

# **ANNUAL REPORT**

**2012-2013**



**NATIONAL INSTITUTE OF TECHNOLOGY**

**KURUKSHETRA - 136 119**

1904-1905

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## FOREWORD

I am indeed very happy to present Annual Report of National Institute of Technology, Kurukshetra (Haryana) for year 2012-13. The performance during the year under report has been elucidated in this Report alongwith progress and achievements made in various directions.

As one scans through the pages of this report, one can easily be convinced that Institute has done commendable work during the year. Enrolment across various disciplines is increased substantially.

National Institute of Technology, Kurukshetra is one of the thirty National Institutes of Technology in the country. Earlier, Institute was known as Regional Engineering College, Kurukshetra and was established in 1963 as a joint and cooperative enterprise of Govt. of India and State Government of Haryana to serve State of Haryana and rest of the country for imparting technical training to youth and for fostering national integration. Govt. of India has taken over full administrative and financial control of the Institute w.e.f. 14.5.2003.

Institute offers four year B.Tech. under-graduate programmes in Civil, Electrical, Electronics & Communication, Mechanical, Computer Engineering, Information Technology and Industrial Engineering & Management with sanctioned intake of 832 seats. It also offers specialized postgraduate (M.Tech.) programmes in the fields of Civil, Electrical, Electronics & Communication, Mechanical, Computer Engineering, Instrumentation and Nano-technology. Facilities are also available in the Institute for research leading to Degree of Doctor of Philosophy in Civil, Electrical, Electronics & Communication, Mechanical, Computer, Physics, Chemistry, Mathematics as well as Humanities and Social Sciences. In order to generate income from own resources, two new self financing courses i.e. MBA & MCA have also been introduced with an intake of 92 seats in each course. Total students' strength of Institute is 4656. The Institute has 128 faculty in various disciplines and 218 non-faculty staff is available to support faculty.

There are sustained research and development activities in the Institute throughout the year. Several faculty members of the Institute are actively involved in research activities during the year under report. Some research projects funded by Central and State Governments have started showing results. Faculty members also participated in various conferences/seminars/schools. Fifteen research projects are in progress in Civil Engineering, Computer Engineering, Electrical Engineering, Mechanical Engineering, Physics and Chemistry. Institute completed consultancy assignments valued at Rs. 312.45 lacs referred to it by various Governments and Industrial Organizations during the year under report.

A special initiation has been taken by the Institute for the development of research activities in the Institute to boost the status of Institute equivalent to IIT. Faculty members are academically very active and organized a large number of academic events.

Institute has been selected as a Lead Institution in Haryana for Technical Education Quality Improvement Programme (TEQIP) funded by World Bank to enhance



efficiency and dynamism in Technical Education. It was launched by MHRD as a Rs. 1550 crores programme during 10th plan. Further, to continue the development activities initiated through TEQIP-I, a sequel project is planned as TEQIP-II with a focus to scale-up PG education and demand driven R&D and innovation. The project duration is four years (2010-2014).

Institute is trying to improve Industry-Institute Interaction and seeks active collaboration with Industries in various academic activities. It has already established interaction with many industries of Haryana and nearby regions. Industries are invited to join hands with Institute so as to improve quality of engineering education as well as training and research. Industry receives benefit in the form of intellectual resources, equipments and other facilities of the Institute. Institute has also entered into an agreement of cooperation with Tata Consultancy Services Ltd., Altair Engineering and University of Toledo for enhancing efficiency in academic curriculum and providing software training to the students.

Institute Library is well equipped with the latest books, National and International journals. A total number of 143764 books are available in the Library besides 4500+ journals. Institute Library is also a core member of Indian National Digital Library in Engineering Science and Technology (INDEST) Consortium set up by MHRD to access online resources.

Institute also has a Health Centre for staff and students and medical aid is provided within the available resources. To facilitate all financial transactions, a fully computerized branch of State Bank of India functions in the Institute premises. A Post Office as well as a Shopping Centre are also available in the Institute premises.

A Center of Computing and Networking (CCN) was started in 1997 as a project funded by MHRD. It is a central computing facility for Institute connecting all buildings and departments through Local Area Network with 4000 nodes spread over the campus on OFC backbone. The main Workshop comprising of Machine Shop, Fitting Shop, Electrical Shop, Welding Shop, Pattern Making Shop, Foundry Shop, Production Technology Lab. is fully equipped with latest machines. All the Departments are equipped with laboratories for practical training to the students and researchers.

Government of India, Ministry of Human Resource Development released Rs. 33.00 crores and Rs. 38.00 crores under Plan and Non-Plan scheme respectively during financial year 2012-13. A sum of Rs. 40.99 crores and Rs. 49.98 crores has been spent under various heads of recurring and non-recurring expenditure during financial year under report. Institute made progress in implementing various departmental activities. Number of constructional works under Plan Scheme has been completed during the year under report.

I am aware that achievements of the Institute during the year are quite commendable yet it has to go far ahead. Institute has prepared a prospective plan and twenty year road map for future development of the Institute.

**DIRECTOR**

## **INTRODUCTION**

### **1.1 VISION AND MISSION**

- To be a role-model in technical education and research, responsive to global challenges
- To impart quality technical education that develops innovative professionals and entrepreneurs and to undertake research that generates cutting-edge technologies and futuristic knowledge, focusing on the socio-economic needs

### **1.2 OBJECTIVES**

- To offer academic programs in different areas of engineering at Under-graduate, Post-graduate and Doctoral levels
- To impart instructions and training to empower students to meet the technological needs and socio-economic challenges and create facility and environment for the overall personality development of students
- To promote quality research and undertake research projects keeping in view of the present day to day needs of technology
- To interact with industry and other relevant sectors with a view to promote mutual interaction
- To provide consultancy and testing facilities to various government, semi-government and private organizations with a view to generate additional resources and keep in touch with latest demands of the profession
- To interact with, and provide necessary help to other engineering institutions from the state in particular
- To act as a source for fostering national integration, the students intake being from all over the country providing this opportunity.
- To inculcate moral values

### **1.3 EDUCATION SYSTEM**

The Education System of the Institute is divided into academic sessions comprising two semesters – Even and Odd semester. The Institute offers courses of study leading to B.Tech, M.Tech., MCA, MBA and Doctor of Philosophy degrees. The medium of instructions and examination is English. The Institute is of national importance and governed by National Institute of Technology Act of Govt. of India. The Institute is independent in every respect relating to academic work such as Examinations, evaluation of the answer sheets, declaration of results and conferring of degrees. The courses include study at the Institute, visits to work sites and practical training at Institute Workshop and approved Engineering works. There is a semester examination at the end

of each semester. The Institute follows Credit Based System of evaluation.

#### **1.4 NEW INITIATIVES**

1. In response to MHRD letter no. F.33-1/2011-TS-III dated 11<sup>th</sup> July 2011 regarding provision for adequate medical facilities, the upgradation of existing Health Centre of the Institute with extension of its infrastructure has been completed.
2. To continue the development activities initiated through TEQIP-I, a sequel project is planned as TEQIP-II with a focus to scale-up PG education and demand driven R&D and innovation. The project duration is four years (2010-2014).
3. The construction of a new Mega Boys' Hostel of 1000 students capacity has been completed during the year 2012-13.
4. For improvement at P.G. and research levels, four new schools are approved in the Finance Committee meeting as well as BOG meeting held on 12.3.2012 & 13.3.2012 respectively. Two schools, i.e. School of VLSI Design and Embedded Systems in Department of Electronics & Communication and School of Renewable Energy and Efficiency in Department of Electrical Engineering have been started in July 2012 in the Institute. Other two schools, i.e. School of Material Science and Nano-technology in Physics Deptt. and School of Bio-medical Engineering in Electrical Engineering Department have been started in May 2013 in the Institute.
5. The construction of new Administrative Block has been completed. The Golden Jubilee year of the Institute was celebrated in the Institute from 15<sup>th</sup> September 2012 to 14<sup>th</sup> September 2013.



## **2.0 AN OVERVIEW**

### **2.1 HISTORICAL BACKGROUND**

The Central Government in consultation with the Planning Commission had sanctioned a scheme of establishment of Regional Engineering Colleges under Third Five Year Plan in order to expand the facilities for technical education in the country during the plan period. The Regional Engineering College (REC), Kurukshetra was one of the seventeen colleges in the country.

Vide letter No. 16-4/60-T.5, dated 26<sup>th</sup> February, 1962 from Secretary to the Government of India, Ministry of Scientific Research and Cultural Affairs, New Delhi, it was established in the year 1963 as a joint and cooperative enterprise of Govt. of India and State Government of Haryana to serve the State of Haryana and rest of the country for imparting technical training to youth and for fostering national integration. Its objective was to provide instructions and research facilities in various disciplines of engineering and technology and the advancement of learning and dissemination of knowledge in each such discipline.

The first admission to five year B.Sc. (Engg.) degree course was made by the Institute in July, 1963 at Punjab Engineering College, Chandigarh and Thapar Institute of Engineering & Technology, Patiala, with an intake of 60 students at each place. This was repeated in July, 1964 also. The Institute started functioning on its present campus at Kurukshetra from year 1965-66. The REC Kurukshetra was registered under Societies Registration Act XXI of 1860 on 25<sup>th</sup> April, 1964. The students were admitted to the first year of five year integrated B.Sc.(Engg.) degree courses in Civil, Electrical and Mechanical Engineering. In 1967-68, M.Sc. (Engg.) degree courses in Civil, Electrical and Mechanical Engineering were introduced. In 1971-72, a degree course in Electronics & Communication Engineering and a Post-graduate Diploma Course in Scientific Instrumentation were started. In 1976-77, part time M.Sc. (Engg.) degree courses in Electronics & Communication Engineering and Instrumentation Engineering were also started. The first registration for the degree of Doctor of Philosophy in the Faculty of Engineering and Technology was done in July, 1967.

The Institute switched over to four year B.Tech.Degree course with effect from 1985-86. The Course has since been designated as Bachelor of Technology (B.Tech.). The M. Sc.(Engg.) degree in various disciplines has since been renamed as M.Tech. degree with effect from the session 1983-84. In 1987-88, B.Tech. degree course in Computer Engineering and M.Tech. degree Course in Electronics Engineering were started. In 1989-90, M.Tech. degree course in Water Resources

Engineering was started in the Department of Civil Engineering. A special two semesters M.Tech. degree course in Instrumentation for candidates holding P.G. Diploma in Scientific Instrumentation was introduced from January, 1988.

Three year Special Degree Course, 'Bachelor of Engineering' for in-service diploma holders was introduced from the session 1982-83 in Civil, Electrical and Mechanical Engineering. This course was fully funded by Govt. of Haryana. The Govt. of Haryana has discontinued the course w.e.f. 2001-02.

During the period 1963 to 2001, there have been considerable achievements in the academic as well as development areas. The Govt. of India, Ministry of Human Resource Development, New Delhi has upgraded REC Kurukshetra to National Institute of Technology, Kurukshetra with the status of Deemed University w.e.f. 26.6.2002 vide letter No. F.9-10/2002-U.3 dated 26.6.2002. The NIT Kurukshetra was also registered under the Societies Registration Act XXI of 1860 on 9<sup>th</sup> April, 2003. The new Memorandum of Association (MOA) was formulated under the guidance of the Ministry of Human Resource Development (MHRD).

As per establishment of REC, Kurukshetra, the entire Non-plan expenditure on Undergraduate Courses was borne by the Central and State Government on 50:50 basis. This practice remained intact upto 31.3.2003. Consequent upon conversion of REC to NIT, the Government of India had taken over full administrative and financial control and the Central Government started bearing the expenditure on Undergraduate Courses on 100% basis. However, it is also mentioned here that since the inception of the Institute the expenditure on PG Courses was borne by the Central Government.

Further, in pursuance to the Notification published in Gazette of India Extraordinary Part-II, Section-3, Sub-Section(ii), dated 10<sup>th</sup> August 2007 and the MHRD letter No. F-20-22/2004-TS-III, dated 24/27 August 2007, the National Institute of Technology Act, 2007 (29 of 2007) has been enforced with effect from 15<sup>th</sup> August 2007 and the NIT Kurukshetra has become the Central Institution under this Act.

The Director, Government of India, Ministry of Human Resource Development, Deptt. of Higher Education vide letter no. F.22-5/2006-TS.III (Pt.) dated 11.5.2009 forwarded a copy of notification published in Gazette of India Extraordinary Part-, Section-3, Sub-Section- (i) dated 23<sup>rd</sup> April, 2009 regarding the first Statutes under NIT Act, 2007 for information and necessary action.



## **2.2 LOCATION**

Kurukshetra, steeped in history and mythology, is a place of great spiritual significance where Lord Krishna delivered the divine message of "Shrimad Bhagwad Gita". The place from where knowledge spread far and wide was chosen as his capital by King Harshwardhana. It is one of the premier centres of pilgrimage attracting devotees in a steady stream all-round the year. Kurukshetra is a railway junction on Delhi-Karnal-Ambala section of Northern Railway. It is about 160 Km from Delhi. The Institute campus is about 10 Km from Pipli, a well known road junction on NH-I.

## **2.3 CAMPUS**

The campus extends over an area of 300 acres imaginatively laid down on a picturesque landscape. It presents a spectacle of harmony in architecture and natural beauty. The campus has been organised into three functional sectors:

- (i) Hostels for the students
- (ii) Academic Area
- (iii) Residential sector for the staff

Hostels for students are located towards Eastern side of the campus in the form of cluster. Multi-storey buildings of hostels provide comfortable accommodation and pleasing environment to students. Residential sector for staff is located towards Western side. Academic area is located between the two residential sectors in order to reduce walking distance. A full fledged health centre manned by qualified doctors, a Post Office and a branch of the State Bank of India are located at convenient points on the Campus.

## **2.4 ADMINISTRATION**

Director is Principal Academic and Executive Officer of the Institute. He is responsible for the proper administration of the Institute, imparting instructions and maintenance of discipline therein. He is assisted in his day- to-day work by Deans, Heads of the different Departments, Professor-in-Charges, Registrar and other Officers and various committees of the Institute.

## 2.5 ACADEMIC PROGRAMMES

The following academic programme was observed during the academic session 2012-13:-

### **ODD SEMESTER**

1.	Registration	Without late fee: 18 <sup>th</sup> July to 25 <sup>th</sup> July 2012 With late fee of Rs. 500/-: 26 <sup>th</sup> July to 31 <sup>st</sup> July 2012 After 1 <sup>st</sup> August registration shall be allowed after the approval of Dean (Academic)/Director.
2.	Teaching commences for all classes	23.7.2012
3.	Term Exams-I	3.9.2012 to 5.9.2012
4.	Term Exams-II	17.10.2012 to 19.10.2012
5.	Mid-semester Vacation	22.10.2012 to 26.10.2012
6.	Term Exams-III	May be arranged by the teachers as per their convenience
7.	Teaching closes	7.11.2012
8.	End semester Exams. begin	19.11.2012
9.	Winter Vacation	10.12.2012 to 21.12.2012
10.	Declaration of Result	Within first three weeks of the beginning of the next semester

### **EVEN SEMESTER**

1.	Registration (for all except B.Tech. Ist year)	Without late fee: 18 <sup>th</sup> Dec. to 26 <sup>th</sup> Dec. 2012 With late fee of Rs. 500/-: 27 <sup>th</sup> Dec. to 3 <sup>rd</sup> Jan. 2013 After 3 <sup>rd</sup> Jan. registration shall be allowed after the approval of the Dean (Academic)/Director)
2.	Teaching commences for all (except B.Tech. Ist year)	24.12.2012
3.	Registration (B.Tech. Ist year)	Without late fee: 4 <sup>th</sup> Jan. to 12 <sup>th</sup> Jan. 2013 With late fee of Rs. 500/-: 13 <sup>th</sup> Jan. to 19 <sup>th</sup> Jan. 2013 After 19 <sup>th</sup> Jan. registration shall be allowed after the approval of the Dean (Academic)/Director)
4.	Teaching commences (for B.Tech. Ist year)	7.1.2013
5.	Techspardha	31.1.2013 to 3.2.2013
6.	Term Exams-I	2.2.2013 to 4.2.2013
7.	Confluence-2013	21.2.2013 to 24.2.2013
8.	Athletic Meet	8.3.2013 to 10.3.2013
9.	Mid-semester Vacation	25.3.2013 to 29.3.2013
10.	Term Exams-II	1.4.2013 to 3.4.2013
11.	Term Exams-III	May be arranged by the teachers as per their convenience
12.	Teaching closes (for all except B.Tech. Ist year)	30.4.2013
13.	End semester Exams. (for all except B.Tech. Ist year)	10.5.2013
14.	Summer vacation	3.6.2013 to 12.7.2013
15.	Practical Training begins	10.6.2013
16.	Declaration of Result	Result declaration shall start by the end of June 2013

## 2.6 COURSES OFFERED

The Institute offers following Graduate and Post Graduate Degree Courses of study: -

Sr. No.	Name of the Course	Graduate/ Post Graduate	Duration of the Course	Total Intake
1.	M.Tech.	Post Graduate	2 years	418
2.	MBA	-do-	2 years	92
3.	MCA	-do-	3 years	92
4.	B.Tech.	Graduate	4 years	832

Facilities are also available in the Institute for research leading to Degree of Doctor of Philosophy in various disciplines of Engineering and Technology of NIT, Kurukshetra.

## 2.7 ADMISSION PROCEDURE

In the Undergraduate courses – B.Tech. Degree Courses, admissions are made on the basis of All India Engineering Entrance Examination (AIEEE) conducted by Central Board of Secondary Education (CBSE) on behalf of the Govt. of India.

Admission to M. Tech. degree courses are made on the basis of candidate's score in the GATE examination. Seats are first filled by admitting GATE qualified candidates and then by industry sponsored candidates. Remaining vacant seats are offered to Non-GATE candidates with a minimum of 60 percent marks (55 percent for SC candidates) in their qualifying examination. While GATE candidates are eligible for a scholarship of Rs. 8000/- per month, non-GATE candidates are not given any scholarship.

Admission for the course of MBA is done through stringent screening process using CAT and JMAT scores followed by group discussion and personal interview. Admission for MCA course is done on the basis of written test as well as interview.



## 2.8 STUDENTS

There were 4656 students in all Undergraduate and Postgraduate courses in the Institute as on 31.3.2013.

## 2.9 EXAMINATION & EVALUATION

### EXAMINATION

As per scheme of the examination, Institute is organizing examination in two parts – Theory and Practical. The medium of examination is English. The students are required to fill up their Examination Forms along with examination fees. Examinations are held at the end of every semester.

### EVALUATION

The Evaluation System for 4-year (8 semesters) B.Tech. Degree Course at this Institute for the batches prior to 2003 is being followed in terms of marks as it was followed by Kurukshetra University, Kurukshetra to which this Institute was affiliated before switching over from REC to NIT (Deemed University) status. In all 8 semesters, marks were awarded out of 5600 scaled marks. The same is as under:-

Marks Obtained	Division/Result
70% and above (subject to passing all eight semesters in 4 years duration).	1 <sup>st</sup> Division with Honours
60% and above	1 <sup>st</sup> Division
50% and above but less than 60%	2 <sup>nd</sup> Division
40% and above but less than 50%	Pass Class

Further, from the batch admitted in year 2003, Institute has switched over to Credit Based System of evaluation for all degree programmes which is as under:-

A letter grade in each course taken during the semester is being awarded on the basis of performance of a student in class work, sessionals and end semester exams held at the end of each Semester. Letter grade has a grade point for the purpose of computing the Cumulative Grade Point Average (CGPA) i.e.  $CGPA = \frac{C1 \times G1}{Ce}$  (C1

indicates credits assigned to the course, G1 indicates grade point equivalent to the letter grade obtained and Ce indicates total number of credits). The letter grades and their grade point value are given below:-

Letter Grade	Performance	Grade Point
A+	Excellent	10
A	Very Good	09
B	Good	08
C	Average	06
D	Pass	04
E	Required to Improve	02
F	Repeat	00

The Percentage of marks of a student can be calculated by multiplying the CGPA of a student by 9.00. The above system is also being used for other Graduate and Post Graduate Courses.

## 2.10 PLACEMENT

Many opportunities are open to engineering graduates in Government Departments, Armed Forces, Engineering and Allied Industries, Building construction and Engineering consultancy organizations. For the benefit and convenience of B.Tech. final year students, campus interviews are arranged by the Department of Training and Placement of the Institute. Many reputed concerns including Govt. Departments, Public Undertakings, Armed Forces and Private companies make on campus selections. The number of students getting offers of good jobs is steadily increasing, particularly during the last few years.

## RECRUITMENT VISITS

Discipline	No. of companies which conducted interviews	No. of jobs*
Computer Engg.	65	77
Information Technology	65	58
Electronics & Comm. Engg.	45	122
Mechanical Engg.	64	119
Electrical Engg.	51	98
Civil Engg.	39	86
Industrial Engg. & Mgt.	33	18
MCA	25	69
M.Tech.	27	100

Note: \*Some students were selected by more than one company.



## 2.11 GAMES AND SPORTS

The Engineering Curriculum demands dedicated and sustained efforts from every student. As a result, students remain busy with studies throughout the year. Nevertheless, realizing the importance of sports and games in the overall development of the students, sport facilities are provided to students to the maximum possible extent. The Institute lays adequate emphasis on student participation in various outdoor and indoor games and track and field Sports. All sports and games activities are directed by a Sports Committee comprising students, faculty members and Sports personnel. The Committee is responsible for laying down the policies and programmes for sports and games.

A senior faculty member designated as President (Sports) co-ordinates the activities. Students who distinguish themselves by their outstanding performance in sports are eligible for a number of awards including 'Best Sportsman of the year' award and Institute colours. On recommendations of the Sports Committee, a cash prize of Rs. 500/- and a trophy is awarded to the 'Best Sportsman of the year'.

## 2.12 STAFF POSITION AS ON 31.3.2013

### SUMMARY (TEACHING STAFF)

Sr.No	Name of the Post	Sanctioned	In Position	Vacant
1.	Director	01	01	-
2.	Professors	43	41	02
3.	Associate Professors	85	41	44
4.	Assistant Professors	170	46	124
	Total	298*	128	170

\*Based on students' strength for the year 2010-11.

### SUMMARY (TEACHING SUPPORTING STAFF)

Sr.No.	Name of the Post	Sanctioned	In Position	Vacant
1.	Supervisor	26	10	16
2.	Sr.Draftsman	03	-	03
3.	Asstt.Draftsman	01	01	-
4.	Tech.Grade"A"	23	10	13
5.	Tech.Grade "B"	19	14	05
6.	Tracer	04	-	04
7.	Ferro-Machine Operator	02	-	02

8.	Lab. Assistant	02	02	-
9.	Gasman	01	-	01
10.	Lab. Attendant	33	20	13
11.	System Attendant	03	01	02
12.	Gas Plant Helper	01	-	01
	<b>Total</b>	<b>118</b>	<b>58</b>	<b>60</b>

#### **SUMMARY (NON-TEACHING STAFF)**

1.	Administrative/Ministerial Staff	208	94	114
2.	Library Staff	20	09	11
3.	Medical Staff	07	05	02
4.	Maintenance Staff	67	25	42
5.	Workcharged-made-regular staff	16	16	-
	<b>Total</b>	<b>318</b>	<b>149</b>	<b>169</b>

#### **SUMMARY (OVERALL)**

<b>SR. NO.</b>	<b>STAFF</b>	<b>SANCTIONED</b>	<b>IN POSITION</b>	<b>VACANT</b>
1.	Teaching Staff	298	128	170
2.	Officer Cadre	30	11	19
3.	Teaching Supporting Staff	118	58	60
4.	Non-Teaching Staff	318	149	169
	<b>Grand Total</b>	<b>764</b>	<b>346</b>	<b>418</b>

### **2.13 NOTABLE ACHIEVEMENTS**

1. The Institute has been conferred the status of Deemed University by the Government of India w.e.f. 26.6.2002. Consequent upon upgradation of REC Kurukshetra to National Institute of Technology, Kurukshetra with Deemed University status w.e.f. 26.6.2002, the Institute is independent in every respect relating to academic work such as Exams, Evaluation of Answer-sheets, declaration of results and other allied matters.

2. The Central Government has taken over full Administrative and Financial control of this Institute w.e.f. 14.5.2003. The Plan and

Non-Plan expenditures of this Institute are being borne entirely by the Central Government from financial year 2003-04.

3. The National Board of Accreditation (NBA) has accredited our four Undergraduate Degree Level Programmes in Engineering and Technology i.e. Electronics & Communication Engineering, Mechanical Engineering, Electrical Engineering and Civil Engineering for five years w.e.f. 19.3.2004 on the basis of standards maintained by the Institute for the Academic Excellence.

4. Institute has signed Memorandum of Understanding with the Govt. of India, Department of Secondary & Higher Education, Ministry of Human Resource Development, New Delhi on 1.12.2003 for the years 2003-08, consenting on the commitments and targets formulated by the Ministry for the said period.

5. The Technical Education Quality Improvement Programme (TEQIP), funded by World Bank, aims to upscale the on going initiatives of GOI to enhance efficiency and dynamism in technical education. It was launched by MHRD as a Rs. 1550 crore programme during the 10<sup>th</sup> Plan. Haryana is one of the six states which was selected to participate in the first cycle of the first phase of the programme, based on their commitment and preparedness for the project. The agreements were signed in February 2003- between GOI, six participating states and the World Bank.

Following are the Objectives of Technical Education Quality Improvement Programme:

- Improving undergraduate teaching learning process
- Increasing facilities for undergraduate education
- Increasing efficiency and effectiveness of the education process through better academic discipline and improved governance
- Improving post-graduate and research programmes
- Improving Sponsored Research and Consultancy activities
- Starting new PG programmes

6. The first year of 20-year Road Map- 2006 was a bold initiative by way of increased intake and new courses. The Ministry of Human Resources Development approved some new courses for PG and UG Programme from session 2006-07 in addition to enhancing the existing intake of some UG courses. Further, responding to an increasing demand for Management Graduates in the country and keeping in line with its stated goal of regularly adding new courses, a self



sustaining 2 years Course - Master of Business Administration (MBA) was introduced in the Institute from the session 2006-07 with an intake of 60 students.

7. Responding to an increasing demand for Computer professionals in the Country and keeping in line with its stated goal of regularly adding new courses as a part of its 20-years growth plan, NIT Kurukshetra started Master Computer Applications (MCA) with effect from session 2007-08. With the introduction of this programme, Institute extended its long years of expertise into the field of Computer Applications, thus fulfilling its commitment to the IT Industries world wide and the society at large of developing Computer professionals with varied competencies and ethical values. This programme derives strength from expert faculty, and well established administrative, consultancy, training and placement infrastructure of NIT Kurukshetra.

8. National Institute of Technology Act, 2007 was enacted by the Parliament of India on 5<sup>th</sup> June, 2007 and became effective on 15<sup>th</sup> August, 2007 i.e. Independence Day. This Act declares NIT, Kurukshetra Institution of National Importance.

9. As per the T-School Survey conducted by Data Quest IDC-NASSCOM, the Institute has been ranked at 18 in the Country.

10. An institute delegation comprising of some faculty members and officers of the institute visited University of Sunderland, UK, Binghamton University, New York and University of Toledo, USA from 19.10.2008 to 27.10.2008. During the visit of the delegation of the above foreign universities, various areas of academic cooperation were identified. The scope of establishing academic links between NIT, Kurukshetra with the above universities was also discussed. The memorandum of understanding (MoU) was signed with the University of Toledo, College of Engineering, Toledo, USA. Further, signing of MoU with the Binghamton University, New York and the University of Sunderland, UK is under process.

11. The Director, Government of India, Ministry of Human Resource Development, Deptt. of Higher Education vide letter no. F.22-5/2006-TS.III (Pt.) dated 11.5.2009 forwarded a copy of notification published in Gazette of India Extraordinary Part, Section-3, Sub-Section-(i) dated 23<sup>rd</sup> April, 2009 regarding the first Statutes under NIT Act, 2007 for information and necessary action.

12. A two days colloquium on 'Future Training and Placement Scenario' was organized in the Institute for providing a platform for deliberations among distinguished fraternities to explore possibilities of

further enhancing placement scenario of the Institute and collaborative research projects with industries in emerging areas of science and technology. The colloquium was attended by distinguished dignitaries from IITs, Industries & other Academic Institutes of repute, in addition to Alumni & Students of the institute.



### **3.0 STAFF**

#### **3.1 Academic Staff (Teaching)**

The Institute has highly qualified, dedicated and well trained faculty of National and International repute of proven capabilities. More than 75% of faculty possesses Ph.D degree in various disciplines.

**Director (Head of the Institution)**

Prof. Anand Mohan

**Dean (Planning & Development)**

Dr. V.K. Arora

**Dean (Academic)**

Dr. A.K. Gupta

**Dean (Estate)**

Dr. K.K. Singh

**Dean ( Faculty Welfare)**

Dr. V.K.Sehgal

**Dean ( Students' Welfare)**

Dr. S.K.Sharma

**Dean ( Research & Consultancy)**

Dr. A.Swarup

**Professor Incharge Training, Placement & Students Welfare**

Dr. H.K. Sharma

#### **ADMINISTRATIVE OFFICERS**

**Registrar Incharge**

Sh. Gyana Ranjan Samantaray

**Workshop Supdt.**

Dr. Hari Singh (Addl. Charge)

**Senior Medical Officer**

Dr. (Ms.) Minati Raut

**Medical Officers**

Dr. Sumit Kumar

Dr. Gaurav Kaushal

**Librarian**

Dr. Krishan Gopal

**Deputy Registrar (GA & Legal)**

Sh. Gyana Ranjan Samantaray

**Deputy Registrar (Academic)**

Vacant

**Deputy Registrar (Accounts)**

Sh. S.K. Sharma

**Stores Officer**

Sh. J.L. Moudgil

**Foreman**

Sh. R.L. Nafaria

**OTHERS****Chief Warden (Boys)**

Dr. Rajinder Kumar

**Chief Warden (Girls)**

Dr. (Mrs.) Minati Baral

**Deputy Chief Wardens**

Sh. V.P. Singh & Dr. D.P.Singh

**Controller of Examinations**

Dr. S.M.Gupta

**Chief Vigilance Officer**

Dr. Subodh Ranjan

**President Sports**

Dr. D.K. Soni

**President Clubs**

Dr. S.N. Sachdeva

**Professor Incharge (Public Relations)**

Dr. P.J. Philip

**Public Information Officer Under RTI Act-2005**

Sh. Gyana Ranjan Samantaray, DR (GA&L)

Dr. S.K. Sharma, Prof., Mech.Engg.Deptt.

