learning resources.
- Video Capture Solution for the expert lectures, which are subsequently made available on the Institute's website.
- Allocation of duties to faculty & staff as per their talent/choice.
- The Institute has started displaying the internal assessment of the students on the notice boards.
- The bio-metric system of attendance has been introduced for the staff.
- The Institute has implemented the ERP system for effective functioning.
- The provision has been made to provide funding for the students' research projects.

- The faculty is being granted the academic leave with pay for pursuing higher studies.
- Appointment of Adjunct Faculty drawn from industry and from the alumni of the Institute.
- Constitution of Industry Advisory Board and Academic Advisory Council.
- Galileo Meridian Digital Library has been made operational in the Institute. Readers can assess and download e-books, journals articles, NPTEL videos and other research materials on their laptops, tabs and mobile phones.
- MOOCs based courses have been started in the Institute.
- Texas Instruments has established a Centre of Excellence in the Institute.
- The Institute has signed a Memorandum of Understanding with Sofcon.
- In order to enhance the employability of the students, the Institute has started the Employability Skill Training (EST) for the students.
- The Centre for Incubation and Entrepreneurship (CIE) has been established in the Institute targeting the growth of start-ups in the campus.
- The new format of course files targeting OBE has been introduced which is more comprehensive and meaningful.
- The Institute has made a complete transition to outcome based education system.
- Cashless treatment under Group Health insurance policy for the students in the listed hospitals.
- Availability of library and lab facilities offering tea/coffee to the students during extended hours.

**7.3.1 Elaborate on any two best practices as per the format, which have contributed to the achievement of the Institutional Objectives and/or contributed to the Quality improvement of the core activities of the college.**

## **TWO BEST PRACTICES**

### **I. Title of the Practice**

Implementation of Outcome Based Education Model in the Institute.

#### **Goal**

Outcome Based Education aims to focus and establish our educational system around the performance essential(s) for our students. Such an education is expected to enable them to ensure successful performance of the essentials at the end of their learning experience.



### **The Context**

The technical education plays crucial role in the development of any country and it causes a fundamental economic and social transformation in the society. In the recent years, the technical institutions have mushroomed in our country. As per AICTE Handbook for the year 2016-17, there are more than 10,000 (UG & PG) engineering & Technology Institutions in the country. But the quality of education offered by these institutions is questionable one. The deficiencies of our education include the glaring challenges viz. input-based approach, CGPA/Marks consciousness, un-employability and poor soft skills. This shows that they are not having the knowledge, skills and attitude/behaviour as required by the employers/industry. In such a scenario, OBE is the only solution.

### **The Practice**

Under OBE, we have developed a clear and coherent vision of what is essentially important to our students. Accordingly, we are organizing our curriculum, pedagogy and assessment/evaluation to measure the extent of the learning outcome(s). For this purpose, all of our teaching departments have framed their Vision, Mission, Programme Educational Objectives, Program Outcomes, Course Outcomes etc. Furthermore, we have also come up with the Industry-relevant curriculum which is in addition to the University curriculum. Thus, we have executed curriculum restructuring coupled with innovative delivery methods, credible assessment and evaluation methods using Bloom's Taxonomy, reliable evidence and continuous quality improvement. Importantly, DAVIET relies on the advancements of technology for facilitating our students with a flexible yet contemporary learning through Massive Open Online Courses (MOOCs). We also have a special focus on three important domains viz. skill development, entrepreneurship and start-ups. For this purpose, we have established Centre for Incubation and Entrepreneurship in the campus and we are also providing Employment Skills Training to our students.

### **Evidence of Success**

OBE is enabling our students to ensure successful performance of the essentials at the end of their learning experience by showcasing outcomes which include a range of knowledge, skills and attitudes. In this way, this model helps in developing a clear and coherent vision of what is essentially important to our students and then organizing our curriculum, pedagogy and assessment/evaluation to measure the extent of the learning outcome(s). MOOCs, industry-relevant curriculum, adjunct faculty, national and international MoUs, financial assistance for international conferences, CIE-MSME collaboration are some of the key instances which highlight the success of the implementation of OBE model in the Institute.

### **Problems Encountered and Resources Required**

Lack of senior faculty in the varied knowledge disciplines of engineering & technology, the dearth of government funding for the promotion of

research, weak industry-academia integration are some of the problems encountered for the ideal implementation of OBE. Thus, the Institute has planned to submit research proposals to DST, UGC, AICTE etc. for financial support.

## **II. Title of the Practice**

### **Industry-Institute Confluence.**

#### **Goal**

To hone career specific skill set(s) of student(s) and to make them globally competent and employable in multinational industries. Hence, a healthy interaction between industry and institution is central to enable our students to be well-equipped to meet the challenges of the competitive world.

#### **The context**

The deficiencies of technical education include the glaring challenges viz. un-employability vis-à-vis the glaring gap between academia and industry. NASSCOM is of the opinion that 75% of the engineering graduates are unemployable since they lack the skills required in industry. This shows that the students are not having the skills and attitude/behaviour as required by the employers/industry. Considering the pervasive macdonaldization of the world economy and culture, the current employment demands that the new workforce must exhibit the skills which are extremely important for the professionals of the 21st century. Therefore we have recognized the fact that it is imperative to equip our students with the industry recommended skills/expertise. Hence, we focus to build a strong industry-academia confluence in the best interests of our students.

#### **The Practice**

We have taken the following initiatives in order to strengthen the Industry-Academia confluence:

- a) Appointment of 20% Adjunct faculty which includes substantial representation from industry.
- b) Financial Support up-to Rs. 25,000/- students for Industry Defined/Research Projects.
- c) Conduct of Industry Week every semester by all departments.
- d) Constitution of Industry Advisory Board with an intent to seek quality inputs for going beyond the prescribed syllabus so as to suit the requirements of industry.
- e) Conduct of a number of expert talks, workshops, training sessions by our alumni and experts from Industry.

- f) Our industrial tie-ups with Microsoft, Texas Instruments, CISCO etc. also provide necessary industry exposure to the budding engineers.
- g) We have hired the services of competent professional service providers for confidence building and soft skills training. In addition, we also have an adjunct faculty from English & Foreign Languages University Hyderabad to groom communication and other soft skills as required for all round development of students.
- h) Dedicated Training & Placement/Corporate Relations Cell which maintains a healthy liaison with the top-notch industry.
- i) Dedicated Centre for Entrepreneurship and Incubation. The centre aims to nurture the innovative entrepreneurial ideas of the budding technocrats to set up their ventures and thus enable them to be the job creators rather than job seekers.
- j) The Institute has got the membership of CII (Confederation of Indian Industry) and JMA (Jalandhar Management Association).

### **Evidence of Success**

The initiatives taken by the college are helping our students to better their acceptability/employability in Industry. The college placements have been steadily improving in terms of number of companies coming to campus, number of students employed as well as quality of placements. We have excellent Placement Track Record as about 300 students passing out this year are already placed in top companies with the highest pay package of Rs. 20.5 lacs per annum – the best in the region. In addition, we also have 05 patents to our credit which are being used by Industry.

### **Problem Encountered & Resources Required**

The lesser presence of product based IT industry in the state of Punjab is a challenge for strengthening the Industry-Academia confluence. We require more support from the affiliating University to have quality representation of Industry in Board of Studies (BoS) for all the programmes.

### **Contact Details:**

#### **Name of the Principal:**

**Dr. Manoj Kumar**

#### **Name of the College:**

**DAV Institute of Engineering & Technology, Jalandhar-144008 (Pb.)**

**Phone: (91)181-2207650 Fax: 0181-2205851**

**Mobile. 94781-01102, 98722-03898**

**Website : [www.davietjal.org](http://www.davietjal.org)**

**E-mail: [principal@davietjal.org](mailto:principal@davietjal.org)**

## Evaluative Report – Department of Electronics & Comm. Engg.

1. Name of the department: **Electronics & Communication Engineering**
2. Year of Establishment: **2001**
3. Name of Programmes/Courses offered (UG, PG, M.Phil., Ph.D., Integrated Master; Integrated Ph.D., etc.): **UG**

Course offered	Programme	Type	
B.Tech.	Electronics & Communication Engg.	Full Time	UG

4. Names of Interdisciplinary courses and the departments / units involved:

S.No.	Interdisciplinary courses	Departments	Class (Sem)
1	Engineering Physics	Applied Sciences	1 <sup>st</sup> Semester
2	Engineering Mathematics-1	Applied Sciences	1 <sup>st</sup> Semester
3	Communicative English	Applied Sciences	1 <sup>st</sup> Semester
4	Human Values and Professional Ethics	Applied Sciences	1 <sup>st</sup> Semester
5	Manufacturing Practice	Mechanical Engg.	1 <sup>st</sup> Semester
6	Engineering Chemistry	Applied Sciences	2 <sup>nd</sup> Semester
7	Engineering Mathematics-2	Applied Sciences	2 <sup>nd</sup> Semester
8	Elements of Mechanical Engineering	Mechanical Engg.	2 <sup>nd</sup> Semester
9	FCPIT	CSE/IT	2 <sup>nd</sup> Semester
10	EVS	Civil Engg.	2 <sup>nd</sup> Semester
11	Engineering Drawing	Mechanical Engg.	2 <sup>nd</sup> Semester
12	Engineering Mathematics-3	Applied Sciences	3 <sup>rd</sup> Semester
13	Object Oriented Programming using C++	CSE/IT	3 <sup>rd</sup> Semester
14	Data Structures	CSE/IT	5 <sup>th</sup> Semester
15	Operating System	CSE/IT	6 <sup>th</sup> Semester

5. Annual/Semester/choice based credit system (programme wise): Semester/  
Choice Based Credit System
6. Participation of the department in the courses offered by other departments:

S. No.	Programs offered by other Departments	Participation of ECE Deptt.	Class (Sem.)
1	B.Tech. (CSE)	Digital Circuit & Logic Design	3 <sup>rd</sup> Sem.
2	B.Tech. (IT)	Digital Circuit & Logic Design	3 <sup>rd</sup> Sem.
3	B.Tech. (CSE)	Microprocessors & Applications	4 <sup>th</sup> Sem.
4	B.Tech. (IT)	Microprocessors & Applications	4 <sup>th</sup> Sem.
5	MCA	Embedded Systems	5 <sup>th</sup> Sem.
6	B. Tech. (EE)	Digital electronics	4 <sup>th</sup> Sem.
7	B. Tech. (EE)	Microcontroller & PLC	6 <sup>th</sup> Sem.
8	B. Tech. (EE)	Bio-Medical Instrumentation	6 <sup>th</sup> Sem.

7. Courses in collaboration with other universities, industries, foreign institutions, etc.:

Sr. No.	Industries / Organizations	
1	Texas Instruments	MOU
2	Indovision Services Pvt. Ltd. (Huawei certified ICT graduate associate inhouse training)	MOU
3	Sofcon India Pvt. Ltd.	COE
4	Itronix Solutions Pvt. Ltd.	Training Provider
5	MOOCs Courses	4 nos.

8. Details of courses/programmes discontinued (if any) with reasons: **Nil**

9. Number of Teaching posts

	Sanctioned	Filled
Professors	02	01
Associate Professors	04	03
Asstt. Professors	18	14

10. Faculty profile with name, qualification, designation, specialization, D.Sc./D.Litt./Ph.D./M.Phil.etc.) :

Name	Qual.	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. Manoj Kumar	Ph.D.	Professor	Optical and Wireless Communication Systems	25 Years	02
Dr. Neeru Malhotra	Ph.D.	Associate Professor & HOD	Bio Electro Magnetics Applications, Digital Designing	17 Years	Nil
Dr. Jagjit Singh Malhotra	Ph.D.	Associate Professor	Multi Channel Optical Communication Systems, Optical Solution Communication, Analog Electronics, Fiber Optics	22 Years	Nil
Dr. Jagroop Singh Sidhu	Ph.D.	Associate Professor	Digital Signal & Image Processing	16 Years	Nil
Ms. Bindiya Jain	M.Tech.	Assistant Professor	Optical Communication And Wireless sensor Network	15 Years	NA

Ms. Aarti Kochhar	M.Tech.	Assistant Professor	Image Processing	13 Years	NA
Dr. Kiran Ahuja	Ph.D.	Assistant Professor	Wireless communication and networks	11.5 Years	Nil
Mr. Ramnik Singh Randhawa	M.E.	Assistant Professor	Wireless Sensor networks	8 Years	N.A
Mr. Amit Arora	M.Tech.	Assistant Professor	Microwave Communication and Antennas	8 Years	N.A
Mr. Rajesh Wadhwa	M.E.	Assistant Professor	Wireless communication and networks	10 Years	N.A
Mr. Love Kumar	M.Tech.	Assistant Professor	Optical Communication system	9.5 year	N.A
Ms. Poonam Sethi	M.Tech. (ECE)	Assistant Professor	Image Processing	12 years	N.A
Mr. Hari Singh	M.Tech.	Assistant Professor	Instrumentation and Control	08 Years	N.A
Mr. Ganesh Chand	M.Tech.	Assistant Professor	Communication Systems	08 Years	N.A
Mr. Ashish Malhotra	M.Tech.	Assistant Professor	Optical Communication	10 Years	N.A
Mr. Navleen Singh Rekhi	M.Tech.	Assistant Professor	Digital Signal Processing, Soft computation techniques	09 Years	N.A
Ms. Risha Sharma	M.Tech.	Assistant Professor	VLSI Design	5.5 Years	N.A
Mr. Vishav Kapoor	M.Tech.	Assistant Professor	Wireless Communication	6 years	N.A.
Mr. Sumit Mahajan	Diploma-ECE, B.Tech., M.Tech. (CSE), CCNA	Sr. Technician	Microprocessor, Digital Electronics	15 Years	N.A
Mr. Sukhdeep Singh	Diploma-ECE, AMIE, MCSE, CNA, CCAI, MS	Lab Technician	Data Communication, Hardware	16 Years	N.A
Ms. Sarabjeet Kaur	PGDCA, MCA	Lab Technician	VLSI, DSP, Microcontroller, OOPs	16 Years	N.A

Ms. Shallu Singh	Diploma-ECE, AMIE, Pursuing M.Tech.	Lab Assistant	EDC, LIC, Power Electronics	13 Years	N.A
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**11. List of senior visiting faculty:**

S. No.	Name of the Visiting Faculty	Designation	Organization
1	Dr. Balwinder Singh	Co-ordinator & Sr. Engineer	ACS Division, C-DAC, Mohali
2	Er. Arvind Dixit	Director	Advance Tech India Pvt. Ltd.

**12. Percentage of lectures delivered and practical classes handled (programmed wise) by temporary faculty:**

S. No.	Faculty Name	Designation	Percentage of lectures delivered	Percentage of Practical classes
1	Ms. Kranti Bala	Assistant Prof.	63%	37%
2	Ms. Shefali Sharma	Assistant Prof.	71%	29%
3	Mr. Sumeet Garg	Assistant Prof.	50%	50%

**13. Student-Teacher Ratio (programme wise):**

B. Tech (ECE) = 18:1

**14. Number of academic support staff(technical) and administrative staff; sanctioned and filled:**

S. No.	Staff Type	Sanctioned	Filled
1	Academic support staff (Technical)	4	4
2	Administrative staff		

**15. Qualifications of teaching faculty with Dsc/ D.Litt/ Ph.D/ MPhil /PG.:**

Same as Sr. No. 10

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: **Nil**
17. Departmental projects funded by DST-FIST;UGC,DBT,ICSSR, etc. and total grants received: **Nil**
18. Research Centre / facility recognized by the University: **Light Wave Communication Lab**
19. Publications: **As per Annexure-I**
20. Areas of consultancy and income generated: **Nil**
21. Faculty as members in

a) National Committees b) International Committees c) Editorial Boards:

S. No.	Name of the Faculty	Name of the Committee	National/ International	Capacity
1	Dr. Manoj Kumar	The Indian Science Congress Association, CSI, ISTE, IETE, Punjab Academy of Sciences, WASET	National	Member
2	Dr. Manoj Kumar	Board of Studies; Electronics & Communication Engineering, Punjab Technical University, Jalandhar (2003-09).	National	Chairman
3	Dr. Jagjit Malhotra	Board of Studies; Electronics & Communication Engineering, Punjab Technical University, Jalandhar	National	Member
4	Dr. Neeru Malhotra	ISTE, Punjab Science Congress	National	Member
5	Dr. Jagjit Malhotra	ISTE, Punjab Science Congress	National	Member
6	Dr. Jagroop Singh	IBIC (USA)	International	Member
7	Ms. Bindiya Jain	ISTE , Punjab Science Congress	National	Member
8	Dr. Kiran Ahuja	Punjab Science Congress (Lifetime)	National	Life-Member



9	Mr. Amit Arora	ISTE	National	Member
10	Mr. Love Kumar	ISTE	National	Member
11	Ms. Poonam Sethi	ISTE	National	Life-Member
12	Mr. Hari Singh	Indian society of Bio-Mechanics	National	Life-Member
13	Ms. Risha Sharma	ISTE	National	Life-Member
14	Mr. Sumit Mahajan	ISTE	National	Member

S. No.	Name of the Faculty	Name of the Journal	National/International	Capacity
1	Dr. Manoj Kumar	I <sup>2</sup> CT, IJITT	International	Reviewer

## 22. Student projects

- Percentage of students who have done in-house projects including inter departmental / programme
- Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/ Industry/ other agencies

S. No.	% of students	2015-16	2014-15	2012-13
1	% of students who have done in-house projects	100%	100%	100%
2	% of students placed for projects in organizations outside the institution	100%	100%	100%

## 23. Awards / Recognitions received by faculty and students:

### 1. Awards / Recognitions received by faculty:

S. No.	Faculty Name	Organization	Remarks
1	Dr. Manoj Kumar	Indian Solidarity Council	Awarded "Jewel of India"
2	Dr. Manoj Kumar	Secretary, D.O.E, Govt. of India	Best PI coordinator award
3	Dr. Jagjit Singh	Best Teacher Award	ISTE (2016)

### 2. Awards / Recognitions received by students:

#### Sports:

S. No.	Student Name	Organized By	Remarks
1	Rashmi Mahajan	GNE Ludhiana	2 <sup>nd</sup> , Lawn Tennis, 2015
2	Pooja Sharma	PTU	2 <sup>nd</sup> , Cricket, Inter-College
3	Navneet Kaur	PTU	2 <sup>nd</sup> , Cricket, Inter-College
4	Pooja Grover	PTU	1 <sup>st</sup> , Chess, Inter-College

5	Gagneet	DAVIET	2 <sup>nd</sup> , Tug of War, Tech-fest, 2016
6	Nishita Sikka	DAVIET	2 <sup>nd</sup> , 4x400 Relay, Athletic Meet, 2016
7	Nishita Sikka	PTU	2 <sup>nd</sup> , Hand-Ball Inter-College
8	Nishita Sikka	PTU	2 <sup>nd</sup> , Cricket, Inter-College
9	Mishank Chadha	DAVIET	3 <sup>rd</sup> , Discus Throw, Athletic Meet, 2016
10	Akshit	Inter-University	3 <sup>rd</sup> , Chess
11	Kamalpreet Kaur	PTU	2 <sup>nd</sup> , Cricket, Inter-College
12	Kamalpreet Kaur	DAVIET	1 <sup>st</sup> , Discus Throw, Athletic Meet, 2016
13	Deepansh Sood	DAVIET	2 <sup>nd</sup> , 4x100 m & 4x200 m Relay, Athletic Meet, 2015
14	Kulpreet Kaur	PTU Inter-College	1 <sup>st</sup> , Badminton
15	Kulpreet Kaur	DAVIET	2 <sup>nd</sup> , 4x100 m Relay, Athletic Meet, 2016
16	Inderpreet Kaur	PTU	2 <sup>nd</sup> , Handball, Inter-College
17	Kanika	PTU	1 <sup>st</sup> , Chess, Inter-College
18	Nisha	PTU	2 <sup>nd</sup> , Handball, Inter-college
19	Neha Sharma	PTU	2 <sup>nd</sup> , Lawn Tennis, Inter-College
20	Wishwesh	DAVIET	2 <sup>nd</sup> , Tug of War, Athletic Meet, 2016
21	Anjali	Inter-University	2 <sup>nd</sup> , Cricket
22	Mohit Badhan	DAVIET	Javelin throw,silver,2014 Shotput,bronze,2014
23	Mishank Chadha	DAVIET	Shotput,silver,2014 Shotput,silver,2014
24	Shubham	DAVIET	Cricket,gold,2014
25	Chitwandeep	DAVIET	Bronze medal in 800 m race
26	Daman (Batch 2013-2017)	PTU	Inter College Badminton, Gold,2015
27	Kulpreet	PTU	Lawn tennis,SILVER ,2015
28	Neha Sharma	PTU	Inter College chess,GOLD,2015
29	Kanika	PTU	Inter College chess,GOLD,2015
30	Pooja Grover	PTU	Cricket Tournament,Silver,2015
31	Purva Arora	PTU	Cricket Tournament, Silver,2015
32	Anjali	PTU	Cricket Tournament, Silver,2015
33	Kanchan	PTU	Cricket Tournament, Silver,2015
34	Arti Rana	PTU	Cricket Tournament, Silver,2015
35	Pooja Sharma	PTU	Cricket Tournament, Silver,2015
36	Kamalpreet Kaur		North India Inter university handball
37	Mohit Badhan		Mr.RCF Power lifting championship (category80-90kg), First,2015
38	Mohit Badhan	DAVIET	Javelin throw,Gold,2015
39	Mohit Badhan	DAVIET	Discuss throw,silver,2015
40	Harinder Kaur	DAVIET	Gold, 800m Race Women, 2015

41	Mishank Chadha	DAVIET	Discuss throw, gold, 2015
42	Kamal Preet kaur	DAVIET	Shotput, bronze, 2015
43	Nishita sikka	DAVIET	400m relay, silver, 2015
44	Puneet Bhardawaj	DAVIET	Long jump, bronze, 2015, 400m relay (men), silver, 2015
45	Navneet Nagpal	DAVIET	2 <sup>nd</sup> , Cricket, 2016
46	Plash Verma	Inter-University	Silver, Cricket, 2015
47	Shweta	Inter-college	1 <sup>st</sup> , table tennis
48	Aarti	PTU	2 <sup>nd</sup> , Cricket, Inter-College
49	Harinder Kaur	DAVIET	2 <sup>nd</sup> , 400m and 4 x 400 m Relay, Athletic Meet, 2016
50	Harmanpreet Singh	DAVIET	2 <sup>nd</sup> , Tug-of-War, Athletic Meet, 2016
51	Himanshu	DAVIET	2 <sup>nd</sup> , Tug of War, Athletic Meet, 2016
52	Punnet	DAVIET	2 <sup>nd</sup> , 4 x 400 Relay, Athletic Meet, 2016
53	Mishank Chadha	DAVIET	3 <sup>rd</sup> , Shot put, Athletic Meet, 2016
54	Mishank Chadha	DAVIET	2 <sup>nd</sup> , Discus Throw and Tug of War, Athletic Meet, 2016
55	Mohit Badhan	DAVIET	1 <sup>st</sup> , ShotPut & Discus Throw, Athletic Meet, 2016
56	Sushant Sharma	PTU	2 <sup>nd</sup> , Cricket, 2016
57	Ujjwal Malhi	PTU	2 <sup>nd</sup> , Cricket, 2016
58	Lalit	PTU	2 <sup>nd</sup> , Cricket, 2016
59	Mohit	DAVIET	2 <sup>nd</sup> , Badminton, 2016
60	Rishabh	PTU (2014-15)	1 <sup>st</sup> , cricket, 2015
61	Rishabh	PTU (2015-16)	2 <sup>nd</sup> , cricket, 2015
62	Srikant	PTU (2014-15)	1 <sup>st</sup> , cricket, 2015
63	Srikant	PTU (2015-16)	2 <sup>nd</sup> , cricket, 2015

#### Technical & Cultural Activities:

S. No.	Student Name	Organized By	Remarks
1	Diksha	IIT Kanpur	2 <sup>nd</sup> , Crime run IIT Kanpur, 2015
2	Harsh Chandra	Inter-university	2 <sup>nd</sup> Position, Bhangra, 4 <sup>th</sup> Fest (Handball), Inter-university, Oct. 2015
3	Akshat Behl	DAVIET	Gold, Skit, Youth fest 2015
4	Anmolpreet Kaur	DAVIET	Silver, Gidha, Youth Fest, 2015
5	Hiten Kumar	DAVIET	1 <sup>st</sup> , Group Singing, Youth Fest 2015
6	Hiten Kumar	DAVIET	1 <sup>st</sup> , Bhajan Singing, Youth Fest 2015
7	Harsh Singh	DAVIET	Organized, Robo-FIFA, aDAVitya 2016
8	Nikhil Arora	DAVIET	2 <sup>nd</sup> , Technical event, Tech-fest 2016
9	Mitali Verma	DAVIET	2 <sup>nd</sup> , Electro-Bucks, Tech-fest 2016
10	Navneet Nagpal	DAVIET	2 <sup>nd</sup> , Gidha, Youth Fest 2015
11	Priyanshu Solanki	DAVIET	1 <sup>st</sup> , Mimicry, Youth Fest 2015
12	Simranpreet Singh	NIT Jalandhar	2 <sup>nd</sup> , Bhangra, Utkansh, 2016

13	Saumya	NIT Jalandhar	2 <sup>nd</sup> , Ashwa, Utkansh, 2016
14	Maninder Singh	NIT Jalandhar	2 <sup>nd</sup> , Ashwa, Ukansh, 2016
15	Ritika	DAVIET	1 <sup>st</sup> , Quiz, Talent Hunt, 2015
16	Mohit	DAVIET	2 <sup>nd</sup> , Art Competition, 2016
17	Simrat	DAVIET	1 <sup>st</sup> , On the spot painting, Talent Hunt, 2015
18	Simrat	Inter College Competition	1 <sup>st</sup> , Poem Writing
19	Rajbir Singh	PTU (Zonal/ Interzonal)	2 <sup>nd</sup> , Bhangra, 2015
20	Ravinder Singh Dogra	PTU, Zonal Youth Fest	1 <sup>st</sup> , Dramatics, 2015
21	Ravinder Singh Dogra	PTU, Zonal Youth Fest	3 <sup>rd</sup> , Skit, 2015
22	Ravinder Singh Dogra	PTU, interzonal Youth Fest	1 <sup>st</sup> , skit, 2015
23	Ravinder Singh Dogra	Kartarpur Fest	2 <sup>nd</sup> , skit, 2015
24	Vividha	PTU zonal youth fest (2014-15)	2 <sup>nd</sup> , Debate, 2014-15
25	Vividha	PTU inter-zonal youth fest	2 <sup>nd</sup> , Debate, 2014-15
26	Vividha	DAVIET	1 <sup>st</sup> , Volteface, Techfest, 2016
27	Vividha	PTU zonal	2 <sup>nd</sup> , Elocution, Youth Fest 2015-16
28	Vividha	PTU inter-zonal youth fest	3 <sup>rd</sup> , Elocution, Youth Fest, 2015-16
29	Vividha	DAVIET	1 <sup>st</sup> , Digiexpression, Techfest, 2016
30	Supreet	NSS, DAVIET (2014-15)	1 <sup>st</sup> , Declamation, 2016
31	Supreet	DAVIET	1 <sup>st</sup> , Digi-expression, techfest, 2016
32	Supreet	DAVIET	1 <sup>st</sup> , Kavi Sammelan, techfest, 2016
33	Supreet	ECE, DAVIET	3 <sup>rd</sup> , Poetical Recitation, 2016
34	Surbhi Anand	PTU, Zonal youth fest (2015-16)	1 <sup>st</sup> , Dramatics, 2015
35	Nischay Chadha	DAVIET	1 <sup>st</sup> , Electro-treasure, aDAVitya, 2016
36	Puneet Gupta	DAVIET	1 <sup>st</sup> , Technomistry, Techfest 2016
37	Rahul Kataria	DAVIET	1 <sup>st</sup> , Tech-o-Funia, aDAVitya 2016
38	Rohin	DAVIET	1 <sup>st</sup> , Electro maestro, aDAVitya, 2016
39	Rohin	DAVIE	3 <sup>rd</sup> , Shades of electronics, aDAVitya 2016
40	Gurjot Singh	DAVIET	1 <sup>st</sup> , Electro maestro, aDAVitya 2016
41	Varun	DAVEIT	1 <sup>st</sup> , Shades of electronics, aDAVitya, 2016
42	Varun	DAVEIT	3 <sup>rd</sup> , poster making, aDAVitya, 2016
43	Anish	DAVIET	2 <sup>nd</sup> , Techno mystery, aDAVitya 2016
44	Anish	DAVIET	1 <sup>st</sup> , Shades of electronics, aDAVitya, 16

45	Varun	DAVIET	2 <sup>nd</sup> , Techno mystery, aDAVitya 2016
46	Varun	DAVIET	1 <sup>st</sup> , Shades of electronics, aDAVitya, 2016
47	Karan	DAVIET	3 <sup>rd</sup> , Poster making, aDAVitya 2016
48	Aina	DAVIET	3 <sup>rd</sup> , Poster making, aDAVitya 2016
49	Varun	DAVIET	3 <sup>rd</sup> , Poster making, aDAVitya 2016
50	Sajan	DAVIET	2 <sup>nd</sup> , Technomaze, aDAVitya 2016
51	Karan Kapoor	DAVIET	2 <sup>nd</sup> , correct the mistakes, aDAVitya 2016
52	Vinay Sharma	DAVIET	2 <sup>nd</sup> , correct the mistakes, aDAVitya 2016
53	Ravjot Singh	DAVIET	2 <sup>nd</sup> , Electromaestro, aDAVitya 2016
54	Shubham Nag	DAVIET	3 <sup>rd</sup> , electro maestro, aDAVitya 2016
55	Shubham Nag	DAVIET	2 <sup>nd</sup> , Mannure, aDAVitya 2016
56	Gurman	PTU	1 <sup>st</sup> , one act play, youth fest
57	Anchal	DAVIET	2 <sup>nd</sup> , Finding fanny, aDAVitya 2016
58	Bhanvi	DAVIET	2 <sup>nd</sup> , Finding fanny, aDAVitya 2016
59	Ankita	DAVIET	2 <sup>nd</sup> , Tale Tell, aDAVitya 2016
60	Arpit	DAVIET	2 <sup>nd</sup> , finding fanny, aDAVitya 2016
61	Gautam	DAVIET	2 <sup>nd</sup> , line follower robot, aDAVitya 2016
62	Deepak	DAVIET	2 <sup>nd</sup> , line follower robot, aDAVitya 2016
63	Gurakashdeep	DAVIET	2 <sup>nd</sup> , line follower robot, aDAVitya 2016
63	Jasleen Kaur	PTU	3 <sup>rd</sup> , Skit, Zonal Youth Festival, 2015
64	Jasleen Kaur	PTU	1 <sup>st</sup> , Skit, Inter-zonal Youth Festival, 2015
65	Jasleen Kaur	PTU	2 <sup>nd</sup> , Gidha, Zonal & Inter-zonal Youth Festival, 2015
66	Jasleen Kaur	Rotary Club	1 <sup>st</sup> , Gidha, 2015
67	Deepali	DAVIET	1 <sup>st</sup> , Techno-Funia, Techfest, 2016
68	Deepali	DAVIET	3 <sup>rd</sup> , Shaed of Electronics, Techfest, 2016
69	Gurjot	DAVIET	1 <sup>st</sup> , Info-balloon, 2016
70	Gurjot	Rotary club	1 <sup>st</sup> , Gidha, 2015
71	Mohit Badhan	DAVIET	2 <sup>nd</sup> , Tug of War, Athletic Meet, 2016
72	Mohit Badhan	DAVIET	1 <sup>st</sup> , Robotics Techno Maze, Techfest, 2016
73	Mishank Chadha	DAVIET	2 <sup>nd</sup> , Techno Maze, TechFest, 2016
74	Himanshu	DAVIET	2 <sup>nd</sup> , Techno-maze, TechFest, 2016
75	Nitin	DAVIET	3 <sup>rd</sup> , Info-Balloon, Tech-Fest, 2016
76	Harmanpreet Singh	DAVIET	1 <sup>st</sup> , linr-following robot, Tech-fest, 2016
77	Deepansh Sood	DAVIET	1 <sup>st</sup> , Boot from Root, Tech-fest, 2016
78	Deepansh Sood	DAVIET	2 <sup>nd</sup> , Techno-Funnia, Tech-fest, 2016
79	Deepak	DAVIET	1 <sup>st</sup> , Line Seguidier, Tech-Fest, 2016
80	Ashim	DAVIET	2 <sup>nd</sup> , Techno-Funnia, TechFest, 2016
81	Aarti	DAVIET	1 <sup>st</sup> , The Mummy
82	Kanchan	PTU	2 <sup>nd</sup> , Cricket, Inter-College
83	Rahul Anand	NIT Jalandhar	1 <sup>st</sup> , Photography Competition

84	Rahul Ananad	NIT Jalandhar	3 <sup>rd</sup> , Dreams Scope
85	Kapil	DAVIET	3 <sup>rd</sup> , Growth the flow, Tech-fest, 2016
86	Harinder Kaur	DAVIET	2 <sup>nd</sup> , Techno-funnia and Shades of Electronics, Tech-fest, 2016
87	Mukul	DAVIET	1 <sup>st</sup> , Techno-Maze, Tech-fest, 2016
88	Nitish	DAVIET	1 <sup>st</sup> , Info-Balloon, Tech-fest, 2016
89	Kamalpreet Kaur	PTU	2 <sup>nd</sup> , Gidha, Zonal & Inter-Zonal Youth Fest, 2015
90	Kamalpreet Kaur	Rotary Club	2 <sup>nd</sup> , Gidha
91	Kulpreet Kaur	PTU	1 <sup>st</sup> , one act play, Zonal Youth Fest, 2015
92	Inderpreet Kaur	DAVIET	3 <sup>rd</sup> , Info-Balloon
93	Kulpreet Kaur	DAVIET	1 <sup>st</sup> , Buhumatic, Tech-fest, 2016
94	Nisha	NIT Jalandhar	2 <sup>nd</sup> , Dance
95	Nisha	DAVIET	3 <sup>rd</sup> , Tachno-maze, Tech-fest, 2016
96	Neha Sharma	DAVIET	3 <sup>rd</sup> , Techno-maze, Tech-fest, 2016
97	Gazalpreet Kaur	DAVIET	2 <sup>nd</sup> , Info-Balloon, Tech-fest, 2016
98	Gazalpreet Kaur	DAVIET	2 <sup>nd</sup> , Shades of Electronics, Tech-fest, 2016
99	Wishwesh	DAVIET	1 <sup>st</sup> , Techno-maze & Line Seguidier, Tech-fest, 2016
100	Harpreet Bains	DAVIET	1 <sup>st</sup> , Line Seguidier, Tech-fest, 2016
101	Harpreet Bains	DAVIET	2 <sup>nd</sup> , Techno-maze, Tech-fest, 2016
102	Harinder Kaur	DAVIET	2 <sup>nd</sup> , Info-Balloon, Tech-fest, 2016
103	Himanshu	DAVIET	2 <sup>nd</sup> , Line Seguidier, Tech-fest, 2016
104	Parminder Singh	Zonal Youth Fest	2 <sup>nd</sup> , Bhangra
105	Parminder Singh	NIT Jalandhar	2 <sup>nd</sup> , Bhangra, Utkansh
106	Rahul Kanwar	NIT Jalandhar	2 <sup>nd</sup> , Utkansh
107	Mandeep Kumar	DAVIET	1 <sup>st</sup> , BCL, Tech-fest, 2016
108	Jasleen kaur Sachdeva	Rotary club	North zone giddha competition ,first,2015
109	Gurjot kaur	Rotary club	North zone giddha competition ,first,2015
110	Nitish	DAVIET	Dominos event,Second,2015,
111	Kamalpreet kaur	Rotary club	North zone giddha competition,first,2015
112	Gazalpreet kaur	Red cross bhavan	Skit,Consolation prize,2014
113	Gurjot kaur	PTU	Youth fest giddha,first,2014
114	Kamalpreet kaur	PTU	Youth fest giddha,first,2014
115	Gaganpreet Singh (Batch 2012-16)	PTU	Kartarpur fest,first,2014
116	Neha Sharma	DAVIET	DJ mashup,second,2014
117	Pooja Sharma	DAVIET	Group singing,second,2013, Skit, second,2013
118	Kanika	DAVIET	Group Singing, second,2013

119	Puneet bhardawaj	DAVIET	Fresher's party,Third,2013
120	Kanchan	DAVIET	Group Singing, second,2013
121	Harinder Kaur	DAVIET	Giddha, second,2013
122	Diksha	DAVIET	Giddha, second,2013
123	Gurjot Kaur	DAVIET	Fresher's party,third,2013
124	Aarzo Gaba	DAVIET	Giddha, second,2013
125	Pooja Grover	DAVIET	Elocution ,second,2013
126	Jasleen Kaur Sachdeva	DAVIET	Cultural event giddha,First
127	Mamta Bhatia	DAVIET	Electromania,first,2013
128	Kanchan	DAVIET	Electromania,first,2013
129	Gagneet Singh Narang	DAVIET	Cut the knot,third,2013
130	Rishav Batra	PEC	4 <sup>th</sup> in dance (All-India)
131	Harleen Kaur	DAVIET	Ist prize on engineer's day,tech-sharaz
132	Chitwandeep Kaur	DAVIET	Ist prize on engineer's day,tech-sharaz
133	Meenu	DAVIET	2 <sup>nd</sup> prize on engineer's day, poster making
134	Anubhav	DAVIET	Ist prize on engineer's day,wivi apher
135	Varinderjot Bangar	SBBSIET, Jalandhar	2 <sup>nd</sup> , On the spot painting, 2013
136	Varinderjot Bangar	SSCET,Badhani	1 <sup>st</sup> , On the spot painting, 2014
137	Rishav Batra	PTU	Silver, Debate, Zonal Youth Fest, 2014
138	Rishav Batra	PTU	Silver, Debate, Inter-zonal Youth Fest, 2014

### **Students bagged University Positions (2014-15)**

S. No.	Roll No.	Name	Father's Name	Class	Exam.	Batch	%age	Position
1	1408571	Harleen Kaur Tanque	Jaswant Singh Tanque	ECE	Ist semester 2014-15	2014-18	85.125	1 <sup>st</sup> in College
2	1505318	Ankita	Chander Shekhar	ECE	April 2016	2015-19	9.03 CGPA	1 <sup>st</sup> in College

24. List of eminent academicians and scientists/visitors to the department:

S. No.	Name	Organization	Designation	Year
1	Dr. S. S. Patnaik	NITTTR, Chandigarh	Professor	2013
2	Dr. Anupama Marwaha	SLIET, Longowal	Professor	2013
3	Dr. A. P. Singh	PTU, Jalandhar	Dean (RIC)	2016

25. Seminars/Conferences/Workshops organized & the source of funding

a) National

1. Organized 3<sup>rd</sup> DAV National Congress on Science, Technology, Engineering, Humanities & Management (STEHM'16), May 20 – 21, 2016.
2. Organized DAV National Congress on Science, Technology and Management – “Recent Trends in Electronics & Communication Engineering”, 7-8 November, 2014.
3. Organized DAV National congress on Science & Technology on 30-31 May, 2013
4. Organized a PTU sponsored workshop on “Antenna Design using HFSS” held at DAVIET, Jalandhar on 25<sup>th</sup> and 26<sup>th</sup> April, 2013.

b) International: Nil

26. Student profile programme/course wise:

Name of the Course/programme	Applications Received	Selected	Enrolled		Pass Percentage
			*M	*F	
B.Tech ECE Batch 2015-19	Admission process is handled by PTU, Jalandhar		70	43	Exams yet not conducted
B.Tech ECE Batch 2014-18			79	35	-- do --
B.Tech ECE Batch 2013-17			65	48	-- do --

\*M = Male \*F = Female

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other states	% of students from abroad
B.Tech ECE Batch 2015-19	85%	15%	Nil
B.Tech ECE Batch 2014-18	96%	4%	Nil
B.Tech ECE Batch 2013-17	88%	12%	Nil



28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil Services, Defense services, etc.?

S. No.	Name of Student	Branch/Batch	National and Competitive Examination
1.	Mr. Shiva Bhardwaj	2012-2016	GATE
2.	Ms. Twinkle Goyal	2012-2016	GATE
3.	Ms. Akriti Bedi	2012-2016	GATE

29. Student Progression

Student Progression	Against % enrolled 2012 (Batch 2012-16)	Against % enrolled 2011 (Batch 2011-15)	Against % enrolled 2010 (Batch 2010-14)	Against% enrolled 2009 (Batch 2009-13)
UG to PG	21%	----	----	----
PG to M.Phil.	----	NA	NA	NA
PG to Ph.D.	----	Nil	Nil	Nil
Ph.D to Post-Doctoral	----	Nil	Nil	Nil
Employed <ul style="list-style-type: none"> <li>• Campus selection</li> <li>• Other than campus recruitment</li> </ul>	36% 6%	27%	59%	34%
Entrepreneurship / Self-employment	----	----	----	----

30. Details of Infrastructural facilities

- a) Library

Trade	No of Title of books	No of books	National Journals P/I		International Journals P/I		E-Journals
ECE	364	366	12	---	----	----	117 : SCIENCE DIRECT, IEEE, MCGRAW HILL ACCESS ENGINEERING, J-GATE, ASTM DIGITAL LIBRARY

- b) Internet facilities for Staff & Students: **Centralized provision of internet for staff and students.**
- c) Class rooms with ICT facility: **07** exclusive classrooms, **02** of the classrooms are equipped with ICT facility.
- d) Laboratories (with list of equipments)

S. No.		
1	VLSI LAB	8031/8051 Micro controller Kit (Vinytics)
2		8031/8051 Micro controller Kit (Vinytics) (With Programmer)
3		8031/8051 Micro controller Kit (Vinytics) (With emulator)
4		8051 Microcontroller Trainer Board (Advanced Technology)

<b>5</b>	Universal Microcontroller development Kit (Advanced Technology)
<b>6</b>	Universal handy programmer
<b>7</b>	VMC ADC Interface Card
<b>8</b>	Dual DAC Interface card
<b>9</b>	Logic Controller Card
<b>10</b>	Display Interface Card
<b>11</b>	Steeper motor Interface card
<b>12</b>	Keyboard Interface card
<b>13</b>	LCD display Interface card
<b>14</b>	Traffic Light Controller Card
<b>15</b>	Temperature Measurement Card
<b>16</b>	DC Motor Controller Card
<b>17</b>	LED Display Matrix Card
<b>18</b>	Thumb Wheel switch card
<b>19</b>	Relay Opto coupler card
<b>20</b>	8051 daughter Board with Programmer adapter
<b>21</b>	PIC Daughter Board with Programmer adapter
<b>22</b>	AVR Daughter Board with programmer adapter
<b>23</b>	Sensor
<b>24</b>	FPGA trainer Kit
<b>25</b>	Elevator Simulator Card
<b>26</b>	IC Tester Card
<b>27</b>	12 Bit ADC Interface Card
<b>28</b>	Stepper Motor 3Kg
<b>29</b>	DSP Starter Kit TMS20C6713 (Texas Inst.)
<b>30</b>	Fingerprint Authentication Tool with TMS320C5510 DSK (Texas Inst.)
<b>31</b>	PC(P-IV, 3 GHz, 512 MB RAM, Wipro LCD Monitor, Optical Mouse, Wipro Keyboard) + 1 GB EXTENDED RAM
<b>32</b>	Desktop HP (i5-3.20GHz, 4GB RAM, 500GB HDD)
<b>33</b>	Spartan-3E Platform FPGAs Starter Kit
<b>34</b>	Bloom with DSP V2.0 CD 10 users
<b>35</b>	Projector
<b>36</b>	LCD Projectors Installed in Room 14 & 15
<b>37</b>	Electronic Board Installed in Room No. 15
<b>38</b>	Microcontroller Burner (EEAST)
<b>39</b>	UPS 10 KVA with SMPF DB
<b>40</b>	Universal Programmer/CPLD Board with USB programming (48 PIN Burner with testing zig)
<b>41</b>	Embedded System Kits

42	Communication Lab	TDM Pulse amplitude modulation Trainer Scientech
43		Carrier Demodulation & data reformatting receiver trainer Scientech
44		Sampling & reconstruction Kit Scientech
45		FM Transmitter & receiver Trainer Scientech
46		FM Transmitter & receiver Trainer Scientech
47		DSB/SSB Transmitter trainer Scientech
48		DSB/SSB Transmitter trainer Scientech
49		Data formatting & carrier modulation trainer Scientech
50		LCR –Q Bridge
51		Delta adaptive delta & delta sigma modulation / demodulation trainer Scientech
52		TDM Pulse code modulation transmitter Trainer Scientech
53		SSB/DSB Receiver Trainer Scientech
54		SSB/DSB Receiver Trainer Scientech
55		TDM Pulse Code Modulation receiver Trainer Scientech
56		Amplitude modulation /demodulation system
57		Amplitude modulation/ demodulation module
58		Frequency modulation/demodulation System
59		Frequency modulation/demodulation module
60		Sampling theorem Trainer
61		Pulse amp. Mod./Demod. Trainer
62		Pulse width mod. / Demod. Trainer
63		Pulse position Mod. / Demod trainer
64		T.D. PAM MOD. Demodulation. System Trainer
65		Pulse code mod./ Demod. System trainer
66		Delta mod. / Demod. System trainer
67		Adaptive delta mod. /demod. Trainer
68		ASK mod. / Demod System trainer
69		Fsk Mod/ Demod System trainer
70		PSK demodulation System Trainer
71		Error Det. And correction Trainer
72	Line coding and decoding trainer	
73	Sample & Hold trainer	
74	Phase lock loop trainer	
75	1Ghz Spectrum Analyzer	
76	Experiment Kit for spectrum analyzer	
77	Probe 1*10 60MHz	
78	20 MHz oscilloscope with function generator	
79	Voltage stabilizer	
80	Digital storage oscilloscope tektronix	

81		10 mhz AM/Fm Function Genrator
82		FDM Trainer
83		PAM , PPM, PWM MOD/DE mod
84		QAM Trainer
85		Audio input module
86		Function Generator 2 Mhz
87		Bread Board with Power Supply
88		3.5 Digit Digital Multimeter
89		Audio Output module
90		Digital storage oscilloscope Rigol
91		Digital storage oscilloscope Rigol
92		Power Supply
93		BNC to Crocodile probe
94		BNC to Test
95		BNC to Test
96		TDM Pulse code transmitter
97		TDM Pulse code receiver
98		Communication module for techtronics DSO
99		PAM/PPM/PWM Modu./Demodulation Trainer
100		FDM TRAINER
101		ANTEENA TRAINER
102		TRANSMISSION LINE TRAINER
103	Measurement Lab	B H Loop of a torodial Spicimen using flux meter
104		Wheat Stone Bridge
105		Q factor of a coil using Q meter
106		Voltage Measurement using Potentiometer
107		Electronic Standard cell
108		Volt Ratio box
109		Wein Bridge for measurement of frequency
110		Maxwell Bridge
111		Anderson Bridge
112		Kelvin Double Bridge
113		Sheering Bridge
114		Digital Meter 14S
115		Digital Meter 16S
116		Digital Meter 18S
117		Digital Multimeter SI 232
118		Decade Resistance Box
119		Decade Inductance Box
120		Decade Capacitance Box
121		Oscilloscope 20 Mhz Dual Trace APLAB

122		Function Generator 2 MHz
123		Digital Gauss Meter
123	Optical Fiber Lab	Advanced Fiber Optic Trainer
125		Optical Power Meter
126	Light Wave Communication Lab	OptSim 5.1 (Optical Communication Simulation Tool )
127		AnSoft HFSS (Antenna Design Simulation Tool)
128		Qualnet (Wireless Communication Simulation Tool)
129		CommSim (Communication Simulator)
130	Microwave Lab	Klystron based Microwave Bench (MT-9000)
131		Klystron based Microwave Bench (MT-9002)
132		Microwave Bench With different components (MT-9004)
133		Microwave Bench with Dielectric (MT-9003)
134		Colour TV Trainer
135		Digital VSWR Meter
136		Gunn Power Supply
137		Cavity Resonator
138		Oscilloscope 20Mhz (201CT)
139		Gunn Oscillator
140		Klystron based Microwave Bench W/O Power Supply & SWR Meter
141		Microwave Frequency Meter
142		Microwave klystron Mount with Klystron Tube
143		Microwave Diode IN23
144		Microwave Cooling Fan
145	Microprocessor and Digital Electronics Lab	8085 Microprocessor
146		Kit with Inbuilt Power supply
147		8031 Micro Controller kit
148		Advance Microprocessor training kit Based in 8085 With LCD display ASCII
149		Keyboard
150		8086 Microprocessor kit
151		with LCD display
152		Stepper Motor Training kit
153		Keyboard interface
154		Display Interface
155		Dual DAC Interface
156		ADC interface
157		8251/8253 study Card
158		CRO Interface
159		8257 DMA interface

160	Stepper motor 3kg cm torque
161	DC motor controller card with motor & power supply
162	Traffic light Controller Card
163	Temperature Measurement card
164	Power supply for advance microprocessor 8085 kit
165	Power supply for 8086
166	Power supply for stepper motor
167	Power Supply
168	Printer interface
169	26 pin FRC cable
170	50 pin FRC Cable
171	Digital Trainer Kit
172	Digital IC Tester
173	Study of Various flip
174	Flops training board
175	8 bit A/D converter
176	8 bit D/A converter
177	Logic Training board
178	OR/NOR/AND/
179	NAND/NOT/Buffer
180	Logic training board
181	On counter & shift register
182	Study of Universal logic gates training board
183	Study of decade counter using IC 7490,7493
184	Digital multiplexer training board
185	1:8 line Demultiplexer
186	Training board
187	Oscilloscope 20 MHz
188	Voltage stabilizer

#### **Software support in the laboratories**

1. OptSim (Optical Communication Simulation Tool-A complete photonic design simulation tool for physical layer design)-5 USERS
2. AnSoft HFSS (Antenna Design Simulation Tool)
3. Qualnet (Wireless Communication Simulation Tool)
4. CommSim (Communication Simulator)
5. MATLAB 2009b-10 Users
6. Simulink-10 Users
7. Control System Tool box -10 Users
8. Digital Signal Processing Tool box-10 Users

9. Bloom with DSP-10 USERS
10. Xilinx Foundation Series Software.(Student Version)
11. Code Composer Studio.(Student Version)
12. Keil Microvision
13. Flash Magic
14. PONY PROG 2000 for PIC Microcontroller

31. Number of students receiving financial assistance from college, university, government or other agencies

S. No.	Schemes Provided by College/ other agencies	Number of Students (ECE) – 2014-2015	Number of Students (ECE) – 2013-2014	Number of Students (ECE) – 2012-2013
1	OBC Post Matric Scholarship (Punjab)	4	3	Nil
2	PTU Fee waiver Scholarship	Nil	4	5
3	SC Post Matric Scholarship (Punjab)	28	18	10
4	SC Scholarship Bihar 2013-14	Nil	Nil	Nil
5	Only Girl child.	Nil	Nil	Nil

32. Details on student enrichment programmes (special lectures/workshops/ seminar) with external experts

S. No.	Name & Details	From	To
1	Magic of our mind by Mr. Shankar Goenka	28 Sep., 2015	-
2	Proficiency analytics based GRE/G-Mat/GATE & Banking Exams from IITians in campus	30 Sep., 2015	-
3	Yoga techniques by Col. Seva Singh	20 June, 2015	-
4	Art of Living by Shri Shri Ravi Shankar	19 Jan., 2015	24 Jan., 2015
5	Recent trends in electronics and telecommunication at national and international level - Expert lecture by Dr. Neeru Malhotra	14 March, 2015	
6	Imaginitive visual approach for competitive exams: Learning is Simple by Sh. Vamsi Krishnana Choudhary	10 Sep., 2013	-

33. Teaching methods adopted to improve student learning

- **Lecture Method:** Teaching through lectures by using green boards as well as LCD projectors.
- **Interactive Method:** Teaching through conducting debates on the topics related to the subject handling.
- **Project Based learning:** Analyzing, Designing, Implementing and documenting skills of the students are improved by assigning mini-projects, half semester projectors and full semester projects.

