

## Appendix 10

### Mandatory Disclosure (Part 1)

(As on 01.07.2021)

Mandatory Disclosure by Institutions running AICTE approved Engineering/ Technology/Pharmacy programmes to be included in their respective Information Brochure, displayed on their website and to be submitted to AICTE every year latest by 30<sup>th</sup> April together with its URL.

**The following information is to be given in the Information Brochure besides being hosted on the Institution's official Website.**

*“The information has been provided by the concerned institution and the onus of authenticity lies with the institution and not on AICTE.”*

**10.1 AICTE File No.:** **F.No. North-West/1-7010790641/2020/EOA**  
**Date and Period of last approval:** **14.06.2020 for the period 2020-2021**  
**Permanent ID: 1-13119431**

**10.2 Name of the Institution including Address, Telephone, Fax & E-mail**

Name	National Institute of Technical Teachers Training & Research, Sector-26, Chandigarh	
Address	Permanent Location as approved by AICTE	Temporary Location (if applicable)
PIN	160019	
State	U.T. Chandigarh	
STD Code	0172	Phone No: 2759500, 2792369
Fax No.	0172-2791366/2793893	E-Mail: director@nitttrchd.ac.in
Web site	<a href="http://www.nitttrchd.ac.in">www.nitttrchd.ac.in</a>	
Longitude & Latitude	76.80 E; 30.73 N	
Nearest Rly Station	Chandigarh	Distance in Kms : 5
Nearest Airport	Chandigarh	Distance in Kms : 12

- ❖ Office Hours at the Institution : 09.00AM to 05.30PM (Monday to Friday)
- ❖ Academic Hours at the Institution : 09.00AM to 05.30PM (Monday to Friday)

**10.3 Type of Institution** : **GOVERNMENT**  
Category (1) of the institution : NA  
Category (2) of the institution : Co-Ed

**The institute is ISO 9001:2015 certified.**

**10.4 Name of the Organization**

Type of the Organization

Address

Registered with

Registration Date

**Website of the Organization**: **National Institute of Technical Teachers Training & Research**, Sector – 26, Chandigarh: *Autonomous under MHRD, Govt. of India*: *Memorandum of Association of NITTTR, Chandigarh Society (under the Societies Registration Act (XXI of 1860))*

: Sector – 26, Chandigarh – 160 019

: Registrar of Firms &amp; Societies, UT, Chandigarh

: Registration No. 3609, dated 18.11.2003

: **[www.nitttrchd.ac.in](http://www.nitttrchd.ac.in)****10.5 Name of the Affiliating University**

Address

Website

Latest Affiliation Period

: Panjab University, Chandigarh

: Sector – 14, Chandigarh – 160 014

: **[www.puchd.ac.in](http://www.puchd.ac.in)**: 2013-14 onwards (**Permanent Affiliation**)**10.6 Name & Address of the Director**

Name	<b>Dr. SS Pattnaik</b>	Exact Designation	<b>Director</b>	
Qualifications	Ph.D. in Engineering (Elex. & Telecom. Engg.), M.Tech. in Electronics & Communication Engg.; M.Sc. Physics (Electronics spl.)		<b>Date of Birth:</b>	<b>24.02.1964</b>
STD Code	0172	Phone No. (O) 2792369; 5061563	Fax No.	0172-2791366
STD Code	0172	Phone No. (R) 2794417	Fax No.	---
E-Mail	<u><a href="mailto:director@nitttrchd.ac.in">director@nitttrchd.ac.in</a></u> <u><a href="mailto:dinitttrchd@yahoo.com">dinitttrchd@yahoo.com</a></u>		Mobile Phone	9872879362

**10.7 Governing Board Members**

Frequency of the Board Meetings

:

**Annexure – I**

The Board ordinarily meets once in every four months provided that the Chairman may, whenever he/she thinks fit, and on the written requisition of not less than five members call a special meeting.

**Date of Last Meeting: 18.06.2021****10.8 Academic Council/Advisory Body**

Frequency of the Academic Advisory Council

:

**Annexure – II**

Twice in a year;

**Date of Last Meeting: 15.01.2021****10.9 Organizational Chart**

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**Annexure – III****10.10 Student Feedback Mechanism on Institutional Governance/Faculty Performance**

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Obtaining feedback from students; frequent interaction between faculty and students with regard to academic affairs, and improvement measures are taken accordingly wherever necessary. Institute is following the Central Govt. rules as approved by the Board of Governors and, Transparency is maintained with regard to admissions & examinations – internal/external as per norms of the affiliating university (Punjab University) and the information is put on the institute website (which is updated periodically). Students' feedback is obtained monthly.

**10.11 Grievance Redressal Mechanism for Faculty, staff and students**

:

## 10.12 Name of the Department

- ❖ Name of the Programmes approved by the AICTE : ME(Regular/Modular Programmes)
- ❖ Name of the Programmes accredited by the AICTE : Three of ME (Regular) Programmes by NBA

Department-wise detail is given below:

			AICTE Approved Intake during last 4 years								Status of Accreditation (Validity period)
		1 <sup>st</sup> Year of approval by AICTE (give approval ref. no. & date)	2019-2020		2018-2019		2017-2018		2016-2017		
			Sanctioned intake	Actual admissions	Sanctioned intake	Actual admissions	Sanctioned intake	Actual admissions	Sanctioned intake	Actual admissions	
PG (FT)	ME Mechanical Engg. (Manufact Technology) (Regular)	F.No.14-1/PG/92-AICTE/1837 Dt.16.06.1992	28	06	28	15 (including 1 under QIP Poly) scheme)	28	20 (including 2 under QIP Poly) scheme)	28	22 (including 2 under QIP Poly) scheme)	-
	ME Civil Engg. (Const. Tech. & Mgt.) (Regular)	F.CHN-1/B-II/BOS (PG)/92 Dt 09.05.1994	28	26 (including 1 under QIP Poly) scheme)	28	24	28	28	28	28	-
	ME Computer Science & Engg.(Regular)	F.CHN-1/B-II/BOS (PG)/92 Dt 09.05.1994	28	07 (including 1 under QIP Poly) scheme)	28	05	28	14 (including 1 under QIP Poly) scheme)	28	23 (including 3 under QIP Poly) scheme)	Accredited for five years (2016-17 to 30.06.2021)
	ME Electrical Engg. (Instr. and Control (Regular)	F.No.441/CHN-01/BOS (PG) /92 Dt 26.06.1998	26	10 (including 1 under QIP Poly) scheme)	26	06 (including 2 under QIP Poly) scheme)	26	09	26	24 (including 1 under QIP Poly) scheme)	Accredited for two years (2016-17 to 30.06.2018)
	ME Elex. & Comm. Engineering (Regular)	F.No.441/CHN-/BOS(PG)/92 Dt 22.07.1998	19	09	19	03 (including 1 under QIP Poly) scheme)	19	16 (including 2 under QIP Poly) scheme)	19	18 (including 1 under QIP Poly) scheme)	Accredited for two years (2016-17 to 30.06.2018)
	ME Mechanical Engg. (Manufact Technology) (Modular)	F.No.255-50/PG/CH/2003/3 37 dt. 14.06.2005	40	10	40	02	40	26	40	12	-
	ME Civil Engg. (Const. Tech. & Mgt.) (Modular)	F.No.255-50/PG/CH/2003/3 37 dt. 14.06.2005	40	25	40	18	40	32	40	36	-
	ME Computer Science & Engg.(Modular)	F.No.255-50/PG/CH/2003/3 37 dt. 14.06.2005	40	08	40	09	40	17	40	07	-
	ME Electrical Engg. (Instr. and Control (Modular)	F.No.255-50/PG/CH/2003/3 37 dt. 14.06.2005	40	09	40	14	40	10	40	11	-
	ME Elex. & Comm. Engineering (Modular)	F.No.255-50/PG/CH/2003/3 37 dt. 14.06.2005	40	04	40	13	40	11	40	12	-

### Total no. of students placed by the Institution through its Placement Cell (Discipline wise)

Since all the candidates to M.E. Programmes are sponsored teachers from Polytechnics and Engineering Colleges, they are already employed. However, they get promotions as and when posts are available. They may shift to higher positions either in institutes or in industries. General (fresh candidates admitted against GATE score or PU CET) in M.E. Programmes may get teaching or Research and Development as employment opportunities.