**DEPARTMENT OF CIVIL ENGINEERING**

Dr. D.K. Soni Ph.D.

Dr. V.K. Arora	Ph.D.
Dr. V.K. Sehgal	Ph.D.
Dr. R.C. Bhattacharjee	Ph.D.
Dr. N.K. Gupta	Ph.D.
Dr. Baldev Setia	Ph.D.
Dr. Diwan Singh	Ph.D.
Dr. S.K. Madan	Ph.D.
Dr. H.K. Sharma	Ph.D.
Dr. S.N. Sachdeva	Ph.D.
Dr. K.K. Singh	Ph.D.
Dr. Subodh Ranjan	Ph.D.
Dr. Anupam Mittal	Ph.D.
Dr. S.M. Gupta	Ph.D.
Dr. Arun Goel	Ph.D.
Dr. S.K. Patidar	Ph.D.
Dr. Ashwani Jain	Ph.D.

Dr. Mahesh Pal	Ph.D.
Dr. Surender Deswal	Ph.D.
Dr. V.P. Singh	Ph.D.
Dr. Saraswati Setia	Ph.D.
Dr. Paratibha Aggarwal	Ph.D.
Dr. Parveen Aggarwal	Ph.D.

Dr. N.K. Tiwari	Ph.D.
Dr. Babita Saini	Ph.D.
Dr. Yogesh Aggarwal	Ph.D.



## **DEPARTMENT OF COMPUTER ENGINEERING & INFORMATION TECHNOLOGY**

### **Head of Department**

Dr. J.K. Chhabra                      Ph.D.

### **Associate Professors**

Dr. A.K. Singh	Ph.D.
Dr. Mayank Dave	Ph.D.
Dr. S.K. Jain	Ph.D.
Sh. R.K. Aggarwal	M.Tech.
Sh. R.M. Sharma	M.Tech.

### **Assistant Professors**

Ms. Priyanka Ahlawat	M.Tech.
Sh. Mohit Dua	B.Tech.
Ms. Ritu Garg	M.Tech.
Sh. Virender Ranga	M.Tech.

## **DEPARTMENT OF ELECTRICAL ENGINEERING**

### **Head of Department**

Dr. (Ms.) Lillie Dewan              Ph.D.

### **Professors**

Dr. A. Swarup	Ph.D.
Dr. K.S. Sandhu	Ph.D.
Dr. R.S. Bhatia	Ph.D.
Dr. G.L. Pahuja	Ph.D.
Dr. (Ms.) Ratna Dahiya	Ph.D.
Dr. L.M. Saini	Ph.D.

### **Associate Professors**

Dr. Ashwani Kumar	Ph.D.
Dr. (Ms.) Jyoti Ohri	Ph.D.
Dr. J.S. Lather	Ph.D.
Sh. C.P. Bansal	B.Sc. (Engg.)
Ms. Sunita Chauhan	M.Tech.
Ms. Rupanshi Batra	M.Tech.

Ms. Monika Mittal	M.Tech.
Sh. Sathans	M.Tech.
Sh. Yash Pal	M.Tech.

#### **Assistant Professors**

Sh. K.K. Sharma	M.Tech.
Dr. Saurabh Chanana	Ph.D.
Ms. Shelly Vadhera	M.Tech.
Dr. Dheeraj Joshi	Ph.D.
Sh. A.K. Dahiya	M.Tech.

### **DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGG.**

#### **Head of Department**

Dr. O.P. Sahu	Ph.D.
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#### **Professors**

Dr. A.K. Gupta	Ph.D.
Dr. Brahmjit singh	Ph.D.
Dr. R.K. Sharma	Ph.D.

#### **Associate Professors**

Sh. Umesh Ghanekar	M.Tech.
Dr. Rajoo Pandey	Ph.D.

#### **Assistant Professors**

Sh. Mohd. Arif	M.Tech.
Sh. Neeraj Pratap Singh	M.Tech.
Ms. Vrinda Gupta	M.Tech.
Sh. Vikas Mittal	M.Tech.
Sh. Karan Sharma	B.Tech.
Sh. Sandeep Santosh	M.Tech.
Sh. Arvind Sharma	M.Tech.
Sh. Rajender Kumar	M.Tech.
Ms. Poonam Jindal	M.Tech.

## **DEPARTMENT OF MECHANICAL ENGINEERING & INDUSTRIAL ENGINEERING AND MANAGEMENT**

### **Head of Department**

Dr. Sudhir Kumar      Ph.D.

### **Professors**

Dr. S.K. Sharma	Ph.D.
Dr. S.S. Rattan	Ph.D.
Dr. Dixit Garg	Ph.D.
Dr. Surjit Angra	Ph.D.
Dr. Dinesh Khanduja	Ph.D.
Dr. P.C. Tiwari	Ph.D.
Dr. Hari Singh	Ph.D.

### **Associate Professors**

Sh. V.P. Singh	M.Tech.
Dr. V.K. Bajpai	Ph.D.
Dr. Gian Bhushan	Ph.D.
Dr. Ajai Jain	Ph.D.
Dr. Pankaj Chandna	Ph.D.
Dr. S.C. Gupta	Ph.D.
Sh. Sandeep Singhal	M.Tech.
Sh. Jaideep Gupta	M.Tech.
Dr. Vinod Kumar	Ph.D.
Dr.(Ms.) Meenu	Ph.D.

### **Assistant Professors**

Sh. Rajiv Verma	M.Tech.
Sh. N.K. Singh	M.Tech.
Sh. M.K. Gupta	M.Tech.
Dr. P.K. Saini	Ph.D.
Dr. Punit Kumar	Ph.D.
Sh. Avadesh Yadav	M.Tech.
Dr. Jitinder Kumar	Ph.D.
Dr. Gulshan Sachdeva	Ph.D.

## **DEPARTMENT OF PHYSICS**

### **Head of the Department**

Dr. J.K. Quamara      Ph.D.



**Professors**

Dr. S.K. Mahna	Ph.D.
Dr. B.K. Kaushik	Ph.D.

**Associate Professor**

Dr. Ashavani Kumar	Ph.D.
Dr. (Ms.) Neena Jaggi	Ph.D.
Dr. Rishipal Chauhan	Ph.D.

**Assistant Professor**

Dr. Anurag Gaur	Ph.D.
Sh. Parkash Chand	M.Sc.

**DEPARTMENT OF CHEMISTRY****Head of Department**

Dr. (Ms.) Minati Baral	Ph.D.
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**Professor**

Dr. Dinesh Kumar	Ph.D.
Dr. D.P. Singh	Ph.D.

**Associate Professor**

Dr. J.K. Kapoor	Ph.D.
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**DEPARTMENT OF HUMANITIES & SOCIAL SCIENCE****Head of Department**

Dr. Rajender Kumar	Ph.D.
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**Professor**

Dr. P.J. Philip	Ph.D.
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**Associate Professors**

Dr. Vikas Chaudhary                      Ph.D.  
Dr.(Ms.) Kiran Mor                      Ph.D.

**DEPARTMENT OF MATHEMATICS****Head of Department**

Dr. Paras Ram                              Ph.D.

**Professor**

Dr. Kuldeep Kumar                      Ph.D.

**Assistant Professor**

Dr.(Ms.) Saraswati Yadav              Ph.D.

**DEPARTMENT OF BUSINESS ADMINISTRATION****Head of Department**

Dr. P.J. Philip                              Ph.D.

**DEPARTMENT OF COMPUTER APPLICATIONS****Head of Department**

Dr. Jitender Kumar Chhabra      Ph.D.

**3.2 NON ACADEMIC STAFF (NON-TEACHING)**

Registrar	01
Dy. Registrar	03
Asstt. Registrar	04
Librarian	01
Asstt. Librarian	01
Sr. SAS Officer	01
SAS Officer	02
Sr. Medical Officer	01
Medical Officer	03
Security Officer	01
Pr. Technical Officer	01
Sr. Technical Officer	04
Technical Officer	06
Executive Engineer	01

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**TOTAL****30**

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### TEACHING SUPPORTING STAFF

Supervisor	26
Senior Draftsman	03
Asstt. Draftsman	01
Technician Grade 'A'	23
Technician Grade 'B'	19
Tracer	04
Lab Assistant	02
Ferro Machine Operator	02
Gas Man	01
<b>System Attendant</b>	<b>03</b>
Lab. Attendant	33
Gas Plant Helper	01

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<b>TOTAL</b>	<b>118</b>
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### OTHER ADMINISTRATIVE STAFF

Deputy Superintendent	08
Junior Accountant	01
Assistant/MMCA	23
Head Cashier	01
Cashier	01
Accounts Clerk	05
Senior Stenographer	07
Senior Storekeeper	02
Junior Stenographer	10
Junior Storekeeper	07
Clerks	36
Duplicating Machine Operator	01
Steno-typist	02
Lady Resident Warden	01
Matron (Girls Hostel)	01
Farash-cum-Attendant	05
Guest House Helper	01
Telephone Operator-cum-receptionist	02
Store Helper	01
Farash	05
Groundsman	06
Jamadar Peon	01
Peon	27
Daftri	02
Dafedar	01
Storemate	01
Storemunshi	01
Chowkidar	42
Driver	04



Cleaner	02
Cook-cum-chowkidar	01
<b>TOTAL</b>	<b>208</b>

#### **LIBRARY STAFF**

Senior Library Asstt.	02
Counter Assistant	03
Restorer	04
Library Attendant	07
Book Binder	01
Cleaner	02
Xerox Operator	01
<b>TOTAL</b>	<b>20</b>

#### **MAINTENANCE STAFF**

Junior Engineer	04
Electrician	01
Plumber	01
Carpenter	01
Mason	01
Pump Driver	01
Asstt Pump Driver	05
Fitter	01
Asstt. Fitter	01
Tradesman Mate	01
Chowkidar-cum-Mali	02
Jamadar Sweeper	01
Sweeper	29
Sewerman	04
Head Mali	01
Mali	13
<b>TOTAL</b>	<b>67</b>

#### **MEDICAL STAFF**

Pharmacist	02
Lab. Technician	01
Staff Nurse	01
Dresser	01

Female Attendant	01
Health Worker-cum-Peon	01
<b>TOTAL</b>	<b>07</b>

**WORKCHARGED/DAILY-WAGED STAFF MADE REGULAR BUT NOT ABSORBED IN THE REGULAR ESTABLISHMENT OF INSTITUTE (PERSONAL TO INCUMBENT)**

<b>Post</b>	<b>Sanctioned</b>
Painter	01
Plumber	01
Carpenter	03
Electrician	02
Mason	03
Beldar	05
Mali	01
<b>TOTAL</b>	<b>16</b>

### **3.3 TRAINING STATUS**

The Ministry of Human Resource and Development, Govt. of India has formulated training policy under Technical Education Quality Improvement Programme (TEQIP) for the faculty in which teachers of the technical institutions are trained. The Technical Teachers' Training Institutes of the region organize training programme on the different areas of Engineering and Technology. The Govt. of India is meeting expenditure for training of the teachers and bears the training cost, salary, TA/DA and stay expenses.

The Institute has training facilities for the faculty and other staff under Technical Education Quality Improvement Programme within the country which are arranged from Govt. organizations/ institutions as per the proposal. A number of staff members have been benefited by this scheme.

### **3.4 PLACEMENT OF STAFF FOR ACADEMIC EXCELLENCE**

The Academic staff (faculty) of the Institute is placed for Academic excellence for the following subjects:-

- a) To conduct research or advance studies in India or abroad;

- b) To write text books, standard works and other literature;
- c) To visit/work in International concerns and Technical Departments of Government to gain practical experience in their respective fields;
- d) To visit or work in a University, Institute or Government Research Laboratories in India or abroad; and
- e) Any other purpose for the academic development of the staff.
- f) For undergoing a special course of higher studies or specialized training in a professional or technical subject having a direct and close connection with the sphere of duties.

For this purpose, study leave and sabbatical leave are granted to the academic staff for the development of academic excellence.



## 4.0 TEACHING PROGRAMMES

### 4.1 COURSES OFFERED

#### UNDERGRADUATE COURSES - B.TECH. DEGREE COURSES

Courses of study were offered in the following disciplines:

<u>Discipline</u>	<u>No. of seats</u>
Civil Engineering	139
Electrical Engineering	139
Mechanical Engineering	139
Electronics & Communication Engineering	139
Computer Engineering	92
Industrial Engg. & Management	92
Information Technology	92
Total	832

Note:

DASA/NRI students can be admitted upto 15% over and above of the sanction strength of B.Tech. (i.e. 15% of 832)

The duration of each course is four academic years. Teaching in each academic year (1<sup>st</sup> July to 30<sup>th</sup> June) is divided into two semesters of about sixteen weeks each.

The courses include study at the Institute, visits to work-sites and practical training in the Institute workshops and in approved engineering works.

#### POSTGRADUATE COURSES - M.TECH. DEGREE COURSES

Courses of study were offered in the following disciplines and specializations:

The seats available for admission though CCMT-2012 are given below:

Discipline	No. of seats						Specialization
	Open	SC	ST	OBC	PD	Total	
Civil Engineering	08	03	01	04	-	16	Structural Engineering
	08	03	01	04	01	17	Transportation Engg.
	09	02	01	05	01	18	Environmental Engg.
	08	03	01	04	-	16	Soil Mechanics & Foundation Engg.
	08	03	01	04	01	17	Water Resources Engg.
Electrical Engineering	08	03	01	04	-	16	Control System

	08	03	01	04	-	16	Power System
	08	03	01	04	-	16	Power Electronics & Drives
Electronics & Comm. Engg.	10	03	02	05	-	20	Electronics & Comm. Engg.
	09	02	02	06	01	20	VLSI Design
Physics	10	03	02	05	-	20	Instrumentation
	09	02	02	06	01	20	Nano Technology
Mechanical Engg.	08	03	01	04	-	16	Industrial And Production Engg.
	08	03	01	04	01	17	Machine Design
	09	02	02	05	01	19	Thermal Engg.
Computer Engg.	10	02	01	06	01	20	Computer Engg.

The duration of each course is four semesters for regular students and five semesters for part-time students.

The Institute made admissions directly in the academic session in the academic session 2012-13 on (i) sponsored seats and (ii) seats available under TEQIP-II project. In addition direct admissions were also made for two new M.Tech. programmes. The number of seats available in each category for admission through this mode are given below:

(i) Sponsored and TEQIP-II seats:

Discipline	No. of seats TEQIP-II						Specialization
	Open	SC	ST	OBC	Sponsored	Total	
Civil Engineering	01	01	-	01	05	08	Structural Engineering
	01	01	-	-	05	07	Transportation Engg.
	-	-	-	01	05	06	Environmental Engg.
	01	-	-	01	05	07	Soil Mechanics & Foundation Engg.
	01	-	-	-	05	06	Water Resources Engg.
Electrical Engineering	02	01	-	01	05	09	Control System
	02	-	01	01	05	09	Power System
	02	01	-	01	05	09	Power Electronics & Drives
Electronics & Comm. Engg.	02	01	-	01	05	09	Electronics & Comm. Engg.
	06	01	02	03	05	17	VLSI Design
Physics	-	-	-	-	05	05	Instrumentation
	-	-	-	-	05	05	Nano Technology

Mechanical Engg.	02	01	-	01	05	09	Industrial And Production Engg.
	02	01	-	01	05	09	Machine Design
	02	-	01	01	05	09	Thermal Engg.
Computer Engg.	03	01	-	01	05	10	Computer Engg.
School of VLSI Design & Embedded System	-	-	-	-	05	05	Embedded System Design
School of Renewable Energy & Efficiency	-	-	-	-	05	05	Renewable Energy Systems

(ii) New M.Tech. Programmes:

Deptt./School	No. of seats						Programme
	Open	SC	ST	OBC	PD	Total	
School of VLSI Design & Embedded System	09	03	02	05	01	20	Embedded System Design
School of Renewable Energy & Efficiency	09	03	02	05	01	20	Renewable Energy Systems

### MBA DEGREE COURSE

Responding to an increasing demand for management professionals in the country and keeping in line with its stated goal of regularly adding new courses as a part of its 20-years growth plan, NIT Kurukshetra has started 2-years MBA programme, effective 2006-07 with an intake of 60 Students (presently 90 seats). With the introduction of the programme, Institute extends its long years of expertise into the field of Business Administration, thus fulfilling its commitment to the business world and the society at large of developing professional managers with varied competencies and ethical values.

In a short span, MBA program has made a mark for itself. It has all the ingredients of a successful program: a strong curriculum, comparable with the very best; well qualified and dedicated faculty, a batch of talented and enthusiastic students; emphasis on case-based interactive study, supported by all modern teaching aids; liaison with industry; active participation in inter & intra-institution competitions etc.

The first batch enjoyed the unique opportunity of receiving Summer Training from reputed Universities/B-Schools and industries in three European countries- Switzerland, Germany & Holland. This exceptional experience helped the



students widen their horizon and provide them much valued international exposure.

### **MCA DEGREE COURSE**

Responding to an increasing demand for computer professionals in the country and keeping in line with its stated goal of regularly adding new courses as a part of its 20-years growth plan, NIT Kurukshetra has started 3-years MCA programme with effect from session 2007-08 with an intake of 60 Students (presently 90 seats). With the introduction of the programme, Institute extends its long years of expertise into the field of Computer Applications thus fulfilling its commitment to the IT industry worldwide and the society at large of developing computer professionals with varied competencies and ethical values. The programme derives strength from:

Expert faculty, and well established administrative, consultancy,  
Training and placement infrastructure of NIT Kurukshetra  
Latest IT Industry oriented flexible curriculum  
Specialized training at leading IT Industry  
Placement assistance from Training and Placement Cell

### **Ph.D. DEGREE COURSES**

Facilities are available in Institute for research leading to the degree of Doctor of Philosophy in the various disciplines of Engineering and Technology.

## **4.2 COURSE-WISE ENROLMENT WITH SEX AND CASTE BREAK-UP**

### **B.TECH. DEGREE COURSES**

Year	Semester	Boys	Girls	Total
I	I	659	149	808
II	III	693	89	782
III	V	711	80	791
IV	VII	666	129	795
<b>Total</b>		<b>2729</b>	<b>447</b>	<b>3176</b>

### **M.TECH. DEGREE COURSES**

	Year	Semester	Boys	Girls	Total
<b>Civil</b>	I	I	74	10	84
	II	III	60	20	80
<b>Electrical</b>	I	I	56	05	61
	II	III	60	12	72

<b>Electronics</b>	I	I	16	09	25
	II	III	51	04	55
<b>Mechanical</b>	I	I	63	02	65
	II	III	70	06	76
<b>Physics</b>	I	I	14	07	21
	II	III	25	08	33
<b>Computer</b>	I	I	19	04	23
	II	III	18	06	24
Renewal Energy System	I	I	14	01	15
	II	III	11	03	14
Embedded System Design	I	I	49	02	51
	II	III	17	04	21
<b>Total</b>			<b>617</b>	<b>103</b>	<b>720</b>

#### **MBA and MCA DEGREE COURSES**

	<b>Year</b>	<b>Semester</b>	<b>Boys</b>	<b>Girls</b>	<b>Total</b>
<b>MBA</b>	I	I	43	19	62
	II	III	48	21	69
<b>MCA</b>	I	I	55	28	83
	II	III	50	32	82
	III	V	51	35	86
<b>Total</b>			<b>247</b>	<b>135</b>	<b>382</b>

#### **Ph.D DEGREE COURSE**

	<b>Boys</b>	<b>Girls</b>	<b>Total</b>
<b>Ph.D.</b>	278	87	365

#### 4.3 ADMISSION STATISTICS-UG/PG PROGRAMMES, COURSE-WISE UNDERGRADUATE COURSES

Details of candidates admitted to B.Tech. courses in 2012-2013:-

B.Tech.	FEMALE										FEMALE Total	MALE										MALE Total	Grand Total
	DASA	ICCR	MEA	OBC	OBC PH	OP	SC	ST	DASA	ICCR		MEA	OBC	OBCPH	OP	OP PH	SC	SC PH	ST	ST PH			
Category																							
Civil Engg.						8	1		9		1	1	36	1	57	2	19		10	1	128	137	
Computer Engg.	1			5		7	1	2	16			1	20		32	1	13	1	4		72	88	
Electrical Engg.		2	1	3		7	5	3	21				33	2	50	1	15	1	6		108	129	
Electronics & Comm. Engg.				6		11	3	1	21	2	2	1	29	2	52	2	13	1	9		113	134	
Industrial Engg. and Management																							
Information Technology				2	1	2	1		6				23		36	1	12		7		79	85	
Mechanical Engg.				1		12	1	2	16				21		26	1	9		5		62	78	
Grand Total	1	2	1	17	1	47	12	8	89	2	5	5	199	6	311	10	100	3	51	1	693	782	

Grand Total 766+16 \*ICCR/MEA/DASA = 782



## POSTGRADUATE COURSES

Details of sanctioned intake and candidates admitted to M.Tech. courses in 2012-2013:-

Branch	Programme	Female						F <sup>1</sup> Total	Male								M <sup>1</sup> Total	Grand Total
		ICCR	OBC	OP	SC	ST	Spon.		DASA	ICCR	OBC	OP	PH	SC	ST	Spon.		
Civil Engg.	C (Envir.)		2	2				4			2	7		2			11	15
	C (S.M.F)		2	2	1			5			3	6		2			11	16
	C (Strut.)		1	1				2	1		5	7		1	1		15	17
	C (Trans.)										6	8	1	4			19	19
	C (W.R)			1	1			2			5	8		2			15	17
Computer Engg.	Computer			6				6			6	6		3		1	16	22
Electrical Engg.	E (C.S.)	1	2	6	1			10			2	7		2		1	12	22
	E (P.E.D.)			2	2			4			5	11	1	2		1	20	24
	E (P.S.)			1				1			6	9		3	2	4	24	25
Electronics & Comm. Engg.	ECE			1	1		1	3			5	13		3		2	23	26
Mechanical Engg.	M (M.D.)		2					2		1	6	12		4			23	25
	M (I & P)				2			2			6	11		2		2	21	23
	M (Thermal)			2		1		3			8	7	1	2	1	3	22	25
Physics	Ph (N. T)		1	3				4			5	2		2			9	13
	Ph (Inst.)			3	1			4			5	8		2	1		16	20
School of VLSI Design & Embedded System	VLSI Design				1			1			4	15	1	3	2		25	26
	E.S.D.		2		1		1	4			3	12				2	17	21
	R.E.S			3				3				8		2		1	11	14
Renewal Energy & Efficiency	Grand Total	1	12	33	11	1	2	60	1	1	82	157	4	41	7	17	310	370

#### 4.4 STUDENTS' TOTAL STRENGTH

##### **B.Tech. Degree Course**

Ist Semester	=	808
IIIrd Semester	=	782
Vth Semester	=	791
VIIth Semester	=	795

##### **M.Tech. Degree Course**

Ist Semester	=	366
IIIrd Semester	=	370

##### **MBA Degree Course**

Ist Semester	=	62
IIIrd Semester	=	67

##### **MCA Degree Course**

Ist Semester	=	83
IIIrd Semester	=	82
Vth Semester	=	85

<b>Ph.D Degree Course</b>	=	<b>365</b>
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<b>Total</b>	=	<b><u>4656</u></b>
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**Table 1 shows yearwise breakup of students' statistics for B.Tech. programme.**

**Table 1: Students Statistics Yearwise for B.Tech. Programme**

Class/Course		Total Enrolment			Scheduled Castes Enrolment			Scheduled Tribes Enrolment			Backward Class Enrolment(OBC)		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
	1	2	3	4	5	6	7	8	9	10	11	12	13
<b>B.Tech</b>													
2009	Comp	61	15	76	12	02	14	02	03	05	11	02	13
	EC	104	17	121	13	03	26	08	02	10	24	01	25
	M	120	01	121	18	-	18	10	-	10	24	-	24
	E	98	21	119	14	03	17	07	03	10	22	02	24
	C	111	09	120	16	01	17	10	-	10	26	01	27
	IT	50	26	76	07	03	10	02	02	04	13	05	18
	IEM	28	05	33	06	-	06	02	-	02	07	-	07
2010	Comp	77	17	94	12	03	15	05	02	07	21	03	24
	EC	108	33	141	15	05	20	07	03	10	27	11	38
	M	141	-	141	20	-	20	10	-	10	37	-	37
	E	118	20	138	19	02	21	08	02	10	36	02	38
	C	125	14	139	18	02	20	08	02	10	37	01	38
	IT	57	14	71	13	01	14	05	02	07	17	07	24
	IEM	57	14	71	13	01	14	05	01	06	19	04	23
2011	Comp	64	16	80	10	4	14	4	2	6	18	3	21
	EC	110	18	128	15	4	19	9	1	10	35	3	38
	M	133	0	133	20	-	20	11	-	11	37	-	37
	E	121	11	132	18	2	20	7	3	10	34	2	36
	C	128	4	132	19	1	20	9	2	11	38	-	38
	IT	69	20	89	10	4	14	6	1	7	20	4	24
	IEM	73	10	83	12	2	14	4	1	5	24	1	25
2012	Comp	72	16	88	14	1	15	4	2	6	20	5	25
	EC	113	21	134	14	3	17	9	1	10	31	6	37
	M	131	-	131	19	-	19	10	-	11	38	-	38
	E	108	21	129	16	5	21	6	9	10	35	8	38
	C	128	9	137	19	1	20	11	-	11	37	-	37
	IT	62	16	78	9	1	10	5	2	7	21	1	22
	IEM	79	6	85	12	1	13	7	-	5	23	3	26



## **4.5 THE HOSTELS**

### **MANAGEMENT OF HOSTELS**

The Institute has 10 boys' and 3 girls' hostels. Three boys hostels for B.Tech. students with a capacity of 250 each are three seaters and two boys' hostels for B.Tech. students with a capacity of 350 seats each, two boys' hostels for P.G. students/research scholar with a capacity of 150 seats and 350 seats are single seaters. Recently, the Institute has constructed one Mega boys' hostel with a capacity of 1000 seats to cope up the increased strength of B.Tech. and M.Tech. students. Three Girls' hostels are with capacity of 120 seats, 200 seats & 300 seats. There are single, double and triple seated rooms in these hostels.

All rooms in the hostels have been provided with furniture and ceiling fans. Each hostel is a self contained unit with its own mess and common room. Common room facilities include newspapers, magazines, indoor games and a colour television set. Each student is expected to respond to the role assigned to him/her in the community life of the hostel.

### **ADMINISTRATION**

Each boys' hostel is looked after by two members of the teaching faculty who act as Wardens. Every girl hostel has a full time lady Resident Warden. The overall coordination of working is done by Deputy Chief Warden and Chief Warden. Each boys' hostel has Mess Manager-cum-Accountant, Hostel Clerk, Farash, Chowkidars, Mess Supervisor and other mess staff to assist Wardens in smooth running of the hostel. In each girl hostel Matron, Chowkidars, Mess Supervisor and other mess staff help Resident Lady Warden in running of the hostel.

## **4.6 SCHOLARSHIPS/ASSISTANCE-SHIP**

### **Merit-cum-means and other Scholarship for B.Tech.**

21 Merit Scholarships and 52 Merit-cum-Means Scholarships are awarded by the Institute (as per conditions laid down) for each year of B.Tech. Degree courses. In addition, National Scholarships, Post-matric Scholarship and many other stipends are awarded by various Government Institutions and other agencies.

Students receiving a Merit Scholarship or Merit-cum-Means Scholarship or stipend are not permitted to receive any other scholarship/stipend. In case he/she is in receipt of any other Scholarship or stipend it must be surrendered and amounts received is refunded before a Merit Scholarship or Merit-cum-Means Scholarship can be claimed. Loans or a single cash Prize however does not debar a student from eligibility for the Merit Scholarship or Merit-cum-Means Scholarship.



A Scholarship which falls vacant due to any reason is awarded to the next eligible candidate in order of merit.

Subject to availability, a small number of Merit-cum-Means Scholarships are awarded to students in higher classes also on the aggregate of two semester examination in the previous year provided the students have secured 60% or more marks in one attempt in each of the two semester examinations in the previous year and they fulfil the eligibility conditions for the Merit-cum-Means Scholarship.

### **Alumni Association Scholarship**

The NITK Alumni Association awards 5 scholarships (one each in the disciplines of Civil, Computer, Electronics, Electrical and Mechanical Engineering) worth Rs. 2400/- per annum which is open to all regular B.Tech. students of the Institute.

### **Alumni Association Medal for the Best All-Round Student of the year**

Alumni Association has instituted a Medal for Best All- round student of the year of the Institute. The Best All- rounder will be same as selected by the duly constituted board of the Institute for the purpose.

### **Scholarships for M.Tech students**

A scholarship of Rs. 8000/- p.m. per student is awarded to all eligible students pursuing a regular course of study of M.Tech. Only those candidates who have qualified the GATE examination are eligible for the award of scholarships.