- **Computer assisted learning:** Quizzes are conducted through LMS (Learning Management System).
  - **Experimental Learning:** The students are trained to do programming through lab experiments.
  - **Seminars:** The Students are encouraged to take technical seminars which are used to improve the presentation skills of the students.
34. Participation in Institutional Social Responsibility (ISR) and Extension activities
- As per Annexure-II**
34. SWOC analysis of the department and Future plans.

### **STRENGTHS**

- Qualified and sufficient research oriented and experienced faculty.
- Highly qualified lab staff.
- Inculcating the technical development skills through department society activities.
- State-of-the-art infrastructure facilities like e-classrooms, Laboratories and Library.
- Higher intake of UG students and Regional center of IKGPTU for PG students.
- High retention rate of Faculty/Staff.
- Excellent network with Alumni association.
- MOUs signed with Institutes' of National importance.
- Alumni of the department are placed in reputed public and private organizations.
- Sponsored Analog lab by Texas Instruments.
- Innovative classroom teaching through smart classes.
- GATE qualified students.
- Alumnus placed in Civil Services
- Motivation to students for Research work.
- Achievements of students in extra-curricular activities.
- Faculty & staff work as a team.

### **WEAKNESSES**

- Lack of workshops/expert lectures to encourage Lab Staff.
- Lack of proactive approach to enhance consultancy activity.
- The department is not accredited.
- FDPs and workshops for faculty and staff.



## **OPPORTUNITIES**

- MOUs with different industries for Student/Faculty to provide them wider exposure to explore themselves.
- FDP/SDP and Expert Lectures for continuous development/skill enhancement for existing faculty.
- To start regular PG program for promotion of research work.
- Sponsored International Conferences for international exposure relating to research work.
- Financial aid to university Position holders to motivate students.
- To strengthen Alumni connection.
- Expert Lectures/ Workshops for students to make them aware about Government Jobs.
- NBA Accreditation.

## **CHALLENGES**

- Lack of funding in projects for Students/Faculty by AICTE Government aided sectors.
- Quality admission of students to ECE getting tough because of falling interest amongst students to opt for engineering in general and ECE in particular.

## Evaluative Report – Department of Computer Science & Engg.

1. Name of the department : **Computer Science & Engineering**
2. Year of Establishment : **2001**
3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)

Name of the Programme	Specialization	Duration	Full Time/Part Time
B.Tech.	Computer Science and Engineering	4 years	Full Time
M.Tech.	Computer Science and Engineering	2 years	Full Time

4. Names of Interdisciplinary courses and the departments/units involved :

Sr. No.	Interdisciplinary courses	Departments involved	Class(Semester)
1	Digital Control and Logic Design	Electronics and Communication Engineering	3 <sup>rd</sup> Semester
2	Mathematics-III	Applied Science	3 <sup>rd</sup> Semester
3	Microprocessor & Assembly Language Programming	Electronics and Communication Engineering	4 <sup>th</sup> Semester
4	Discrete Structures	Applied Science	4 <sup>th</sup> Semester

5. Annual/semester/choice based credit system (programme wise):

### **Semester/Choice Based Credit System**

6. Participation of the department in the courses offered by other departments:

Sr. No.	Programs offered by other Departments	Participation of CSE Department	Class (Semester)
1	B. Tech. (ECE,ME,EE,CE)	Fundamentals of Computer Science and Information Technology	1 <sup>st</sup> /2 <sup>nd</sup> Semester
2	B.Tech. (ECE)	Object Oriented Programming	3 <sup>rd</sup> Semester
3	B.Tech. (ECE)	Data Structures	5 <sup>th</sup> Semester
4	B.Tech. (ECE)	Operating Systems	6 <sup>th</sup> Semester
5	B.Tech. (ECE)	Relational Database Management System	6 <sup>th</sup> Semester

7. Courses in collaboration with other universities, industries, foreign institutions, etc.:

Sr. No.	Course Name	University and Industry Contribution
1	CCNA, Cyber Security, MOOCs	

8. Details of courses/programmes discontinued (if any) with reasons : **Nil**
9. Number of Teaching posts

Category of Faculty	Sanctioned	Filled
Professors	2	0
Associate Professors	3	1
Assistant Professors	10	06

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc)

Name	Qualification	Desig.	Specification	No. of year exp.	No. of PhD student guided in last 4 years
Ms. Harpreet Kaur Bajaj	B.Tech. M.Tech. Pursuing Ph.D.	Associate Professor	Wireless Networks, Data Communication	15 Years	NIL
Mr. Parveen Kakkar	B.Tech, M.Tech, Pursuing Ph.D.	Assistant Professor	Information Security, Handling Operating System	14 Years	NIL
Dr. Vinay Chopra	ME, Ph.D.	Assistant Professor	Soft Computing, Software Engineering	12.5 Years	NIL
Ms. Shaveta Angurala	B.Tech. M.Tech.	Assistant Professor	Adhoc Networks, RDBMS	9 Years	NIL
Mr.Dhiraj Kapila	B.Tech. M.Tech. Pursuing Ph.D.	Assistant Professor	Data Mining	9 Years	NIL
Mr. Gursewak Singh	B.Tech. M.Tech.	Assistant Professor	RFID , WsN	3.5 Years	NIL
Ms.Sonali Talwar	B.Tech. M.Tech.	Assistant Professor	Digital Image processing, Under water imaging	1 .5 Year	NIL

11. List of senior visiting faculty:

S. No.	Name of Visiting Faculty	Designation	Organization
1	Dr. Anup Girdhar	CEO	M/s. Solutions and Technologies, New Delhi
2	Mr. Amandeep Singh	Technical Architect	Pitney Bowes
3	Mr. Ankiat Wahi	Project Manager	Maven Wave Partners, Chandigarh
4	Mr. Rohit Mahajan	Sr.SCM/TM Consultant	NOVIGO Partners Pvt. Ltd.
5	Mr. Abhishek Saraswat	Sr. Software Engineer	Birlasoft, Noida

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty

Year	%age
2013-14	11%
2014-15	11%
2015-16	11%
2016-17	9%

**13. Student -Teacher Ratio (programme wise)**

Name of the Program	No. of Faculty	No. of students	Student Teacher Ratio
B.Tech.	8	212	18:1
M.Tech.	3	36	12:1

**14. Number of academic support staff (technical) and administrative staff; sanctioned and filled**

No. of	Sectioned	Filled
Technical Staff	4	4
Administrative Staff	-	-

**Following are the details of Technical Staff:**

Sr. No.	Name	Designation	Qualification		Experience
			Diploma & Certification	Degree	
1	Mr. Amit Sharma	Lab Technician	-	MCA	12 Years
2	Ms. Neetu Kochher	Lab Technician	'O' Level	MCA	12 Years
3	Mr. Sanjay Das	Lab Assistant	CIC Diploma in Computer	-	18 years
4	Mr. Saurav Kapoor	Lab Assistant	Diploma ECE	B.Tech	6 Years

**15. Qualifications of teaching faculty with DSc / D.Litt/ Ph.D/ MPhil / PG.**

Same as Sr. No. 10.

**16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received : **NIL****

**17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received : **NIL****

**18. Research Centre /facility recognized by the University :**

State Recognition : **NIL**

National Recognition : **NIL**

International Recognition : **NIL**

**19. Publications: As per Annexure - I**

**20. Areas of consultancy and income generated : NIL**

S. No.	Company Name	Area of Consultancy	Income Generated
	NIL	--	--

**21. Faculty as members in**

a) National committees b) International Committees c) Editorial Boards....

S. No.	Name of Faculty	Name of Committee	National/ International	Capacity
1	Ms. Harpreet Kaur Bajaj	Punjab Academy of Sciences	National	Member
2	Ms. Shaveta Angurala	Punjab Academy of Sciences	National	Member

S. No.	Name of Faculty	Name of Journal	National/ International	Capacity
1	Dr. Vinay Chopra	International Journal of Computer Science Issues	International	Review Committee

**22. Awards / Recognitions received by faculty and students**

**a. Faculty Awards**

S. No.	Faculty Name	Organization	Remarks
1	NIL		

**b. Students Awards**

S. No.	Student Name	Organization	Remarks
	NIL		

**c. Students won Gold/Silver medals in PTU Zonal/Inter-zonal Youth Festival – 2014-15**

• **Year 2016**

Z/I/ S. No.	Name	Class	Roll No.	Item	Position
Z/I	Riza Dhiman	M.Tech CSE-7 <sup>th</sup> Sem	2412/15	Gidha	First(Zonal), First(Inter-Zonal)
Z/I	Vasudha Vashisht	B.Tech CSE-7 <sup>th</sup> Sem	152/11	Gidha	First(Zonal), First(Inter-Zonal)
Z/I	Gurpreet Kaur	B.Tech CSE-7 <sup>th</sup> Sem	110/13	Gidha	First(Zonal), First(Inter-Zonal)
Z/I	Ridihma Sood	B.Tech CSE-7 <sup>th</sup> Sem	132/13	Gidha	First(Zonal), First(Inter-Zonal)
Z/I	Anchal Chawla	B.Tech CSE-5 <sup>th</sup> Sem	114/14	Rangoli	First(Zonal), Second (Inter-Zonal)

Z/I	Damandeep Singh	B.Tech CSE-3 <sup>rd</sup> Sem	117/15	Bhajan	First(Zonal), First(Inter-Zonal)
Z	Rakshanda	B.Tech CSE-5 <sup>th</sup> Sem	156/14	Mime	Second(Zonal)
Z/I	Kirti Nagpal	B.Tech CSE-5 <sup>th</sup> Sem	128/14	Collage	First(Zonal), First(Inter-Zonal)
Z/I	Pernika Sharma	B.Tech CSE-5 <sup>th</sup> Sem	139/14	One Act Play	First (Zonal), Third (Inter-Zonal)
Z/I	Surbhi Sharma	B.Tech CSE-5 <sup>th</sup> Sem	175/14	Vaar Singing	First(Zonal), Second (Inter-Zonal)
Z/I	Damandeep Singh	B.Tech CSE-3 <sup>rd</sup> Sem	117/15	Western Group Song	First(Zonal), Second(Inter-Zonal)

• **Year-2015**

Z/IZ/S.no	Name	Class	Roll No.	Item	Position
Z/1.	Ashish Pandey	CSE-3 <sup>rd</sup> Sem.	154/13	Play	Best Actor
Z/2.	Agrim Uppal	CSE-7 <sup>th</sup> Sem.	104/11	Mime	First
Z	Agrim Uppal	CSE-7 <sup>th</sup> Sem.	104/11	Western Group Song	Second
Z/3.	Ashima Ohri	CSE-7 <sup>th</sup> Sem.	164/11	Skit	Second
IZ	Ashima Ohri	CSE-7 <sup>th</sup> Sem.	164/11	Skit	Second
Z/4.	Vasudha Vashisht	CSE-3 <sup>rd</sup> Sem.	162/11	Skit	Second
IZ	Vasudha Vashisht	CSE-3 <sup>rd</sup> Sem.	162/11	Skit	Second
Z/5.	Aviral Sangal	CSE-5 <sup>th</sup> Sem.	107/12	Quiz	First
Z/6.	Richa	CSE-3 <sup>rd</sup> Sem.	131/13	Western Group Song	Second
Z/7	Rakshanda	CSE-1 <sup>st</sup> Sem.	156/14	Western Group Song	Second

• **Year-2014**

Z/IZ/S.No	Name	Branch	Roll No.	Events	Positions
IZ	Gursharan Singh	CSE-8 <sup>th</sup> Sem.	176/10	Singing	First
IZ	Agrim Uppal	CSE-8 <sup>th</sup> Sem.	104/11	Singing (Western)	Second
IZ	Shrishti Raj	CSE-8 <sup>th</sup> Sem.	146/10	Singing (Western)	Second
IZ	Nagesh Soni	CSE-8 <sup>th</sup> Sem.	180/10	Fine Arts	First
IZ	Rajnish Bharti	CSE-8 <sup>th</sup> Sem.	139/10	Literary	Second
IZ	Sumelkamal	CSE-8 <sup>th</sup> Sem.	149/10	Literary & Theatre	Second
IZ	Nitika	CSE-8 <sup>th</sup> Sem.	132/10	Fine Arts	First

IZ	AashimaOhri	CSE-6 <sup>th</sup> Sem.	164/11	Mime	Second
Zonal	Roopjeet Kaur	CSE-4 <sup>th</sup> Sem.	154/12	Gidhha	Second
Zonal	Jaspreet Kaur	CSE-4 <sup>th</sup> Sem.	124/12	Gidhha	Second
IZ	Diviya	CSE-6 <sup>th</sup> Sem.	114/11	Mime	Second
IZ	Kanika	CSE-6 <sup>th</sup> Sem.	125/11	Mime	Second

● **Year-2013**

Z/IZ/ S. No.	Name	Branch	Roll No.	Events	Positions
Z	Nitika	CSE-4 <sup>th</sup> Year	132/10	Fine Arts	Second
Z	Cristee	CSE-4 <sup>th</sup> Year	115/10	Singing (Kartarpur Fest)	Second
Z	Nitika	CSE-3 <sup>rd</sup> Year	134/11	Singing (Kartarpur Fest)	Second
Z	Chiranjeev	CSE 4 <sup>th</sup> Year	114/10	Skit (Kartarpur Fest)	Second
Z	Sumel Kamal	CSE-4 <sup>th</sup> Year	149/10	Elocution	First
Z	Nitika	CSE-4 <sup>th</sup> Year	132/10	Fine Arts	First
Z	Sumel Kamal	CSE-4 <sup>th</sup> Year	149/10	Elocution	First
Z	Nitika	CSE-4 <sup>th</sup> Year	132/10	Fine Arts	First

**23. Students bagged university Positions**

S. No	Roll No.	Name	Class	Exam.	Batch	Position
1	90230303 890	Priyanka Arora	CSE	PTU	2009-2013	3 <sup>rd</sup> in University
2	1308454	Harsimrat Kaur	CSE	PTU	2013-2017	7 <sup>th</sup> in University
3	1308449	Dishpreet Kaur	CSE	PTU	2013-2017	9 <sup>th</sup> in University
4	1452546	Sonali Malhotra	CSE	PTU	2014-2018	7 <sup>th</sup> in University
5	1408441	Simranjot Kaur	CSE	PTU	2014-2018	9 <sup>th</sup> in University
6	1408414	IshitaKohli	CSE	PTU	2014-2018	9 <sup>th</sup> in University
7	1408443	Sonia	CSE	PTU	2014-2018	10 <sup>th</sup> in University

**24. List of eminent academicians and scientists / visitors to the department:**

S. No.	Eminent Academicians and Scientists/ Visitors to the Department	Designation	University/ Institution	Purpose
1	Dr. Harsh Verma	Associate Professor	NIT, Jalandhar	Expert Talk, Key Note Speaker in National Conference

2	Dr.Kulwant Kaur	Assistant Professor, Dean	Apeejay Institute of Management Technical Campus, Jalandhar	Key Note Speaker in National Conference
3	Dr. AK Paul	Chief Scientist, CSIR-CSIO, India	CSIO Chandigarh	Key Note Speaker in National Conference
4	Dr.Reenu Dhir	Associate Professor	NIT, Jalandhar	Key Note Speaker in National Conference
5	Dr.Hardeep Singh	Professor	GNDU, Amritsar	Key Note Speaker in National Conference
6	Dr.Geeta Sikka	Associate Professor	NIT, Jalandhar	Key Note Speaker in National Conference

25. Seminars/Conferences/Workshops organized & the source of funding

a) National:3

Conference Name	Dates
Recent Advances in Computer Engineering & Applications	20-21 May, 2016
Innovation and Technologies in Computer Science and Applications	7-8 Nov, 2014
Recent Advances in Computer Science and Technology	30-31 May, 2013

b) International :NIL

26. Student profile programme/course wise:

Name of the Course/programme (refer question no. 4)	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
B.Tech. (2012-2016)	Received via PTU	70	38	32	69%
B.Tech. (2013-2017)		71	38	33	78%
B.Tech. (2014-2018)		71	32	39	82%
B.Tech. (2015-2019)		70	45	25	84%
B.Tech. (2016-2020)		59	40	19	-
M.Tech. (2014-2016) Regular		18	1	17	100%
M.Tech. (2015-2017) Regular		16	4	12	80%
M.Tech. (2016-2018) Regular		14	2	12	-



27. Diversity of Students

Name of Course	% of students from the same state	% of students from other states	% of students from abroad
B.Tech. (2013-2017)	64	7	-
B.Tech. (2014-2018)	66	5	-
B.Tech. (2015-2019)	51	8	-
B.Tech. (2016-2020)	60	6	-

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defence services, etc.?

S. No.	Name of Student	Branch/Batch	National and Competitive Examination
1	Raghav Mahajan	CSE/2012-2016	CAT Qualified
2	Vaibhav Makhija	CSE/2012-2016	CAT Qualified
3	Shiffali Singla	CSE/2012-2016	CAT Qualified
4	Anam Bansal	CSE/2012-2016	GATE Qualified
5	Arjun Sahni	CSE/2012-2016	GATE Qualified
6	Nishant Goyal	CSE/2012-2016	GATE Qualified

29. Student Progression

Student progression	Against % enrolled
UG to PG	30%
<b>Batch (2010-2014)</b>	29%
<b>Batch (2011-2015)</b>	28%
<b>Batch(2012-2016)</b>	
PG to M.Phil.	NIL
PG to Ph.D.	NIL
Ph.D. to Post-Doctoral	NIL
<b>Employed</b>	
• Campus selection	36.2%
<b>Batch (2009-2013)</b>	79.2%
<b>Batch (2010-2014)</b>	58.3%
<b>Batch (2011-2015)</b>	60.2%
<b>Batch(2012-2016)</b>	
• Other than campus recruitment	
Entrepreneurship/Self-employment	

30. Details of Infrastructural facilities

a) Library:

Trade	No of Title of books	No of books	National Journals		International Journals		E-Journals
			P/I	I	P/I	I	
CSE	251	251	NIL	NIL	NIL	NIL	NIL

**Library:** Books are available for student and faculty in main Library and departmental library. The library is opened on all working hours from 9 am to 6 pm. The following facilities are available in the departmental library:

1. Computer with Internet facility.
2. Reading rooms are available for the faculty.
3. Project reports are available in the departmental library.
4. LCD projectors.

<b>a) Internet facilities for staff and students</b>	YES
<b>b) Classrooms</b>	5 exclusive classrooms
<b>c) Laboratories</b>	<p>Department of CSE consist of four Laboratories in total, namely:-</p> <p>Central Computing Lab Linux Lab DBMS Lab Programming Lab</p> <ul style="list-style-type: none"> <li>• These Labs are equipped with latest simulation tools like MATLAB, C++and Packet Tracer, MySQL, Rational Rose&amp; access to IEEE papers.</li> </ul>

d)

<b>S. No.</b>	<b>Name of the Laboratory</b>	<b>Major Equipment's</b>
<b>1</b>	Central Computing Lab	Desktop Pcs (32)
<b>2</b>	Linux Lab	Desktop Pcs(30)
<b>3</b>	RDBMS Lab	Desktop Pcs(30)
<b>4</b>	Programming Lab	Desktop Pcs(27)

<b>LAB Name</b>	<b>Namof Equipment</b>	<b>No of Units</b>	<b>Configuration</b>	<b>Age and condition of equipment</b>
Linux LAB	Desktop Pcs	30	DELL, Intel C2D 2.93 Ghz, 3GB RAM, 300 GB HDD	6 Years Old, Working Condition
RDBMS LAB	Desktop Pcs	30	HP Intel Core i5, 2.9 GHZ, 4GB RAM, 500 GB HDD	3 Years Old, Working Condition
FCPIT LAB	Desktop Pcs	27	Wipro Intel Pentium P4 3.0 Ghz ,1.5 GB RAM, 80 GB HDD	8 years Old, Working Condition
Central Computing LAB	Desktop Pcs	32	Intel C2D 2.66 Ghz, 2 GB RAM, 250 GB HDD	7 Years Old, Working Condition

**31. Number of students receiving financial assistance from college, university, government or other agencies**

<b>S. No.</b>	<b>Schemes Provided by College/ other agencies</b>	<b>Number of Students B.Tech (CSE) 2015-2014</b>	<b>Number of Students B.Tech (CSE) 2014-2013</b>	<b>Number of Students B.Tech (CSE) 2013-2012</b>
1	PTU Fee waiver Scholarship	0	0	2
2	SC Post Matric Scholarship (Punjab)	10	11	4
3	Minority Scholarship	4	3	1
4	Sita Ram& Jindal Scholarship	0	0	1
5	Guru Harkrishan Educational Society Scholarship	0	1	0

<b>S. No.</b>	<b>Schemes Provided by College/ other agencies</b>	<b>Number of Students M.Tech (CSE) 2014-2015</b>	<b>Number of Students M.Tech (CSE) 2013-2014</b>	<b>Number of Students M.Tech (CSE) 2012-2013</b>
1	OBC Post Matric Scholarship (Punjab)	1	0	0
2	Minority Scholarship	2	4	4
3	Gate Based Scholarship	0	0	1

**32. Details on student enrichment programmes (special lectures/workshops/ seminar) with external experts**

<b>S. No.</b>	<b>Name &amp; Details</b>	<b>Date From</b>	<b>Date To</b>
1	Workshop on "Hack-O-Mania" by Sunil Vishwakarma from i3indya technologies	03-03-2013	04-03-2013
2	Workshop on "Software Engineering" by Mr.Harmeet Singh from Microsoft India	22-03-2013	22-03-2013
3	Workshop on Cyber Security on Android Hacking & Secutriy By I3indya	14-11-2014	18-11-2014
4	Workshop(INK) By Lakshmi Pratury on InkTalk Event	20-12-2014	21-12-2014

5	Expert Lectures(Microsoft) by Rane Johnson on Game Development & Current Trends in Technology	30-09-2014	30-09-2014
6	Expert Lectures (Microsoft) by Ruhani Arora on How technology has changed in the last 20 years	24-10-2014	24-10-2014
7	Workshop(IMS Jalandhar) by Dwijendra Srivastava on Resume Building, Career Guidance	25-02-2015	25-02-2015
8	Expert Lectures(INK) by Neeraj Arora on Motivational	31-10-2015	02-11-2015
9	Expert Talk on “Information Security and Cyber Crimes” by Dr.Anup Girdhar CEO, Sedulity Solutions& Technology, New Delhi	08-02-2016	08-02-2016
10	Workshop on “Advanced Computer Networks” by Mr.Aman Sharma Sr. Network Engineer TCSION PVT Chandigarh.	24-02-2016	24-02-2016
11	Expert Talk on “New Startups in IT Sector” by Mr. Mani Madhukar Cloud Partner, Lead-South IBM ECO system development team	27-02-2016	27-02-2016
12	Workshop on “Information Security and Cyber Crimes” by Dr.Anup Girdhar CEO, Sedulity Solutions& Technology, New Delhi	18-03-2016	19-03-2016
13	Expert Talk on Web Technologies by Mr Nitin Saluja, Software Developer, ST Micro Electronics, Noida	01-11-2016	01-11-2016
14	Workshop on Web Technologies by Mr Gurpreet Singh, Institute Head and Sr Trainer,GTB, Jalandhar	02-11-2016	02-11-2016
15	Workshop on Internet of Things by Mr Ansh Aneja, Sr Software Engineer ,Ansh Infotech, Ludhiana	03-11-2016	03-11-2016
16	Workshop on Mobile Application Development (iOS) by Mr Ranjeet Sajwan, Project Manager and Sr Mobile Application Developer,CS Soft Solutions, Mohali	04-11-2016	04-11-2016
17	Workshop on Big Data Analytics by Mr Anil Saxena, oftware Engineer and Training Partner with IBM Technologies,KBCH Technologies, Noida	04-11-2016	04-11-2016

### 33. Teaching methods adopted to improve student learning

- **Lecture Method:** Teaching through lectures by using green boards as well as LCD projectors.
- **Interactive Method:** Teaching through conducting debates on the topics related to the subject handling.
- **Project Based learning:** Analyzing, Designing, Implementing and documenting skills of the students are improved by assigning mini-projects, half semester projectors and full semester projects.

- **Computer assisted learning:** Quizzes are conducted through LMS(Learning Management System)
- **Experimental Learning:** The students are trained to do programming through lab experiments.
- **Seminars:** The Students are encouraged to take technical seminars which is used to improve the presentation skills of the students

34. Participation in Institutional Social Responsibility (ISR) and Extension activities : **As per Annexure - II**

35. SWOC analysis of the department and Future plans:

<b>Strengths</b>	<b>Weaknesses</b>
Centre of excellence in emerging technologies/areas of computer science.	Less number of regular faculty members.
Constructive social image among stakeholders.	Lack of funded research projects.
MoU with premier institutes and industries for research and extension activities.	Up-gradation of curriculum as per the request of the industry is not feasible promptly.
Well qualified and dedicated faculty members.	Lack of collaboration with research based organisations and MNCs.

<b>Opportunities</b>	<b>Challenges</b>
Scope of collaborative proposals with government/govt aided institutions and organizations for research projects and grants.	To cope up with the advanced technologies.
To enhance employability and knowledge of our students.	Lack of research funding due to private un-aided stature of the institute.
Enhancing the skill set of our students and faculty members with emerging technologies.	
MoU with foreign universities for student/faculty exchange program.	
To indulge in consultancies with industry and organisation.	

## Evaluative Report – Department of Electrical Engineering

1. Name of the department : **Electrical Engineering**
2. Year of Establishment : **2002**
3. Programs offered : **B.Tech.**  
**M.Tech.**
4. Names of Interdisciplinary courses and the departments / units involved:

<b>Interdisciplinary courses for B.Tech.</b>					
<b>Sr. No.</b>	<b>Interdisciplinary courses</b>	<b>Course Code</b>	<b>Course Credits</b>	<b>Departments Involved</b>	<b>Class (Semester)</b>
1	Engineering Mathematics-III	BTAM-301	5	Applied Sciences	3
2	Digital Electronics	BTEC- 404	4	ECE	4
3	Electronics Circuits Lab (Lab VI)	BTEC - 409	1	ECE	4
4	Human Resource Management	BTHU-6XX/HU-251	4	MBA	6
5	Total Quality Management	BTME-6XX/ME-251	4	MBA	6
<b>Interdisciplinary courses for M.Tech.</b>					
<b>Sr. No.</b>	<b>Interdisciplinary courses</b>	<b>Course Code</b>	<b>Course Credits</b>	<b>Departments Involved</b>	<b>Class (Semester)</b>
1	Research Methodology	MTRM-101	4	Applied Sciences	1

5. Annual / semester / choice based credit system (program wise) :

### **Semester/Choice Based Credit System**

6. Participation of the department in the courses offered by other departments

<b>Sr. No.</b>	<b>Name of the Subject</b>	<b>Name of the Branch</b>	<b>Program</b>
1	Basic Electrical & Electronics Engg.	EE, ME, ECE	B.Tech.
		CSE, IT, CE	B.Tech.

7. Courses in collaboration with other Universities, industries and foreign institutions etc.

- **University Collaboration**

Dr. B.R Ambedkar National Institute of Technology, Jalandhar  
National Institute of Technology, Delhi  
National Institute of Technology, Hamirpur

- **Industry Collaboration**

M/s. Ecosense Sustainable Solutions Pvt. Ltd., New Delhi  
M/s. IEC Gensets- Kirloskar Oil Engines, Chandigarh  
M/s. Green field Enterprises, Kathua, J&K  
M/s. Core Metal Infra Ltd, Derabassi, Punjab  
M/s. Industrial Equipment Company , Barwala, Harayana

- **Foreign Institutions Collaborations**

University of Ontario Institute of Technology (UOIT), Canada

8. Courses or programs discontinued for any reason: -----NIL-----

9. Number of Teaching Posts:

Designation	Sanctioned	Filled
Professors	02	0
Associate Professors	03	01
Assistant Professors	10	09

10. Faculty Profile with Name/ Qualification/ Designation/ Specialization (D.Sc. / D. Lit. / Ph.D. / M. Phil. et cetera)

Sr. No.	Name	Qual.	Designation	Specialization	No. of Years of Experience	No. of Ph.D Students guided for the last 4 years
1	Dr Sudhir Sharma	Ph.D	Associate Professor & HOD	Electrical Machines	20 Years	3 (Pursuing)
2	Mrs Chintu Rza	Ph.D. (Submitted)	Assistant Professor	Power system	18 Years	NA
3	Mr. Gagandeep Sharma	Ph.D. Pursuing	Assistant Professor	Electrical Machines & Power Electronics	12 Years	NA
4	Mrs. Shivani Mehta	Ph.D. Pursuing	Assistant Professor	Power System	13 Years	NA
5	Mr Baljit Singh	M.Tech.	Assistant Professor	HVDC	10 Years	NA
6	Mr Sushil Prashar	Ph.D. Pursuing	Assistant Professor	Automatic Generation	11 Years	NA

				Control		
7	Ms. Sumeet Kaur	M.Tech.	Assistant Professor	Power System, Power converters	4 Years	NA
8	Ms. Prabhpreet Kaur	M.Tech.	Assistant Professor	Biomedical	2 years	NA
9	Ms. Anchal Wadhwa	M.Tech.	Assistant Professor	Testing of Transformers	2 Year	NA
10	Mr. Ashish Sharma	Ph.D. (Pursuing)	Assistant Professor	Induction Machines	14 Years	NA

#### 11. List of Senior Visiting Faculty

S. No.	Name of Faculty	Designation	Organization
1	Dr. V.K Sood	Co-chair in Innovation Design Engg., Faculty of Engg. & App. Sci.	University of Ontario Institute of Technology, Canada
4	Mr. A.P Singh	Consultant	Self-employed
2	Mr. Sudhir Ghera	Director – Operations	IEC Gensets Ltd.
3	Mr. Gurinderbir Singh Grewal	Teaching Assistant	Indian Institute of Technology, Mandi, Himachal Pradesh

#### 12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty : **52.48%**

Year	2014-2015	2015-2016	2016-2017
Semester	Odd- 67.5%	Odd- 70.2%	Odd- 57.4%
	Even- 66.8%	Even- 76.4%	Even- 52.48%

#### 13. Student-Teacher Ratio (programme wise)

18:1

#### 14. No of academic support staff (technical) and administrative staff (sanctioned and filled)

	Sanctioned	Filled
<b>Technical</b>	06	05
<b>Administrative</b>	01	01

#### Following are the details of Technical Staff

Sr. No.	Name	Designation	Qualification	Experience
1	Mr. Suraj Khanna	Lab Technician	Three years diploma in Electrical Engineering	9 years
2	Mr. Subhash Kumar	Lab Technician	Three years diploma in Electrical Engineering	17 years
3	Mr. Tejinder Singh	Lab Assistant	Three years diploma in Electrical Engineering	10 years
4	Mr. Sandeep Sharma	Lab Assistant	M.Sc. (IT)	12 years
5	Mr. Rajesh Kumar	Lab Technician	Three years diploma in	14 years



			Electrical Engineering	
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### List of Administrative Staff

S. No.	Name	Designation	Qualification	Experience
1	Ms. Neelam Rani	Clerk	Bachelor of Arts	3 years

### 15. Qualifications of teaching faculty with DSc/ D. Litt/ Ph.D./ PG.

Sr. No.	Name	Doctorate	Post Graduation	Graduation
1	Dr. Sudhir Sharma	Ph.D.	M.Tech.	AMIE
2	Mrs. Chintu Rza	Ph.D. (Thesis Submitted)	M.E.	B.E.
3	Mr. Gagandeep Sharma	Ph.D. (Pursuing)	M.Tech.	B.Tech.
4	Mrs. Shivani Mehta	Ph.D. (Pursuing)	M.Tech.	B.Tech.
5	Mr. Baljit Singh	-----	M.Tech.	B.Tech.
6	Mr. Sushil Prashar	Ph.D. (Pursuing)	M.Tech.	B.Tech.
7	Ms. Sumeet Kaur	-----	M.Tech.	B.Tech.
8	Ms. Prabhpreet Kaur	-----	M.Tech.	B.Tech.
9	Ms. Anchal Wadhwa	-----	M.Tech.	B.Tech.
10	Mr. Ashish Sharma	Ph.D. (Pursuing)	M.Tech.	B.Tech.

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received: ----- **NIL**-----

17. Department projects funded by DST-FIST, UGC, DBT, ICSSR and total grants received:

- IKGPTU provided IDP grant of **Rs. 25,000/-** (reference letter No. IKGPTU/RIC/5959) to students of B.Tech. (Electrical Engineering).
- DAVCMC, Delhi made budget provisions of **Rs. 2 Lakhs** for faculty and **Rs. 25000/-** for students of the Institute.

18. Research centre/ facility recognized by the University: ----- **NIL**-----

19. Publications: **As per Annexure - I**

20. Areas of Consultancy

1. Energy Management/ Energy Saving
2. Power Quality Analysis

**Income Generated - NIL**

21. Faculty as members in National/ international and editorial Boards.

Sr. No.	Name of Faculty	Name of Committee	National/ International	Capacity
1	Dr Sudhir Sharma	Punjab Academy of Science (L-774)	National	Member
		ISTE( LM-42976)	National	Member
		Member International Association of Engineers	International	Member
		Member International Association of Computer Science and Information Technology	International	Member
		Member of Board of studies of Electrical Engineering at IKGPTU	University	Member
2	Ms. Chintu Rza	Punjab Academy of Science (L-762)	National	Member
3	Mr Gagandeep Sharma	Punjab Academy of Science (L-739)	National	Member
4	Ms Shivani Mehta	Punjab Academy of Science ( L-733)	National	Member

22. Student Projects:

- Percentage of Students who have done in house projects including interdepartmental program: 100%
- Percentage of Students placed for projects in organizations outside the Institution i.e. in research laboratories/ Industry/other agencies: **15%**

23. Awards/ Recognitions received by faculty and students:

**Faculty Awards**

Sr. No.	Name of the Person	Name of Award	Agency	Date/Year
1	Dr. Sudhir Sharma	Best Teacher Award	ISTE	2016

**Student Awards:**

Sr. No.	Name of the person	Name of Award	Agency	Date/Year
1	Amritpal Singh	Best Student Award	ISTE	2016

**Other Awards**

1	Rajdeep Singh	Secured 2 <sup>nd</sup> position in E Structuring	Thapar Polytechnic College	2012
2	Tanuj Malhotra	Secured 1 <sup>st</sup> position in Treasure Hunt	IIT Delhi	2015
3	Tanuj Malhotra	Secured 2 <sup>nd</sup> position in Textile Quiz	IIT Delhi	2015
4	Tanuj Malhotra	Secured 2 <sup>nd</sup> position in Great Indian Tamasha	IIT Delhi	2015
5	Mahesh Noonina	Secured 1 <sup>st</sup> Position in Painting	Maa Boli Diwas	2016
6	Amritpal Singh	Best Student Award	ISTE	2016

7	Mahesh Noonia	Cartooning	Students won Gold/ Silver Medals in PTU Zonal/Inter-Zonal Youth-Festival (2016-17)	2016-20017
8	Amritpal Singh	Bhangra		
9	Satyam Magu	Group song,		
		Light vocal Indian		
		group shabad		
10	Shweta	Giddha		
11	Sandeep Sharma	Classical instrument Solo		
12	Mandeep Singh	Bhangra	Students won Gold/ Silver Medals in PTU Zonal/Inter-Zonal Youth-Festival (2015-16)	2015-2016
13	Sahil Doda	One Act Play		
14	Kartik Sharma	Skit		
15	Mahesh Noonia	Cartooning		
16	Shubham Sondhi	Group Song Indian		
17	Sandeep Sharma	Classical instrument Solo		
18	Sahil Doda	Mime	Students won Gold/ Silver Medals in PTU Zonal/Inter-Zonal Youth-Festival (2014-15)	2014-2015
19	Mahesh Noonia	Poster Making		
20	Sandeep Sharma	Percussion		
21	Shubham Sondhi	Shabad		
22	Baldeep Singh	Bhangra	Students won Gold/ Silver Medals in PTU Zonal/Inter-Zonal Youth-Festival (2013-2014)	2013-2014
23	Karanpreet Singh	Bhangra		
24	Tarun Raj	Singing		
25	Harleen Kaur	Gidhha		
26	Srujitha Reddy	Fine Arts		
27	Kartik Sharma	Skit		
28	Shubham Sondhi	Singing		
29	Amritpal Singh	Bhangra		
30	Mahesh Noonia	Poster Making		
31	Gagandeep Singh	Lawn Tennis	Students won Gold/ Silver Medals in PTU Zonal/Inter-Zonal Sports (2015-16)	2015-2016
32	Yash Bajaj	Badminton		
33	Jasmeet Singh	Chess		
34	Rajandeep Kaur	Handball		
35	Kapil Kamboj	Cricket	Students won Gold/ Silver Medals in PTU Zonal/Inter-Zonal Sports (2014-15)	2014-2015
36	Manish Kumar	Cricket		
37	Raghu Shivam Sharma	Cricket		
38	Himanshu Khullar	Cricket		

39	Gagandeep Singh	Lawn Tennis		
40	Rishabh Arora	Swimming		
41	Suhani Sandhu	CHESS	Medal winner in PTU Inter-College Championship 2013-2014	2013-2014

**24. List of eminent academicians and scientists/ visitors to the department**

1. Mr.Sudhir Gera, President, IEC delivered expert talk on Technical Session on gap between academia and industry .
2. Technical Session on transmission and Distribution of electrical power by Mr. Somnath Mahi Additional Supdt. Engineer (PSEB).
3. Expert talk on “Robotics & Its Origins” by Mr. Kuldeep Nagla, Associate Professor from NIT, Jalandhar.
4. Expert Talk on “Aptitude Skills – A Passport to Placements” by M/s. Cynosure.
5. Expert Lecture on Personality Development by Public and Motivational speaker Ms. Shilpi Rana.
6. Special Lecture on Micro-grid in a smart grid prospective by Dr Sukumar Mishra, Professor IIT Delhi.
7. Expert Talk on “PLC Programming, Substation design on SCADA, Motor Drive” by Arvind Thakur.

**25. Seminars/Conferences/workshops organized & the source of funding**

- a) National
- b) International

**Conferences: (2016-2017)**

1. DAVIET organised and International interdisciplinary conference on Engineering science & Management at Goa in collaboration with Biju Patnaik University of Technology (BPUT).
2. DAVIET organised 3<sup>rd</sup> DAV National Congress, 2016 on Science, Technology, Engineering, Humanities and Management.

**Workshops: (2016-2017)**

1. One day workshop on PLC, HMI, Drives SCADA by Automation system Ludhiana
2. Training on hydro power plant familiarization
3. Electrical CADD by CAD Forum
4. Aptitude Workshop by Gateforum
5. Industrial automation ( HMI, Drives and Panel Wiring)
6. Robotics
7. PLC & SCADA ( Distributed Control System)

8. Aptitude workshop by GATE Revolution
9. Matlab and Simulink workshop
10. Workshop on Advanced embedded system using raspberry PI
11. One Day Workshop on MATLAB and SIMULINK by Coroma Campus (Noida)

**Seminars:**

As per point no. 32

**26. Student profile Programme/Course Wise:-**

Name of the Course/Programme (refer question no.4)	Applications Received	Selected	Enrolled		Pass Percentage
			Male	Female	
B.Tech (EE- 2013)	Applications are received via PTU	65	57	8	90.6%
B.Tech (EE- 2014)		74	64	10	71.2%
B.Tech (EE- 2015)		63	55	8	57.14%
M.Tech (EE- 2014)		11	6	5	100%
M.Tech (EE- 2015)		-----	-----	-----	-----
M.Tech (EE- 2016)		3	1	2	--RA--

**27. Diversity of students**

Name of the Course	% of students from the same state			% of students from other states			% of students from abroad		
	2016	2015	2014	2016	2015	2014	2016	2015	2014
B.Tech.	69.05%	77.7%	82.2%	30.95%	22.3%	17.8%	0	0	0
M.Tech.	66.67%	NA	100%	33.33%	NA	NA	0	0	0

**28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil Services, Defense services, etc.?**

Name of the Course	Gate			Defence Services		
	2016	2015	2014	2016	2015	2014
B.Tech.	4	4	1	0	0	0

## 29. Student Progression

Student progression	Against %enrolled
	2016
UG to PG	Nil
PG to M.Phil.	Nil
PG to Ph.D.	1
Ph.D to Post-Doctoral	Nil
Employed	Year 2016
Campus selection	47.7%
Other than campus recruitment	1.53%
Entrepreneurship/Self-employment	7.7%

## 30. Details of Infrastructural Facilities

### a) Library

	Area	No. of Books
Department Library	175 Sq.	302

### b) Internet facilities for Staff & Students

	Specifications	Area
Internet facility	110 Mbps leased line	UG BLOCK

### c) Class rooms with ICT Facility

	ICT facility	Area
Class rooms Room 21	Interactive board 1, Projector 1	875 sq feet

### d) Laboratories

Sr. No.	Name of the Lab	Semester	Area	Details of Furniture	Details of Equipment
1.	BEEE Lab	1 <sup>st</sup> & 2 <sup>nd</sup>	L-15.7 m B-7.6 m A-119.32m <sup>2</sup>	Annex. - 1	<ol style="list-style-type: none"> <li>1. Panel To find voltage, current relationship R-L series circuit and to determine the power factor of the circuit.</li> <li>2. 2 Panels to find the voltage and current relations in star and delta connected system.</li> <li>3. Panel to measure power and power factor in a single-phase AC circuit.</li> <li>4. Panel To measure</li> </ol>

					<p>minimum operating voltage, current drawn, power consumed and power factor of a fluorescent tube light.</p> <p>5. 1 LVDT Kit, 3 Multimeter</p> <p>6. Panel To verify the rating of compact fluorescent lamp (CFL)</p> <p>7. Kit To verify the truth table of logic gates.</p> <p>8. 2 Transistor Kit,</p> <p>9. Transformer(2KVA)</p> <p>10. inductive load o1, resistive load 01</p>
2.	Laboratory-II Electrical Machines-I	3 <sup>rd</sup>	L-18.6m B-7.6m A-141.36m2	Annexure 1	<p>1. Panel for Single phase transformer load test</p> <p>2. Panel for Single phase transformer O.C and S.C test</p> <p>3. Panel for Single phase transformer efficiency and voltage regulation</p> <p>4. Panel for Single phase transformers Parallel operation</p> <p>5. Panel for Three phase transformer various connections</p> <p>6. Panel for obtaining D.C Shunt generator O.C.C</p> <p>7. D.C Shunt generator panel for obtaining load characteristics</p> <p>8. D.C Series generator panel for obtaining load characteristics</p> <p>9. Panel for obtaining load characteristics of Dc compound generator</p> <p>10. D.C Shunt motor panel for obtaining speed-torque characteristics</p> <p>11. D.C series motor panel for obtaining speed-torque characteristics</p> <p>12. D.C Compound motor panel for obtaining Load characteristics</p> <p>13. D.C Shunt motor panel for obtaining Swinburne's Test</p> <p>14. S.C.R Drive</p>
3.	Laboratory-VII Electrical Machines-II	5 <sup>th</sup>	L-16.6m B-7.6m A-126.16m2	Annexure 1	<p>1. Panel for performing load test on 3-ph Ind. Motor &amp; plot speed torque characteristics</p> <p>2. Panel for performing no load &amp; block rotor test on 1ph Industrial Motor.</p> <p>3. Panel for finding voltage regulations of an 3-ph alternator by zero power factor method.</p>

					<ol style="list-style-type: none"> <li>4. Panel for finding voltage regulations of an 3-ph alternator by zero power factor method.</li> <li>5. Panel for measurement of negative sequence &amp; zero sequence reactance of a synchronous m/c.</li> <li>6. Panel star/delta.</li> <li>7. panel for measurement of negative sequence &amp; zero sequence reactance of a synchronous m/c.</li> <li>8. Panel speed control of 3-ph Ind . Motor by Kramer method.</li> <li>9. Panel for performing no load &amp; block rotor test on 3-ph Ind . Motor by obtaining equivalent characteristics parameters &amp; to draw the circle diagram.</li> <li>10. Panel for performing no load &amp; block rotor test on 3-ph Ind . Motor by obtaining equivalent characteristics parameters &amp; to draw the circle diagram.</li> <li>11. Panel SLIPRING IND. MOTOR by inserting different levels of resistances in rotor.</li> <li>12. Panel for drawing V &amp; Inv. V curves of A 3-ph. synchronous motor.</li> <li>13. set up for performing regulation of a 3-ph alternator by Zero power factor method.</li> </ol>
4.	Laboratory-I Semiconductor devices and circuit theory	3 <sup>rd</sup>	L-13m B-7.5m A-97.5m <sup>2</sup>	Annexure 1	<ol style="list-style-type: none"> <li>1. Different values of resistances &amp; multimeter</li> <li>2. Bread Board, resistance, inductor, capacitor</li> <li>3. 3 Superposition theorem kit</li> <li>4. 3 Thevenin theorem kit</li> <li>5. 3 maximum power transfer theorem kit</li> <li>6. Low pass and high pass filters kit</li> <li>7. 3 K-derived filters kit</li> <li>8. 3 m-derived filters</li> <li>9. half wave rectifier kit</li> <li>10. full wave and bridge rectifiers kit</li> <li>11. Diode clippers and clampers kit</li> <li>12. FET Kit</li> <li>13. Zener diode voltage regulator kit</li> <li>14. emitter follower circuit kit</li> </ol>



					15. Connecting Leads 16. CRO
5.	Laboratory-III Electrical Measurements	3 <sup>rd</sup>	L-13m B-7.5m A-97.5m <sup>2</sup>	Annexure 1	1. 1 DC Ammeter -----0-50mA 2. 1 AC voltmeter -----0-50V 3. 1 AC Ammeter -----0-10A 4. 1 Wattmeter -----0-1kW 5. DC voltmeter -----0-200mV 6. DC Ammeter -----0-50μA 7. 1 Multiplier resistance 8. 1 Shunt resistance 9. 1 AC voltmeter -----0-300V 10. 1 AC voltmeter -----0-12mV 11. 1 AC Ammeter -----0-50mA 12. 1 AC Ammeter -----0-50μA 13. 1 Potential Transformer 300/12 14. 1 Current Transformer 100/5 15. 2 Wheatstone Bridge kit 16. 1 Panel 3 phase load 17. Panel 1 phase energymeter calibration 18. 2 Kelvin's Bridge kit 19. 2 Anderson's Bridge kit 20. 2 Schering Bridge kit 21. 1 Hysteresis loop kit 22. Wien's Bridge kit 23. CRO 24. potentiometer kit 25. Q- meter
6.	Lab-IV Instrumentation & Measuring Devices	4 <sup>th</sup>	L-13m B-7.5m A-97.5m <sup>2</sup>	Annexure 1	Annexure 1.
7.	Laboratory-V Control System	4 <sup>th</sup>	L-13m B-7.5m A-97.5m <sup>2</sup>	Annexure 1	Annexure 1
8.	Laboratory-IX Electrical: Estimating & Costing	5 <sup>th</sup>	L-13m B-8m A-104m <sup>2</sup>	Annexure 1	Annexure 1
9.	Laboratory-XII Power System Analysis	7 <sup>th</sup>	L-13m B-8m A-104m <sup>2</sup>	Annexure 1	1. 32 Computers (10 Pc With Matlab, 10 Pc With e-tap) 2. 2 Printers 3. 1 UPS 4. 2 Switch
10.	Laboratory-VIII Numerical Analysis	5 <sup>th</sup>	L-13m B-8m A-104m <sup>2</sup>	Annexure 1	1. 32 Computers (10 Pc With Matlab, 10 Pc With e-tap) 2. 2 Printers 3. 1 UPS 4. 2 Switch

11.	Laboratory-VI Electronic Circuits	4 <sup>th</sup>	L-10.4m B-7.6m A-79.04m <sup>2</sup>	Annexure 1	<ol style="list-style-type: none"> <li>1. 3 zener diode kit</li> <li>2. 2 clippers and clampers kit</li> <li>3. 2 Amplifier Kit</li> <li>4. 3 Emitter follower kit</li> <li>5. 2 class A,B,C,AB amplifier kit</li> <li>6. 3 symmetry amplifier kit</li> <li>7. IC-7400,7402,7404,7408,7432,7486. Digital trainer kit</li> <li>8. IC-74150,74154</li> <li>9. IC-7483 Digital trainer kit</li> <li>10. IC 74181</li> <li>11. IC-7400. Digital trainer kit</li> <li>12. IC -7476, Digital trainer kit</li> <li>13. IC -7474 Digital trainer kit</li> <li>14. IC-7490, 7493 Digital trainer kit</li> </ol>
12.	Laboratory-X Power Electronics & Drives	6 <sup>th</sup>	L-7.6m B-7.6m A-5.76m <sup>2</sup>	Annexure 1	<ol style="list-style-type: none"> <li>1. 3 SCR V-I characteristics KIT</li> <li>2. 2 UJT V-I characteristics kit</li> <li>3. 3 UJT as relaxation oscillator kit</li> <li>4. 2 free-wheeling diode on power factor kit</li> <li>5. 2 single phase full-wave, fully controlled bridge rectifier, for resistive and resistive cum inductive loads kit</li> <li>6. 1 three phase fully controlled bridge converter kit</li> <li>7. 2 Jones chopper kit</li> <li>8. 1 Thyristorised speed control of a D.C. Motor.kit</li> <li>9. 3 Dimmer circuit kits</li> <li>10. 1 Series inverter circuit kit</li> <li>11. 2 Single-phase cycloconverter kit</li> </ol>
13.	Laboratory-XI Power System-II	6 <sup>th</sup>	L-7.6m B-7.65m A-58.14m <sup>2</sup>	Annexure 1	<ol style="list-style-type: none"> <li>1. Over current relay are 2.5-10A-2 Earth fault relay is 1- 4.0A. -1</li> <li>2. stop watch and time totalizer and phantom loading.</li> <li>3. 3 spikes Earthing tester WICO make (digital type).</li> <li>4. continuously variable voltage source.</li> <li>5. bimetal mini circuit breakers.</li> <li>6. Oil testing set 0- 66kv with oil cup (motorized)</li> </ol>

14.	Laboratory- XII Micro controller & PLC	6 <sup>th</sup>	L- 13m B- 8m A- 104m <sup>2</sup>	Annexure 1	Annexure 1
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**31. Number of students receiving financial assistance from college, university, government or other agencies Scholarship**

Scholarship	Year			
	2017-2016	2016-2015	2014-2015	2013-2014
Post – Matric Scholarship for SC	-	26	24	14
Sita Ram & Jindal Scholarship	-	0	0	0
PTU Feeship Scheme	1	0	0	0
Minority Scholarship	-	04	5	4
J&K Scholarship	2	01	1	1

**32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts**

Sr. No.	Year	Special Lecture/Workshop/Seminar Workshop on
1	2016	<ol style="list-style-type: none"> <li>1. Industrial automation (HMI, Drives and Panel Wiring)</li> <li>2. Robotics</li> <li>3. PLC &amp; SCADA (Distributed control system)</li> <li>4. Aptitude workshop</li> <li>5. Matlab and Simulink</li> <li>6. Industrial Automation</li> <li>7. PLC Programming and substation design</li> <li>8. SCADA and Motor Drives</li> <li>9. Matlab and Embedded system</li> </ol>
2	2015	<ol style="list-style-type: none"> <li>1. Workshop on Advanced embedded system using raspberry PI and Arduino platform by Netmax</li> <li>2. Change India workshop By THE HINDU</li> <li>3. DAV Model United Nations</li> <li>4. aDavitya</li> <li>5. Entrepreneurship seminar by MR Srinivas CEO of Ostilio</li> <li>6. Semianr by Mr Sudhir Gehra from Kirloskar on energy saving</li> </ol>

		<p>7. Workshop on vedic maths and resume building by TIME</p> <p>8. Art of Living's Yes + course</p>
3	2014	<p>1. Workshop on Reboot V.1.1 Candroid Hacking and security</p> <p>2. Meditation Workshop</p> <p>3. C++ and core java one day workshop</p> <p>4. Half day IIT- NPTEL awareness workshop</p> <p>5. Seminar by Sh Surinder Seth , Former MD of Dainik Bhaskar on Bollywood Mantra for Peak Performance</p> <p>6. DUCAT ( Tailor Made Programme on JAVA &amp; .Net)</p> <p>7. PLC-SCADA</p>
4	2013	<p>1. Workshop on Hack -O-Mania conducted by i3indya technologies.</p> <p>2. Special Lecture on Micro- grid in a smart grid prospective by Dr. Sukumar Mishra</p> <p>3. AMCAT online test for enhancement of aptitude skills of students</p> <p>4. My Kampus Portal</p>

**33. Teaching methods adopted to improve student learning**

1. PPT slides
2. Project based learning
3. Role play, GD, Quiz, Presentations (Task based Learning)

**34. Participation in Institutional Social Responsibility (ISR) and Extension activities**

**As per Annexure – II**

### 35. SWOC Analysis of the department

#### SWOC Analysis

##### STRENGTHS

- Electrical repair & maintenance of the Institute managed by the department.
- Successful implementation of PG Regular & Part-Time courses.
- Experienced and research oriented faculty.
- Strong Alumni network.
- Cordial relationship among faculty, staff and students.
- Introduced learning based on MOOCs and Virtual Labs.
- A considerable number of Merit positions in University Examinations.
- Excellent faculty retention.
- A significant number of GATE qualified students.
- Employability Skill Training for the students (EST/ Mock Placement Drive).
- MOU's with foreign Universities/ Industries/ NITs.
- More emphasis on project based learning.