### Students Data and Pass % since last three years (as per result declared on 01.01.2020)

S. No.	Course	Year	Sanctioned Intake	Students Admitted	Students Passed out in first attempt	% of Students passed on first attempt	% of Students passing out with Distinction	% of Students with Ist Division	% of Students with IInd Division
1.	<b>M. Tech. Engineering Education</b>								
	Modular	2015	40	No admissions were held from 2014 onwards as per Panjab University directions					
2.	<b>ME Mechanical Engineering (Manufacturing Technology)</b>								
	Modular	2015	40	*23/27	22	95.6	39.13	86.9	8.6
	Regular	2015	28	*26/28	26	100	26.9	88.4	11.5
	Modular	2016	40	12	Pursuing their studies				
	Regular	2016	28	*17/22	17	100	41.0	100	nil
	Modular	2017	40	26	Pursuing their studies				
	Regular	2017	28	*19/20	18	94.73	31.5	94.73	nil
	Modular	2018	40	02	Pursuing their studies				
	Regular	2018	28	15	Pursuing their studies				
	Modular	2019	40	10	Pursuing their studies				
	Regular	2019	28	06	Pursuing their studies				
3.	<b>ME Civil Engineering (Construction Technology and Management)</b>								
	Modular	2015	40	*23/29	23	100	39.1	100	nil
	Regular	2015	28	*26/28	**25	96.1	50.0	96.1	nil
	Modular	2016	40	36	Pursuing their studies				
	Regular	2016	28	*24/28	20	83.3	37.5	83.3	nil
	Modular	2017	40	32	Pursuing their studies				
	Regular	2017	28	*27/28	25	92.5	7.4	92.5	nil
	Modular	2018	40	18	Pursuing their studies				
	Regular	2018	28	24	Pursuing their studies				
	Modular	2019	40	25	Pursuing their studies				
	Regular	2019	28	26	Pursuing their studies				
4.	<b>ME Computer Science and Engineering</b>								
	Modular	2015	40	*18/24	17	94.4	66.6	94.4	nil
	Regular	2015	28	25	**14	56.0	52.0	56.0	nil
	Modular	2016	40	07	Pursuing their studies				
	Regular	2016	28	*18/23	18	100	61.1	100	nil
	Modular	2017	40	17	Pursuing their studies				
	Regular	2017	28	14	14	100	35.72	100	nil
	Modular	2018	40	09	Pursuing their studies				
	Regular	2018	28	05	Pursuing their studies				
	Modular	2019	40	08	Pursuing their studies				
	Regular	2019	28	07	Pursuing their studies				
5.	<b>ME Electrical Engineering (Instrumentation and Control)</b>								
	Modular	2015	40	*20/24	20	100	35.0	95.5	nil
	Regular	2015	26	*20/21	20	100	85.0	95.0	5.01
	Modular	2016	40	11	Pursuing their studies				
	Regular	2016	26	*21/24	20	95.2	85.7	95.2	nil
	Modular	2017	40	10	Pursuing their studies				
	Regular	2017	26	*06/09	05	83.34	50.00	83.34	nil
	Modular	2018	40	14	Pursuing their studies				
	Regular	2018	26	06	Pursuing their studies				
	Modular	2019	40	09	Pursuing their studies				
	Regular	2019	26	10	Pursuing their studies				
6.	<b>ME Electronics and Communication Engineering</b>								
	Modular	2015	40	*15/19	15	100	40.0	100	nil
	Regular	2015	19	*17/19	17	100	76.4	100	nil
	Modular	2016	40	12	Pursuing their studies				
	Regular	2016	19	*15/18	14	93.3	33.3	93.3	nil
	Modular	2017	40	11	Pursuing their studies				
	Regular	2017	19	*15/16	15	100	33.34	80.00	nil
	Modular	2018	40	13	Pursuing their studies				
	Regular	2018	19	03	Pursuing their studies				
	Modular	2019	40	04	Pursuing their studies				
	Regular	2019	19	09	Pursuing their studies				

\* Number of students now are on-rolls as few students left the programme after one spell/semester or the other

\*\* Above data contains students who have completed the programme, **others are still continuing**

- Cut off mark/rank for admission during the last three years : As per the criteria of admission, the total score calculated based on aggregate % of marks and experience should not be less than 25 except in case of GATE qualified.

S. No.	M.Tech/ME Programme(s)	2018– 19		2019– 20		2020– 21	
		MINIMUM SCORE	MINIMUM SCORE	MINIMUM SCORE	MAXIMUM SCORE	MINIMUM SCORE	MAXIMUM SCORE
1.	ME Civil Engg. (Const. Tech. & Mgt.) (Regular)	24.16	55.58	24.12	37.02		
2.	ME Mechanical Engineering (Manufacturing Tech.) (Regular)	26.52	61.04	28.40	36.68		
3.	ME Comp. Sc. & Engg. (Regular)	26.93	51.65	24.44	43.45		
4.	ME Electrical Engg. (Inst. & Control) (Regular)	25.07	32.15	28.84	42.74		
5.	ME Eltx. & Comm. Engg. (Regular)	26.68	33.15	24.32	42.50		
6.	ME Civil Engg. (Const. Tech. & Mgt.) (Modular)	28.53	40.99	27.44	38.18		
7.	ME Mechanical Engineering (Manuf Tech.) (Modular)	27.17	33.62	28.32	40.65		
8.	ME Comp. Sc. & Engg. (Modular)	27.57	37.63	28.84	39.29		
9.	ME Electrical Engg. (Inst. & Control) (Modular)	28.94	40.65	30.44	38.22		
10.	ME Eltx. & Comm. Engg. (Modular)	29.48	37.04	24.90	35.66		

- **Accreditation Status of the Course** : **Three of ME Programmes Accredited**

**ME in Computer Science & Engineering, ME in Electrical Engineering (Instrumentation and Control), and ME in Electronics & Communication Engineering are accredited by National Board of Accreditation (NBA), New Delhi for the Academic Years 2016-2017 and 2017- 2018 vide its letter No. 31-49-2014-NBA dated 04.02.2017. ME Programme in Computer Science and Engineering was later on accredited for 5 years i.e. upto 2020-21 vide NBA letter No. F. No.31-49- 2014-NBA dated 16.05.2017.**

- **Doctoral Courses** : **Yes**
- ❖ Name and duration of programme(s) having affiliation/collaboration with Foreign University(s)/Institution(s) and being run in the same Campus along with status of their AICTE approval. : **NIL/NA**

## 10.13 Major achievement/s (national/international level) of the institute for the period (2018-19) under review:

### Academic Achievements of the Departments

Achievements of the institute are reported under **05** major areas viz., Staff Development; through Training & Education Curriculum Development & revision; Instructional Material Development & implementation; Research and Development; Extension Services and Consultancy. Distinctive programs and activities undertaken during the years are as under.

#### 1. Distinctive Programmes and Activities (2018-19)

- **48** and **50** students respectively got admitted in Master's Degree Programs 05 Regular and Modular respectively. In addition, **102** Regular and **248** Modular students of previous batches were also on roll as on date (Total Students in PG – **448**).
- **65** students on roll for Ph.D. Programs in different disciplines at the Institute.
- **362** Video Films prepared for MOOCs.
- NITTTR Chandigarh is recognized as NRC in EEE and as a part of that EEE Department floated SWAYAM NRC Course on Real Time Power System Analysis and Smart Grid. The Rating of the course was 4.7 out of 5 with a total participation of 1578.
- NITTTR Chandigarh also floated 4 Teacher Training Courses on SWAYAM with an average rating of 4.4 out of 5 with a participation of 5417.
- An International seminar on Skilling for Self-Employment was conducted by EDIC Department and a total number of 162 participants attended the seminar.
- National Seminar on Blockchain Technology on 14.12.2018 by CSE Department.
- National Seminar on Digital India: Services and Solutions conducted in collaboration with TRAI Jaipur.
- National Seminar for ME Students on Design Challenges in Low Power VLSI Design was conducted on 03.05.2018
- National Seminar for ME Students on Data Analysis for Engineers and Scientists on 01.11.2018.
- National Education –Employment Summit 2018, was conducted on Sept., 6, 2018
- National conference on Education 4.0: Remaining & Transforming Learning Environments in collaboration with India Didactic Association on Dec., 12,2018
- 11 Print Materials and 67 Non – Print Materials are prepared; 120 Video Films prepared for MOOCs.
- 03 MOUs signed with Technical Institutions and Industries i.e., Quality Council of India (QCI) New Delhi, Sarthak Educational Trust, New Delhi, Regain Our Glory Foundation.
- Conducted TechSpardha 2018 a technical showcase for M.E. Students
- Executed Consultancy Projects worth 229.83 Lakhs
- Received funding from AICTE, DST, MeitY for conducting research projects and training programmes
- Faculty have published their research works in 165 Peer Reviewed International Journals and 50 International/National Conferences.

#### 2.1 Staff Development

The institute continued to grow in terms of academic activities, both qualitatively and quantitatively. The qualitative dimensions covered related to continued improvements by way of increased emphasis on applications, case studies and industrial exposure in training programs besides more efficient and effective use of multi-media in teaching-learning process. During 2018-19, the details of the long term and short term training programs conducted by the institute for faculty/staff of engineering colleges and polytechnics are given below:

##### 2.1.1 Long Term Programmes

###### 2.1.1 (a) Ph.D. Programmes

Institute is an approved Research Centre of Panjab University, Chandigarh, I.K. Gujral Punjab Technical University, Kapurthala and H.P. University, Shimla for Ph.D. Program as on March 2019, **65** students are undergoing Ph.D. programs in different disciplines. The Institute is also a Ph.D. Centre under QIP (Poly) Scheme of AICTE.

###### 2.1.1 (b) M.Tech. / M.E. Programmes

The Institute offers full-time industry-oriented and practice-based Master's Degree Programmes of **02** years' duration affiliated to Panjab University, Chandigarh and approved by AICTE in the following disciplines:

- Civil Engineering (Construction Technology and Management)
- Computer Science and Engineering
- Electrical Engineering (Instrumentation and Control)
- Electronics and Communication Engineering
- Mechanical Engineering (Manufacturing Technology)

The institute is also offering these Master's Degree Programs on modular basis. The modular program is of 3½ years duration. These ME programs are duly approved by AICTE and affiliated to Panjab University and mainly for the working personnel who undergoes the course work during Summer and Winter break but are evaluated along with the regular students on the same question paper as they appear examination with regular students. This unique model of the institute is a platform for the service personnel to upgrade quality knowledge through a flexi mode degree awarding programme ensured with quality. This programme was launched in the year 2005. Since then majority of the polytechnic faculty members could enhance their qualification spreading to all parts of the country.