## **4.7 GAMES AND SPORTS**

The Engineering Curriculum demands dedicated and sustained efforts from every student. As a result, students remain busy with their studies throughout the year.

Nevertheless, realizing the importance of sports and games in the overall development of the students, Institute has provided several sports facilities to the students.

NIT Kurukshetra is the only institution which introduces the physical education as a compulsory subject (practical only) for all the B.Tech. Ist year students. Almost all students of institute come to sports grounds daily for their physical fitness. This is the only Engg. institution which conducts inter year tournaments in all games and sports every year. Almost all Inter-Class Tournaments in various games and sports were organized this year too.

Institute teams participated in 'SPORTECH 2012' held at Indian Institute of Technology, Delhi from 2.3.2012 to 5.3.2012 in Basketball, Chess, Cricket, Football and Table Tennis. Basketball, Cricket, Athletics, Sports Quiz teams of the Institute participated in Inter Collegiate Annual Sports Fest 'Udghosh 2012' held at IIT Kanpur from 27.9.2012 to 30.9.2012. Badminton, Basketball, Cricket, Football, Table Tennis & Volleyball teams of the Institute participated in 'SPARDHA 2013' held at IIT, BHU from 22.2.2013 to 25.2.2013. In both events, Basketball team got Runner's up position. Institute Table Tennis team participated in Inter Engg. Deemed University Table Tennis Tournament held at TIET, Patiala from 12.10.2012 to 13.10.2012. 41<sup>st</sup> Annual Athletic Meet 2012 was organised in the Institute.

#### 4.8 AWARDS

Undergraduate students of B.Tech. Degree Course are eligible for a number of Honours, Awards, Scholarships and other financial assistance based on their academic performance, means, requirements etc.. Chief among these are Medals awarded to the toppers in the various disciplines, citation of names in the Institute Roll of Honour and the Award for the Best All-rounder. While the Medals and Certificates of merit awarded by the Institute are for purely academic achievements, the Best All Rounder Award is for Students who achieve scholarship with sportsmanship and excellence in other extra-mural activities.

#### MEDALS

Gold Medal along with a cash award of Rs. 5,000/- for the students who secure 1<sup>st</sup> position in the final examination in all disciplines of NIT Kurukshetra.

#### 4.9 EXAMINATION DETAILS

##### UNDERGRADUATE COURSES

Discipline	No. Appeared	No. Passed	1 <sup>st</sup> Divn. Hons.	1 <sup>st</sup> Div	2 <sup>nd</sup> Div n.	Name & Roll No. of students Securing Highest Marks	CGPA
Computer	76	61+2	Grade Base System			Mohd. Fahad 108112	9.9388
Civil	104	99+4	-do-			Kusum Ghangas 108636	9.7021
Electronics	110	106+ 13	-do-			Sheena Goel 108696	9.8105
Electrical	102	92+2	-do-			Paranav Chachra 108624	9.7190
Mechanical	109	94+2	-do-			Charu Datt 108322	9.7434

IEM	54	47	-do-	Hemant Kr. Suman 108243	9.6098
IT	66	64	-do-	Sumedha Khatter 108482	9.6004
Total	<b>621</b>	<b>562+</b> <b>23</b>			

### POSTGRADUATE COURSES

<b>M.Tech.</b>	<b>No. of Students Passed</b>
Computer Engg.	24
Electronics & Comm. Engg.	27
Electronics & Comm. Engg. (VLSI Design)	22
Mechanical Engg. (Thermal)	21
Mechanical Engg. (I & P)	16
Mechanical Engg. (Machine Design)	21
Electrical Engg. (Power System)	18
Electrical Engg. (Control System)	08
Electrical Engg. (PED)	11
Civil Engineering (Environmental)	04
Civil Engineering (Soil Foundation & Mechanics)	07
Civil Engineering (Structural)	12
Civil Engineering (Transportation)	13
Civil Engineering (Water Resources)	02
Instrumentation	16
Nanotechnology	16
<b>Total</b>	<b>238</b>
<b>MBA</b>	<b>76</b>
<b>MCA</b>	<b>80</b>

## 4.10 TRAINING AND PLACEMENT

### TRAINING

It is mandatory for all B.Tech. students to undergo practical training twice during their four-year stay in the Institute. The students undergo first practical training after 4<sup>th</sup> semester and the second after 6<sup>th</sup> semester. This training takes place during the summer vacations in establishments approved by the Institute. All expenses are to be borne by the students. After completion of the training period, students are required to submit a report which is evaluated in the Institute. While undergoing practical training, the students are expected to conform to the rules of the organization in which they are taking training. They are subjected to the orders and disciplinary control of the concerned organizations.



## **SURVEY CAMP**

Second year B.Tech. degree students of Civil Engineering are required to attend a survey camp during summer vacations. The Institute bears only limited expenses for this camp.

## **PROJECT TOURS**

All students of final and pre-final years of B.Tech. are required to go on short project tours as and when arranged by the Institute. The Institute provides a bus for these tours but all other expenses are borne by students.

## **EDUCATIONAL TOURS**

B.Tech. students of third and final years are required to go on short educational tours as arranged by the Institute.

## **PLACEMENT**

The number of companies visited and jobs offered disciplinewise are as given below:

<b>Discipline</b>	<b>No. of companies which conducted interviews</b>	<b>No. of jobs*</b>
Computer Engg.	65	77
Information Technology	65	58
Electronics & Comm. Engg.	45	122
Mechanical Engg.	64	119
Electrical Engg.	51	98
Civil Engg.	39	86
IEM	33	18
MCA	25	69
M.Tech.	27	100

Note : \*Some students were selected by more than one company



**List of firms which conducted campus interviews/considered Bio-data.**

ZS Associates	Exide	Lakshya Institute
Mahindra & Mahindra	Subros	Shobha Developers
Facebook US	TERII	GLA University
Future First	Vserve	NCB
EXL Services	Winshuttle	NOIDA Power
Atrenta	Pepsico	Pratap University
Bachtel	Maruti	Shivalik College
MAQ Software	TATA Motors	Adobe
Open Solutions	Alstom Power	Tally
Thought Works	Grey-B	Novell
Microsoft IT	RBS	Telecon
Cvent	Brahmos Aerospace	TATA Housing
Playbuff	AKS Software	Grape City
Amadeous	Verizon	Microsoft IDC
Ashok Leyland	Thermax	JSPL
Aricent	Compro	Mu-Sigma
JSW	HeroMotocop	IBM
Omfpgaom	Applied Material	Sapient
MIDAS IT	Freescall	Belzabar
ACC Concrete	Petrofac	Lurgi
Rancore	LPU	Aecom
Emerson Network	Technip	Drishti Software
LnT ECC	EMAAR MGF	Indian Navy
JCB	IRCO	Impetus
Kritical	Omega Sea	Osscube
Manglayatan University	Polaris	Virtusa
Era Contruction	Gemini Solution	Ambuja Cement
Samsung Engg.	HDFC	LnT Heavy Engg.
Wind Moller	Oceaneering	Agnity

Aakash Institute	Firefly HT	Wood Keny
Tejas network	Simson India	CA Technology
IDEA	HSCC	Henkel
EXICOM	Libsys	Escorts Ltd.
Polyplex	NEC HCL	Century Metal
Google	Newgen Software	Amdocs
TATA Power DDL	ISGEC	BIT Meerut
Galghotia	Godrej	IMI Norgren
Genesis Classes	Triune Energy	Ganpact
Samsung Reasearh	Eveready	Ansys
Samsung SEL	TSCS	Analog Device
Google US	Samsung SDS	Trident
Infoedge	ATOS	MVN Institute
C-Dot	Denso India	
Snapdeal	Magneti Mareli	
Make My Trip	HPCL	
Naggaro	IOCL	
Bristle Cone	Texas Instrumentation	
TCS	Wapocs	
DATA 64	Grazrity	
Nestle	G S Contruction	
ISMT	IGL	
Accenture	HFG Ltd.	
Honda	Pradan	
Ericsson	B L Kashyap	
HUL	Konyy Lab	

## **5.0 RESEARCH AND DEVELOPMENT ACTIVITIES**

### **5.1 Ph.D. PROGRAMMES**

Facilities are available in the Institute for research leading to the Degree of Doctor of Philosophy in the following areas of Engineering and Technology:-

#### **Civil Engineering Department**

1. Structural Engineering and Concrete Technology
2. Hydraulics and Water Resources
3. Soil Mechanics and Foundation Engineering
4. Geotechnique/Rock Mechanics
5. Highway/Transportation Engineering
6. Environment/Public Health Engineering
7. Remote Sensing/Advanced Surveying

#### **Electrical Engineering Department**

1. Reliability Engineering
2. Digital Signal Processing
3. Control Systems Theory and Applications
4. Electrical Machines
5. Wind Energy Conversion
6. Power Systems Dynamics and Stability
7. FACTS
8. Power Electronics
9. Power System Restructuring
10. Genetic Algorithms Applications
11. Robust Control
12. Robotics
13. Electric Drives
14. Digital Instrumentation and Control
15. Linear Control Systems
16. Microprocessor Based Systems
17. Power Quality Control in Power Systems
18. Control Applications in Power Drives
19. Artificial Intelligence
20. High Voltage Engineering
21. DSP Applications

#### **Mechanical Engineering Department**

1. Thermal Sciences
2. Energy Management Design
3. Production and Industrial Engg.
4. CAD/CAM



5. Mechanical Design

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

1. Mobile Communication
2. Digital Signal Processing
3. Digital Communications
4. Microelectronics & Modeling of semi conductor devices
5. VLSI Design
6. Image Processing
7. CDMA Systems
8. Reconfigurable Systems
9. Low Power VLSI Design
10. Wireless Broadband Access Technologies
11. Mobile Computing
12. Wireless Sensor Networks

### **Computer Engineering Department**

1. Operating Systems
2. Computer Networks
3. Distributed Computing
4. Software Engineering
5. Object Oriented Technology
6. Database and Data Mining
7. Natural Language Processing

### **Physics Department**

1. High Energy and Radiation Physics
2. Nano Technology
3. Solid State Nuclear Track Detectors
4. Polymer Physics
5. Condensed matter Physics
6. Molecular Spectroscopy

### **Chemistry Department**

1. Coordination Chemistry
2. Bio-inorganic Chemistry
3. Polymer Chemistry
4. Environmental Chemistry

### **Mathematics Department**

1. Elasticity
2. Fluid Mechanics
3. Magnetic Fluids
4. Operational Research

## 5. Reliability Models

### Humanities & Social Sciences Department

1. Anglo Saxon and Medieval English (Pre Chaucerian) Poetry, Applied Linguistics (English Language Teaching, Translation Studies)
2. Agricultural Economics, Industrial Economics, Indian Economy
3. Human Resources Management and Industrial Relations, Marketing Management and Financial Management
4. Intellectual Property Rights

### MCA Department

1. Semantic Web Services
2. Synchronisation in Mobile Computing
3. Software Engineering
4. Web based Instructional System
5. Adhoc Network
6. Mobile Computing Techniques & Algorithms in Wireless and Computer Systems
7. Fault Tolerance in Distributed Computing
8. Secure Wireless Sensor Network
9. Semantic Web & Services

## 5.2 PhDs AWARDED AND IN-PROGRESS

No.	Department	Awarded	In-Progress
1.	Civil	03	28
2.	Electrical	11	89
3.	Mechanical	09	80
4.	Electronics & Comm.	01	26
5.	Physics	01	20
6.	Chemistry	02	08
7.	Mathematics	02	04
8.	Humanities	01	13
9.	Computer	02	18
10.	MCA	--	08
	<b>Total</b>	<b>32</b>	<b>294</b>

## 5.3 INSTITUTE-INDUSTRY COLLABORATION

### CIVIL ENGINEERING DEPARTMENT

- i) Doing Industrial Consultancy for Structures Design/Testing – Dr. S.K. Madan

- ii) Principal Investigator of sponsored Research Project entitled "Strengthening of Structural Elements using tyfo Fibrwrap Systems" sponsored by Fyfe Asia Pvt. Ltd., TT International Trade Park, Singapore through their Indian Agency M/s Cembond Construction, New Delhi- Dr. H.K. Sharma

#### **5.4 INNOVATIONS AND TECHNOLOGY TRANSFER**

##### **CIVIL ENGINEERING DEPARTMENT**

Developed innovative methods for strengthening of structural element and transferred such technology to M/s Cembond Construction, New Delhi under collaborative research project.

#### **5.5 Technical Education Quality Improvement Programme-II (TEQIP-II)**

The Institute has been selected to participate in TEQIP-II, subcomponent 1.2, which aims at Scaling-up Postgraduate Education and Demand-Driven Research & Development and Innovation.

The major objective of TEQIP-II subcomponent 1.2 is to significantly increase enrolment in PG programmes in engineering disciplines and enhance engineering Research & Development and innovation by

- Improving the quality and relevance of the PG programmes
- Attracting more and better qualified PG students
- Improving faculty qualifications
- Increasing facilities for PG education
- Enhancing management of the institutions for more effective governance



## 6.0 THE COUNCIL, BOG AND OTHER COMMITTEES

### 6.1 INSTITUTE'S (NIT) COUNCIL

The composition of the Members of the Council shall be as under:-

1.	Minister of Human Resource Development, Government of India	Chairman
2.	Secretary, Department of Secondary and Higher Education, Ministry of HRD, Government of India	Member
3.	Principal Adviser (Education Planning Commission)	Member
4.	Secretary, Deptt. of Science & Technology, GOI	Member
5.	Director General, Council of Scientific & Industrial Research, Government of India	Member
6.	Secretary, Deptt. Of Biotechnology, Government of India.	Member
7.	Secretary, Atomic Energy, Government of India	Member
8.	Secretary, Deptt. of Information Technology, GOI	Member
9.	Secretary, Deptt. Of Space, Govt. of India.	Member
10.	Special Secretary/Addl. Secretary/ Educational Adviser(T), Department of Secondary & Higher Education, Ministry	Member
11.	Chairman, University Grants Commission	Member
12.	Chairman, All India Council of Technical Education	Member
13-14	Two Chairmen, Board of Governors of National Institute of Technology (by rotation)	Members
15-18	4 Directors of the National Institutes of technology (by rotation)	Members
19.	One Director of Indian Institute of Technology (by rotation)	Member
20.	One Director of Indian Institute of Management (by rotation)	Member
21-22	Two Secretaries of Higher/Technical Education from states where NITs are located (by rotation)	Members
23-24	Two persons from Industry nominated by the Central Government	Members
25.	Financial Adviser, MHRD, GOI	Member
26.	Joint Secretary,(Technical Education) Joint Educational Adviser (Technical Education),MHRD,GOI	Member-Secretary

## **6.2 BOARD OF GOVERNORS**

The Board of Governors consists of the following persons, namely:-

- (a) the Chairperson, nominated by the Visitor;
- (b) the Director, ex officio;
- (c) two persons not below the rank of the Joint Secretary to the Government of India to be nominated by the Central Government from amongst persons dealing with technical education and finance;
- (d) two persons to be nominated by the Government of the State in which the Institute is situated, from amongst persons, who, in the opinion of that Government, are technologists or industrialists of repute;
- (e) two persons, at least one of whom shall be a woman, having special knowledge or practical experience in respect of education, engineering or science to be nominated by the Council;
- (f) one Professor and one Assistant Professor or a lecturer of the Institute to be nominated by the Senate.
- (g) the Registrar, Secretary.

## **6.3 FINANCE COMMITTEE**

The Finance Committee consists of following persons, namely:-

- (a) the Chairperson, ex officio, who is the Chairman of the Committee;
- (b) two persons nominated by the Central Government;
- (c) two persons nominated by the Board; and
- (d) the Director, Ex-officio.
- (e) the Registrar, ex-officio Member Secretary.
- (f) the nominee of the Govt. of Haryana.

## **6.4 BUILDING AND WORKS COMMITTEE**

The Building and Works Committee consists of the following persons, namely:-

- (a) the Director, ex-officio, who is the Chairman of the Committee;
- (b) one person nominated by the Central Government not below the rank of Director or Deputy Secretary;
- (c) one person nominated by the Board from amongst its members;
- (d) the Registrar, ex-officio Member Secretary
- (e) Dean, Planning & Development.

- (f) One expert each from Civil, Electrical Engineering Wing of the Central or State Government or any autonomous body of the repute.

## **6.5 OTHER COMMITTEES**

### **SENATE**

The Senate consists of the following persons, namely:-

- (a) the Director, ex-officio, who is the Chairman of the Senate.
- (b) the Deputy Director, ex officio.
- (c) the Professors appointed or recognized as such by the Institute for the purpose of imparting instructions in the Institute.
- (d) three persons, one of whom shall be a woman, not being employees of the Institute, to be nominated by the Chairperson in consultation with the Director, from amongst educationists of repute, one each from the field of science, engineering and humanities.
- (e) such other members of the staff as may be laid down in the Statutes.
- (f) the Registrar, Secretary.



## **7.0 CONCESSIONS FOR SCs, STs, OBCs AND HANDICAPPED STUDENTS**

### **7.1 CONCESSIONS PROVIDED FOR STUDENTS**

15% seats for SC category, 7½% seats for ST category and 27% seats for OBC category are reserved for admission to the Under-graduate and Post-graduate courses. Moreover, 3% seats are reserved for Physically Handicapped students for admission to Under-graduate courses. These students can receive extra books from library as compared to General Category students. Concessional admission brochures are provided to SC/ST candidates for appearing in AIEEE examination conducted by CBSE. The Government also provides scholarships to SC/ST students.

### **7.2 CONCESSIONS PROVIDED FOR STAFF**

#### **TEACHING STAFF**

15% reservation for SC category, 7½ reservation for ST category, 27% seats for OBC category and 3% reservation for physically handicapped candidates is provided at Assistant Professor level teaching posts as per reservation policy of Central Govt. However, there is no reservation for SC/ST/PH in teaching posts at Professors and Associate Professors levels.

#### **NON-TEACHING STAFF**

15% reservation for SC category, 7½ reservations for ST category, 27% seats for OBC category and 3% reservation for physically handicapped candidates is provided to all non-teaching posts as per reservation policy of Central Govt. The promotion and direct recruitment is being made according to the Post-Based-Roster Point.

## **8.0 FINANCIAL STATUS**

### **8.1 ANALYSIS OF PLAN AND NON-PLAN GRANTS**

Since inception of Institute, Government of India has been providing Plan Grant for development of Institute. Plan Grant is mainly released for construction of residences in the campus, hostel buildings construction/renovation of instructional building and other buildings, purchase of new equipments as well as for purchase of furniture for the Institute as well as hostels. On a perusal of the grant released by the Government of India for the last 10 years, Plan Grant to the tune of Rs. 493.20 lacs for 2003-04, Rs. 322.50 lacs for 2004-05, Rs. 300.00 lacs for 2005-06, Rs. 900.00 lacs for 2006-07, Rs. 2315.00 lacs for 2007-08, Rs. 2756.00 lacs for 2008-09, Rs. 3944.00 lacs for 2009-10, Rs. 2200.00 lacs for 2010-11, Rs. 4100.00 lacs for the year 2011-12 and Rs. 3300.00 lacs for the year 2012-13 are released.

### **8.2 SOURCES OF FUNDS**

As per establishment of REC now known as NIT, Kurukshetra, the entire Non-plan expenditure on Undergraduate Courses was borne by Central and State Government on 50:50 basis. This practice remained intact upto 31.3.2003. Consequent upon conversion of REC to NIT, Government of India has taken over full administrative and financial control and the Central Government started bearing the expenditure on Undergraduate Courses on 100% basis. However, since the inception of the Institute, the expenditure on PG Courses is borne by the Central Government.

During year 2004-2005, Government of India has released a sum of Rs. 750.00 lacs and Rs. 1200.00 lacs for 2005-06, Rs. 987.50 for 2006-07, Rs. 1200.00 lacs for 2007-08, Rs. 525.50 lacs for 2008-09, Rs. 2204.87 lacs for 2009-10, Rs. 1600.00 lacs for 2010-11, Rs. 2600.00 lacs for the year 2011-12 and Rs. 3800.00 lacs for the year 2012-13.

### **8.3 EXPENDITURE POSITION FOR LAST THREE YEARS**

The position of expenditure from the year 2010-11 to 2012-13 is as under:-

Items	2010-11 (Actual) (Rs. in Lacs)	2011-12 (Actual) (Rs. In Lacs)	2012-13 (Actual) (Rs. In Lacs)
Total Faculty Salary Bill	970.20	1365.25	1615.31
Arrears of salary paid	-	-	-
Non-faculty Salary Bill	672.01	674.69	733.96
Arrears of salary paid	-	-	-

Total Wage Bill of Daily wagers/Ad-hoc employees & those on individual contract	-	-	57.96
Payment made to Agencies for work being done on contract basis.	-	-	-
Total Pension Bill	-	-	20.03
TA/DA Bill	13.22	11.99	2.64
Employer's net contribution to CPF	222.35	150.87	104.07
Payment of Gratuity	144.80	91.21	121.25
Printing Publications	4.60	5.83	6.47
Scholarships/Fellowships	246.62	307.21	455.40
Other Administrative Expenses	358.22	677.90	289.82
Outstanding payment, if any	-	-	-
Electricity Charges	76.28	79.61	149.13
Maintenance of Campus/Computers	54.51	19.70	74.31
Taxes paid, if any	-	58.82	74.10
Any other expenditure	90.14	167.46	214.41
Library Expenses	1.10	1.10	72.37
<b>Gross Exp.</b>	<b>2854.05</b>	<b>3611.64</b>	<b>3991.23</b>



## **9.0 CENTRAL FACILITIES AND SERVICES**

### **9.1 COMPUTER SERVICES CENTRE**

#### **ORGANIZATION**

Center of Computing and Networking (CCN) was started in 1997 as a project funded by MHRD. It is central computing facility for whole Institute connecting all buildings, departments and hostels through Local Area Network. CCN aims to integrate networking and computing facility for service to students, scholars, faculty and community, with an effort to automate Institute Offices and Sections. CCN maintains existing Institute and Hostel Networking with more than 4000 nodes. It maintains Institute's Mail Server and Website along with state-of-the art Wireless Network. CCN is in the process of extending facilities to upcoming hostels and new administrative block.

#### **ADMINISTRATIVE AND TECHNICAL STAFF**

Prof. Brahmjit Singh  
Er. Jagan Nath

Professor-In-Charge  
Technical Officer

#### **TIMING OF THE CENTRE**

It is open to students, faculty and staff members of the Institute and operates round the clock (24x7) throughout the year except on National Holidays.

#### **NETWORKING FACILITIES**

- 1 GBPS NKN leased line
- 155 Mbps leased line on OFC.
- Structured Networking (Including Core, Distribution and Access Switch, LX Modules and Passive Components) 4000 nodes.
- Wi-Fi Networking (84 Access Points) 2500 (Concurrent users)

#### **COMPUTING FACILITIES: HARDWARE RESOURCES**

Desktop Computer Core i7	-	67
Computer Systems (Core 2 Duo, AMD, P-IV)	-	90
Desktop Computer Core i3	-	02
Servers	-	16
Laser Printers	-	03

Color Laser Printer	-	01
Photocopier	-	03
LCD Projectors	-	01
Scanners	-	02

## **SOFTWARE PACKAGES**

### **1. MatLab 8 with Modules**

- Optimization Toolbox 3.0
- Partial Different Equation Toolbox 1.0.5
- Statistics Toolbox 5.0
- Curve Fitting Toolbox 1.1.1
- Fuzzy Logic Toolbox 2.0.1
- Signal Processing Toolbox 6.2
- Wavelet Toolbox 3.0
- Filter Design Toolbox 3.0
- Genetic Algorithm
- Neural Network Toolbox 4.0.3
- Control System Toolbox 6.0
- Robust Control Toolbox 2.0.1
- Communications Toolbox 3.0
- Image Processing Toolbox 4.2
- Sim Power System 3.1
- Communications Blockset 3.0
- CDMA Reference Blockset 1.1
- Signal Processing Blockset 6.0

### **2. Mathematica 5.1 with Modules**

- Control System Professional Suite
- Digital Image Processing
- Dynamic Visualizer
- Experimental Data Analyst
- Fuzzy Logic
- Global Optimization 4.0
- Neural Networks
- Operations Research 3.0
- Wavelet Explorer
- Advanced Numerical Methods
- Signals and Systems
- Structural Mechanics
- Mechanical Systems
- Industrial Optimization

- Parallel Computing Tool Kit

### **3. OPERATING SYSTEMS**

- Windows 98, win 2000, win XP, win 7, win Vista, Linux

### **4. WORD PROCESSING PACKAGES**

- Office 2000, Professional Office 2003, Office XP.

#### **Power Back Up**

UPS for 1 hour back up	
20 KVA UPS	01
10 KVA UPS	03
6 KVA UPS	02
5 KVA UPS	02
Generator Set 63 KVA	01

## **9.2 WORKSHOP**

The central Workshop comprises of the following fully equipped shops:-

- Machine Shop
- Fitting Shop
- Electrical Shop
- Welding Shop
- Pattern Making Shop
- Foundry Shop
- Production Technology Lab.
- Advance Manufacturing System Lab.

The Central Workshop imparts training to all First & Second semester students and Third and Fourth semester students of Mechanical Engineering as well as Industrial Engineering & Management Disciplines. Third year students are given projects involving work in the shops and the Fourth year students undergo specialized training in manufacturing processes. The Final year and Postgraduate students in the discipline utilize the facilities of Workshop in connection with their project and dissertations. Facilities exist for manufacture of components, parts and repair jobs.

## **9.3 LIBRARY**

Institute has a very spacious Library with good collection of documents. It includes text and reference books, videocassettes, CD-ROMs and large number of Print & On-Line Journals. The Library has reading facilities for 500 readers at



a time and sufficient space for stacking of documents, Digital Library and Audio-Visual Centre. The total area of library is 36711 square feet.

## STOCK

<b>Stock Books</b>	<b>As on 31.3.2012</b>	<b>Added during 1.4.2012 to 31.03.2013</b>	<b>Total as on 31.3.2013</b>
Library	50893	1017	51910
Book Bank	89576	2278	91854
<b>Total</b>	<b>140469</b>	<b>3295</b>	<b>143764</b>
<b>Other Documents</b>			
Back Sets	7096	01	7097
Standard	9979	118	10097
CDs/Video Cassettes	1284	-	1284
e-Books	6987	820	7807
Thesis	1987	1328	3315
<b>Grand Total</b>	<b>167802</b>	<b>5562</b>	<b>173364</b>

## CURRENT JOURNALS

**Online journals**

**4500+**

**Print journals**

**120**

Number of journals subscribed

International	:	13
National	:	95
Gratis	:	10
Total	:	<u>118</u>

## EXPENDITURE (2012-2013)

Books	Rs. 14,45,865-00
Journals, e-resources and Newspaper & Magazine	Rs. 84,87,433-00
Computer Peripherals & Furniture	Rs. 22,29,967-00
Library Supply	Rs. 28,816-00
Library Binding	Rs. 39,386-00
Maintenance of Computer	Rs. 42,291-00
Material and Service Charges for Electro Copier	Rs. 37,156-00

## INDEST Consortium-Digital Library

The NITK Library is a core member of Indian National Digital Library in Engineering Science and Technology (INDEST) Consortium set up by MHRD. Approximately 4500+ e-resources are subscribed/provided through the Consortium. To access online resources in the institute premises, the library is providing services through internally maintained web server. All these resources/e-journals can be accessed through library intranet site <http://172.16.0.52>. The site provides the direct links to the following Electronic Resources:

Sr. No.	Electronic Resources	URL
<b>Subscribed through INDEST Consortium</b>		
1.	ACM	<a href="http://portal.acm.org/dl.cfm/">http://portal.acm.org/dl.cfm/</a>
2.	ASCE	<a href="http://www.pubs.asce.org/journals/jrns.html">www.pubs.asce.org/journals/jrns.html</a>
3.	ASME	<a href="http://www.asme.org/pubs/journals/">www.asme.org/pubs/journals/</a>
4.	Springer	<a href="http://www.link.springer.de/">www.link.springer.de/</a>
5.	IEL/IEEE	<a href="http://www.ieeexplore.ieee.org/">www.ieeexplore.ieee.org/</a>
6.	Nature	<a href="http://www.nature.com/">http://www.nature.com/</a>
7.	Indian Standards	Intranet Version
8.	Annual Reviews	<a href="http://www.annualreviews.org/">http://www.annualreviews.org/</a>
9.	JSTOR	<a href="http://www.jstor.org/">http://www.jstor.org/</a>
<b>Directly subscribed by the Institute</b>		
10.	Science Direct (Five package)	<a href="http://www.sciencedirect.com/">www.sciencedirect.com/</a>
11.	ASTM Journals + Standards	<a href="http://journalsip.astm.org/">http://journalsip.astm.org/</a>
12.	Springer Back Files (Engg.&Comp.Science)	<a href="http://www.link.springer.de/">www.link.springer.de/</a>
13.	Science Direct Back Files (Engg.&Comp.Science)	<a href="http://www.sciencedirect.com/">www.sciencedirect.com/</a>
14.	LNCS	<a href="http://www.link.springer.de/">www.link.springer.de/</a>
15.	Taylor & Francis	<a href="http://journalsonline.tandf.co.uk/">http://journalsonline.tandf.co.uk/</a>
16.	Emerald	<a href="http://www.emeraldinsight.com/info/products_services/AtoZList.jsp">http://www.emeraldinsight.com/info/products_services/AtoZList.jsp</a>
17.	CUP: Science & Technology	<a href="http://journals.cambridge.org/">http://journals.cambridge.org/</a>
18.	OUP: Physical Sciences	<a href="http://oxfordjournals.org">http://oxfordjournals.org</a>
19.	IBID	<a href="http://www.ibid.informindia.co.in">http://www.ibid.informindia.co.in</a>
20.	J-Gate	<a href="http://jgateplus.com">http://jgateplus.com</a>

21.	BS in Civil Engg.	Intranet Version
22.	Wiley (2008 only)	<a href="http://onlinelibrary.wiley.com/journal">http://onlinelibrary.wiley.com/journal</a>

Users can also visit the site directly for search of Journals, Proceedings of Conferences, Standards, articles etc. covered under respective Electronic Resources.