##### WEAKNESSES

- Less local industry collaboration with institute.
- Placements in core companies are lower in number.
- PG course students are not GATE qualified in the department.
- Lack of research funding & policies from Government.
- Institute is affiliated to PTU & hence, has limitation of curriculum as per industry requirement.
- Lack of senior faculty with industrial experience.
- Less number of research/industry related projects (departmental).
- Consultancy.

##### OPPORTUNITIES

- Placements in Public, Private & IT sector.
- Improvement of teaching-learning process by introducing project based learning.
- Can provide consultancy services to local industry.
- International recruitments/ Training.
- Interdisciplinary course development for other departments.

- Introduction of online journal in department.
- To strengthen Alumni Network.
- NBA Accreditation.
- More MOU's can be assigned.
- Digitization of department.
- Regular department newsletter for students (Local Industry School).
- Can start extended branches of Electrical Engineering Courses at UG & PG level.
- Share resources within college for research.
- Bigger role under CSR/ISR.

### **CHALLENGES**

- To ensure that well placed alumni will continue supporting the department.
- To increase the student participation in the competitive exams.
- To cope up with the challenge of rapid technical advances.
- To place more students in the core companies.
- To encourage students for sponsored/ industry defined projects.

## Evaluative Report – Department of Information Technology

1. Name of the department : **Information Technology**
2. Year of Establishment : **2002**
3. Programmes/Courses offered : **B.Tech.**
4. Names of Interdisciplinary courses and the departments/units involved:

S. No.	Interdisciplinary Courses	Departments involved	Class (Sem.)
1	Digital Control and Logic Design	Electronics & Comm. Engg.	3 <sup>rd</sup> Semester
2	Math-II	Applied Sciences	4 <sup>th</sup> Semester
3	Math-III	Applied Sciences	3 <sup>rd</sup> Semester
4	Human Values	Applied Sciences	1 <sup>st</sup> /2 <sup>nd</sup> Semester
5	Microprocessor	Electronics & Comm. Engg.	4 <sup>th</sup> Semester
6	Communication Skills	Applied Sciences	1 <sup>st</sup> Semester
7	HRM	MBA	6 <sup>th</sup> Semester
8	CG	Mechanical Engineering	1 <sup>st</sup> /2 <sup>nd</sup> Semester
9	BEEE	Electronics & Comm. Engg.	1 <sup>st</sup> /2 <sup>nd</sup> Semester
10	EME	Mechanical Engineering	1 <sup>st</sup> /2 <sup>nd</sup> Semester
11	ED	Mechanical Engineering	1 <sup>st</sup> /2 <sup>nd</sup> Semester
12	Physics	Applied Sciences	1 <sup>st</sup> /2 <sup>nd</sup> Semester
13	Chemistry	Applied Sciences	1 <sup>st</sup> /2 <sup>nd</sup> Semester

5. Annual/semester/choice based credit system (programme wise):

### **Semester/Choice Based Credit System**

6. Participation of the department in the courses offered by other departments :

CE (FCPIT), ECE(OOPS), ECE(DS), CSE(DIP), CSE(ACA)

S. No.	Programs offered by other Deptts.	Participation of IT Department	Class (Semester)
1	B.Tech. (CE)	FCPIT	1 <sup>st</sup> /2 <sup>nd</sup> semester
2	B.Tech. (EE)	FCPIT	1 <sup>st</sup> /2 <sup>nd</sup> semester
3	B.Tech. (ME)	FCPIT	1 <sup>st</sup> /2 <sup>nd</sup> semester
4	B.Tech. (ECE)	FCPIT	1 <sup>st</sup> /2 <sup>nd</sup> semester
5	B.Tech. (ECE)	OOPS	3rd Semester
7	M.Tech. (CSE)	Digital Image Processing	1 <sup>st</sup> Semester
8	M.Tech. (CSE)	Big Data	3 <sup>rd</sup> Semester
9	M.Tech. (CSE)	Project	3 <sup>rd</sup> Semester
10	M.Tech (CSE)	Seminar	3 <sup>rd</sup> Semester
11	M.Tech (CSE)	Thesis Guidance	4 <sup>th</sup> Semester

7. Courses in collaboration with other universities, industries, foreign institutions, etc.: **NIL**
8. Details of courses/programmes discontinued (if any) with reasons: **NIL**

Number of teaching posts:

Teaching Posts	Sanctioned	Filled
Professors	01	-
Associate Professors	02	01
Assistant Professors	10	07

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D. / M. Phil. etc.)

Name	Qual.	Designation	Specialization	No. of Years of Experience	No of Ph.D Students guided for the last 4 years
Dinesh Kumar	Ph.D.	Associate Professor	Machine learning Natural language processing	14 Years	01
P.S. Mann	M.Tech, Ph..D*	Assistant Professor	Computer Networks, Wireless Communication	11 Years	Nil
Rajeev Vashisht	Ph.D.	Assistant Professor	Wireless Sensor Network, Soft Computing	10 Years	Nil
Avani Bhatia	M.E.	Assistant Professor	Water Marking, Web Technologies, Object Oriented Programming	8 Years	Nil
Rajesh Kochher	M.Tech.	Assistant Professor	Java/J2EE, System Analysis and Design, Software Engineering	10 Years	Nil
Neetika Bhardwaj	M.Tech.	Assistant Professor	Network Security	2 Years	Nil
Rajindervir	M.Tech	Assistant Professor	Software Engineering, Data Structures	9 Years	Nil
Hartej Singh	M.Tech	Assistant Professor	Information security Operating systems, Computer Networks	2.5 Years	Nil



**11. List of senior visiting faculty:**

Sr. No.	Name of the Person	Designation	Organization
1	Mr. Raj Kumar	Manager	SJVN Ltd.
2	Mr. Sarvesh Gupta	Director	Hi Spirit Technologies, Jalandhar

**12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty :**

Total Lectures Taken by Temporary Faculty	= 54
Total No. of Temporary Faculty	= 3
Percentage of Lectures delivered by Temporary Faculty	= 38.5
Total Practical Taken by Temporary Faculty	= 28
Total No. of Temporary Faculty	= 3
Percentage of Practical classes handled by Temporary Faculty	= 42.4%

**13. Student-Teacher Ratio (programme wise) : 18:1**

**14. Number of academic support staff (technical) and administrative staff; sanctioned and filled :**

	Sanctioned	Filled
<b>Technical</b>	3	3
<b>Administrative</b>	Nil	Nil

**Following are details of Technical Staff**

Name	Designation	Diploma	Degree	Certificates	Exp.
Mr. Bhagat Singh	Network Administrator	Two years in Computer Hardware	B.Com., MBA, MCA	MCSE, MCP, CCNA	15 years
Mr. Surjit Singh	Lab Assistant	Two years in Computer Hardware and networking	B.A. M.Sc. (IT)	MCSE	18 years
Mr. Rajesh Gandhi	Lab Assistant	PGDCA	M.Sc. (IT), MCA	CCNA	15 years
Ms. Anjana	Lab Assistant	Diploma in ECE, Post Diploma in Comp. Application			7 Years

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

**Same as Sr. No. 10.**

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received : **NIL**

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received : **NIL**

18. Research Centre /facility recognized by the University: **NIL**

19. Publications: **As per Annexure-I**

20. Areas of consultancy and income generated : **NIL**

21. Faculty as members in

S. No.	Name of Faculty	Memberships	National Committees	International Committees	Editorial Boards
1.	Dr.Dinesh Kumar	IEEE, CSI, ISTE, PSC, IJCSI, Institution of Engineers, International Association of Computer Science & Information Technology	--	---	--
2	Mr. P.S.Mann	ISTE,CSI,IEEE,			
3	Mr. Rajeev Kumar	ISTE, Punjab Science Congress	--	--	--
4	Ms. Avani Bhatia				
5	Mr. Rajesh Kochher	--	--	--	--
6	Ms.Neetika	--	--	--	--
7	Ms. Rajinder Vir	ISTE	--	--	--
8	Mr. Hartej Singh	--	--	--	--

## 22. Student Projects

- a) Percentage of students who have done in-house projects including inter departmental/programme :100%
- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research Laboratories/Industry/other agencies: 100%

## 23. Awards / Recognitions received by faculty and students:

### Faculty Awards

Sr. No.	Faculty Name	Organization	Remarks
	NIL	NIL	NIL

### Students won Gold/ Silver medals in PTU Zonal/Inter-Zonal Youth-festival – 2015-16

Sr. No.	Name of Participant	Father's Name	Regd. No.	College Name	Item	Position
1.	Rubeen Gill	Harpinder Singh	1308691	DAVET	Gidha(Zonal)	Silver
2.	Namneet Kaur	Inderjit Singh	1452552	DAVET	Gidha(Zonal, Inter-Zonal)	Silver
3.	Meenakshi	Surinder Kumar	1505449	DAVIET	Theatre(Inter-Zonal)	Gold
4.	Riya Bansal	Manoj Bansal	1505468	DAVIET	Theatre(Inter-Zonal)	Gold

### Students won Gold/ Silver Medals in PTU Zonal / Inter-Zonal Youth Festival – 2016-17

Sr. No.	Name of Participant	Father's Name	Regd. No.	College Name	Item	Position
1.	Deepanshu	Dinesh Goel	1408698	DAVIET	One-act play(Inter-Zonal)	Bronze
2.	Meenakshi	Surinder Kumar	1505449	DAVIET	One-act play(Inter-Zonal)	Bronze
3	Riya Bansal	Manoj Bansal	1505468	DAVIET	One-act play(Zonal)	Gold
4	Vivek Kumar	Ashwani Kumar	1505477	DAVIET	Clay Modeling (Inter-Zonal & Zonal)	Gold
5.	Meenakshi	Surinder Kumar	1505449	DAVIET	MIME(zonal)	Silver
6.	Anjali Verma	Pawan Kumar	1408686	DAVIET	Gidha(Inter-zonal)	Gold
7.	Reha Justin	Justin Saum	1408728	DAVIET	Western Vocal(Inter-Zonal)	Silver
8.	Nishant	Roop Lal	1408723	DAVIET	Bhangra(Zonal)	Bronze

### Students Bagged University positions

S. No.	Roll No.	Name	Father's Name	Class	Exam.	Batch	%	Position
1.	1308701 (452/13)	Tania Saini	Sh. Sita Ram	B Tech IT 5 <sup>th</sup> sem.	Nov-13	2013	84.6 %	9 <sup>th</sup>

1.	Rubeen Gill	PTU – DAVIET (Inter College 2k15)	Silver Medal in cricket Silver Medal in Handball
2.	Akshay Bhanot	DAVIET (Tech Fest – 2k15)	Second Prize
3.	Kanika Kimmi	PTU – DAVIET (Inter College) NIT National Dance Competition 2016	Silver Medal in Tennis Second Prize
4.	Rajbeer Kaur	PTU – DAVIET (Inter College 2k15)	Silver Medal in cricket
5.	Monika Yadav	PTU – DAVIET (Inter College-2k15)	Gold Medal in chess Silver Medal in cricket Silver Medal in Handball
6.	Manassavi	PTU – DAVIET (Inter College 2k15)	Gold Medal in chess Silver Medal in Handball
7.	Anika	PTU – DAVIET (Inter College 2k15)	Gold Medal in chess Silver Medal in Handball
8.	Ramit Basra	DAVIET	Gold Medal in football
9.	Aarti Gandhi	PTU – DAVIET (Inter College 2k15)	Gold Medal in Badminton
10.	Vimal Kumar	PTU – DAVIET (Inter college 2k15) (Badminton)	Gold Medal in Badminton
11.	Megha Thakur	PTU – DAVIET (Inter college) (Tennis)	2015 – Silver Medal
12.	Pooja Goyal	PTU – DAVIET (Inter college) (Chess)	Gold Medal
13.	Pulkit Jain	PTU – DAVIET (Inter College)	Silver Medal in cricket
14.	Ishita Bahri	Inter college	Gold Medal in Badminton
15.	Amita	Inter college	Silver Medal in cricket
16.	Gurleen	Inter college	Silver Medal in cricket

17	Ankit Maini	Inter College	Gold Medal in Badminton
18.	Anishu	Inter college	Bronze Medal in Handball and silver in cricket
19	Harsha	Inter college	Bronze Medal in Handball and silver in cricket
20	Shruti	Inter college	Bronze Medal in Handball and silver in cricket
21	Diksha	Inter college	Bronze Medal in Handball and silver in cricket

24. List of eminent academicians and scientists / visitors to the department

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National

S. No.	Event	Year	Source of funding
1	Workshop on Effective Document writing using LaTeX	2010	Self Financed
2	National conference on Modern Management Practices and Information Technology Trends	2009	Self Financed
3	National Conference on Futuristic Computing and Applications	2013	Self Financed, PTU
4	National Conference on Futuristic Computing and Applications	2014	Self Financed, PTU
5	National Conference on Futuristic Computing and Applications	2016	Self Financed, PTU

b) International

NIL

26. Student Profile Programme/Course:

Name of the Course/Programme	Applications Received	Selected	Enrolled		Pass%
			*M	*F	
B.Tech IT 3 Semester	68	68	43	25	
B.Tech IT 5 Semester	55	55	30	25	
B.Tech IT 7 Semester	68	68	37	31	

\*M = Male \*F = Female

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other states	% of students from abroad
B.Tech IT 3 Semester	91.1	8.8	NIL
B.Tech IT 5 Semester	87	12.7	NIL
B.Tech IT 7 Semester	92.6	7.3	NIL

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

Sr. No.	Name of Student	Branch/Batch	National and Competitive Examination
1.	Deeptanshu Goel	IT 3 <sup>rd</sup>	NDA
2.	Gursant Singh	IT 3 <sup>rd</sup>	NDA
3.	Karanpreet Singh	IT 7 <sup>th</sup>	CEH version 9
4.	Siddharth	IT 5 <sup>th</sup>	NCC

29. Student Progression

Student progression	Against % enrolled			
UG to PG				
PG to M.Phil	NIL			
PG to Ph.D.	NIL			
Ph. D. to Post Doctoral	NIL			
Employed • Campus Selection • Other than campus recruitment	Batch	Total No. of students placed	Campus Placement	Off campus placement
	2009	23/66	17	6
	2010	37/60	07	03
	2011	35/56	06	06
	2012	40/67	27	13
Entrepreneurship/Self-Employment	-----			

### 30. Details of Infrastructural Facilities

Trade	No of Title of books	No of books	National Journals		International Journals		E-Journals
IT	207	207	P/I	I	P/I	I	IEEE, Science direct

<b>a) Internet facilities for staff and students</b>	24*7
<b>b) Classrooms</b>	03 classrooms
<b>c) Laboratories</b>	Department of IT consist of Laboratories in total, namely, <ul style="list-style-type: none"> <li>• Project Lab</li> <li>• Programming Lab</li> <li>• Computer Networks Lab</li> </ul>

### 31. Number of students receiving financial assistance from college, university, government or other agencies

S. No.	Schemes Provided by College/ Other Agencies	Number of Students 2015	Number of Students 2014	Number of Students 2013	Number of Students 2012
1.	OBC Post Matric Scholarship (Punjab).	0	0	0	0
2.	PTU Fee waiver Scholarship	0	0	3	0
3.	SC Post Matric Scholarship (Punjab)	0	2	6	8
4.	SC Scholarship Bihar 2013-14	0	0	0	0
5.	Only Girl child.	0	0	0	0
6.	Miniority Scholarship	0	0	0	0
7.	Sita Ram and jindal	0	0	0	2
8.	Guru Harkishan educational Society	0	0	0	0
9.	J&K scholarship AICTE	0	0	0	0

**32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts**

<b>S. No.</b>	<b>Name &amp; Details</b>	<b>Expert Talk</b>	<b>Date from</b>	<b>Date To</b>
<b>1</b>	<b>Mr. Sunil Battu</b> Nvish Corporation Pvt. Ltd. Chandigarh	Web Development based on Software Engineering	18/10/2010	18/10/2010
<b>2</b>	<b>Dr. Dilip Kumar, Sr.</b> Design Engineer & Coordinator Academic & Consultancy Services Division, C-DAC, Mohali	Wireless Sensor Network: A Research Prospective	3rd June, 2014	3/6/ 2014
<b>3</b>	<b>Dr. B. Venkataraman,</b> Former Head, Analytical Chemistry Division, Bhabha Atomic Research Centre, Mumbai	Atomic Energy	25/1/12	25/1/12
<b>4</b>	<b>Dr. Sandeep Sood,</b> Assistant Professor-CSE, GNDU	Password based Authentication	16/6/11	16/6/11
<b>5</b>	<b>Mr. Chandan Puggal,</b> Software Engineer, Aricent Technologies, Gurgaon	Creating Data Communication modules using C under UNIX.	23/6/11	23/6/11
<b>6</b>	Mr. Ankit Wahi, Senior Project Manager, SmartData Enterprises, Mohali	Software Project management	28-03-2016	28/3/2016
<b>7</b>	Mr. Nitish Suri, Data Analyst, Accenture, Bangalore	System Application and products in data processing	28-03-2016	28/3/2016
<b>8</b>	Mr. Jagdeep Singh and Mr. Tejpal Singh, Netmax Technologies Chandigarh	Internet of Things	29-03-2016	29/3/2016
<b>9</b>	Mr. Vipin Mehra and Mr. Anup Sharma, O7 Services, Jalandhar	Cloud Computing and Domain Network System – DNS	30/3/2016	30/3/2016
<b>10</b>	Mr. Sanjeev Sharma and Mr. Mukesh Kumar, KITES, Jal.	Digital Marketing	30/3/2016	30/3/2016
<b>11</b>	Mr. Gurpreet Singh, GTB Computer Education, Jalandhar	Career Opportunities in IT sector	31/3/2016	31/3/2016
<b>12</b>	Ms. Sandhya, Kites Jalandhar	MongoDB	31/3/2016	31/3/2016

**33. Teaching methods adopted to improve student learning:**

- Interaction Learning
- Group Discussions



**34. Participation in Institutional Social Responsibility (ISR) and Extension Activities:**

**As per Annexure - II**

**35. SWOC analysis of the department and Future plans**

**STRENGTHS**

- Qualified Faculty & Staff
- Good Admission
- Improving Placement Record
- Strong Alumni Base
- Industry Oriented Syllabus
- Good Academic Record
- Students contribute in various software developments.
- Good Record in Extra Curricular activities.
- MOUs with Industry
- Holistic Environment in the department
- Industry Weeks
- E-Learning Program e.g. QEEE Program
- Backbone of Institute for IT support

**WEAKNESSES**

- No Patents or Research Center
- No Consultancy Work
- Less Research, No MHRD Projects
- Less Number of Labs
- Lesser Industry Collaboration
- Less Ph.D. Faculty
- No Industry Mentorship
- No Post Graduate Course

**OPPORTUNITIES**

- Start Up Projects
- IT based New PG Courses
- To strength Alumni Linkage

- Introduce online Research Journal
- Research funding from External Agencies
- Collaboration with International IT based School & Engineering Colleges
- Consultancy Work
- Technical Club of Students
- CSR initiative
- Training of Technical Support Staff
- Industry Backed / Sponsored Students Projects

### **CHALLENGES**

- To cope up with the advanced technologies.
- Lack of research funding due to private un-aided stature of the institute.

## Evaluative Report – Department of Mechanical Engineering

1. Name of the Department : **Mechanical Engineering**
2. Year of Establishment : **2003**
3. Name of Programmes / Courses offered : **B.Tech.**
4. Names of Interdisciplinary courses and the departments/units involved

Sr. No.	Name of the Course	Course Code	Department(s) Involved
1	HRM	PPE	Applied Sciences
2	Numerical Methods	BTME-604	Applied Sciences

5. Annual / semester / choice based credit system ( programme wise)  
**Semester/Choice Based Credit System**
6. Participation of the department in the courses offered by other departments

Sr. No.	Programme	Course	Department (s)
1.	Nil	Nil	Nil

7. Courses in collaboration with other universities, industries, foreign institutions, etc.

### **PLC , SCADA**

Courses	Universities	Industries	Foreign Institution
Industrial Automation	-	Softcon India Private Limited, New Delhi	-
MOOC Courses			

8. Details of courses / programmes discontinued (if any) with reasons

Sr. No.	Courses/Programme	Discontinue with reasons
Nil		

9. Number of Teaching posts

Posts	Sanctioned	Filled
Professors	01	0
Associate Professors	02	01
Assistant Professors	11	11

**10. Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt./ Ph.D./ M.Phil. etc.)**

Name	Qualification	Designation	Specialization	No. of Years of Exp.	No. of Ph.D. Students guided for the last 4 years
Mr. Gaurav Kumar Dhuria	M.Tech., Pursuing Ph.D.	Associate Professor	Advance Materials and Manufacturing Processes	15Years	NA
Dr. Sanjeev Saini	Ph.D.	Assistant Professor	Metal cutting, Manufacturing	21 Years	4 (Pursuing)
Mr. Pankaj Sadana	M.Tech, Pursuing Ph.D	Assistant Professor	Design Engg.	14	Nil
Mr. Ramandeep Singh Johal	M.Tech. Pursuing	Assistant Professor	Mechanical Engineering	12 Years	Nil
Dr. Devinder Priyadarshi	Ph.D.	Assistant Professor	Nano Composite Material	13 Years	NA
Mr. S.K.Uppal	M.Tech, Pursuing Ph.D.	Assistant Professor	Robotics And Automation	15 Years	Nil
Mr. Ankush Kohli	M.Tech, Pursuing Ph.D.	Assistant Professor	CAD/CAM	10 Years	Nil
Mr. Chetan Darshan	M.Tech, Pursuing Ph.D.	Assistant Professor	Machine Design	8 Years 3 Months	Nil
Mr. Aman Maini	M.Tech Pursuing Ph.D.	Assistant Professor	System Dynamics	13 Years	Nil
Mr. Gurveen Singh	M.Tech Pursuing Ph.D.	Assistant Professor	Manufacturing, Production Engg.	10 Years	Nil
Dr. Sheetal Soda	M.Tech Pursuing Ph.D.	Assistant Professor	Supply Chain Management	8 Years	Nil
Mr. Anuraag Sharma	B.Tech.	Adjunct Faculty	Thermal and I.C. Engines	15 Years Industry/1.5 Yrs. Teaching	NA

**11. List of Senior Visiting Faculty**

Sr. No.	Name of Visiting Faculty	Designation	Organization
1	Mr. Saurabh Solly Mehta	Managing Partner	M/s. Balsons Engineers, Jalandhar
2	Mr. Sarabjit Singh Asht	Chief Manager- QA	M/s. International Tractors Ltd. Hoshiarpur
3	Mr. Manjeet Singh	Partner in ITCO Drill	M/s. Indian Engg. Corp., Jalandhar

12. Percentage of lectures delivered and practical classes handled (programmed wise) by temporary faculty

Name	2016		2015		2014	
	Jan-May	July-Dec	Jan-May	July-Dec	Jan-May	July-Dec
Mr. Karan Vadhera	9 %		12.5 %		12 %	
Dr. Sheetal Soda	N/A	8.50%	10.25	10.25	10.30%	12.50%
Mr. Sandeep	N/A	N/A	N/A	N/A	10.50%	10.50
Ms. Rameshwar Cambow	N/A	N/A	N/A	12.30	N/A	N/A

13. Student-Teacher Ratio (programme wise)

16:1

Course	Year		
	2016	2015	2014
B.Tech	1/16	1/16	1/16

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

	Sanctioned	Filled
Technical	06	03
Workshop	07	04

Following are the details of Technical Staff:

S. No.	Name	Designation	Qualification		Exp.
			Diploma & Certification	Degree	
1	Mr. S. K Sharma	AIW	Three Years Diploma in Mechanical Engg.	AMIE	35 Years
2	Mr. Sunil Kumar	AIW	Three Years Diploma in Mechanical Engg., Post Diploma in Automobile Engg. and Advance Diploma in Industrial Engg.	B.Tech M.Tech	15 Years
3	Mr. Om Parkash Sharma	AIW	Three Years Diploma in Mechanical Engg.		23 Years
4	Mr. Rajesh Mehra	AIW	Three Years Diploma in Mechanical Engg.		16 Years
5	Mr. Balbir	Lab Technician	Three Years Diploma in Mechanical Engg.		19 Years
6	Mr. Pawan	Lab Technician	Three Years Diploma in Mechanical Engg.		12 Years
7	Mr. Ashwani	Asst. Lab Technician	Three Years Diploma in Mechanical Engg.		4 Years

15. Qualifications of teaching faculty with Dsc/ D.Litt/ Ph.D/ MPhil /PG.

Name	Qualification
Mr. Gaurav Kumar Dhuria	M.Tech.
Dr. Sanjeev Saini	Ph.D.
Mr. Pankaj Sadana	M.Tech, Pursuing Ph.D.
Dr. Davinder Priyadarshi	Ph.D
Mr. S.K. Sharma	M.Tech, Pursuing Ph.D.
Mr. Ankush Kohli	M.Tech, Pursuing Ph.D.
Mr. Chetan Darshan	M.Tech, Pursuing Ph.D.
Mr. Aman Maini	M.Tech, Pursuing Ph.D.
Mr. Gurveen Singh	M.Tech, Pursuing Ph.D.
Dr. Sheetal Soda	M.Tech, Ph.D.

16. Number of faculty with ongoing projects from

a) National

b) International funding agencies and grants received NIL

Sr. No.	Name	Funding Agency	National/Intl.	Grant Received	Year
Nil					

17. Departmental projects funded by DST-FIST;UGC,DBT,ICSSR, etc. and total grants received NIL

Sr. No.	Name	Funding Agency	National/Intl.	Grant Received	Year

18. Research Centre / facility recognized by the University

**Regional centre of IKG, PTU, Jalandhar, M.Tech Part time, Research work**

19. Publications: As per Annexure - I

20. Areas of Consultancy –

Sr. No.	Area of Consultancy	Income Generated	Year
1	Microhardness	7500/-	2014
2.	Microstructure Evaluation	1000/-	2014
3	CNC Training	7000/-	2014
4.	Surface Test	3125/-	2014
7.	Microhardness	3000/-	2015
8.	Microstructure Imaging	2500/-	2015

9.	Surface roughness	1000/-	2015
10.	Surface roughness	2000/-	2015
11.	Microstructure	17500/-	2015
12.	Microstructure	3000/-	2015
13.	Microstructure	1250/-	2016
14.	Microstructure	1500/-	2016
15.	Microstructure	5000+5000=10000/-	2016

## 21. Faculty as members in

- a) National Committees
- b) International Committees
- c) Editorial Boards...

Sr. No.	Name of Faculty	Name of Committee	National/ International	Capacity
1.	Mr. Gaurav Kumar Dhuria	Life membership of Indian Society for Technical Education	National	Member
2.	Dr. Sanjeev Saini	Life membership of Indian Society for Technical Education	National	Member
		Life membership of Punjab Academy of Sciences	International	Member
3.	Dr. Sheetal Soda	Life membership of Indian Society for Technical Education	National	Member

## 22. Student Projects

- a) Percentage of students who have done in-house projects including inter-departmental / programme
- b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/other agencies

Percentage of students who have done in-house projects including inter departmental / programme (7 <sup>th</sup> Sem. Major Project)			Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/ Industry/ other agencies (8 <sup>th</sup> Sem Industrial Training)		
2015	2014	2013	2016	2015	2014
100%	100%	100%	100%	100%	100%

## 23. Awards / Recognitions received by faculty and students:

### Faculty Awards:

Sr. No.	Name of the Person	Name of Award	Agency	Date/Year
1	Mr. Gaurav Dhuria	ISTE Best Teacher Award	ISTE Best Teacher Award for year 2015 in ISTE Section Faculty Covention-2014 (Punjab, Chandigarh, Himachal Pradesh and Jammu & Kashmir section)	2015
2	Dr. Sanjeev Saini	ISTE Best Teacher Award	ISTE Best Teacher Award for year 2014 in ISTE Section Faculty Covention-2014 (Punjab, Chandigarh, Himachal Pradesh and Jammu & Kashmir section)	2014

### Student Awards:

#### Academics

Sr. No.	Student Name	Organization	Year
1.	Mr. Karan Sharma	ISTE Best Student Award for year 2014 in ISTE Student Covention-2014 (Punjab, Chandigarh, Himachal Pradesh and Jammu & Kashmir section)	2014
2.	Mr. Kashish Goyal	ISTE Best Student Award for year 2016 in ISTE Student Covention-2016 (Punjab, Chandigarh, Himachal Pradesh and Jammu & Kashmir section)	2016

#### Cultural

Sr. No.	Name	Medal	Event	Session
1.	Barinderpreet Singh	Gold	IKG PTU- Vaar Singing	2015-16
2.	Gagandeep	Gold	IKG PTU -Singing	2015-16
3.	Barinder Preet Singh	Gold	IKG PTU - Group Shabad	2015-16
4.	Dixit Kalia	Gold	IKG PTU -One Act Play	2013-14
5.	Ashman	Gold	IKG PTU -Gidha	2013-14
6.	Gagandeep	Silver	IKG PTU -Group Song (Indian)	2013-14
7.	Barinder Preet Singh	Silver	IKG PTU- Group Song (Indian)	2013-14
8.	Amrinder Singh	Silver	IKG PTU -Vaar Singing	2013-14
9.	Arjun Singh	Silver	IKG PTU -Singing	2013-14
10.	Vikash Kumar	Silver	IKG PTU- Literary	2013-14



**Sports:**

Sr. No.	Name	Medal	Event	Session
1.	Arunit Mahajan	(Gold)	IKG PTU- Lawn Tennis	2013-14
2.	Akshay Marwaha	(Gold)	IKG PTU- Lawn Tennis	2013-14
3.	Simran Singh Chadha	(Gold)	IKG PTU- Cricket	2013-14
4.	Sumeet Bhardwaj	(Gold)	IKG PTU- Cricket	2013-14
5.	Opinderjit Singh Oscar	(Gold)	IKG PTU- Cricket	2013-14
6.	Arvind Roshan	(Gold)	IKG PTU- Cricket	2013-14
7.	Anurag Jindal	(Silver )	IKG PTU- Badminton	2013-14

**24. List of eminent academicians and scientists / visitors to the department.**

Sr. No.	Name	Organization	Year
1.	Dr. Sanjeev Kumar	Deptt. of Semiconductor Science, Dongguk Univ, Seoul	2016
2.	Capt. H S Randhawa Lt. Paras Kochher	Indian Army	2016
3.	Mr. Karthik Sundaraj	National Technical Manager and Head, ARK Infosolutions Pvt. Ltd.	2016
4.	Mr. Dinesh Chadha	Principal Process Engineer, petrofac International Ltd, Saudi Arabia	2016

**25. Seminars/ Conferences/ Workshops organized & the source of funding**

- a) National
- b) International

Sr. No.	Title of seminar/Conference/Workshop	National/Intl.	Funding Agency	Year
1	DAV National Congress – 2014	National	PTU	2014
2	DAV National Congress on STEHM 2016	National	PTU	2016

**26. Student profile programme / course wise:**

Name of the Course/programme (refer question no.4)	Applications Received	Selected	Enrolled		Pass Percentage
			*M	*F	
B. Tech (ME- 2013)	Applications are received via PTU	68	67	1	
B. Tech (ME- 2014)		71	71	0	
B. Tech (ME- 2015)		62	62	0	
B. Tech (ME- 2016)		62	62	0	

\*M = Male \*F = Female

27. Diversity of Students

Name of the Course	% of students from the same state			% of students from other states			% of students from abroad		
	2015	2014	2013	2015	2014	2013	2015	2014	2013
B.Tech	87%	85%	86%	13%	15%	13%	----	-----	----

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil Services, Defense services, etc.?

Name of the Course	Gate			Defence Services		
	2016	2015	2014	2016	2015	2014
B.Tech	-	5	5	-	-	-

29. Student Progression

Student Progression	Against % enrolled
	2016
UG to PG	8%
PG to M. Phil.	NA
PG to Ph.D.	NA
Ph. D to Post-Doctoral	NA
Employed	Year 2016
Campus selection	25
Other than campus recruitment	
Entrepreneurship / Self-employment	

30. Details of Infrastructural facilities

a) Library

	Area	No. of Books
Department Library	Inside the staff room (16*16) sq.ft	150

b) Internet facilities for Staff & Students

	Specifications	Area
Internet facility	WLAN Connectivity	(26*54) sq.ft PG Block & Core Block

c) Class rooms with ICT facility

Class Rooms	ICT Facility	Area
Room 22	Projector 1	875 sq feet

**d) Laboratories**

**i) EMM Laboratory**

<b>Sr. No.</b>	<b>Description</b>
1	Metallurgical polishing machine
2	Metallurgical Linsher polishing Belt
3	Heat Treatment Furnace with pool Chamber
4	Inclned Metallurgical Microscope
5	Poldi Hardness tester
6	Abrasive Disc cutt-off machine
7	Abrasive wear test machine Attachments = (DC motor panel, DC gear Joint)
8	Digital camera
9	Submersibal pump ( Fitted with Jominy End Quench Test Apparatus)
10	Sterlized Box

**ii) SOM Laboratory**

<b>Sr. No.</b>	<b>Description</b>
1	Universal Testing Machine
2	Torsion Testing Machine
3	Izord/ Charpy Testing Macine
4	Rockwel And Brinell Hardness Testing Machine
5	Fatigue Testing Machine

**iii) AT Laboratory**

<b>Sr. No.</b>	<b>Description</b>
1	Centrifugual Blower Test Rig
2	Axial Flow Fan Test Rig
3	1 Cylnder 4 Stroke Petrol Engine
4	1 Cylnder 4 Stroke Diesel Engine
5	Exhaust Gas Calorimeter
6	Cut Sectional Model 4- stroke Petrol Engine
7	Cut Sectional Model 4- stroke Diesel Engine
8	Cut Sectional 2-Stroke Petrol Engine
9	Seprating & Throtlling Calorimeter
10	Carburettor (Solax Type) (Model)
11	Carburettor (Carter Type)(Model)
12	Air Compressor
13	Water Tube Boiler (Model)

<b>14</b>	Lancashire (Model)
<b>15</b>	Locomotive Boiler (Model)
<b>16</b>	Multi Cylinder 4-Stroke Petrol Engine
<b>17</b>	Gypsy Engine
<b>18</b>	Battery Charger
<b>19</b>	Battery

**iv) FM Laboratory**

<b>Sr. No.</b>	<b>Description</b>
<b>1</b>	Appratus For Verification Bernollies
<b>2</b>	Flow Measurment Apparatus (Venturimeter & Orificemeter)
<b>3</b>	Orifice Appratus
<b>4</b>	Notch Appratus
<b>5</b>	Pitot Tube Appratus
<b>6</b>	Reynold's Appratus
<b>7</b>	Pipe Friction Apparatus
<b>8</b>	Appratus for head loss (Minnor Losses)
<b>9</b>	Metacentric height apparatus
<b>10</b>	Open end Spanner
<b>11</b>	Measuring Tape
<b>12</b>	Plier
<b>13</b>	Screw Driver

**v) TOM Laboratory**

<b>Sr. No.</b>	<b>Description</b>
<b>1</b>	Epicyclic gear train Apparatus
<b>2</b>	Journal Bearing Appratus
<b>3</b>	Universal Governer Apparatus
<b>4</b>	CAM analysis Apparatus
<b>5</b>	Whirling of Shaft
<b>6</b>	Motorised Gyroscope Apparatus
<b>7</b>	Balancing of Rotating masses
<b>8</b>	Digital tachometer
<b>9</b>	Digital Stroboscope
<b>10</b>	Models - Compound Gear

**vi) MMM Laboratory**

<b>Sr. No.</b>	<b>Description</b>
1	Depth Measuring (0500083)
2	Outside Micrometer (125-101)
3	Outside Micrometer (103-913-30)
4	Adaptor (12AAA222)
5	Digimatic Micrometer Hhead(164-162)
6	Measuring Microscope TM-505(176-811E)
7	Setting Ring(177-139)
8	Surface Roughness Tester SJ-301
9	Thickness Gauge (.5 to 1mm)
10	Raduis Gauges (186-902)
11	Bevel Protractor (187-907)
12	Pitch Guages(188-111&188-130)
13	Digimatic Height Guage(162-630)
14	Dial Indicator(2044S)
15	Digimatic Micrometer(293-340)
16	Profile Projector PJ-A3010F-100
17	3-wire unit (313-101)
18	Digimatic caliper (500-171-20)
19	Dial Caliper(505-680)
20	Bore Guage Set(511-901)
21	Vernier Height Guage (514-105)
22	Rectangle Guage Block(516-947P-10)
23	Vernier Caliper, 0-200mm (532-120)
24	Vernier Caliper, 0-300(532-121)
25	Gauge Block (611675-041)
26	Magnetic Stand (70103-10)
27	Bench Center (967-201)
28	Charts
29	Connecting Cable
30	Granite Surface Plate

**vii) IAR laboratory**

<b>Sr. No.</b>	<b>Description</b>
1	Customized Hydraulic Kit
2	Text Books
3	Software (FSP3.61en FSH3.61en)
4	Electropneumatic Trainer kitwith PLC
5	Junair Compressor

<b>6</b>	Electropneumatic SupplimetryTrainer Kit
<b>7</b>	Basic Level Pneumatic Kit
<b>8</b>	Poster
<b>9</b>	Projector
<b>10</b>	Technasystem Embedded Software

**viii) CAD Laboratory**

<b>Sr. No.</b>	<b>Description</b>
<b>1</b>	SOFTWARE PRO
<b>2</b>	Solid Works Software
<b>3</b>	PC
<b>4</b>	Printer and Scanner
<b>5</b>	UPS
<b>6</b>	Wireless adaptor UPS
<b>7</b>	Networking equipments
<b>8</b>	Projector
<b>9</b>	Printer (HP Laser jet-P1108)

**ix) AE Laboratory**

<b>Sr. No.</b>	<b>Description</b>
<b>1</b>	Cut Sectional Syncromesh Gear box
<b>2</b>	Cut Sectional Automatic Gear box
<b>3</b>	Cut Sectional Rear Axle
<b>4</b>	Cut Sectional 4-Stroke 4-Cyllinder petrol engine
<b>5</b>	Model of Plate Cluch
<b>6</b>	Model of Piston with Rings
<b>7</b>	Model of Water Cooling System
<b>8</b>	Model of Forced Air Cooling System
<b>9</b>	Mechanical Brake Unit
<b>10</b>	Diffrential of Maruti Omni
<b>11</b>	Electrical Equipment Board
<b>12</b>	Steearing Mechanism Test Rig
<b>13</b>	Hydroulic Brake Unit
<b>14</b>	Engine Head with Valve Arrangement
<b>15</b>	Crank Shaft
<b>16</b>	Frictional Plate of Clutch
<b>17</b>	Torque Wrench

18	Open Set Spanner Set
19	Bi - Hexagonal Spanner Set
20	Allen Key Set
21	Adjustable Spanner
22	Screw Driver Kit
23	Plier
24	Bearing Puller
25	Grease Flexible Gun
26	Cross Wrench
27	Pneumatic Gun
28	Heavy Duty Wrench
29	Hydraulic Jack
30	Air Gun
31	Pressure Gauge
32	Bench Vice
33	Socket Wrench Set
34	Motor Cycle
35	Multi Plate clutch
36	Model of Battery Ignition System
37	Model of Magnetic Ignition System

**x) HT Laboratory**

<b>Sr. No.</b>	<b>Description</b>
1	Thermal condu. of Insulating Slab Apparatus
2	Thermal condu. of Insulating Powder apparatus
3	Thermal condu. of Metal Rod Apparatus
4	Thermal conductivity of Liquid Apparatus
5	Heat transfer in natural convection Apparatus
6	Heat transfer from pin-fin Apparatus
7	Heat transfer from fluidized Bed Apparatus
8	Dropwise and Filmwise condensation Apparatus
9	Stefan boltzman Apparatus
10	Heat pipe Demonstrator Apparatus
11	Submersible Pump
12	Plastic Crate (Tub)

**xi) Fluid Machinery Laboratory**

<b>Sr. No.</b>	<b>Description</b>
1	Centrifugal Pump Test Rig.
2	Display Board
3	Francis Turbine
4	Ram Test Hydraulic
5	Kaplan Turbine
6	Pelton Wheel Turbine
7	Reciprocating Pump Test Rig

**xii) RAC Laboratory**

<b>Sr. No.</b>	<b>Description</b>
1	Air Conditioning Test Rig
2	Ice Plant Test Rig
3	Electrolux Refrigerator
4	Domestic Test Rig
5	Component Board
6	Cut Section Model

**xiii) MV LAB**

<b>Sr. No.</b>	<b>Description</b>
1	Universal Vibration Apparatus

**xiv) Manufacturing Process Lab-2**

<b>Sr. No.</b>	<b>Description</b>
1	Lathe Machines
2	Shapper
3	Milling
4	Drilling
5	Surface Grinding
6	Bench Grinder
7	CNC
8	MIG Welding
9	TIG Welding
10	SPOT Welding
11	ARC Welding
12	GAS Welding



31. Number of students receiving financial assistance from college, university, Government or other agencies

Scholarship	Year		
	2014-2015	2013-2014	2012-2013
Post – Matric Scholarship for SC	13	13	9
Sita Ram & Jindal Scholarship	0	3	0
PTU Freeship Scheme	0	0	1
Minority Scholarship	2	3	2
J&K Scholarship	0	0	0
Guru Harkrishan Educational Society scholarship	3	2	0

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

Sr. No.	Year	Special lecture/ workshop/ seminar Workshop on
1	2016	<ul style="list-style-type: none"> <li>• Dr. Sanjeev Kumar Sharma, Asst. Prof. Deptt. of Semiconductor Science, Dongguk Univ, Seoul</li> <li>• Mr. Karthik Sundaraj, National technical Manager and Head, ARK Infosolutions Pvt. Ltd</li> <li>• Mr. Dinesh Chadha, Principal Process Engineer, Petrofac International Ltd, Saudi Arabia</li> </ul>
*2	2015	<ul style="list-style-type: none"> <li>• Mr. A. K. Goswami, Retd. AGM, Ordnance Factory, Jabalpur</li> </ul>
3	2014	<ul style="list-style-type: none"> <li>• Mechatronics Workshop by Er. Anil From Prolific Pvt Ltd</li> </ul>
4.	2013	<ul style="list-style-type: none"> <li>• Robotics Workshop by Prof. K.S Nagla From NIT Jalandhar</li> </ul>

33. Teaching methods adopted to improve student learning

- a) Use of MOOCs /NPTEL by faculty
- b) Participative learning
- c) Use of power point presentation.
- d) Use of physical models to augment visualization.

### **34. Participation in Institutional Social Responsibility (ISR) and Extension activities**

**As per Annexure – II**

### **35. SWOC Analysis**

The following analysis was done:

#### **STRENGTHS**

- Well qualified, experienced & research oriented faculty.
- Good connection with Alumni.
- Focus on overall student development as is evident from outstanding track record in academics, extra and co-curricular achievements.
- Interpersonal cordial atmosphere among the faculty/staff members.
- Inclination towards use of advance teaching technologies such as MOOCs and Power point presentations.
- Consistent merit positions in University examinations by the students
- Excellent faculty retention.
- Graduates opt for higher education in India as well as overseas.
- Employability Skill Training (EST/ Mock Placement Drive/PDP Sessions).
- Focus on practical work.
- Frequent industrial visits by the students as well as lectures by eminent industry people for the awareness regarding the new technologies used by industry.
- Students' participation in technical activities through departmental clubs.
- Financial Assistance to the students for paper presentation in India and Abroad and for carrying out research projects.
- Faculty patents.

#### **WEAKNESSES**

- Less local industry collaboration with institute.
- Placements in core companies are lower in number.
- Lack of research funding & policies from Government.
- Not Accredited by NBA.
- Less number of research facilities within department.
- Fewer Industrial Consultancy assignments.

## **OPPORTUNITIES**

- Adequate opportunities available for placement of students in public, private & IT sector.
- Improvement of teaching learning process by introducing project based learning.
- Can provide consultancy services to industry especially in manufacturing domain.
- International recruitments/ Training.
- Interdisciplinary course development.
- To strengthen the core placement in the department through Alumni Network.
- NBA Accreditation.
- Incorporation of PG courses.
- Bigger role under CSR/ ISR.

## **CHALLENGES**

- To sustain the alumni network and increase their involvement through frequent guest lectures.
- To increase the number of students clearing GATE/related exams for recruitment in public sector exams.
- To catch up the interest of the students for entrepreneurship and start-ups.
- To keep pace with rapid advances in the technology and disseminate the same to students during their course curricula.
- To transfer technology from academia to industry.
- To enhance placements in core companies.
- To get sponsored projects in the department.

## Evaluative Report – Department of Civil Engineering

1. Name of the Department : **Civil Engineering**
2. Year of Establishment : **2003**
3. Programmes / Courses offered : **B.Tech.**  
**M.Tech.**
4. Names of Interdisciplinary courses and the departments/units involved

Sr. No.	Course	Course Code	Department(s) Involved
1	Engineering Mathematics III	BTAM-301	Applied Sciences
2	Numerical Methods in Civil Engineering	BTCE-604	Applied Sciences

5. Annual / semester / choice based credit system ( programme wise)

### Semester/Choice Based Credit System

6. Participation of the department in the courses offered by other departments

Sr. No.	Programme	Course	Department (s)
Nil			

7. Courses in collaboration with other universities, industries, foreign institutions, etc.

**Nil**

8. Details of courses / programmes discontinued (if any) with reasons

**Nil**

9. Number of Teaching posts

Posts	Sanctioned	Filled
Professors	01	0
Associate Professors	02	01
Assistant Professors	07	07

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt./ Ph.D./ M.Phil. etc.)