Admissions made in these programmes during 2018-19 are given below:

Sr. No.	Name of the Programme	No. of Participants				Total	State-wise Break-up
		Polys	Engg. Colleges	Industry	General		
<b>MASTER'S DEGREE (REGULAR MODE)</b>							
1.	Civil Engineering (Construction Technology and Management)	-	05	05	13	23	PB-2, UP-3, HP-10, J&K-5, UK-1, HR-1, Delhi-1
2.	Computer Science and Engineering	-	-	02	03	05	CHD-3, PB-1, HP-1
3.	Electrical Engineering (Instrumentation and Control)	01	03	-	02	06	J&K-2, HP-2, Odisha-1, CHD-1
4.	Electronics and Communication Engg	-	-	-	02	02	HP - 2
5.	Mechanical Engineering (Manufacturing Technology)	02	-	-	10	12	PB-4, CHD-4, HP-3, AP-1, UP-1, J&K-2
	<b>Total</b>	<b>03</b>	<b>08</b>	<b>07</b>	<b>30</b>	<b>48</b>	
<b>MASTER'S DEGREE (MODULAR MODE)</b>							
1.	Civil Engineering (Construction Technology & Mgt)	09	04	05	-	18	PB-5, UP-5, HP-2, J&K-1, HR-1, RAJ-4
2.	Computer Science and Engineering	05	03			08	HP-2, UP-4, AP-1, J&K-1
3.	Electrical Engineering (Instrumentation & Control)	08	04	01	-	13	UK-3, Bihar-5, HR-1, Jharkhand-1, A.P.-1, UP-1, Telengana-1
4.	Electronics and Communication Engg.	06	01	03	-	10	PB-2, HP-1, HR-1, UP-3, RAJ-2, KER-1
5.	Mechanical Engg. (Manufacturing Technology)	01	-	-	-	01	Raj-01, PB-01
	<b>Total</b>	<b>29</b>	<b>12</b>	<b>09</b>	<b>-</b>	<b>50</b>	

Note: **102** (Regular) and **248** (Modular) students of previous batches are also on roll.

PB–Punjab, UP-Uttar Pradesh, HP-Himachal Pradesh, J&K-Jammu and Kashmir, UK-Uttrkhand, HR-Haryana, CH-Chandigarh, MH-Maharashtra, BH-Bihar, NL-Nagaland, DL-Delhi, JH-Jharkhand, RJ-Rajasthan, TS-Telangana.

## 2.1.2 Short Term Courses (STCs)

The Faculty Development Programmes were broadly of 5 categories viz: industry oriented, industry supported, research oriented, skill oriented and advanced level. The institute offers need-based and customized short-term courses of one to two weeks duration for faculty/staff of engineering colleges, polytechnics and working professionals from industry. During the year 2018-19, **323** short-term programs were conducted through contact and ICT mode for faculty/staff of engineering colleges and polytechnics which were attended by **18114** teachers from various states of the country. Conferences/Seminars, Training Workshops, Curriculum Development Workshops and Students Training etc. were other development programmes conducted by the institute.

### (i) Training Programmes/Workshops:

<b>A)</b>	<b>Short Term Courses</b>	<b>No. of Courses</b>	<b>No. of Teachers Trained</b>
	Contact Mode	<b>238</b>	<b>4456</b>
	ICT Mode	<b>85</b>	<b>13658</b>
	<b>Total</b>	<b>323</b>	<b>18114</b>
<b>B)</b>	<b>Conferences/Seminars</b>	<b>09</b>	<b>1646</b>
	(i) International	<b>01</b>	<b>162</b>
	(ii) National	<b>06</b>	<b>764</b>
<b>C)</b>	(i) Training Workshops (other than Curriculum Development Workshop)	<b>23</b>	<b>1366</b>
	(ii) Review and Operational Plan Preparation Workshops	<b>07</b>	<b>339</b>
	<b>Total (A+B+C):</b>	<b>360</b>	<b>20745</b>
<b>D)</b>	<b>No. of Students Trained</b>	<b>29</b>	<b>3157</b>
<b>E)</b>	<b>Curriculum Development Workshops</b>	<b>33</b>	<b>346</b>

**Total Programmes: 422**

**Total Manpower: 24248**

### (ii) Conferences and Seminars:

S. No.	Title(s)	Dates	Department	No. of Participants
1.	International Conference on Skilling for Self-Employment	21 -22 Feb., 2018	Entrepreneurship Development & Coordination	162
2.	National Seminar on Block Chain Technology	14.12.2018	Computer Science & Engineering	34
3.	National Seminar on Digital India: Services and Solutions in Collaboration with TRAI, Jaipur	13.09.2018	Electronics & Communication Engg.	204
4.	National Seminar for ME Students: Design Challenges in Low Power VLSI Design	03.05.2018	Electronics & Communication Engg.	16
5.	National Seminar for ME Students on Data Analysis for Engineers & Scientists	01.11.2018	Electronics & Communication Engg.	10
6.	National Conference on Education – Employment Summit 2018	06.09.2018	Media Centre	250
7.	National Conference on Education 4.0: Remaining & Transforming Learning Environments in Collaboration with India Didactic Association	12.08.2018	Media Centre	250
	<b>Total:</b>			<b>764</b>



## 2.2 Curriculum Development

The institute continued to undertake curriculum development activities including the design and review of curricula for courses in engineering and non-engineering areas through a scientific approach, which has been considerably internalised by the polytechnic system enabling them to take up similar projects by themselves with some guidance from this institute. During the year **2018-19**, **11** curricula have been designed and **01** curricula were revised, including AICTE Model Curriculum of courses at UG level in Emerging Areas. The department conducted **37** Curriculum Development Workshops of **1-2** days' duration which were attended by **349** participants.

## 2.3 Instructional Material Development

During the year 2018-19, institute continued its efforts to promote development of instructional material, both print (text books, laboratory manuals, modules, readers etc.) and non-print (video programme CAO Packages i.e. MOOCs material, Experimental Kits etc.). Emphasis was made to develop course material for MOOCs as it is thrust area of MHRD.

The following instructional material was produced during the year under report:

### Non Print Material (Digital Resources)

Educational Video Films	<b>120</b>
Lecture based Video Films/(NCTEL)	<b>122</b>
CAI Packages	-
Video Lectures uploaded on You Tube	<b>76</b>
Video Films – MOOCs	<b>286</b>

### Print Material

Text Books	<b>05</b>
Laboratory Manuals	<b>02</b>
Modules	<b>03</b>
Readers	<b>15</b>
Course Material for Training Programs	<b>46</b>
Worksheets for Experiments	-

The information regarding the instructional material developed has been disseminated to the technical institutions of the region and outside to enable them to use the same.

## 2.4 Research and Development

Research and development activities in technology and technical education form an important aspect of the institute's programme. During the year 2018-19, the following Research Studies and Development Projects were completed:

1. Entrepreneurship Awareness Camps/FDPs Sponsored by DST/NIMAT.
2. Curriculum Development of Courses that Enhance Employability Skills Sponsored by AICTE.
3. Solid Waste Management Technologies and Regulatory Compliance Sponsored by DST.
4. Development of Swayam MOOCs for Teacher Training Programmes, Sponsored by MHRD
5. Sustain and Enhance Technical Knowledge in Solar Energy Systems under Green Skill Development Programme of ENVIS Scheme of by DoE, Chandigarh Administration.
6. The following Ph.D thesis under the supervision of faculty were completed and defended during 2018-19: Two-level Security Architecture for Virtual Machine Migration in Cloud Computing; Security Issues in Cloud Computing, Challenges and Solutions.

In addition to above, **136 ME thesis** were also completed under the guidance of faculty of this institute. The faculty of the institute have contributed research papers to the various journals, conventions, seminars and conferences. **33 papers** of the institute faculty were published in SCI Indexed Journals, 191 papers in **International Journals** and **01 papers** of the institute faculty were published in **National Journals**. **51 papers** were presented by the faculty in various International Conferences & Seminars and **04** were presented by the faculty in various National Conferences & Seminars.

The institute publishes a ‘**Journal of Engineering and Technology Education**’, which is referred by teachers and students of technical education and research. This helps the faculty and students of technical institutions from across the country to publish their views and research work in Engineering and Technology and Technical Education. The journal (published twice in a year, i.e., January-June and July-December) provides an interdisciplinary forum to teachers, students, officials/administrators of technical education system and working professionals in industries to share the findings of research along with concerns and opinions on various issues related to engineering and technical education.

## 2.5 Extension Services and Consultancy

### Policy Planning and Service to Industry and Community

The Institute has continued to play a proactive role to influence the planning and development of technical education and also collaborated with institutions and organisations at national and international levels having similar objectives. The institute also provided consultancy services to government, public sector and other national and state level organisations, technical education system and industry in the area of engineering and technology, educational management, curriculum development, entrepreneurship development and rural development. Sarthak related informations to be considered.

### Signing of Memorandum of Understanding

The institute signed **06** MoUs with the following Institutions and Organisations:

1.	Quality Council of India, 2 <sup>nd</sup> Floor, Institute of Engineers Building, 2, Bahadur Shah Zafar Marg, New Delhi –110002	27.04.2018	26.04.2021	Dr. R.P. Singh Secretary General
2.	Sarthak Educational Trust (SET), Regd.Office: DG-II/248A, Vikas Puri, New Delhi 110 018	02.08.2018	01.08.2021	Dr. Jatender Aggarwal
3.	Regain Our Glory Foundation, Amritsar (Punjab)	24.05.2018	23.05.2019	Shri Shankar Dutt Tiwari Director

The major objectives of signing these MoUs are to:

- Develop training hubs to enhance the learning of faculty through diversified facilities and local experts support.
- Support each other’s’ endeavour in delivery of academic programs and research activities.
- Exchange of scientific and technical information.
- Undertaking collaborative research activities through participation in Nationally and Internationally funded projects.
- Jointly organize events such as seminars, workshops, conferences and training programs.
- Training of students of PG level.
- Collaboratively working for various National Mission.