### **LIBRARY AUTOMATION & DATABASE FOR LIBRARY:**

Library is providing automated services in all sections of the Library using LIBSYS Software. Database of the Library is updated regularly and Readers can search the documents and access the database in the Institute through Web-OPAC (Online Public Access Catalogue), available through Library intranet Site <http://172.16.0.52>

All the books are bar-coded and members are also given bar-coded membership card for smooth circulation of documents in the Library.

### **SELF LEARNING RESOURCES/NPTEL**

The Library has procured NPTEL web & video courses, educational video cassettes/ CDs/ Floppies prepared by IITs and other agencies for self-learning covering various areas of knowledge. A separate Audio-Visual Centre has been set up to promote the use of such non-book material.

The Library has a CD/DVD/NAS Server with 4TB (4000 MB) capacity and 40 computers. The server is capable to catch 1500-2000 CD/DVDs at a time. All the CDs received with books and magazines are loaded on the server. The Information loaded on the server can be accessed by students, faculty members and other readers through network.

### **UTILIZATION (USE OF LIBRARY)**

Number of books issued during 2012-2013	:	191173
Number of visitors during 2012-2013	:	468720
Total No. of Membership during 2012-2013	:	5865

### **BOOK BANK**

The Institute has a strong Book Bank collection, which caters to the needs of all the students for all the semesters including MBA & MCA. SC/ST students are given priority for issue of books. They are given 8 books for a semester without any charges. General category students are given 5 books for a semester without any fee and they can get five additional books against payment of Rs. 30/- per Book for a full semester.

The facility of Book-Bank is also extended to M.Tech. students. They can get the books issued for full semester against payment of Rs. 30/- per book.



## **REPROGRAPHIC SERVICES**

A contractor is appointed to provide the Reprographic Services to the readers. Reproduction from books, periodicals & other materials is provided @50 paisa per copy.

## **BINDING**

The Library has its own bindery. It is equipped with cutting, stitching, spiral binding and Lamination machines. During the period under report, it bound and repaired 5836 Books, Institute reports and other binding works of the departments.

## **9.4 LABORATORIES**

### **CIVIL ENGINEERING DEPARTMENT**

- Soil Mechanics
- Foundation Engineering
- Rock Mechanics
- Structural Engineering
- Concrete Technology
- Fluid Mechanics
- Irrigation Engineering
- Surveying
- Highway Engineering
- Public Health Engineering
- Geology
- Departmental Computer Centre

### **COMPUTER ENGINEERING DEPARTMENT**

- Application & System Software Lab.
- Computer Networks Lab.
- Software Engineering & Web Engineering Lab.
- Computer Hardware & Trouble Shooting Lab.
- Thin Client Lab.
- Mobile Computing Lab.
- Wireless & Sensor Network Lab.
- Project Lab.

## **ELECTRICAL ENGINEERING DEPARTMENT**

- Machines and Drives Lab.
- Power Systems Lab.
- Basic Electrical Engg. & Measurements Lab.
- High Voltage Engg. Lab.
- Control Systems & Reliability Engg. Lab.
- Power Electronics Lab.
- Computer Systems Lab.
- Microprocessor Lab.
- Instrumentation Lab.
- Signal and DSP Lab.
- Analog & Digital Electronics Lab.
- CAD Lab.
- Electrical Workshop

## **ELECTRONICS & COMMUNICATION ENGINEERING DEPARTMENT**

- Computer Centre
- Basic Electronics Laboratory
- Advanced Electronics Laboratory
- VLSI Design (PG) Laboratory
- VLSI Design (UG) Laboratory
- DSP Laboratory
- Computing and Simulation Laboratory
- Communication Laboratory
- Microwave Laboratory
- Wireless Communication (PG) Lab.
- Microprocessor Laboratory
- Internet Application Laboratory
- Audio-Visual Laboratory

## **MECHANICAL ENGINEERING DEPARTMENT**

- Applied Mechanics Lab.
- Strength of Materials Lab
- Dynamics of Machines Laboratory
- Vibration Lab.
- IC Engine Lab.
- Boilers & Steam Engine Lab.
- Refrigeration & Air Conditioning Lab.
- Energy Engineering Lab.
- Computer and Automation Centre
- Mechanical Measurements Lab.

- Heat Transfer Lab.
- Industrial Engineering Lab.
- Machine Tool Technology Lab.
- Metreology Lab.
- Advanced Welding Lab.
- CAD/CAM Lab.
- Hydraulic Machines Lab.
- Machine Vision Lab.
- Mechatronics Lab.
- Advance Manufacturing Technology Lab.
- Computational Fluid Dynamics Lab.
- Tribology Lab.
- Stress Analysis Lab.
- Design and Manufacturing Integration Lab.

### **PHYSICS DEPARTMENT**

- Undergraduate laboratory for experiments in Heat, Light, Sound, electricity and magnetism, Atomic Physics and Solid State Physics
- Postgraduate laboratory in Instrumentation
- Postgraduate Laboratory in Nanotechnology
- Research laboratory
- Highly sophisticated Instrumentation Lab (AFM, SEM, XRD, XRF)

### **CHEMISTRY DEPARTMENT**

- Undergraduate Laboratory for qualitative and quantitative analyses of the sample salts, quantitative etc.
- Inorganic and Organic Research Lab.
- Spectral Lab for light scattering, Polarography, IR Spectra, FTIR, Spectrophotometer Experiments and Research Work

### **HUMANITIES AND SOCIAL SCIENCES DEPARTMENT**

- Computer Lab.
- Language Lab.

## **9.5 HOSPITAL, BANK, POST OFFICE, SHOPPING CENTRE**

### **HOSPITAL**

Institute has a Health Centre and all students are provided medical aid at this center within the available resources. The Health Centre has a Senior



Medical Officer (SMO), a Dental Surgeon (Part-time) and supporting staff. Health Centre is equipped with X-ray machine, E.C.G. machine, dental facilities and good laboratory for routine tests. Serious medical cases are sent to the LNJP (Civil) Hospital in Kurukshetra.

Whenever a student falls ill, he/she reports and seeks advice/medical aid from SMO without delay. Students are advised not to seek treatment from unauthorized medical practitioners.

Students are advised to approach LNJP (Govt. Civil Hospital) in case of Emergency. They are advised to bring Mosquito Net and the Mosquito repellent to prevent themselves from malaria fever. Further, they are advised to maintain cleanliness and proper hygienic atmosphere in their surroundings.

### **BANK AND POST OFFICE**

To facilitate all financial transactions, a fully computerized branch of the State Bank of India functions in the Institute premises.

For the convenience of the students a Post-Office is operating in shopping complex. It provides Saving Bank facility plus provisions for Money Orders, Postal Orders, Postage, etc.

### **SHOPPING CENTRE**

The Institute has a Shopping Centre equipped with all the basic commodities of the human beings for the residents of the Campus as well as for the hostel students.

## **9.6 PHYSICAL FACILITIES**

Gymnasium Centre has been provided for health upkeep of students and staff members. It is fitted with the latest and state of the art equipments for different physical exercises.

## **9.7 GAMES & SPORTS FACILITIES**

Extensive and well laid out fields for sports and games are available on the campus for the students. Badminton courts, Tennis courts with Chain Link Iron mesh around the courts, Cricket Pitch, Volleyball courts with Light and with Chain Link Iron mesh encloser and basketball and a stadium facilities are available to the students. Trained sports personnel help the students to develop their interest in games and coach them to acceptable standards.

## **9.8 OTHER FACILITIES LIKE HOSTELS, MESSES, STAFF QUARTERS, ADMINISTRATION ETC.**

### **a) MANAGEMENT OF HOSTELS**

The Institute has 10 boys' and 3 girls' hostels. Three boys hostels for B.Tech. students with a capacity of 250 each are three seaters and two boys' hostels for B.Tech. students with a capacity of 250 each are single seaters, two boys' hostels for B.Tech. students with a capacity of 350 seats each, two boys' hostels for P.G. students/research scholars with a capacity of 150 seats and 350 seats are single seaters. Recently, the Institute has constructed one Mega boys' hostel with a capacity of 1000 seats to cope up the increased strength of B.Tech. and M.Tech. students. Three Girls' hostels are with capacity of 120 seats, 200 seats & 300 seats. There are single, double and triple seated rooms in these hostels.

### **MESSES**

In each hostel, Mess is run on co-operative basis with the assistance of the students in the form of a Mess Committee under the overall supervision of an MMCA, Clerks & Wardens. Membership of the mess is compulsory for all students residing in the hostel. Meals are served in the dining hall only during the hours fixed by the Warden. In no case should the students ask the mess staff to serve meals outside the dining hall. The students need to come in proper dress in the dining hall. The students are supposed not to disturb the seating arrangements in the dining hall. Manhandling or abusing the mess staff under any circumstances is considered a gross breach of discipline inviting strict disciplinary action. Mess utensils etc. are not permitted to be taken out of the dining hall by the students. Rebates from the mess for not taking food are governed by the Rebate Rules which are revised from time to time.

### **b) STAFF QUARTERS**

Category	Type of House	No. of Houses
A	Director's	01
B	BA-Type	06
	BB-Type	16
	BC-Type	06
C	CA-Type	13
	CB-Type	09
	AD-Type (AD-1,2,3,4)	04
	CC-Type	12
	AD-Type (AD-5,6)	02
	DA-Type	15
D	DB-Type	68
	Teacher's Flats (now Faculty House)	24
E	E-Type	24

F	F-Type	78
G	G-Type	92

### **ALLOTMENT**

The quarters are allotted to the employees on the basis of seniority. Two committees (Teaching and Non-Teaching) have been constituted for the allotment of House as per the availability of the quarters on the request of employees.

### **c) CONFERENCE FACILITY**

NITK has a state-of-the-art Senate Hall. It is an aesthetically designed and conveniently located conference facility. It is constructed on a raft foundation and RCC frame structure, incorporating earthquake resistant features. The unique architecture of the building depicts a combination of round and linear structure with a polycarbonate dome on the top. The Senate Hall makes the Institute well-equipped to hold conferences, seminars, workshops etc. All Lectures given by the Guest Faculty and Corporate Managers are arranged here. The Training & Placement Cell is also housed on the first floor.

### **d) STUDENT ACTIVITY CENTRE**

Student Activity Centre provides facilities and the right environment to develop extra curricular skills among the students in addition to the academic knowledge rendered by the Institute. SAC has all the resources to help the students, pursue interests in various cultural activities. The following clubs are functioning under the SAC:

1. Music & Dance
2. Dramatics
3. Fine arts
4. Modeling
5. Literary & Debating
6. Photography
7. AVA
8. SPIC-MACAY
9. Hiking & Trekking

Inter hostels and inter Institute competitions are organized to inculcate the spirit of healthy competitions. In addition to this, National level cultural festival is organized every year. Students are also encouraged to compete in cultural activities with other technical Institutes. A talent show is organized ever year to identify talent lying hidden among the first year students.



All these activities are organized by a committee of Secretaries of the Club and Faculty Incharge of various clubs under the overall guidance and supervision of President (Clubs).

**e) NATIONAL CADET CORPS**

National Cadet Corps is a vibrant youth organization which has made a commendable contribution in producing responsible and patriotic citizens of India. From a small beginning, today it has grown to the largest youth movement motivating and training the upcoming generations to render their meaningful contribution towards national integration and development.

The Institute has NCC Army Wing unit which has a sanctioned strength of 54 cadets. Enrolment to NCC is voluntary and is done on "First Come First Served" basis. NCC credo-unity and discipline is truly symbolic of the organization and NCC cadets of the Institute, dedicated to this motto, participate in the various activities of NCC which are Basic Training, Adventurous Activities, Social Service Activities, NCC Camps etc.

**f) NATIONAL SERVICE SCHEME**

NSS was started in the Institute with the overall objective of motivating students to do service to the community while going through their studies. The primary aim of the scheme is to enable the students to upgrade their personality through community service. Its end is the improvement in personality while service to the community is a means through which it is achieved. In the scheme, students get opportunity to work with the people around the educational campus creatively and constructively. Its also imbibes the dignity of labour in them. An Advisory Body comprising of teachers and students manages the affairs of two units of NSS. The agenda of activities other than routine activities is proposed and co-organized by the Kurukshetra University, Kurukshetra.

**g) INSTITUTE MAGAZINE**

The students bring out an annual Magazine, "THE HELIOS", in which technical and literary articles contributed by students are published in both English and Hindi. The Editorial Board also organizes various competitive activities like creative writing, cartooning, photography etc. so as to nurture creative talents among students of Institute.

**h) NITK ALUMNI ASSOCIATION**

There is an Alumni Association to which all those who have passed an approved course of study from this Institute and members of teaching staff who have three years stay in the Institute are eligible to become members on payment of subscription.

The Association strives to develop and promote a feeling of fraternity amongst the old students, the present students and members of the teaching staff of the Institute.

It maintains a record of all its members and keeps them informed of the activities and progress of this Institute through a newsletter and arranging get-togethers from time to time.

The Alumni Association also awards a scholarship of the value of Rs. 2400/- per annum to deserving candidates.

## **10.0 NOTABLE ACHIEVEMENTS**

### **10.1 PAST ACHIEVEMENTS**

1. Students placement was almost 100% for the academic year 2000-2001. Students are preferred by most of the private/Govt. companies because of their excellent technical and personnel skills.
2. Institute was awarded International Standard Organization (ISO) 9002 Certificate in February, 2001. This certificate was awarded by the Govt. of India, Ministry of Information Technology, for the departments of Electronics & Communication as well as Computer Engineering.
3. Indian Society for Technical Education awarded a certificate of achievements i.e. Best Students Chapter to the College for the year 2000 amongst the Student Chapters in Rajasthan and Haryana Section.
4. Institute was conferred the status of Deemed University by the Government of India w.e.f. 26.6.2002. Consequent upon upgradation of REC Kurukshetra to National Institute of Technology, Kurukshetra with Deemed University status w.e.f. 26.6.2002, Institute became independent in every respect relating to academic work such as exams, evaluation of answer-sheets, declaration of results and other allied matters.
5. Technical Education Quality Improvement Programme (TEQIP), funded by World Bank, aims to upscale the on-going initiatives of GOI to enhance efficiency and dynamism in technical education. It was launched by MHRD as a Rs. 1550 crore programme during 10<sup>th</sup> Plan. Haryana is one of the six states which was selected to participate in the first cycle of the first phase of the programme, based on their commitment and preparedness for the project. The agreements were signed in February 2003 between GOI, the six participating states and World Bank.
6. Central Government has taken over full administrative and financial control of this Institute w.e.f. 14.5.2003. The plan and non-plan expenditure of



the Institute are being borne entirely by the Central Government from the financial year 2003-04 onwards.

7. National Board of Accreditation (NBA) has accredited our four Undergraduate Degree Level Programmes in Engineering and Technology such as Electronics & Communication Engineering, Mechanical Engineering, Electrical Engineering and Civil Engineering for five years w.e.f. 19.3.2004 on the basis of current standard maintained by Institute for the Academic Excellence.

8. Institute has signed Memorandum of Understanding with the Govt. of India, Department of Secondary & Higher Education, Ministry of Human Resource Development, New Delhi on 1.12.2003 for the years 2003-08, consenting on the commitments and targets formulated by the Ministry for the said period.

9. As per directions of the MHRD and the initiative of the Director, a 20-year roadmap for the Institute was prepared. A committee was constituted to set the goals and draw up the roadmap. It was felt that Institute needs to be prepared to face the challenges of the future. Rapid advances in the field of engineering and technology necessitated commencement of new courses in emerging areas and initiatives to facilitate enhanced research. This, in turn, called for upgradation of facilities and strengthening of faculty and staff.

10. Institute entered into an agreement of cooperation with Tata Consultancy Services Ltd. for providing Software Engineering Training to the selected students of TCS, without any financial liability on the part of the Institute. The classes for the said training were held after Institute working hours/week-ends. However, TCS made some payments to the Institute, faculty and the students towards providing training to the selected students of TCS. The relationship is committed for 3 consecutive academic years starting from Academic year 2005-06. The agreement can be renewed after three years, based on mutual agreement.

11. Senate of Institute in its 5<sup>th</sup> meeting held on 14.1.2006 decided to change the name of Department of Humanities to Department of Humanities and Social Sciences. The decision of the Senate was ratified by Board of Governors in its 9<sup>th</sup> meeting held on 25.2.2006. In view of this decision, name of Department of Humanities is hereby changed to Department of Humanities and Social sciences.

12. Institute, since its inception, received electricity supply from State Electricity Board (UHBVN) through L.T. connections. With expansion in infrastructure, electric load of Institute increased manifold and UHBVN refused to release further LT connections. UHBVN was ready to provide bulk electricity supply through HT connections. For this purpose, Institute took initiation for the installation of HT/LT sub station in the Institute. Board of Governors in its



6<sup>th</sup> meeting has approved the installation of HT/LT sub station in the Institute to fulfil the increasing Electricity needs of the Institute. The Govt. of India also released Rs. 100.00 lacs to initiate the work.

13. In order to automate/computerize the activities of various sections/branches/departments of Institute as an integrated system (Decision Support System), Institute has entered into an agreement with Master's Software, Nagpur. A committee has also been constituted to check all the activities of the DSS and observe the lacuna in the proper coordination of the system. The said company is providing training and knowledge to the staff of the Institute with regard to the automation system.

14. A special initiation has been taken by the Institute for the development of research activities in the Institute to boost the status of the Institute equivalent to IIT.

15. As per directions of HRD Ministry, Institute has started its Website in the Institute. In order to strengthen the Institute Website and to make it more user friendly, informative and presentable, a committee has also been constituted for the website development, information uploading, maintaining, proper vetting and scrutiny.

16. Institute was actively engaged in providing the consultancy services to various Govts., Semi-Govts. and Private organizations. During the period from 1.4.07 to 31.3.08, one thousand five hundred ninety one (1591) consultancy jobs were finalized by the Institute and earned around Rs. 156.39 lacs as consultancy fees.

17. The first year of the 20-year Road Map- 2006 was a bold initiative by way of increased intake and new courses. The Ministry of Human Resources Development approved the following new courses for PG and UG Programme with an intake mentioned against each from the session 2006-07 in addition to enhancing the existing intake of some courses:-

#### **UNDERGRADUATE COURSES - B.TECH. DEGREE COURSES**

Courses of study were offered in the following disciplines:

<u>Discipline</u>	<u>No. of seats</u>
Civil Engineering	139
Electrical Engineering	139
Mechanical Engineering	139
Electronics & Communication Engineering	139
Computer Engineering	92
Industrial Engg. & Management	92
Information Technology	92
<b>Total</b>	<b>832</b>

Note: Dasa/NRI students can be admitted upto 15% over and above of the sanction strength of B.Tech. (i.e. 15% of 832)

## POSTGRADUATE COURSES - M.TECH. DEGREE COURSES

### Existing Courses

Discipline	No. of seats						Specialization
	Open	SC	ST	OBC	PD	Total	
Civil Engineering	08	03	01	04	-	16	Structural Engineering
	08	03	01	04	01	17	Transportation Engg.
	09	02	01	05	01	18	Environmental Engg.
	08	03	01	04	-	16	Soil Mechanics & Foundation Engg.
	08	03	01	04	01	17	Water Resources Engg.
Electrical Engineering	08	03	01	04	-	16	Control System
	08	03	01	04	-	16	Power System
	08	03	01	04	-	16	Power Electronics & Drives
Electronics & Comm. Engg.	10	03	02	05	-	20	Electronics & Comm. Engg.
	09	02	02	06	01	20	VLSI Design
Physics	10	03	02	05	-	20	Instrumentation
	09	02	02	06	01	20	Nano Technology
Mechanical Engg.	08	03	01	04	-	16	Industrial And Production Engg.
	08	03	01	04	01	17	Machine Design
	09	02	02	05	01	19	Thermal Engg.
Computer Engg.	10	02	01	06	01	20	Computer Engg.

The duration of each course is four semesters for regular students and five semesters for part-time students.

The Institute made admissions directly in the academic session 2012-13 on (i) sponsored seats and (ii) seats available under TEQIP-II project. In addition direct admissions were also made for two new M.Tech. programmes. The number of seats available in each category for admission through this mode are given below:

(i) Sponsored and TEQIP-II seats:

Discipline	No. of seats TEQIP-II						Specialization
	Open	SC	ST	OBC	Sponsored	Total	
Civil Engineering	01	01	-	01	05	08	Structural Engineering
	01	01	-	-	05	07	Transportation Engg.
	-	-	-	01	05	06	Environmental Engg.
	01	-	-	01	05	07	Soil Mechanics & Foundation Engg.
	01	-	-	-	05	06	Water Resources Engg.
Electrical Engineering	02	01	-	01	05	09	Control System
	02	-	01	01	05	09	Power System
	02	01	-	01	05	09	Power Electronics & Drives
Electronics & Comm. Engg.	02	01	-	01	05	09	Electronics & Comm. Engg.
	06	01	02	03	05	17	VLSI Design
Physics	-	-	-	-	05	05	Instrumentation
	-	-	-	-	05	05	Nano Technology
Mechanical Engg.	02	01	-	01	05	09	Industrial And Production Engg.
	02	01	-	01	05	09	Machine Design
	02	-	01	01	05	09	Thermal Engg.
Computer Engg.	03	01	-	01	05	10	Computer Engg.
School of VLSI Design & Embedded System	-	-	-	-	05	05	Embedded System Design
School of Renewable Energy & Efficiency	-	-	-	-	05	05	Renewable Energy Systems



(ii) New M.Tech. Programmes:

Deptt./School	No. of seats						Programme
	Open	SC	ST	OBC	PD	Total	
School of VLSI Design & Embedded System	09	03	02	05	01	20	Embedded System Design
School of Renewable Energy & Efficiency	09	03	02	05	01	20	Renewable Energy Systems

18. Responding to an increasing demand for Management Graduates in the country and keeping in line with its stated goal of regularly adding new courses, a self sustaining 2 years Course - Master of Business Administration (MBA) was introduced in the Institute from the session 2006-07 with an intake of 60 students (presently 90 seats).

19. Institute has signed an MOU with Hewlett Packard India Software Operation Private Limited (HPISO). Accordingly, the Institute will involve its Computer & Electronics Engineering students in industry-oriented live project, thereby benefiting students, faculty and industry. This understanding came into effect in May 2006.

20. An MOU was signed between NITK, Institute for Sustainable Development and Research (ISDR), Mumbai and Muktainagar Taluka Education Society (MTES), Muktainagar, Maharashtra, to actively support sustainable development, through R&D programs, at the national, regional and local levels. The MOU also envisages developing joint socio-economic development programs. Natural Disaster Management and Rehabilitation programs and ensuring appropriate co-operation and support for Government/NGO organized and assisted programs.

21. Institute organized a two-day workshop on Industry Institute Interaction (NWIII-2007) on February 19-20, 2007 at Hotel Shiwalikview Chandigarh, which was largely attended by the leading Industry and the academia. During the deliberations of the workshop, it was agreed upon to enter for a Memorandum of Understanding between NIT Kurukshetra and Altair Engineering India regarding setting up of a center of excellence in the field of Computer Aided Engineering (CAE) at NIT Kurukshetra for mutual benefits.

22. M/s Altair Engineering has agreed upon to supply the commercial version of the software worth 6.5 crore rupees at a concessional price of Rupees 20 lac plus taxes which includes AMC and upgradation to new versions for a period of three years for this center of excellence.

23. Students Placement record of our Institute is excellent all through. In the batch just passed out, all eligible students got good package jobs. Several students got two or three job offers. Further, MBA Department has provided both Summer and Final placements to all the students in National and International organizations like Pepsi, Coke, Ranbaxy, ICICI Lombard, Max New York, Canon, Vestas, IDBI, HSBC, Globus Infocom, Copal Partners, ACE Data Devices etc.

24. To make the Institute as a Centre of Excellence, the Institute has signed following Memorandum of Understandings (MOUs): -

- With TCS and HP (India) to cooperate in making NIT Kurukshetra as a Centre of Excellence.
- With Institute for Sustainable Development & Research (ISDR), India to actively support sustainable development, Natural Disaster Management and Rehabilitation programme.
- With DST, Govt. of India under TIFAC Scheme to study technology gap in (a) Scientific Instruments Industry Cluster at Ambala; (b) Agricultural Implements Industry Cluster at Karnal.
- With Altair Engineering, India regarding setting up a Centre of Excellence in the emerging field of Computer Aided Engineering (CAE) at NIT Kurukshetra in the year 2007.
- With Agence Edufrance & n+i Engineering Institutes Network for academic collaboration.

25. NIT Kurukshetra has bench marked itself not only with Institutes of excellence in Country but also with International Institutions abroad. During November 2007, Institute signed an MOU with University of Concordia, Montreal, Canada, with the objective of promoting academic linkages. The Institute also received a French delegation representing various Universities and Institutes in France to explore the possibilities of collaborating in teaching and research.

26. As per the T-School Survey conducted by Data Quest IDC-NASSCOM, the Institute has been ranked at 18 in the Country.

27. Director of the Institute has been nominated for "Socrates International Award" in this year by Europe Business Assembly (United Kingdom).

28. One of the faculty members participated in the UN sponsored International Forum on Water & Food at Vientiane, Laos.

## 10.2

### ACHIEVEMENTS DURING THE YEAR 2012-13

1. For improvement in P.G. study and research, four new schools have been approved in the Finance Committee as well as BOG meeting held on 12.3.2012 & 13.3.2012 respectively. Two schools, i.e. school of VLSI Design and Embedded Systems in Department of Electronics & Communication and school of Renewable Energy and Efficiency in Department of Electrical Engineering have been started in July 2012 in the Institute. Other two schools i.e. School of Material Science and Nano-technology in Physics Department and School of Bio-Medical Engineering in Electrical Engineering Department have been started in May 2013 in the Institute.
2. The following Construction works were finalized during the year 2012-13:-
  - 1) Construction of Mega Boys' Hostel of 1000 capacity at NIT Kurukshetra.
  - 2) Construction of Additional Block of Health Centre at NIT Kurukshetra.
  - 3) Construction of New Administrative Block at NIT Kurukshetra.
  - 4) Construction of graded seating arrangement for 2000 persons in Open Air Theatre at NIT Kurukshetra.
3. The following works are under progress:
  - 1) Construction of 20 Nos. Prof. & 20 Nos. Asstt. Prof. Multi Storeyed Staff Housing at NIT Kurukshetra.
  - 2) Construction of swimming pool at NIT Kurukshetra.
  - 3) Providing and installation of Electrical Sub-station HT/LT distribution including street lighting and feeder pillar etc. in Non-residential area at NIT Kurukshetra.
  - 4) Construction of Boundary Wall of Hostel No. 1 & 2 at NIT Kurukshetra.
  - 5) Widening of Institute Road from Kirmich Road Gate to Hostel No. 4 (approx. length of 400 meters) at NIT Kurukshetra.
  - 6) Replacement of ACC sheets with Zincalume sheets & renovation of water channel in central/old Workshop at NIT Kurukshetra.
  - 7) Construction of 2 Nos. parkings at NIT Kurukshetra.
  - 8) i) Recarpeting of roads from NIT gate (towards KUK gate) to Apollo Canteen chowk via NIT chowk at NIT Kurukshetra.  
ii) Re-carpetting of road from main approach road of Guest House and around Guest House roads at NIT Kurukshetra.  
iii) Re-carpeting of road from Apollo Canteen to NIT gate via Mega Hostel and Hostel no. 7 & 8 at NIT Kurukshetra.  
iv) Re-carpeting of road from Apollo Canteen chowk to Y shape road via Open Air Theatre at NIT Kurukshetra.
4. The network connections have been provided in the Institute campus under Phase-I and II project.