Name	Qual.	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr Sanjeev Naval	Ph.D.	Associate Professor & HOD	Geotechnical Engineering	20 Years	5 ( Pursuing)

Dr. Sanjay Goel	Ph.D.	Assistant Professor	Structural Engineering	13 Years	2 (Pursuing)
Mr .Manpreet Singh Bedi	Ph.D. Pursuing	Assistant Professor	Environmental Engineering	12.5 Years	NA
Dr. M K Kaushik	Ph.D.	Assistant Professor	Environmental Engineering	12.5 Years	NA
Ms. Sonia Chutani	Ph.D. Pursuing	Assistant Professor	Structural Engineering	16 Years	NA
Mr. Manish Bhutani	Ph.D. Pursuing	Assistant Professor	Geotechnical Engineering	10 Years	NA
Mr. Jhala Sudhir Kumar	M.Tech.	Assistant Professor	Geotechnical Engineering	12 years	NA
Mr. Gobind Khurana	M.Tech.	Assistant Professor	Structural Engineering	6.5 years	NA

**11. List of senior visiting faculty**

S. No.	Name of Visiting Faculty	Designation	Organization
1	Dr. P.K. Aggarwal	Ret. Xen	Govt. Professor
2	Mr. Balwinder Singh	Executive Engineer	Punjab Mandi Board
3	Mr. Gurinder Singh	Xen	Punjab Mandi Boad

**12. Percentage of lectures delivered and practical classes handled (programmed wise) by temporary faculty**

Name	2016-2017	
	Jan-May	July - December
Mr. Bhavesh Jha	NA	15%

**13. Student-Teacher Ratio (programme wise)**

B. Tech (CE) = 20:1

M. Tech (CE) = 4:1

Course	Year		
	2016	2015	2014
B.Tech	1/19	1/19	1/20
M.Tech	4/1	4/1	N/A

**14. Number of academic support staff (technical) and administrative staff; sanctioned and filled**

	Sanctioned	Filled
<b>Technical</b>	02	02
<b>Administrative</b>		

**Following are the details of Technical Staff:**

Sr. No.	Name	Designation	Qualification		Exp.
			Diploma & Certification	Degree	
1	Mr. Harvinder Kumar	Lab Technician	Three Years Diploma in Civil Engg.	NA	22 Years
2	Mr. Vinay Prashar	Lab Technician	Three Years Diploma in Civil Engg.	NA	20 Years

**List of Administrative staff:**

Sr. No.	Name	Designation	Department/Section	UG	PG
1.	Ms. Jasdeep Kaur	Clerk	CE	Diploma	

15. Qualifications of teaching faculty with Dsc/ D.Litt/ Ph.D/ MPhil /PG.

**Same as Sr. No.10**

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

**Nil**

17. Departmental projects funded by DST-FIST;UGC,DBT,ICSSR, etc. and total grants received

**Nil**

18. Research Centre / facility recognized by the University

**Regional centre of IKG, PTU, Jalandhar, M.Tech Part time.**

19. Publications: **As per Annexure – I**

20. Areas of Consultancy

Sr. No.	Area of Consultancy	Income Generated	Year
Total of Rs.3.75 lacs generated through consultancy services in the field of building Material Testing since 2008.			

21. Faculty as members in

a) National Committees b) International Committees c) Editorial Board

Sr. No.	Name of Faculty	Name of Committee	National/ International	Capacity
1	Dr. Sanjeev Naval	American society for civil Engineer	International	Member
		Ethiopian society for Civil Engineer	International	Member
		Indian Geo Technical Society	National	Member
		Member of Board of studies of Civil Engineering at IKGPTU	University	Member
		Punjab Science Congress	National	Member
2	Dr. Sanjay Goel	Punjab Science Congress	National	Member
3	Dr. M K Kaushik	Punjab Science Congress	National	Member
4	Ms. Sonia Chutani	Punjab Science Congress	National	Member

22. Student Projects

a) Percentage of students who have done in-house projects including inter departmental / programme

b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/ Industry/other agencies

Percentage of students who have done in-house projects including inter departmental / programme			Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/ Industry/ other agencies		
2016	2015	2014	2016	2015	2014
100%	100%	100%	100%	100%	100%

23. Awards / Recognitions received by faculty and students:

**Faculty Awards:**

Sr. No.	Name	Name of Award	Agency	Date/Year
1.	Dr. Sanjeev Naval	Geotechnical Achievement	NITTR	2014
2.	Dr. Sanjay Goel	Best Ph.D. thesis and Young Scientist Award	ICI	2014
3.	Dr. M K Kaushik	Best Teacher Award	ISTE	2015

**Student Awards:**

**Academics:**

1.	Nitish Gupta	2 <sup>nd</sup> Prize in Project Presentation	Pushpa Gujral Science City, Jal.	2014
2.	Karan Chawla	2 <sup>nd</sup> Prize in Project Presentation	Pushpa Gujral Science City, Jal.	2014
3.	Nitish Gupta	ISTE best student award	ISTE	2014

**Sports:**

1.	Kanwarpreet Singh	Gold	PTU-Cricket	2014
2.	Chirag Bhasin	Gold	PTU-Cricket	2014
3.	Aashish Jamuwal	Gold	PTU-Cricket	2014
4.	Lakshay Khosla	Gold	PTU-Cricket	2014
5.	Naresh Kumar	Gold	PTU-Cricket	2014
6.	Anikeit	Gold	PTU-Cricket	2014
7.	Mohit Chugh	Gold	PTU-Badminton	2015
8.	Mannar Puggal	Gold	PTU-Badminton	2015
9.	Tanmay	Gold	PTU-Badminton	2015
10.	Prabhnoor Kaur	Gold	PTU-Badminton	2015
11.	Abhishek	Silver	PTU-Cricket	2015
12.	Chirag Bhasin	Silver	PTU-Cricket	2015
13.	Mohit Chugh	Gold	PTU-Badminton	2016
14.	Mannar Puggal	Gold	PTU-Badminton	2016
15.	Prabhnoor Kaur	Gold	PTU-Badminton	2016
16.	Somaksh Bhatia	Gold	PTU-Chess	2016
17.	Vikrant Thapar	Gold	PTU-Chess	2016
18.	Saurabh Aeron	Gold	PTU-Chess	2016
19.	Vaibhav Rampal	Gold	PTU-Table Tennis	2016
20.	Dhruv Anand	Gold	PTU-Table Tennis	2016
21.	Madhuri Kumari	Silver	PTU-Cricket	2016

**Cultural:**

1.	Samar Sidhu	Bronze	PTU Bhangra (Zonal)	2016
2.	Ravneet Singh	Gold	PTU Group Song (Zonal)	2016
3.	Ravneet Singh	Gold	PTU Group Bhajan (Zonal)	2016
4.	Ravneet Singh	Gold	PTU Non Percussion (Zonal)	2016
5.	Ravneet Singh	Gold	PTU Classical Vocal(Zonal)	2016
6.	Ravneet Singh	Gold	PTU Group Song (Interzonal)	2016
7.	Ravneet Singh	Gold	PTU Group Bhajan (Interzonal)	2016
8.	Ravneet Singh	Bronze	PTU Non Percussion (Interzonal)	2016
9.	Ravneet Singh	Gold	PTU Classical Vocal (Interzonal)	2016
10.	Brahmjot Kaur	Gold	PTU Giddha (Zonal)	2016
11.	Arpit Bhagat	Silver	PTU Bhangra (Zonal)	2015
12.	Arpit Bhagat	Silver	PTU Bhangra (Interzonal)	2015
13.	Tejbir Singh	Silver	PTU Bhangra (Zonal)	2015
14.	Tejbir Singh	Silver	PTU Bhangra (Interzonal)	2015
15.	Navroz Singh Atwal	Silver	PTU Bhangra (Zonal)	2015
16.	Navroz Singh Atwal	Silver	PTU Bhangra (Interzonal)	2015
17.	Samar Sidhu	Silver	PTU Bhangra (Zonal)	2015
18.	Samar Sidhu	Silver	PTU Bhangra (Interzonal)	2015
19.	Ravneet Singh	Gold	PTU Non Percussion (Zonal)	2015



20.	Ravneet Singh	Gold	PTU Classical Vocal (Zonal)	2015
21.	Ravneet Singh	Gold	PTU Non Pradashan (Interzonal)	2015
22.	Ravneet Singh	Silver	PTU Classical Vocal (Interzonal)	2015
23.	Ravneet Singh	Gold	PTU Group Song (Zonal)	2014
24.	Ravneet Singh	Gold	PTU Group Bhajan (Zonal)	2014
25.	Ravneet Singh	Gold	PTU Non Pradashan	2014
26.	Ravneet Singh	Silver	PTU Gazal Event(Zonal)	2014
27.	Ravneet Singh	Gold	PTU Non Pradashan (Interzonal)	2014
28.	Ravneet Singh	Gold	PTU Group Bhajan (Interzonal)	2014
29.	Ravneet Singh	Silver	PTU Group Song (Interzonal)	2014

24. List of eminent academicians and scientists / visitors to the department.

Sr. No.	Name	Organization	Designation	Year
1	Dr. S.K Kaushik	IIT Roorkee	Former Director	2014
2	Dr. Sanjeev Aggarwal	Maharaja Ranjit Singh State Technical University	Professor	2014
3	Dr. B S Walia	GNDEC, Ludhiana	Professor	2014-2016
4	Dr. Manjeet Bansal	Maharaja Ranjit Singh State Technical University	Professor	2016
5	Dr. Ravi Ranade	B.C.E.T. Gurdaspur	Principal	2015

25. Seminars/ Conferences/ Workshops organized & the source of funding

- a) National
- b) International

Sr. No.	Title of Seminar/Conference/ Workshop	National/Intl.	Funding Agency	Year
1	DAV National Congress – 2014	National	PTU	2014
2	DAV National Congress on STEHM 2016	National	PTU	2016

26. Student profile programme/ course wise:

Name of the Course/programme (refer question no.4)	Applications Received	Selected	Enrolled		Pass Percentage
			*M	*F	
B.Tech (CE- 2014)	Applications are received via PTU	72	62	8	77.14%
B.Tech (CE- 2015)		77	75	2	32.44%
B.Tech (CE- 2016)		61	56	5	Cont.....
M.Tech (CE- 2014)		2	1	1	Cont.....
M.Tech (CE- 2015)		5	4	1	Cont.....
M.Tech (CE- 2016)		2	2	0	Cont.....

\*M = Male \*F = Female

27. Diversity of Students

Name of the Course	% of students from the same state			% of students from other states			% of students from abroad		
	2016	2015	2014	2016	2015	2014	2016	2015	2014
B. Tech	62.93%	87%	84.28%	37.07%	13 %	15.71%	nil	nil	nil
M. Tech	2	2	1	Nil	3	1	nil	nil	nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil Services, Defense services, etc.?

Name of the Course	GATE		
	2016	2015	2014
B.Tech	10	11	11

29. Student Progression

Student Progression	Against % enrolled
	2016
UG to PG	8%
PG to M.Phil.	Nil
PG to Ph.D.	3
Ph.D to Post-Doctoral	nil
Employed	Year 2016
Campus selection	6%
Other than campus recruitment	70%
Entrepreneurship/Self-employment	8%

30. Details of Infrastructural facilities

a) **Library**

	<b>Area</b>	<b>No. of Books</b>
Department Library	Inside the staff room (225 sq.ft)	112

b) **Internet facilities for Staff & Students**

	<b>Specifications</b>	<b>Area</b>
Internet facility	Science Direct	PG Block & Core Block

c) **Class rooms with ICT facility**

	<b>ICT facility</b>	<b>Area</b>
Class rooms Room 24, 25, 30, 31	Projector 02	875 Feet each

d) **Laboratories**

1. **Geotechnical Laboratory**

<b>Sr. No.</b>	<b>Description</b>
1	Core Cutter Appartus
2	Sand Replace Appartus
3	Digital Direct Shear Test Appartus
4	Automatic Soil Compactor Light & Heavy Compection
5	Compaction Mould (Light)
6	Compaction Mould (Heavy)
7	Heavy Compaction Rammer
8	Light Compaction Rammer
9	Speedy Moister Meter
10	Pocket Pentrometer
11	Proctor Pentrometer
12	Automatic Cone Pentrometer
13	Is Sieves Brass 20cm Dia (2mm,1mm 212mic,850 Mic,600 Mic,425 Mic,300 Mic, 150 Mic, 75 Mic, PAN & LID
14	IS SIEVES GI 30CM DIA 80mm, 40mm, 20mm, 12.5mm, 10mm, 4.75mm,Pan & Lid
15	Laboratory Oven 50°To 250°C & Ss Inside Size

	450×600×450
16	Pycnometer
17	Electronic Balance 6kg Accuracy 0.5 Gm
18	PAN Balance 20KG Accuracy 1.0gm Weight set
19	Measuring Cylinder 100ml
20	Measuring Cylinder 250ml
21	Measuring Cylinder 500ml
22	Measuring Cylinder 1000ml
23	Steel Spatula 150mm Blade
24	Casagrande Appartus
25	Digital Triaxial Shear Test Appartus (50 Kn)
26	Unconfined Pressure Testing Mach.
27	Universal Permeability Appartus
28	Relative Density Appartus
29	Electronic Consolidometer Test (Front Loading )
30	Standerd Penetration Test
31	Plastic Limit Appartus
32	Shrinkage Limit Appartus
33	Sieve Shaker Motorize
34	Polcarbonated Graduted Beakers 50ml
35	100ml
36	250ml
37	500ml
38	1000ml
39	Desicators Vaccuam Type Dia (200mm)
40	Sample Trays 650×500×50mm
41	Sample Trays 450×300×40mm
42	Sample Trays 200×150×30mm
43	Weighing Bottels 20ml
44	Weighing Bottels 60ml
45	Digital Stop Watch 1/10 Sec.
46	Digital Thermometer 50°To 280°C
47	Auger Outfit Posthole Type 50mm
48	Auger Outfit Posthole Type 100mm
49	Auger Outfit Posthole Type 150mm
50	Eletrical Water Bath With Heating
51	Software For Direct Shear
52	Software For Trixial Shear
53	Computer Machine With Printer
54	Pycnometer
55	Plate Load Steel Structure Made Of 200mm Girderwith Plates

	Angle Iron Square=320kg Steel Extension =100 Kg Aclaric Sheet =1 Pc.
56	Hydrolic Jack 250kn With Load Gauge & Hand Pump Hydrolic Jack 250kn Capisty Having Least A/C 1 Kn Piston Dia 78.6 Mm &Pistontravel 150mm High Pressure Flaxible Hose Pipe 2m Long
57	Settlement Load Testing Machine 25 Kn Cap. Load Frame,Hand Oprated 4 Piller Type Suitable To Accomdate Tank Of Size 830×680×630mm High =1 Supply Tank =1 Digital Indicator With 25 Kn Load Cell & 0 To 10mm Lvdt =1
58	Nuclear Density Gauge With Radition Survey Meter
59	Traval
60	Pipe Wrench
61	Plier
62	Screw Driver Set
63	Plastic Hammer
64	Tray
65	Spanner Set
66	L-Key Set
67	Wooden Hammer
68	Hammer
69	Elertronic Balance (30 Kg)
70	Trays (2'*2')

2.

### Environmental Laboratory

Sr. No.	Description
1	Water Distillation Assembly
2	Electronic Balance
3	Muffle Furnance With Controller
4	Trubidity Meter
5	Ph Meter
6	Dissolved Oxygen (D.O.) Meter
7	Biological Oxygen Demand (Bod) Incubator
8	Magnetic Stirrer Cum Hot Plate
9	Hot Air Oven
10	Spectrophotometer (Uv/Visible)
11	Laboratary Scale Cylindrical Pipe Permameter

### 3. Survey Laboratory

<b>Sr. No.</b>	<b>Description</b>	<b>Quantity</b>
1	Electronic Theodolite	01
2	Telescopic Alidade	06
3	Offset Rods(2m)	12
4	Survey Chain (20m)	06
5	Survey Chain (30m)	06
6	Arrows (12)	50
7	Gunter Chain	01
8	Ranging Rods	30
9	Prismatic Compass	06
10	Survey Compass	01
11	Dumpy Level 175mm	04
12	Dumpy Level 225mm	02
13	Tilting Level (175mm)	01
14	Tilting Level (225mm)	01
15	Cross Staff (Open Type)	05
16	French Cross Staff	01
17	Prism Square	01
18	Optical Square	05
19	Vernier Transit Theodolite (20'')	05
20	Vernier Transit Theodolite (20'')	03
21	Vernier Transit Theodolite (10'')	01
22	Plane Table Set	06
23	Auto Level	01
24	Auto Level (Sokkia)	01
25	Levelling Staff(3m)	06
26	Levelling Staff(4m)	06
27	Box Sextant	01
28	Hand Level	01
29	Tangent Clinometer	06
30	Abney Level	01
31	Planimeter	01
32	Cyclone Ghatrarer	01
33	Survey Umbrella	01
34	Garden Umbrella	02
35	Measuring Tapes (15m)	04
36	Measuring Tapes (30m)	04
37	Wooden Pegs	65
38	Drawing Board (1000×700mm)	10

39	Drawing Board	10
40	Auto Level	03
41	Plane Table Set	03
42	Prismatic Compass	04
43	Levelling Staff(4m)	04
44	Ranging Rods	25
45	Total Station	01
46	Triangulation Signals	08
47	Trunk	02
48	Suvey Umbrella	05
49	Ranging Rods (2m)	03
50	Ranging Rods (2m)	02
51	Total Station Trimble M3 Wiyh Accessories. Prism Reflector Tilttable Large 2.5', Graduated Telescope Range Pole Wooden Tripod With Dual Clamp	02
52	Gps Junu 3 B Handed Wiyh Terrasync Professional Software	02

#### 4. Concrete Laboratory

Sr. No.	Description
1	Compression Testing Machine (Digital)
2	Flexural Machine Motorized
3	Cube Mould (70.6mm×70.6mm×70.6mm)
4	Cylindrical Moulds (100mmdia×200mmhigh)
5	Cylindrical Moulds(150mmdia×300mmhigh)
6	Beam Moulds (100mm×100mm×500mm)
7	Needle Vibrator
8	Concrete Laboratory Mixer
9	Crucibles (Metal)
10	Gauging Trowel (200mm Long)
11	Gauging Trowel (150mm Long)
12	Specific Gravity Bottle (50ml.)
13	Specific Gravity Bottle (100ml.)
14	Standard Le Chatelier Flask
15	Weighing Bottle With Stopper (60ml.)
16	Standard Spatula(Hc 40.25)
17	Measuring Cylinder Glass (Capacity 50ml.)
18	Measuring Cylinder Glass (Capacity 100ml.)
19	Measuring Cylinder Glass (Capacity 500ml.)

20	Measuring Cylinder Glass (Capacity 1000ml.)
21	Hot Air Oven (Hc 100.205)
22	Vicat Appartus (37.05)
23	Complete Set Of Lee Chatelier Apparatus And Le Chatelier Moulds(Hc 38.05) (12 Pc.)
24	Cast Iron Cube Moulds (Hc 42.25) (150mm×150mm×150mm)
25	Cast Iron Beam Moulds (Hc 42.55) (150mm×150mm×700mm)
26	Cast Iron Cube Moulds(Hc 42.20) (100mm×100mm×100mm)
27	Tamping Rod (16mmdia,600mm Long)
28	Tamping Rod (25mm×25mm×400mm )
29	Capping Set (Vertical) Hc 42.105 100mm Dia
30	Capping Set (Vertical) Hc 42.105 150mm Dia
31	Mild Steel Tray (18"×12"×2")
32	Mild Steel Tray (12"×10"×1.5")
33	Mild Steel Tray (36"×24"×4")
34	Pycnometer (500ml. Capacity)
35	Pycnometer (1000ml. Capacity)
36	Eletronic Weighing Balance (Capacity 600 Gms)
37	Stop Watch (1/10 Sec.)
38	Pan Balance(Scale Type With Weights)
39	Metal Scoop (1/2 Kg.)
40	Vibrating Table
41	Platform Balance(With Weights)
42	Metal Measures(10ltrs. & 20ltrs.)
43	Cylindrical Measures(3ltrs, 15ltrs., 30ltrs.)
44	Density Basket
45	Standard Test Sieves (200mm DIA Brass Frame) Forfine Material(4.75mm,2.36mm,1.18mm,850mic.,600mic.,300mic.,150mic.,90mic.,75mic.,Pan & Lid)
46	Standard Test Sieves (300mm DIA GI Sheet Frame) For Coarsematerial (80mm,40mm,20mm,10mm,4.75mm,Pan & Lid)
47	Seive Shaker Motorized
48	Vee- Bee Consistometer
49	Compaction Factor
50	Concrete Test Hammer
51	Mortar Penetrometer
52	Variable Flow Type Air Permeability Apparatus
53	Conical Mould For Sp. Gravity Of Fine Agg.
54	VIBRATING MACHINE(For 70.6mm Cement Mortar Cube)
55	Le-Chatelier Water Bath(Hc 38.05)



56	J – Ring
57	L – Box
58	V – Funnel
59	ULTRASONIC PULSE VELOCITY METER(Display Unit,Transducers-2,Cables 1.5m-2,Couplant,Calibration Rod, USB Charger With Cable, Batteries, Data Carrier With Software, Documentation & Carrying Case)
60	Concrete Test Hammer (Battery Charger With Usb Cable, Data Carrier With Software, Carrying Strap, Grinding Stone Chalk, Documentation & Carry Bag)
61	Slump Cone Apparatus
62	BEAM MOULDS (100mm×100mm×500mm)
63	CAST IRON CUBE MOULDS (150mm×150mm×150mm)
64	Ups (Apc)

#### 5. Structure Analysis Laboratory

Sr. No.	Description
1	Behaviour Of Columns & Struts Apparatus
2	Elastic Properties Of Deflected Beam Apparatus
3	Two Hinged Arch Apparatus
4	Three Hinged Arch Apparatus
5	Unsymmetrical Bending Apparatus
6	Clark's Maxwell Reciprocal Theorem Apparatus
7	Redundant Joint Apparatus
8	Elastically Coupled Beam Apparatus
9	Deflection Of Truss Apparatus
10	Linear Arch Model
11	Pin Jointed Truss
12	Curved Member Apparatus
13	Dial Guages
14	Dial Guages Stand

#### 6. Strength of Material Laboratory

Sr. No.	Description
1	Universal Testing Machine(60 Tonnes) With Computer
2	Torsion Testing Machine
3	Rockwell & Brinell Hardness Tester Machine (250kgf)
4	Fatigue Testing Machine(200kgcm)
5	Spring Testing Machine(50 Tones)
6	Impact Tester(30kgm)
7	Deflection Of Beams (0.01mmx30mm)

31. Number of students receiving financial assistance from college, university, government or other agencies Scholarship

Scholarship	Year			
	2016-2017	2015-2016	2014-2015	2013-2014
Post Matric Scholarship for SC	22	14	15	10
Sita Ram & Jindal Scholarship	nil	nil	Nil	nil
PTU Freeship Scheme	nil	nil	Nil	nil
Minority Scholarship	Proposal list under processing	1	0	0
J&K Scholarship	nil	1	2	nil

32. Details on student enrichment programmes (special lectures/ workshops/ seminar) with external experts

Sr. No.	Year	Special lecture/ workshop/ seminar Workshop on
1	2016	<ul style="list-style-type: none"> <li>Survey Camp of 2<sup>nd</sup> year students at Solang Valley, HP</li> <li>Aptitude workshop</li> <li>Inspirational talk by Mr Sahili. Habibullah from Shapoorji pallonji during Technical Festival “ADAVITYA-2016”</li> </ul>
2	2015	<ul style="list-style-type: none"> <li>Workshop on disaster management by NDRF 7<sup>th</sup> regiment, Bathinda</li> <li>Expert Lecture by Dr. Jaspal Singh PAU, Ludhiana.</li> <li>Expert Lecture by Dr. D S Walia, GNDEC, Ludhiana.</li> <li>Guest Lecture by Mr. Prem Prasant, GIS Analyst Forest Department, Haryana.</li> <li>Guest Lecture by Mr. Varun, Aimil Ltd. Industry, Chandigarh</li> <li>DAV Model United Nations</li> <li>Tech Fest “ADAVITYA - 2015”</li> <li>Art of Living’s Yes + course</li> <li>Survey Camp of 2<sup>nd</sup> year students at DAVIET, Jalandhar</li> </ul>
3	2014	<ul style="list-style-type: none"> <li>Expert Talk by Dr Manjit Bansal, Dr. Sanjeev Aggarwal of Maharaja Ranjit Singh Tech. Campus (PTU) Bathinda &amp; Dr. Chander Parkash from IKGPTU-Kapurthala</li> <li>15 days Survey Camp at DAVIET, Jalandhar</li> <li>Tech Fest “ADAVITYA”</li> </ul>

33. Teaching methods adopted to improve student learning

Projectors, Seminars, one to one interaction with the students

34. Participation in Institutional Social Responsibility (ISR) and Extension activities Data from NSS

**As per Annexure-II**

### 35. SWOC analysis of the department and Future Plans

#### SWOC Analysis

##### STRENGTHS

- Department serves as a support to the construction activities under DAVCMC, New Delhi.
- The department undertakes the consultancy services.
- Successful implementation of PG programme.
- Well qualified & research oriented faculty.
- Excellent communication with Alumni Network.
- Excellent track record of extra-curricular activities (Champions in inter-zonal & zonal University & other National- Level Competitions.)
- Cordial behavior among faculty.
- New methods for teaching are adopted such as virtual labs.
- Merit positions in University.
- Excellent faculty retention.
- GATE qualified students.
- Employability Skill Training (EST/ Mock Placement Drive).
- Focus on practical work.

##### WEAKNESS

- Less local industry collaborations with institute.
- Placements in core companies are lower in number.
- PG courses students are not GATE qualified in the department.
- Lack of research funding & policies from Government.
- Not Accredited by NBA.
- Department is affiliated to PTU & hence, has limitation of curriculum as per industry requirement.
- Lack of senior faculty with industrial experience.
- Lack of training of students for software companies (Computer Programming).

##### OPPORTUNITIES

- Placement in public, private & IT sector.
- Improvement of teaching learning process by introducing project based learning.
- International recruitments/ Training.
- Interdisciplinary course development for other departments.

- Introduction of online journal in department.
- To strengthen Alumni Network (their visits & suggestions for institute betterment).
- Accreditation.
- More MOU's can be signed with the institutes of National and International repute.
- Digitization of department.
- Regular department newsletter for students (Local Industry School).
- Share resources within college for research.
- Bigger role under CSR/ ISR.

### **CHALLENGES**

- Ensure that well placed alumni will continue supporting the department.
- To increase the number of students in National level competitive exams.
- To cope up with challenge of rapid technical advances.
- To involve more core companies for placements.
- To encourage students for sponsored project oriented learning.

## Evaluative Report – Department of Applied Sciences

1. Name of the department : **Applied Sciences**
2. Year of Establishment : **2001**
3. Names of Programmes / Courses offered :
  - a) B.Tech (CSE, CE, ECE, EE, IT, ME )
  - b) M.Tech (Nano Science & Technology)
4. Names of Interdisciplinary courses and the departments/units involved

Sr. No.	Inter disciplinary Subject	Departments involved	Class / Semester	No. of Sections Taught	L	T	P	Total Load
1	FCPIT	CSE/IT	B.Tech. / Sem. I/II	7	3	-	4	77
2	EME	ME	B.Tech. / Sem. I/II	7	4	1	-	42
3	ED	ME	B.Tech. / Sem. I/II	7	-	-	7	49
4	CG	ME	B.Tech. / Sem. I/II	7	-	-	2	28
5	MP	ME	B.Tech. / Sem. I/II	7	-	-	6	42
6	BEEE	EE	B.Tech. / Sem. I/II	5	4	1	2	66
7	BEEE	ECE	B.Tech / Sem. I/II	2	2	1	-	8

5. Annual/ semester/choice based credit system (programme wise):

### **Semester/Choice Based Credit System**

6. Participation of the department in the courses offered by other departments :

S. No.	Programme offered by other Department	Participation of Applied Sciences Department	CLASS / Semester	L	T	P	Total
1	CSE	MATHS-III	B. Tech III	3	1	-	5
		DISCRETE	B. Tech III	3	1	-	5
2	IT	MATHS-III	B. Tech III	3	1	-	5
		DISCRETE	B. Tech III	3	1	-	5
3	EE	NUMERICAL ANALYSIS	B. Tech IV	4	1	2	10
4		MATHS-III	B. Tech III	4	1	-	6
5	ECE	MATHS-III	B. Tech III	4	1	-	12
6	ME	NUMERICAL METHODS	B. Tech IV	3	1	-	5
7		MATHS-III	B. Tech III	3	1	-	5

8	CE	MATHS-III	B. Tech III	4	1	-	6
9	MCA	TECHNICAL COMMUNICATION	MCA I	3	-	2	5
10		CMFT	MCA I	4	1	-	5

7. Courses in collaboration with other universities, industries, foreign institutions, etc.  
: N.A.

8. Details of courses/programmes discontinued (if any) with reasons : NIL

9. Number of Teaching posts

	Sanctioned	Filled
Professors		Nil
Associate Professors	03	Physics-1 Chemistry-1
Assistant Professors	13	Physics-3 Chemistry-1 Math-7, English-2

10. Faculty profile with name, qualification, designation, specialization, D.Sc./D.Litt./Ph.D. / M. Phil. etc.)

S.No	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
1	Dr. Kanchan L Singh	Ph.D, M.Sc. Physics, B.Sc (Hons)	Associate Prof. & Head	Solid State Physics	17 years	Guiding-06
2	Dr. Ashok Kumar	Ph.D, M.Sc., B.Sc, UGC- NET	Associate Prof.	Organic Chemistry	16 Years	Guided- 01
3	Dr. Rajni Sharma	Ph.D, M.Sc. Maths UGC-NET Qualified	Asstt. Prof.	Numarical Analysis	15 Years	Guiding- 03
4	Mr. Kamal Kishore	M.Sc. (Applied Physics), UGC- NET Qualified	Asstt. Prof.	Applied Physics	14 Years	—
5	Mr. Sunil Sachdeva	M.Sc. Mathematics, UGC- NET Qualified, Pursuing Ph.D.	Asstt. Prof.	Solid Mechanics	14 Years	—
6	Ms. Neeru Sharma	M.Sc. Maths, UGC- NET Qualified, Ph.D.(Pursuing)	Asstt. Prof.	Continuum Mechanics	9 years	—
7	Ms. Suman Arora	M.Sc. Maths(Gold Medalist), UGC-NET Qualified	Asstt. Prof.	Fuzzy Optimization	11 Years	—
8	Mr. Amit Sharma	M.Sc Maths, M.Phil, UGC-NET Qualified, JRF, Ph.D.	Asstt. Prof.	Mathematical Modeling in Ecology	10 Years	—
9	Ms. Shivani Vij	M.Sc Physics, UGC NET Qualified, Ph.D.(Pursuing)	Asstt. Prof.	Plasma Physics	8 Years	

10	Mr. Anand Bajaj	M.A, M.Phil (Eng Literature) Ph.D. (Pursuing)	Asstt. Prof.	Indian Writings in English, Postcolonial Studies, Bakhtinian Dialogics, ESL	8 Years	
11	Ms. Payal Sharma	M.Sc Physics	Asstt. Prof.	Material Science	9 Years	
12	Dr. Narinder Sharma	M.A English, M.Phil, Ph.D.	Asstt. Prof.	ELT Indian English Institute	12 Years	
13	Mr. Ashwani Kumar	M.Sc.(Maths), CSIR\UGC-NET Qualified, GATE Qualified, Pursuing Ph.D.	Asstt. Prof.	Mathematical Modeling	7.5 Years	
14	Mr. Nitin Kalra	M.Sc.(Maths), UGC-NET Qualified, B.Ed., Pursuing Ph.D.	Asstt. Prof.	Numerical Techniques	14 Years	
15	Dr. Bhupinder Singh	Ph.D. M.Sc Hons. ( Chemistry)	Asstt. Prof.	Chemistry	5 Years	Guiding - 1

11. List of Senior Visiting Faculty : Nil

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty : N.A.

13. Student -Teacher Ratio (programme wise)

B. Tech (1<sup>st</sup> Year, CSE, CE, ECE, EE, IT, ME) = 20:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled

	Sanctioned	Filled
Technical	02	02
Administrative		

**Following are the details of Technical Staff:**

Sr. No.	Name	Designation	Qualification		Experience
			Diploma & Certification	Degree	
1.	Ms. Deepika Kakkar	Lab Assistant	PGDCA	M.Sc IT	7.5 Years
2.	Mr. Deepak Parmar	Lab Assistant		B.Sc(Med.)	10 Years

**List of Administrative Staff:**

Sr. No.	Name	Designation	Department/ Section	UG	PG

15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.

S No.	Name of Faculty	Graduation	Post Graduation	Doctorate/Research Degree
1	Dr. Kanchan L. Singh	B. Sc. (Hons) Physics	M.Sc. (Physics).	Ph.D. (Physics)
2	Dr. Ashok Kumar	B. Sc. (N.M.)	M.Sc. Chemistry	Ph.D. (Chemistry)
3	Dr. Rajni Sharma	B.Sc. (N.M.)	M.Sc. (Mathematics)	Ph.D. (Numerical Analysis)
4	Mr. Kamal Kishore	B.Sc. (N.M.)	M.Sc.	
5	Mr. Sunil Kumar Sachdeva	B.Sc. (Computer Science)	M.Sc (Mathematics)	Ph.D. (Pursuing)
6	Ms. Suman Arora	B.Sc.	M.Sc (Mathematics) Gold Medalist	Ph.D. (Pursuing) (Fuzzy Optimization)
7	Dr. Amit Sharma	B.Sc.	M.Sc., MPhil..	Ph. D
8	Ms. Neeru Sharma	B.Sc. (PCM)	M.Sc (Maths)	Ph.D (Pursuing)
9	Ms. Shivani Vij	B.Sc.	M.Sc.	Ph.D (Pursuing)
10	Ms. Payal Sharma	B.Sc(. N.M)	M.Sc(Physics).	M.Phil, NET-CSIR Ph.D. (Pursuing)
11	Mr. Anand Bajaj	B.A (Geography Hons)	M.A English Literature	M.Phil English literature, Ph. D (Pursuing)
12	Dr. Narinder K. Sharma	B.A.	M.A English	M.Phil. English literature, Ph.D.
13	Mr. Ashwani Kumar	B.Sc. (C.S.)	M.Sc. (Mathematics)	Ph. D.(Pursuing)
14	Mr. Nitin Kalra	Non Medical	Mathematics.	Ph.D. (Pursuing)
15	Dr. Bhupinder Singh	B.Sc. (Honors' School) Chemistry	M.Sc. (Honours School) Chemistry.	Ph. D.(Chemistry)

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received : Nil

17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR, etc. and total grants received : Nil

18. Research Centre /facility recognized by the University N.A.

19. Publications: **As per Annexure -I**

20. Areas of consultancy and income generated: N.A.

21. Faculty as members in

S.No.	Name of Faculty	Name of Committee	National/ International	Capacity
1	Dr. Kanchan L. Singh	Board of Study – Physics and Nanotechnology, PTU, Jalandhar	National	Member
		Subject expert RDC committee, PTU, Jalandhar	National	Member
		ISTE	National	(Life Member)



		IAPT	National	(Life Member)
		Punjab Science Congress	National	(Life Member)
2	Dr. Ashok Kumar	ISAS-DC	National	(Life Member)
		Analytical Society of Chemistry	National	(Life Member)
3	Mr. Sunil Kumar Sachdeva	Punjab Science Congress	National	(Life Member)
4	Ms. Payal Sharma	IAPT	National	(Life Member)
5	Dr. N.K. Sharma	Punjab Science Congress Member, BOS of IKG PTU for Humanities	National National	(Life Member) Member

S.No.	Name of Faculty	Name of Journal	National/International	Capacity
1	Dr. Kanchan L. Singh	Journal of Nanoscience, Nanoengineering and Applications	International	Reviewer
2	Dr. Rajni Sharma	International journal of computer mathematics	International	Reviewer
3	Dr. Rajni Sharma	Japan Journal of industrial and applied mathematics	International	Reviewer
4	Dr. Rajni Sharma	Asian journal of mathematics and computer research	International	Reviewer

**22. Student projects : Not Applicable**

- Percentage of students who have done in-house projects including inter departmental/programme.
- Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies

**23. Awards / Recognitions received by faculty and students**

**a) Session 2014-15**

Sr. No.	Achievement	Position	Event Name	Org. by	Year	Student Name	Roll No	Batch	Branch
1	2nd position in Zonal level Youth Fest	2 <sup>nd</sup>	Western Group Song	PTU	2014	Rakshanda Sehgal	156/14	2014	CSE
2	Gold Medal in Zonal level Youth Fest	1 <sup>st</sup>	Group Shabad	PTU	2014	Ravneet Singh	637	2014	CE
3	Gold Medal in Zonal level Youth Fest	1 <sup>st</sup>	Group Song	PTU	2014	Ravneet Singh	637	2014	CE

4	Gold Medal in Zonal level Youth Fest	2 <sup>nd</sup>	Gazal	PTU	2014	Ravneet Singh	637	2014	CE
5	Silver Medal in Zonal level Youth Fest	1 <sup>st</sup>	Instru-mental	PTU	2014	Ravneet Singh	637	2014	CE
6	Silver Medal in Inter Zonal level Youth Fest	2 <sup>nd</sup>	Instru-mental	PTU	2014	Ravneet Singh	637	2014	CE
7	Participation	6 <sup>th</sup>	Volley Ball Tournament (Men)	PTU	2014	Vikrant rana	651	2014	CE
8	Participation	5 <sup>th</sup>	Inter PTU Swimming	PTU	2014	Nishkarsh Mangotra	629	2014	CE
9	Participation	4 <sup>th</sup>	Group Relay in Swimming	PTU	2014	Nishkarsh Mangotra	629	2014	CE
10	Participation		Inter HandBall Tournament (Men)	PTU	2014	Gagandeep Singh	615	2014	CE
11	Participation in Zonal Youth Fest		Bhangra	PTU	2014	Manvish Joshi	627	2014	CE
12	Silver Medal in Zonal level Youth Fest	2 <sup>nd</sup>	Skit	PTU	2014	Anjali	1408685	2014	IT
13	Silver Medal in Zonal level Youth Fest	2 <sup>nd</sup>	Western Group Song	PTU	2014	Reha	1408688	2014	IT
14	Silver Medal in Zonal level Youth Fest	2 <sup>nd</sup>	Western Group Song	PTU	2014	Ankur	1408688	2014	IT
15	Gold Medal in Zonal level Youth Fest	1 <sup>st</sup>	Poster making	PTU	2014	Vipin Rawat	1408743	2014	IT
16	Silver Medal in PTU Inter college	2 <sup>nd</sup>	Badminton	PTU	2014	Hitanshu Sharma	1408577	2014	ECE
17	Position in Elocution	1 <sup>st</sup>	Elocution	NSS Deptt. of DAV IET under the guidance of AICTE	2015	Vividha	246/14	2014	ECE
18	Position in Elocution	1 <sup>st</sup>	Elocution	NSS Deptt. of DAV IET under the guidan	2015	Supreet	237/14	2014	ECE

				ce of AICT E					
<b>19</b>	Gold Medal in Intercollege Tournament	<b>1<sup>st</sup></b>	lawn tennis	PTU	2014	Gagandeep Singh	319/14	2014	EE-I
<b>20</b>	Gold medal in Interzonal Youth Festival	<b>1<sup>st</sup></b>	tabla	PTU	2014	Sandeep Sharma	348/14	2014	EE-I
<b>21</b>	Gold medal in Interzonal Youth Festival	<b>1<sup>st</sup></b>	cartooning	PTU	2014	Mahesh Noonia	329/14	2014	EE-I
<b>22</b>	Bronze medal in Annual Sports Athletic Meet	<b>3<sup>rd</sup></b>	100 meter race	DAV IET	2015	Japjeet Kaur	325/14	2015	EE-I
<b>23</b>	Bronze medal in Annual Sports Athletic Meet	<b>3<sup>rd</sup></b>	200 meter race	DAV IET	2015	Japjeet Kaur	325/14	2015	EE-I
<b>24</b>	Bronze medal in Annual Sports Athletic Meet	<b>3<sup>rd</sup></b>	long jump	DAV IET	2015	Japjeet Kaur	325/14	2015	EE-I
<b>25</b>	Bronze medal in Annual Sports Athletic Meet	<b>3<sup>rd</sup></b>	Discus throw	DAV IET	2015	Kunal Dutta	360/14	2015	EE-I
<b>26</b>	Bronze medal in Annual Sports Athletic Meet	<b>3<sup>rd</sup></b>	Shotput	DAV IET	2015	Kunal Dutta	360/14	2015	EE-I

**Awards won by students (Engineering students only)**  
**in State/ National / International level events during Jan 2016 – Dec 2016:**

Details of the Students who received Awards / Prizes (Please Specify)		State Level	National Level
ROHIT RAWAT	B.Tech (ME)		✓
SANDEEP SHARMA	B.Tech (EE)	✓	
RAVNEET SINGH	B.Tech (Civil)	✓	
ANCHAL CHAWLA	B.Tech (CSE)	✓	
SIMRAT KAUR	B.Tech (ECE)	✓	
KIRTI NAGPAL	B.Tech (CSE)	✓	
GURPREET SINGH	B.Tech (Civil)	✓	
AMIT KAJAL	B.Tech (CSE)	✓	
DAMAN DEEP SINGH	B.Tech (CSE)	✓	
DEEPAK KUMAR	B.Tech (Civil)	✓	
SATYAM MAGU	B.Tech (EE)	✓	
RAHUL ANAND	B.Tech (ECE)	✓	
SYED HUZAIR SHAFI	B.Tech (Civil)	✓	
RAGHAVENDAR KAUSHIK	B.Tech (CSE)	✓	
ARJUN SEHAJPAL	B.Tech (ECE)	✓	
PRANVAT SINGH RAINS	B.Tech (ME)	✓	
KUSHAGAR SHARMA	B.Tech (ME)	✓	
MEENAKSHI	B.Tech (IT)	✓	
DAVTEJ SINGH	B.Tech (ME)	✓	
PERNIKA SHARMA	B.Tech (CSE)	✓	
PRIYANSHU SOLANKI	B.Tech (ECE)	✓	
RIYA BANSAL	B.Tech (IT)	✓	
SUBEG SINGH BHOGAL	B.Tech (ME)	✓	
SURBHI ANAND	B.Tech (ECE)	✓	
DEEPANSHU	B.Tech (IT)	✓	

ARNAV DOGRA	<b>B.Tech (IT)</b>	✓	
SAGARPREET SINGH	<b>B.Tech (ME)</b>	✓	
DAVTEJ SINGH	<b>B.Tech (ME)</b>	✓	
PRIYANSHU SOLANKI	<b>B.Tech (ECE)</b>	✓	
SAGARPREET SINGH	<b>B.Tech (ME)</b>	✓	
KULPREET KAUR	<b>B.Tech (ECE)</b>	✓	
MEENAKSHI	<b>B.Tech (IT)</b>	✓	
SAGARPREET SINGH	<b>B.Tech (ME)</b>	✓	
RAKSHANDA SEHGAL	<b>B.Tech (CSE)</b>	✓	
URVASHI THAKUR	<b>B.Tech (ECE)</b>	✓	
ABHISHEK GOYAL	<b>B.Tech (CSE)</b>	✓	
DEVIKA	<b>B.Tech (ECE)</b>	✓	
SURBHI SHARMA	<b>B.Tech (CSE)</b>	✓	
SOM BAHADUR	<b>B.Tech (ECE)</b>	✓	
ISHAN SONI	<b>B.Tech (ME)</b>	✓	
VIVEK KUMAR	<b>B.Tech (IT)</b>	✓	
MAHESH NOONIA	<b>B.Tech (EE)</b>	✓	
VANYA SHARMA	<b>B.Tech (ECE)</b>	✓	
DIPIN GHASI	<b>B.Tech (ECE)</b>	✓	
REHA JUSTIN	<b>B.Tech (IT)</b>	✓	
SANDEEP SHARMA	<b>B.Tech (EE)</b>	✓	
VAIBHAV SINGH	<b>B.Tech (ME)</b>	✓	
JASLEEN KAUR SACHDEVA	<b>B.Tech (ECE)</b>	✓	
NAVNEET NAGPAL	<b>B.Tech (ECE)</b>	✓	
VASUDHA VASHISHT	<b>B.Tech (CSE)</b>	✓	
SHWETA	<b>B.Tech (EE)</b>	✓	
BRAHMJOT KAUR	<b>B.Tech (Civil)</b>	✓	
RIDHIMA SOOD	<b>B.Tech (CSE)</b>	✓	
ANJALI VERMA	<b>B.Tech (IT)</b>	✓	

GURMANPREET KAUR	B.Tech (ECE)	✓	
GURPREET KAUR	B.Tech (CSE)	✓	
RIZA DHIMAN	M.TECH(CSE)	✓	

Sr. No.	Achievement	Position	Event Name	Organized by	Year	Student Name	Roll No.	Batch	Branch
1	Gold medal _	Ist	PTU Inter College Badminton Tormament	IKGPTU, Jalandhar	2016	Nitish Kumar	142 /16	2016	CSE
2	Gold medal _	Ist	PTU Inter College Chess Tormament (men)	IKGPTU, Jalandhar	2016	Saurabh Aeron	646 /16	2016	CE
3	Gold medal _	Ist	PTU Inter College Chess Tormament (Women)	IKGPTU, Jalandhar	2016	Shagun Mehra	231 /16	2016	ECE
4	Silver medal	IInd	PTU Inter College Cricket Tormament (Women)	IKGPTU, Jalandhar	2016	Varsha Samita Aditi Madhuri	453/16 444/16 403/16 630/16	2016	IT IT IT CE
5	Gold medal _	Ist	PTU Inter College Table Tennis Tormament (men)	IKGPTU, Jalandhar	2016	Lovedeep Kumar Dhruv Anand	37/16 621/16	2016	ECE CE
6	BRONZE	IIIrd	PTU Inter College HandBall Tormament (Women)	IKGPTU, Jalandhar	2016	Ruchita Sudan Anushka Beri	225 /16 408 /16		ECE IT
7	BRONZE	IIIrd	PTU Inter College Basket Ball Tormament (men)	IKGPTU, Jalandhar	2016	Raghav Chib Kshitiz Singh Verma	215 /16 529 /16		ECE ME

#### 24. List of eminent academicians and scientists / visitors to the department

S. No.	Name	Organization	Designation	Year
1	Prof. (Dr.) R. Thangaraj	G. N. D. U., Amritsar	Prof.	2013
2	Dr. Y. K. Yadav	Sardar Swarn Singh National Institute of Renewable Energy Resources, Kapurthala, Punjab	Director	2014
3	Dr. I.V. Singh	IIT, Roorkee	Assoc. Prof.	2014

4	Prof. Shivani Mishra	University of Johannesburg, South Africa	Prof.	2014
5	Dr. Rohit Mehra	NIT Jalandhar	Assoc. Prof.	2014
6	Dr. B.S. Kaith	NIT, Jalandhar	Professor	2014
7	Prof. (Dr.) N. K. Verma	Thapar University, Patiala	Professor	2014
8	Dr. R. K. Seth	Sri Sai University, Palampur, H.P	Assoc. prof.	2014
9	Dr. Harleen Dahiya	NIT, Jalandhar	Assistant Prof .	2014
10	Dr. Ashish Arora	IKG-PTU Jalandhar	Asstt. Prof.	2015
11	Prof.(Dr.) Ajay Aggarwal	DAV College, Jalandhar	Prof. & HOD, PG Department of Mathematics,	2015
12	Prof. (Dr.) Ravi Kumar	Beant College of Engineering and Technology, Gurdaspur, Punjab	Director	2016
13	Dr. N. C. Kotiyal	NIT, Jalandhar	Prof.	2016
14	Dr. Rohit Mehra	NIT, Jalandhar	Assoc. Prof.,	2016
15	Dr. R. K. Seth	DAV University, Jalandhar	Assoc. Prof.	2016
16	Dr. Anupinder Singh	GNDU, Amritsar	Assistant Prof.	2016

25. Seminars/ Conferences/Workshops organized & the source of funding

a) National

S. No.	Title of seminar/Conference/Workshop	National /Intl.	Funding Agency	Year
1	PTU sponsored workshop on “Recent Advances and Futuristic trends in Nanotechnology”	National	IKG-PTU, Jalandhar	2012
2	Workshop on Thin Films & Nanotechnology	College level	-----	2013
3	A two-day National Workshop on ‘Applications of Mathematical Modeling’	National	IKG-PTU, Jalandhar	2013
4	PTU sponsored FDP on “Innovation and futuristic trends in advance manufacturing and nanotechnology”	National	IKG-PTU, Jalandhar	2014
5	DST Sponsored FDP on “Numerical and Computational Techniques in Engineering “	National	DST	2014
6	Importance of Vedas in one’s life” by Acharya Raju Vigyanik	National	-----	2015
7	Save the Girl Child	National	-----	2015
8	Health & Happy Life Through Values & Spirituality , Clean The Mind And Green The Earth	National	-----	2015

9	Workshop on "Universal Human Values & Ethics"	National	IKG-PTU, Jalandhar	2016
10	Physical Sciences: advances, Challenges and Sustainable Fururistic Trends	National	IKG-PTU, Jalandhar	2016
11	Moral values and education' by Rajyogi Brahmakumar Bhagwan Bhai ji	National	-----	2016
12	Importance of Yoga' by Yoga expert Sh. R. K. Shangharia, Bharat Swabhiman Trust	National	-----	2016
13	"Healthy and Happy Life through Values and Spirituality" by Mahatma Chaitanya Muni & Mata Satyapriya	National		2016
14	Importance of Vedas in one's life" by Acharya Raju Vigyanik	National		2016
15	World renowned nano technologist dr. Suprakas sinha ray delivers a talk on research initiatives in nano science and nano technology in south africa	College level	.....	2016

b) International : NIL

26. Student profile programme/course wise:

Name of the Course/Programme	Applications Received	Selected	Enrolled		Pass%
			*M	*F	
CSE	Through PTU	60	40	20	Result Awaited
IT	Through PTU	57	32	25	Result Awaited
CE	Through PTU	59	54	5	Result Awaited
ME	Through PTU	57	57	Nil	Result Awaited
EE	Through PTU	42	40	2	Result Awaited
ECE	Through PTU	102	72	30	Result Awaited

\*M = Male \*F = Female

27. Diversity of Students

Name of the Course	% of students from the same state	% of students from other states	% of students from abroad
B.Tech	81.3	18.7	Nil

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.?