### Consultancy Projects

During the year 2018-19, the following consultancy projects were undertaken:

Sr. No.	Name of Consultancy Project	Status of Project
1.	Evaluation of Learning Materials (English, Physics, Chemistry and Mathematics)	Completed
2.	<ul style="list-style-type: none"> <li>• Testing of Materials, Design, Quality Control</li> <li>• Training Need Analysis (TNA) for teachers of State Council of Odisha</li> <li>• Developing of Curriculum for Polytechnics and Engineering College for the State of HP</li> </ul>	Completed
3.	Energy Efficient Solar PV Shade for e-benches in Parks	Completed
4.	Documentary Film on Haryana Directorate	Completed
5.	Conduct of recruitment tests for Punjab government on 08-04-2018	Completed
6.	Punjab Government Recruitment Test on 14-10-2018	Completed
7.	Recruitment Test for PUDA, Mohali	Completed
8.	Recruitment test for MILKFED, punjab	Completed
9.	Recruitment test of JBT Teachers for Chandigarh Administration on 27-01-2019	Completed
10.	Entrance examination for Sri Mata Vaishno Devi University Jammu	Completed

Sr. No.	Name of Consultancy Project	Status of Project
11.	Recruitment test for JBT under Samagra Shiksha Abhiyan, Chd. Adm	Completed
12.	Third Party Audit Inspection and Stability of Buildings	Completed

⇒ **Training Programs for Students**

The institute organised **29** training programs in which **3157** students of technical institutions participated.

The institute could complete consultancy projects worth Rs. 6.86 Crs with net IRG of Rs. 2.15 Crs.

**Other Projects**

- 03 Training Programs were conducted by EMGT Department namely, Induction Training Program, Research Methodology and Training for Newly Recruited Junior Engineers.
- Analysed the Existing Model Curricula for Diploma Programs (NSQF aligned).

## 2.6 Academic Achievements of the Departments

### Applied Science Department

During the year 2018-19, the department has conducted **18** short term courses for polytechnic, engineering college teachers and industry, which were attended by **225** participants. The department has conducted **03** training programs through ICT in which **553** teachers participated.

The department faculty applied for 01 Patent, published 02 papers in International Journals and published/presented **02** Papers in International Conference. Faculty have developed **02** Print Materials and contributed 02 Video Films. Faculty have guided 02 M.Sc Projects and completed **03** Consultancy/Extension Service Projects. The department also provided sample analysis using AFM & PLS and training programs under consultancy services.

The department organized following contact based programmes: Nuclear Techniques & Instrumentation; Differential and Integral Equations; Nanotechnology: Developments & Challenges; Fiber Optics Technology: Potential & Applications; Applied Mathematical Techniques with Applications; Lasers and Their Applications; Laboratory Organization and Practices in Applied Physics; OFC Systems: Design & Performance Evaluation; Nanomaterials: Characterization & Applications; Advanced Optimization Techniques; Optimization Techniques; Advances in Laser Technology; Optimization techniques with software; Newer Experiments in Applied Physics; Mathematical Programming Problems; Integral Transforms with Engineering uses; OFC Network & Trouble Shooting; Numerical Methods with their Engineering Applications.

In addition, following ICT programmes were also organized: Advances in OFC Technology; Optimization Techniques with Engineering Applications; Nuclear Power Technologies.

### Civil Engineering Department

During the year 2019-19, the department conducted **24** short term training programs on contact modes and **11** programs on ICT Mode which were attended by **288 and 967** teachers respectively from polytechnics and engineering colleges. The Department has conducted 03 workshops with 63 participations. The department also conducted **01** Student Training Programme of 4 Weeks Duration and total of 09 student's participation. The department faculty published **45** papers in International Journals and **01** in National Journals. The department developed various instructional resources that include **02** Print Material and **01** Video Film. The department also provided design and testing services to industry as consultancy projects of Gross Value more than **Rs.82 Lacks**.

The department organized following contact based programmes: Lab Practices in Highway Engineering; Accreditation for Testing & Calibration Laboratories; Lab Practices in Civil Engineering; Laboratory Practices in Environmental Engineering; Recent Trends in Design of Structures; Construction and Maintenance of Black Top Pavements; Structural Design with STAAD PRO; Climate Change & Sustainable Infrastructure Development; Engineering Material Testing; Advanced Construction Techniques for Roads, Buildings Bridges & Other Civil

Engineering Structure; Structural Health Monitoring; Application of Auto CAD in Engineering; Laboratories Practices in Civil Engineering; Low Cost Housing Techniques and Practices; Yoga and Meditation; Concrete Mix Design – New Direction; Mapping by Total Station; Alternate Technologies in road construction; Construction Management; Software Application in Project Management; Green Building and Techniques; Bearing Capacity Estimation for Foundations; Lab Practices in Soil Engineering; Seismic Analysis Design and Retrofitting of Bridges; Laboratory Practices in Civil Engineering.

In addition, following ICT programmes were also organized: Water Resource Management; Remote Sensing, GPS and GIS in Civil Engineering; Low Cost Housing Techniques and Practices; Application of AutoCAD in Engineering; Sustainable Environmental Management; Green Building and Techniques; Building Maintenance; Retrofitting and Rehabilitation of Structures; Application of AutoCAD in Engineering; Solar Wind & Non-conventional Sources of Energy; Project Management.

### **Centre for Clean Technologies and Sustainable Development**

During the year 2018-19, the Centre conducted **09** short term training programs which were attended by **167** participants. The Centre has also completed one consultancy project on Third Party Audit Inspection and Stability of Buildings worth 2 Lakhs.

The centre organized following contact based programmes: NABET Accredited Training Program on Laboratory Management System & Internal Auditing as per IS/ISO/IEC 17025:2005; DST Sponsored National Programme for Training of Scientists/Technologies working in Govt. Sector on Solid Waste Management and Regulatory Compliance; DST Sponsored National Programme on Sustainability and Smart City Concept; Sustain and Enhance Technical Knowledge in Solar Energy System under Green Skill Development Program of ENVIS Scheme.

### **Computer Science and Engineering Department**

During the year 2018-19, the department conducted **32** training programs through contact mode and **08** training programs through ICT mode, which were attended by **650** and **2178** participants respectively. The department conducted 02 Workshops and 09 student training programs in which **101** and **733** participants attended respectively. The department also conducted **01** Seminar which was attended by **34** delegates. The department faculty published **21** Papers in International Journals and **16** papers were presented/accepted in International Conferences. The department faculty also developed **03** Print Material and **09** Non-print Materials.

The department organized following contact based programmes: Cyber Security; Cloud Computing and Cloudsim Simulator; Linux Administration Using Centos; Software Testing Using Open Source Tools; Machine Learning Using Python; Big Data Analytics; Application Development Using .Net; Cloud Computing & Cloudsim Simulator; Next Generation Wireless Networks; Designing of Responsive Websites; Internet of Things; Python Programming; Image Processing and Signal Processing Using Scilab; Matlab for Engineering Application; Cyber Crime and Forensic Tools; Application Development Using Android; Online Safety Awareness; Digital Marketing and E-Commerce; Data Science Using R; Virtual Reality; Open Source Technologies; Web Application Security Audit; Data Analytics Tools for Research; Artificial Neural Network and Fuzzy Logic; Cisco CCNA Exploration; NS2/3 SIMULATOR; Web Designing Using PHP & Mysql; Repair and Maintenance of Computer Peripheral and Network Devices; Report Writing Using Latex; Outcome Based Education; Application Development Using Angular Java; Mobile Computing and Application Development.

In addition, following ICT programmes were also organized: Linux Administration using CentOS; Next Generation Wireless Networking; Internet of Things; Digital Marketing & E-commerce; Data Science Using R; Open Source Technologies; Web Application and Security Audit; Application Development using angular Java. Student Training programmes include: Linux and Shell Programming; PHP and Mysql; Java Programming; Cloud Computing and CloudSim Simulator; Python Programming; Data Science Using R; Digital Marketing; Application Development using Angular Java.

### **Curriculum Development Centre**

During the year 2018-19, Curriculum Development Centre conducted **26** Short Term Training Programs and **08** ICT Programs for the faculty of polytechnics and engineering colleges and trained **597** and **1256** teachers

respectively. The Centre has launched a Course on Swayam MOOC on Curriculum Implementation which has been attended by 1289 participants all over India. The Centre organized **03** Workshops other than Curriculum Development in which **258** participants participated. The centre also conducted **30** Curriculum Development Workshops for the States of Delhi, Haryana, Punjab and Uttar Pradesh which was attended by **893** participants. The department faculty published **01** paper in International Journal. The Department has developed Curriculum of 9 Courses at UG Level for AICTE in emerging areas and completed one Consultancy Project of conversion of 1<sup>st</sup> Year 33 Diploma Courses from Semester system to annual system.