## 11.0 ANNEXURES

### 11.1 INSTITUTE'S (NIT) COUNCIL

The composition of the Members of the Council is as under:-

1.	Minister of Human Resource Development, Government of India	Chairman
2.	Secretary, Department of Secondary and Higher Education, Ministry of HRD, Government of India	Member
3.	Principal Adviser (Education Planning Commission)	Member
4.	Secretary, Deptt. Of Science & Technology, GOI	Member
5.	Director General, Council of Scientific & Industrial Research, Government of India	Member
6.	Secretary, Deptt. Of Biotechnology, Government of India.	Member
7.	Secretary, Atomic Energy, Government of India	Member
8.	Secretary, Deptt. of Information Technology, GOI	Member
9.	Secretary, Deptt. Of Space, Govt. of India.	Member
10.	Special Secretary/Addl. Secretary/ Educational Adviser(T), Department of Secondary & Higher Education, Ministry	Member
11.	Chairman, University Grants Commission	Member
12.	Chairman, All India Council of Technical Education	Member
13-14	Two Chairmen, Board of Governors of National Institute of Technology (by rotation)	Members
15-18	4 Directors of the National Institutes of technology (by rotation)	Members
19.	One Director of Indian Institute of Technology (by rotation)	Member
20.	One Director of Indian Institute of Management (by rotation)	Member
21-22	Two Secretaries of Higher/Technical Education from states where NITs are located (by rotation)	Members
23-24	Two persons from Industry nominated by the Central Government	Members
25.	Financial Adviser, MHRD, GOI	Member
26.	Joint Secretary,(Technical Education) Joint Educational Adviser (Technical Education),MHRD,GOI	Member-Secretary

## 11.2 BOARD OF GOVERNORS

Sr.No.	Composition	Members
1.	Chairperson	Dr. A. Sivathanu Pillai Distinguished Scientist & Chief Controller (R&D), DRDO & CEO and MD, BrahMos Aerospace 16, Cariappa Marg, Kirby Place Delhi Cantt., New Delhi
2.	Director- ex officio	Prof. Anand Mohan Director NIT Kurukshetra
3 & 4.	Two Nominee of Central Govt. (persons dealing with Technical Education & Finance)	Ms. Amita Sharma Additional Secretary (Tech.), Govt. of India, Ministry of Human Resource Development, Department of Higher Education, Shastri Bhawan, New Delhi Joint Secretary & Financial Advisor Integrated Finance Division Govt. of India, Ministry of Human Resource Development Department of Higher Education, Shastri Bhawan, New Delhi
5 & 6	Two Nominee of State Govt. (Techno- logists or industrialists of repute)	Dr. Chandra Shekhar Director Central Electronics Engg. Research Institute Pillani (Rajasthan)
7 & 8	Two persons having special knowledge in respect of education, engg. or science	Prof. (Ms.) Sneh Anand Professor & Head Centre for Biomedical Engineering Indian Institute of Technology Hauz Khas Delhi Prof. M.K. Surappa Director or his nominee Indian Institute of Technology Ropar (Punjab)
9.	One Professor of the Institute	Prof. S.K. Sharma, Professor, Mech. Engg. Department, NIT Kurukshetra

10.	One Associate Prof. of the Institute	Sh. Umesh Ghanekar Associate Professor Electronics & Comm. Engg. Deptt., NIT Kurukshetra
11.	Secretary	Sh. G. R. Samantary Registrar Incharge NIT Kurukshetra.

### 11.3 FINANCE, BUILDING AND WORKS AND OTHER COMMITTEES

#### FINANCE COMMITTEE

Sr.No.	Composition	Members
1.	Chairperson, Board of Governors, Ex-officio	Dr. A. Sivathanu Pillai Hon'ble Chairperson, Finance Committee, NIT Kurukshetra
2	Director-ex officio	Prof. Anand Mohan Director, NIT Kurukshetra
3 & 4	Joint Secretary dealing with NIT and Financial Advisor (HRD)	Joint Secretary (Tech.) Government of India, Ministry of Human Resource Development, Department of Higher Education, Shastri Bhawan, New Delhi.  Financial Advisor (IFD) Government of India Ministry of Human Resource Development, Department of Higher Education, Shastri Bhawan New Delhi
5.	Two persons nominated by the Board	Prof. (Ms.) Sneha Anand Professor & Head Centre for Biomedical Engineering Indian Institute of Technology Delhi  Prof. M.K. Surappa Director Indian Institute of Technology Ropar, Punjab



6.	Ex-Officio Member- Secretary	Registrar Incharge National Institute of Technology Kurukshetra
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#### **BUILDING & WORKS COMMITTEE**

<b>Sr.No.</b>	<b>Composition</b>	<b>Members</b>
1.	Chairman	Prof. Anand Mohan Director, NIT Kurukshetra
2.	One person nominated by the Central Government not below the rank of Director or Deputy Secretary	Sh. Rajesh Singh Dy. Secretary (NITs) Deptt. of Higher Education MHRD, Shastri Bhawan New Delhi-110001
3.	One person nominated by the Board of Governors	Prof. S.K. Sharma Prof. Mechanical Engg. Deptt. National Institute of Technology Kurukshetra
4.	Dean, Planning & Development	Dr. V.K. Arora, Dean (Planning & Development), NIT Kurukshetra.
5.	One expert from Civil Engineering Wing of the Central or State Government or any autonomous body of repute	Er. Iqbal singh Executive Engineer (Civil) Karnal Central Division, CPWD Karnal
6.	One expert from Electrical Engineering Wing of the Central or State Government or any autonomous body of repute	Er. Surender Singh Superintending Engineer (Electrical), Chandigarh Electrical Central Circle, CPWD, Chandigarh.
7.	Special Invitee	Dr. K.K. Singh Dean (Estate) NIT Kurukshetra Dr. Ashwani Jain Prof. In-charge (Estate & Const.) NIT Kurukshetra

		<p>Dr. Ashwani Kumar Prof. I/C (EM) NIT Kurukshetra</p> <p>Executive Engineer, Construction Cell NIT Kurukshetra</p> <p>Sh. S.N. Kaushik Asstt. Engineer (Civil) NIT Kurukshetra</p>
8.	Member-Secretary	<p>Sh. G.R. Samantaray Registrar In-Charge NIT Kurukshetra</p>

## SENATE

Sr.No.	Composition	Members
1.	Ex-Officio Chairman	<p>Prof. Anand Mohan Director, NIT Kurukshetra</p>
2,3 & 4	Three Educationists of repute	<p>Dr. Chandra Shekhar Director Central Electronics Engg. Research Institute (CEERI) Pilani (Raj.) Prof. (Ms.) Shashikala Achyut Gangal ISRO Chair Professor Deptt. of Electronics Science University of Pune Pune Prof. Rajendra Rai Head of the Department Deptt. of Economics Faculty of Social Sciences Banaras Hindu University Varanasi</p>
5.	All Professors and such other members of the staff	<p>Dr. V.K. Arora Professor &amp; Dean (P&amp;D), Civil Engg. Department NIT Kurukshetra</p> <p>Dr. V.K Sehgal Professor &amp; Dean (Faculty Welfare), Civil Engg. Department, NIT Kurukshetra</p>

	<p>Dr. S.K. Sharma Professor &amp; Dean (Students' Welfare), Mechanical Engg. Deptt., NIT Kurukshetra</p> <p>Dr. A.K.Gupta Professor &amp; Dean (Academic), Electronics &amp; Comm. Engg. Deptt. NIT Kurukshetra</p> <p>Dr. A. Swarup Professor &amp; Dean (R &amp; C), Electrical Engg. Deptt. NIT Kurukshetra</p> <p>Dr. Brahamjit Singh Professor ECE Department NIT Kurukshetra</p> <p>Dr. (Ms.) Minati Baral, Professor &amp; Head, Chemistry Department, NIT Kurukshetra.</p> <p>Dr. D.K. Soni Professor &amp; Head, Civil Engg. Deptt. NIT Kurukshetra</p> <p>Dr. N.K. Gupta Professor, Civil Engg. Deptt. NIT Kurukshetra</p> <p>Dr. S.S. Rattan Professor, Mechanical Engg. Deptt., NIT Kurukshetra</p> <p>Dr. K.S. Sandhu Professor, Electrical Engg. Deptt., NIT Kurukshetra</p> <p>Dr. Sudhir Kumar Professor, Mechanical Engg. Deptt., NIT Kurukshetra</p>
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	<p>Dr. Baldev Setia Professor, Civil Engg. Deptt., NIT Kurukshetra</p> <p>Dr. Rajender Kumar Professor &amp; Head, Department of Humanities &amp; Social Sciences, NIT Kurukshetra</p> <p>Dr. S.K. Madan, Professor, Civil Engg. Deptt. NIT Kurukshetra</p> <p>Dr. H.K. Sharma, Professor, Civil Engg. Deptt. NIT Kurukshetra</p> <p>Dr. Lillie Dewan, Professor &amp; Head, Electrical Engg. Deptt. NIT Kurukshetra</p> <p>Dr. S.N. Sachdeva, Professor, Civil Engg. Deptt. NIT Kurukshetra</p> <p>Dr. Dixit Garg, Professor, Mechanical Engg. Deptt., NIT Kurukshetra</p> <p>Dr. P.J. Philip, Professor, Humanities &amp; Social Science, NIT Kurukshetra</p> <p>Dr. J.K. Quamara, Professor, Physics Deptt., NIT Kurukshetra</p>
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		<p>Dr. Surjit Angra Professor, Mechanical Engg. Deptt., NIT Kurukshetra</p> <p>Dr. R.S. Bhatia Professor, Electrical Engg. Deptt. NIT Kurukshetra</p> <p>Dr. G.L. Pahuja Professor, Electrical Engg. Deptt. NIT Kurukshetra</p> <p>Dr. K.K. Singh Professor &amp; Dean (Estate), Civil Engg. Deptt. NIT Kurukshetra</p> <p>Dr. Subodh Ranjan Professor, Civil Engg. Deptt. NIT Kurukshetra</p> <p>Dr. (Ms.) Ratna Dahiya Professor Electrical Engg. Deptt. NIT Kurukshetra</p> <p>Dr. Anupam Mittal Professor, Civil Engg. Deptt. NIT Kurukshetra</p> <p>Dr. Dinesh Khanduja Professor, Mech. Engg. Deptt. NIT Kurukshetra</p> <p>Dr. R.K. Sharma Associate Professor, Electronics &amp; Comm.Engg. Deptt. NIT Kurukshetra</p>
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		<p>Dr. O.P. Sahu Professor &amp; Head Electronics &amp; Comm.Engg.Deptt. NIT Kurukshetra</p> <p>Dr. S.M. Gupta Professor &amp; COE Civil Engg. Deptt. NIT Kurukshetra</p> <p>Dr. Arun Goel Professor Civil Engg. Deptt. NIT Kurukshetra</p> <p>Dr. Dinesh Kumar Professor, Chemistry Deptt. NIT Kurukshetra</p> <p>Dr. D.P. Singh Professor, Chemistry Deptt. NIT Kurukshetra</p> <p>Dr. P.C. Tiwari Professor, Mech. Engg. Deptt. NIT Kurukshetra</p> <p>Dr. L.M. Saini Professor &amp; Prof. I/C (Acad.&amp; Senate Affairs) Elect. Engg. Deptt. NIT Kurukshetra</p> <p>Dr. Hari Singh Professor Mech. Engg. Deptt. NIT Kurukshetra</p> <p>Dr. S.K. Patidar Professor Civil Engg. Deptt. NIT Kurukshetra</p>
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		Dr. Ashwani Jain Professor Civil Engg. Deptt. NIT Kurukshetra  Dr. Jitender Chhabra Associate Professor & Head Computer Engg. Deptt. NIT Kurukshetra  Dr. Paras Ram Associate Professor & Head Mathematics Deptt. NIT Kurukshetra
6.	Member-Secretary	Sh. G.R. Samantray Registrar Incharge NIT, Kurukshetra

#### 11.4 RESEARCH PROJECTS AND CONSULTATION JOBS

The Government of India has been releasing grant under the head Schemes i.e. MODROB, R&D and Thrust Area. A large number of schemes have been sanctioned to the Institute and as on 31.3.2013, following schemes as per details given below were in operation:-

Sr. No.	Scheme & Principal Investigator	Grant Received + Interest or previous balace	Amount utilized	Balance on 31.3.2013
1.	Information Security Education Awareness Dr. A. Swarup	444065.00 155187.00	237286.00	361984.00
2.	Special man power Development programme Dr. A.K. Gupta	600000.00 506023.00	735906.00	370117.00
3.	Water Harvesting to curb ground water Dr. K.K. Singh	1250000.00 113308.00	1306551.00	56757.00
4.	Development of a Model for intelligent integration of process planning and scheduling for flexible systems in manufacturing for performance improvement in evolving CIM environment Dr. Ajay Jain	1400000.00 58416.00	1230397.00	228019.00
5.	In Silico Design & Modeling of some artificial allosteric system Dr. Minati Baral	100000.00 13483.00	84455.00	29028.00

6.	Design Coputational modeling & synthesis of some novel biominetic sidrophore analog Dr. Minati Baral	210143.00 86136.00	171942.00	124337.00
7.	Central for water resources mgmt. Dr.K.K.Singh	300000.00 44231.00	295961.00	48270.00
8.	Study of High-Energyhadron thearapyspace. Dr.Ashwani Kumar	350000.00 364094.00	297345.00	416749.00
9.	Synthesis & charactersition of Multinferroic Dr. Anurag Gaur	1064000.00 35828.00	795678.00	304150.00
10.	Estimation of Fertilizer induced Radioactivity in plants. Dr. R.P. Chauhan	187281.00	159879.00	27402.00
11.	Study of the factor affecting rondon level Dr. R.P. Chauhan	1399755.00	1044421.00	355334.00
12	Changing Water Cycle Dr. K.K. Singh	977400.00 16890.00	373912.00	620378.00
13	Ganga River Basin Environmental Manage-ment Plan (GRBEMP) Prof. S.K. Patidar	500000.00	154302.00	345698.00
14	Distribution System Markets Dr. Ashwani Kumar	1008000.00	381434.00	626566.00

## CONSULTANCY SERVICES

The Institute is actively engaged in providing consultancy services to various Government, Semi-Government and Private Organizations. Efforts to diversify the areas pertaining to various disciplines are continuously being made so that more interaction could be ensured with the industries and various organizations. Number of faculty members taking up consultancy projects is considerably increased during the recent past.

During the period from 1.4.2012 to 31.3.2013, one thousand four hundred fifty four (1454) consultancy jobs involving consultancy fees around Rs. 339.89 lacs were sanctioned.

### 11.5 FACULTY POSITION AS ON 31.03.2013

Sr. No.	Name of the Post	Sanctioned	In position	Vacant	Pay Scale (Rs.)
1.	Director	01	01	-	75000+5000
<b>Civil Engineering Department</b>					
1.	Professors	06	16	-(10)	37400-67000+10000
2.	Asso.Professors	11	06	05	37400-67000+9000
3.	Asstt.Professors	22	04	18	15600-39100+6000

<b>Electrical Engineering Department</b>					
1.	Professors	06	07	-(01)	37400-67000+10000
2.	Asso.Professors	12	09	03	37400-67000+9000
3.	Asstt.Professors	23	06	17	15600-39100+6000
<b>Mechanical Engineering Department</b>					
1.	Professors	06	07	-(01)	37400-67000+10000
2.	Asso.Professors	12	10	02	37400-67000+9000
3.	Asstt.Professors	24	07	17	15600-39100+6000
<b>Industrial Engineering Department</b>					
1.	Professors	02	01	01	37400-67000+10000
2.	Asso.Professors	04	01	03	37400-67000+9000
3.	Asstt.Professors	08	03	05	15600-39100+6000
<b>Electronics &amp; Comm. Engineering Department</b>					
1.	Professors	06	04	02	37400-67000+10000
2.	Asso.Professors	12	02	10	37400-67000+9000
3.	Asstt.Professors	23	13	10	15600-39100+6000
<b>Computer Engineering Department</b>					
1.	Professors	04	-	04	37400-67000+10000
2.	Asso.Professors	07	05	02	37400-67000+9000
3.	Asstt.Professors	15	02	13	15600-39100+6000
<b>Information Technology Department</b>					
1.	Professors	03	-	03	37400-67000+10000
2.	Asso.Professors	06	01	05	37400-67000+9000
3.	Asstt.Professors	11	05	06	15600-39100+6000
<b>Physics Department</b>					
1.	Professors	02	01	01	37400-67000+10000
2.	Asso.Professors	04	03	01	37400-67000+9000
3.	Asstt.Professors	09	02	07	15600-39100+6000
<b>Chemistry Department</b>					
1.	Professors	01	03	-(02)	37400-67000+10000
2.	Asso.Professors	02	01	01	37400-67000+9000
3.	Asstt.Professors	05	01	04	15600-39100+6000
<b>Mathematics Department</b>					
1.	Professors	01	--	01	37400-67000+10000
2.	Asso.Professors	03	01	02	37400-67000+9000
3.	Asstt.Professors	06	03	03	15600-39100+6000
<b>Humanities and Social Sciences Department</b>					
1.	Professors	01	02	-(01)	37400-67000+10000
2.	Asso.Professors	02	02	--	37400-67000+9000
3.	Asstt.Professors	06	--	06	15600-39100+6000
<b>MBA Deptt. (Self Financing)</b>					
1.	Professors	02	-	02	37400-67000+10000
2.	Asso.Professors	04	-	04	37400-67000+9000
3.	Asstt.Professors	08	-	08	15600-39100+6000



<b>MCA Deptt. (Self Financing)</b>					
1.	Professors	03	-	03	37400-67000+10000
2.	Asso.Professors	06	-	06	37400-67000+9000
3.	Asstt.Professors	10	-	10	15600-39100+6000
Total		298	128	170	
<b>Summary (Faculty Staff)</b>					
1.	Director	01	01	-	75000+5000
2.	Professors	43	41	02	37400-67000+10000
3.	Asso.Professors	85	41	44	37400-67000+9000
4.	Asstt.Professors	170	46	124	15600-39100+6000
Total		298	128	170	

## 11.6 ADMINISTRATIVE AND OTHER STAFF

### POSITION OF OFFICER CADRE STAFF AS ON 31.03.2013

Sr. No.	Name of the post	Sanctioned	In position	Excess/ Shortage	Pay Scale (Rs.) PB+GP
<b>Registrar Office</b>					
1	Registrar	01	-	01	37400-67000+10000
<b>General Administration Section</b>					
1	Dy. Registrar	01	01	-	15600-39100+7600
<b>Establishment Section</b>					
1	Asstt. Registrar	01	-	01	15600-39100+5400
<b>Accounts Section</b>					
1	Dy. Registrar	01	01	-	15600-39100+7600
2	Asstt. Registrar	01	-	01	15600-39100+5400
<b>Academic Section</b>					
1	Dy. Registrar	01	-	01	15600-39100+7600
<b>Exams Cell</b>					
1	Asstt. Registrar	01	01	-	15600-39100+5400
<b>Stores Section</b>					
1	Asstt. Registrar	01	01	-	15600-39100+5400
<b>Health Centre</b>					
1	Sr. Medical Officer	01	-	01	15600-39100+7600
2	Medical Officer	03	-	03	15600-39100+5400
<b>Library</b>					
1	Librarian	01	01	-	37400-67000+10000
2	Assistant Librarian	01	-	01	15600-39100+6000
<b>Sports</b>					
1	Sr. SAS Officer	01	-	01	15600-39100+8000
2	SAS Officer	02	-	02	15600-39100+6000

<b>Security Section</b>					
1	Security Officer	01	-	01	15600-39100+5400
<b>Estate</b>					
<b>Officer Cadre</b>					
1	Executive Engineer	01	-	01	15600-39100+6600
<b>Workshop</b>					
1	Pr. Technical Officer	01	-	01	15600-39100-7600
2	Sr. Technical Officer	01	-	01	15600-39100-6600
<b>Centre for Computing &amp; Networking</b>					
1	Sr. Technical Officer	01	01	-	15600-39100+6600
<b>Civil Engineering Department</b>					
1	Technical Officer	01	-	01	15600-39100+5400
<b>Computer Engineering Department</b>					
1	Sr. Technical Officer	01	01	-	15600-39100-6600
<b>Information Technology</b>					
1	Technical Officer	01	-	01	15600-39100+5400
<b>Electrical Engineering Department</b>					
1	Technical Officer	01	01	-	15600-39100+5400
<b>Electronics and Comm. Engineering Department</b>					
1	Sr. Tech. Officer	01	01	-	15600-39100+6600
<b>Mechanical Engineering Department</b>					
1	Technical Officer	01	01	-	15600-39100+5400
<b>Physics/Chemistry Department</b>					
1	Technical Officer	01	01	-	15600-39100+5400
<b>Computer Applications</b>					
1	Technical Officer	01	-	01	15600-39100+5400
<b>Total</b>		30	11	19	

### Summary (Officer Cadre Staff)

Sr. No.	Name of the post	Sanctioned	In position	Vacant
1	Registrar	01	-	01
2	Dy. Registrar	03	02	01
3	Asstt. Registrar	04	02	02
4	Librarian	01	01	-
5	Asstt. Librarian	01	-	01
6	Sr. SAS Officer	01	-	01
7	SAS Officer	02	-	02
8	Sr. Medical Officer	01	-	01

9	Medical Officer	03	-	03
10	Security Officer	01	-	01
11	Pr. Technical Officer	01	-	01
12	Sr. Technical Officer	04	02	02
13	Technical Officer	06	04	02
14	Executive Engineer	01	-	01
<b>Total</b>		30	11	19

### POSITION OF TEACHING SUPPORTING STAFF AS ON 31.03.2013

Sr. No.	Name of the post	Sanctioned	In position	Vacant	Pay Scale (Rs.) PB+GP
<b>Civil Engineering Department</b>					
<b>Group-B</b>					
1	Supervisor	03	-	03	9300-34800 +4600
<b>Group-C</b>					
2	Senior Draftsman	01	-	01	9300-34800 +4200
3	Tech. Grade A	04	02	02	9300-34800 +4200
4	Tech. Grade B	03	01	02	5200-20200 +2400
5	Tracer	02	-	02	5200-20200 +2000
6	Lab. Attendant	10	04	06	5200-20200 +1900
<b>Electrical Engineering Department</b>					
<b>Group-B</b>					
1	Supervisor	06	03	03	9300-34800 +4600
<b>Group-C</b>					
2	Senior Draftsman	01	-	01	9300-34800 +4200
3	Tech. Grade A	05	04	01	9300-34800 +4200
4	Tech. Grade B	01	01	-	5200-20200 +2400
5	Tracer	01	-	01	5200-20200 +2000
6	Lab. Attendant	04	04	-	5200-20200 +1900



<b>Mechanical Engineering Department</b>					
<b>Group-B</b>					
1	Supervisor	04	01	03	9300-34800 +4600
<b>Group-C</b>					
2	Sr. Draftsman	01	-	01	9300-34800 +4200
3	Asstt. Draftsman	01	01	-	9300-34800 +4200
4	Tech. Grade A	04	02	02	9300-34800 +4200
5	Tech. Grade B	01	01	-	5200-20200 +2400
6	Tracer	01	-	01	5200-20200 +2000
7	Ferro-Machine Operator	02	-	02	5200-20200 +1900
8	Lab. Attendant	05	05	-	5200-20200 +1900
<b>Electronics and Comm. Engineering Department</b>					
<b>Group-B</b>					
1	Supervisor	04	03	01	9300-34800 +4600
<b>Group-C</b>					
2	Tech. Grade A	04	01	03	9300-34800 +4200
3	Tech. Grade B	03	02	01	5200-20200 +2400
4	System Attendant	02	01	01	5200-20200 +2400
5	Lab. Attendant	02	02	-	5200-20200 +1900
<b>Computer Engineering Department</b>					
<b>Group-C</b>					
1	Tech. Grade A	01	-	01	9300-34800 +4200
2	System Attendant	01	-	01	5200-20200 +2400
3	Lab. Attendant	02	01	01	5200-20200 +1900
<b>Physics Department</b>					
<b>Group-B</b>					
1	Supervisor	02	-	02	9300-34800 +4600
<b>Group-C</b>					
2	Tech. Grade	01	01	-	9300-34800

	A				+4200
3	Tech. Grade B	01	-	01	5200-20200 +2400
4	Lab. Asstt.	01	01	-	5200-20200 +1900
5	Lab. Attendant	02	01	01	5200-20200 +1900
<b>Chemistry Department</b>					
<b>Group-B</b>					
1	Supervisor	01	-	01	9300-34800+4600
<b>Group-C</b>					
2	Tech. Grade A	01	-	01	9300-34800 +4200
3	Lab Asstt.	01	01	-	5200-20200 +1900
4	Gas Man	01	-	01	5200-20200 +1900
5	Lab. Attendant	01	01	-	5200-20200 +1900
6	Gas Plant Helper	01	-	01	5200-20200+1800
<b>Workshop</b>					
<b>Group-B</b>					
1	Supervisor	06	03	03	9300-34800 +4600
<b>Group-C</b>					
2	Tech. Grade A	03	-	03	9300-34800 +4200
3	Tech. Grade B	10	09	01	5200-20200 +2400
4	Lab. Attendant	07	02	05	5200-20200 +1900

**SUMMARY (TEACHING SUPPORTING STAFF)**

Sr. No.	Name of the post	Sanctioned	In position	Vacant
<b>Group-B</b>				
1	Supervisor	23	10	13
	(Engg.)			
	(Sciences)	03	--	03
<b>Group-C</b>				
2	Sr. Draftsman	03	-	03
3	Asstt. Draftsman	01	01	-

4	Tech. Grade A	23	10	13
5	Tech. Grade B	19	14	05
6	Tracer	04	-	04
7	Ferro Machine Operator	02	-	02
8	Lab. Asstt.	02	02	-
9	Gas Man	01	-	01
10	Lab. Attendant	33	20	13
11	System Attendant	03	01	02
12	Gas Plant Helper	01	-	01
Total		118	58	60

**POSITION OF NON-TEACHING SUPPORTING STAFF AS ON 31.03.2013**

Sr. No.	Name of the post	Sanctioned	In position	Vacant	Pay Scale (Rs.)
<b>Administrative Officers/Ministrial Staff</b>					
<b>Group-C</b>					
1	Deputy Supdt.	08	02	06	9300-34800 +4200
2	Jr. Accountant	01	01	-	9300-34800 +4200
3	Head Cashier,	01	01	-	9300-34800 +4200
4	Cashier	01	01	-	9300-34800 +4200
5	Accounts Clerk	05	05	-	9300-34800 +4200
6	Assistant/MMC A	23	09	14	9300-34800 +4200
7	TOCR	02	01	01	9300-34800 +4200
8	Sr. Storekeeper	02	02	-	9300-34800 +4200
9	Sr. Stenographer	07	03	04	9300-34800 +4200
10	Jr. Stenographer	10	04	06	5200-20200 +2400
11	Jr. Storekeeper	07	01	06	5200-20200 +1900
12	Clerks	36	22	14	5200-20200 +1900
13	Duplicating Machine Operator	01	-	01	5200-20200 +1900



14	Steno-Typist	02	-	02	5200-20200 +1900
15	Store-Munshi	01	-	01	5200-20200 +1900
16	Lady Resident Warden	01	01	-	9300-34800 +4200
17	Matron	01	01	-	5200-20200 +1900
18	Driver	04	01	03	5200-20200 +2400
19	Daftri	02	--	02	5200-20200 +1800
20	Jamadar peon	01	01	-	5200-20200 +1800
21	Cook-Cum- Chowkidar	01	-	01	5200-20200 +1800
22	Dafedar	01	-	01	5200-20200 +1800
23	Store Mate	01	-	01	5200-20200 +1800
24	Guest House Helper	01	-	01	5200-20200 +1800
25	Farash	05	-	05	5200-20200 +1800
26	Store Helper	01	01	-	5200-20200 +1800
27	Groundsman	06	01	05	5200-20200 +1800
28	Chowkidar	42	20	22	5200-20200 +1800
29	Peon	27	12	15	5200-20200 +1800
30	Cleaner (Vehicle)	02	-	02	5200-20200 +1800
31	Farash-Cum- Attendant	05	04	01	5200-20200 +1800
<b>Library Staff</b>					
<b>Group-C</b>					
1	Sr. Lib. Assistant	02	-	02	9300-34800 +4200
2	Counter Assistant	03	-	03	9300-34800 +4200
3	Restorer	04	02	02	5200-20200 +1900
4	Book Binder	01	01	-	5200-20200 +1900
5	Xerox Machine Operator	01	01	-	5200-20200 +1900
6	Lib. Attendant	07	04	03	5200-20200 +1900
7	Cleaner	02	01	01	5200-20200

					+1800
<b>Medical Staff (Health Centre)</b>					
<b>Group-C</b>					
1	Pharmacist	02	02	-	9300-34800 +4200
2	Staff Nurse	01	01	-	9300-34800 +4200
3	Lab Technician	01	01	-	5200-20200 +2800
4	Dresser	01	01	-	5200-20200 +1900
5	Female Attendant	01	-	01	5200-20200 +1800
6	Health Worker-Cum-Peon	01	-	01	5200-20200 +1800
<b>Maintenance Staff (Estate)</b>					
<b>Group-C</b>					
1	Junior Engineer	04	01	03	9300-34800 +4200
2	Electrician	01	-	01	5200-20200 +2400
3	Plumber	01	-	01	5200-20200 +2400
4	Carpenter	01	-	01	5200-20200 +2400
5	Mason	01	-	01	5200-20200 +2400
6	Pump Driver	01	01	-	5200-20200 +2400
7	Fitter	01	-	01	5200-20200 +2400
8	Asstt. Pump Driver	05	04	01	5200-20200 +1900
9	Asstt. Fitter	01	-	01	5200-20200 +1800
10	T. Mate	01	-	01	5200-20200+1800
11	Head Mali	01	-	01	5200-20200+1800
12	Jamadar Sweeper	01	-	01	5200-20200+1800
13	Chowkidar - Cum-Mali	02	-	02	5200-20200+1800
14	Sweeper	29	10	19	5200-20200+1800
15	Sewerman	04	02	02	5200-20200+1800
16	Mali	13	07	06	5200-20200+1800

**Workcharged-Made-Regular Staff. (Post Personal to them)**

<b>Group-C</b>		<b>Sanctioned</b>	<b>In Position</b>	<b>Pay Scale ((Rs.)</b>
1	Painter	01	01	5200-20200 +1900
2	Plumber	01	01	5200-20200 +1900
3	Carpenter	03	03	5200-20200 +1900
4	Electrician	02	02	5200-20200 +1900
5	Mason	03	03	5200-20200 +1900
6	Beldar	05	05	5200- 20200+1800
7	Mali	01	01	5200- 20200+1800