**Not Applicable**

29. Student progression **Not Applicable**



**30. Details of Infrastructural facilities**

- a) Library : YES
- b) Internet facilities for Staff & Students : YES
- c) Class rooms with ICT facility
- d) Laboratories : YES ( adequate)

**31. Number of students receiving financial assistance from college, university, government or other agencies**

Total= 166 (gen:07, SC:130, OBC:08, Muslim minority:05, Others:16)

**32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts**

Sr. No.	Name & Details	DATE FROM	DATE TO
1	Workshop on “ Recent Advances and Futuristic Trends in Nanotechnology”	24 <sup>th</sup> March 2012	24 <sup>th</sup> March 2012
2	Conference on “Advance Manufacturing & Nanotechnology”	30 <sup>th</sup> May 2013	31, May 2013
3	Seminar on “Thin Films and Nanotechnology”	22 <sup>nd</sup> March, 2013	March 22 <sup>th</sup> , 2013
4	One declamation contest was organized for B.Tech. First year students on the topic “Moral Values and Ethics in the Present Education System”	15 <sup>th</sup> September, 2013	15 September, 2013
5	DAV Science Congress on Science, Technology & Management.	07 <sup>th</sup> November, 2014	November 08, 2014
6	PTU sponsored Faculty Development Programme on “ Futuristic Trends in Advance Manufacturing and Nanotechnology”	11 <sup>th</sup> July, 2014	11 July, 2014
7	Special lecture on “BIG BANG, GOD’S PARTICLE AND THE LARGE HADRON COLLIDER”	25 <sup>TH</sup> MARCH, 2015	25 <sup>TH</sup> MARCH, 2015
8	Expert Talk on “LalaLajpat Rai “ and his 150 <sup>th</sup> celebration	07 <sup>TH</sup> OCTOBER 2015	07 <sup>TH</sup> OCTOBER 2015
9	Declamation contest and Seminar on “ Save the Girl Child”	09 <sup>TH</sup> OCTOBER 2015	09 <sup>TH</sup> OCTOBER 2015
10	Expert Lecture on basic Techniques in Teaching Mathematics by Prof. Ajay Aggarwal , HOD, PG Department of Mathematics, DAV College, Jal.	For B.Tech CSE-1 <sup>st</sup> Sem, B.Tech ECE-1B in Seminar hall	8 <sup>th</sup> April 2015
11	Expert Lecture on Vedic Mathematics by Dr. Ashish Arora, A.P. in Mathematics, IKG-PTU Jalandhar	For B.Tech CSE-1 <sup>st</sup> Sem, B.Tech ECE-1A, B, IT-1, EE-1 in Convention hall	22 September 2015
12	Personality Development an Overview	B.Tech, ECE-1A & 1B	12 <sup>TH</sup> OCT., 2015
13	Importance of Soft Skills for Technocrats	B. Tech. ECE-1A & 1B	28 <sup>th</sup> Sept., 2015
14	Project to sensitize our students towards the ethos of Social Responsibility		28 <sup>th</sup> Feb., 2015

15	Art of Public Speaking		13 <sup>th</sup> Feb., 2015
16	The Art & Techniques of Standard Pronunciation in English		29 <sup>th</sup> January, 2015

33. Teaching methods adopted to improve student learning : PPT, GD
34. Participation in Institutional Social Responsibility (ISR) and Extension Activities  
As per Annexure - II
35. SWOC analysis of the department and Future plans

### Strengths

- Highly qualified, dedicated, self motivated faculty/staff and competent enough to cope with any competitive environment.
- Close and cordial interaction with students.
- Department has presently 05 Ph.D. faculty members who are actively teaching/guiding Ph.D. and M.Tech. students in their respective areas of research.
- Department has successfully conducted DST sponsored and PTU sponsored two Faculty Department Programs.
- Department has also organized PTU sponsored two National Workshops and four National Conferences for the quality improvement of students and teachers.
- Good Departmental Library.
- Well equipped labs to fulfill the requirements of B.Tech. 1<sup>st</sup> Year students as per PTU syllabus.
- Good number of publications by the faculty in National/International Journals and books.
- English Journal – “The Literati”

### Opportunities

- M.Sc courses can be started in the area of Physics, Chemistry & Maths as we have competent faculty members.
- An interdisciplinary course can be started for students.
- An inter disciplinary journal of basic sciences can be started.

### Weakness

- Interaction of students is only at 1st year.
- Classes of sciences are limited only to first year therefore faculty cannot contribute fully for the scientific growth of students.
- Lack of funded research project.
- Lack of ultra modern equipments for research purpose.

### Challenges

- To cope up with the challenge of rapid technology advances and obsolesce thereof.
- Lack of research funding and policies thereof by the AICTE/Affiliating universities for private unaided educational institutions unlike UGC.

## Evaluative Report – Department of Business Management

1. Name of the Department: **Business Management**
2. Year of Establishment: 2007
3. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Master; Integrated Ph.D., etc.): Master (MBA)
4. Names of Interdisciplinary courses and the departments/units involved:

S.No.	Name of the course	Course Code	Department(s) Involved
1	Quantitative Techniques	MBA 104	Applied Sciences

5. Annual/ semester/choice based credit system (programme wise):

### **Semester/Choice Based Credit System**

6. Participation of the department in the courses offered by other departments:

S. No.	Programme	Course	Department(s)
1	B.Tech.	Total Quality Management	EE
2	B.Tech.	Human Resource Management	EE

7. Courses in collaboration with other universities, industries, foreign institutions, etc.: Nil
8. Details of courses/programmes discontinued (if any) with reasons: Nil
9. Number of Teaching posts

Posts	Sanctioned	Filled
Professors	01	01
Associate Professors	02	01
Assistant Professors	07	07

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./ Ph.D. / M. Phil. etc.)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. students guided for the last 4 years
Dr. Sonia Chawla	MBA, Ph.D. ACMA	Professor	Finance	17	6 (in progress) 2 completed
Dr. Anil Soni	MBA, M.Com, Ph.D.	Associate Professor	Marketing	24	8 (in progress)
Dr. Ritu Sehgal	MBA, M.Phil, Ph.D.	Assistant Professor	Marketing	16	0
Ms. Manu Bhardwaj	MBA	Assistant Professor	HRM	10	NA
Ms. Megha Sharma	MBA, M.Phil, UGC (NET)	Assistant Professor	Finance	10.5	NA
Mr. Savdeep Vasudeva	MBA, CIC	Assistant Professor	IT	16	NA
Ms. Anju Sharma	MBA, M.Com	Assistant Professor	Marketing	17.5	NA
Ms. Vandana Narang	MBA	Assistant Professor	HRM	6	NA
Ms. Priyanka Sharma	MBA, UGC (NET)	Assistant Professor	Finance	07	NA

11. List of senior visiting faculty:

Sr. No.	Name of the Person	Designation	Organization
1	Mr. Ashutosh Kaushal	CEO	Rajhans International
2	Mr. Sidharth Shankar Sharma	Head – Affinity Business	Royal Sudaram General Insurance Co. Ltd., Gurgaon
3	Col. Jagdish Singh	Deputy BM (Securities)	PESCO

12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty : NA

13. Student -Teacher Ratio (programme wise):

13:1

14. Number of academic support staff (technical) and administrative staff; sanctioned and filled:

	Sanctioned	Filled
Technical	1	1
Administrative	1	1

**Following are the details of Technical Staff:**

Sr. No.	Name	Designation	Qualification		Experience
			Diploma & Certification	Degree	
1	Ms. Reena Khera	Lab. Tech.	----	M.Sc (Computer Science)	7 years

**List of administrative staff:**

Sr. No.	Name	Designation	Department/ Section	UG	PG
1	Ms. Neelam Kumari	Clerk			

**15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil / PG.:**

Same as Sr. No. 10

**16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received:**

S. No.	Name	Funding Agency	National/Intl.	Grant Received	Year
	Nil				

**17. Departmental projects funded by DST - FIST; UGC, DBT, ICSSR etc. and total grants received:**

Nil

**18. Research Centre /facility recognized by the University: Nil**

**19. Publications: As per Annexure - I**

**20. Areas of consultancy and income generated:**

S. No.	Area of Consultancy	Income Generated	Year
	Nil		

**21. Faculty as members in:**

a) National committees b) International Committees c) Editorial Boards.....:

S. No.	Name of Faculty	Name of Committee	National/ International	Capacity
1	Dr. Sonia Chawla	ACMA, Institute of cost and management accountants	National	Life Member

		PCMA, Punjab Commerce and Management Association	National	Life Member
		ISTE	National	Life Member
<b>2</b>	Dr. Ritu Sehgal	ISTE	National	Life Member
		AIAER, All India Association of Education and Research	National	Life Member
		PCMA, Punjab Commerce and Management Association	National	Life Member
		PSC, Punjab Science Congress	National	Life Member
<b>3</b>	Ms. Megha Sharma	ISTE	National	Life Member
		PCMA	National	Life Member
<b>4</b>	Ms. Priyanka Sharma	ISTE	National	Life Member

**22. Student projects**

- a) Percentage of students who have done in-house projects including inter departmental/programme: NIL
- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies: 100%

**23. Awards / Recognitions received by faculty and students:**

Nil

**24. List of eminent academicians and scientists / visitors to the department**

<b>S. No.</b>	<b>Name</b>	<b>Organization</b>	<b>Designation</b>	<b>Year</b>
<b>1</b>	Dr. B.B Goyal	University Business School, Panjab University, Chandigarh	Professor	2013
<b>2</b>	Capt. Dinesh Kumar Lamba	Indian Navy	Retd. Capt.	2014
<b>3</b>	Dr. Balbir Singh	NITCON, Chandigarh	Director	2014
<b>4</b>	Dr. Neeraj Pandey	NITIE, Mumbai	Associate Professor	2014
<b>5</b>	Mr. Abhay Kapoor	Ecsorts Ltd. Faridabad	Associate V.P (HR)	2015
<b>6</b>	Mr. Ehsanul Haq	President	President	2015
<b>7</b>	Mr. Shankar Goenka	Wow Factors, New Delhi	Corporate Trainer	2015

8	Dr. J.M. Patil	Hyderabad University	Retd. Prof. of English	2016
9	Mr. Vishal Sharma	Times of India	Chief Manager	2016

25. Seminars/ Conferences/Workshops organized & the source of funding

- a) National  
b) International

S. No.	Title of seminar/Conference/Workshop	National/Intl.	Funding Agency	Year
1	Seminar on Retail Banking	National	AICTE	2014
2	DAV NCSTM	National	Self sponsored	2014
3	DAV STEHM	National	Self sponsored	2016

26. Student profile programme/course wise:

Name of the Course/programme (MBA)	Applications received	Selected	Enrolled		Pass percentage
			*M	*F	
2014		60	20	40	100
2015		60	20	40	--
2016	81	60	20	40	--

\*M = Male \*F = Female

27. Diversity of Students

Name of Course	% of students from the same State	% of students from the other States	% of students from abroad
2014	95	5	----
2015	91.67	8.33	----
2016	91.66	8.34	----

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.? : Nil

29. Student Progression

Student Progression	Against % enrolled
UG to PG	Not Applicable
PG to M.Phil.	Nil
PG to Ph.D.	Nil
Ph.D. to Post-Doctoral	Nil
<b>Employed</b>	
• Campus selection	48.21%
• Other than campus recruitment	Nil
Entrepreneurship/Self-employment	Nil

30. Details of Infrastructural facilities

a) Library:

Trade	No of Title of books	No of books	National Journals		International Journals		E-Journals
			P/I	I	P/I	I	
MBA	194	323	12		Nil	--	EBSCO

b) Internet facilities for staff and students	Yes, available.
c) Classrooms	2 Exclusive classrooms, 1 of the classrooms are equipped with ICT facility (total 3 classrooms).
d) Laboratories	Department of MBA consists of 1 Laboratory with 32 PCs and SYSTAT software with 10 users.

31. Number of students receiving financial assistance from college, university, government or other agencies

Minority Scholarship

Branch	Academic Year (2013-14)	Academic Year (2014-15)	Academic Year (2015-16)
MBA	0	2	2

Post-matric Scholarship for SC

Branch	Academic Year (2013-14)	Academic Year (2014-15)	Academic Year (2015-16)
MBA	1	5	9

32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

S. No.	Name & Details			Date From	Date To
1	Dr. D P Goyal	Professor	MDI Gurgaon	17/8/2012	17/8/2012
2	Dr. B.S. Bhatia	Director	Ramgarhia institute of mgt. & technology, Mandi Gobindgarh	1/9/2012	1/9/2012
3	Dr. B.B Goyal	Professor	University Business School, Panjab University Chandigarh	1/10/2013	1/10/2013
4	Capt. Dinesh Kumar Lamba	Retd. Capt.	Indian Navy	26/2/2014	26/2/2014
5	Dr. Balbir Singh	Director	NITCON, Chandigarh	26/3/2014	26/3/2014



6	Dr. Neeraj Pandey	Associate Professor	NITIE, MUMBAI	27/9/2014	27/9/2014
7	Mr. Abhay Kapoor	Associate V.P (HR)	Ecsorts Ltd. Faridabad	16/1/2015	16/1/2015
8	Mr. Ehsanul Haq	President	President	19/8/2015	19/8/2015
9	Mr. Shankar Goenka	Corporate Trainer	Wow Factors, New Delhi	28/9/2015	28/9/2015
10	Dr. J.M.Patil	Retd. Prof. of English	Hyderabad University	19/10/16	19/10/16
11	Mr. Vishal Sharma	Chief Manager	Times of India	20/10/16	20/10/16

**33. Teaching methods adopted to improve student learning:**

1. Teaching through Power Point Presentation
2. Project based learning.
3. Task based learning (Role Play, GD, Quiz).

**34. Participation in Institutional Social Responsibility (ISR) and Extension activities**

**As per Annexure – II**

**35. SWOC analysis of the department and Future plans**

Strength	Qualified & dedicated faculty, Reputed Social Image among students
Weakness	No Academic autonomy (we can't change our curriculum as per industry requirement) Lack of Consultancy and Funded Research Projects
Opportunity	To indulge in consultancy and research with industry and other reputed organizations.
Challenge	Ever growing Competition

**Future Plans**

1. To start a Journal of Deptt. – By October, 2017
2. To conduct FDP – By December, 2017
3. To conduct HR Summit – By February, 2018

## **Evaluative Report – Department of Computer Applications**

1. Name of the department : **Computer Applications (MCA)**
2. Year of Establishment : **2008**
3. Name of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Master; Integrated Ph.D., etc.) : **PG**

### **MCA**

<b>S.No.</b>	<b>Name of the course</b>	<b>Course Code</b>	<b>Department(s) Involved</b>
<b>1</b>	Accounting & Financial Management	MCA104	MBA
<b>2</b>	Technical Communication	MCA105	Applied Sciences
<b>3</b>	Embedded Systems	MCA501	Electronics & Communication Engg.
<b>4</b>	Mathematical foundation of Computer science	MCA201	Applied Sciences

4. Names of Inter-disciplinary courses and the departments / units involved
5. Annual / semester / choice based credit system (programme wise)

### **Semester/Choice Based Credit System**

<b>S. No.</b>	<b>Programme</b>	<b>Course</b>	<b>Department(s)</b>
<b>1</b>	B.Tech	FCPIT	ECE
<b>2</b>	B.Tech	Cyber Laws and IPR	IT
<b>3</b>	B.Tech	Computer Architecture	IT

6. Participation of the department in the courses offered by other departments
7. Courses in collaboration with other universities, industries, foreign institutions, etc.

Nil

8. Details of courses / programmes discontinued (if any) with reasons

Nil

9. Number of Teaching posts

	Sanctioned	Filled
Professors	01	00
Associate	02	00
Asstt. Professors	8	7

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./ Ph.D./M.Phil. etc.)

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Mr. Parveen Kakkar	M.Tech. Ph. D. Pursuing	Assistant Professor & HOD	Information Security	15 Years	NA
Mr. Sahul Goyal	M.Tech.	Assistant Professor	Java	8 Years	NA
Ms. Jasdeep Kaur	MSc. , M.Fil.	Assistant Professor	Software Engineering	8 Years	NA
Ms. Reeta Bhardwaj	M.Tech. Ph. D. Pursuing	Assistant Professor	DBMS	8 Years	NA
Mr .Jaswinder Singh Dhillon	M.Tech. Ph. D. Pursuing	Assistant Professor	Data Structure & Image Processing	10 Years	NA
Ms. Neetu Gahlawat	M.Tech. Ph. D. Pursuing	Assistant Professor	Software Engineering	8 Years	NA
Mr. Gagan Kumar	M.Tech. Ph. D. Pursuing	Assistant Professor	TOC & Soft computing	9 years	NA
Ms. Archana Aggarwal	M.Tech	Assistant Professor	DBMS	7 years	NA

11. List of senior visiting faculty

S. No.	Name of Visiting Faculty	Designation	Organization
1	Mr. Amit Miglani	Technology Architect in Connected Car Telematics Engineering IOT	Infosys Limited I
2	Mr. Parminder Saini	Director	Network System Integration and Solutions Company (NETPRO), Jalandhar
3	Dr. Z.N. Patil	Former Professor of English, Head of the department of Training & Development	The English and Foreign Languages University, Hyderabad

12. Percentage of lectures delivered and practical classes handled(programmed wise) by temporary faculty

-----NA-----

13. Student-Teacher Ratio (programme wise)

MCA = 13:1

Course	Year		
	2016	2015	2014
MCA	1/13	1/13	1/13

14. Number of academic support staff(technical) and administrative staff; sanctioned and filled

	Sanctioned	Filled
Technical	01	01
Administrative	----	----

Following are the details of Technical Staff:

Sr. No.	Name	Designation	Qualification		Experience
			Diploma & Certification	Degree	
1	Mr.Amit Tyagi	Lab Assistant	Diploma in Hardware & Networking	B.Sc	16 Years

List of administrative staff:

Nil

15. Qualifications of teaching faculty with Dsc/ D.Litt/ Ph.D/ MPhil /PG.

Same as serial no.10

16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received

Nil

17. Departmental projects funded by DST-FIST;UGC,DBT,ICSSR, etc. and total grants received

Nil

18. Research Centre / facility recognized by the University

**Regional centre of IKG, PTU, Jalandhar, M.Tech Part time/ Research work**

19. Publications: **As per Annexure - I**

20. Areas of Consultancy –

S. No.	Area of Consultancy	Income Generated	Year
<b>Income generated- NIL</b>			

21. Faculty as members in

a) National committees b) International Committees c) Editorial Boards...

S. No.	Name of Faculty	Name of Committee	National/ International	Capacity
<b>1</b>	Mr. Parveen Kakkar	Life Member of ISTE	National	Member
		Life Member of Punjab Science Congress	National	Member

22. Student projects

a) Percentage of students who have done in-house projects including inter departmental / programme

b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/ Industry/ other agencies

Percentage of students who have done in-house projects including inter departmental / programme			Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/ Industry/ other agencies		
2016	2015	2014	2016	2015	2014
100%	100%	100%	100%	100%	100%

23. Awards / Recognitions received by faculty and students

**Faculty Awards : Nil**

**Student Awards:**

1	Jasleen Kaur	Best Student in University	IKG PTU, Jalandhar	2013
---	--------------	----------------------------	--------------------	------

24. List of eminent academicians and scientists / visitors to the department.

**NIL**

25. Seminars/ Conferences/ Workshops organized & the source of funding

- a) National  
b) International

S.No.	Title of Seminar/Conference/Workshop	National/ International	Funding Agency	Year
1	DAV National Congress – 2014	National	IKG PTU, Jalandhar	2014
2	DAV National Congress on STEHM 2016	National	IKG PTU, Jalandhar	2016

26. Student profile programme/course wise:

Name of the Course/programme (refer question no.4)	Applications Received	Selected	Enrolled		Pass Percentage
			*M	*F	
MCA 2015		72	14	58	
MCA 2014		68	20	48	

\*M = Male \*F = Female

27. Diversity of Students

Name of the Course	% of students from the same state			% of students from other states			% of students from abroad		
	2016	2015	2014	2016	2015	2014	2016	2015	2014
MCA	90%	90 %	90%	10%	10%	10%	0	0	0

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil Services, Defense services, etc.?

Name of the Course	GATE			Defence Services		
	2016	2015	2014	2016	2015	2014
MCA	0	0	0	0	0	0

29. Student Progression

Student Progression	Against %enrolled
	2016
UG to PG	NA

PG to M.Phil.	NIL
PG to Ph.D.	2
Ph.D to Post-Doctoral	nil
<b>Employed</b>	<b>Year</b>
	<b>2016</b>
Campus selection	22.7%
Other than campus recruitment	
Entrepreneurship / Self-employment	

**30. Details of Infra feet structural facilities**

**a) Library**

	<b>Area</b>	<b>No. of Books</b>
Department Library	175 sq.ft.	69

**b) Internet facilities for Staff & Students**

Yes

**c) Class rooms with ICT facility**

	<b>ICT facility</b>	<b>Area</b>
Class rooms Room 35	Projector 1	875 sq.ft.

**d) Laboratories**

<b>S. No.</b>	<b>Name of the Laboratory</b>	<b>Major Equipment's</b>
<b>1</b>	Central Computing Lab	Desktop Pcs (32)
<b>2</b>	Linux Lab	Desktop Pcs(30)
<b>3</b>	RDBMS Lab	Desktop Pcs(30)
<b>4</b>	Programming Lab	Desktop Pcs(27)

Lab	Name of Equipment	No of Units	Configuration	Age and condition of equipment
Linux Lab	Desktop Pcs	30	DELL, Intel C2D 2.93 Ghz, 3GB RAM, 300 GB HDD	6 Years Old, Working Condition
RDBMS Lab	Desktop Pcs	30	HP Intel Core i5, 2.9 GHZ, 4GB RAM, 500 GB HDD	3 Years Old, Working Condition
FCPIT Lab	Desktop Pcs	27	Wipro Intel Pentium P4 3.0 Ghz ,1.5 GB RAM, 80 GB HDD	8 years Old, Working Condition
Central Computing Lab	Desktop Pcs	32	Intel C2D 2.66 Ghz, 2 GB RAM, 250 GB HDD	7 Years Old, Working Condition

**31. Number of students receiving financial assistance from college, university, government or other agencies Scholarship**

Scholarship	Year			
	2016-2017	2015-2016	2014-2015	2013-2014
Post – Matric Scholarship for SC	4	1	0	0
Minority Scholarship	01	01	01	0



32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts

S. No.	Year	Special lecture/workshop/seminar Workshop on
1	2016	<ul style="list-style-type: none"> <li>• Workshop on cyber security by Sedulity</li> <li>• Workshop on Python</li> </ul>
2	2015	<ul style="list-style-type: none"> <li>• Workshop on IoT</li> <li>• DAV Model United Nations</li> <li>• ADavitya</li> <li>• Entrepreneur ship seminar by MR Srinivas CEO of Ostilio</li> </ul>
3	2014	Workshop on Android technologies
4	2013	Workshop on IoT

33. Teaching methods adopted to improve student learning

**Interactive Boards, Projectors, Seminars**

34. Participation in Institutional Social Responsibility (ISR) and Extension activities

**As per Annexure-II**

35. SWOC analysis of the department and Future plans

**SWOC Analysis**

The following analysis was done:

**STRENGTHS**

- Well qualified & research oriented faculty.
- Excellent communication with Alumni Network.
- Excellent track record of extra-curricular activities (Champions in inter-zonal & zonal University & other National- Level Competitions.)
- Cordial behavior among faculty.
- New methods for teaching are adopted such as virtual labs.
- Merit positions in University.
- Excellent faculty retention.
- Employability Skill Training (EST/ Mock Placement Drive).
- MOUs with foreign Universities.
- Interest of students in presenting projects outside campus.
- Focus on practical work.

## **WEAKNESSES**

- Less local industry collaboration with institute.
- Placements in core companies are lower in number.
- Lack of research funding & policies from Government.
- Not Accredited by NBA.
- Department is affiliated to PTU & hence, has limitation of curriculum as per industry requirement.
- Lack of senior faculty with industrial experience.
- Less number of research papers (departmental).
- Lack of training of students for software companies (Computer Programming).
- Consultancy not provided.

## **OPPORTUNITIES**

- Placement in public, private & IT sector.
- Improvement of teaching learning process by introducing project based learning.
- Can provide consultancy services to local industry.
- International recruitments/ Training.
- Inter-disciplinary course development for other departments.
- Introduction of online journal in department.
- To strengthen Alumni Network (their visits & suggestions for institute betterment).
- Accreditation.
- More MOUs can be signed.
- Digitization of department.
- Regular department newsletter for students (Local Industry School).
- Share resources within college for research.
- Bigger role under CSR/ ISR.

## **CHALLENGES**

- To cope up with the advanced technologies.
- Lack of research funding due to private un-aided stature of the institute.

## Annexure - I

**PUBLICATIONS****Department of Electronics & Comm. Engg.**

Year 2016:

Sr. No.	Faculty Name	Details of Paper (Title, co-authors, journal name, volume, page no, year)	Metrics Impact Factor, Indexing Etc.	No. of Citations
1	Dr. Manoj Kumar	Bhupinder Singh, Manju Bala , Manoj Kumar, "A Modified Weight Balanced Algorithm for Influential Users Community Detection in Online social Network (OSNs)", <i>International Journal of Advanced Engineering, Management and Science (IJAEMS)</i> , [Vol-2, Issue-6, June- 2016], ISSN : 2454-1311		
2	Dr. Manoj Kumar	Narpat Singh, <b>Manoj Kumar</b> , Manju Bala "Face Recognition System based on SURF and LDA Technique" <i>I.J. Intelligent Systems and Applications</i> , 2016, 2, 13-19 Published Online February 2016 in MECS, DOI: 10.5815/ijisa.2016.02.02		
3	Dr. Neeru Malhotra	Jitin Verma & Neeru Malhotra, "Compact size fractal antenna design using stripes to increases antenna Length for ism and higher frequency applications" in <i>International Journal of Advance Research (IJAR)</i> , vol.4, issue 7, ISSN:2320-5407 (2016).		
4	Dr. Neeru Malhotra	Deepali Arora & Neeru Malhotra, " TRM Antenna Failure Compensation in Wireless Sensor Network using Bacterial Foraging Optimization (BFO) " in <i>International Journal of Advanced Computronics and Management Studies (IJACMS)</i> , (2016).		
5	Dr. Neeru Malhotra	Manvir Singh Bhambra & Neeru Malhotra, "Ultra wideband patch antenna for C,X,Ku and K band applications" in <i>International Journal of ScientificResearch (IJSR)</i> , vol.5, issue 5, ISSN:2277-8179 (2016).		
6	Dr. Jagjit Malhotra	Lavish Kansal, Vishal Sharma, Jagjit Singh, "Performance evaluation of FFT-WiMAX against WHT-WiMAX over Rayleigh fading channel", <i>Optik - International Journal for Light and Electron Optics</i> , Volume 127, Issue 10, May 2016, Pages 4514-4519.		
7	Dr. Jagjit Malhotra	Lavish Kansal, Vishal Sharma, Jagjit Singh, "BER assessment of FFT-OFDM against WHT-OFDM over different fading channel", <i>International Journal of Wireless Information Networks</i> (May 2016), Springer doi:10.1007/s11276-016-1283-2		
8	Dr. Jagjit Malhotra	Lavish Kansal, Vishal Sharma, Jagjit Singh, "Performance assessment of precoded OFDM using Discrete Cosine-based DOST Transform", <i>Optik - International Journal for Light and Electron Optics</i> , In Press, Accepted Manuscript, Available online 14 May 2016		
9	Dr. Jagjit Malhotra	Aakshi Sharma, Sapanjot Kaur, Rajan Miglani, Jagjit Singh Malhotra, Implementation of all optical full-addition module based on SOA non linearity", <i>Journal of Optics</i> ISSN: 0972-8821 (Print) 0974-6900 (Online) (May 2016), Springer doi:10.1007/s12596-016-0341-6		
10	Dr. Jagroop Singh	"Blocking Artifacts Reduction Algorithm", <i>International Research Journal of Engineering and Technology (IRJET)</i> , Volume 3 Issue 8, August 2016.	4.45 (SJ)	

11	Dr. Jagroop Singh	“Image Compression - An Overview”, International Journal of Engineering And Computer Science, Volume 5 Issue 8, Aug 2016	2.83	
12	Dr. Jagroop Singh	“Super Resolution Applications in Modern Digital Image Processing”, International journal of computer applications, 2016		
13	Dr. Jagroop Singh	“Frequency Domain Techniques For Blocking Artifact Reduction-A Review”, International Journal of Engineering And Computer Science, 2016	1.412	
14	Dr. Jagroop Singh	“Video Compression Techniques: A Review”, Amity Journal Of Engineering And Technology, 2016		
15	Dr. Jagroop Singh	“Coiflet Wavelet Transform Image Compression based on JPEG Images”, International Journal of advanced Research in Electrical and Electronics and Instrumentation Engineering. (IJAREEIE), 2016	5.612 (SJ)	
16	Dr. Jagroop Singh	“Performance analysis of wavelet based denoising of images through various noises”, International Journal of Informative and futuristic Research, vol.3, issue 12, 2016	5.081 (SJ)	
17	Dr. Jagroop Singh	“Review paper: Video processing and its applications”, International Research Journal of Engineering and Technology (IRJET), vol.3, issue 8, 2016	4.45 (SJ)	
18	Dr. Jagroop Singh	“Comparative analysis of Gaussian filter with wavelet denoising for various noises present in images”, Indian journal of science and technology, vol. 9(45)		
19	Dr. Jagroop Singh	“Image quality assessment –A review”, International Research Journal of Engineering and Technology (IRJET), 2016	4.45 (SJ)	
20	Dr. Jagroop Singh	Anjali Bakhshi and Jagroop Singh, “Image Compression with quality assessment with Daubechies Wavelet transform”, International Journal of Informative and futuristic Research, Volume 3, Issue No.7, March 2016. ISSN 2347-1697.		
21	Dr. Jagroop Singh	Amanpreet kaur and Jagroop Singh, “ Review on Image Compression Techniques and Advantages of Image Compression”, International Journal of Advance Research in science and Engineering, Volume 8, Issue No.8, August 2016. ISSN 2319-8354.		
22	Dr. Kiran Ahuja	Shallu Singh, Kiran Ahuja, “ Performance Evaluation of Wireless Mesh Network (IEEE 802.11s),” CiiT International Journal of Wireless Communication, Vol. 8, No.5 , pp 191-195, 2016	3.12	
23	Dr. Kiran Ahuja	Kiran Ahuja, Brahmjit Singh, Rajesh Khanna, “Network selection based on available link bandwidth in multi-access networks” Digital Communications and Networks, Vol. 2, pp 15-23, 2016		1
24	Mr. Amit Arora	“Effect of thickness on microwave absorptive behavior of La-Na doped Co-Zr barium hexaferrites in 18.0–26.5 GHz band”, Journal of Magnetism and Magnetic Materials (Elsevier/Science Direct).	2.357	
25	Mr. Amit Arora	“A Rectangular Microstrip Patch Antenna for Ku, Kand Ka Band Applications”, CiiT International Journal of Wireless Communication, 2016		
26	Mr. Amit Arora	Amit Arora, Sukhleen Bindra Narang, “Structural and dielectric properties of co-substituted M-type barium hexaferrite”, Journal of Materials Science: Materials in Electronics (Springer), 2016, DOI: 10.1007/s10854-016-5092-2	IF: 1.798	1
27	Mr. Amit Arora	Amit Arora, Sukhleen Bindra Narang, “Investigation of Microwave Absorptive Behavior of La-Na Substituted M-Type	IF: 1.100	

		Co-Zr Barium Hexaferrites in X-Band”, Journal of Superconductivity and Novel Magnetism (Springer), 2016, DOI: 10.1007/s10948-016-3607-y		
28	Mr. Love Kumar	“Performance Investigation of RAMAN-EDFA HOA for DWDM System”, International Journal for Science, Management and Technology (Accepted 02 October, 2016)	0.372	
29	Mr. Love Kumar	“A Review: Congestion Control Clustering Protocol PASCCC in Wireless sensor networks”, International Journal for Science, Management and Technology, 2016	0.372	
30	Mr. Vishav Kapoor	“Performance Analysis of Secure Optical Wireless Network under Varying Conditions in International Conference on Sciences engineering & Technical Innovations in 2016		
31	Mr. Vishav Kapoor	2016- Presented Research Papers on the topic of “Power Consumption Analysis of Static Wireless Sensor Networks with FRT” during International Conference on Sciences ,Engineering & Technical Innovation held at CT Group of Institution in the year 2016		

### Year 2015:

Sr. No	Faculty Name	Details of Paper (Title, co-authors, journal name, volume, page no, year)	Metrics Impact Factor, Indexing Etc.	No. of Citations
1	Dr. Manoj Kumar	Sooraj Parkash, Anurag Sharma, Manoj Kumar, Harsukhpreet Singh, “Performance Enhancement of WDM-PON FTTH Network by Using Decision Feedback and Feed forward Equalizations” International Journal of Signal Processing, Image Processing and Pattern Recognition Vol.8, No.8 (2015), pp.99-106, ISSN: 2005-4254.		
2	Dr. Manoj Kumar	Sooraj Parkash, Anurag Sharma, Manoj Kumar, “Performance investigation of CRZ modulation format in high speed 15X48GB/s WDM-PON”, Australian Journal of Information Technology and Communication, Volume II, Issue II, June 2015, pp 26-30. ISSN 2203-2843.	0.78	
3	Dr. Manoj Kumar	Narpat Singh, Manoj Kumar, Manju Bala “To improve the accuracy in face recognition system” International Journal of Engineering Research, Vol.3 , Issue 2, 2015, pp 295-298 , ISSN:2321-7758.	5.49	
4	Dr. Neeru Malhotra	Neeru Malhotra et al., “Error Convergence Analysis for Local Hyperthermia Applications” International Journal of Engineering Science and Technology, vol. 11, issue 3, 2015.	0.042	
5	Dr. Neeru Malhotra	Paramjot Singh, Love Kumar & Neeru Malhotra, “Performance Analysis of 4 Channel WDM System” published in International Journal for Science and Emerging Technologies with Latest Trends Vol.19, No.1, 2015.	1.472	
6	Dr. Jagjit Malhotra	Lovdeep Singh, Jagjit Malhotra, Charanjeet Singh, S. Bindra Narang, “Investigation of microwave and electrical characteristics of Co–Zr substituted M-type Ba–Sr hexagonal ferrite”, Materials Science-Poland, Vol. 33, Issue 2, pp. 335–339, February 2015.		
7	Dr. Jagjit Malhotra	Preet Kanwal, Dr. Jagjit Malhotra, "Transient mitigation of multi-channel long haul DWDM OADM ring network", International Journal of Engineering Research-Online, volume-3, issue-3, June 2015.		
8	Dr. Jagjit	Abhay Bhandari, Jagjit Malhotra, “A review on Network		

	Malhotra	Survivability in Optical Networks”, International Journal of Engineering Research and Applications, Vol. 5, Issue 12, (Part-3), pp.97-101, December 2015		
9	Dr. Jagroop Singh Sidhu	“An edge regeneration method for artifact removal in compressed images”, International journal of computer applications, vol. 130, no. 17, pp. 28-36		
10	Dr. Jagroop Singh Sidhu	Gurkirandeep Kaur, Jagroop Singh Sidhu, ” A Comparative Analysis of Predefined & Proposed Filter for Different Gurumukhi Inputs”, International Journal of Informative & Futuristic Research, Vol. No.2, Issue No.5, Jan. 2015	4.164	
11	Dr. Jagroop Singh Sidhu	Rupinder Kaur, Jagroop Singh Sidhu, “ Discrete wavelet transform for image compression and quality assessment of compressed images”, International Journal of Informative & Futuristic Research, Vol. No.2, Issue No.9, May 2015	4.164	
12	Dr. Jagroop Singh Sidhu	Jagroop Singh Sidhu , “Corner outlier reduction in block based DCT compressed images”, Journal of Applied Global Research (JAGR), USA, Volume 8, Issue 21, 2015.		
13	Ms. Aarti Kochhar	Sonia Jassi, Aarti Kochhar , “Improved Steganography in Images with $2^k$ correction method” International Journal for Science and emerging Technologies with latest trends, 20(1)12-17 (2015) ISSN No.(online) 2250-3641, ISSN No. (print) 2277-8136	1.47	
14	Dr. Kiran Ahuja	Kiran Ahuja, Brahmjit Singh, Rajesh Khanna, “Optimal Network Selection in Heterogeneous Wireless Environment for Multimedia Services,” Wireless Personal Communication, Vol. 83, No. 1, pp 441-454, July 2015	0.979	1
15	Dr. Kiran Ahuja	Paramjit Singh, Kiran Ahuja, “QoS aware topology management of MANET for cooperative communication,” CiiT International Journal of Wireless Communication, Vol 7, No.1 , 2015	0.572	
16	Mr. Hari Singh	Sukhwinder Kaur and Hari Singh, “Human Eye Blink Detection using YCbCr Color Model, Haar Like Features and Template Matching”, International Journal of Advanced Research in Electrical, Electronics and Instrumentation Engineering (IJAREEIE), Vol 4, Issue 2, 2015, pp 825-832.	5.016	
17	Mr. Hari Singh	Neetu Saini, and Hari Singh, “Comparison of Different Approaches for Multiple Face Detection in Color Images”, International Journal of Innovative Research in Electrical, Electronics, Instrumentation and Control Engineering (IJIREEICE), Vol 3, Issue 1, January 2015, pp 38-42.	3.885	
18	Mr. Hari Singh	ShahzadPreet Singh, Saurabh Bansal, Mohit Ahuja, Sugam Parnami, and Hari Singh,” Classification of Apples using Neural Network”, International Journal of Science, Technology & Management, Vol. 04, Special Issue 01, March 2015, pp 1599 – 1605.	2.012	
19	Mr. Ashish Malhotra	“Colour Spaces Effects On Joint Dct-Dwt Based Digital Image Watermarking” International Journal of Electronics, Communication & Instrumentation Engineering Research and Development (IJEIERD) ISSN(P): 2249-684X; ISSN(E): 2249-7951 Vol. 5, Issue 1, Feb 2015, pp. 9-18	4.9467	
20	Ms. Risha Sharma	Shweta Chadha, Risha Sharma, “Analysis of Low Phase Noise and Low Power CMOS VCO – A Review”, International Journal of Computer Science and Information Technologies, Vol. 6 (4) , pp.3475-3478, 2015	3.32	

**Year 2014:**

<b>Sr. No.</b>	<b>Faculty Name</b>	<b>Details of Paper (Title, co-authors, journal name, volume, page no, year)</b>	<b>Metrics Impact Factor, Indexing Etc.</b>	<b>No. of Citations</b>
1	Dr. Manoj Kumar	Gurkirat Kaur, Manoj Kumar, Manju Bala, "Comparing Ethernet & Soft RoCE over 1 Gigabit Ethernet", International Journal of Computer Science and Information Technologies (IJCSIT) Vol. 5 (1), 2014, pp 323-327 ISSN: 0975-9646.	3.32	
2	Dr. Manoj Kumar	Anurag Sharma, Dinesh Kumar, Rahul Malhotra, Manoj Kumar, "Investigation of Delivery of Triple Play Service in GE-PON Fiber to the Home Network", International Science Index, Vol. 2014, No10, Part XVII.		
3	Dr. Manoj Kumar	Jagjit Singh Malhotra, Manoj Kumar, Ajay K. Sharma," Low cost solution to high capacity 32 x 32 channel FTTH duplex link employing triple play services", Elsevier Science's International Journal for Light and Electron Optics, Optik, Germany, Volume 125, Issue No.1, January 2014, Pages 93-96. ISSN 0030-4026.	0.717	2
4	Dr. Manoj Kumar	Prabhpreet Kaur Bhatia, Vineet Anand, Anurag Sharma, Manoj Kumar, "Analysis and Augmentation of IMD in Multi tone Analog CATV Transmission system", DST & PTU sponsored International Multi Track Conference on Sciences, Engineering and Technical Innovations (imtc14) at CT Group of Institutions on June 2 & 3, 2014, pp 151-155.		
5	Dr. Neeru Malhotra	Neeru Malhotra et al., (2014), "Accurate Investigation of Coaxial-Slot Antenna for Invasive Microwave Hyperthermia Therapy", International Journal of Sciences: Basic and Applied Research, vol. 16, ISSN (Print and Online): 2307-4531, no. 1, pp. 388- 396.	0.323	
6	Dr. Neeru Malhotra	Juhi Rai, Ajay Dang, Neeru Malhotra & Anupma Marwaha, "Optimization of Feed Point Location of Low Profile Triangular Patch Antenna" published in International Journal of Electronics Communication and Computer Engineering. Vol. 5, Issue 2, march 2014 ISSN (Online): 2249-071X, ISSN (Print):2278-4209.	1.09	1
7	Dr. Neeru Malhotra	Neeru Malhotra et al., "Finite Element Modeling of Novel Rectangular Plate Antenna for Superficial Hyperthermia", International Journal of Electronics and Communication, ISSN: 2051-5219, vol. 14, issue 2, 2014	2.221	
8	Dr. Jagjit Singh Malhotra	Jagjit Singh Malhotra, Manoj Kumar, Ajay K. Sharma, "Low cost solution to high capacity 32 x 32 channel FTTH duplex link employing triple play services" Elsevier Science's International Journal for Light and Electron Optics, Optik, Germany, Volume 125, Issue No.1, January 2014, Pages 93-96. ISSN 0030-4026.	0.717	
9	Dr. Jagjit Singh Malhotra	Lovdeep Singh, Jagjit Singh Malhotra, Charanjeet Singh, "Microwave Properties of Co-Zr Substituted M-type Ba-Sr Hexagonal Ferrite", CiiT International Journal of Wireless Communication, Vol 6, No 05, May 2014.	0.572	
10	Dr. Jagjit Singh Malhotra	Pankaj Sharma, Sandeep Kaushal, Anurag Sharma, Jagjit Singh Malhotra, "Link Length Augmentation of Optically Coded Multi-User Network by using Electronic Equalization Technique", Proceedings of 2014 RAECS		

		UIET Panjab University Chandigarh, 06-08 March, 2014.		
11	Dr. Jagroop Singh Sidhu	“Detection methods for blocking artifacts in transform coded images”, IET image Processing Journal, doi: 10.1049/iet-ipr.2013.0403, 2013, pp. 1-10	0.64	
12	Dr. Jagroop Singh Sidhu	Rupinder Kaur, Jagroop Singh Sidhu, ”Comparative study of DWT based image Compression using HAAR, DAUB & COIF Wavelets”, International Journal of Advance Research In Science And Engineering, 2014.	1.142	
13	Dr. Jagroop Singh Sidhu	Jagroop Singh Sidhu, “Blocking artifact detection and reduction in block based DCT compressed gray scale images”, CIIT International Journal of Digital Image Processing, Vol. 6, No. 5, 2014.	.652	
14	Ms. Bindiya Jain	“A Survey on Design and Development of Energy Efficient Cross Layer Approaches in Wireless Sensor Networks.” International Journal of Research in Advent Technology, Vol.2, No.4, April 2014	2.865	
15	Ms. Aarti Kochhar	Sonia Jassi, Aarti Kochhar, “Steganography in Images using sobel edge detection with $2^k$ correction method”, published in International Journal for Science and emerging Technologies with latest trends,15(1) 1-6(2014) ISSN No.(online) 2250-3641, ISSN No. (print) 2277-8136	1.47	
16	Ms. Aarti Kochhar	Sukhmeet Kaur, Aarti Kochhar, “Detection and Removal of cast and self shadow in Images”, published in International Journal of Electronics ,Electrical and Computational system, 3(6) 1-5(2014)ISSN No. 2348-117X	2.52	
17	Dr. Kiran Ahuja	Kiran Ahuja, Brahmjit Singh, Rajesh Khanna, “Network Selection Based on Weight Estimation of QoS Parameters in Heterogeneous Wireless Multimedia Networks,” Wireless personal communication, Vol. 77, No. 4, pp 3027-3040, August 2014.	0.979	2
18	Dr. Kiran Ahuja	Kiran Ahuja, Brahmjit Singh, Rajesh Khanna, “Network Selection Algorithm Based on Link Quality Parameters for Heterogeneous Wireless Networks” Optik- International journal for light and Electron optics, Vol. 125, No. 14, pp 3657–3662, July 2014.	0.768	7
19	Dr. Kiran Ahuja	Kiran Ahuja, Brahmjit Singh, Rajesh Khanna, “PSO Based Network Selection in Heterogeneous Wireless Environment”, Optik- International journal for light and Electron optics, Vol. 125, No. 1, pp 214–219, January 2014.	0.768	2
20	Dr. Kiran Ahuja	Paramjit Singh, Kiran Ahuja, “Effect of multi traffic on topology managed MANET with cooperative communication,” International Journal of Advances in Engineering and Technology, Vol. V, Issue No. IV, pp 48-52, Oct.-Dec., 2014.	3.12	0
21	Dr. Kiran Ahuja	Kiran Ahuja, Brahmjit Singh, Rajesh Khanna, “Available Link Bandwidth Based Network Selection in Multi-access Networks,” International Journal of Intelligent Systems and Applications (IJISA), Vol. 6, No. 3, pp 76-83, February 2014.	ICV 2013 7.77	2
22	Mr. Love Kumar	Varsha, Love Kumar, Anurag Sharma, “Design and Implementation of Optical codes in Multiuser WCDMA network”, <i>International Journal of Electronics, Communication &amp; Instrumentation Engineering Research and Development (IJEIERD)</i> , vol.4 issue 2 pp 149-154, 2014	4.9467	



23	Mr. Love Kumar	Anisha, Love Kumar ” PERFORMANCE EVALUATION ON OPTIMIZATION OF WCDMA BASED RADIO OVER FIBER (ROF) TRANSMISSION LINK” International Journal of Electronics, Communication & Instrumentation Engineering Research and Development (IJECIERD), Vol. 4, Issue 6, pp29-36, Dec 2014.	4.9467	
24	Mr. Love Kumar	Jatinder Pal Singh, Love Kumar, “Power Consumption Analysis of Wireless Sensor Networks with different Modulation and Routing Techniques” International Journal of Emerging Technologies in Computational and Applied Sciences, vol-2, pp 116-121, September-November 2014	Impact factor count value 6.20	
25	Mr. Love Kumar	Jatinder Pal Singh, Love Kumar”POWER CONSUMPTION ANALYSIS OF STATIC AND MOBILE WIRELESS SENSOR NETWORKS WITH CONVERGE CAST ROUTING” International Multi Track Conference on sciences, Engineering & Technical Innovations, June 3&4, 2014	IC Value 6.32	
26	Mr. Love Kumar	Jatinder Pal Singh, Love Kumar, Power Consumption measurement for Converge Cast Routing in Wireless Sensor Network” National Conference on Innovations in Engineering and Information Technology (IEIT-2014) March 28-29, 2014		
27	Ms. Poonam Sethi	Sonu Dhall, “Geometric and Appearance Feature Analysis for Facial Expression Recognition”, International Journal of Advanced Engineering Technology, Vol. V, Issue III, pp. 1-11, July-September 2014.		
28	Ms. Poonam Sethi	Sonu Dhall, “Fusion of Appearance and Geometric Descriptors in Facial Expression Analysis”, International Journal of Advanced Engineering Technology, Vol. V, Issue III, pp. 27-34, July-September 2014		
29	Mr. Ashish Malhotra	“A Survey on Image Watermarking Techniques”, International Journal for Science and Emerging Technologies with Latest Trends” 18(1): 22- 26(2014) ISSN No. (Print): 2277-8136 ISSN No. (Online):2250-3641	1.472	
30	Ms. Shefali Sharma	‘Achieving power and Area reduction by redesigning existing memory IC’ , Prof. Bipan Kaushal, International Journal of Engineering Trends & Technology (IJETT), edition, ISSN: 2231-5381, Pg. No.-340-343, May,2014	1.795	
31	Mr. Vishav Kapoor	“Robust Threshold Estimation for Image Denoising using Wavelet Transforms” during International Multitrack Conference held at CT Group of Institution on June 3 & 4 2014		

### Year 2013:

Sr. No.	Faculty name	Details of Paper (Title, co-authors, journal name, volume, page no, year)	Metrics Impact Factor, Indexing Etc.	No. of Citations
1	Dr. Manoj Kumar	Gurkirat Kaur, Manoj Kumar, Manju Bala, “Performance Evaluation of Soft RoCE over 1 Gigabit Ethernet”, IOSR Journal of Computer Engineering (IOSR-JCE) Volume 15, Issue 4 (Nov. - Dec. 2013), PP 81-87 e-ISSN: 2278-0661, p-ISSN: 2278-8727.	1.213	