The centre organized following contact based programmes: Planning, Execution and Evaluation of Project Work; Communication Skills; Curriculum Implementation ; Organizing Student Centered Activities; Life Skills Development; Choice Based Credit System; Neuro Linguistic Programme; Outcome Based Curriculum; NSQF Aligned Curriculum Implementation; Effective Presentation & Communication Skills. In addition, following ICT programmes were also organized: Communication Skills; Curriculum Development; Outcome Based Education; Life Skills Development; Curriculum Implementation; Project Work Planning and Execution; MOOCs on Curriculum.

### **Education and Educational Management Department**

During the year 2018-19, Department of Education & Educational Management organized **17 Short Term Training Programmes** (on contact mode) for the teachers working in technical institutions. Out of **422** teachers (616 Man weeks) who participated in these programmes, 71 were from Engineering Colleges, 350 from the Polytechnics and 1 from industry. Course material was provided to all the participants of these 23 programmes. The programmes organized included: Research Methodology, Induction Training Programme for Newly Recruited Teachers, Stress Management, Student Centered Instructional Strategies, Managerial Skills, Leadership Training Programme, and Student Evaluation etc. In addition, the department organized **7 Short Term training programmes through ICT**. A total number of **988** teachers (1094 Man weeks), out of which 853 from engineering colleges and 104 from polytechnics, were trained through these programmes. As such a total of 1410 teachers (with 1710 Man weeks) were trained by the faculty of the department.

The Department organized **two one-day workshops** and trained **228** teachers from the State of Haryana. **Four training programmes (one-day each)** on 'Preparing Students for Job Interviews' were organized through ICT for the students of technical institutions. A total of **2061** students from various technical institutions benefitted by these programmes.

The department launched two Massive Open Online Courses (MOOC) on SWAYAM Portal, viz., 'Research in Technical Education' by Professor (Dr.) PK Tulsi and 'Development of Self Learning Material' by Professor (Dr.) Sunil Dutt wherein a total of 1752 (963 + 789) candidates registered and got benefitted through these courses. In addition, the Faculty of EMGT has developed e-content Modules and Video Films for four MOOCs, viz., a) Research in Technical Education, b) Development of Self-Learning Material, c) Instructional Planning, and d) Communication Skills.

The department faculty published **02** Papers in various National Journals. Dr. PK Tulsi, presented a paper, 'Design of MOOC on Research in Technical Education' in IEEE International Conference: Learning with MOOCs held at Madrid, Spain from 26 – 28 September, 2018.

The department generated IRG of **Rs. 8,67,300/-** by undertaking a Sponsored Research project, 'Assessment of Faculty working in both Government and Private Polytechnics under the State Council for Technical Education & Vocational Training, Govt. of Odisha'. The department also generated IRG of **Rs. 1,00,200/-** as course fee from participants of TEQIP Institutions (Rs. 94,400/-) and industry (Rs. Rs. 5,900/-). In addition, Professor (Dr.) Sunil Dutt contributed in many of the Consultancy Recruitment/Written Tests undertaken by the institute for various organizations as one of the Coordinators.

The department organized following contact based programmes: Induction Training Programme for Newly Recruited Teachers; Research Methodology; Student Centered Instructional Strategies; Student Evaluation; Preparing Students for Job Interview; Enhancing Performance of Staff; Managerial Skills; Evaluation of Theory and Practical Work; Managing your Ego and Emotions at Workplace; Student Centered Instructional Strategies and Soft skills; Leadership Training Programme; Stress Management; Operation Digital Board.

In addition, following ICT programmes were also organized: Research Methodology; Instructional Planning (Module I: IPD); Instructional Delivery (Module II: IPD); Student Evaluation (Module III: IPD); Classroom Communication; Student Centered Instructional Strategies; Managerial Skills and three student training programmes on Preparing Students for Job Interviews through ICT.

### **Educational Television Centre**

During the year 2018-19, the department conducted **12** short term courses in Contact Mode and 5 Short Term Courses in ICT Mode for polytechnic and engineering college teachers, which were attended by **125 and 573** participants respectively. The department conducted **02** National Workshops, which was attended by **09** participants. The department faculty published **08** papers in International Journals. The Centre also developed **286** MOOCs Film Videos and 122 NCTEL Videos.

The department organized following contact based programmes: Digital Image Editing & Animation; Creative Visual Using Adobe Photoshop Flash & After Effect; Creative Video Editing Using Adobe Premier; Deep Learning; Development of MOOCs Videos; Graphics & Animation Techniques for Instructional Material Development; Open Source Tools for Enhancing Presentation Quality; Use of Digital Technologies in Teaching Learning; Selection Camera Shots & Editing for Video; Use of Digital Video Camera for Digital Content Generation; Video Production Techniques for e-content Generation; Cyber Security.

In addition, following ICT programmes were also organized: Scilab Programming; Artificial Neural Network and Fuzzy Logic; Image Processing and Signal Processing using Scilab; App Development; Learning Management System.

### **Electrical Engineering Department**

During the year 2018-19, the department conducted **26** short term courses for polytechnic and engineering college teachers, which were attended by **460** participants. The department conducted **09** training programs through ICT and **2215** participants attended. The department also conducted **06** Student Training Programmes and total of 59 student's participation. The Department has conducted 02 workshops. The department developed **01** print materials and has developed One course for Swayam MOOC (58 Video Films) under NRC. The department has applied for one Patent, published **50** papers in International Journals and **22** papers were accepted/presented in International conferences/seminars.

The department organized following contact based programmes: Instrumentation for Environmental Engineering; Modeling and Real Time Simulation of Electrical Systems; Modeling and Simulation of Renewable Energy Systems; Alternative Energy Sources and their Applications; Emerging Research Areas in Engineering & Technology; IOT Applications using LabVIEW; Energy Management – Climate Protection and Resource Conservation; Simulation of Power Systems; Hands on Practices on Power Electronics Circuits; Hands on Practices using LabVIEW and NI ELVIS; Projects on Electrical and Electronics Engineering; Power Quality issues and Monitoring; Bio-inspired Optimization Techniques; Tools for Scientific Research in Engineering and Science; Basics of MATLAB/ SIMULINK; PLC and Microcontrollers; Smart Grid and Distributed Generation Technologies; Artificial Intelligence and Optimization; Real Time Simulation of HVDC and FACTS Devices; MATLAB/SIMULINK and its Hardware Interface; Science and Technology for Sustainable Development; Microcontroller and its Programming; Laboratory Practices of Electrical Machines and Instrumentation; Hardware in Loop for power system and power electronics Applications (in collaboration with Typhoon HIL Switzerland); Microcontrollers and Embedded Systems; Machine Health Monitoring and Evaluation using IOT.

In addition, following ICT programmes were also organized: Emerging Research Areas in Engineering & Technology; Biomedical Signal Processing; Tools for Scientific Research in Engineering and Science; Smart Grid and Distributed Generation Technologies; Artificial Intelligence and Optimization; Real Time Simulation of HVDC and FACTS Devices; Science and Technology for Sustainable Development; Microcontrollers and Embedded Systems; Machine Health Monitoring and Evaluation using IOT.

6-months summer training programme for students on Embedded System, PLC and Microcontrollers; and Special Training for World Skill Competition were also organized.

## Electronics and Communication Engineering Department

During the year 2018-19, the department conducted **22** short term courses for polytechnic and engineering college teachers, which were attended by **431** participants. The department conducted **09** ICT Programs and **1823** participants attended. **01** student training program was conducted and **07** engineering students were trained by the department. The department also conducted **3** seminar and **34** participants attended. The department completed **02** print materials, **07** non-print materials. **02** projects under consultancy were completed. The department published **33** papers in international journals 03 papers were presented/accepted in International Conferences.

The department organized following contact based programmes: 3G to 5G; FPGA Design Implementation; Antenna Design and Simulation; PCB Using CAD; Microcontroller and its Applications; CAM for PCB; Self-configured Wireless Sensor Network; DSP Using MATLAB; Embedded System Design; 4G & 5G; VLSI Design; FPGA & its Applications; Digital Communication using MATLAB; Next Generation Wireless Technology; Embedded World; Latest Wireless Technologies; Microcontroller and its Applications; Lab Practical in EDA Tools; CMOS Analog Design; Microwave Communication System; System Designing and its Application; MATLAB and its Application.

In addition, following ICT programmes were also organized: Self Configured Wireless Sensor Networks; Embedded System Design; 4G & 5G; VLSI Design; Next Generation Wireless Technology; Digital System Design; CMOS Analog Design; Wireless Propagation; Recent Trends in Biomedical Instrumentation. A student training programme on PCB Designing was also organized.

## Entrepreneurship Development and Industrial Coordination Department

During 2018-19, the department conducted **14** short term courses for polytechnics and engineering colleges which were attended by **339** teachers. The department also trained **683** teachers from polytechnics and engineering colleges in **06** training programs organised through ICT. The department also conducted **02** DST sponsored programs which were attended by **155** participants. **02** Workshops were organised by the department which were attended by **227** participants. The department published **05** papers in International Journals.

The department organized following contact based programmes: Intellectual Property Rights and Patenting; Annual Review cum operational preparation & training of project Coordinators; Entrepreneurial opportunity identification and Project Formulation; Blue Ocean Strategy for Entrepreneurship Promotion; Intervention for Effective Industry Academia Integration; Students Grooming for Entrepreneurship; Economic Environment and Policies for Business; Empowering the persons with Benchmark Disabilities; Achievement Motivation Training; Entrepreneurship Promotion Through Technical Institutions; CPSC- NITTTR Collaborative regional Programme on Skill Development for Employability for officials of Asia Pacific Region; SWOT Analyses; Entrepreneurial Project Formulation; Entrepreneurship Promotion Through Polytechnics.