**SUMMARY (NON-TEACHING STAFF)**

	<b>Sanctioned</b>	<b>In position</b>	<b>Vacant</b>
<b>Administrative/Ministry Staff</b>			
Group-C	<b>208</b>	<b>94</b>	<b>114</b>
<b><u>Library Staff</u></b>			
Group-C	<b>20</b>	<b>09</b>	<b>11</b>
<b><u>Medical Staff</u></b>			
Group-C	<b>07</b>	<b>05</b>	<b>02</b>
<b><u>Maintenance Staff (Estate)</u></b>			
Group-C	<b>67</b>	<b>25</b>	<b>42</b>
<b><u>Workcharged-Made-Regular Staff. (Post personal to them)</u></b>			
Group-C	<b>16</b>	<b>16</b>	<b>-</b>
<b>Total</b>	<b>318</b>	<b>149</b>	<b>169</b>

**SUMMARY**



Sr. No.	Sanctioned	In position	Vacant
<b>Teaching Staff</b>			
Group-A	298	128	170
<b>Officer Cadre</b>			
Group-A	30	11	19
<b>Teaching Supporting Staff</b>			
Group-B	26	10	16
Group-C	92	48	44
<b>Non Teaching Staff</b>			
Group-C	318	149	169
Grand Total	<b>764</b>	<b>346</b>	<b>418</b>

### 11.7 STAFF MEMBERS DEPUTED/SPONSORED FOR TRAINING, LEARNING

Sr.No.	Name of faculty & Designation	Area of Training	Venue	Duration of Training
1.	Prof. Brahmjit Singh, Professor	Short Course on Wireless Sensor Networks: From Theory to Practice	I I T Kanpur	May 24-26, 2012
2.	Dr Anil Kumar Dahiya, Asstt. Prof.	Recent Advances In Genetic Algorithms and their Applications in Engineering Design	I I T Roorkee	June 25-29 2012
3.	Shri Mohit Dua, Assistant Professor	Advanced School on Natural Languages Processing	I I I T Hyderabad	July 05-20 2012
4.	Dr.Pankaj Chandna, Associate Professor	Hyper Works Technology Conference	Bangalore	July 17-18 2012
5.	Mr Virender Ranga , Assistant Professor	Faculty Development Program on Wireless Sensors Network a	Graphic Era Uni., Dehradun	August 04-05 2012
6.	Dr. Mayank Dave, Asso. Professor	Faculty Development Program on Wireless Sensors Network a	Graphic Era Uni., Dehradun	August 04-05 2012
7.	Dr .Saurabh Chanana Assistant Professor	International Conference on Industrial and Information Systems ICIIS 2012	IIT Madras , Chennai	August 06-09 2012
8.	Dr Neena Jaggi, Associate Professor	International Conference on Raman Spectroscopy	IISc Bangalore	August 12-17 2012
9.	Dr. D P Singh, Professor	Chemical Constellation Cheminar-2012	NIT Jalandhar	Sept. 10-12 ,2012
10.	Dr. J K Kapoor, Asso. Prof.	Chemical Constellation Cheminar-2012	NIT Jalandhar	Sept. 10-12 ,2012
11.	Dr Mohammad Arif Assistant Professor	Communication, Information and Computing Technology (ICCIT-2012)	Sardar Patel Institute of Tech. , Mumbai	October 18-20 ,2012
12.	Mr. Mohit Dua, Assistant Professor	4th Intl. Conf. on Advances in Recent Technologies in Communication and	Bangalore	October 19-20 ,2012

		Computing ARTCom 2012		
13.	Dr. Rajender Kumar, Professor	16 <sup>th</sup> Annual Conference of Indian Political Economy Association	IIT Roorkee	October 26-27, 2012
14.	Dr. Mayank Dave, Asso. Professor	IEEE International Conference on Computational Intelligence and Communication Networks (CICN-2012)	Mathura	November 3-5, 2012
15.	Dr. J K Quamara, Professor	57th DAE-Solid State Physics Symposium	IIT Bombay , Mumbai	December 3-7 , 2012
16.	Dr. Anurag Gaur, Asstt. Prof.	57th DAE-Solid State Physics Symposium during at	IIT Bombay , Mumbai	December 3-7 , 2012
17.	Dr Vikas Chaudhary, Associate Professor	International Conference on Marketing Paradigms in Emerging Economies (ICOM12)	Banaras Hindu University , Varanasi	December 4-5, 2012
18.	Dr. P J Phillip, Professor	International Conference in Faculty of Management Studies	Banaras Hindu University , Varanasi	December 04-05 , 2012
19.	Sh. Mohit Dua, Asstt. Prof.	3rd International Conference on Meta Computing and Workshop on Parallel and Distributed Computing	Bhubaneswar Odisha	December 06-07 , 2012
20.	Sh. Virender Ranga, Asstt. Prof.	3rd International Conference on Meta Computing and Workshop on Parallel and Distributed Computing	Bhubaneswar Odisha	December 06-07 , 2012
21.	Dr. Arun Goel, Professor	Conference on Hydraulics , Water Resources , Coastal and Environmental Engineering	IIT Bombay , Mumbai	December 7-8 , 2012
22.	Dr. Ashwani Sharma, Asso. Professor	IEEE INDICON 2012 – Innovation	Kochi , Kerala	December 07-09 , 2012
23.	Dr Jitender Kumar Chhabra , Asso. Professor	ACM International Collegiate Programming Contest 2012	IIT , Kanpur	December 12-13 , 2012
24.	Dr. Ashwani Kumar, Asso. Professor	17 <sup>th</sup> National Power Systems Conference - 2012	IIT , Banaras Hindu University , Varanasi	December 12-14 , 2012
25.	Dr. Ajai Jain, Asso. Professor	International Conference on Agile Manufacturing (ICAM-2012)	IIT , Banaras Hindu University , Varanasi	December 16-19 , 2012
26.	Dr. Yash Pal, Professor	2 <sup>nd</sup> International Conference on Power , Control and Embedded Systems , ICPCES 2012	MNIT Allahabad	Dec. 17-19 , 2012
27.	Sh. V P Singh, Asso. Prof.	Short course on finite element method	IIT , Hyderabad	December 19- 21 , 2012
28.	Sh. Rajinder Kumar, Asstt. Prof.	International Conference on Communication , Devices and Intelligent Systems , CODIS 2012	Jadavpur University Kolkata	December 28-29 , 2012
29.	Dr. Rajender Kumar, Professor	95 <sup>th</sup> Annual Conference of Indian Economic Association	Visakhapatnam	December 27-29 , 2012

		(IEA)		
30.	Dr. J K Quamara, Professor	Indian Science Congress - 2013	Kolkata	January 03- 07 2013
31.	Dr. R P Chauhan, Asso. Prof.	100 <sup>th</sup> Indian Science Congress	Kolkata	January 03- 07 2013

## 11.8 COURSES AND ADMISSIONS

### COURSES OFFERED

#### UNDERGRADUATE COURSES – B.TECH. DEGREE COURSES

Courses of study are offered in following disciplines:

<u>Discipline</u>	<u>No. of seats</u>
Civil Engineering	139
Electrical Engineering	139
Mechanical Engineering	139
Electronics & Communication Engineering	139
Computer Engineering	92
Industrial Engg. & Management	92
Information Technology	92
Total	832

Note: Dasa/NRI students can be admitted upto 15% over and above of the sanction strength of B.Tech. (i.e. 15% of 832)

The duration of each course is four academic years. Teaching in each academic year (1<sup>st</sup> July to 30<sup>th</sup> June) is divided into two semesters of about sixteen weeks each.

The courses include study at Institute, visits to work-sites and practical training in Institute workshops and in approved engineering works.

#### POSTGRADUATE COURSES – M.TECH. DEGREE COURSES

Courses of study are offered in following disciplines and specializations:

<b>Discipline</b>	<b>No. of seats</b>						<b>Specialization</b>
	Open	SC	ST	OBC	PD	Total	
Civil Engineering	08	03	01	04	-	16	Structural Engineering
	08	03	01	04	01	17	Transportation Engg.
	09	02	01	05	01	18	Environmental Engg.
	08	03	01	04	-	16	Soil Mechanics & Foundation Engg.
	08	03	01	04	01	17	Water Resources Engg.



Electrical Engineering	08	03	01	04	-	16	Control System
	08	03	01	04	-	16	Power System
	08	03	01	04	-	16	Power Electronics & Drives
Electronics & Comm. Engg.	10	03	02	05	-	20	Electronics & Comm. Engg.
	09	02	02	06	01	20	VLSI Design
Physics	10	03	02	05	-	20	Instrumentation
	09	02	02	06	01	20	Nano Technology
Mechanical Engg.	08	03	01	04	-	16	Industrial And Production Engg.
	08	03	01	04	01	17	Machine Design
	09	02	02	05	01	19	Thermal Engg.
Computer Engg.	10	02	01	06	01	20	Computer Engg.

The duration of each course is four semesters for regular students and five semesters for part-time students.

The Institute made admissions directly in the academic session in the academic session 2012-13 on (i) sponsored seats and (ii) seats available under TEQIP-II project. In addition direct admissions also made for two new M.Tech. programmes. The number of seats available in each category for admission through this mode are given below:

(i) Sponsored and TEQIP-II seats:

Discipline	No. of seats TEQIP-II						Specialization
	Open	SC	ST	OBC	Sponsored	Total	
Civil Engineering	01	01	-	01	05	08	Structural Engineering
	01	01	-	-	05	07	Transportation Engg.
	-	-	-	01	05	06	Environmental Engg.
	01	-	-	01	05	07	Soil Mechanics & Foundation Engg.
	01	-	-	-	05	06	Water Resources Engg.
Electrical Engineering	02	01	-	01	05	09	Control System
	02	-	01	01	05	09	Power System
	02	01	-	01	05	09	Power Electronics & Drives
Electronics & Comm. Engg.	02	01	-	01	05	09	Electronics & Comm. Engg.
	06	01	02	03	05	17	VLSI Design

Physics	-	-	-	-	05	05	Instrumentation
	-	-	-	-	05	05	Nano Technology
Mechanical Engg.	02	01	-	01	05	09	Industrial And Production Engg.
	02	01	-	01	05	09	Machine Design
	02	-	01	01	05	09	Thermal Engg.
Computer Engg.	03	01	-	01	05	10	Computer Engg.
School of VLSI Design & Embedded System	-	-	-	-	05	05	Embedded System Design
School of Renewable Energy & Efficiency	-	-	-	-	05	05	Renewable Energy Systems

(ii) New M.Tech. Programmes:

Deptt./School	No. of seats						Programme
	Open	SC	ST	OBC	PD	Total	
School of VLSI Design & Embedded System	09	03	02	05	01	20	Embedded System Design
School of Renewable Energy & Efficiency	09	03	02	05	01	20	Renewable Energy Systems

The duration of each course is four semesters for regular students and five semesters for part-time students.

## ADMISSIONS

### UNDERGRADUATE COURSES

Details of candidates admitted to B.Tech. courses in 2012-2013:-

B.Tech.	FEMALE										FEMALE Total	MALE											MALE Total	Grand Total
	DASA	ICCR	MEA	OBC	OBC PH	OP	SC	ST	DASA	ICCR		MEA	OBC	OBCPH	OP	OP PH	SC	SC PH	ST	ST PH				
Category						8	1			9			1	36	1	57	2	19	10	1	128	137		
Civil Engg.																								
Computer Engg.	1			5		7	1	2		16				1	20		32	1	13	1	4	72	88	
Electrical Engg.																								
Electronics & Comm. Engg.		2	1	3		7	5	3		21				33	2	50	1	15	1	6	108	129		
Industrial Engg. and Management						11	3	1		21	2	2	1	29	2	52	2	13	1	9	113	134		
Information Technology				2	1	2	1			6				23		36	1	12		7	79	85		
Mechanical Engg.				1		12	1	2		16				21		26	1	9	5		62	78		
Grand Total	1	2	1	17	1	47	12	8		89	2	5	2	37	1	58	2	19	10		131	131		

Grand Total 766+16 \*ICCR/MEA/ DASA =782



## POSTGRADUATE COURSES

Details of candidates admitted to M.Tech. courses in 2012-13:-

Branch	Programme	Female						F Total	Male						M Total	Grand Total	
		ICCR	OBC	OP	SC	ST	Spon.		DASA	ICCR	OBC	OP	PH	SC			ST
Civil Engg.	C (Envir.)		2	2				4			2	7	2			11	15
	C (S.M.F)		2	2	1			5			3	6	2			11	16
	C (Strut.)		1	1				2	1		5	7	1	1		15	17
	C (Trans.)										6	8	1	4		19	19
	C (W.R)			1	1			2			5	8	2			15	17
Computer Engg.	Computer			6				6			6	6	3		1	16	22
Electrical Engg.	E (C.S.)	1	2	6	1			10			2	7	2		1	12	22
	E (P.E.D.)			2	2			4			5	11	1	2	1	20	24
	E (P.S.)			1				1			6	9	3	2	4	24	25
Electronics & Comm. Engg	ECE			1	1		1	3			5	13	3		2	23	26
Mechanical Engg.	M (M.D.)		2					2			1	6	12	4		23	25
	M ( I &P)				2			2			6	11	2		2	21	23
	M (Thermal)			2		1		3			8	7	1	2	1	3	22
Physics	Ph (N . T)		1	3				4			5	2	2			9	13
	Ph (Inst.)			3	1			4			5	8	2	1		16	20
School of VLSI Design & Embedded System	VLSI Design				1			1			4	15	1	3	2	25	26
	E. S.D.		2		1		1	4			3	12			2	17	21
Renewal Energy & Efficiency	R.E.S			3				3				8	2		1	11	14
	Grand Total	1	12	33	11	1	2	60	1	1	82	157	4	41	7	310	370

## 11.9 SCHOLARSHIPS AND AWARDS

### UNDERGRADUATE

Scholarships/stipends and Academic Prizes were awarded to the students of undergraduate courses as per details given in the table below:

#### B.Tech.

Scholarships	Number awarded					Value (Rs.)
Year	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	Final		
Batches	2011	2010	2009	2008	Total	
Merit Scholarship	56	21	21	21	119	Rs 1000/- per annum and a merit certificate with exemption from payment of tuition fee. From 2007 onward only 21 nos. scholarship amounting to Rs.3000/- & a merit certificate is given. Tuition is not exempted.
Postmatric Scholarship	56	21	10	06	93	Rs. 740/- p.m. for Boarders &Rs.330/- p.m. for day scholars
<u>Others states</u>	68	54	04	04	130	Students with full exemption from tuition fee.
Others Univ., Railways, P&T, Air-Force, Jindal Trust, Guru Harikishan Society and NCERT, DTE, DHE, Kalpana Chawla & Dhingra etc. ONGC	21	06	04	05	36	As sanctioned by the various departments and concerned agencies.

<b>Academic Prizes</b> B.Tech	147	44	-	03	194	Rs. 250/- by way of Technical books and in cash to the passed out students.
<b>Central Scholarship</b>	12 (SC) 05 (ST)					Rs.1,23,140/- per student

Institute has started an award of excellence named as 'Manohar Award of Excellence' from the academic session 2009-10 which is given to the topper of B.Tech. 1st year with a cheque of Rs.51,000 and a certificate. 1981-86 (Batch) Electrical students have instituted a Medal alongwith Cash prize of Rs. 5000/- to be given to overall topper of the batch, in memory of late Sh. Shyam Sunder Dhingra.

### **POSTGRADUATE**

A scholarship of Rs. 8000/- p.m. per student is awarded to all eligible student pursuing a regular course of study of M.Tech. Only those candidates who have qualified GATE are eligible for the award of the scholarships.

### **DOCTORAL PROGRAMME**

A scholarship of Rs. 16,000/- p.m. for 1<sup>st</sup> & 2<sup>nd</sup> Year), Rs. 18,000/- p.m. for 3<sup>rd</sup> year, 4<sup>th</sup> year and 5<sup>th</sup> year (for B.E/B.Tech./M.Sc. Equivalent with Valid GATE score above the prescribed cut off level/NET qualification) and Rs. 18,000/- p.m. for 1<sup>st</sup> & 2<sup>nd</sup> Year and Rs. 20,000/- p.m. for 3<sup>rd</sup> & 4<sup>th</sup> year (for M.E/M.Tech. or Equivalent) is awarded to all eligible students pursuing a regular course of study of Ph.D.

### **11.10 TRAINING AND PLACEMENT STATISTICS**

Leading national and multi national companies compete each other to be first in our campus for recruiting under-graduate and post-graduate students. Major PSU's like C-DOT, IOCL, ONGC, CIL, HSCC, TCIL, NCB & Brahmos Aerospace have visited the institute and recruited many students. Likewise major private sector companies such as ZS Associates, Winshuttle, Samsung, SISO, Future First, Tata Motors, Microsoft, Motorola Mobility, Maruti Suzuki, Oracle, Freescale Semiconductors, Honda, Google etc. have visited the institute for recruitments. During the year 2011-12, more than 155 companies have visited the campus and offered 900 jobs to the undergraduate and about 200 jobs to post graduate students. The highest pay package offered has been of Rs. 14 lacs p.a. More than 200 students have been offered pay packae between Rs. 8-10 lacs p.a. and another 125 students have been offered pay package in the range of Rs. 6-8 lacs p.a. Over 350 students have been offered dream jobs and may students have been offered Pre Placement Offer (PPO) of Rs. 11 lacs p.a. as pay package while undergoing training during sixth



semester. The number of companies visited and jobs offered disciplinewise are tabulated below:

Discipline	No. of companies which conducted interviews	No. of jobs*
Computer Engg.	65	77
Information Technology	65	58
Electronics & Comm. Engg.	45	122
Mechanical Engg.	64	119
Electrical Engg.	51	98
Civil Engg.	39	86
IEM	33	18
MCA	25	69
M.Tech.	27	100

Note : \*Some students were selected by more than one company.

### 11.11 FINANCE AND ACCOUNTS DETAILS

Since the inception of Institute, Government of India has been providing Plan Grant for development of Institute. The Plan Grant is mainly released for construction of residences in the campus, hostel buildings construction/renovation of instructional building and other buildings, purchase of new equipments as well as for purchase of furniture for the Institute as well as hostels. On a perusal of the grant released by the Government of India for the last 10 years, Plan Grant to the tune of Rs. 493.20 lacs for 2003-04, Rs. 322.50 lacs for 2004-05, Rs. 300.00 lacs for 2005-06, Rs. 900.00 lacs for 2006-07, Rs. 2315.00 lacs for 2007-08, Rs. 2756.00 lacs for 2008-09, Rs. 3944.00 lacs for 2009-10, Rs. 2200.00 lacs for 2010-11, Rs. 4100.00 lacs for 2011-12 and Rs. 3300.00 lacs for 2012-13 are released for the development of Institute. The Plan Grant received from Government of India has been earmarked/utilized for construction of various works as per details given below:-

- 1) Construction of Mega Boys' Hostel of 1000 capacity at NIT Kurukshetra.
- 2) Construction of Additional Block of Health Centre at NIT Kurukshetra.
- 3) Construction of New Administrative Block at NIT Kurukshetra.
- 4) Construction of graded seating arrangement for 2000 persons in Open Air Theatre at NIT Kurukshetra.

#### On-going works:

- 1) Construction of 20 Nos. Prof. & 20 Nos. Asstt. Prof. Multi Storeyed Staff Housing at NIT Kurukshetra.
- 2) Construction of swimming pool at NIT Kurukshetra.
- 3) Providing and installation of Electrical Sub-station HT/LT distribution including street lighting and feeder pillar etc. in Non-residential area at NIT Kurukshetra.

- 4) Construction of Boundary Wall of Hostel No. 1 & 2 at NIT Kurukshetra.
- 5) Widening of Institute Road from Kirmich Road Gate to Hostel no. 4 (approx. length of 400 meters) at NIT Kurukshetra.
- 6) Replacement of ACC sheets with Zinalume sheets & renovation of water channel in central/old Workshop at NIT Kurukshetra.
- 7) Construction of 2 Nos. parkings at NIT Kurukshetra.
- 8) i) Recarpeting of roads from NIT gate (towards KUK gate) to Apollo Canteen chowk via NIT chowk at NIT Kurukshetra.  
ii) Re-carpetting of road from main approach road of Guest House and around Guest House roads at NIT Kurukshetra.  
iii) Re-carpeting of road from Apollo Canteen to NIT gate via Mega Hostel and Hostel no. 7 & 8 at NIT Kurukshetra.  
iv) Re-carpeting of road from Apollo Canteen chowk to Y shape road via Open Air Theatre at NIT Kurukshetra.

## 12. RESEARCH WORK

### 12.1 On going Research Projects

Sr No	Name & Coordinator of the Project	Amount sanctioned (Rs. In lacs +interest)	Sponsoring Agency	Duration
1.	Information Security Education Awareness Dr. A. Swarup	4.44+1.55	MC & IT, Govt. of India, New Delhi	2005-13
2.	Special man power Development programme Dr. A.K. Gupta	50.00+2.73	MC & IT, Govt. of India, New Delhi	2005-13
3.	Water Harvesting to curb ground water Dr. K.K. Singh	12.50+1.13	Ministry of Science & Tech. GOI New Delhi	2007-12
4.	Development of a Model for intelligent integration of process planning and scheduling for flexible systems in manufacturing for performance improvement in evolving CIM environment Dr. Ajay Jain	14.00+0.58	Ministry of Science & Tech. GOI New Delhi	2008-13
5.	In Silico Design & Modeling of some artificial allosteric system Dr. Minati Baral	1.00+0.13	UGC New Delhi	2009-13
6.	Design Coputational modeling & synthesis of some novel biominetic sidrophore analog Dr. Minati Baral	8.83+1.21	CSIR Project MHRD	2009-13
7.	Central for water resources mgmt.	7.78+0.08	DST, Govt. of India,	2010-13



	Dr.K.K.Singh		New Delhi	
8.	Study of High-Energyhadron thearapyspace. Dr.Ashwani Kumar	7.00+0.24	DST Project New Delhi	2010-13
9.	Synthesis & charactersition of Multinferroic Dr. Anurag Gaur	10.64+0.35	DST Project New Delhi	2010-13
10.	Estimation of Fertilizer induced Radioactivity in plants. Dr. R.P. Chauhan	3.56+0.16	UGC Grant	2011-14
11.	Study of the factor affecting runden level Dr. R.P. Chauhan	15.86+0.08	BRNS	2011-14
12.	Changing Water Cycle Dr. K.K. Singh	9.77+0.17	MOEs	2012-15
13.	Ganga River Basin Environmental Manage- ment Plan (GRBEMP) Prof. S.K. Patidar	5.00	IIT Kanpur	2012-15
14.	Distribution System Markets Dr. Ashwani Kumar	10.08	SERB	2012-13

## **12.2 ACHIEVEMENTS DURING THE YEAR**

### **Civil Engineering Department**

1. Dr. D.K.Soni was honoured with the award of Best Citizen of India by Internation Publishing House.
2. Dr. D.K.Soni was honoured with the award of Glory of Excellence Award-2011 by National and International Compedium and International Institute of Education & Management, Delhi.
3. Dr. D.K.Soni was nominated for the award of Leading Scientists of World-2011 by International Biographical Centre, Cambridge, England.
4. The dissertation submitted by an M.Tech student under the supervision of Dr. V.K.Sehgal was published in the form of a book in Germany.
5. Dr. Anupam Mittal and Dr. Parveen Aggarwal were given appreciation letter by DRDO.
6. Dr. K.K. Singh arranged an expert lecture delivered by Dr. V.P.Singh, Professor, Texas A and M University, USA.

### **Mechanical Engineering Department**

1. Dr. N.K. Singh delivered keynote lecture on 'Prediction and Control of a Laminar Separation Bubble' in the International Conference on Applications of Fluid Engineering held at GLBITM, Greater Noida from Sept. 20-22, 2012.
2. A seminar on 'Design Sensitization' was organized on August 28, 2012.
3. 'E-Summit.13', a two days workshop was organized by Entrepreneurship Development Cell on 19-20 April 2013.
4. STC on 'Wind Energy Conversion Systems' organized by Dr. V.K. Bajpai & Dr. Ashwani Kumar on 07-09 Sept. 2012.
5. STC on 'Solar Energy: Modeling and Conversion' organized by Dr. V.K. Bajpai & Dr. Ashwani Kumar on 24-26 August, 2012.
6. Expert lecture on "Desiccant Cooling Systems" delivered by Dr. V.K. Bajpai & Dr. Avadhesh Yadav on 12<sup>th</sup> October 2012.
7. A 3-days self financed STC on 'CFD Applications in Tribology' was organized in Mech. Engg. Deptt. from April 19-21, 2013 with Dr. Punit Kumar and Dr. Gulshan Sachdeva.
8. A delegation of scientists from Combat Vehicle Research & Development Establishment, Chennai, DRDO visited NIT Kurukshetra on Aug.7, 2013.

### **Physics Department**

1. Organised National Conference in Nanoscience and Instrumentation Technology (NCNIT-2013) on 28-29 March 2013.
2. Organised Expert Lecture Series on Instrumentation on 11-12 October 2012.

## **Electrical Engineering Department**

### **Seminar/conference/workshops/short term courses organized**

1. STC on Wind Energy Conversion Systems (Sept. 07- 09, 2012) under self financed scheme, organized by Dr. Ashwani Kumar.
2. STC on Solar Energy: Modeling and Conversion (August 24- 26, 2012) under self financed scheme organized by Dr. Ashwani Kumar.
3. Two days training program on software NEEPLAN procured under DST project, Jan. 2013, organized by Dr. Ashwani Kumar.
4. Three days training program on software PSCAD procured under DST project, Jan. 2013 organized by Dr. Ashwani Kumar.
5. National Conference on Recent trends in Energy, Systems and Control, March 15-16, 2013, organized by the department.
6. Two Week ISTE Workshop on Introduction to Research Methodologies, from 25 June 2012 to 4 July 2012 under NME-ICT, organized by Dr. Saurabh Chanana.

### **Lectures Delivered**

1. Lecture on "congestion management and renewable energy policies and impact on power systems", in the STC, Oct. IIT Kanpur, 2012, delivered by Dr. Ashwani Kumar.
2. Lecture on "Large-scale integration of wind power in electric grid" at 3 day STC on Wind Energy conversion system. 7-9 Sep, 2012 organized by School of Renewable Energy and Efficiency, delivered by Dr. Saurabh Chanana.
3. Lecture on "Information Communication Technology Enabled Teaching-Learning Process: A Recent Perspective", in Refresher Course on ICT organized by UGC Academic Staff College, BPS Mahila Vishwavidyala, Khanpur Kalan, Gohana, Haryana, May 31, 2013, delivered by Dr. Sathans.
4. Lecture on "Android Operating System and Aakash Tablet", in Refresher Course on ICT organized by UGC Academic Staff College, BPS Mahila Vishwavidyala, Khanpur Kalan, Gohana, Haryana, May 31, 2013, delivered by Dr. Sathans.
5. Lecture on "E-Learning: A New Paradigm of Learning", in Orientation Course, organized by UGC Academic Staff College, BPS Mahila Vishwavidyala, Khanpur Kalan, Gohana, Haryana, June 28, 2013, delivered by Dr. Sathans.



6. Lecture on "Aakash Tablet and Computer Networking Basics", in Orientation Course, organized by UGC Academic Staff College, BPS Mahila Vishwavidyala, Khanpur Kalan, Gohana, Haryana, June 28, 2013, delivered by Dr. Sathans.

**Seminar/Conference/Workshops/Short term courses attended:**

1. One day Workshop on curriculum revision for the ME (Electrical Engineering), at PEC University of Technology, Chandigarh, Apr 18, 2013, attended by Prof. R. S. Bhatia.
2. Two day ISTE Workshop on "Akaash for Education" (10-11 Nov, 2012) at NIT Kurukshetra attended by Dr. Saurabh Chanana.
3. QIP STC on Power markets: Economics and management, Oct.29-Nov. 2, 2012, IIT Kanpur, 2012, attended by Dr. Ashwani Kumar.
4. One week Short Term Course on "Power Electronics", May 13-17, 2013, NITTTR, Chandigarh, attended by Dr. Sathans.
5. National Workshop on Predictive Mathematical Models in science and Engineering (PMMSE-2013) during May 24-25, 2013 organized by department of Mathematics, NIT Kurukshetra, attended by Mr. K. K. Sharma.
6. National conference on recent trends in energy, systems and control, march 15-16, 2013, NIT Kurukshetra, March-2013, attended by Mr. Atma Ram Gupta.

**Computer Applications Department**

**Personality Development Programme for Students**

Department organized Personality Development Programme on "Effective Communication Skills" for the students during 2011-12. The programme proved to be very useful to the students and helped them in getting good jobs as well.

**Humanities & Social Sciences Department**

1. Dr. Rajendera Kumar attended one day workshop on "Human Value and Professional Ethics" organized by Govt. of Haryana, Chandigarh on 28.11.2011.
2. Dr. Rajendera Kumar attended 94<sup>th</sup> National Conference of the Indian Economic Association, organized by Bharati Vidyapeeth Deemed University, Pune, 27-29 December, 2011.
3. Dr. Rajendera Kumar attended workshop on IP Management and Technology Licensation, Feb. 2-5, 2012.

## **Mathematics Department**

### **Workshop Organised**

Organised a two day National Workshop on Predictive Mathematical Models in Science and Engineering (PMMSE 2013) held at Department of Mathematics, NIT Kurukshetra during 24-25 May 2013 coordinated by Dr. Paras Ram and Co-coordinated by Dr. Sarasvati Yadav.

### **Research Paper presented in Conferences**

Paras Ram, "Role of Porosity and Field Dependent Viscosity on Disk Driven Axi-symmetric Ferrofluid Flow" at National Conference on Emerging Trends in Physics of Fluids & Solids held at Jadahavpur, Kolkata during Feb. 27-28, 2013.

### **Short Term Courses/Conferences/Workshops Attended**

Paras Ram, "Management Capacity Enhancement Programme" at I.I.M. Indore during April 29- May 8, 2013.