2	Dr. Manoj Kumar	Manwinder Singh, Manoj Kumar, Jyoteesh Malhotra, “Research Gaps in Cognitive Radios Networks”, Vol. 2 Issue 2, pp 121-125, Feb. 2013, International Journal of advanced and innovative research(IJAIR), ISSN: 2278-7844.	0.349	
3	Dr. Manoj Kumar	Jagjit Singh Malhotra, Manoj Kumar, Ajay K. Sharma, Performance comparison of PSQPSK and PM-QPSK modulation schemes in high capacity long haul DWDM optical communication link. International Journal of Engineering Sciences, 2(5) May 2013, pp. 154-159.	2.668	
4	Dr. Manoj Kumar	Parambir singh, Manoj Kumar, Anurag Sharma, “Design and performance investigation of multi user OCDMA network”. International Journal of Scientific & Engineering Research Vol. 4, Issue 7, July 2013. ISSN 2229-5518.	3.2	2
5	Dr. Manoj Kumar	Jagjit Singh Malhotra, Manoj Kumar, Ajay K. Sharma, Performance optimization of high capacity long reach 32 channel FTTH downstream link employing triple play services, Elsevier Science’s International Journal for Light and Electron Optics, Optik, Germany, Volume 124, Issue No.16, August 2013, Pages 2424-2427. ISSN 0030-4026.	0.769	3
6	Dr. Manoj Kumar	Jagjit Singh Malhotra, Manoj Kumar, Ajay K. Sharma, Performance evaluation and PMD tolerance of PM-QPSK at 100 Gb/s in dispersion managed 64 channel long haul DWDM optical communication link. DE GRUYTER Journal of Optical Communication, Vol.34(4), pages 351-356, 2013.	0.2	
7	Dr. Manoj Kumar	Jagjit Singh Malhotra, Manoj Kumar, Ajay K. Sharma, Estimation and mitigation of FWM penalties in dispersion managed 32 channel long haul DWDM soliton link, Elsevier Science’s International Journal for Light and Electron Optics, Optik, Germany, Volume 124, Issue No.17, September 2013, Pages 3029-3032. ISSN 0030-4026.	0.769	3
8	Dr. Manoj Kumar	Jagjit Singh Malhotra, Manoj Kumar, Ajay K. Sharma, Performance evaluation of 16 channel DWDM radio-over-fiber link, Elsevier Science’s International Journal for Light and Electron Optics, Optik, Germany, Volume 124, Issue No.20, October 2013, Pages 4120-4122. ISSN 0030-4026.	0.769	2
9	Dr. Manoj Kumar	Manwinder Singh, Manoj Kumar, Jyoteesh Malhotra, “Research Gaps in Cognitive Radios Networks”, International Journal of advanced and innovative research.(IJAIR)Vol. 2 Issue 2, pp 121-125, Feb. 2013. ISSN: 2278-7844.	0.349	
10	Dr. Neeru Malhotra	Neeru Malhotra et.al., (2013) , “Adaptive Finite Element Analysis for Optimized Design of Coaxial Antenna Fed DI Water-Stowed Waveguide Applicator for Therapeutic Local Hyperthermia System”, International Journal Electronics Communication and Computer Engineering, vol. 4, issue 4, ISSN (Online): 2249–071X, ISSN (Print): 2278–4209.	1.0909	2
11	Dr. Neeru Malhotra	Sheetal Nave, Neeru Malhotra, Rajdeep Singh “Implementation of GASAO Algorithm for Circuit Minimization and Optimization” published in International Journal Of Computer Science and Information Technology (IJCDIT),Vol.4, Issue 5, September -2013,ISSN: 0975-9646.	3.32	
12	Dr. Neeru Malhotra	Amanjot Kaur, Neeru Malhotra, Preetinder Singh “Coaxial Probe Fed T-Shaped Patch Antenna for Wideband Applications” published in International Journal of Engineering Research & Technology (IJERT),Vol.2, Issue 11, November-2013,ISSN: 2278-0181.	1.76	

13	Dr. Neeru Malhotra	Navdeep Kaur, Neeru Malhotra, "FPGA Impementation of ALU using BIST" published in International Journal Of Engineering Research & Technology (IJERT),Vol.2, Issue 3,March -2013,ISSN: 2278-0181	1.76	
14	Dr. Neeru Malhotra	Amninder Kaur, Neeru Malhotra, Saniya Puri and Bhavesh. Article: Analytical Study of Design Parameters of Co-Axial Antenna for Microwave Ablation Therapy using COMSOL Multiphysics. International Journal of Computer Applications 83(12):48-51, December 2013	3.12	
15	Dr. Jagjit Singh Malhotra	Jagjit Singh Malhotra, Manoj Kumar, Ajay K. Sharma, Performance optimization of high capacity long reach 32 channel FTTH downstream link employing triple play services, Elsevier Science's International Journal for Light and Electron Optics, Optik, Germany, Volume 124, Issue No.16, August 2013, Pages 2424-2427. ISSN 0030-4026.	0.769	
16	Dr. Jagjit Singh Malhotra	Jagjit Singh Malhotra, Manoj Kumar, Ajay K. Sharma, Estimation and mitigation of FWM penalties in dispersion managed 32 channel long haul DWDM soliton link, Elsevier Science's International Journal for Light and Electron Optics, Optik, Germany, Volume 124, Issue No.17, September 2013, Pages 3029-3032. ISSN 0030-4026.	0.769	
17	Dr. Jagjit Singh Malhotra	Jagjit Singh Malhotra, Manoj Kumar, Ajay K. Sharma, Performance evaluation of 16 channel DWDM radio-over-fiber link, Elsevier Science's International Journal for Light and Electron Optics, Optik, Germany, Volume 124, Issue No.20, October 2013, Pages 4120-4122. ISSN 0030-4026.	0.769	
18	Dr. Jagjit Singh Malhotra	Jagjit Singh Malhotra, Manoj Kumar, Ajay K. Sharma, Performance evaluation and PMD tolerance of PM-QPSK at 100 Gb/s in dispersion managed 64 channel long haul DWDM optical communication link. DE GRUYTER Journal of Optical Communication, Vol.34(4), pages 351-356, 2013.	0.2	
19	Dr. Jagjit Singh Malhotra	Jagjit Singh Malhotra, Manoj Kumar, Ajay K. Sharma, Performance comparison of PSQPSK and PM-QPSK modulation schemes in high capacity long haul DWDM optical communication link. International Journal of Engineering Sciences, 2(5) May 2013, pp. 154-159.	2.668	
20	Dr. Jagroop Singh Sidhu	"Performance Evaluation of various Image De-noising Techniques", Journal of Information and Computing Science (UK), 2013	NAAS Rating 5.5	
21	Dr. Jagroop Singh Sidhu	"A Post-Processing algorithm for detection and removal of corner outlier", International Journal of Computer Applications, vol. 8, no. 1 pp. 013-026	NAAS Rating 5.5	
22	Dr. Jagroop Singh Sidhu	"Blocking artifact detection method for highly compressed images", International Journal of Computer Science and Engineering Technology , Vol. 4 No. 06 Jun 2013	NAAS Rating 5.5	
23	Dr. Jagroop Singh Sidhu	Review of Deblocking Of Compressed Images Using Post Processing Spatial Techniques, Roohi Makol, "International Journal for Science and Emerging Technologies with Latest Trend, 9(1), pp. 1-7, 2013.	0.263	

24	Dr. Jagroop Singh Sidhu	Deblocking filtering method based on separate modes, International Journal of Computer Science and Engineering Technology, Vol. 4 No. 06 Jun 2013.		
25	Dr. Jagroop Singh Sidhu	Reduction of blocking artifacts in compressed medical images, S.Singh, D.Singh, Journal of Information and Computing Science (UK), vol.8, no. 2, 2013.		
26	Dr. Jagroop Singh Sidhu	Comparison of detection methods based on different modeling functions for blocking artifacts in highly compressed images, D.Singh, MoinUddin, IET image Processing Journal, doi: 10.1049/iet-ipr.2013.0403, pp. 1-10, 2013	0.64	
27	Dr. Jagroop Singh Sidhu	Blocking artifact reduction in compressed data, CIIT International Journal of Digital Image Processing, doi:DIP062013002, 2013.	0.652	
28	Ms. Aarti Kochhar	Gurmeet Kaur,Aarti Kochhar, "Transform domain Analysis of Image steganography" published in International Journal for Science and emerging Technologies with latest trends, 4(1) 29-37 (2013) ISSN No.(online) 2250-3641, ISSN No. (print) 2277-8136	1.47	4
29	Ms. Aarti Kochhar	Amanbir Sandhu'Aarti Kochhar, "Analysis For Image retrieval of texture ,color and shape features" published in <b>International Journal of Management, IT and Engineering</b> , 3.3 (2013): 386-394ISSN: 2249-0558	5.29	
30	Dr. Kiran Ahuja	Kiran Ahuja, Brahmjit Singh and Rajesh Khanna, "Available Bandwidth Estimation for Network Selection in Heterogeneous Environment of WLAN and WiMAX", International Journal of Computer Applications 71(5):23-27, June 2013. Published by Foundation of Computer Science, New York, USA, ISSN: 0975 – 8887	1.56	0
31	Mr. Love Kumar	Anisha, Love Kumar "Simulative Analysis of DPSK modulated WCDMA Based RoF Link" International journal of science & emerging technology with latest trends, vol 11 issue 1pp22-26., 2013	1.472	
32	Mr. Love Kumar	Jatinder Pal Singh, Love Kumar "A Survey on Power Management Techniques in Wireless Sensor Network" international journal of science & emerging technology with latest trends, vol 13 issue 1 pp31-35, 2013.	1.472	
33	Ms. Poonam Sethi	Manisha Lumb, "Texture Feature Extraction of RGB, HSV, YIQ and Dithered Images using GLCM, Wavelet Decomposition Techniques", International Journal of Computer Applications, Vol. 68, No. 11, pp. 25-31, April 2013.	3.12	2
34	Ms. Poonam Sethi	Jaideep Kaur, "An Efficient Method of Edge Detection using Fuzzy Logic", International Journal of Computer Applications, Vol. 77, No. 15, pp. 27-30, September 2013.	3.12	-
35	Ms. Poonam Sethi	Jaideep Kaur, "Evaluation of Fuzzy Interference System in Image Processing", International Journal of Computer Applications, Vol. 68, No. 22, pp. 1-4, April 2013.	3.12	2

36	Ms. Poonam Sethi	Manisha Lumb, "Texture Feature Extraction of RGB, HSV, YIQ and Dithered Images using Wavelet and DCT Decomposition Techniques", International Journal of Computer Applications, Vol. 73, No. 10, pp. 41-49, July 2013.	3.12	
37	Mr. Hari Singh	Navjot Kaur, Hari Singh, and Anand Nayyar, "Fuzzy Logic based Expert System for Diagnosing Diabetes: A Review", International Journal of Electronics, Communication and Instrumentation Engineering Research and Development (IJEIERD), Vol. 3, Issue 3, August 2013, pp- 25 – 34.	IF:5.2896	
38	Mr. Hari Singh	Neetu Saini, Sukhwinder Kaur, and Hari Singh, "A Review: Face Detection Methods and Algorithms", International Journal of Engineering Research and Technology, Vol. 2, Issue 6, June 2013, pp 284 – 289.	IF:1.76	01

### Year 2012:

S. No	Faculty name	Details of Paper (Title, co-authors, journal name, volume, page no, year)	Metrics Impact Factor, Indexing Etc.	No. of Citations
1	Dr. Manoj Kumar	Jagjit Singh Malhotra, Manoj Kumar, Ajay K. Sharma , Performance enhancement of 32 channel long haul DWDM soliton link using electronic dispersion compensation, International Journal of Electronics Communication & Instrumentation Engineering Research and Development, Vol. 2 Issue 4, pp. 11-16, Dec- 2012.	5.28	
2	Dr. Neeru Malhotra	Amandeep Singh, Neeru Malhotra & Gagandeep Sharma, "Simulative Analysis of Discone Antenna for 2.44 Ghz Regime using Antenna Magus", published in International Journal of Computing and Corporate Research, Vol.2, Issue-2, March 2012.	2.487	
3	Dr. Neeru Malhotra	Gaurav Bhargav, Neeru Malhotra "Effectiveness of PCB Simulations in High Speed DDR Memory Design" published in International Journal for Science and Emerging Technologies with latest Trends Vol.2, November-2012.	1.472	
4	Dr. Neeru Malhotra	Navdeep Kaur, Neeru Malhotra, "VHDL Implementation of ALU with Built-in-Self-Test Technique", published in International Journal of Engineering Research & Technology (IJERT), Vol.5, Issue 1, November -2012, ISSN: 2278-800X.	1.76	
5	Dr. Neeru Malhotra	Amrit Pal Singh, Rajesh Kumar, Neeru Malhotra and Suman, "Preparation of ZnO Nanoparticles by Solvothermal Process" published in International Journal for Science and Emerging Technologies with Latest Trends, Vol.4, ,December-2012, ISSN: 2250-3641.	1.472	
6	Dr. Neeru Malhotra	Alok Kumar, Jagjit Malhotra & Neeru Malhotra, "Performance Investigations on Multichannel Radio-over- Fiber (RoF) Link", published in UACEE International Journal of Advances in Electronics Engineering, Vol.2, Issue-3 ISSN 2278-215X.(2012)	-	

7	Dr. Jagjit Singh Malhotra	Jagjit Singh Malhotra, Manoj Kumar, Ajay K. Sharma , Performance enhancement of 32 channel long haul DWDM soliton link using electronic dispersion compensation, International Journal of Electronics Communication & Instrumentation Engineering Research and Development, Vol. 2 Issue 4, pp. 11-16, Dec- 2012.	5.28	
8	Dr. Jagjit Singh Malhotra	Vishal Sharma, Jagjit Malhotra, Harsukhpreet Singh, "Quality of Service (QoS) evaluation of IEEE 802.11 WLAN using different PHY-Layer Standards" Optik - Int. J. Light Electron Opt. (2012), doi:10.1016/j.ijleo.2011.12.009	0.769	
9	Dr. Jagjit Singh Malhotra	Gaurav Soni, Jagjit Singh Malhotra, "Impact of Beam Divergence on the Performance of Free Space Optical System," International Journal of Scientific and Research Publications, Volume 2, Issue 2, February 2012.	1.22	
10	Dr. Jagjit Singh Malhotra	Amandeep Kaur Virk, Jagjit Singh Malhotra, Sakshi Pahuja, "Link Margin Optimization of Free Space Optical Link under the Impact of Varying Meteorological Conditions", <u>International Journal of Engineering Science and Technology (IJEST)</u> , 4(3), 1120 – 1125, 2012.	-	
11	Dr. Jagjit Singh Malhotra	Anurag Sharma, Jagjit Singh Malhotra, "Performance Optimization of Multi-Channel, High Speed DWDM OADM ring", CiiT International Journal of Digital Signal Processing, 2012.	0.126	
12	Dr. Jagroop Singh Sidhu	Performance evaluation of the TCP connection using different error control mechanism (ECMs), Vishal Sharma, Shally Gujral, International Journal of Light Electron Opt. (Elesiver), 2012.	0.542	
13	Dr. Jagroop Singh Sidhu	Performance Evaluation of various Image Denoising Techniques, Gurmeet Kaur, Journal of Information and Computing Science (UK), vol. 8, no. 1, 2012.		04
14	Dr. Jagroop Singh Sidhu	Image denoising technique based on fuzzy histogram adaptive filter, Jasmeen Kaur, International Journal of Engineering and Research and Technology (IJERT), vol.1, issue 7, 2012.		
15	Dr. Jagroop Singh Sidhu	Performance analysis of sack enabled TCP connection over wireless link, Vishal Sharma, Shally Gujral, International Journal of Computing and Corporate Research, vol. 2, march 2012..	2.487	
16	Ms. Aarti Kochhar	Gurmeet Kaur, Aarti Kochhar, "A Steganography implementation based on LSB and DCT", published in International Journal for Science and emerging Technologies with latest trends, 4(1) 35-41 (2012) ISSN No.(online) 2250-3641, ISSN No. (print) 2277-8136	1.47	14
17	Ms. Aarti Kochhar	Amanbir Sandhu, Aarti Kochhar, "Content Based Image Retrieval using Texture, Color and Shape for Image Analysis" published in International Journal of Computers & Technology 3(1) 149-152 (2012) ISSN No.2277-3061	1.392	10
18	Dr. Kiran Ahuja	Rupinder Kaur, Kiran Ahuja, "Impact of Transmission Power on QoS of IEEE 802.11 Mesh Network", IJCIS, pp 8-11, July 2012 , ISSN: 2229-5208	0.289	0
19	Mr. Amit	"Circuit Minimization Using PSO and Genetic Algorithm",		

	Arora	International Journal of Engineering Trends and Technology, 2012		
20	Ms. Poonam Sethi	Paramjeet Kaur, "Removal of Blocking Artifacts using Various Filtering Techniques", International Journal of Computer Applications, Vol. 48, No. 24, pp. 11-18, June 2012.	3.12	
21	Ms. Poonam Sethi	Gurpreet Kaur, "A Novel Methodology for Automatic Bacterial Colony Counter", International Journal of Computer Applications, Vol. 49, No. 15, pp. 21-26, July 2012.	3.12	1
22	Ms. Poonam Sethi	Paramjeet Kaur, "Blocking Artifacts Reduction in Block based Discrete Cosine Transform Compressed Images", International Journal of Computer Applications, Vol. 42, No. 6, pp. 19-24, March 2012.	3.12	3
23	Mr. Hari Singh	Hari Singh and Jaswinder Singh, "A Review on Electrooculography", International Journal of Advanced Engineering Technology, Volume 3, Issue 4, Oct – Dec 2012, pp 115-122.		13
24	Mr. Hari Singh	Hari Singh, Jaswinder Singh, "Human Eye Tracking and Related Issues: A Review", International Journal of Scientific and Research Publications (IJSRP), Vol. 2, Issue 9, September 2012, pp 1-9.	IF:1.22	16
25	Ms. Risha Sharma	"Analysis and Design of Low Power Column bypass Multiplier using Modified Booth Algorithm" Risha Sharma , Mohit Gupta, International Journal of Trends in Electronics Engineering (IJTIEE), Vol.1(6),pp.8-12, 2012.	3.135	
26	Ms. Shefali Sharma	'Smart Environments', Himanshu Garg, National Conference on emerging Trends In Communication, Control And Computation" (ET3C'12), Baddi, Pg No.-93-98,2012		

**Total Number of publications per faculty:**

S.No	Name	Total no. of publications*					Number of papers published in peer reviewed journals (national / international)				
		2016	2015	2014	2013	2012	2016	2015	2014	2013	2012
1	Dr. Manoj Kumar	2	7	6	12	1	2	3	4	9	1
2	Dr. Neeru Malhotra	3	2	3	5	5	3	2	3	5	5
3	Dr. Jagjit Singh Malhotra	6	3	5	5	8	4	3	3	5	6
4	Dr. Jagroop Singh	10	4	4	9	6	10	4	3	8	4
5	Ms. Bindiya Jain			1					1		
6	Ms. Aarti Kochhar		1	2	2	2		1	2	2	2
7	Dr. Kiran Ahuja	2	2	11	5	3	2	2	5	1	1
8	Mr. Ramneek Singh										
9	Mr. Amit Arora	4				1	4				1
10	Mr. Rajesh Wadhwa										
11	Mr. Love kumar	8		6	2		2		4	2	

12	Ms. Poonam Sethi			1	3	3		1			1
13	Mr. Hari Singh	2	4		2	2		3		2	2
14	Mr. Ganesh Chand										
15	Mr. Ashish Malhotra		1	1				1	1		
16	Mr. Navleen S Rekhi				2	2					
17	Ms. Risha Sharma		1			1		1			1
18	Mr. Vishav Kapoor	2		1							

**b. Number of publications listed in International Database (For Eg :Web of Science, Scopus, Humanities International Complete, Dare Database-International Social Sciences Directory, EBSCO host etc.):**

Dr. Manoj Kumar	:	24
Dr. Neeru Malhotra	:	05
Dr. Jagjit Singh Malhotra	:	09
Dr. Jagroop Singh	:	16
Dr. Kiran Ahuja	:	04
Mr. Amit Arora	:	03
Mr. Love Kumar	:	09
Ms. Poonam Sethi	:	07
Mr. Hari Singh	:	08

c. Monographs : NIL

d. Chapter in Books : NIL

e. Books Edited : NIL

f. Books with ISBN/ISSN numbers with details of publishers:

S.No.	Name of Faculty	Book Authored	Publisher, Year	ISBN/ISSN no
1	Dr. Manoj Kumar	Principles of Communication Engineering	Satya prakashan, New Delhi.	ISBN 81-7684-445-4
2	Dr. Manoj Kumar	Communication Systems-I.	Satya prakashan, New Delhi.	ISBN 81-7684-099-8
3	Dr. Manoj Kumar	Troubleshooting & Maintenance of Electronics equipment	Satya prakashan, New Delhi.	ISBN 81-7684-387-3
4	Dr. Manoj Kumar	Electronic Components & Materials	Satya prakashan, New Delhi.	ISBN 81-7684-148-X
5	Dr. Manoj Kumar	Electronic Devices & Circuits – I	Satya prakashan, New Delhi.	ISBN 81-7684-173-3
6	Dr. Manoj Kumar and Dr. Jagjit Malhotra	Basic Electrical & Electronics Engineering	Jaico publishers, Bombay.	ISBN 81-7992-360-6
7	Dr. Manoj Kumar	Analog Communication Systems	Satya prakashan, New Delhi.	ISBN 81-7684-431-4
8	Dr. Manoj Kumar	Applied Power Electronics	Satya prakashan, New Delhi	ISBN 81-7684-080-7



9	Dr. Jagjit Singh Malhotra	Multi-Channel Optical Communication	Scholars' Press, Germany	ISBN 978-3-639-71875-1
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a. Citation Index & h-index:

S. No	Faculty Name	Cited By	h-index
1	Dr. Manoj Kumar	75	5
2	Dr. Neeru Malhotra	13	2
3	Dr. Jagjit Singh Malhotra	52	5
4	Dr. Jagroop Singh Sidhu	19	3
5	Ms. Bindiya Jain	21	2
6	Ms. Aarti Kochhar	28	3
7	Dr. Kiran Ahuja	57	5
8	Ms. Poonam Sethi	11	2
9	Mr. Hari Singh	82	4
10	Mr. Navleen Singh Rekhi	43	3
11	Ms. Risha Sharma	15	1

b. Publications by student:

**Year 2016**

- Rahat Mahajan, Kiran Ahuja, "Fighting energy crisis: renewable resources and sustainable development", 3<sup>rd</sup> DAV National Congress on Science, Technology, Engineering, Humanities & Management (STEHM'16), May 20 – 21, 2016.
- Ayush Kaalia, Akshay Goyal, Kashyap Aggarwal, Kiran Ahuja, "Solar power driven vehicular system", 3<sup>rd</sup> DAV National Congress on Science, Technology, Engineering, Humanities & Management (STEHM'16), May 20 – 21, 2016.
- Raveena Sharma, Suhani Chaudhary, Kiran Ahuja, "New future technology – light bulb to access the internet", 3<sup>rd</sup> DAV National Congress on Science, Technology, Engineering, Humanities & Management (STEHM'16), May 20 – 21, 2016.
- Suchitra Gupta, Ginnia Kakkar, Ganesh Chand "A Review on 5G: The Future of Mobile Network", 3<sup>rd</sup> DAV National Congress on Science, Technology, Engineering, Humanities & Management (STEHM'16), May 20 – 21, 2016.
- Alisha Mahajan, Akriti Bedi, Ankita Kaushal, Kiran Ahuja, "Non cooperative spectral sensing techniques in cognitive radio networks", 3<sup>rd</sup> DAV National Congress on Science, Technology, Engineering, Humanities & Management (STEHM'16), May 20 – 21, 2016.
- Himanshu Aggarwal, Ajeet Kumar, "Ultra wideband (UWB) antenna for USB dongle applications", 3<sup>rd</sup> DAV National Congress on Science, Technology, Engineering, Humanities & Management (STEHM'16), May 20 – 21, 2016.
- Smriti, Twinkle, Vinayka, Kiran Ahuja, "Fastest finger first detector", 3<sup>rd</sup> DAV National Congress on Science, Technology, Engineering, Humanities & Management (STEHM'16), May 20 – 21, 2016.
- Raveena Sharma, Kriti Chadha, Kiran Ahuja "Automatic speed control and breaking system", 3<sup>rd</sup> DAV National Congress on Science, Technology, Engineering, Humanities & Management (STEHM'16), May 20 – 21, 2016.

- Garima Verma, Mohit Gupta, Kiran Ahuja, “Generation and storage of renewable energy using PSOC microcontroller”, 3<sup>rd</sup> DAV National Congress on Science, Technology, Engineering, Humanities & Management (STEHM’16), May 20 – 21, 2016.

#### Year 2015

- ShahzadPreet Singh, Saurabh Bansal, Mohit Ahuja, Sugam Parnami, and Hari Singh, “Classification of Apples using Neural Network”, International Conference on Recent Trends in Engineering, Science and Management (ICRTE SM 15), pp 3093 – 3099, 15<sup>th</sup> March 2015, Jawaharlal Nehru University, New Delhi. (ISBN: 978-81-931039-2-0)
- Rishav Batra “The Hindu foreign policy” 2015

#### Year 2014

- Shreya Jain, Varun Mehra, Kiran Ahuja, “Radio Planning of 3G Cellular Networks,” in proceedings of DAV National Congress on Science , Technology and Management-Recent Trends in Electronics & Communication Engineering, 7-8 November, 2014
- Sukhmandeep Singh, Shubham Singh Sambyal, Kiran Ahuja, “A Review: Handover in 3G/UMTS Network,” in proceedings of DAV National Congress on Science , Technology and Management-Recent Trends in Electronics & Communication Engineering, 7-8 Nov., 2014
- Neha Chopra, and Navleen Singh Rekhi, “A Review Based on Face Expression Recognition and Analysis”, in proceedings of DAV National Congress on Science , Technology and Management-Recent Trends in Electronics & Communication Engineering, 7-8 Nov., 2014
- Umang Arora, Kapil Khanna, Mayuri Kashyap, N.S. Rekhi, “Propeller Led Clock”, in proceedings of DAV National Congress on Science , Technology and Management-Recent Trends in Electronics & Communication Engineering, 7-8 November, 2014
- Pavneet Kaur and Jagjit Singh Malhotra,” A Review Based on DWDM Longhaul Optical Soliton Communication Link”, in proceedings of DAV National Congress on Science , Technology and Management-Recent Trends in Electronics & Communication Engineering, 7-8 November, 2014
- Shitiz Jain, Yoginder Kumar and Ashish Malhotra,” Human Wireless Controlling Fire Fighting ROBOT”, in proceedings of DAV National Congress on Science , Technology and Management-Recent Trends in Electronics & Communication Engineering, 7-8 Nov., 2014
- Sandeep Kumar Bhullar, “Experience the Imaginary World: Augmented Reality and its Applications”, in proceedings of DAV National Congress on Science , Technology and Management-Recent Trends in Electronics & Communication Engineering, 7-8 Nov., 2014
- Varsha, Love Kumar and Anurag Sharma, “Implementation of 2-D Optical Codes in Multiusers WCDMA Net-Work”, in proceedings of DAV National Congress on Science , Technology and Management-Recent Trends in Electronics & Communication Engineering, 7-8 November, 2014
- Shefali Sharma, Satwinder Kaur, Vishvy Marwaha and Reema Rani, “Accident Avoidance System using Ultrasonic Sensor”, in proceedings of DAV National Congress on Science , Technology and Management-Recent Trends in Electronics & Communication Engineering, 7-8 November, 2014.

## Department of Computer Science & Engineering

### A) Faculty:

Name	No. of Papers Published in national/international journals	No. of publications listed in International Database	Monographs	Books edited	Chapters in books
Ms. Harpreet Kaur Bajaj	14	2	-	-	-
Mr. ParveenKakkar	15	-	-	-	-
Dr. Vinay Chopra	66	-	-	-	-
Mr. DhirajKapila	3	-	-	-	-
Mr. Gursewak Singh	5	-	-	-	-
Ms. SonaliTalwar	3	-	-	-	-

S. No.	Name	Paper Title	Journal	ISSN No.	Year	Citation Index	SNIP	SJR	Impact Factor	h-index
1	Ms. Harpreet Kaur Bajaj	Classification of Functional and Non functional requirements in Agile by Cluster Neuro Genetic Approach	International Journal of Software Engineering and its Applications”, SERSC South Korea, vol 10, no. 10, pp. 129-138.	1738-9984	2016	0.42		0.26	0.54	9
2	Ms. Harpreet Kaur Bajaj	”Implementation of SRRC Filter in Mobile WiMax with DWT Based OFDM System”	I.J. Computer Network and Information Security, vol 8, pp 62-69.	2074-9104	2016				0.726	16
3	Ms. Harpreet Kaur Bajaj	Performance analysis of DWT based OFDM over fading environments for mobile WiMax”	Optik - International Journal for Light and Electron Optics, vol 127,pp 544–54	0030-4026	2016	0.92	0.68	0.36	1.01	30
4	Ms. Harpreet Kaur Bajaj	Performance Analysis of Hybrid Approach Comprising Genetic Algorithm and Adaptive Approach on Test Case Prioritization.	International Journal of Computer Applications, vol 155, no. 8, pp 41-45.	0975-8887	2016					
5	Ms. Harpreet Kaur Bajaj	Isolated Character Recognition using Hierarchical	International Journal Of Engineering Sciences & Research	2277-9655	2016					

		approach with SVM classifier	Technology, vol 5, no.9, pp 570-575.							
6	Ms. Harpreet Kaur Bajaj	Analysis of proposed technique for graphical representation of isolated character using SVM classifier	International Journal Of Engineering Sciences & Research Technology, vol 5,no.11, pp 422-429	2277-9655	2016					
7	Ms. Harpreet Kaur Bajaj	“Performance Analysis of Different Wavelet Families Over Fading Environments for Mobile WiMAX System”,	International Journal of Future Generation Communication and Networking, SERSC South Korea, Vol. 8, pp. 87-98	2233-7857	2015					
8	Ms. Harpreet Kaur Bajaj	“Performance Evaluation of HSRP Protocol for Wireless Network for Fault Tolerance to Improve Quality of Service”,	International Journal of Engineering and Innovative Technology, vol. 3, no. 5, pp 267-269.	2277-3754	2013					
9	Ms. Harpreet Kaur Bajaj	“Performance Evaluation of WLAN by varying PCF, DCF and Enhanced DCF slots to improve Quality of service”,	IOSR Journal of Computer Engineering, vol. 2, no.5, pp 29-33.	2278-0661	2012					
10	Ms. Harpreet Kaur Bajaj	“Integration of Bacteria Foraging Optimization and Case Base Reasoning for Ground Water Possibility Detection”	International Journal of Applied Information Systems, Foundation of Computer Science FCS, New York, USA ,vol. 2, No.4, pp 30-35.	2249-0868	2012					
11	Ms. Harpreet Kaur Bajaj	“Comparative Study of Gaussian and Nearest Mean Classifiers for Filtering Spam E-mails”	Journal of Emerging Trends in Computing and Information Sciences, vol. 3, no.5, pp	2079-8407	2012					
12	Ms. Harpreet	Performance	The	2278-	2012					

	Kaur Bajaj	evaluation of Gaussian and Nearest Mean Classifiers for Filtering Spam E-mails?.	International Journal of Computer Science & Applications, vol. 1, no. 3, pp 184-193	1080						
13	Ms. Harpreet Kaur Bajaj	Technique to Reduce Routing Overhead in AODV	CIIT International Journal of Networking and Communication Engineering, Coimbatore, vol 2, no.3.		2010					
14	Ms. Harpreet Kaur Bajaj	Investigations into effectiveness of gaussian and nearest mean classifiers for spam detection	Indian Journal of Computer Science and Engineering vol. 2, no. 1, pp 1-5	0976-5166	2011					
15	Mr. Parveen Kakkar	Traffic Pattern based performance comparison of Reactive and Proactive protocols of mobile adhoc networks	International Journal of Computer Applications	0975-8887	2010	57			0.752	
16	Mr. Parveen Kakkar	The DDoS Attacks in MANET-A Review	Journal of Information Systems & Communication	0976-8742	2012	2				
17	Mr. Parveen Kakkar	Investigating the Impact of Random Waypoint AND Vector Mobility Models on AODV, OLSR and GRP Routing Protocols in MANET	International Journal of Computer Applications	0975-8887	2013				0.752	
18	Mr. Parveen Kakkar	A Study of the impact of random waypoint and vector mobility models on various routing protocols in Manet	International Journal of Advances in Computing and Information Technology	2277-9140	2013					
19	Mr. Parveen Kakkar	Investigation of Mobility Model Against	International Journal of Computers & Technology	2277-3061	2013				0.876	

		Reactive Routing Protocols in MANET's								
20	Mr. Parveen Kakkar	Soft Computing based technique for accurate effort Estimation: A Survey”	International Journal of Engineering Sciences	2320-0332	2013	2	1.35	1.916	3.165	
21	Mr. Parveen Kakkar	Performance investigations of DYMO, DSR, AODV & LAR Routing Protocols using different Mobility in MANETS	International Journal of Engineering Research & Technology	2278-0181	2013	2				
22	Mr. Parveen Kakkar	Optimizing the Cluster Partition Using Tabsoluteand Fuzzy cost for Heterogeneous WSNs	International journal of Computer Technology & Application	2229-6093	2014				2.804	
23	Mr. Parveen Kakkar	Performance Analysis of Multihop Routing Protocol in Wireless Sensor Networks	International Journal of Innovative Science, Engineering & Technology	2348-7968	2014				4.332	
24	Mr. Parveen Kakkar	Effect of varying packet interval time on Multihop routing protocol in Wireless Sensor Networks	Transactions on Networks and Communications, UK.		2014	1				
25	Mr. Parveen Kakkar	Comparison of Multihop Routing Protocols based on packet interval time in Wireless Sensor Networks	International Journal of Scientific Engineering and Technology	2277-1581	2014				0.489	
26	Mr. Parveen Kakkar	An Edge Regeneration Method for Artifacts Removal in Compressed Image	International Journal of Computer Application	0975 - 8887	2015				0.752	

27	Mr. Parveen Kakkar	Traffic signal Control using Enhanced AODV in VANETS	Asian Journal of Multidimensional Research journal	2278-4853	2016				0.518	
28	Mr. Parveen Kakkar	Performance Analysis of Encrypted Image by digital watermarking	Apeejay Journal of Computer Science and Applications	0974-5742	2008				1.125	
29	Mr. Parveen Kakkar	ACA A New Way Of Video Watermarking	Apeejay Journal of Computer Science and Applications	0974-5742	2009				1.125	
30	Dr. Vinay Chopra	Ant Colony Optimization approach for Solving FPGA Routing with minimum Channel Width Vol. 3, Issue 7	IJCSE	ISSN: 0975-3397	-	-	-	-	-	-
31	Dr. Vinay Chopra	Ant Colony Based Approach for Solving FPGA routing Vol. 8, Issue 4	IJCSI	ISSN: 1694-0814	-	-	-	-	-	-
32	Dr. Vinay Chopra	Solving FPGA Routing using Ant Colony Optimization with Minimum CPU Time Vol 2, Issue 4, pp: 223-226	IJCST	ISSN: 0976-8491	-	-	-	-	-	-
33	Dr. Vinay Chopra	ACO Based SAT Solver for FPGA Routing: A Novel Approach Vol 3, Issue 4	IJCIIT	ISSN: 0974-973X	-	-	-	-	-	-
34	Dr. Vinay Chopra	Multi-Objective Genetic Algorithm for FPGA Testing Vol. 6, pp: 1-6	IJSETT	ISSN No: 2250-3641	-	-	-	-	-	-
35	Dr. Vinay Chopra	Multi-Objective Genetic Algorithm for Testing MCNC FPGA	IJCSC	ISSN No: 2319-7080	-	-	-	-	-	-

		Benchmark Circuits Vol.2, Issue 1								
36	Dr. Vinay Chopra	Analysis of various Multiobjective Genetic Approaches in Association Rule Mining Vol 86, No. 16	IJCA	ISSN: 0975-8887	-	-	-	-	-	-
37	Dr. Vinay Chopra	Association Rule Mining: A Multi-objective Genetic Algorithm Approach Using Pittsburgh Technique Vol. 2, Issue 4	IJRTE	ISSN: 2277-3878	----	-	-	-	-	-
38	Dr. Vinay Chopra	A Review of Surveys on Estimating Software Development Effort pp: 448-451	IJAIR		--	-	-	-	-	-
39	Dr. Vinay Chopra	Neural Network and Fuzzy Logic based framework for Software Development Effort Estimation pp: 759-763	IJARCSSE	ISSN: 2277 128X	-	-	-	-	-	-
40	Dr. Vinay Chopra	To Design and Implement Neural Network and Fuzzy Logic for Software Development Effort Prediction	IJCA	ISSN: 0975-8887	-	-	-	-	-	-
41	Dr. Vinay Chopra	A predictive Energy Aware Hybrid Resource Scheduler for Green Cloud Computing Vol.1, No. 3	IJARC	ISSN No. 23212 640	-	-	-	-	-	-
42	Dr. Vinay Chopra	Test case Prioritization Using Genetic Algorithm Vol. 7, Issue 3	IJERD	ISSN No. 2278-067X.	-	-	-	-	-	-
43	Dr. Vinay	Design and	IJCSCE	ISSN	-	-	-	-	-	-



	Chopra	Implementati on of Testing Tool using Genetic Algorithm for Test Case Prioritization Vol. 7, Issue No. 3		2319- 7080						
44	Dr. Vinay Chopra	Image Compression of medical images using VQ-Huffman Coding Technique Vol. 1, No. 1, pp: 36-43	IJRBT	ISSN 2291- 2118	-	-	-	-	-	
45	Dr. Vinay Chopra	<i>DICOM Image Compression using Huffman Coding Technique with Vector Quantization</i>	IJARCS	ISSN No. 0976- 5697	-	-	-	-	-	-
46	Dr. Vinay Chopra	Design and Implementati on of Testing Tool for Rectifying Code Smell Using C- Mean Algorithm Vol.4, Issue 9, pp: 108- 114	IJARCS	ISSN No. 0976- 5697	-	-	-	-	-	-
47	Dr. Vinay Chopra	A study of Bad Smells in code	IJSETT	ISSN No. 2250- 3641	-	-	-	-	-	
48	Dr. Vinay Chopra	“Performance Evaluation of MANET Routing Protocols with Scalabilty using QoS Metrics of VOIP applications Vol. 3, issue 2,pp: 150-156	IJARCSSE	ISSN: 2277 128X	-	-	-	-	-	-
49	Dr. Vinay Chopra	Emerging Need and significance of Performance Appraisal of Voice over Internet Protocols in MANET’s	IJARC	ISSN 0975- 8070	-	-	-	-	-	-

		technology for Best QoS Vol. 1, pp:15-22								
50	Dr. Vinay Chopra	Solving Detailed FPGA Routing Problem Using Quantum Computing Vol. V, No. 2 pp:24-34	IUP Journal of System Management ICFAI University Press		-	-	-	-	-	-
51	Dr. Vinay Chopra	Design and Implementation in Selenium IDE with Web driver Vol. 46, pp: 8-11	IJCA	ISSN: 0975-8887	-	-	-	-	-	-
52	Dr. Vinay Chopra	Design and Implementation in Automatic Testing Tool Selenium IDE, RC and Web driver Vol. 2, Issue 5, pp: 43-46	IJSAA	ISSN: 2277-2677	-	-	-	-	-	-
53	Dr. Vinay Chopra	Optimization of multi-channel HDLC Protocol transceiver using Verilog Vol. 9, Issue 2, pp: 256-262	IJCSI	ISSN: 1694-0814	-	-	-	-	-	-
54	Dr. Vinay Chopra	Fuzzy Model For Optimizing Strategic Decisions Using Matlab Vol. 1	IJES	ISSN: 2229-6913	-	-	-	-	-	-
55	Dr. Vinay Chopra	Performance Evaluation of Scheduling Algorithms in WLAN Network with CBR Application Using Qualnet 1(1): 1-5(2012)	IJEECE	ISSN No. (online): 2277-2626	-	-	-	-	-	-
56	Dr. Vinay Chopra	Scheduling Algorithms and IP Queue types in WLAN 1(1): 24-30(2012)	IJSETT	ISSN No. 2250-3641	-	-	-	-	-	-
57	Dr. Vinay	Decision	IJSETT	ISSN	-	-	-	-	-	-

	Chopra	Support System for Software Risk Analysis during Software Development Vol. 2, Issue-I, pp: 29-35		No. 2250-3641						
58	Dr. Vinay Chopra	Image Quantization Using HIS Based on Bacteria Foraging Optimization Vol. V, Issue-II	IJITKM	ISSN 0973-4414	-	-	-	-	-	-
59	Dr. Vinay Chopra	Modified Architectural Support to Implement Tomasulo's Algorithm on Tournament Branch Predictor Vol. 3, Issue no. 4	IJCTE	ISSN: 1793-8201	-	-	-	-	-	-
60	Dr. Vinay Chopra	Fuzzy Logic Based Framework for Software Development Effort Estimation Vol. 1	IJES	ISSN: 2229-6913	-	-	-	-	-	-
61	Dr. Vinay Chopra	Software Development Effort Estimation Using Soft Computing Vol. 2, No. 5	IJMLC	ISSN 2010-3700	-	-	-	-	-	-
62	Dr. Vinay Chopra	Performance Analysis of fault Tolerant Irregular Baseline Multistage Interconnection Network Vol. 2, Issue No. 9	IJCSE	ISSN 3079-3084	-	-	-	-	-	-
63	Dr. Vinay Chopra	Design and Reliability Analysis of new Fault Tolerant Irregular Multistage Interconnection Network Vol. 10, Issue No. 1	IJCA	ISSN: 0975-8887	-	-	-	-	-	-
64	Dr. Vinay Chopra	Enhancement and	IJCA	ISSN: 0975-	-	-	-	-	-	-

		Elimination of Roadblocks in Automation testing Tool Selenium RC Vol. 53, Issue No. 5, pp:12-14		8887						
65	Dr. Vinay Chopra	Framework and implementation of vector based representation for clustering linguistic data by using cosine distances similarities pp: 618-624	International journal AttidellaFondazione Giorgio Ronchi	ANN O LXIII N-5	-	-	-	-	-	-
66	Dr. Vinay Chopra	Generating Boolean SAT based Test Pattern Generation using Multi-objective Genetic Algorithm Vol. 6(8), pp:1-4	IJCA	ISSN: 0975-8887	-	-	-	-	-	-
67	Dr. Vinay Chopra	Generating Test Patterns for FPGA's using Multi-Objective Genetic Algorithm Vol. IV, Issue-I	IJITKM		-	-	-	-	-	-
68	Dr. Vinay Chopra	Optimized FPGA Routing using soft computing	IJCA	ISSN 0975-8887	-	-	-	-	-	-
69	Dr. Vinay Chopra	Enhanced DNA Computing Biological Model for implementing a Covert Communication Channel	International Journal Coimbatore Institute of Information and Technology (CIIT)	DOI: NCE0 82009 004	-	-	-	-	-	-
70	Dr. Vinay Chopra	“ Comparison of Enhanced Ada-Boost Algorithm with Decision Tree for Web Related Data	IJARCCCE	-	-	-	-	-	-	-
71	Dr. Vinay	A study on	IJRCCE	-	-	-	-	-	-	-

	Chopra	Image Enhancement Techniques Vol.4 (5), May 2015								
72	Dr. Vinay Chopra	Enhancement of Remote sensing Images based on Bacterial Foraging Optimization Algorithm Using DWT-SVD Vol.3, Issue: 1 Sept 2015.	IJCSCSE	-	-	-	-	-	-	-
73	Dr. Vinay Chopra	Sentiment Analysis of News Headlines using Machine Learning Technique Vol. 1, Issue 1	IJSMT	ISSN: 2395-5856	-	-	-	-	-	-
74	Dr. Vinay Chopra	ACO based Color Edge Detection on the Fusion of HUA and PCA Components Vol. 5, Issue 6, June 2015	IJARCSSE	-	-	-	-	-	-	-
75	Dr. Vinay Chopra	Performance Evaluation of Color Based Edge Detectors	IJARCSSE	-	-	-	-	-	-	-
76	Dr. Vinay Chopra	Analysis of Energy Aware Resource Scheduler with Without Scheduler	IJETSE	Vol 1, Issue 1 October 2013	-	-	-	-	-	-
77	Dr. Vinay Chopra	Design and Implementation of Rank Based ACO Approach for Multipath Routing Mechanism with Load Balancing in Adhoc Network	IJARCSSE	Vol 4, Issue 12, December 2015	-	-	-	-	-	-
78	Dr. Vinay Chopra Dr. Vinay Chopra	Performance Evaluation of MANET Routing Protocols with	IJARCSSE	ISSN: 2277 128X		21	-	-	-	-

		Scalability using QoS Metrics of VOIP applications Vol. 3, issue 2, pp: 150-156								
79	Dr. Vinay Chopra	A Comparative Study and Analysis of Image Restoration Techniques Using Different Images Formats 2(1): 7-14 (2012)	IJSETT			12	-	-	-	-
80	Dr. Vinay Chopra	Performance Analysis of fault Tolerant Irregular Baseline Multistage Interconnection Network Vol. 2, Issue No. 9	IJCSE	ISSN 3079-3084		9	-	-	-	-
81	Dr. Vinay Chopra	Fuzzy Logic Based Framework for Software Development Effort Estimation Vol. 1	IJES	ISSN: 2229-6913		6	-	-	-	-
82	Dr. Vinay Chopra	Image Quantization Using HIS Based on Bacteria Foraging Optimization Vol. V, Issue-I	IJITKM	ISSN 0973-4414		4	-	-	-	-
83	Dr. Vinay Chopra	Decision Support System for Software Risk Analysis during Software Development Vol. 2, Issue-I, pp: 29-35	IJSETT	ISSN No. 2250-3641		4	-	-	-	-
84	Dr. Vinay Chopra	Design and Reliability Analysis of new Fault Tolerant Irregular Interconnection Network Vol. 10, Issue No. 1	IJCA	ISSN: 0975-8887		4	-	-	-	-

85	Dr. Vinay Chopra	Performance Evaluation of Scheduling Algorithms in WLAN Network with CBR Application Using Qualnet 1(1): 1-5(2012)	IJEECE	ISSN No. 2277-2626		3	-	-	-	-
86	Dr. Vinay Chopra	Ant Colony Optimization approach for Solving FPGA Routing with minimum Channel Width Vol. 3, Issue 7	IJCSE	ISSN: 0975-3397		3	-	-	-	-
87	Dr. Vinay Chopra	Multi-Objective Genetic Algorithm for Testing MCNC FPGA Benchmark Circuits Vol.2, Issue 1	IJCSE	ISSN No. 2319-7080		2	-	-	-	-
88	Dr. Vinay Chopra	A Study of Image Enhancement Techniques Vol. 4(5)	IJARCE			2	-	-	-	-
89	Dhiraj Kapila	“Survey–routing protocols (ipv6)”	International Journal For Technological Research In Engineering	2347 - 4718	2016				2.81	
90	Dhiraj Kapila	Survey on Different Fuzzy Association Rule Mining Techniques	International Journal For Technological Research In Engineering	2347 - 4718	2014				2.81	
91	Dhiraj Kapila	Performance Evaluation of EFarhdalgorithm With Levenstein Distance On Soybean Dataset	International Journal For Technological Research In Engineering	2347 - 4718	2014				2.81	
92	Gursewak Singh	Various Attacks and their Counter-measure on all Layers of RFID System	International Journal of Emerging Science and Engineering	2319–6378	2013	1			0.342	
93	Gursewak Singh	Detection and Prevention Of Black Hole Using Clustering In MANET	International Journal of Emerging Science and Engineering	2319-7242	2014	3			0.342	

		Using Ns2							
94	Gursewak Singh	Improvement of Network Efficiency by Preventing Black Hole Attack in Manet	International Journal of Innovative Technology and Exploring Engineering (IJITEE)	2278-3075	2014	1			1.276
95	Gursewak Singh	A Survey of Various Attacks and Their Security Mechanisms in Wireless Sensor Network	International Journal of Emerging Science and Engineering (IJESE)	2319-6378	2014	0			1.201
96	Gursewak Singh	Location Based-Balanced Clustering Algorithm For Wireless Sensor Network-Bleach	International conference on Signal Processing, Communication, Power and Embedded System (SCOPE5)-2016	-	2016	0			-
97	Sonali Talwar	Analysis of various Fuzzy Based image enhancement Techniques	International Journal for Science, Management & Latest Technology IJSMT	2395-5856	2015				
98	Sonali Talwar	Evaluation of Underwater Image Dehazing Techniques	International Journal of Science and Emerging Technologies With Latest Trends (IJSETT)	2250-3641	2015				1.472
99	Sonali Talwar	Performance Evaluation of Fuzzy based DCP and AHE for Underwater Image Haze Removal	International Journal of Computer Applications (IJCA)	0975-8887	2015				0.752

#### B) Publications by students

S. No.	Student Name	Batch	Total No. of publications
1	Harman Preet Kaur	2014-2017	2
2	Prabhjot Singh	2014-2017	1

#### Details of Publications of B.TechStudents

##### Year 2015-2016

1. Harman Preet Kaur "Offline handwritten signature verification using Zernike Moments"NCVPRIPG - 2015 at IIT Patna.
2. Harman Preet Kaur "A Detailed Study on Li-Fi and Comparison of Li-Fi v/s Wi-Fi" STEMH -3rd DAV National Congress 2016 at DAVIET Jalandhar
3. Prabhjot Singh "A Detailed Study on Li-Fi and Comparison of Li-Fi v/s Wi-Fi"STEMH -3rd DAV National Congress 2016 at DAVIET Jalandhar



## Department of Electrical Engineering

S.No.	Name	No. of Papers Published in national/ international journals	No. of publications listed in International Database	Monographs	Books edited	Chapters in books
1	Dr.Sudhir Sharma	26			2	
2	Ms.Chintu Rza	23			1	
3	Ms.Shivani Mehta	25			1	
4	Mr.Baljeet Singh	6			0	
5	Mr.Sushil Prashar	22			0	
6	Ms.Sumeet Kaur	2			0	
7	Ms.Anchal Wadhwa	2			0	
8	Ms.Prabhpreet Kaur	12			0	

S. No.	Name	Paper Title	Journal	ISSN No.	Year	Citation Index	SJR	Impact Factor
1.	Dr. Sudhir Sharma	An Approach for Measurement of Non-Technical losses of 11KV feeder and its Minimization	Journal of Engineering Research and Applications	ISSN : 2248-9622	2015			
2.	Dr. Sudhir Sharma	Grey Wolf Optimization For Solving Non-Convex Economic Load Dispatch	International Journal of Engineering Research-Online		2015			
3.	Dr. Sudhir Sharma	Multi Objective Economic Load dispatch using grey Wolf optimization	International Journal of Electrical Power & Energy Systems communicated		2015			
4.	Dr. Sudhir Sharma	Weight Pattern Based Cuckoo Search for Unit Commitment Problem	International Journal of Research in Advent Technology		2015			
5.	Dr. Sudhir Sharma	Economic Load Dispatch Using Grey Wolf Optimization	International Journal of Engineering Research and Applications		2015			
6.	Dr. Sudhir Sharma	Control of Induction Motor Fed from Solar Photovoltaic Array	European Journal of Advances in		2015			