In addition, following ICT programmes were also organized: Business Incubation in Technical Institutions; Promoting Industry Institute Integration; Strategic Management and SWOT Analysis of Technical Institutions; DST/EDI Sponsored FDP in Entrepreneurship; Green Entrepreneurship; Entrepreneurship and Business Incubation. Entrepreneurship Awareness Camps were organized for students.

## Library

The library catalogue can be accessed through WEB-OPAC from anywhere on the internet. For this a link has been provided in the Central Library tab on the NITTTR web page. It is likely to be accessed directly as and when the Library website is registered. The e-resources subscribed by the library are being accessed by the students anywhere in the institute campus. During the period more than 800 users have accessed and consulted the -journals. A directory of open source journals in computer science, electronics and electrical engineering has been compiled. The directory is available on the institute website, which can be accessed through a link provided in the central library tab. The holding of the library can also be accessed through IndCAT a Union Catalogue Project on the INFLIBNET.

The Library has compiled user guide i.e. NITTTR Library Guide. In addition the library is bringing out Current Contents of Journals received in the library. The department has organized/conducted **06** short term courses for

the Polytechnics Librarians and Engineering Colleges Librarians **89** participated in these courses. The department organized following contact based programmes: Recent Trends in Libraries; Knowledge Organisational Tools; Information Literacy and Life Long Learning; Digital Library Management; Library Automation Using GSDL: Basis; Cloud Computing Applications in Libraries.

## **Mechanical Engineering Department**

During the year 2018-19, the department conducted **21** short term courses for polytechnic and engineering college teachers, which were attended by **326** participants. The department conducted **13** ICT Programs and **1569** participants attended. **03** student training programs were conducted and **17** engineering students were trained by the department.

The department conducted **01** workshop on quality improvement which was attended by **40** participants. The department completed **02** print materials, and **01** non-print material. Department conducted **02** Curriculum Development Workshops which were attended by 44 participants. **57** final thesis of M.E. Students were guided by department faculty. **12** projects under extension services and **03** recruitment projects under consultancy were completed. The department published **60** papers in International journals and **03** papers presented/accepted in International Conferences.

The department organized following contact based programmes: Workshop Safety Practices; Materials Testing and NDT; PLC Programming for Mechanical Applications; Automation & Robotics; Supervisory Skill Development for Workshop Instructors; Computer Aided Manufacturing; Welding Laboratory Practices; Ergonomics & Product Design; Production Management; CNC Machines: Operation & Programming; Reverse Engineering; Auto CAD; Rapid Prototyping Technology; Optimization Techniques; Repair and Maintenance of Machine Tools; CAD Using CREO; CAD Using CREO; NBA Accreditation of Engineering Programmes; Skill Development Programme.

In addition, following ICT programmes were also organized: Optimization Using MATLAB; Human Engineering in Design; Modeling & Simulation using MATLAB; Gear Design using KissSoft; CAD using Fusion; IOT in Manufacturing; Manufacturing Resource Management; Advances in Manufacturing; Industry 4.0 Standard; Green Manufacturing; Recent Trends in Automobile Technology; CAD using SOLIDWORK; Computer Aided Design & Manufacturing.

Student Training Programmes in the advanced areas of Mechanical Engineering were also organized

## **Media Centre**

During the year 2018-19, the department conducted **04** short term courses in Contact Mode and **06** Short Term Programmes in ICT Mode for polytechnic and engineering college teachers, which were attended by **88** and **1043** participants respectively. The department also conducted **02** Conferences/Seminars which were attended by **500** participants.

The department completed **03** print materials, **01** non-print material and **14** video films. The department also provided assistance in **05** recruitment projects under consultancy projects. The department published **01** paper in International Conference. The department organized following contact based programmes: Smart Classroom, Concept, Design, Operation & Maintenance; NBA Accreditation through Outcome Based Education; Instructional Material Development using Latest Media; E-Governance in Technical Education.

In addition, following ICT programmes were also organized: Strategic Management and SWOT Analysis for Institutional Excellence; Sustainable Creativity & Innovation Management in Institutions; Faculty Development: Planning & Management for Institutional Excellence; Technical Teacher's Self Esteem, Motivation and Professionalism; NBA Accreditation for Quality Assurance; Managing Your Self.

## **Rural Development Department**

The Department has conducted **15** training programs for teachers of polytechnics and engineering colleges. **395** polytechnic teachers and engineering college teachers participated in these program. The department also conducted **02** ICT based training programs in which **247** teachers participated. **13** workshops with respect to



implementation of the SPAI, Sansad Adarsh Gram Yojana, Unnat Bharat Abhiyan were organized for different States in the northern region in which **741** participants participated. The department also conducted **01** Pre-Job Training Programs for MBA (Rural Development) Students of Institute of Integrated Himalayan Studies (IIHS), Himachal Pradesh University, Shimla which were attended by **38** MBA students. The department faculty have presented their papers in 03 International Conferences and in 04 National Conferences.

The department organized following contact based programmes: Technological Innovations for Rural Development; Earthquake Resistant Low Cost Housing; Role of Technical Institutions in Sansad Adarsh Gram Yojana; Mentoring Rural Youth for Start-Up & Entrepreneurship; Climate Change and Disaster Management; Technologies for Sustainable Rural Development; Technologies for Sustainable Development; Role of Technical Institutions; Affordable Housing in Disaster Prone Areas; Technological Innovation and Value Addition for Rural Development; Corporate Social Responsibility for Sustainable Rural Development; Innovation in Building Construction in collaboration with industry; Start-UP on Organic Farming; Innovative Approach Towards Green and Sustainable Building; NSQF Aligned Courses for CDTP Beneficiaries.

In addition, following ICT programmes were also organized: Skill Development for Employment Generation in India; Climate Change and Disaster Management. Pre-Job Training of MBA (Rural Management) Students-IIIrd Semester on “Integrated Village Development” from IIHS, HP University, Shimla, 15-31 January 2018 at NITTTR, Chandigarh.

### Information Management and Coordination Department

During the year under report, the department prepared annual report of the institute for the year 2017-18 and submitted to MHRD, Government of India for their perusal and placing in the Parliament. The other major activity of the department during 2018-19 was preparation of Operational Plan of the institute depicting the annual calendar of Training Programs for Faculty and Technical Staff of Engineering Colleges and Polytechnics, Research and Development, Instructional Material Development, Curriculum Development, Extension Services and Consultancy activities for the year 2018-19 after consolidating the needs of various states of the Northern region through conduct of annual workshops held with each state representative. The department is also in the process of developing Management Information System (MIS) of the institute in collaboration with Computer Science Department of the institute. The department prepared **03** MoU which were signed with different organisations and provided necessary liaising with MHRD, DTEs, BTEs, Training Hubs and other private technical institutions and industry to promote various activities of the Institute.

### Achievements of institution partners:

The Institute established a Start-Up ‘**Enovate Skills**’ on 1<sup>st</sup> August, 2016 to work on the following major areas: Robotics & Automation; Renewable Energy; Product design and development. During current year, the following were the achievements:

ACTIVITY	Nos of programs	No of persons trained	Beneficiary
2 days workshop	18	980	Diploma & Engineering Students
3 & 5 d Workshop	4	280	
1 day Workshop & Seminar	20	890	
Summer training- 6 weeks	1	25	
2 National Level Workshop	2	“”Electronics 4 You” Conference, Bangalore	Diploma & Engineering Students
World Skill Competition	2		

### Sarthak SMART+ Centre:

At the Centre, PwDs were provided skill development training of 4 months with the objective of employment. There were **184** candidates who were provided training out of which **120** candidates were provided placement through this Centre. In addition, the following activities were also carried out:

- Number of mobilization and awareness camps organised : 22
- Total number of UDID camps organised : 04
- Total number of candidates mobilised in : 897

#### 10.14 Financial Position for the year 2019-20 (as on 31.03.2020):

S. No.	Source of Income	Rs. (in Lakhs)	Expenditure during the last year 2018-19	Rs. (in Lakhs)
1.	Central Government	Revenue: Capital: 4160.00	Salary of Full-time Faculty	Revenue 954.28
2.	State Government	Nil	Salary for Visiting/Adjunct Faculty	Revenue 38.61
3.	University Grants Commission	Nil	Salary of Non-Teaching Staff	Revenue 662.17
4.	Other Central/State Govt. Bodies	Nil	Library	Capital 14.40
5.	Private Trust	Nil	Computer Centre	Capital Nil
6.	Donations	Nil	Others: Contingencies/Maintenance etc.	Non Salary 131.75 110.43
7.	Student Fees	Revenue 168.38	Equipments Labs and Workshops	Capital 43.15
8.	Internal Revenue Generation	Revenue 216.48 Interest 9.25	Building (Renovations)	Capital 160.00
9.	Others (please specify) Plan (OSC)-OBC Scheme	Nil	Others (please specify) Furniture, re-surfacing of roads, renovation electrical etc.)	Capital Nil
			Other, i.e., OTA, TA/DA	Non-Salary 128.98
			Advances to firms	Nil
	<b>Gross</b>	<b>4554.00</b>	<b>Gross</b>	<b>Total 2243.77</b>

- **Details of Operational Funds: The Institution is funded 100% by MHRD, Govt. of India (as on 31.03.2020)**