Amit Prakash, "National Workshop on Predictive Mathematical Models in Science and Engineering (PMMSE 2013) at NIT Kurukshetra during 24-25 May, 2013.

## **Chemistry Department**

### **Conferences/Workshops/Seminars attended:**

1. D.P.Singh, Vidhi Grover and Kiran Jain, "Template synthesis, spectral studies and antibacterial studies of tetraazamacrocyclic complexes of trivalent metal ions" 99<sup>th</sup> Indian Science Congress, Bhuvaneshwar, 2012.
2. D.P.Singh, "Macrocyclic Chemistry: Current trends and future perspectives" Int. Conf. of Indian Council of Chemists, Bangkok, Invited talk, P-3, 2011.
3. D.P.Singh and Parveen, "Divalent transition metal complexes derived from thiocarbohydrazide and dimedone" Int. Conf. on Global Trends in Pure and Applied Chemical Sciences (ICGTCS-2012) Udaipur, 2012.

## **Department of Business Administration**

1. One day workshop on Enhancing Group Discussion & Interview skills, Feb. 14, 2012. Resource person: Mr. Vinay Sharma, Partners India, New Delhi.

2. Expert Lectures on Making Summer Internship Effective, Feb. 27, 2012. Resource persons: Dr. N.K. Chaudhary, President, ISDR, Mumbai & Dr. Lalit Chaudhari, Secretary General, ISDR, Mumbai.
3. Expert Lecture on Modern Marketing Trends, March 23, 2012. Resource person: Prof. Usha Kiran Rai, FMS, BHU Varanasi.
4. One day workshop on Enhancing Employability, April 17, 2012. Resource person: Sh. Vaibhav Jaiswal, Professional trainer, Pune.

#### **Conferences attended:**

1. Prof. P.J. Philip attended the national conference on the Role of Assistive Technologies in enabling access of persons with disabilities in higher education and work place on Jan. 20-21, 2012 at IIM Bangalore.
2. Prof. P.J. Philip attended the 13<sup>th</sup> UN conference on Trade and Development (UNCTAD XIII) at Doha, Qatar on April 17-26, 2012 and presented a paper on Trade, Sustainability and Development.

#### **Computer Engineering Department**

The department faculty have visited and presented various research papers in International Conferences abroad.

### **12.3 PUBLICATIONS, PATENTS etc.**

#### **MECHANICAL ENGINEERING DEPARTMENT**

##### **Papers in International/National Journals**

1. Yadav. A. and Bajpai V.K., 2012, "An experimental investigation of solar powered desiccant wheel with different rotational speeds' International Journal of Ambient Energy, September 2012 pp. 1-24, by Taylor and Francis ISSN: 0143-0750 print/2162-8246 on line.
2. Yadav, A. and Bajpai V.K., 2012, "Design parameter analysis to improve the performance of desiccant wheel using a mathematical model" Chemical Engineering & Technology (Accepted on 9 March 2012). Wiley Publication Print ISSN: 0930-7516, on line ISSN:1521-4125.
3. Yadav, A. and Bajpai V.K., 2012, "Numerical and experimental investigation of operation parameters of solar powered desiccant wheel in India" Heat Transfer-Asian Research January 2013 Vol. 42 I. pp I-30, Wiley Publication On line ISSN:1523-1496.
4. Yadav, A. and Bajpai V.K., 2012, "Analysis of various designs of a desiccant wheel for improving the performance using a mathematical model March/April 2013 Published by the American Institute of Physics (AIP) ISSN:1941-7012.
5. Yadav, A. and Bajpai V.K., 2012, "The performance of solar powered desiccant dehumidifier in India: An experimental investigation." International Journal of



## **CIVIL ENGINEERING DEPARTMENT**

### **Publications**

1. Rafat Siddique, Paratibha Aggarwal and Yogesh Aggarwal, "Influence of water/powder ratio on strength properties of self-compacting concrete containing coat fly ash and bottom ash, construction and building materials" Elsevier Publications, pp 73-81, 2012.
2. Rafat Siddique, Paratibha Aggarwal and Yogesh Aggarwal, "Prediction of compressive strength of self-compacting concrete containing bottom ash using artificial neural network, advances in engineering software" Elsevier Publication, pp 780-786, 2012.

## **CHEMISTRY DEPARTMENT**

### **Papers in International/National Journals**

1. S.K. Sahoo, R.K. Bera, Minati Baral, B.K. Kanungo, Synthesis and aqueous coordination chemistry of a Novel flexible tripodal aminopentol ligands toward Al(III), Ga(III) and In(III). *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*(89), 322-328 (2012)
2. Dinesh Kumar, Arun Syamal, A. Gupta, V. Pandey and Mukesh Rani Coordination compounds of Schiff base containing urea moiety.
3. D.Kumar, Amit kumar and Jyoti Sharma, Physico-chemical studies on the coordination compounds of thiazolidin-4-one. *J. Chem.*, Article ID 870325, (2013).
4. M.Kamboj D.P. Singh and K. Jain. Synthesis, Spectral and Antibacterial studies of 18-membered teraazamacrocyclic complexes derived from carbohydrazide and diacetonyl, *Int. J. Chem. Res.*, 3, 21-24 (2012)
5. D.P. Singh, Parveen, Chetan Sharma and K. R. Aneja. Divalent Transition Metal Complexes from Thiocarbonylhydrazide and Dimedone.
6. Synthesis, Characterization and in vitro Antimicrobial studies of Macrocyclic Metal Complexes Derived from 1, 8-Diaminonaphthalene and Dimedone. D. P. Singh, Parveen, Ramesh Kumar, P. Surain and K. R. Aneja. *J. Incl. Phenom. Macrocycl. Chem.* (Accepted; DOI: 10.1007/s10847-013-0306-1) (Online. In press)
7. Trivalent Transition Metal Complexes Derived from carbohydrazide and Dimedone. D.P. Singh, Vidhi Grover, Parveen and Kiran Jain. *Arabian J. Chem.*, DOI:10.1016/j.arabjc.2013.07.004 (online, in press)
8. Kapoor J.K, Dass R and Gambhir S, "Rapid spectrophotometric determination of Molybdenum in steel and Environmental samples after extraction of its 6-chloro-

- 3hydroxy-2-[4'methylphenyl]-4-H-chromen-4-one", Research Journal of Chemistry and Environment, 16 (4), 40-45 (2012).
9. R. Dass, J.K. Kapoor and Sunita Gambhir, "Extractive spectrophotometric method of determination of Mo in step and Environmental samples", Journal of Chemistry, Article ID 420768 2 (2013)
  10. J.K. Kapoor Shagufta Jabin, H.S. Bhatia "Effective use of lime and alum along with synthetic polyelectrolyte in treatment of dairy industry wastewater", Journal of pollution research, poll Res. 32 (I):39-44 (2013).

#### **Papers in International/ National Conferences/Symposia/Seminars**

1. Design and synthesis of TREN CAP tripodal ligand with alanine and phenyl alanine as a spaces units: An analogs of natural siderophore bacillibactin Kirandeep Kaur, Minati Baral and B.K. Kanungo International Conference "Chemical Constellation Cheminar September 10-12<sup>th</sup> 2012" NIT Jalandhar (PP)
2. Design and synthesis of Ruthenium (II) complex containing Schiff base ligand and bipyridine compounds for solar cell application C. Chaitanya Reddy and Minati Baral International Conference "Chemical Constellation Cheminar September 10-12<sup>th</sup> 2012" NIT Jalandhar (PP)
3. Synthesis of two benzene based novel tripodal studies with Fe (III) metal ion Amit Gupta, Kirandeep Kaur, Minati Baral and B.K. Kanungo International Conference "Chemical Constellation Cheminar September 10-12<sup>th</sup> 2012" NIT Jalandhar (PP)
4. Design and synthesis of Ruthenium (II) complex containing bipyridine ligands for solar cell application C. Chaitanya Reddy and Minati Baral and B.K. Kanungo National Conference GC: nfcs KU 22-23<sup>rd</sup> October 2012 (PP)
5. Synthesis, theoretical studies of a novel imine naphthol ligand and its complexation with trivalent metal ion" Kirandeep Kaur, Minati Baral and B.K. Kanungo National Conference GC: nfcs KU 22-23<sup>rd</sup> October 2012 (PP)
6. Synthesis and antimicrobial activity of Ruthenium (II) complex containing tetradentate Schiffs base ligand and bipyridine ligands. C. Chaitanya Reddy and Minati Baral Research Scholar's day 2012, 17-18, December 2012 IIST, Thiruvananthapuram (PP)
7. Synthesis, theoretical studies of amine naphthol tripodal ligand & its complexation with Fe (III). Kirandeep Kaur and Minati Baral Research Scholar's day 2012, 17-18, December 2012 IIST, Thiruvananthapuram (PP)
8. Design, Synthesis and antimicrobial activity of Ruthenium (II) Complex containing bipyridine ligands. Minati Baral, Chaitanya Reddy and Kanungo 7<sup>th</sup> RSC-CRSI & 15<sup>th</sup> CRSI National Symposium in Chemistry 2013 (NSC-15) Jan.31 to Feb 3-2013
9. Design, Synthesis and theoretical studies of Ru (II) complex containing mixed ligands for antimicrobial application. Chaitanya Reddy and Minati Baral 5<sup>th</sup> National Seminar on "New frontiers in Chemistry" feb 15 to 16 2013, Patiala Punjabi University.



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55. Prakash Chand, Anurag Gaur, Ashavani Kumar, Structural and Optical Studies of Sr and Mn doped ZnO Nanoparticles, AIP Conf. Proc. 1536, 143 (2013).
56. Prakash Chand, Anurag Gaur, Ashavani Kumar, Structural and Optical Properties of Ni doped CuO Nanoparticles, NCNIT-2013, NIT, Kurukshetra.
57. Prakash Chand, Anurag Gaur, Ashavani Kumar, Effect of Li doping on ZnO and CuO nanostructures, NST-2013, Centre of Material Science & Engg. NIT Hamirpur.
58. Prakash Chand, Anurag Gaur, Ashavani Kumar, Optical and morphological study of CuO nanoparticles sintered at various temperatures, NanoSciTech-2012, P.U. Chandigarh.
59. Prakash Chand, Anurag Gaur, Ashavani Kumar, Effect of Sintering Temperature on  $\text{Cu}_{0.95}\text{Co}_{0.05}\text{O}$  nanoparticles, Global Challenges new frontiers in Chemical sciences (GC:NFCS-2012), K.U. Kurukshetra.

## **COMPUTER ENGINEERING DEPARTMENT**

Thirty five research papers have been published by the faculty members of the Department in various International/National Journals and International/National Conferences during the year 2012-13.

## **ELECTRONICS & COMMUNICATION ENGG. DEPTT.**

### **Papers in International/National Journals**

1. Vivek Kumar, Vrinda Gupta, Rohit Maurya, "A study and analysis of High Speed Adders in power-constrained environment." International Journal of Soft Computing and Engineering, Vol.2 (3), July 2012. pp. 281-287.
2. N.P. Singh and Brahmjit Singh, "Impact of L2 Triggering Time on Hanover Performance for 4 G Wireless Networks: SPRINGER Wireless Personal Communications, vol. 68(3), 2013, pp. 727-746, ISSN:0929-6212.



3. Rajeev Verma, and N.P. Singh "GRA based network selection in heterogeneous wireless network," SPRINGER Wireless Personal Communications, Published on line 07<sup>th</sup> March 2013, ISSN Online 1572-834x
4. Tarun Dubey and O.P. Sahu, " Directional Antenna Assisted Scheme to Reduce Localization Error in Wireless Sensor Networks," International Journal of information & Network Security, Vol.2, No. 2, pp. 183-189. (2013).
5. Tarun Dubey and O.P. Sahu, "Performance Evaluation of Gossip for Minimizing Redundancy in Wireless Sensor Networks,' International Journal of Computer Science: Theory, Technology and Application, Vol. 2, No. 1, pp. 1-7, (20130).
6. Sandeep Santosh And O.P. Sahu, "Performance Enhancement of Robust Expectation- Maximization Direction of Arrival Estimation Algorithm for Widerband Source Signal," Journal fo Information and Communication Technologies, Vol. 2, Issue 11, pp. 16-22, December 2012
7. Sandeep Santosh and O.P. Sahu, "Performance Enhancement of High Resolution Multiple Wideband Nonstationary Source Localization with Unknown Number of Sources," Journal of Information and Communication Technologies, Vol. 2, Issue 11, pp. 6-15, December 2012.
8. Shri Kant and O.P. Sahu, "Design of Low Voltage High Speed Operational Amplifiers for Pipelined ADC in 90 nm Standard CMOS Process," International Journal of Engineering Research & Technology (IJERT)" ISSN":2278-0181, Vol. 1, Issue 4, June-2012

#### **Papers in International/ National Conferences/Symposia/Seminars**

1. Vrinda Gupta and Rajoo Pandey, "Investigating Clustering Algorithms in Micro-Sensor Networks", Lecture Notes in Engineering and Computer Science: Proceedings of WCE, July 2012, London, U.K. pp. 1292-1297.

#### **MATHEMATICS DEPARTMENT**

##### **Research Papers published in International Journals:**

1. Paras Ram, "Effect of phase difference between highly oscillating magnetic field and magnetization on the unsteady ferrofluid flow due to a rotating disk", Results in Physics (Elsevier, USA)3, 55-60 (2013).
2. Paras Ram, "Negative viscosity effects on ferrofluid flow due to a rotating disk" Int. Journal of applied Electromagnetics and Mechanics (IOS, Netherland), 41, 467-478 (2013).
3. Paras Ram, "Effect of porosity on unsteady MHD flow passed a semi infinite moving vertical plate with time dependent suction", Indian Journal of Pure and Applied Physics (CSIR, INDIA) 51, 461-470 (2013).
4. Paras Ram, "Effect of temperature dependent viscosity on the revolving azisymmetric ferrofluid flow with heat transfer" Applied Mathematics and Mechanics (Springer), 33 (11), 1441-1452 (2012).
5. Paras Ram, "On the revolving ferrofluid flow due to rotating disk", Int. Journal of Non Linear Sciences (World Academic Press, UK) 13(3), pp 317-324 (2012).



6. Paras Ram, "Ferrofluid flow with magnetic field dependent viscosity due to rotating disk in porous medium" *Int. Journal of Applied Mechanics* (World Scientific, UK), 4(4), 1250041 (2012).
7. Paras Ram, "Flow characteristics of revolving ferrofluid with variable viscosity in a porous medium in the presence of stationary disk", *Fluid Dynamics & Material Processing* (Tech Science Press, USA) 8(4), 437-452 (2012).
8. Satasvati Yadav, "On irreducible  $p, q$ -representations of Lie algebras (0.1) and (0.0)" *Mathematische Nachrichten* (Wiley) 286 (4) pp. 392-401 (2013).
9. Amit Prakash, "On a quarter symmetric non-metric connection in a Kenmurtu manifolds" *Int. Journal of Pure and Applied Mathematics*, 82(2), pp. 271-278 (2013).
10. Amit Prakash, "m-projective curvature tensor on a Lorentzian para-Sasapian manifolds", *IOSR Journal of Mathematics*, 6(1), pp. 19-23 (2013).
11. Amit Prakash, "Some results on a Lorentzian para-Sasapian manifolds", *Global Journal of Science and Frontier Research Mathematics and Decision Sciences*, 13 (1) (2013).

### **Research Papers in Conferences/International Meet**

1. Paras Ram, "Magneto viscous effects on flow characteristics of ferrofluid saturating porous medium" in *Proceedings of National Seminar on Mathematical Modeling in Science and Technology* held at TIT & S, Bhiwani on 18<sup>th</sup> August 2012.
2. Paras Ram, "Ferrofluid flow with heat transfer under the influence of variable viscosity in the presence of a disk" in *Proceedings of National Seminar on Mathematical Modeling in Science and Technology* held at TIT & S, Bhiwani on 18<sup>th</sup> August 2012.
3. Paras Ram, "Unsteady MHD flow past a vertical plate with radiation and time dependent suction" in *Proceedings of National Seminar on Mathematical Modeling in Science and Technology* held at TIT & S, Bhiwani on 18<sup>th</sup> August 2012.

### **ELECTRICAL ENGG. DEPTT.**

#### **Publications {Journals/Conferences(National/International)}**

1. Parag Nijhawan, R.S.Bhatia, D.K.Jain, "Application of PI controller based DSTATCOM for improving the power quality in a power system network with induction furnace load", *Songklanakarin Journal of Science of Technology*, vol. 34 (2), pp. 195-201, Mar – Apr 2012.
2. Parag Nijhawan, R.S.Bhatia, D.K.Jain, "Improved Performance of Multilevel Inverter based DSTATCOM with induction furnace load", *The Institution of Engineering and Technology (IET) Journal on Power Electronics*, pp. 1-9, Jun 2013.
3. Pankaj Gupta, R.S.Bhatia, D.K.Jain, "An advanced frequency drift method for islanding detection of an inverter interfaced grid connected distribution

- generation", 2012 IEEE Fifth India International Conference on Power Electronics (IICPE 2012). Delhi Technological University, Delhi, India. (December 6-8, 2012).
4. Parag Nijhawan, R.S.Bhatia, D.K.Jain, "Role of DSTATCOM in a Power System Network with Induction Furnace Load", 2012 IEEE Fifth POWER INDIA Conference December 19-22, 2012, Deenbandhu Chhotu Ram University of Science & Technology, Murthal, -National Capital Region, Delhi, India
  5. Pankaj Gupta, R.S.Bhatia, D.K.Jain, "A Hybrid Technique for Islanding Detection of an Inverter Based Distributed Generation", 2012 IEEE Fifth POWER INDIA Conference December 19-22, 2012, Deenbandhu Chhotu Ram University of Science & Technology, Murthal, -National Capital Region, Delhi, India
  6. An Efficient Self-Organizing Map Learning Algorithm with Winning Frequency of Neurons for Clustering Application", IEEE International Advance Computing Conference (IACC-2013), India Feb. 22-23, 2013.
  7. Chaudhary Vikas, Bhatia Ravinder Singh, Anil K. Ahlawat, "An Investigation and Analysis of Microstrip Antenna to reduce backward radiation toward the users' head", National Conference on Recent Trends in Energy Systems and Control, March 15-16, 2013, Kurukshetra, India.
  8. Yajvender Pal VERMA, Ashwani KUMAR "Dynamic contribution of variable-speed wind energy conversion system in system frequency regulation", Front. Energy Int. Journal on FIE, Springer Verlag 2012, 6(2): 184-192.
  9. Ashwani KUMAR, Charan SEKHAR, Demand response based congestion management in a mix of pool and bilateral electricity market model Front. Energy 2012, 6(2): 164-178.
  10. Yajvendra Verma and Ashwani Kumar, "Participation of Doubly Fed Induction Generator Based Wind Turbine in Frequency Regulation with Frequency-linked Pricing", Electric Power Components and Systems, vol. 40, no. 14, Oct. 2012, pp. 1586-1604.
  11. Yajvendra Verma and Ashwani Kumar, "Load Frequency Control in Deregulated Power System with Wind Integrated System using Fuzzy Controller" Int. Journal on FIE, SpringerVerlag, vol.6 No.2, 2013, pp.184-192.
  12. D. Tyagi, Ashwani Kumar, Saurabh Chanana, "Load shedding scheme for an interconnected hydro-thermal hybrid system with SMES", Int. Journal on FIE, Springer Verlag, vol.6, No. 2, 2012, pp.227-236.
  13. Ashwani Kumar and Charan Sekhar, "Congestion management with FACTS devices ensuring loadability limits", Int. J. of Electric Power and Energy Systems, vol. 46, No. 1, Jan. 2013, pp.258-273.



14. Deepak Tyagi, Ashwani Kumar, and Saurabh Chanana, "Load shedding scheme for the two-area system with linear quadratic regulator", Int. Journal on FIE, SpringerVerlag, vol.6 No.1 2013, pp.90-102.
15. Himanshi Singla and Ashwani Kumar, "LQR Based Load Frequency Control with SMES in Deregulated Environment", in Proc. INDICON Dec. 2012 at Kochi Kerala.
16. D. Tyagi, Ashwani Kumar and Saurabh Chanana, "Load Shedding Via PID Controller for an Isolated Power System", in Proc. IEEE POWERCON 2012, DCRUST Murthal.
17. N. Yella, K. S. Sandhu, and A. Kumar, "Comparison of Modeling Techniques for Magnetization Characteristics of Induction Machine", in Proc. IEEE POWERCON, 2012, DCRUST Murthal.
18. Ram Kumar Mittapalli, Ashwani Kumar, and Yash Pal, "Optimal Load Curtailment Based Transmission Management with FACTS", in Proc. IEEE POWERCON, 2012, DCRUST Murthal
19. Ram Kumar Mittapalli, Ashwani Kumar, Yesh Pal, and S. Chanana, "Optimal Load Curtailment in Hybrid Electricity Market and Impact of FACTS", in Proc. IEEE Int. Conf. on Power, Control, and Embedded Systems, ICPCES, Dec. 17-19, 2012, NIT Allahabad.
20. Charan Sekhar and Ashwani Kumar, "Comparison of Series FACTS Controllers for Congestion Management in Pool Electricity market Model", in Proc. NPSC Dec. 2012 IT BHU.
21. D. Tyagi, Himanshi Singla, and Ashwani Kumar, "PID fuzzy based AGC of multi-area power system in deregulated environment", in Proc. NPSC Dec. 2012, IT BHU.
22. Rishabh Verma, Shalini Pal, Sathans, "Fuzzy based Automatic Generation Control of Two-area Power System and Comparative Analysis", International conference on Biomedical Engineering and Assistive Technologies, Dec.6-7, 2012, NIT, Jalandhar.
23. Rishabh Verma, Shalini Pal , Sathans, "Intelligent Automatic Generation Control of Two-Area Hydrothermal Power System using ANN and Fuzzy Logic", IEEE International Conference on Communication Systems and Network Technologies, Gwalior, India, April 6-8, 2013.
24. Manjeet, Sathans, "Fuzzy based Control of Two Link Robotic Manipulator and Comparative Analysis", IEEE International Conference on Communication Systems and Network Technologies, Gwalior, India, April 6-8, 2013.
25. Rishabh Verma, Shalini Pal, Sathans, "Fuzzy Gain Scheduled Automatic Generation Control of Two Area Multi Unit Power System", IEEE Students Conference on Engineering and Systems", NIT, Allahabad, April 12-14, 2013.



26. Amit Kumar Gupta, Saurabh Chanana and Ashwani Kumar, "A smart Uninterruptible Power Supply based on frequency linked pricing mechanism", 7th IEEE International Conference on Industrial and Information Systems (ICIIS), IIT Madras, Chennai, India, 6-9 August, 2012.
27. S. Singh, A.K. Singh, Saurabh Chanana, "Operation and control of a hybrid photovoltaic-diesel-fuel cell system connected to micro-grid" IEEE Fifth Power India Conference, DCRUST Murthal, Dec 19-22, 2012.
28. Akhil Gupta, Saurabh Chanana, Tilak Thakur, "Power quality improvement of solar photovoltaic transformer-less grid-connected system with maximum power point tracking control", International Journal of Sustainable Energy, (Taylor and Francis).
29. B. Pratap and S. Purwar, "Real Time Implementation of State Observers for Twin Rotor MIMO System: An Experimental Evaluation," International Journal of Modelling, Identification and Control, Vol. 19, No. 1, 2013 (Inderscience).
30. B. Pratap and S. Purwar, "State Observer Based Robust Feedback Linearization Controller for Twin Rotor MIMO System," Proceeding of IEEE, Multi-conference on Systems and Control (MSC-2012), Dubrovnik, Croatia, October 3-5, 2012.
31. B. Pratap, A. Agrawal, and S. Purwar, "Optimal Control of Twin Rotor MIMO system using Output Feedback," Proceeding of IEEE, International Conference on Power, Control & Embedded Systems (ICPCES-2012), Allahabad, India, December 17-19, 2012.
32. V. Sharma and B. Pratap, "Sliding Mode Observer Based Controller of Uncertain Systems: An LMI Based Approach," Proceeding of IEEE, International Conference on Power, Control & Embedded Systems (ICPCES-2012), Allahabad, India, December 17-19, 2012.

## **HUMANITIES DEPARTMENT**

### **Papers in International/National Journals**

1. Rajender Kumar, "Environment and Sustainable Development' Conf. Volume of Indian Political Economic Association held at IIT Roorkee on October 2012.
2. Rajender Kumar, "Pre and Post Economic Reforms Employment in India- An Empirical Study' in Indian Economic Journal, Vol. Dec. 2013.
3. Vikas Choudhary, "Operational productivity of public sector bank in India" Int. journal of social sciences & interdisciplinary research vol. 1, No. 2 April-June, 2012

### **Papers in International/ National Conferences/Symposia/Seminars**

1. Vikas Choudhary, "Innovations for fast growth: A study of capital structure of FMCS sector in India" Presented at Envisage 2020: Energy Business

Practices, held at IFS Management College & Research Centre, Mumbai, Jan. 5-6, 2012.

2. Vikas Choudhary, "Labour Productivity of Public Sector Banks in India during post reforms period" presented at national seminar on economic reforms: An unfinished agenda, held at Chandigarh on 11 Feb. 2012.
3. Vikas Choudhary, "Corporate Social Responsibilities of Public Sector Banks in India presented at national seminar on relevance of corporate social reasonability in contemporary socio economic milieu in India held at Jagadhar on 24-25 Feb. 2012.

#### 12.4 R & D INCOME & EXPENDITURE

Sr. No.	Scheme & Principal Investigator	Grant Received + Interest or previous balace	Amount utilized	Balance on 31.3.2013
1.	Information Security Education Awareness Dr. A. Swarup	444065.00 155187.00	237286.00	361984.00
2.	Special man power Development programme Dr. A.K. Gupta	600000.00 506023.00	735906.00	370117.00
3.	Water Harvesting to curb ground water Dr. K.K. Singh	1250000.00 113308.00	1306551.00	56757.00
4.	Development of a Model for intelligent integration of process planning and scheduling for flexible systems in manufacturing for performance improvement in evolving CIM environment Dr. Ajay Jain	1400000.00 58416.00	1230397.00	228019.00
5.	In Silico Design & Modeling of some artificial allosteric system Dr. Minati Baral	100000.00 13483.00	84455.00	29028.00
6.	Design Coputational modeling & synthesis of some novel biominetic sidrophore	210143.00 86136.00	171942.00	124337.00

	analog Dr. Minati Baral			
7.	Central for water resources mgmt. Dr.K.K.Singh	300000.00 44231.00	295961.00	48270.00
8.	Study of High- Energyhadron thearaypspace. Dr.Ashwani Kumar	350000.00 364094.00	297345.00	416749.00
9.	Synthesis & charactersition of Multinferroic Dr. Anurag Gaur	1064000.00 35828.00	795678.00	304150.00
10.	Estimation of Fertilizer induced Radioactivity in plants. Dr. R.P. Chauhan	187281.00	159879.00	27402.00
11.	Study of the factor affecting runden level Dr. R.P. Chauhan	1399755.00	1044421.00	355334.00
12	Changing Water Cycle Dr. K.K. Singh	977400.00 16890.00	373912.00	620378.00
13	Ganga River Basin Environmental Manage- ment Plan (GRBEMP) Prof. S.K. Patidar	500000.00	154302.00	345698.00
14	Distribution System Markets Dr. Ashwani Kumar	1008000.00	381434.00	626566.00



**AUDITED STATEMENT OF ACCOUNTS  
AND  
AUDIT REPORT  
2012-2013**



**NATIONAL INSTITUTE OF TECHNOLOGY  
KURUKSHETRA - 136 119**



# **AUDIT REPORT AND AUDITED STATEMENT OF ACCOUNTS FOR THE YEAR 2012-2013**

<b>Sr. No.</b>	<b>Particulars</b>	<b>Page No.</b>
1.	Audit Certificate	(i-iii)
2.	Balance Sheet	(1)
3.	Income & Expenditure & Account	(2)
4.	Schedule 1 to 15	(3-14)
5.	Receipt & Payment Account	(15-19)





## AUDIT CERTIFICATE

### Separate Audit Report of the Comptroller & Auditor General of India on the Accounts of the National Institute of Technology, Kurukshetra for the Year ended 31 March, 2013

1. We have audited the attached Balance Sheet of National Institute of Technology, Kurukshetra as on 31 March 2013, Income and Expenditure Account and Receipts and Payments Account for the year ended on that date under Section 19(2) of the Comptroller and Auditor General's (Duties, Powers & Conditions of Service) Act, 1971 read with Section 22 of the National Institute of Technology Act, 2007. These financial statements are the responsibility of the Institute's management. Our responsibility is to express an opinion on these financial statements based on our audit.
2. This Separate Audit Report contains the comments of the Comptroller and Auditor General of India (CAG) on the accounting treatment only with regard to classification, conformity with the best accounting practices, accounting standards and disclosure norms, etc Audit observation on financial transactions with regard to compliance with the Law, Rules & Regulations (Propriety and Regularity) and efficiency-cum-performance aspects, etc., if any, are reported through Inspection Reports/CAG's Audit Reports separately.
3. We have conducted our audit in accordance with auditing standards generally accepted in India. These standards require that we plan and perform the audit to obtain reasonable assurance whether the financial statements are free from material mis-statements. An audit includes examining, on a test basis, evidences supporting the amounts and disclosure in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of financial statements. We believe that our audit provides a reasonable basis for our opinion.
4. Based on our audit, we report that:
  - I. We have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purpose of our audit;
  - II. The Balance Sheet, Income and Expenditure Account and Receipts and Payments Account dealt with by this report have been drawn up in the format prescribed by the Government of India, Ministry of Finance.
  - III. In our opinion, proper books of accounts and other relevant records have been maintained by the National Institute of Technology, Kurukshetra as required under Section 22 of the National Institute of Technology Act, 2007 in so far as it appears from our examination of such books.
  - IV. We further report that:
    - A. Balance Sheet  
Liabilities  
Earmarked/Endowment Funds (Schedule-3)  
Institute Development Fund (Consultancy) : ₹ 528.36 Lakh

Above represent the Consultancy Income of the Institute generated by way of providing consultancy services, testing of samples and construction materials, which should have been accounted for as income. This has resulted into overstatement of liability (Institute Development Fund (Consultancy) by ₹ 528.36 lakh as well as understatement of income to the same extent.