			Engineering and Technology					
7.	Dr. Sudhir Sharma	Minimization of Power Loss & Improvement in Voltage Profile of 11kV Feeder	Transactions on Engineering and Sciences		2015			
8.	Chintu Rza	Transient Stability Enhancement of SMIB System with Phase Shifter Mode of UPFC	International Journal of Science and Engineering		2015			
9.	Chintu Rza	Impact Of Different Types Of Governors/Exciters On Transient Stability	IJREAT International Journal of Research in Engineering & Advanced Technology		2015			
10.	Chintu Rza	Transient Stability Improvement of SMIB System using Line Impedance Compensation Mode of UPFC	Transactions on Engineering and Sciences	ISSN: 2347-1964	2015			
11.	Chintu Rza	Improvement in Power Capacity by Simultaneous HVAC-HVDC Transmission System	International Journal of Engineering and Innovative Technology (IJEIT)		2015			
12.	Shivani Mehta	Pollination Based Optimization for Economic Load Dispatch Problem	International Journal of Research in Advent Technology		2015			
13.	Shivani Mehta	Optimal Load Dispatch Using Ant Lion Optimization	Int. Journal of Engineering Research and Applications		2015			
14.	Shivani Mehta	Economic Load Dispatch Using Grey Wolf Optimization	Int. Journal of Engineering Research and Applications		2015			
15.	Shivani Mehta	Grey Wolf Optimization For Solving Non-Convex Economic Load Dispatch	Int. Journal of Engineering Research and Applications		2015			
16.	Shivani Mehta	Weight Pattern Based Cuckoo Search for Unit Commitment Problem	International Journal of Research in Advent Technology		2015			

17.	Shivani Mehta	Impact Of Different Types Of Governors/Exciters On Transient Stability	International Journal of Research in Engineering & Advanced Technology		2015			
18.	Mr.Baljeet Singh	Suppression of low frequency oscillations using hybrid optimization techniques	IJRAT		2015			
19.	Mr.Baljeet Singh	A modified firefly algorithm based MPPT for multi junction Photo-voltaic arrays	IJSHRE		2015			
20.	Mr.Baljeet Singh	Efficiency assessment using natural gas micro turbine for cogeneration plant in textile mill	IJSETT		2015			
21.	Sushil Prashar	Effectuation of QP- PSO and dynamic Programming method on a continued single area unit commitment problem :- A Comparative Analysis	IJRAT		2015			
22.	Sushil Prashar	Short Term Wind Thermal Scheduling Of electric Power system using Gravitation Search Algorithm	IJERSTE		2015			
23.	Prabhpreet Kaur Bhatia	A Comparative Approach to Feature Extraction Techniques for Human Computer Interface Systems	International Conference on Wireless Networks and Embedded Systems : An approach to Clean and Sustainable Technology(W ECON-2015)		2015			
24.	Prabhpreet Kaur Bhatia	Fuzzy Based Temperature Controller Using Membership Functions in Fuzzy Toolbox Using MATLAB	International Conference on Advances in Computing & Communication Engineering (ICACC-2015)		2015			
25.	Prabhpreet Kaur Bhatia	Performance Investigation of CRZ Modulation Format in GEPON Fiber to the Home (FTTH) Network at 2.5G/bits for 200 ONU's	International Conference on Advances in Computing & Communication Engineering (ICACC-2015)		2015			

26.	Prabhpreet Kaur Bhatia	Different Techniques for Extracting Brain Signals for Human Machine Interface, a Review	Australian Journal of Information Technology and Communication		2015			
27.	Anchal Wadhwa	Health Assessment of Oil immersed Transformer Using Funny Logic	STM Journal	ISSN: 2249-4774	2015			
28.	Dr. Sudhir Sharma	Reduction in Total harmonics Distortion Reduction Using Active Power Filters	International Journal of Research in Advent Technology		2014			
29.	Chintu Rza	Design A Tracking Controller for Single Manipulator via DSC	International Journal of Research in Advent Technology		2014			
30.	Chintu Rza	DSC design for Synchronization And Anti-Synchronization of Arneodo Chaotic System	International Journal of Research in Advent Technology		2014			
31.	Chintu Rza	Improvement of Power Flow and Transient behavior of a Two Machine Power System Using SSSC	International Journal of Research in Advent Technology		2014			
32.	Chintu Rza	A New method for differential protection in Power transformer	IOSR Journal of Electrical and Electronics Engineering (IOSR-JEEE)	ISSN: 2320-3331	2014			
33.	Shivani Mehta	Improvement of Power Flow and Transient behavior of a Two Machine Power System Using SSSC	International Journal of Research in Advent Technology		2014			
34.	Shivani Mehta	A Hybrid Firefly-DE Algorithm For Economic Load Dispatch	International Journal of Research in Advent Technology		2014			
35.	Shivani Mehta	Solution of Economic Load Dispatch Problem using Gravitational Search Algorithm with Valve Point Loading	International Journal of Engineering Research & Technology (IJERT)		2014			

36.	Shivani Mehta	Economic load dispatch problem using Heuristic gravitational search algorithm	International Journal For Research In Applied Science And Engineering Technology		2014			
37.	Shivani Mehta	DSC Design For Synchronization And Anti- Synchronization of Arneodo Chaotic System	International Journal For Research In Applied Science And Engineering Technology		2014			
38.	Shivani Mehta	Design a tracking controller for single link manipulator via DSC	International Journal of Research in Advent Technology		2014			
39.	Sushil Prashar	Advantage of artificial intelligence technique in discriminating inrush and fault condition for power transformer protection	IJRAT		2014			
40.	Sushil Prashar	Tuning a PID controller for a separately excited DC motor	IJRAD		2014			
41.	Prabhreet Kaur	Analysis and Augmentation of IMD in Multitone Analog CATV Transmission Systems	IMTC-2014		2014			
42.	Prabhreet Kaur	Analysis and Intensification of IMD in Multitone Analog CATV Transmission Systems	International Journal of Electronics, Communication & Instrumentation Engineering Research and Development		2014			
43.	Sudhir Sharma	Control of Power Distribution Losses Through Good Quality Distribution Transformers	International Journal of Engineering and Innovative Technology		2013			
44.	Sudhir Sharma	Flicker contribution of Induction generators in wind energy Conversion systems	Journal of Electrical Engineering		2013			0.967
45.	Sushil Prashar	Power Control of Doubly Fed Induction Generator Using Back	International Journal of Engineering		2013			

		To Back Converter	and Innovative Technology (IJEIT)					
46.	Sudhir Sharma	Power quality improvement in wind-diesel hybrid generation using bacteria foraging optimization technique	International Journal of Energy Engineering		2012			
47.	Sudhir Sharma	Power Quality Issues of Induction Generators in Different Operating Modes	International Journal of Energy Engineering		2012			
48.	Baljit Singh	Power upgrading of transmission line by converting EHVAC into EHVDC	IJSETT		2012			
49.	Sudhir Sharma	Effect of Magnetization Curves on Power Quality of Induction Generator Operating in Self Excited Mode	International Journal of Science and Advanced Technology		2011			
50.	Sudhir Sharma	Effect of Machine Parameters on Starting Transients of Grid Connected Induction Generators used in Wind Farms	International Journal of Computer Applications		2011			
51.	Sushil Prashar	Evolution in the area of smart load frequency Control using Passino Technique	CiiT International Journal of Automation & Autonomous systems		2011			
52.	Sudhir Sharma	Effects on Major Power Quality Issues Due to Incoming Induction Generators in Power System	ARNP Journal of Engineering and Applied Sciences		2010			0.4621
53.	Sudhir Sharma	Induction Generator Parameters Effecting Power Quality: An Exposition	International Journal of Electronics and Electrical Engineering		2010			
54.	Sudhir Sharma	Power Quality Issues From Wind Generation Using Induction Generators – A Statistical Review	ICMET 2010		2010			
55.	CR Makkar	Transient Stability Enhancement using Robust FACTS Controllers-A Brief Tour	Canadian Journal on Electrical & Electronics Engineering		2010			

56.	Sudhir Sharma	Role of Reactive Power Source on Power Quality of Three-Phase Self-Excited Induction Generator	WSEAS Transactions on Power Systems		2008			
57.	Sudhir Sharma	Selection of Reactive Power Source for a three-Phase Self-Excited Induction Generator	WSEAS International Conference MMF'08, Harvard, Massachusetts		2008			
58.	Sudhir Sharma	Power Quality Issues in Wind Electrical Generation-A Prospective	Proc. of the 10th Punjab Science Congress at DAVIET		2007			
59.	Sudhir Sharma	Impact of Harmonics in Electrical Distribution Systems	International conference on Energy and Environmental Technologies for Sustainable Development (ICEET 2003)		2003			
60.	Sudhir Sharma	Effect of Harmonics on Power Quality	National Conference on Power System & Energy Management psem-2003		2003			

## Department of Information Technology

Sr. No.	Name	Designation	Paper Publication Peer Reviewed Journals		No. Of Publication Listed in Internal Databases			Monographs	Chapter in Books	Books Edited	Books With ISBN /ISSN No. with Detail of Publishers	Citation Index	SNIP	SJ R	Impact Factor	h-Index
			National	International	SCI	Scopus	EBSCO Host									
1	Dr.Dinesh Kumar	Associate Prof	-	39	3	2	1		1			106		1	2	7
2	Mr. P.S.Mann	Assistant Prof.	-	28	3											
3	Mr. Rajeev Kumar	Assistant Prof.	-	25	2	-	-	-	1	-	-	-	-	-	2	-
4	Ms.Avani Bhatia	Assistant Prof.	-	3												
5	Mr. Rajesh Kochher	Assistant Prof.	-	15												
6	Ms.Neetika Bhardwaj	Assistant Prof.	-	1	-	-	-	-	-	-	-	-	-	-	-	-
7	Ms. Rajinder Vir	Assistant Prof.	-	3												
8	Mr. Hartej Singh	Assistant Prof	-	3												

S.No.	Name	Paper Title	Journal	ISSN No.	Year
1	P S Mann	An Analytical Approach to Mitigate DDoS Attacks and improve Network Performance under Collaborative Software as a Service (SaaS) Cloud Computing Environment	CIIT International Journal of Networking and Communication Engineering.	Print: ISSN 0974 – 9713	2010
2	P S Mann	A Novel Algorithm based on An Analytical Approach to Mitigate DDoS Attacks,	International Journal of Engineering & Information Technology (IJEIT)	Print: ISSN 0975-5292	2010
3	P S Mann	A Reactive Defense Mechanism based on an Analytical Approach to Mitigate DDoS Attacks and Improve Network Performance,	International Journal of Computer Applications (IJCA), Foundation of Computer Science,	ISBN: 978-93-80747-26-5,	2011
4	P S Mann	Improving Network Performance and mitigate DDoS attacks using Analytical Approach under Collaborative Software as a Service (SaaS) Cloud Computing Environment	International Journal of Computer Science and Technology (IJCST)	Print: ISSN 2229 –4333	2011
5	P S Mann	A spatial-domain filter for digital image Denoising used for Real time applications	International Journal of Computer Science and Technology (IJCST)	Print: ISSN 2229 –4333	2011



6	P S Mann	Non-linear Filter for Digital Image De-noising	International Journal of Computer Technology and Applications (IJCTA)	ISSN:2229-6093	2011
7	P S Mann	A hybrid approach for the prediction of fault proneness in object oriented design using fuzzy logic	Journal of Academics and Industrial Research (JAIR) ,	ISSN: 2278-5213	2013
8	P S Mann	Edge Detection Techniques Based On Soft Computing	International Journal for Science and Emerging Technologies with Latest Trends.	ISSN No. (Online):2250-3641,	2013
9	P S Mann	A Review on Association Rule Mining with Genetic Algorithm	International Journal for Science and Emerging Technologies with Latest Trends.	ISSN No. (Online):2250-3641,	2013
10	P S Mann	Adaptive Neuro-Fuzzy Inference System (ANFIS) Based Edge Detection Technique	International Journal for Science and Emerging Technologies with Latest Trends ,	ISSN No. (Online):2250-3641,	2013
11	P S Mann	Page Segmentation using XY Cut Algorithm in OCR Systems - A Review	International Journal of Computers & Technology,	ISSN 22773061	2013
12	P S Mann	Hybrid Transform Domain Algorithm for Medical Image Fusion	International Journal for Science and Emerging Technologies with Latest Trends ,	(ISSN No. (Online):2250-3641	2013
13	P S Mann	Improved XY cut Page Segmentation Algorithm for Border Noise	International Journal of Computer Science Engineering and Technology (IJCSET	ISSN:2231-0711	2013
14	P S Mann	Classical and Computational Intelligence Based Routing Protocols for Wireless Sensor Networks- A Review	International Journal of Emerging Technologies in Computational and Applied Sciences (IJETCAS) ,	ISSN (Print): 2279-0047	2013
15	P S Mann	Association Rule Mining with Multi-Fitness Function Genetic Algorithm	International Journal for Science and Emerging Technologies with Latest Trends.	ISSN No. (Online):2250-3641,	2013
16	P S Mann	Page Segmentation in OCR System- A Review	International Journal of Computer Science and Information Technologies,	(ISSN 0975-9646)	2013
17	P S Mann	An Adaptive Neuro Fuzzy Approach for Software Development Time Estimation	International Journal of Advanced Research in Computer Science and Software Engineering,	ISSN: 2277 128X	2013
18	P S Mann	Design and Implementation of Neuro Fuzzy model for Software Development Time Estimation	International Journal of Computer Applications	ISSN (0975 – 8887)	2014
19	P S Mann	Analysis of MFGA to Extract Interesting Rules	International Journal of Computer Applications	ISSN 0975 – 8887	2014
20	P S Mann	M-Band Ridgelet Transform to Remove Speckle Noise from Medical Images	International Journal of Computer Applications	ISSN 0975 – 8887	2014
21	P S Mann	Detection of Clone Attacks In Wireless Sensor Networks: A Survey	International Journal Of Research In Computer Applications And Robotics,	ISSN 2320-7345	2014
22	P S Mann	Detection of Black Hole Attack In Mobile Ad Hoc Networks: A Survey	International Journal of Research In Computer Applications And Robotics,	ISSN 2320-7345	2014
23	P S Mann	Motion Codec Ant Forensics	International Journal of Computer Applications,	(ISSN 0975 – 8887)	2015

24	P S Mann	Comparative Analysis and Secure ALM P2P Overlay Multicasting of Various Multicast Routing Techniques	International Journal of Engineering Research and Development,	ISSN: 2278-800X	2015
25	P S Mann	Improved sorted switching median filter for removal of impulse noise	International Journal of Engineering Research and General Science	ISSN 2091-2730	2015
26	P S Mann	Diagnosis of Hypertension using Adaptive Neuro-Fuzzy Inference System	IJCST	ISSN : 0976-8491	2015
27	P S Mann	Adaptive Neuro-fuzzy Inference System for Hypertension Analysis	International Journal of Advanced Engineering Research and Science	ISSN: 2349-6495	2015
28	P S Mann	Performance analysis of energy-efficient routing protocol for wireless sensor networks	American International Journal of Research in Science, Technology, Engineering and Mathematics,	(ISSN (Print): 2328-3491,	2016
29	Avani Bhatia	Modified Edge Based Color Constancy Using Non Local Means	International Journal of Computer Trends and Technology	ISSN 2349-0829	2014
30	Avani Bhatia	Neural Network Based Intelligent Retrieval System for Verifying Dynamic Signatures	International Journal of Advanced Science and Technology	ISSN: 2005-4238	2015
31	Avani Bhatia	Contrast Enhancement of an Image using Fuzzy Logic	International Journal of Computer Applications	ISSN (0975 – 8887)	2015
32	Rajesh Kochher	Performance Evaluation of Scheduling Algorithms in WLAN Network with CBR	International Journal of Electrical, Electronics and Computer Engineering	2277-2626	2012
33	Rajesh Kochher	Scheduling Algorithm and IP Queue Types in WLAN	International Journal for Science and emerging technology with latest trends	2250-3641	2012
34	Rajesh Kochher	A Review on Active and Passive Queuing Techniques	International Journal for Science and emerging technology with latest trends	2250-3641	2014
35	Rajesh Kochher	Survey on Image Watermarking Techniques	International Journal for Science and emerging technology with latest trends	2250-3641	2014
36	Rajesh Kochher	A Novel Approach on DWDM based metropolitan ring network	International Journal for Science and emerging technology with latest trends	2250-3641	2015
37	Rajesh Kochher	FTTH deployment technology with optical networks	International Journal for Science and emerging technology with latest trends	2250-3641	2015
38	Rajesh Kochher	Design and Performance Evaluation of DWDM based Metropolitan Ring Networks	International Journal of Innovative Research in Computer and Communication Engineering	2142-2149	2015
39	Rajesh Kochher	Evaluation of Underwater Image Dehazing Techniques	International Journal of Innovative Research in Computer and Communication Engineering	2250-3641	2015
40	Rajesh Kochher	Optimization Of DWDM ring network Based On DPSK and QPSK Modulation Techniques	International Journal for Science, Management and	2395- 5856	2015

			Technology		
41	Rajesh Kochher	Analysis of various Fuzzy Based image enhancement techniques	International Journal for Science, Management and Technology	2395- 5856	2015
42	Rajesh Kochher	Link length enhancement in FTTH PON	International Journal for Science, Management and Technology	2395- 5856	2015
43	Rajesh Kochher	Performance Evaluation of Fuzzy based DCP and AHE for Underwater Image Haze Removal	International Journal of Computer Applications	0975 – 8887	2015
44	Rajesh Kochher	Colour spaces effects on joint dct-dwt based digital image watermarking	International Journal of Electronics, Communication & Instrumentation Engineering Research and Development	2249-684X	2015
45	Rajesh Kochher	The Survey: Enhanced DSR protocol under various attacks	International Journal for Science, Management and Technology	2395- 5856	2015
46	Rajesh Kochher	Hybrid Optical Amplifier in Fiber Distributed Ring for Wide Area Network	International Journal for Science, Management and Technology	2395- 5856	2015
47	Rajinder Vir	A hybrid approach for the prediction of fault proneness in object oriented design using fuzzy logic	Journal of academia and industrial research	2278-5213	2013
48	Rajinder Vir	Fuzzy Logic Approach to Forecast the Extendibility/Extensibility in Object Oriented Design using an Integrated Model	INTERNATIONAL JOURNAL OF Computer applicatons	0975 – 8887	2014
49	Rajinder Vir	A COMPREHENSIVE SURVEY OF THE WIRELESS GENERATIONS	INTERNATIONAL JOURNAL OF RESEARCH IN COMPUTER APPLICATIONS AND ROBOTICS	2320-7345	2015
50	Neetika Bhardwaj	Detection and Avoidance of Blackhole Attack in AOMDV Protocol in MANETs	IJAIEEM	2319-4847	2013
51	Hartej Singh	Location based information Hiding	IEEE ICACCA	978-1-5090-0673-1	2016
52	Hartej Singh	Packet size optimization in WSN using LDPC codes	IEEE INDICON	2325-9418	2015
53	Hartej Singh	A Novel Association Rule Algorithm to Discover Maximal Frequent Item Set	IJCA	0975-8887	2016
54	Dr. Dinesh Kumar	Exponential Ant Colony Optimization and Fractional Artificial Bee Colony to Multi-Path Data Transmission in Wireless Sensor Networks	IET Communications	1751-8628	2016
55	Dr. Dinesh Kumar	Prediction of part of speech tags for Punjabi using Support Vector Machines	International Arab Journal of Information Technology	1683-3198	2015
56	Dr. Dinesh Kumar	Prediction model for predicting powdery mildew using ANN for medicinal plant - Picrorhiza kurrooa	Springer Journal of The Institution of Engineers (India): Series B	2250-2106	2015
57	Dr. Dinesh Kumar	ORSMF: Optimistic Replacement Based Switching Median Filter for Highly Corrupted Images	International Journal of Computer Science and Information Technology	0975-9646	2015
58	Dr. Dinesh Kumar	Clustering and General Self-Organized Tree-based Energy-Balance Routing Protocol for Wireless Sensor Network	International Journal of Computer Applications	0975 - 8887	2015
59	Dr. Dinesh Kumar	Evaluating the Performance of Modified Watershed Algorithm Based on DBMF and DT	International Journal of Computers & Technology	2277-3061	2014

60	Dr. Dinesh Kumar	Performance Evaluation of the Masking Based Watershed Segmentation	International Journal of Computational Engineering Research	2250-3005	2014
61	Dr. Dinesh Kumar	A Review on Different Image Segmentation Techniques	Indian Journal of Applied Research	2249-555X	2014
62	Dr. Dinesh Kumar	Punjabi Font Recognition System Using Neural Network	International Journal of Applied Research in Computing	2321-2640	2014
63	Dr. Dinesh Kumar	A Beta Regression Model for Himalayan Medicinal Plant Disease Prediction	Indian Journal of Science and Technology	0974-6846	2014
64	Dr. Dinesh Kumar	Fault Tolerant ACO using Checkpoint in Grid Computing	International Journal of Computer Applications	0975 - 8887	2014
65	Dr. Dinesh Kumar	Punjabi Offline Signature Verification System Using Neural Network	International Journal of Engineering and Advanced Technology	2249-8958	2013
66	Dr. Dinesh Kumar	A Survey on Online Signature Verification for Indian and Non-Indian Languages	International Journal of Applied Research in Computing	2321-2640	2013
67	Dr. Dinesh Kumar	Association Rule Mining Algorithm's Variant Analysis	International Journal of Computer Applications	0975 - 8887	2013
68	Dr. Dinesh Kumar	Developing a tagset for machine learning based pos tagging in punjabi	International Journal of Applied Research on Information Technology and Computing	0975-8070	2012
69	Dr. Dinesh Kumar	Effect of Grid Job Slice Variation on Virtualized Desktop Grid Performance	International Journal of Computer Applications	0975 - 8887	2012
70	Dr. Dinesh Kumar	Performance Analysis of Reactive Routing Protocols In Chain Mobility Models	International Journal of Computer Science and Communication	0973-7391	2012
71	Dr. Dinesh Kumar	Software Fault prediction of object oriented software using density based clustering approach	International Journal of research in Engineering & Technology	2278-0181	2012
72	Dr. Dinesh Kumar	Comparative Study of Chain Mobility Models using Reactive Routing protocols	International Journal of Computer Applications	0975 - 8887	2012
73	Dr. Dinesh Kumar	Performance Evaluation of Globus Grid Environment Using AVI to Flash Video Encoding	International Journal of Computer Science and Information Technology	0975-9646	2012
74	Dr. Dinesh Kumar	Quality prediction of object oriented software using DBSCAN algorithm	International Journal of Engineering & Technology	0975-4024	2011
75	Dr. Dinesh Kumar	Protein Profile Analysis: an exploration with HMM	International Journal of Advanced Research in Computer Science	0976 - 5697	2011
76	Dr. Dinesh Kumar	Speech Synthesis System for Online Handwritten Punjabi Word: An Implementation of SVM & Concatenative TTS	International Journal of Computer Applications	0975 - 8887	2011
77	Dr. Dinesh Kumar	Applying Hidden Markov Model to Protein Sequence Alignment	International Journal of Computer Science and Information Technology	0975-9646	2011
78	Dr. Dinesh Kumar	A Hybrid Recognition & Speech Synthesis System for Handwritten Punjabi Words	International Journal of Advanced Research in Computer Science	0976 - 5697	2011
79	Dr. Dinesh Kumar	Improving Network Performance and mitigate DDoS attacks using Analytical Approach under Collaborative Software as a Service (SaaS) Cloud Computing Environment	International Journal of Computer Science and Technology	2277-3061	2011
80	Dr. Dinesh Kumar	Stemming of Punjabi Words by using Brute Force Technique	International Journal of Engineering Science &	0975-5462	2011

			Technology		
81	Dr. Dinesh Kumar	A Reactive Defense Mechanism based on an Analytical Approach to Mitigate DDoS Attacks and Improve Network Performance	International Journal of Computer Applications	0975 - 8887	2011
82	Dr. Dinesh Kumar	Design & Development of Stemmer for Punjabi	International Journal of Computer Applications	0975 - 8887	2010
83	Dr. Dinesh Kumar	Performance Analysis of AES, DES and Triple DES against Brute Force Attack to protect MPLS Network	International Journal of Advanced Research in Computer Science	0976 - 5697	2010
84	Dr. Dinesh Kumar	Study and Investigation of Performance of Reactive & Proactive Protocols of MANETS on the basis of CBR and TCP Traffic Patterns	CiiT International Journal of Networking & Communication Engineering	0974 - 9713	2010
85	Dr. Dinesh Kumar	Implementation and Investigation of Performance of AES, DES and Triple DES to secure MPLS Network	CiiT International Journal of Networking & Communication Engineering	0974 - 9713	2010
86	Dr. Dinesh Kumar	Part of Speech Taggers for Morphologically rich Indian Languages: A Survey	International Journal of Computer Applications	0975 - 8887	2010
87	Dr. Dinesh Kumar	MPLS Technology on IP Backbone Network	International Journal of Computer Applications	0975 - 8887	2010
88	Dr. Dinesh Kumar	Isolated Word Recognition System for English using Matlab	International Journal of Information Technology & Knowledge Management	0973-4414	2010
89	Dr. Dinesh Kumar	An analytical approach to mitigate DDoS attacks & improve network performance under Collaborative Software as a Service (SaaS) Cloud Computing,	CiiT International Journal of Networking & Communication Engineering	0974 – 971	2010
90	Dr. Dinesh Kumar	Data security in Mobile Communications	CiiT International Journal of Wireless Communication	0974 – 9756	2010
91	Dr. Dinesh Kumar	Wavelets based De-noising, Multi Resolution Analysis & Image Compression	CiiT International Journal of Digital Image Processing	0974 – 9691	2010
92	Dr. Dinesh Kumar	Implementation and Analysis of AES, DES and Triple DES on GSM Network	International Journal of Computer Science & Network Security	1738-7906	2010
93	Rajeev Kumar	Exponential Ant Colony Optimization and Fractional Artificial Bee Colony to Multi-Path Data Transmission in Wireless Sensor Networks	IET Communication	1751-8628	2016
94	Rajeev Kumar	Multi-Objective Fractional Artificial Bee Colony Algorithm to Energy Aware Routing Protocol in Wireless Sensor Network	Wireless Networks (WINE), <b>Springer</b>	1022-0038	2015
95	Rajeev Kumar	Hybrid Swarm Intelligent Energy Efficient Clustered Routing Algorithm for Wireless Sensor Networks	Journal of Sensors, Hindawi	1687-7268	2015
96	Rajeev Kumar	A bio-inspired hybrid algorithm for effective load balancing in cloud computing	International Journal of Cloud Computing (IJCC), <b>Inderscience Publishers</b>	2043-9997	2016
97	Rajeev Kumar	Modified fitness based swarm intelligence approach for routing in wireless sensor network	International Journal of Advanced Intelligence Paradigms (IAIP), <b>Inderscience Publishers</b>	1755-0394	2016
98	Rajeev Kumar	Comparative Analysis of Fuzzy Expert Systems for Diabetic Diagnosis” International Journal of Computer Application	International Journal of Computer Application(IJCA)	0975-8887	2015
99	Rajeev Kumar	Trends towards Efficient Fundus Image Segmentation	Journal of Computing Technology(JCT)	2278-3814	2015
100	Rajeev	DWEDDEEC: Distance Aware Waiting based	Communications on	2394-4714	2015

	Kumar	EDDEEC Protocol for Heterogeneous WSNs	Applied Electronics		
101	Rajeev Kumar	An Intrusion Detection System against Multiple Blackhole Attacks in Ad-Hoc Network Using Wireless Antnet	International Journal for Research in Applied Science & Engineering Technology(IJRASET)	2321-9653	2015
102	Rajeev Kumar	ECG Signal Monitored Under Various Compression Techniques and Transmission Environments - A Survey Approach	International Journal of Advanced Research in Computing(IJARC)	2321-2640	2014
103	Rajeev Kumar	The Research of Data Mining by using Depth First Search and Sorting Techniques in Association Rule Mining	International Journal of Advanced Research in Computing(IJARC)	2321-2640	2014
104	Rajeev Kumar	Hybrid approach for Travelling Salesman Problem using Intelligent Water Drops and Ant Colony Optimization	International Journal of Advanced Research in Computing(IJARC)	2321-2640	2014
105	Rajeev Kumar	Evaluating the Performance of DEEC Variants	International Journal of Computer Application(IJCA)	0975-8887	2014
106	Rajeev Kumar	Hierarchical Clustering Algorithm LEACH-A Review	International Journal of Computer Science and Information Technologies(IJCSIT)	0975-3826	2014
107	Rajeev Kumar	Investigation for Quality of Service (QoS) in Mobile Ad-hoc Networks (MANET) Routing Protocols by Varying Mobility Models	International Journal of Advanced Research in Computing(IJARC)	2321-2640	2014
108	Rajeev Kumar	Comparative Investigation of GA and HPSO for Data Allocation and Optimizing Performance with Load Balancing	International Journal of Advanced Research in Computing(IJARC)	2321-2640	2013
109	Rajeev Kumar	Utilization of GA and HPSO for allocation: A Systematic Review	International Journal of Computer Science and Communication Engineering (IJCSCE)	2319-7080	2013
110	Rajeev Kumar	Promulgation on Efficacy of Artificial Bee Colony Optimization in Image Processing	International Journal of Advanced Research in Computing(IJARC)	2321-2640	2013
111	Rajeev Kumar	Classification of Chronic Diabetic Diseases based on Adaptive Neuro-Fuzzy approach	International Journal of Advanced Research in Computing(IJARC)	2321-2640	2013
112	Rajeev Kumar	Optimizing Pre-Shared Key Scheme For Effective Key Connectivity And Energy Efficiency In WSN	International Journal for Science and Emerging Technologies with Latest Trends	2250-3641	2013
113	Rajeev Kumar	Survey On Pre-Shared Key In Wireless Sensor Network	International Journal for Science and Emerging Technologies with Latest Trends	2250-3641	2012
114	Rajeev Kumar	Average Half Face Recognition By Elastic Bunch Graph Matching Based On Distance Measurement	International Journal for Science and Emerging Technologies with Latest Trends	2250-3641	2012
115	Rajeev Kumar	Comparative Study of Facial Expression Recognition Techniques	International Journal of Computer Application(IJCA)	0975-8887	2011
116	Rajeev Kumar	Framework for Evaluating Reusability of Procedure Oriented System using Metrics based Approach	International Journal of Computer Application(IJCA)	0975-8887	2011
117	Rajeev Kumar	Recognition of Facial Expressions with Principal Component Analysis and Singular Value Decomposition	International Journal of Computer Application(IJCA)	0975-8887	2011

**Books Edited:**

S.No.	Name of Faculty	Book Authored	Publisher	ISBN/ISSN no	Year
1.	Mr. Rajesh Kochher	“Fundamental of Computer programming and information Technology”	Satyaprakashan	81-7684-633-3	2011
2	Mr. Rajesh Kochher	Thinking in C++	Kataria publications	81-7684-633-3	2012
3	Mr. Rajesh Kochher	Humann Values and Professional ethics	Unique Ideaz publication	978-81-922707-7-7	2013
4	Mr. Rajesh Kochher	Symbolic logic and logic Programming	Satyaprakashan	81-7684-719-4	2014
5	Mr. Rajesh Kochher	Optical communications	Unique Ideaz publication	978-81-922707-7-8	

**Citation Index & h-index:**

S. No	Faculty Name	Cited By	h-index
1	Dr. Dinesh Kumar	168	8
3	Mr. P S Maan	67	4
2	Ms. Neetika Bhardwaj	2	-

**Publications by Students:**

S. No.	Student Name	Semester	Total No. of publications
1	Anmol Sharma	IT 7 <sup>th</sup>	2

## Department of Mechanical Engineering

1. Publications:

**Publication per faculty**

S. No.	Name	No. of Papers Published in national/ international journals	No. of publications listed in International Database	Monographs	Books edited	Chapters in books
1	Mr. Gaurav Dhuria	5	-	-	-	-
2	Dr. Sanjeev Saini	16				
3	Mr. Pankaj Sadana	-	-	-	-	-
4	Mr. Ramandeep Singh Johal	-	-	-	-	-
5	Dr Devinder Priyadarshi	2	-	-	-	-
6	Mr. S K Uppal	-	-	-	-	-
7	Mr. Ankush Kohli	-	-	-	-	-
8	Mr. Chetan Darshan	3	-	-	-	-
9	Mr. Aman Maini	2	-	-	-	-
10	Mr. Gurveen Singh	-	-	-	-	-
11	Ms. Sheetal Soda	3	3	-	-	-

S. No.	Name	Paper Title	Journal	ISSN No.	Year	Citation Index	Impact Factor	h-index
1.	Gaurav Dhuria	Effect of Process Parameters on Weld-Strength in Friction Stir Welding of Dissimilar Aluminium Alloys	European Journal of Advances in Engineering and Technology	2394 – 658X	2016			
2.	Gaurav Dhuria	Investigation of effect of process parameters on microhardness in friction stir welded dissimilar aluminium alloys AA2014-T651 and AA7075-T651	ELK Asia Pacific Journals – Special Issue	978-81-930411-8-5	2016			
3.	Gaurav Dhuria	“A Review on Friction Stir Welding of Aluminium Metal Matrix Composites”	International Journal of Engineering, Business and Enterprise Applications	2279 - 0020	2015			
4.	Gaurav Dhuria	“Multi response optimization of Parameters in Electric Discharge Machining of Al/Si-C hybrid composite using Grey relational Analysis”	International Journal for Science and Emerging Technologies with latest trends	2250 -3641	2015		1.472	



5.	Gaurav Dhuria	“Investigation and Modelling of EDM process parameters in machining of Incoloy-800”	<b>International Journal of Research in Engineering and Technology</b>	2319-1163	2015			
6.	Sanjeev Saini, Hari Singh & Amit Kohli	“Effect of Process Parameters on Depth of Hardening in Induction Hardening during Normalized Condition,”	International Journal of Manufacturing Technology and Research,	(ISSN: 0973-0281)	2009			
7.	Sanjeev Saini, Inderpreet Singh Ahuja and Vishal S. Sharma	‘Residual stresses, surface roughness and Tool wear in hard turning: A Comprehensive review’,	Materials and Manufacturing Processes	ISSN: 1042-6914	2011		1.6 29	
8.	Saini, S., Ahuja, I.P.S. and Sharma, V.S.	‘The Effect of Cutting Parameters on Surface Integrity in Hard Turning’,	Applied Mechanics and Materials: Mechanical and Aerospace Engineering	ISSN: 1662-7482	2012			
9.	Saini, S., Ahuja, I.P.S. and Sharma, V.S.	Modeling, Optimization and Experimental Validation of Cutting Parameters to achieve minimum Tool Wear and Surface Roughness in Hard Turning of AISI H11 Tool Steel’,	International Journal of Materials Engineering Innovation (IJMatEI	ISSN 1757-2754	2012			
10.	Saini, S., Ahuja, I.P.S. and Sharma, V.S.	‘Influence of cutting parameters on tool wear and surface roughness in hard turning of AISI H11 tool steel using ceramic tools’	International Journal of Precision Engineering and Manufacturing,	:2234-7593	2012			
11.	Saini, S., Ahuja, I.P.S. and Sharma, V.S.	‘Modeling the effects of cutting parameters on residual stresses in hard turning of AISI H11 tool steel’	International Journal of Advanced Manufacturing Technology	0268-3768.	2013		1.4 58	
12.	Saini, S., Kumar Deepak	‘Effect of process parameters on surface roughness during grinding of hot work steel AISI H11 under dry, wet and compressed gas environment.	International Journal of Modern Engineering Research	2249–6645	2014		1.1 03	
13.	Saini, S. Kumar Deepak	‘Effect of process parameters on material removal rate during grinding of hot work steel AISI H11 under dry, wet and compressed gas environment.	International Journal of Modern Engineering Research		2014		1.1 03	
14.	Saini, S.	Material Parameter and Effect of Thermal load on functionally Graded Cylinders’	International Journal of Modern Engineering Research		2015		1.1 03.	
15.	Dr. Sanjeev Saini, Jaspreet Singh, Harpreet Singh	“Effect of Electrical Discharge Machining Parameters Al-B4c Composites”	International Journal of Engineering & Science Research	ISSN 2277-2685	2015			
16.	Dr. Sanjeev Saini, Jaspreet Singh, Harpreet Singh	“Optimizing The Machining Parameters Of Edm For 304 And 316 Stainless Steel	International Journal of Engineering & Science Research		2015			
17.	Dr. Sanjeev Saini, Jaspreet Singh, Harpreet Singh	“Optimization of machining parameters in Electric Discharge Machining of 316 stainless steel	International Journal of Engineering & Science Research		2015			

18.	Dr. Sanjeev Saini, Jaspreet Singh, Harpreet Singh	“Optimization of machining parameters in Electric Discharge Machining of High Speed steel by using U shape electrode	International Journal of Engineering & Science Research		2015			
19.	Dr. Sanjeev Saini, Sunil Kumar & Dr. Balkar Singh	Effect on Material Removal Rate (MRR) Of Hot Work Steel AISI H11 Material during Grinding With Silicon Carbide Wheel under Different Environmental Condition Using Taguchi Method”,	International Journal Of Research In Engineering & Technology	ISSN: 2319-1058.	2016			
20.	Sanjeev Saini , Gurudutt Sahni & Balpreet Singh	“A Review On Hard-facing And Wear Reducing Techniques On Industrial Valves,” IMPACT:	International Journal Of Research In Engineering & Technology	ISSN 2347-4599	2016			
21.	Rachit Poddar, Chetan Darshan and Sanjeev Saini	“Performance Evaluation of PVD Coated Ceramic Insert Using AISI 52100 in Hard Turning”,	International Journal of Mechanical Engineering	ISSN 2321-6441	2016		2.7 43	
22.	Devinder Priyadarshi	“Porosity in aluminium matrix composites: Cause, Effect and Defence”,	Materials Science		2016			
23.	Devinder Priyadarshi	“Optimization for Turning of Al-6061-SiC-Gr Hybrid Nanocomposites Using Response Surface Methodologies”,	Materials and Manufacturing Processes		2015			
24.	Chetan Darshan, Dr. Lakhvir Singh and Dr. APS Sethi	Analysis and Optimization of ceramic cutting tool in hard turning of EN-31 using Factorial Design	International Journal of Mechanical and Industrial Engineering (IJMIE)	2231 – 6477	2012	5	0.5 09	11
25.	R. Poddar, C. Darshan, and S. Saini	Performance Evaluation of PVD Coated Ceramic Insert Using AISI 52100 in Hard Turning	IPASJ International Journal of Mechanical Engineering (IJME)	2321-6441	2016		3.8 11	6
26.	Karandeep and Aman Maini	Modeling of Electro-Hydraulic Power Steering System using Bond Graph Technique	International Journal of Science and Research (IJSR)	2319-7064	2016		6.3 91	
27.	Karandeep and Aman Maini	Modeling and Simulation of Two link flexible manipulator using bond graph.	International Journal of Science and Research (IJSR)	2319-7064	2016		6.3 91	
28.	SHEETAL SODA	GSCM: practices, trends and prospects in Indian context.	Journal of Manufacturing Technology Management	1741-038X	2105	ES IC		
29.	SHEETAL SODA	Literature review of multi-aspect research works carried out on the concept and implementation of GSCM	International Journal of Industrial and Systems Engineering	1748-5037	2016			
30.	SHEETAL SODA	Implementation of green supply chain management in India: Bottlenecks and remedies	The Electricity Journal		2016			

## Department of Civil Engineering

### Publication per faculty

S. No.	Name	No. of Papers Published in National/ International journals	No. of publications listed in International Database	Monographs	Books edited	Chapters in books
1	Dr Sanjeev Naval	16	03		0	
2	Dr. Sanjay Goel	12	-		1	
3	Mr. Manpreet Singh Bedi	Nil	-		0	
4	Dr. M K Kaushik	13	-		0	
5	Ms. Sonia Chutani	01	-		0	
6	Mr Manish Bhutani	6	-		0	
7	Mr. Jhala Sudhir Kumar	4	-		0	
8	Mr. Gobind Khurana	2	-		0	

S. No.	Name	Paper Title	Journal	ISSN No.	Year	Citation Index	SNIP	SJR	Impact Factor	h-index
1.	<b>Dr. Sanjeev Naval</b>	“Computer Program for Pressure Settlement Characteristics using Constitutive laws”	Electronic journal of Geotechnical Engineering, Volume 19,5691-5714	ISSN 1089-3032	2014			0.238		
2.	<b>Dr. Sanjeev Naval</b>	“Model Tests on footing resting on waste tire fiber reinforced granular soil”	International Journal of Geotechnical Engineering,(IJGE) Vol. 8, 460-476.	Print ISSN: 1938-6362	2014	SCI Indexed				

3.	<b>Dr. Sanjeev Naval</b>	“Triaxial Tests on Waste Tire Rubber Fiber Mixed Granular Soil”	Electronic Journal of Geotechnical Engineering,(EJ GE) Vol. 18(H), 1623-1641	ISSN 1089-3032	2013			0.238		
4.	<b>Dr. Sanjeev Naval</b>	“Pressure Settlement Characteristics of Strip footing Resting on Sand Reinforced with Waste Tire Fibers.”	Electronic Journal of Geotechnical Engineering,(EJ GE) Vol. 17(Y), 3771-3795	ISSN 1089-3032	2012			0.238		
5.	<b>Dr. Sanjeev Naval</b>	“Bearing capacity improvement in soils using waste tire rubber fibers”	i-manager’s Journal of Structural Engineering, Vol. 1, No. 4., Pg. 42-45	ISSN Print: 2231-1068	2012					
6.	<b>Dr. Sanjeev Naval</b>	“Application of Waste Tire Fiber in Granular Soils with Partial Replacement of Sand by Saw Dust”	International Journal of Engineering Research and Technology, vol. 2, Issue 3	<b>ISSN: 2277-9655</b>	2013				Peer Review ed Journal	
7.	<b>Dr. Sanjeev Naval</b>	“Self compacting concrete using Industrial waste materials”	International Organization of Scientific Research (IOSR) Journal of Engineering, Vol. 3, Issue 2.	ISSN-2320-334X	2013				Peer Review ed Journal	
8.	<b>Dr. Sanjeev Naval</b>	“Experimental Study On Core Diameter Varying H/D Ratio On Concrete Core Strength”	International Journal of Engineering Research and Technology, Volume 2, Issue 3.	<b>ISSN: 2277-9655</b>	2013				Peer Review ed Journal	

9.	<b>Dr. Sanjeev Naval</b>	“Stabilization of Expansive soils using low cost Materials”	International Journal of Engineering and Innovative Technology (JEIT), Volume 2, Issue 11.	<b>ISSN:2277-3754</b>	2013				Peer Review ed Journal	
10.	<b>Dr. Sanjeev Naval</b>	Effect of magnetic water on the the engineering properties properties of Self Compaction Concrete using Binary & Tertiary Blends	International Journal for Science, Management and Technology	ISSN (print) 2394-1529	2016				Peer Review ed Journal	
11.	<b>Dr. Sanjeev Naval</b>	Permeation Properties of Self Compacting Concrete with Mineral Admixtures and Magnetized Water, and Technology”	International Journal for Science, Management	ISSN (print) 2394-1529	2016				Peer Review ed Journal	
12.	<b>Dr. Sanjeev Naval</b>	Assessment of Ground Water Quality and Feasibility of Tire Derived Aggregates for use as Leachate Drainage Material	Electronic Journal of Geotechnical Engineering.	ISSN-1089-3032	2016			SJR 0.238		
13.	<b>Dr. Sanjeev Naval</b>	“To Study The Strength Characteristics Of Concrete Using Waste Marble Powder And Recycled Coarse Aggregates	International Journal of Science and Research (IJSR)	2319-7064	2016			0.23		
14.	<b>Dr. Sanjeev Naval</b>	“Present Status of MSW Disposal in Jalandhar and Suitability of Tire Derived Aggregates as	International Journal of Innovative Research in Science, Engineering and	ISSN (print) 2347-6710	2016				Peer Review ed Journal	

		a Drainage Material in Cover System of Landfill”	Technology.							
15.	<b>Dr. Sanjeev Naval</b>	“Effect of Bearing Capacity of Strip Footing on Reinforced Double Layer Soil System with Fly ash Stabilized Clayey Soil”	International Journal Of engineering Research and Applications (IJERA)	ISSN-2248-9622	2016				Peer Review ed Journal	
16.	<b>Dr. Sanjay Goel</b>	Fatigue Performance of Plain and Steel Fibre Reinforced Self Compacting Concrete using S-N Relationships.	Engineering Structure, Elsevier Science, Vol. 74, pp. 65-73.	ISSN: 0141-0296	2014	SCI/2	2.024	1.813	1.893	(Elsevier/Scopus)
17.	<b>Dr. Sanjay Goel</b>	Fatigue Analysis of Plain and Fibre Reinforced Self-Consolidating Concrete	ACI Materials Journal, American Concrete Institute USA, Vol. 109, No. 5, pp 573-582.	ISSN:08893 25X	2012	SCI /8	1.62	1.43	1.123	
18.	<b>Dr. Sanjay Goel</b>	Flexural Fatigue Strength and Failure Probability of Self Compacting Fibre Reinforced Concrete.	Engineering Structure, Elsevier Science, Vol. 40, No. 7, pp. 131-140.	ISSN: 0141-0296	2012	SCI /19	2.024	1.813	1.893	
19.	<b>Dr. Sanjay Goel</b>	Flexural fatigue analysis of self-compacting concrete beams,	Proceedings of the ICE - Construction Materials, Thomas Telford, UK, Vol. 165, No 6, pp. 367 -376,	ISSN 1747-650X  E-ISSN 1747-6518	2012	SCOPUS/3	0.403	0.262		
20.	<b>Dr. Sanjay Goel</b>	Prediction of Mean & Design Fatigue Lives of Steel Fibrous Concrete Beams in	Journal of Advances in Structural Engineering, Multi-Science Co., UK Vol. 10, No. 1, pp 25	ISSN:1369-4332	2007	SCI /3	0.751	0.475	0.56	

		Flexure,	- 36,							
21.	<b>Dr. Sanjay Goel,</b>	Flexural Fatigue Strength Prediction of Self Compacting Concrete,	Journal of Structural Engineering, CSIR-SERC, Vol. 40, No. 2, pp. 121- 128,	ISSN 0970-0137	2013	SCOPUS	0.153	0.13	0.24	
22.	<b>Dr. Sanjay Goel</b>	Fatigue lives of self-compacting concrete and self-compacting fibre-reinforced concrete beams	Proceedings of the ICE - Construction Materials, Thomas Telford, UK, Vol. 166, No 3, , pp. 141 - 151.,	ISSN 1747-650X  E-ISSN 1747-6518	2013	SCOPUS/1	0.403	0.262		
23.	<b>Dr. Sanjay Goel</b>	Prediction of Mean & Design Fatigue Lives of steel Fibrous concrete using S-N relationships,	Asian Journal of Civil Engineering, Tehran, Vol. 5, No. 3-4, pp 175 -190,	ISSN:1563-0854	2004	SCOPUS/1	0.252	0.499	0.62	
24.	<b>Dr. Sanjay Goel</b>	Workability And Compressive Strength of Steel Polypropylene Hybrid Fibre Reinforced Self-Compacting Concrete",	International Journal for Science and Emerging Technology with latest trends, USA, Volume 1, No 6, pp 7- 13. Impact factor -	ISSN (Online):2250-3641,	2013	Google Scholar/8			1.472.	
25.	<b>Dr. Sanjay Goel</b>	Prediction of Mean and Design Fatigue Lives of Self Compacting Concrete Beams in Flexure	Journal of Institution of Engineers (India): Springer, Series A, Vol. 93, No.1, pp 55-61,	ISSN 2250-2149	2012	Google Scholar				
26.	<b>Dr. Sanjay Goel</b>	Performance evaluation of PET-Polypropylene Hybrid Fiber Reinforced Concrete in terms of workability, strength and	International Journal of Civil and Structural Engineering Research, Vol 3, No 2,	(ISSN 238-7607 online).	2016	Google Scholar				

		Cost Effectiveness",.								
27.	<b>Dr. Sanjay Goel</b>	Strength and Permeability of Recycled Aggregate Concrete Containing Silica Fumes,	International Journal of Innovative Research in Science , Engineering and Technology, Vol.5, Issue 10,	ISSN (Online): 2319-8753	2016	Google Scholar			6.209	
28.	<b>Dr. MK Kaushik</b>	Performance of Tire chips - Gravel combinations with nonwoven geotextile and encapsulated tire chips layers used as filter/separator under incremental stress levels	European Journal of Environmental and Civil Engineering	1964-8189 (print) 2116-7214 (online)	2016  (accepted on 2 <sup>nd</sup> Nov. 2016)		0.639 (2015)	0.394	<b>0.9</b> (2016) 0.639 (2015)	11
29.	<b>Dr. MK Kaushik</b>	Drainage Performance of Different Sizes Tire Chips used alone and mixed with Natural Aggregates as Leachate Drainage Layer Material	Journal of Geotechnical and Geological Engineering	0960-3182 (print) 1573-1529 (online)	2016	3	1.254 (2014)	0.510 (2015) 0.556 (2014)	<b>1.75</b> (2015)	31
30.	<b>Dr. MK Kaushik</b>	Performance Assessment of Gravel – Tire Chips mixes as Drainage layer Material using real active MSW landfill leachate	Journal of Geotechnical and Geological Engineering	0960-3182 (print) 1573-1529 (online)	2015	2	1.254 (2014)	0.510 (2015) 0.556 (2014)	<b>1.75</b> (2015)	31
31.	<b>Dr. MK Kaushik</b>	Performance Assessment of Tire Chips – Gravel Mixes as leachate drainage layer material	International Journal of Geotechnical Engineering	1938-6362 (Print) 1939-7879 (online)	2014	4		0.49	<b>0.77</b> (2015)	8
32.	<b>Dr. MK Kaushik</b>	Geo-Environmental Prospectives and	Electronic Journal of Geotechnical	ISSN 1089-3032	2014	5		0.21	<b>0.36</b> (2014)	13



		Development Plans for a new MSW landfill site using Tire Chips as Leachate Drainage Materials	Engineering							
33.	<b>Dr. MK Kaushik</b>	Characterization of Municipal Solid Waste in Jalandhar City, Punjab, India	Journal of Hazardous, Toxic and Radioactive Waste	ISSN 2153-5493(Print) 2153-5515 (online)	2013	11		0.25	<b>0.74</b>	20
34.	<b>Dr. MK Kaushik</b>	Assessment of Ground Water Quality and Feasibility of Tire Derived Aggregates for use as Leachate Drainage Material	Electronic Journal of Geotechnical Engineering	ISSN 1089-3032	2016			0.21	<b>0.36</b> (2014)	13
35.	<b>Dr. MK Kaushik</b>	Estimation of Service life for Tire Derived Aggregates Drainage Layer of Leachate Collection System	Electronic Journal of Geotechnical Engineering	ISSN 1089-3032	2016			0.21	<b>0.36</b> (2014)	13
36.	<b>Dr. MK Kaushik</b>	Present Status of MSW Disposal in Jalandhar and Suitability of Tire Derived Aggregates as a Drainage Material in Cover System of Landfill	International Journal of Innovative Research in Science, Engineering and Technology	SSN (Online 2319 -8753) ISSN (Print) 2347 -6710	2016				6.209 (2016) 5.422 (2015)	
37.	<b>Dr. MK Kaushik</b>	Assessment of Drainage Properties of Tires Derived Aggregates to be used as Drainage Layer Material in Leachate Collection System of MSW Landfill	International Journal of Innovative Research in Science, Engineering and Technology	ISSN (Online 2319 -8753) ISSN (Print) 2347 -6710	2016				6.209 (2016) 5.422 (2015)	