S.No.	Name of Bank with Branch & Full Address	Account No.	Cash Balance (in lakhs) (as on 31.03.2019)	FDR, if any (Excluding joint FDR submitted to AICTE)	Total Amount (in lakhs)
1.	State Bank of Patiala, Extension Counter, Chd. College of Engg. & Technology, Sector 26, Chandigarh	55105008209	4,22,73,706.80	NA	-
2.	Axis Bank, Sector 26, Chandigarh	91301004391646	1,72,62,399.81	16,11,43,801.00	-
3.	Canara Bank, Sector 34 Main Building, Chandigarh	2452101001654	1,60,53,311.65	-	-
4.	ICICI Bank, Sector 9, Chandigarh	001301054245	25,91,437.11	-	-
5.	Oriental Bank of Commerce, Sector 26, Chandigarh	06182191012841	4,64,520.00	-	-
6.	IndusInd Bank, Sector 8, Chandigarh	151811200301	26,46,672.14	7,01,54,510.00	-
7.	Any Other Account: GPF/FDR			21,83,33,937.00	-
8.	Indian Bank, Sector 7, Chandigarh	410810883	83,30,770.97	-	-

## 10.15 Name of the Teaching Staff

### List of Faculty Members appointed-with Qualification, Designation, Date of joining

Sr. No.	Name of the Faculty	Designation	Qualification	Date of joining in the Institute
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#### Director

1.	<b>Dr. SS Pattnaik</b>	<b>Director</b>	Ph.D. in Engineering (Elex. & Telecom. Engg.); M.Tech in Electronics & Comm. Engg.; M.Sc. Physics (Electronics spl.)	<b>18.08.2017 as Director</b> and 26.04.2004 as Professor
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#### Applied Science Department

2.	<b>Dr. Pankaj Sharma</b>	<b>Professor &amp; Head</b>	M.Sc. (Physics), M.Phil. (Physics), Ph.D. (Physics)	21.01.2020 as Professor
3.	Dr. Bakhshish Chand	Professor	M.Sc. (Phy), M.Phil (Phy) Ph.D. (Physics)	05.12.1994 as Lecturer
4.	Dr. Ashok Kumar	Associate Professor	M.Sc. (Physics); Ph.D. (Material Science)	19.11.2019 as Associate Professor
5.	Dr. Kailash Chandra Lachwani	Assistant Professor	M.Sc. (Maths), M.Phil (Maths), Ph.D. (Maths), MBA	08.01.2015 as Assistant Professor

#### Civil Engineering Department

6.	<b>Dr. Hemant Sood</b>	<b>Professor &amp; Head</b>	BE (Civil); ME (Highway) Ph.D. (Mgt.)	02.12.1988 as Lecturer
7.	Dr. Sanjay Sharma	Professor	B. Tech. (Civil); M.E (Irr. & Hyd.), Ph.D. (Engg. & Tech.)	13.02.1986 as Lecturer
8.	Er. AK Duggal	Associate Professor	BE (Civil), ME (Civil); Ph.D. (pursuing)	02.02.1985 as Lecturer
9.	Er. Vinod Kumar	Associate Professor	B.Tech. (Civil); M.Tech. (Soil Mech. & Foundation Engg.); Ph.D. (pursuing)	10.05.1995 as Lecturer
10.	Dr. Amit Goyal	Assistant Professor	BE (Civil), ME (Structures); Ph.D.	05.06.2006 as Lecturer in Rural Development
11.	Er. Himmi Gupta	Assistant Professor	ME Civil Engg.; Ph.D. (pursuing)	26.08.2011 as Assistant Professor

#### Computer Science & Engineering Department

12.	Dr. C. Rama Krishna	<b>Professor &amp; Head</b>	B.Tech (ECE); M.Tech. (Eltx.); Ph.D. (Engg.)	14.10.1996 as Lecturer
13.	Er. Shano Solanki	Assistant Professor	B.Sc.; MCA; Ph.D. (pursuing)	05.06.2000 as Lecturer
14.	Er. Amit Deogar	Assistant Professor	BE (Comp. Sc.); ME (CSE); Ph.D. (pursuing)	14.02.2001 as Lecturer
15.	Dr. Mala Kalra	Assistant Professor	BE (CSE), ME Computer Science & Engg.; Ph.D. (Engg.)	09.08.2011 as Assistant Professor

#### Curriculum Development Centre

16.	<b>Dr. Rajesh Kumar</b>	<b>Professor &amp; Head</b>	BE (ECE), ME (ECE); Ph.D.	15.03.1996 as Lecturer
17.	Dr. AB Gupta	Professor and <b>Dean, Extension &amp; Consultancy</b>	BE, ME (Mechanical Engineering); Ph.D. (Mechanical Engineering)	03.10.1986 as Lecturer
18.	Dr. Suresh Kumar	Associate Professor	BE (Civil); ME (Structural); Ph.D.	01.02.1988 as Lecturer
19.	Dr. Meenakshi Sood	Associate Professor	M.Tech. (ECE); Ph.D. (ECE Engg.)	25.10.2019 as Associate Professor

### Education & Educational Management Department

20.	<b>Dr. Sunil Dutt</b>	<b>Professor &amp; Head and Central Public Information Officer</b>	M.Sc. (Hons.) Chemistry B.Ed., M.Ed., Ph.D. (Education)	25.11.1992 as Lecturer
21.	Er. PK Singla	Associate Professor	BE (Civil), ME (Civil); Ph.D. (pursuing)	01.08.1985 as Lecturer in CDC
22.	Er. Rama Chhabra	Associate Professor	BE (Chemical Engineering), ME (Chemical); Ph.D. (pursuing)	04.09.1992 as Lecturer
23.	Er. Amandeep Kaur	Assistant Professor	BE (Chemical Engg.), ME (Environmental Engg.); Ph.D. (pursuing)	09.07.2014 as Assistant Professor

### Electrical Engineering Department

24.	<b>Dr. Lini Mathew</b>	<b>Professor &amp; Head</b>	BE (Elect.), ME (Elect.) Ph.D.	10.11.1988 as Lecturer
25.	Dr. Piush Verma	Professor	M.E. (Hons.) Electrical Engg.; Ph.D. (Electrical Engg.)	29.11.2019 as Professor
26.	Dr. Ritula Thakur	Associate Professor	BE; ME (Elect.); Ph.D.	31.05.2006 as Lecturer
27.	Dr. Shimi SL	Assistant Professor	ME Power Electronics & Drives; Ph.D.	05.08.2011 as Assistant Professor

### Electronics & Communication Engg. Department

28.	<b>Dr. Sandeep Singh Gill</b>	<b>Professor &amp; Head</b>	BE (E&EC) (Hons.); M.Tech (ECE), MBA (Marketing/Systems & Control), Ph.D. (ECE)	27.03.2019 as Professor
29.	Dr. Amod Kumar	Professor	BE (Electrical & Electronics), ME (Electronics); Ph.D. (Bio-Medical Signal Processing)	24.12.2018 as Professor
30.	Dr. Balwinder Singh	Associate Professor	M. Tech. (ECE), Ph.D. (ECE)	11.10.2019 as Associate Professor
31.	Dr. Balwinder Raj	Associate Professor	B. Tech. (Electronics Engg.); M.Tech. (Microelectronics); Ph.D. (VLSI) from IIT Roorkee; Postdoc (VLSI) from University of Rome, Italy	17.12.2019 as Associate Professor
32.	Dr. Kanika Sharma	Assistant Professor	BE (ECE), ME (ECE); Ph.D.	17.11.2004 as Lecturer
33.	Er. Garima Saini	Assistant Professor	B.Tech. (ECE), ME (ECE); Ph.D. (pursuing)	20.09.2006 as Lecturer

### Entrepreneurship Development & Industrial Coordination

34.	<b>Dr. Suresh Dhameja</b>	<b>Professor &amp; Head, EDIC</b>	BE (Civil), ME (Civil), Ph.D. (Business Admn. & Commerce)	10.11.1988 as Lecturer
35.	Dr. Niraj bala	Professor	Ph.D. (Mechanical Engg.); M.E. (Industrial Materials & Metallurgy); BE (Mechanical Engg.)	10.08.2020 as Professor
36.	Dr. Harshwardan Somalia	Associate Professor	Ph.D., M.B.A., (Both from IIITM, Gwalior); B.E. (Mechanical), PG Diploma in Patent Law from NALSAR Law University, Hyderabad	25.02.2020 as Associate Professor
37.	Dr. Hemant Kumar Vinayak	Associate Professor	B.E. (Civil), M.E. (Civil), PhD (Earthquake Engineering)	19.12.2019 as Associate Professor
38.	Er. Amardev Singh	Assistant Professor	B.Tech. (ECE), MBA (IT-Networking), Ph.D. in Business Mgt. (pursuing)	17.08.2012 as Assistant Professor

### Information Management & Emerging Engineering Department

39.	<b>Dr. Maitreyee Dutta</b>	<b>Professor &amp; Head and Dean, Academics, Research &amp; Development</b>	ME Eltx., Ph.D. (Engg.)	04.06.2002 as System Programmer
40.	<b>Dr. Srinivasa KG</b>	<b>Professor</b>	BE (Inf. Science & Engg.); ME (CSE from UVCE - BU); Ph.D. (CSE from BU in 2007)	15.03.2019 as Professor

### Mechanical Engineering Department

41.	<b>Dr. Rupinder Singh</b>	<b>Professor &amp; Head</b>	B.Tech (Production Engg.), M.Tech (Production Engg.), Ph.D. (Mechanical Engineering)	31.12.2019 as Professor
42.	Dr. BS Pabla	Professor	B.Sc. (Mech), ME (Mech.) Ph.D. (Mech. Engg.)	28.10.1986 as Lecturer
43.	Dr. SS Banwait	Professor	BE (Mech.), ME (Mech. Equip); Ph. D. (Mech. & Indl. Engg.)	19.06.1991 as Assistant Professor
44.	Dr. SS Dhami	Professor	BE (Mech.), ME (Mech.); Ph.D.	03.08.2004 as Assistant Professor
45.	Er. Sunil D. Jassal	Associate Professor	BE (Mech.); ME (Thermal)	01.09.1997 as Lecturer
46.	Dr. Sudhakar Rao	Assistant Professor	BE (Mech.), ME (Mech.); Ph.D.	07.10.2004 as Lecturer

### Media Engineering

47.	<b>Dr. Rakesh K Wats</b>	<b>Professor and Head</b>	BE (Civil), ME (Civil), Ph.D. (Mgt.)	21.02.1992 as Lecturer
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### Rural Development Centre

48.	Dr. Poonam Syal	<b>Professor &amp; Head</b>	BE (Elect.), ME (Elect.); Ph.D.	11.02.1986 as Lecturer
49.	Dr. UN Roy	Professor	B.Sc. Hon. (Phy.), PGD in rural Mgt. Dev. Ph.D. (Faculty of Art)	19.05.1995 as Lecturer

### Library

50.	<b>Vacant</b>			
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## Annexure – I

**LIST OF MEMBERS OF THE BOARD OF GOVERNORS OF  
NITTTR, CHANDIGARH  
(AS ON 05.11.2020)**

S. No.	Name, Designation and Address
1.	Hon'ble Chairman Board of Governors, NITTTR, Chandigarh. VACANT
2.	<b>Shri Madhu Ranjan Kumar</b> Joint Secretary (DL,BP & A) Department of Higher Education, Ministry of Education Govt. of India, Shastri Bhawan, NEW DELHI – 110 115
3.	<b>Mrs. Darshana M. Dabral</b> Joint Secretary and Financial Adviser (IFD) Department of Higher Education, Ministry of Education Govt. of India, Shastri Bhawan, NEW DELHI – 110 115
4.	<b>Director,</b> Department of Technical Education Government of Telengana, 2 <sup>nd</sup> Floor, Vidya Bhavan, Opp. To Latha Talkies, Nampally, Hyderabad – 500 001
5.	<b>Dr. Krishan Kumar Kataria, Director</b> Directorate of Technical Education, Government of Haryana Bay No. 07-12, Sector - 4, Panchkula, Haryana-134109
6.	<b>Director,</b> Department of Technical Education, Government of Maharashtra, Mahapalika Marg, Elphinstone Technical Institute Campus, Mumbai – 400 001
7.	<b>Director</b> Directorate of Technical Education J & K, Government of J & K Government Polytechnic Premises, Bikram Chowk, Jammu – 180 004 (J&K)
8.	<b>Director</b> Directorate of Technical Education, Government of Uttarakhand NCC Block Campus, SRINAGAR, Pauri Garhwal – 246 174
9.	<b>Sh. Subhash Chander Ralhan</b> Managing Director, Sri Tools Industries, E- 183,184, &185, Phase IV, Focal Point, Ludhiana – 141 010
10.	<b>Professor Raj Kumar</b> Hon'ble Vice Chancellor, Panjab University, Chandigarh 160 014
11.	<b>Professor (Dr.) L.N. Mittal</b> House No. 845-P, Sector – 4, Panchkula, Haryana – 134 112
12.	<b>Professor Sachin Maheshwari</b> Division of Manufacturing Processes & Automation Engineering, Netaji Subhas Institute of Technology (NSIT), Azad Hind Fauj Marg, Sector 3, Dwarka New Delhi – 110 078
13.	<b>Dr. Hemant Sood</b> Professor, Department of Civil Engineering NITTTR, Sector – 26, Chandigarh – 160 019
14.	<b>Dr. SS Pattnaik,</b> Director & Member-Secretary National Institute of Technical Teachers Training & Research, Sector 26, Chandigarh – 160 019

## Annexure – II

### List of Members of Academic Council

(As on 15.01.2021)

- |  |                 |
|--|-----------------|
| 1. Dr. SS Pattnaik,<br>Director,<br>NITTTR, Sector-26, Chandigarh 160 019  | Chairman        |
| 2. Professor DP Agrawal,<br>Former Chairman, UPSC<br># B – 25, 3 <sup>rd</sup> Floor,<br>Sarvodya Enclave, New Delhi - 110 017   | Eminent Member  |
| 3. Professor Sandeep Sancheti,<br>Vice Chancellor<br>SRM Institute of Science & Technology, SRM Nagar<br>Kattankulathur, Chengalpattu District – 603 203 (Tamil Nadu)              | Eminent Member  |
| 4. Professor Jagat Bhushan Nadda,<br>Director, Consortium for Educational Communication<br>IUAC Campus, Aruna Asaf Ali Marg<br>New Delhi – 110 067                                 | Special Invitee |
| 5. Professor Rajive Kumar,<br>Member Secretary, AICTE<br>Nelson Mandela Marg, Vasant Kunj<br>New Delhi – 110 070   | Special Invitee |
| 6. Dr. Ravi P Singh,<br>Secretary General, Quality Council of India<br>Institution of Engineers Building, 2 <sup>nd</sup> Floor, 2- Bahadur Shah Zafar Marg<br>New Delhi – 110 002 | Special Invitee |
| 7. Dr. BS Pabla,<br>Professor, Mechanical Engineering,<br>NITTTR, Sector-26, Chandigarh 160 019  | Member          |
| 8. Dr. Suresh K Dhameja,<br>Professor & Head, EDIC Department,<br>NITTTR, Sector-26, Chandigarh 160 019  | Member          |
| 9. Dr. AB Gupta,<br>Dean, Industrial Coordination, Consultancy and Extension<br>and Professor, Curriculum Development Centre,<br>NITTTR, Sector-26, Chandigarh 160 019             | Member          |
| 10. Dr. Sanjay Sharma,<br>Professor & Head, Civil Engineering Department,<br>and Incharge Campus Planning & Development,<br>NITTTR, Sector-26, Chandigarh 160 019                  | Member          |
| 11. Dr. Hemant Sood,<br>Professor, Civil Engineering<br>NITTTR, Sector-26, Chandigarh 160 019  | Member          |
| 12. Dr. Sunil Dutt,<br>Professor & Head, Education & Educational Management<br>NITTTR, Sector-26, Chandigarh 160 019   | Member          |

13. Dr. BC Choudhary, Member  
Professor, Applied Science Department,  
NITTTR, Sector-26, Chandigarh 160 019
14. Dr. Rakesh Kumar Wats, Member  
Professor & Head, Media Engineering Department,  
NITTTR, Sector-26, Chandigarh 160 019
15. Dr. (Mrs.) Maitreyee Dutta, Member  
Professor & Head, Computer Science & Engg. Department,  
NITTTR, Sector-26, Chandigarh 160 019
16. Dr. Sukhdeep Singh Dhani, Member  
Professor & Head, Mechanical Engg. Department,  
NITTTR, Sector-26, Chandigarh 160 019
17. Dr. Upendra Nath Roy, Member  
Professor, Rural Development Department,  
NITTTR, Sector-26, Chandigarh 160 019
18. Dr. C Rama Krishna, Member  
Professor, Computer Science & Engg. Department,  
NITTTR, Sector-26, Chandigarh 160 019
19. Dr. (Mrs.) Poonam Syal, Member  
Professor & Head, Rural Development Department,  
NITTTR, Sector-26, Chandigarh 160 019
20. Dr. (Mrs.) Lini Mathew, Member  
Professor & Head, Electrical Engg. Department,  
NITTTR, Sector-26, Chandigarh 160 019
21. Dr. Rajesh Mehra, Member  
Professor & Head, Curriculum Development Department,  
NITTTR, Sector-26, Chandigarh 160 019
22. Dr. Amod Kumar, Member  
Professor, Electronics & Communication Engg. Department,  
NITTTR, Sector-26, Chandigarh 160 019
23. Dr. KG Srinivasa, Member  
Professor, Computer Science & Engg. Department,  
and Coordinator, Academic Cell & Professor Incharge, Library  
NITTTR, Sector-26, Chandigarh 160 019
24. Dr. Sandeep Singh Gill, Member  
Professor & Head, Electronics & Communication Engg. Department,  
NITTTR, Sector-26, Chandigarh 160 019
25. Dr. Piush Verma, Member  
Professor, Electrical Engg. Department,  
NITTTR, Sector-26, Chandigarh 160 019
26. Dr. Rupinder Singh, Member  
Professor, Mechanical Engg. Department,  
NITTTR, Sector-26, Chandigarh 160 019



27. Dr. (Mrs.) Meenakshi Sood, Member  
Associate Professor, Curriculum Development Department  
NITTTR, Sector-26, Chandigarh 160 019
28. Dr. Hemant Kumar Vinayak, Member  
Associate Professor, EDIC Department,  
NITTTR, Sector-26, Chandigarh 160 019
29. Er. (Mrs.) Shano Solanki, Member  
Assistant Professor, Computer Science & Engg. Department,  
NITTTR, Sector-26, Chandigarh 160 019
30. Er. (Mrs.) Garima Saini, Member  
Assistant Professor, Electronics & Communication Engg. Department,  
NITTTR, Sector-26, Chandigarh 160 019
31. Dr. SS Banwait, Member Secretary  
Dean, Academics, Research & Development and  
Professor, Mechanical Engineering Department  
NITTTR, Sector-26, Chandigarh 160 019

**ORGANISATIONAL STRUCTURE OF NITTTR, CHANDIGARH**