38.	<b>Dr. MK Kaushik</b>	Ground water quality of Sriganganagar city, Rajasthan	Nature, Environment and Pollution Technology	0972-6268 (Print) 2395 - 3454 (online)	2005				0.15	5
39.	<b>Dr. MK Kaushik</b>	Gravel Scrap Tires Admixed Drainage Material in Landfill Leachate Collection System	Recent Trends in Civil Engineering & Technology	ISSN 2249 - 8753	2013				---	
40.	<b>Dr. MK Kaushik</b>	Characterization and Hydraulic performance assessment of different sizes Tirechips and Geotextile to be used as Drainage layer in MSW landfills	International Journal for Science and Emerging Technologies with Latest Trends	ISSN 2277-8136 (Print) 2250 -3641 (online)	2013				1.472	
41.	<b>Gobind Khurana</b>	Performance Evaluation of cement concrete using rice husk and bottom ash	International Journal of Science, Management & Technology (IJSMT)	2395-5856	2016				0.32	
42.	<b>Gobind Khurana</b>	Strength Evaluation of cement concrete using bottom ash as partial replacement of fine aggregates.	International Journal of Science, Management & Technology (IJSMT)	2395-4752	2015				0.32	
43.	<b>J. Sudheer Kumar</b>	“Stabilization of expansive soil with cement kiln dust and RBI grade 81 at subgrade level”	Int. Journal of Geotechnical and Geological engineering. Vol.34, Issue 4, Page no: 1037 – 1046		2016					
44.	<b>J. Sudheer Kumar</b>	“Effect of Cement Kiln Dust and Chemical Additive on Expansive Soil at Subgrade Level”	International Journal of Innovative Research in Science, Engineering and Technology, Vol. 4, Issue 5,		2015					

			page: 3759 – 3767							
45.	<b>J. Sudheer Kumar</b>	“Experimental Investigation on Clay with Rice Husk Ash and RBI Grade 81”	International Journal of Innovative Research in Science, Engineering and Technology, Vol. 4, Issue 7, page: 6607 – 6613		2015					
46.	<b>J. Sudheer Kumar</b>	“Effect of Bearing Capacity of Strip Footing on Reinforced Double Layer Soil System with Fly ash Stabilized Clayey Soil”	Int. Journal of Engineering Research and Applications, Vol. 5, Issue 8, (Part - 4), pp.10-16.		2015					
47.	<b>Manish Bhutani</b>	Bearing Capacity Of Strip Footing Resting On Pond Ash Reinforced With Polypropylene Fibre And Geogrid	International Journal of Science, Management & Technology (IJSMT)	2395-5856	2015				0.32	
48.	<b>Manish Bhutani</b>	Strength Characteristics of Concrete Using Rice Husk Ash and Recycled Coarse Aggregates	International Journal of Science, Management & Technology (IJSMT)	2395-5856	2015				0.32	
49.	<b>Manish Bhutani</b>	Strength evaluation of concrete using Marble Powder and Waste Crushed Tile Aggregates	<u>International Journal for Science and Emerging Technologies with Latest Trends</u>	2250-3641	2015				1.472	
50.	<b>Manish Bhutani</b>	Strength Evaluation Of Hybrid Fiber Reinforced Self Compacting Concrete	International Journal of Science, Management & Technology (IJSMT)	2395-5856	2015				0.32	

51.	<b>Manish Bhutani</b>	Performance evaluation of concrete with partial replacement of cement with Bentonite and natural coarse aggregates with recycled coarse aggregates	International Journal of Science, Management & Technology (IJSMT)	2395-5856	2015				0.32	
52.	<b>Manish Bhutani</b>	Performance evaluation of concrete with partial replacement of cement with Bentonite and natural coarse aggregates with recycled coarse aggregates	International Journal of Science, Management & Technology (IJSMT)	2395-5856	2015				0.32	

## DEPARTMENT OF APPLIED SCIENCES

S. No	Name	Paper Title	Journal	ISSN No.	Year	Citation Index	SNIP	SJR	Impact Factor	h-index
1.	Dr. Kanchan L. Singh	Quantum Simulation Study of DNA nucleotide Thymine for use in Molecular Devices	IOSR Journal of Electronics and Communication Engineering, Volume 1, Issue 1 (May-June 2012), PP 01-06.	2278-2834	2012	1				
2	Dr. Kanchan L. Singh	Characterization Of NiO-YSZ Nanocomposite Synthesized By Combustion Method	International Journal for Science and Emerging Technology with Latest Trends, 3(1): 1-8 (2012).	2250-3641	2012					
3	Dr. Kanchan L. Singh	COMPARATIVE STUDY OF VARIOUS MATERIALS FOR SOLID OXIDE FUEL CELL: A REVIEW.	Journal of NanoScience, NanoEngineering & Applications Volume 3, Issue 1, JoNSNEA (2013) 7-15.	2231-1777	2013					
4	Dr. Kanchan L. Singh	Effect of PVA Capping on the Optical and Structural Properties of Hydrothermally Synthesized ZnS Nanocrystals”	International Journal of IT, Engineering and Applied Sciences Research, <i>Volume 2, No. 1, January 2013.</i>	i-Explore	2013					
5	Dr. Kanchan L. Singh	A REVIEW ON Ni-YSZ CERMET ANODE FOR SOLID OXIDE FUEL CELLS	Nano Trends; vol.13, Issue 3, December 2012, Pages 1-11		2012					
6	Dr. Kanchan L. Singh	Combustion Synthesis of NiO-YSZ precursor nanocomposites for SOFC anode and its characterization	Journal of Nanoscience, Engg., Application, vol. 2 Issue 3, December 2012, Pages 1-9.	0973-418X	2012					
7	Dr. Kanchan L. Singh	“Efficient Attachment of Urease with Graphene for Sensing Application”	Nano Trends, Volume 15, Issue 1, ISSN: (September, 2013)	2231-1777	2013					

8	Dr. Kanchan L. Singh	“Synthesis and study of Bio-conjugated graphene”	Nano Trends, Volume 15, Issue 1, ISSN: (September, 2013)	0973-418X	2013					
9	Dr. Kanchan L. Singh	“Comparison of Microwave Processed and Conventionally Processed YSZ Electrolyte”	Advanced Processing and Manufacturing Technologies for Nanostructured and Multifunctional Materials: A Collection of Papers Presented at the 38th International Conference on Advanced Ceramics and Composites January 27-31, 2014 Daytona Beach, Florida, pp: 61-72	Print ISBN: 9781119040262	2014					
10	Dr. Kanchan L. Singh	Magnetic Properties of $(ZnS)_n$ (n= 1-12) Cluster due to B, C, N, and O doping”	Journal of Nanotrends, Volume 16, Issue 3, Pp 16-22 December (2014)	0973-418X	2014					
11	Dr. Kanchan L. Singh	Structural characterization of (Co, Mn) co-doped ZnO thinfilms by sol-gel spin coating method	Nanotrends, Volume 17, Issue 1, Pp 17-21, January, 2015	0973-418X	2014					
12	Dr. Kanchan L. Singh	Investigating the effect of Temperatures on (Co, Mn) co-doped ZnO thin films by spin coating method	J. Pb. Acad. Sci., Volume 11-12(1&2): Page 25-29 (2014)		2014					
13	Dr. Kanchan L. Singh	Synthesis and Characterization of Zinc-doped CdO nanopowder prepared by Mechanochemical method	Nanotrends, Volume 17, Issue 1, Pp26-31, January 2015	0973-418X	2015					
14	Dr. Kanchan L. Singh	Structural study of yttria stabilized zirconia	J. Pb. Acad. Sci., Vol. 11-12 (1&2): page 11-14 (2014).		2014					
15	Dr. Kanchan L. Singh	Effect of nitrogen as codoping on	Journal of Magnetism and Magnetic	0304-8853	2015				1.98	

		transition metal doped (ZnS) <sub>12</sub> clusters	Materials, 394(2015)397-403 (Elsevier)							
16	Dr. Kanchan L. Singh	First principal investigation of the magnetic properties of transition metal doped (ZnS) <sub>n</sub> (n=1-16) clusters.	Journal of Magnetism and Magnetic Materials, 388(2015)160-166 (Elsevier)		2015	1				1.98
17	Dr. Kanchan L. Singh	Relative study on the behaviour and performance of various electrolyte material for SOFC.,	Nano Trends: A Journal of Nanotechnology and Its Applications Sept.2015	0973-418X	2015					
18	Dr. Kanchan L. Singh	Fabrication Methods of group 2 doped calcium substituted hydroxyapatite for application as biomaterial	Advances in Applied Science Research, 2016, 7(2):66-69	0976-8610	2016					
19	Dr. Kanchan L. Singh	Recent Advances In Ceria Based Electrolytes For Solid Oxide Fuel Cells	IJIRAS, volume 3, issue 5, May 2016.	2394-4404	2016					
20	Dr. Kanchan L. Singh	Structural and Electrical Analysis of Microwave Processed YSZ Electrolytes for SOFC	Journal of The Mineral, Metals & Materials Society(TMS) Springer	1047-4838	2016					1.8
21	Dr. Kanchan L. Singh	Effect of Fuel/ Nitrate Molar Ratio on the Properties of NiO-YSZ Nano-composites Synthesized by Combustion (Accepted for publication)	Material science Poland	2083-1331	2016					0.533
22	Dr. Kanchan L. Singh	Mechanism of Microwave: Material Interaction and Its Effect on Material Properties	Nano Trends: A Journal of Nanotechnology and Its Applications	0973-418X	2016					
23	Dr. Kanchan L. Singh	A Study on the Present Status of Zirconia based Electrolytes for Solid Oxide Fuel	Journal of pure and applied physics	2320-2459	2016					0.1

		Cell.(Accepted for publication)								
24	Dr. Ashok Kumar	Sonochemical Synthesis and Photo-Catalytic Study of Cd Doped ZnSe Nanoparticles,	Nano Trends: A Journal of Nanotechnology and Its Applications, 2015;17(1):32-41p.	0973-418X	2015	1				SJIF 2.971
25	Dr. Ashok Kumar	Synthesis and Characterization of Pure and Zn Doped CdSe Nanoparticles by Ultrasonication Technique	American International Journal of Research in Science, Technology, Engineering & Mathematics,	2328-3580	2014					
26	Dr. Ashok Kumar	Ab-initio Study of the Electronic Property of the Functionalized Graphene Nanoribbons having Stone-Wales Defect	Journal of Engineering Science and Management	2250-3854	2013					
27	Dr. Ashok Kumar	Geochemical study of fluoride in ground water in Mohendergarh Town (Haryana)	International journal of pharmaceutical and chemical sciences	2277-5005	2013					
28	Dr. Ashok Kumar	Physico-chemical analysis of ground water in five Blocks (Sabji mandi, Bus stand, govt. Hospital, Railway Station, Anaj mandi) of Mohendragarh district, Haryana (India)	VSRD International Journal of Technical & Non-Technical Research,	0976-7967	2013					SCIENTIFIC IMPACT FACTOR : 3.698
29	Dr. Ashok Kumar	Ground Water Quality in Mohendergarh Town, Haryana (India)	International journal of pharmaceutical and chemical sciences	2277-5005	2013					
30	Dr. Ashok Kumar	Computational Study on the Electronic Properties of Functionalized Graphene Nanoribbon	International Journal for Science and Emerging Technologies with Latest Trends	2250-3641	2012					
31	Dr. Rajni Sharma	An optimal fourth order weighted-Newton method for computing multiple roots	Advances in Applied Science Research	ISSN: 0976-8610.	2016					



		and basin attractors for various methods								
32	Dr. Rajni Sharma	An optimal fourth order iterative method for solving nonlinear equations and its dynamics	Journal of complex analysis	ISSN: 2314-4963.	2015					
33	Dr. Rajni Sharma	A novel family of composite Newton-Traub method for solving systems of nonlinear equations	Applied Mathematics and computation,	ISSN: 0096-3003	2015				Impact Factor 1.338.	
34	Dr. Rajni Sharma	An improved Newton-Traub composition for solving systems of nonlinear equations,	Applied Mathematics and computation,	ISSN: 0096-3003	2016				Impact Factor 1.338.	
35	Dr. Rajni Sharma	A sixth order transformation method for finding multiple roots of nonlinear equations and basin attractors for various methods,	Applied Mathematics and computation,	ISSN: 0096-3003	2015				Impact Factor 1.338.	
36	Dr. Rajni Sharma	General family of third order methods for multiple roots of nonlinear equations and basin attractors for various methods	Advances in Numerical Analysis	ISSN: 1687-9562.	2014					
37	Dr. Rajni Sharma	Some fifth and sixth order iterative methods for solving nonlinear equations,	International Journal of Engineering Research and Applications	ISSN: 2248-9622.	2014					
38	Dr. Rajni Sharma	, A family of modified King's methods with seventh order convergence	Research Journal of Mathematical and Statistical Sciences	ISSN: 2320-6047.	2013					
39	Kamal Kishore	Fabrication of copper nanowires by electrodeposition using anodic alumina and polymer templates	1661-9897	JNanoR	2010	10	0.717	0.316	0.58	3
40	Sunil Kumar Sachdeva	Plane Strain Deformation In Thermoelastic Microelongated	Civil and Environmental Research Vol.7(2),	2225-0514	2015					

		Solid	2015, 92-98							
41	Sunil Kumar Sachdeva	Two dimensional deformation in microstretch thermoelastic half space with microtemperatures and internal heat source.	Cogent Mathematics, Applied & interdisciplinary mathematics. Vol. 2, 2015, 1-15	2331-1835	2015					
42	Sunil Kumar Sachdeva	A two dimensional fibre reinforced micropolar thermoelastic problem for a half-space subjected to mechanical force	Theoretical and applied mechanics Vol 42(1), 2015 , 11-25	1450-5584	2015					
43	Sunil Kumar Sachdeva	Plane strain deformation in a thermoelastic microelongated solid with internal heat source	International journal of Applied Mechanics and Engineering Vol. 20(4), 2015, 717-731	2353-9003	2015					
44	Sunil Kumar Sachdeva	Internal heat source in thermoelastic microelongated solid at an interface under Green Lindsay theory	Journal of Theoretical and applied mechanics Vol. 46(2), 2016, 65-82	1314-8710	2016					
45	Sunil Kumar Sachdeva	Response of Thermoelastic Micropolar Cubic Crystal under dynamic load at an interface	International journal of Applied Mechanics and Engineering Vol. 22(1) , 2017	2353-9003	2017( In press)					
46	Neeru Sharma	A mathematical model for wave propagation in a composite solid matrix containing two immiscible fluids.	Acta Mechanica	0001-5970	2016		1.195	0.898	1.694	
47	Amit Sharma	Stability Analysis of a Plankton System with Delay	International Journal of Mathematical Modeling & Computations	2228-6225 2228-6233	2013					
48	Amit Sharma	The Dynamic of Plankton-Nutrient Interaction with Discrete Delay	Applied Mathematics and Computation, Elsevier	0096-3003	2014				1.4	
49	Amit Sharma	Bifurcation Analysis of a Plankton Model with Discrete Delay	International Journal of Mathematical, Computational , Physical and	20103778, 2010376X	2014					

			Quantum Engineering							
50	Amit Sharma	Analysis of a Toxin Producing Phytoplankton-Zooplankton Interaction with Holling IV Type Scheme and Time Delay	Nonlinear Dynamics, Springer	0924-090X (Print) 1573-269X (Online)	2015				3	
51	Amit Sharma	Dynamical Analysis of a Harvesting Model of Phytoplankton-Zooplankton Interaction.	International Journal of Mathematical, Computational, Physical and Quantum Engineering	20103778, 2010376X	2014					
52	Amit Sharma	Bifurcation Behaviors Analysis of a Plankton Model with Multiple Delays	, International Journal of Biomathematics, WSS	1793-5245, 1793-7159	2016				0.93	3
53	Amit Sharma	Complex Dynamic of Plankton-Fish Interaction with Quadratic Harvesting and Time Delay	Modeling Earth Systems and Environment, Springer	ISSN: 2363-6203 ISSN: 2363-6211	2016					3
54	Amit Sharma	Spatiotemporal Dynamic of Toxin Producing Phytoplankton (TPP)-Zooplankton interaction,	International Journal of Mathematical Modelling and Computation	2228-6225 2228-6233	2016					3
55	Shivani Vij	Propagation of cosh Gaussian laser beam in plasma with density ripple in relativistic – ponderomotive regime	Optik	0030-4026	2014	7	0.717	0.316	0.769	3
56	Shivani Vij	Wiggler magnetic field assisted second harmonic generation in clusters	The European Physical Journal D	1434-6060	2015	2	0.703	0.521	1.228	3
57	Shivani Vij	Propagation of circularly polarized quadruple Gaussian laser beam in magnetoplasma	Optik	0030-4026	2015	3	0.717	0.316	0.769	3
58	Shivani Vij	Self-focusing of quadruple Gaussian laser beam in an inhomogeneous magnetized plasma with	Communications in Theoretical Physics	0253-6102	2015	3	0.615	0.37	0.893	3

		ponderomotive non-linearity: Effect of linear absorption								
59	Shivani Vij	Resonant third harmonic generation in clusters with density ripple: Effect of pulse slippage	Laser and Particle Beams	0263-0346	2015	3	1.059	0.631	1.295	
60	Shivani Vij	Phase-matched relativistic second harmonic generation in clusters with density ripple	Optics Communications	0030-4018	2017	0	0.94	0.778	1.48	
61	Shivani Vij	Effect of the transverse magnetic field on spatiotemporal dynamics of quadruple Gaussian laser beam in plasma in weakly relativistic and ponderomotive regime	Physics of Plasma	1070-664X	2017	0	1.022	0.6	2.207	
62	Anand Bajaj	Eco-criticism: Eco-centric Response to Literature	The Literati, Vol 1, Issue 2	2248-9576	40878					
63	Anand Bajaj	Shashi Tharoor's <i>Show Business</i> : A Dialogic Study	English Journal Vol 12, No 1	0975-4091	41061					
64	Anand Bajaj	Arvind Adiga's <i>The White Tiger</i> : A Study of the Self Assertion of the Dominated and the Oppressed	The Aesthetica, Vol 2, Issue 1	2278-2990	Autumn 2013					
65	Anand Bajaj	Discursive Structures in Miller's <i>A View from the Bridge</i>	The Aesthetica, Vol 1, Issue 1	2278-2990	Autumn 2012					
66	Anand Bajaj	An Edible Wonderland: Reading Food as an Extension to Women Identity in Bulbul Sharma's ' <i>The Anger of Aubergines</i> '	The Literati, Vol 1, Issue 2	2248-9576						
67	Anand Bajaj	Taslima Nasreen's <i>Lajja</i> : A Study of Marginalized Voices	The Touchstone, Vol 1, Issue 1	2347-8799	Spring 2014					
68	Anand Bajaj	Taslima Nasreen's Worldview: An	Conjunctions, Volume 1, Issue 1	2320-995x	2014					

		Introduction								
69	Anand Bajaj	Marginalization and Caste: A Cultural Materialistic Analysis of Mulk Raj Anand's <i>Untouchable</i>	Research Scholar, Vol 2, Issue 4	2320-6101	2014					
70	Anand Bajaj	Introduction to the Theory of Cultural Materialism	Indian Scholar, Vol 1, Issue 2	2350-109x	December 2014					
71	Anand Bajaj	Postcolonialism : A Brief Critical Appraisal	International Journal of Higher Education and Research Vol 6 No 2	2277-260x	July. 2016					
72	Payal Sharma	Relative study on the behaviour and performance of various electrolyte material for SOFC.	Nano Trends: A Journal of Nanotechnology and Its Applications	0973-418X	2015					
73	Payal Sharma	Recent Advances In Ceria Based Electrolytes For Solid Oxide Fuel Cells	IJIRAS Journal	2394-4404	2016					
74	Payal Sharma	Structural and Electrical Analysis of Microwave Processed YSZ Electrolytes for SOFC	Journal of The Mineral, Metals & Materials Society(TMS)	1047-4838	2016				1.8	
75	Payal Sharma	A Study on the Present Status of Zirconia based Electrolytes for Solid Oxide Fuel Cell.(Accepted for publication)	Journal of pure and applied physics	2320-2459	2016				0.1	
76	Payal Sharma	Mechanism of Microwave: Material Interaction and Its Effect on Material Properties	Nano Trends: A Journal of Nanotechnology and Its Applications	0973-418X	2016					
77	Payal Sharma	Effect of Fuel/ Nitrate Molar Ratio on the Properties of NiO-YSZ Nano-composites Synthesized by Combustion (Accepted for publication)	Material science Poland	2083-1331	2016				0.533	

78	Narinder K Sharma	<i>“Duality of Illusion and Reality in Desai’s In Custody”</i>	CLCWeb: Comparative Literature & Culture of Purdue University Press, USA Vol. 14, Issue 2	ISSN: 14814374	2012					
79	Narinder K Sharma	“Reframing the Motif of Social Initiation in Desai’s Where Shall We Go This Summer?”	Counter view: A Peer Reviewed International Research Journal, Vol.1 Issue 2, part III,	ISSN: 2277775X	2012					
80	Narinder K Sharma	“Buddhist Motifs in the Poetry of Som P. Ranchan”	April Yashashri: International Journal of English Language & Literature, Vol. VI, Issue 1	ISSN: 23195851	2013					
81	Narinder K Sharma	“Decoding the Feminist Patterns in Shashi Deshpande’s The Binding Vine”	Langlit: An International Peer Reviewed Open Access Journal, Vol. 1 Issue 2	ISSN: 23495189	2014					
82	Narinder K Sharma	“Alone on My Boat on Sea: A Reading of Desai’s Fire on the Mountain”	Remarkings. Volume 15 No. 1		2016					
83	Narinder K Sharma	“Signification of Diasporic Realities in Kiran Desai’s The Inheritance of Loss”	Literaria: An International Journal of New Literature across the World, Vol. 3 NO.1	ISSN: 22294600	2012					
84	Narinder K Sharma	“Dialectics of Lack & Desire & Signification of Cultural Codes in Anita Desai’s Fasting, Feasting”	Aesthetica, Vol. 1, No. 1	ISSN: 22782990	2012					
85	Narinder K Sharma	“Decoding Alienation in Anita Desai’s Cry, the Peacock”	Ambrosia, Vol. 2	ISSN: 2249:4499	2012					
86	Narinder K Sharma	“Creative Writing as a Tool for Teaching Effective Writing Skills”	JELL, Vol. VI No. 1, June	ISSN: 09756930	2012					
87	Narinder K Sharma	Problematics of Hostland & Himeland	The Literati	ISSN: 2248:9576	2016					

88	Nitin Kalra	A novel family of composite Newton–Traub methods for solving systems of nonlinear equations	Applied Mathematics and Computation	0096-3003	2015					1.6	
89	Bhupinder Singh Arora	Identification of Aryltetralin Lignans from <i>Podophyllum hexandrum</i> Using Hyphenated Techniques	International Journal of Pharmaceutical Sciences and Drug Research	0975-248X	2015					1.36	
90	Bhupinder Singh Arora	Effect of Fe Doping on Structural and Electrical properties of Nanocrystalline MgAl <sub>2</sub> O <sub>4</sub> Spinel Oxide Synthesized by Solution Combustion Method	International Journal of Research in Advent Technology	2321-9637	2015					5.15	
91	B S Arora	In vitro cytotoxicity of methanolic extract from aerial parts of <i>Aralia cachemirica</i> and continentalic acid isolated from this extract	Indian J Pharm Sci.	0250-474X	2015			0.37	0.76		
92	B S ARORA	Phytochemical Study of <i>Nothapodytes foetida</i> by LC-ESI-MS	Journal of Chemistry, Environmental Sciences and its Applications	2349-7769, 2349-7564	2015						

S. No	Name	Total no. of publications*					Number of papers published in peer reviewed journals (national / international)				
		2016	2015	2014	2013	2012	2016	2015	2014	2013	2012
1	Dr. Kanchan L. Singh	06	04	05	04	04	06	04	05	04	04
2	Dr. Ashok Kumar	-	1	1	4	1	-	1	1	4	1
3	Dr. Rajni Sharma	02	2	2	2	4	02	2	2	2	4
4	Mr. Kamal Kishore	-	-	-	1	-	-	-	-	1	-
5	Mr. Sunil K Sachdeva	01	4	--	---	---	01	4	---	---	----
6	Dr. Amit Sharma	03	01	03	01		03	01	03	01	-
7	Ms. Shivani Vij	02	4	1	-	-	02	4	1	-	-
8	Ms. Payal Sharma	05	-	-	-	-	05	1	-	-	-
9	Dr. Narinder K. Sharma	02	-	-	-	-	02	-	-	-	-
10	Mr. Anand Bajaj	01	-	-		2	01	--	-	-	2

11	Mr. Ashwani Kumar	02	-	-	-	-	02	-	-	-	-
12	Mr. Nitin Kalra	-	1	-	-	-	-	1	-	-	-
13	Dr. Bhupinder Singh	-	2	1	1	-	-	2	1	1	-

Books with ISBN/ISSN numbers with details of publishers:

S.No.	Name	Title of the Book	ISBN No.	Publisher	Year
1	Dr. Kanchan L. Singh	“Comparison of Microwave Processed and Conventionally Processed YSZ Electrolyte”	Print ISBN: 9781119040262	Wiley	2014
		Advanced Processing and Manufacturing Technologies for Nanostructured and Multifunctional Materials: A Collection of Papers Presented at the 38th International Conference on Advanced Ceramics and Composites January 27-31, 2014 Daytona Beach, Florida, pp: 61-72			
2	Dr. Rajni Sharma	Engg. Mathematics-1		Modern Publisher	2006
3	Kamal Kishore	Antenna and Wave Propagation	9380028064	I K International Publisher New Delhi	2009
4	Kamal Kishore	Microwave and Radar Engineering	81-272-3369-2	Kalyani Publisher Ludhiana	2007
5	Sunil Kumar Sachdeva	Spectrum Engineering Mathematics-I		Sharma publication, Jalandhar	2009
6	Sunil Kumar Sachdeva	Spectrum Engineering Mathematics-II		Sharma publication, Jalandhar	2010
7	Sunil Kumar Sachdeva	Spectrum Engineering Mathematics-III		Sharma publication, Jalandhar	2010
8	Neeru Sharma	Discrete mathematics	978-93-80856-39-1	University science Press	2011
9	Amit Sharma	Engineering Mathematics-I		Spectrum, SP	2011
10	Amit Sharma	Engineering Mathematics-II		Spectrum, SP	2012
11	Amit Sharma	Engineering Mathematics-III		Spectrum, SP	2012
12	Anand Bajaj	Cross Cultural Nuances	978-93-84935-41.2	Excellent Publishing House, New Delhi	2015
13	Narinder K Sharma	Signification of Desire: A Study of Selected Novels of Anita Desai	978-3-659-26006-3.	Lambert Publishing Germany	2012
14	Narinder K Sharma	Business Communication & Soft Skills (Co-author)	678-3-659-26006-2.	PTU	2007
15	Narinder K Sharma	The Functional Aspects of Communicational Skills(Ed.)	nil	Kataria Publishers New Delhi	2005
16	Narinder K Sharma	Contemporary Literary Conflations: A compendium of Literary Essays(Ed.)	978-81-926564-1-0	Betweenline Publishers Patiala	2014
17	Narinder K Sharma	Communication and Soft Skills: The Emerging Paradigms(Ed.)	878-81-926564-1-0	Excel Publishers New Delhi	2010



## Department of Business Management

S.No.	Name	No. of Papers Published in national/international journals	No. of publications listed in International Database	Mono-graphs	Books edited	Chapters in books
1	Dr. Sonia Chawla	16	10		2	2
2	Dr. Anil Soni	14	9			2
3	Dr. Ritu Sehgal	8	5			5
4	Mr. Savdeep Vasudeva	2	2			
5	Ms Priyanka Sharma	1				
6	Ms. Megha	4				

S. No.	Name	Paper Title	Journal	ISSN No.	Year	Citation Index	SNIP	SJR	Impact Factor	h-index
1	Dr. Sonia Chawla	The Emerging Paradigms of Life Insurance Distribution in India	Journal of Commerce and Trade	0973-4503	2006	MIAR, Cabell's Directory, Ulrich Directory, Citefactor, Journal Seek Directory, Connect Journals			3.86	
2	Dr. Sonia Chawla	A Critical Analysis of Legislative framework on Consumer Protection for the Life Insurance Industry in India	Envision: Commerce and Management Journal	0976-2183	2007					
3	Dr. Sonia Chawla	Customer Relationship Management in Life Insurance	Organizational Management Journal		2007					

		Industry								
4	Dr. Sonia Chawla	Determinants of Life Insurance Consumption in India	Journal of Commerce and Trade	0973-4503	2007	MIAR, Cabell's Directory, Ulrich Directory, Citefactor, Journal Seek Directory, Connect Journals				3.86
5	Dr. Sonia Chawla	Life Insurance Regulatory Framework in India: Developments , Issues and Concerns	ICFAI Journal of Insurance Law	0972-7876	2007	EBSCO Database				
6	Dr. Sonia Chawla	Bancassurance in India: Who is Tying the Knot with Whom, Why and How	Prajnan, Journal of Social and Management Sciences, NIBM, Pune	0970-8448	2007	EBSCO, SSRN and IDEAS Repec.				
7	Dr. Sonia Chawla	Liberlization and Customer Preference for Life Insurance in Northern India	The Indian Journal of Commerce	0019-512X	2007					
8	Dr. Sonia Chawla	Service quality perceptions of life insurance policy holders in Northern India: Pre-privatization vs. Post-privatization	ICFAI Journal of Marketing Management	0972-6845	2008	EBSCO Database				
9	Dr. Sonia Chawla	Indian and the World: The changing Paradigms in the Banking Sector due to Technological Advancements	Prajnan, Journal of Social and Management Sciences, NIBM, Pune	0970-8448	2010	EBSCO, SSRN and IDEAS Repec.				
10	Dr. Sonia Chawla	Impact of Internet Banking on Customer Satisfaction: A Comparative study of Public sector Banks Private Sector	International Journal of Research in Commerce, IT and Management	2231-5756	2011					

		Banks and Foreign Sector Banks								
11	Dr. Sonia Chawla	An Empirical Analysis on Awareness and Satisfaction Level of Internet Banking with Respect to Demographic Profile	IUP Journal of Marketing Management	0972-5342	2012	EBSCO Database				
12	Dr. Sonia Chawla	Trends and Patterns of FDI in India	Asian Journal of Research in Business Economics and Management	2249-7307	2013					
13	Dr. Sonia Chawla	A Macroeconomic approach to Foreign investment Flows in India	Indian Journal of Finance	0973-8711	2014	Scopus (Elsevier), Indexed in Google Scholar, Ulrich's International Periodicals Directory, USA, Cabell's Directory of Publishing Opportunities, Index Copernicus Journals Master List,	0.028	0.192		7
14	Dr. Sonia Chawla	Analysis of FDI in retail sector of India	Radix international Journal of Banking, Finance and Accounting	2277-100X	2013	Google Library, Google Scholery, Ulrichs Periodicals Directory, Proquest, U.S.A				
15	Dr. Sonia Chawla	Engaging Polytechnic Students with Problem based Learning in Civil Engineering Courses	The Indian Journal of Technical Education	0971-3034	2015					
16	Dr. Sonia Chawla	Health care in India: Opportunities,	journal of trade and	0973-4503	2015	MIAR, Cabell's Directory, Ulrich			3.86	

		challenges and concerns (A case study)	commerce			Directory, Citefactor, Journal Seek Directory, Connect Journals				
17	Dr. Anil Soni	Mutaul Fund Performance: An Analysis of Monthly Retrun	KAIM Journal of Management and Research	0974-9462	2008					
18	Dr. Anil Soni	Corporate Social Responsibility in Indai: A Study of BSE Sensex Based Companies	Journal of IMS Group	0973-824X	2009				0.765	
19	Dr. Anil Soni	Reaction of the Stock Market to Union Budget and Monetary Policy Announcements	Asia Pacific Journal of Research in Business Management	2229-4104	2010					
20	Dr. Anil Soni	A Study of Innovative Marketing Channels of Life Insurance Corporation of India	International Journal of Research in Finance and Marketing	2231-5985	2012					
21	Dr. Anil Soni	Working Capital Management With Special Reference to Vardhman Textiles Ltd.	International Journal of Research in IT and Management	2231-4334	2012					
22	Dr. Anil Soni	EXIM Trade: Sources of Short-Term Borrowed Funds	International Journal of Research in Economics & Social Sciences	2249-7382	2013					
23	Dr. Anil Soni	Customer Relationship Management Practices: A Study of Retail Stores in India	International Journal of Research in IT and Management	2231-4334	2014					
24	Dr. Anil Soni	A Study of Dividend	International Journal of	2394-5923	2015					

		Pattern of NIFTY Companies	Research in Business Studies and Management							
25	Dr. Anil Soni	Investors' Attitude towards Secondary Market-A Study of Punjab Region	i-manager journal on Management	2230-715X	2016				0.426	
26	Dr. Anil Soni	Social Media Marketing: Emerging Trends And Its Implication	International Journal of Business Management and Scientific Research	2397-6636	2017					
27	Dr. Anil Soni	Unfortunate Plight of MSME Sector: An Overview	International Journal of Business Management and Scientific Research	2397-6636	2017					
28	Dr. Anil Soni	Consumer Attitude towards Organic Foods: An Exploratory Study of North India	International Journal of Advanced Research in Management, Engineering , Technology	2456-2998	2017					
29	Dr. Anil Soni	Role of ICT in Business Development	International Journal of Advanced Research in Management, Engineering , Technology	2456-2998	2017					
26	Dr. Ritu Sehgal	Impact of Internet Banking on customer satisfaction: A comparative study of Public Sector Banks, Private Sector Banks and Foreign Sector Banks	<b>International Journal of Research in commerce and Management</b>	2231-5756	2011	Included in the International Serial Directories. Ulrich's Periodicals Directory ©, ProQuest, U.S.A., EBSCO Publishing, U.S.A., Google Scholar, Open J-Gate, India [link of the same is duly available at Infilbnet of				

						University Grants Commission (U.G.C.), Cabell's Directories of Publishing Opportunities, U.S.A., The American Economic Association's electronic bibliography, EconLit, U.S.A. & Index Copernicus Publishers Panel, Poland with IC Value of 5.09 as well as in number of libraries all around the world.				
27	Dr. Ritu Sehgal	Legislative framework for intensification of Internet Technology in Banking Sector of India	<b>International Journal of Innovations in Engineering and Management</b>	2319-3344	2012					
24	Dr. Ritu Sehgal	AN EMPIRICAL ANALYSIS OF FACTORS AFFECTING INTERNET BANKING IN PUNJAB STATE (INDIA)	<b>International Journal of Research in Commerce, Economics and Management</b>	2231-4245	2013	Included in the International Serial Directories. Ulrich's Periodicals Directory ©, ProQuest, U.S.A., EBSCO Publishing, U.S.A., Google Scholar, Open J-Gate, India [link of the same is duly available at Inflibnet of University Grants Commission (U.G.C.)], Cabell's Directories of Publishing Opportunities,				

						U.S.A., The American Economic Association's electronic bibliography, EconLit, U.S.A. & Index Copernicus Publishers Panel, Poland with IC Value of 5.09 as well as in number of libraries all around the world.				
28	Dr. Ritu Sehgal	Users' Satisfaction Level from Internet Banking Services in District Jalandhar- A study from Perspective of Customers of Private Sector Banks	<b>INDO Global Journal of Applied Management Science</b>	2320-7892	2013					
29	Dr. Ritu Sehgal	A Study of Attitude of Internet Banking Users of Public Sector Banks in Northern India	<b>International Journal of Marketing, Financial Services and Management Research</b>	2277-6788	2013	Open J-Gate, India, Cabell's Directory of Publishing Opportunities, Texas, Electronic Journals Library-University Library of Regensburg				
30	Dr. Ritu Sehgal	AN ANALYSIS OF PERCEPTION OF INTERNET BANKING USERS OF PRIVATE SECTOR BANKS IN NORTHERN INDIA	<b>Vierwpoint</b>	2229-3925	2014					
31	Dr. Ritu Sehgal	India and the World: the Changing paradigms in the Banking Sector Due to Technological Advancements	Prajnan, Journal of Social and Management Sciences, NIBM, Pune	0970-8448	2010	EBSCO, SSRN and IDEAS Repec.				

32	Dr. Ritu Sehgal	An empirical analysis on awareness and satisfaction level of Internet banking user with respect to demographic profile	<b>IUP JOURNAL OF MARKETING MANAGEMENT</b>	0972-6845	2012	EBSCO and Proquest Database				
33	Savdeep Vasudeva	A Comparative Study of Consumer's Gender Based Attitude towards Mobile Value Added Services in Jalandhar District Using Tri-Component Model	International Journal of Online Marketing (IJOM)	2156-1753	2013	ACM Digital Library, Google Scholar <b>INSPEC</b> , ProQuest Advanced Technologies & Aerospace Journals ProQuest Computer Science Journals ProQuest Illustrata: Technology <b>PsycINFO®</b>			4.2653	
34	Savdeep Vasudeva	Impact of E-Core Service Quality Dimensions on Perceived Value of M-Banking in Case of Three Socio-Economic Variables	International Journal of Technology and Human Interaction (IJTHI)	1548-3908	2017	ACM Digital Library, <b>Australian Business Deans Council (ABDC)</b> , <b>Australian Government's Department of Education, Compendex (Elsevier Engineering Index)</b> , Google Scholar, <b>INSPEC</b> , <b>PsycINFO®</b> , <b>SCOPUS</b> , The Index of Information Systems Journals		0.183		11
35	Priyanka Sharma	A Macroeconomic approach to foreign investment in India	Indian Journal of Finance	0973 - 8711	2014				0.421	



34	Megha Munjal	A Thematic Framework of Governance Practices- Evidence from India	The International Journal of Business & Management	2321-8916	2015				1.223	
35	Megha Munjal	Attitude of the youth Towards Corporate Social Responsibility In India: A Study of Jalandhar District.	The IUP Journal of Management Research	0972-5342	2011				0.765	
36	Megha Munjal	Ethics in Advertising Through Broadcasting Media	The PIMT Journal of Research		2010					
37	Megha Munjal	Corporate Governance in Indian Banks: Need for a clear Roadmap.	Journal of Business Analysis	2231-1165	2011					

<b>Books Published</b>					
<b>S.No.</b>	<b>Name</b>	<b>Title of the Book</b>	<b>ISBN No.</b>	<b>Publisher</b>	<b>Year</b>
1	Dr. Anil Soni	Corporate Accounting	978-93-5058-734-8	V.K. Global Publications Pvt. Ltd. Faridabad	2016
2	Dr. Anil Soni	Corporate Accounting (Solutions)	978-93-5058-838-3	V.K. Global Publications Pvt. Ltd. Faridabad	2017
3	Dr. Anil Soni	Accounting and Financial Management		IKG Punjab Technical University	2015
4	Dr. Sonia Chawla	Impact of privatisation on life insurance industry in India: A study of customer satisfaction in Northern India	978-3-8443-3429-6	lambert academic publishing, UK	2011
5	Dr. Sonia Chawla	Risk nanlysis in life insurance industry: A casr study of indian market players	978-3-8443-9389-7	lambert academic publishing, UK	2011

### Department of Computer Applications

S.No.	Name	No. of Papers Published in national/international journals	No. of publications listed in International Database	Monographs	Books edited	Chapters in books
1	Parveen Kakkar	15				
2	Sahul Goyal	NIL				
3	Jasdeep Kaur	NIL				
4	Reeta Bhardwaj	3				
5	Jaswinder Singh	1				
6	Neetu Gahlawat	NIL				
7	Gagan Kumar	NIL				
8	Archana Aggarwal	NIL				

1.	Parveen Kakkar	Traffic Pattern based performance comparison of Reactive and Proactive protocols of mobile adhoc networks	International Journal of Computer Applications	0975-8887	2010	57			0.752	2
2.	Krishan Kumar Saluja , Parveen Kakkar	The DDoS Attacks in MANET-A Review	Journal of Information Systems & Communication	0976-8742	2012	2				2
3.	Parveen Kakkar	Investigating the Impact of Random Waypoint AND Vector Mobility Models on AODV, OLSR and GRP Routing Protocols in MANET	International Journal of Computer Applications	0975-8887	2013				0.752	
4.	Parveen Kakkar	A Study of the impact of random waypoint and vector mobility models on various routing protocols in Manet	International Journal of Advances in Computing and Information Technology	2277-9140	2013					
5.	Parveen Kakkar	Investigation of Mobility Model Against Reactive Routing Protocols in MANET's	International Journal of Computers & Technology	2277-3061	2013				0.876	
6.	Parveen Kakkar	Soft Computing based technique for accurate effort Estimation: A Survey”	International Journal of Engineering Sciences	2320-0332	2013	2	1.350	1.916	3.165	
7.	Parveen Kakkar	Performance investigations of DYMO, DSR, AODV & LAR Routing Protocols using different Mobility in MANETS	International Journal of Engineering Research & Technology	2278-0181	2013	2				1
8.	Parveen Kakkar	Optimizing the Cluster Partition Using Tabsolute and Fuzzy cost for Heterogeneous WSNs	International journal of Computer Technology & Application	2229-6093	2014				2.804	
9.	Parveen Kakkar	Performance Analysis of Multihop Routing Protocol in Wireless Sensor Networks	International Journal of Innovative Science, Engineering & Technology	2348-7968	2014				4.332	
10.	Parveen Kakkar	Effect of varying packet interval time on Multihop routing protocol in Wireless Sensor Networks	Transactions on Networks and Communications, UK.		2014	1				

11.	Parveen Kakkar	Comparison of Multihop Routing Protocols based on packet interval time in Wireless Sensor Networks	International Journal of Scientific Engineering and Technology	2277-1581	2014				0.489	
12.	Parveen Kakkar	An Edge Regeneration Method for Artifacts Removal in Compressed Image	International Journal of Computer Application	0975 - 8887	2015				0.752	
13.	Parveen Kakkar	Traffic signal Control using Enhanced AODV in VANETS	Asian Journal of Multidimensional Research journal	2278-4853	2016				0.518	
14.	Parveen Kakkar	Performance Analysis of Encrypted Image by digital watermarking	Apeejay Journal of Computer Science and Applications	0974-5742	2008				1.125	
15.	Parveen Kakkar	ACA A New Way Of Video Watermarking	Apeejay Journal of Computer Science and Applications	0974-5742	2009				1.125	
16	Reeta Bhardwaj	Comparative Investigation of GA and HPSO for Data Allocation and Optimizing Performance with Load Balancing			2013					
17	Reeta Bhardwaj	The Research of Data Mining by using Depth First Search and Sorting Techniques in Association Rule Mining			2014					
18	Reeta Bhardwaj	DWEDDEEC: Distance Aware Waiting based EDDEEC Protocol for Heterogeneous WSNS			2015					
19	Jaswinder Singh	Fuzzy Logic Approach to Forecast the Extendibility/Extensibility in Object Oriented Design using an Integrated Model		0975 - 8887	2014					

**34. Participation in Institutional Social Responsibility (ISR) and Extension Activities:**

<b>S. No.</b>	<b>Name of the Co-ordinator</b>	<b>Activity</b>	<b>Ext. Organizing Department, if any</b>	<b>Theme of the Event</b>
<b>1</b>	Dr. M.K. Kaushik Assistant Professor (CE) and NSS officer & Mr. Vinay Kumar, Estate Officer	68 <sup>th</sup> Independence Day	<b>NSS</b>	National flag hosting ceremony was organized in the main lawn of institute. Principal addressed the students, staff and faculty members on the occasion. Few cultural programmes were also organized on the occasion.
<b>2</b>	Dr. M.K. Kaushik Assistant Professor (CE) & NSS Officer	Campus cleanliness drive under SWACHAHA BHARAT ABHIYAN	<b>NSS</b>	Faculty and staff members along with principal of the institute participated in campus cleanliness drive under Swachaha Bharat Abhiyan.
<b>3</b>	Dr. M.K. Kaushik Assistant Professor (CE) NSS Officer & all registered NSS volunteers and students	Cleanliness Pledge under "SWACHAHA BHARAT ABHIYAN"	<b>NSS</b>	Cleanliness Pledge was conducted during 3:20 to 4:20 pm (during 8 <sup>th</sup> lecture) for all the registered NSS volunteers and students. Activity was monitored and managed by respective class incharges of MBA, MCA and B.Tech. classes.
<b>4</b>	Dr. M.K. Kaushik Assistant Professor (CE) NSS Officer & all registered NSS volunteers and students	RASHTRIYA EKTA DIWAS PLEDGE	<b>NSS</b>	Rashtriya Ekta Diwas Pledge was taken by all students on 31 <sup>st</sup> Oct. 2014 which was organized by NSS department of the institute which was managed by all respective class in-charges and registered NSS volunteers.

5	Dr. M.K. Kaushik Assistant Professor (CE) NSS Officer & all members of social welfare committee	Poster making competition under SWACHAHA BHARAT MISSION	NSS	A group of NSS volunteers took part in the poster making competition to create awareness on reducing food wastage. Tamanna of IT- 3 <sup>rd</sup> year (450/12) stood first and Ravi Bhushan Kumar CE 2 <sup>nd</sup> year (634/13) stood second.
6	Dr. M.K. Kaushik Assistant Professor (CE) NSS Officer & 03 members of social welfare committee	Participation in the Two days Sports and Career Awareness Festival “Spark”	<b>District Red Cross Branch</b> under the leadership of <b>Deputy Commissioner and Present</b> of District Red Cross Branch, Jalandhar	NSS team of the institute with six faculty/staff members (under the leadership of NSS officer) participated in the Sports and Career Awareness Festival “Spark” organized by District Red Cross Branch under the leadership of Deputy Commissioner. In this event nearly <b>15000 students</b> participated and were counseled for their future career <b>by the NSS team</b> of DAVIET, Jalandhar.
7	Dr. M.K. Kaushik Assistant Professor (CE) NSS Officer	Introductory session by Art of Living organization	NSS and Art of Living organization	Introductory session by Art of Living organization was arranged by the NSS department for all the faculty and staff members of DAVIET
8	Dr. M.K. Kaushik Assistant Professor (CE) NSS Officer	<b>TRAINING IN EXCELLENCE COURSE</b> for 201 institute students	NSS and Art of Living organization	<b>Training In Excellence Course</b> for students was organized for <b>201 students of institute</b> . The workshop was conducted by Mr. Vivek and Mr. Harsh of <b>Art of Living organization</b> under the guidance of <b>NSS Officer</b> , DAVIET, Jalandhar. The success of the programme was visible from the positive changes in the attitude of students.
9	Dr. M.K. Kaushik, Assistant Professor (CE) NSS officer & all members of	<b>DECLAMATION CONTEST</b> on the topic USE OF TECHNOLOGY AND	NSS	In this contest many new technologies, agricultural reforms were presented by different students. Faculty members judged the students on the basis

	social welfare committee	INNOVATION IN PROMTING GOOD GOVERNACE .		of presentation skills, knowledge and the confidence level. First prize (Rs. 15000/-) was won by VIVIDHA and SUPREET whereas second prize was won by RAVNEET (Rs. 10000/-). Third prize (Rs. 5000/-) was won by SHERYA and SUHANI.
10	Dr. M.K. Kaushik Assistant Professor (CE) NSS officer & all members of social welfare committee and faculty, students Team	<b>Blood donation camp</b>	NSS	Blood donation camp was organized on 12 <sup>th</sup> Feb. 2015 by NSS team in which <b>145 units of blood</b> was donated by the NSS volunteers and institute students.
11	M.K.Kaushik Assistant Professor (CE) NSS officer	Training in excellence workshop for DAVIET faculty and staff members	NSS	Total Six faculty/ staff members including NSS Programme officer participated in <b>six days workshop</b> organized by Art Of Living faculty personals
12	M.K.Kaushik Assistant Professor (CE) NSS officer	Cleanliness Drive under SWACHAHA BHARAT ABHIYAN by registered NSS volunteers in Kabir Nagar area of Jal. city, Punjab	NSS	A group of 60 NSS volunteers from DAVIET Jal. with Sambhav Foundation (NGO) organized one day Cleanliness Drive under Swachaha Bharat Abhiyan in Kabir Nagar area of Jal. city, Punjab
13	Dr. Kanchan L. Singh and Dr. Ashok Kumar	Speech and Book fair	Sarv Hitkari Shiksha Samiti, Punjab	“LalaLajpat Rai “ and his 150 <sup>th</sup> celebration
14	Dr. Kanchan L. Singh and Dr. Ashok Kumar	Declamation contest and Seminar	Alfa Mahindru Foundation, Jalandhar	Save the Girl Child
15	Dr. Ashok Kumar and Dr. Kanchan	Seminar on Helath & Happy life through Values &	Bhram Kumari Iswaria Visvidyalya,	Clean the Mind and Green the Earth.



	L. Singh	spirituality	Maunt Abu.	
4.	Mr. Narinder K. Sharma	Project to sensitize our students towards the ethos of Social Responsibility	Seed Money by Mr. Manjit Singh Kudhail	To raise consciousness for social cause
5.	Dr. Kanchan L. Singh	Art Of Living		Happiness

1. Bharat Jago Daud
2. Participation for orange revolution
3. Financial support given to poor students like books
4. Moral values & ethics in present education system
5. Project Boond : Save Water (A Brain Child Of DAVCMC, New Delhi For Water Conservation)
6. Blood Donation Camp
7. Punjabi Jagriti March
8. Teachings of Vivekananda ( Relevance in the Modern Era)



सत्यमेव जयते  
Government of India

Ministry of Human Resource Development

Department of Higher Education

Statistics Division

New Delhi

# Certificate



**Reference No.** C-10384-2016

This is to certify that **rajeev kumar vashisht** of **DAV Institute of Engineering and Technology, Jalandhar** has successfully uploaded the data of **All India Survey on Higher Education(AISHE) 2016-2017**.

( **B N Tiwari** )

**Deputy Director General**

**Dated:** 04/03/2017