B Effect of Audit comments on Accounts  
The net impact of the comments given in the preceding para is that the surplus for the year was understated by ₹ 586.56 Lakh

**Grants-in-Aid**

Out of the grants-in-aid of ₹71.00 crore received during the year 2012-13, and unutilized grant of ₹ 9.89 crore brought forward from the year 2011-12, the institute could utilize a sum of ₹ 79.71 crore during the year leaving a balance of ₹1.18 crore as unutilized grant as on 31 March 2013.

V. Subject to the observations given in the preceding paragraphs, we report that the Balance Sheet, Income and Expenditure Account and Receipts and Payments Account dealt with by this report are in agreement with the books of accounts.

VI. In our opinion and to the best of our information and according to the explanations given to us, the said financial statements read together with the Accounting Policies and Notes on Accounts, and subject to the significant matters stated above and other matters mentioned in Annexure to this Separate Audit Report give a true and fair view in conformity with accounting principles generally accepted in India.

a) In so far as it relates to the Balance Sheet of the state of affairs of the National Institute of Technology, Kurukshetra as at 31 March 2013 and

b) In so far as it relates to the Income and Expenditure Account of the deficit for the year ended on that date.

**For and on behalf of the C&AG of India**

**Sd/-**

**Director General of Audit  
(Central), Chandigarh**

Place : Chandigarh

Date : 17.12.2013



## **Annexure**

1. Adequacy of internal audit system  
Internal Audit was conducted by a Chartered Accountants firm was considered adequate.
2. Adequacy of internal control system  
The internal control is considered adequate and commensurate with size and activities of the Institute for areas seen by audit.
3. System of physical verification of Fixed Assets.  
Physical verification of fixed assets was not conducted during the year.
4. System of Physical verification of inventory:  
Physical verification of Inventory was not conducted during the year.
5. Regularity in payment of statutory dues.  
Institute is regular in depositing undisputed statutory dues with the appropriate authorities.

**Sd/-  
Director**



# **BALANCE SHEET**





**NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA**  
**BALANCE SHEET AS ON 31ST MARCH 2013**

(Amount in ₹)

LIABILITIES	Schedule	Current Year Amount (₹)					Previous Year Amount (₹)
		Main A/c	Scheme A/c	TEQIP-II A/c	Other A/c	Total	
CORPUS/CAPITAL FUND	1	701,526,169	-	-	-	701,526,169	1,538,844,936
RESERVE AND SURPLUS	2	-	-	6,195,362	-	6,195,362	159,001,519
EARMARKED/ENDOWMENT FUNDS	3	108,583,457	4,941,284	46,183,663	6,857,261	166,565,665	319,773,228
DEFERRED GOVT. GRANTS	4	1,895,130,010	5,749,990	-	-	1,900,880,000	7,874,823
SECURED LOAN AND BORROWINGS		-	-	-	-	-	-
UNSECURED LOAN & BORROWINGS		-	-	-	-	-	-
CURRENT LIABILITIES AND PROVISIONS	5	896,279,926	-	75,000	-	896,354,926	722,473,010
<b>TOTAL</b>		<b>3,601,519,562</b>	<b>10,691,274</b>	<b>52,454,025</b>	<b>6,857,261</b>	<b>3,671,522,122</b>	<b>2,747,967,516</b>
<b>ASSETS</b>							
FIXED ASSETS	6	1,936,403,401	5,749,990	6,195,362	-	1,948,348,753	1,560,989,696
INVESTMENTS	7	900,476,270	4,000,000	36,812,664	6,011,658	947,300,592	759,569,266
CURRENT ASSETS, LOANS AND ADVANCES	8	764,639,891	941,284	9,445,999	845,603	775,872,777	427,408,554
<b>TOTAL</b>		<b>3,601,519,562</b>	<b>10,691,274</b>	<b>52,454,025</b>	<b>6,857,261</b>	<b>3,671,522,122</b>	<b>2,747,967,516</b>
CONTINGENT LIABILITIES	15						
NOTES ON ACCOUNTS	16						

Sd/-  
Director  
National Institute Of Technology,  
Kurukshetra





# **INCOME & EXPENDITURE ACCOUNTS**



# NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA

## BALANCE SHEET AS ON 31ST MARCH 2013

(Amount in ₹)

INCOME	Schedule	Current year Amount (₹)					Previous Year Amount (₹)
		Main A/c	Scheme A/c	TEQIP-I A/c	TEQIP-II A/c	Others A/c	
Grants/Subsidies	9	430,000,000	3,514,525	336	9,270,680	-	190,000,000
Fees/Subscriptions	10	183,384,697	-	-	-	-	129,861,547
Interest Earned	11	92,802,516	73,447	21	3,332,392	957,572	17,883,535
Other Income	12	217,428,692	1,384,628	158,324,512	11,000	-	27,766,343
<b>TOTAL (A)</b>		<b>923,615,905</b>	<b>4,972,600</b>	<b>158,324,869</b>	<b>12,614,072</b>	<b>957,572</b>	<b>365,511,425</b>
<b>EXPENDITURES</b>							
Establishment Expenses	13	365,465,225	781,089	-	9,055,584	-	287,491,830
Other Administrative Expenses	14	44,534,297	2,733,436	357	215,096	-	67,790,202
Depreciation	6	193,489,693	1,367,738	158,324,512	-	-	74,081,452
<b>TOTAL (B)</b>		<b>603,489,215</b>	<b>4,882,263</b>	<b>158,324,869</b>	<b>9,270,680</b>	<b>-</b>	<b>429,363,484</b>
Excess of Income over Expenditure (A-B)		<b>320,126,690</b>	<b>90,337</b>	<b>-</b>	<b>3,343,392</b>	<b>957,572</b>	<b>(63,852,059)</b>
Transfer to Earmarked Fund		-	90,337	-	3,343,392	957,572	-
Transfer to Current Liabilities		-	-	-	-	-	-
<b>BALANCE BEING SURPLUS/DEFICIT CARRIED TO CORPUS</b>		<b>320,126,690</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(63,852,059)</b>

Sd/-  
Director  
National Institute Of Technology,  
Kurukshetra





# SCHEDULES





**NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA**  
**SCHDULES FORMING PART OF BALANCE SHEET AS ON 31st MARCH 2013**

(Amount in ₹)

SCHEDULE 1 - CAPITAL FUND		Current year Amount ( ₹ )		Previous Year Amount ( ₹ )	
(A) MAIN ACCOUNT					
<b>Balance as at the beginning of the year</b>		1,538,844,936		1,385,138,995	
a) Add : Fixed Assets During the Year from the Grant		-		214,154,266	
b) Add : Corpus Fund of MCA		103,573,380		3,403,734	
c) Less : Amount Transferred to Deferred Income adhering applicable norms		1,261,018,837		-	
			<b>381,399,479</b>		<b>1,602,696,995</b>
Add: Excess of Income over Expenditure during the year			320,126,690		(63,852,059)
<b>Closing Balance</b>			<b>701,526,169</b>		<b>1,538,844,936</b>

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**NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA**  
**SCHDULES FORMING PART OF BALANCE SHEET AS ON 31st MARCH 2013**

(Amount in ₹)

SCHEDULE 2 - RESERVE AND SURPLUS		Current year Amount ( ₹ )		Previous Year Amount ( ₹ )	
<b>(A) - TEQIP - II</b>					
Balance as at the beginning of the year		677,007		-	
Add- Fixed Assets Purchased during the year		5,518,355		677,007	
Closing Balance (A)			6,195,362		677,007
<b>(B) - TEQIP - I</b>					
Balance as at the beginning of the year		158,324,512		158,324,512	
Less: Amount Transferred To Income And Expenditure Account		158,324,512		-	
Closing Balance (B)			-		158,324,512
<b>TOTAL (A+B)</b>			6,195,362		159,001,519

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# NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA

## SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31st MARCH 2013

(Amount in ₹)

SCHEDULE 3- EARMARKED/ENDOWMENT FUNDS	Opening Balance as on 01.04.2012	Additions to the funds	Other Income	Total	Utilisation/Exp. Towards obj.			Closing Balances as on 31.03.2013
					Capital Exp.	Revenue Exp.	Refund/ Advances	
<b>(A) MAIN ACCOUNT</b>								
1- Non Recurring Grant from Govt. of India		280,000,000	-	280,000,000	280,000,000	-	-	280,000,000
2- Institute Development Fund (Consultancy)	52,835,867	5,819,782	-	58,655,649	-	-	-	58,655,649
3- Student Fund	35,023,785	14,904,023	-	49,927,808	-	-	-	49,927,808
4- MBA	27,500,424	-	-	27,500,424	27,500,424	-	-	-
5- Grant -in-Aid OBC	177,015,614	-	-	177,015,614	177,015,614	-	-	177,015,614
6- Recurring Grant (GOI)	-	430,000,000	-	430,000,000	-	430,000,000	-	430,000,000
<b>Total (A)</b>	<b>292,375,690</b>	<b>730,723,805</b>	<b>-</b>	<b>1,023,099,495</b>	<b>484,516,038</b>	<b>430,000,000</b>	<b>-</b>	<b>914,516,038</b>
<b>(B) Scheme Account</b>								
	3,682,931	5,181,358	90,337	8,954,626	438,720	3,514,525	60,097	4,941,284
<b>Total (B)</b>	<b>3,682,931</b>	<b>5,181,358</b>	<b>90,337</b>	<b>8,954,626</b>	<b>438,720</b>	<b>3,514,525</b>	<b>60,097</b>	<b>4,941,284</b>
<b>(C) TEQIP Account - II</b>								
	17,629,306	40,000,000	3,343,392	60,972,698	5,518,355	9,270,680	-	46,183,663
<b>(D) TEQIP Account - I</b>								
	336	-	-	336	-	336	-	336
<b>(E) Other Accounts</b>								
	6,084,965	2,483,593	957,572	9,526,130	-	-	2,668,869	6,857,261
<b>Total (A+B+C+D+E)</b>	<b>319,773,228</b>	<b>778,388,756</b>	<b>4,391,301</b>	<b>1,102,553,285</b>	<b>490,473,113</b>	<b>442,785,541</b>	<b>2,728,966</b>	<b>166,565,665</b>

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**NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA**  
**SCHDULES FORMING PART OF BALANCE SHEET AS ON 31st MARCH 2013**

(Amount in ₹)

<b>SCHEDULE 4 -DEFERRED GOVT. GRANTS</b>		<b>Current Year Amount (₹)</b>		<b>Previous Year Amount (₹)</b>	
<b>(A) - Main Account</b>					
<b>Balance as at the beginning of the year</b>		-		-	
Add- Fixed Assets Purchased during the year		485,340,895		-	
Add: Amount Transferred from Corpus Fund adhering applicable norms		1,598,078,049		-	
Less: Amount Transferred To Income And Expenditure Account		188,288,934		-	
<b>Closing Balance (A)</b>			1,895,130,010		-
<b>(B) - SCHEME</b>					
<b>Balance as at the beginning of the year</b>				8,702,742	
Add- Fixed Assets Purchased during the year		438,720		1,203,302	
Less: Amount Transferred To Income And Expenditure Account		1,367,738		2,031,221	
Less: Amount Transferred to Scheme Account adhering applicable norms		1,195,815		-	
<b>Closing Balance (B)</b>			5,749,990		7,874,823
<b>TOTAL (A+B)</b>			1,900,880,000		7,874,823

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**NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA**  
**SCHDULES FORMING PART OF BALANCE SHEET AS ON 31st MARCH 2013**

SCHEDULE 5 - CURRENT LIABILITIES AND PROVISIONS			Current Year Amount (₹)	Previous Year Amount (₹)
(A) Main Account				
1- Statutory Liabilities				
a) Contributory Provident Fund Account			557,699,745	413,737,262
b) Salary Payable			16,746,203	14,828,818
			11,376,674	9,361,170
2- Consultancy				
3- Other Liabilities				
a) Misc. Recovery & Payment			225,157	114,686
b) Other Scholarship			5,585,943	3,031,357
c) Pradhan Mantri Gram Sadak Yojna			350,727	350,727
d) Contractor Security			14,455,251	8,707,609
e) Performance security			142,104	70,347
f) Hostel Security			5,093,350	-
g) House Security			62,000	-
h) Library Security			9,250	-
i) Student Security			25,130,328	25,810,093
j) Other Security			1,500	-
k) Alumni Association			332,591	202,350
l) Earnest Money			14,404,403	17,092,643
m) Practical Examination			19,010	-
n) TDS Payable			7,410,595	5,881,579
o) Central Councillng Board			-	228,809
p) Amount payable to NBCC			-	24,004
q) NIC			28,985	1,154,162
r) NIMCET			93,853	-
4- PROVISIONS				
1- Gratuity			113,519,090	114,607,109
2- Accumulated Leave Encashment			123,593,167	107,270,285
TOTAL (A)			896,279,926	722,473,010
(B) TEQIP-II				
a) Earnest Money			75,000	-
TOTAL (B)			75,000	-
GRAND TOTAL (A+B)			896,354,926	722,473,010
				₹/-

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**NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA**  
**SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31st MARCH 2013**

(Amount in ₹)

SCHEDULE 6 - FIXED ASSETS	Opening Balance as on 01.04.2012	Addition on or before 30.9.2012	Addition on or after 1.10.2012	Sales/Adjustment during the year	Total Amount	Rate	Depreciation During the year	Closing Balance as on 31.03.2013
<b>(A) MAIN ACCOUNT</b>	<b>GROSS BLOCK</b>							
1- Land Freehold	1,375,320	-	-	-	1,375,320	0%	-	1,375,320
2- Building	991,524,677	42,977,120	816,440,091	-	1,850,941,888	10%	144,272,184	1,706,669,704
3- Plant & Machinery	30,074,307	-	126,931	-	30,201,238	15%	4,520,666	25,680,572
4- Vehicle- Bus & Motot Van	1,160,848	-	-	158,000	1,002,848	30%	300,854	701,994
5- Vehicle - Cycle Rickshaw	4,902	-	-	-	4,902	15%	735	4,167
6- Furniture & Fixture	23,553,653	18,183,495	419,301	-	42,156,449	10%	4,194,680	37,961,769
7- Computer/Peripherals	11,353,504	5,565,231	9,902,065	120,000	26,700,800	60%	13,049,861	13,650,939
8- Electrical Equipments	134,545,803	15,718,968	17,778,904	467,070	167,576,605	15%	23,803,073	143,773,532
9- Library Books	2,526,740	1,200,399	2,461,074	2,897	6,185,316	60%	2,972,867	3,212,449
10- Tubewell & Water Supply	3,747,728	-	-	-	3,747,728	10%	374,773	3,372,955
11- Capital Work in Progress	195,441,687	82,865,906	333,145,527	611,453,120	-	0%	-	-
<b>TOTAL - A</b>	<b>1,395,309,169</b>	<b>166,511,119</b>	<b>1,180,273,893</b>	<b>612,201,087</b>	<b>2,129,893,094</b>		<b>193,489,693</b>	<b>1,936,403,401</b>
<b>(B) Scheme</b>								
a) Plant & Machinery	5,465,230	120,179	27,825	-	5,613,234	15%	839,898	4,773,336
b) Computer & Peripherals	494,681	14,990	72,905	-	582,576	60%	327,674	254,902
c) Library Books	233,925	-	-	-	233,925	60%	140,355	93,570
d) Electrical Installations	75,090	15,100	2,500	-	92,690	10%	9,144	83,546
e) Furniture & Fixture	410,082	7,950	177,271	-	595,303	10%	50,667	544,636
<b>TOTAL - B</b>	<b>6,679,008</b>	<b>158,219</b>	<b>280,501</b>	-	<b>7,117,728</b>		<b>1,367,738</b>	<b>5,749,990</b>
<b>(C) TEQIP-II</b>								
a) Goods	-	-	-	-	-	-	-	-
b) Books & LRs	-	-	-	-	-	-	-	-
c) Equipment	677,007	1,009,933	3,515,751	-	5,202,691	-	-	5,202,691
d) Furniture	-	-	992,671	-	992,671	-	-	992,671
<b>TOTAL - C</b>	<b>677,007</b>	<b>1,009,933</b>	<b>4,508,422</b>	-	<b>6,195,362</b>		-	<b>6,195,362</b>
<b>(D) TEQIP - I</b>								
a) Goods	116,210,673	-	-	-	116,210,673	-	116,210,673	-
b) Books & LRs	15,999,273	-	-	-	15,999,273	-	15,999,273	-
c) Vehicle	2,114,566	-	-	-	2,114,566	-	2,114,566	-
d) Furniture	5,000,000	-	-	-	5,000,000	-	5,000,000	-
e) Building	19,000,000	-	-	-	19,000,000	-	19,000,000	-
<b>TOTAL - D</b>	<b>158,324,512</b>	-	-	-	<b>158,324,512</b>		<b>158,324,512</b>	-
<b>GRAND TOTAL (A+B+C+D)</b>	<b>1,560,989,696</b>	<b>167,679,271</b>	<b>1,185,062,816</b>	<b>612,201,087</b>	<b>2,301,530,696</b>		<b>353,181,943</b>	<b>1,948,348,753</b>

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**NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA**  
**SCHDULES FORMING PART OF BALANCE SHEET AS ON 31st MARCH 2013**  
(Amount in ₹)

<b>SCHEDULE 7 - INVESTMENTS</b>		<b>Current Year Amount ( ₹ )</b>	<b>Previous Year Amount ( ₹ )</b>
<b>(A) Main Account FDR's</b>			
<b>a) CPF A/C</b>			
1- FDR State Bank of india, NIT, Kurukshetra	5,000,000	77,000,000	
2- State Bank of Patiala, Kurukshetra	31,731,243	180,738,719	
3- State Bank of Bikaner & Jaipur, Kurukshetra	118,725,677	30,601,165	
4- IDBI Bank, Kurukshetra	85,019,657	85,019,657	
5- Canara bank	169,493,361	-	
<b>b) Main Current Account</b>	406,078,926	355,864,829	
<b>c) Student Activity Fund</b>	7,462,208	7,196,045	
<b>d) MCA</b>	76,965,198	-	
<b>TOTAL (A)</b>	<b>900,476,270</b>	<b>736,420,415</b>	
<b>B) Other FDR's</b>			
<b>a) Scheme Account</b>	4,000,000	4,211,969	
<b>b) TEQIP Account - II</b>	36,812,664	13,060,000	
<b>c) Other Accounts</b>	6,011,658	5,876,882	
<b>TOTAL (B)</b>	<b>46,824,322</b>	<b>23,148,851</b>	
<b>TOTAL(A)+(B)</b>	<b>947,300,592</b>	<b>759,569,266</b>	

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**NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA**  
**SCHDULES FORMING PART OF BALANCE SHEET AS ON 31st MARCH 2013** (Amount in ₹)

SCHDULE 8 - CURRENT ASSETS, LOANS AND ADVANCES			Current Year Amount (₹)	Previous Year Amount (₹)
<b>A- Main Account</b>				
1- Bank Balances			143,247,874	18,401,876
a) SBI Saving A/c (Main)			107,253,383	(5,720,870)
b) SBI Saving A/c (CPF)			11,313,998	18,147,623
c) IDBI Saving A/c (Main SAF)			9,508,046	1,729
d) IDBI Bank Saving A/c (Main TDS)			7,441,605	5,973,394
e) SBI Saving A/c (MCA)			7,730,842	-
2- Advances to PWD/NBCC/CPWD			169,273,600	127,424,004
3- Loans to Employees (CPF)			146,815,250	204,380
4- Interest accrued but not receive (Main A/c FDR's)			35,259,613	25,924,005
5- Interest accrued but not receive (MCA A/c FDR's)			5,700,701	-
6- Interest accrued but not receive (CPF A/c FDR's)			21,275,914	22,230,098
7- Prepaid internet charges			49,358	-
8- Advance to Employees			34,986	31,957
9- Others (Security with HVPN & BSNL)			5,870,338	5,870,338
10- Gratuity Assets			113,519,090	114,607,109
11- Accumulated Leave Encashment Assets			123,593,167	107,270,285
<b>TOTAL (A)</b>			<b>764,639,891</b>	<b>421,964,052</b>
<b>B- Scheme</b>				
a) SBI Saving A/c			872,340	271,547
b) Advance to Employee			-	30,096
c) Interest accrued but not receive			68,944	365,134
<b>TOTAL (B)</b>			<b>941,284</b>	<b>666,777</b>
<b>C- TEQIP ACCOUNT - II</b>				
a) SBI Saving A/c			7,530,203	4,569,306
b) Interest accrued but not receive			1,915,796	-
<b>TOTAL (C)</b>			<b>9,445,999</b>	<b>4,569,306</b>
<b>D- TEQIP ACCOUNT - I</b>				
a) SBI Saving A/c			-	336
b) Interest accrued but not receive			-	-
<b>TOTAL (D)</b>			<b>-</b>	<b>336</b>
<b>E- Other Accounts</b>				
a) SBI Saving Bank A/c			438,424	208,083
b) Interest accrued but not receive			407,179	-
<b>TOTAL (E)</b>			<b>845,603</b>	<b>208,083</b>
<b>GRAND TOTAL (A+B+C+D+E)</b>			<b>775,872,777</b>	<b>427,408,554</b>

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**NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA**  
**SCHDULES FORMING PART OF BALANCE SHEET AS ON 31st MARCH 2013**

(Amount in ₹)

SCHEDULE 9 - GRANT/SUBSIDIES	Current Year Amount(₹)					Previous Year Amount (₹)
	MAIN	SCHEME	TEQIP-I	TEQIP-II	OTHERS	
1- Central Government	430,000,000	3,514,525	336	9,270,680	-	190,000,000
2- State Government	-	-	-	-	-	-
3- VGCE Guest Classes	-	-	-	-	-	-
4- Institutes /Welfare Bodies	-	-	-	-	-	-
5- International Organisations	-	-	-	-	-	-
6- Other (specify)	-	-	-	-	-	-
<b>TOTAL</b>	<b>430,000,000</b>	<b>3,514,525</b>	<b>336</b>	<b>9,270,680</b>	<b>-</b>	<b>190,000,000</b>

**NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA**  
**SCHDULES FORMING PART OF BALANCE SHEET AS ON 31st MARCH 2013**

(Amount in ₹)

SCHEDULE 10 - FEES/SUBSCRIPTIONS	Current Year Amount(₹)					Previous Year Amount (₹)
	MAIN	SCHEME	TEQIP-I	TEQIP-II	OTHERS	
1- Entrance Fees	-	-	-	-	-	-
2- Annual Fees/ Subscriptions	170,584,894	-	-	-	-	123,085,169
3- Institute Development Fee	12,799,803	-	-	-	-	6,776,378
4- Consultancy Fees	-	-	-	-	-	-
5- Others	-	-	-	-	-	-
<b>TOTAL</b>	<b>183,384,697</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>129,861,547</b>

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**NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA**  
**SCHDULES FORMING PART OF BALANCE SHEET AS ON 31st MARCH 2013**

SCHEDULE 11 - INTEREST EARNED	Current Year Amount(₹)					Previous Year Amount (₹)
	MAIN	SCHEME	TEQIP-I	TEQIP-II	OTHERS	
1- Term Deposits	92,090,629	68,944	-	3,236,649	941,538	17,883,535
2- Saving Accounts	711,887	4,503	21	95,743	16,034	-
3- Loans	-	-	-	-	-	-
4- Debtors and Other Receivables	-	-	-	-	-	-
<b>TOTAL</b>	<b>92,802,516</b>	<b>73,447</b>	<b>21</b>	<b>3,332,392</b>	<b>957,572</b>	<b>17,883,535</b>

**NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA**  
**SCHDULES FORMING PART OF BALANCE SHEET AS ON 31st MARCH 2013**

SCHEDULE 12 - OTHER INCOME	Current Year Amount(₹)					Previous Year Amount (₹)
	MAIN	SCHEME	TEQIP-I	TEQIP-II	OTHERS	
1- Hire of Vehicles	44,428	-	-	-	-	118,926
2- Lease of Land/ Khikha	1,186,962	-	-	-	-	1,175,960
3- Misc. Income	3,438,148	16,890	-	11,000	-	10,622,029
4- Income from Xerox	10,600	-	-	-	-	4,800
5- Income from Rent	502,198	-	-	-	-	316,752
6- Water Charges	178,407	-	-	-	-	32,940
7- Others (Sale of Prospectus)	1,246,557	-	-	-	-	3,818,299
8- Sale of Tender Forms	54,450	-	-	-	-	50,500
9- Seat Rent	14,065,020	-	-	-	-	9,546,307
10- Watch & Ward	7,892,948	-	-	-	-	1,866,000
11- Guest house charges	35,419	-	-	-	-	-
12- License Fee	484,621	-	-	-	-	213,830
13- Deferred Govt. Grant	188,288,934	1,367,738	158,324,512	-	-	-
<b>TOTAL</b>	<b>217,428,692</b>	<b>1,384,628</b>	<b>158,324,512</b>	<b>11,000</b>	<b>-</b>	<b>27,766,343</b>

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# NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA

## SCHEDULES FORMING PART OF BALANCE SHEET AS ON 31st MARCH 2013

SCHEDULE 13 - ESTABLISHMENT EXPENSES	Current Year Amount (A)					Previous Year Amount (A)
	MAIN	SCHEME	TEQIP-I	TEQIP-II	OTHERS	
<b>1- Salaries and Wages</b>						
a) Pay & DA of Faculty Staff	161,531,719	-	-	-	-	136,525,403
b) Pay & DA of Non-Faculty Staff	73,396,786	-	-	-	-	67,469,210
c) LTC - Non teaching Staff	917,451	-	-	-	-	677,791
d) LTC Teaching Staff	2,802,183	-	-	-	-	3,343,874
e) Leave Salary Contribution	169,128	-	-	-	-	-
f) Pension	153,380	-	-	-	-	-
g) Salary of Contractual Staff	5,795,546	591,515	-	90,240	-	-
h) Wages For Outsourcing Services	23,834,289	-	-	-	-	-
i) Salary and Wages MBA/MCA	6,181,982	-	-	-	-	-
<b>2- Allowance and Bonus</b>						
a) Bonus	790,698	-	-	-	-	809,100
b) Attending Conferences/Workshops / CPDA	2,233,560	-	-	-	-	10,566,530
c) House Rent Allowance	2,726,019	-	-	-	-	2,418,190
d) Medical Reimbursement	2,867,399	-	-	-	-	2,877,728
e) Transport Allowance	7,834,647	189,574	-	71,662	-	6,811,426
f) Washing Allowance	56,954	-	-	-	-	71,291
g) Children Education allowance	3,217,065	-	-	-	-	-
<b>3- Contribution to Provident Fund</b>	8,404,814	-	-	-	-	14,709,432
<b>4- Staff Welfare Fund</b>	80,480	-	-	-	-	83,580
<b>5- Leave encashment</b>	9,998,043	-	-	-	-	-
<b>6- Death cum Retirement Gratuity</b>	12,124,608	-	-	-	-	9,121,005
<b>7- New Pension Scheme</b>	2,002,662	-	-	-	-	-
<b>8- Scholarship</b>						
a) Undergraduate Courses	-	-	-	-	-	252,000
b) Postgraduate Courses	31,403,790	-	-	8,661,124	-	26,319,072
c) Ph.D	5,243,388	-	-	232,558	-	4,149,724
<b>9- Others</b>						
a) Liversies	115,277	-	-	-	-	87,065
b) TA Members	1,030,754	-	-	-	-	475,869
c) Composite transfer grant	288,921	-	-	-	-	506,479
d) TA Staff	263,682	-	-	-	-	217,061
<b>TOTAL</b>	<b>365,465,225</b>	<b>781,089</b>	<b>-</b>	<b>9,055,584</b>	<b>-</b>	<b>287,491,830</b>



# NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA

## SCHDULES FORMING PART OF BALANCE SHEET AS ON 31st MARCH 2013

(Amount in ₹)

SCHEDULE 14 - OTHER ADMINIDTRATIVE EXPENSES		Current Year Amount (₹)				Previous Year Amount (₹)
	MAIN	SCHEME	TEQIP-I	TEQIP-II	OTHERS	GRAND TOTAL
<b>1- Electricity and Power</b>						
a) Elect. Tariff for Deptts.	12,449,175	-	-	-	-	12,449,175
b) Electricity Tariff for Water Supply	2,220,576	-	-	-	-	2,220,576
c) Maintenance of Street light	242,846	-	-	-	-	242,846
<b>2- Repair and Maintenance</b>						
a) Maintenance of Campus	371,114	-	-	-	-	371,114
b) Maintenance of Electrical Fitting	1,274,349	-	-	-	-	1,274,349
c) Maintenance of Hostel Building	683,850	-	-	-	-	683,850
d) Maintenance of Instructional Building	695,991	-	-	-	-	695,991
e) Maintenance of Roads	1,203,538	-	-	-	-	1,203,538
f) Maintenance of Staff Quarters	704,916	-	-	-	-	704,916
g) Maintenance of water Supply & Disposal	821,180	-	-	-	-	821,180
h) Maintenance of Computer/library	1,706,963	61,386	-	-	-	1,768,349
<b>3- Vehicles Running and Maintenance</b>						
a) Maintenance of Vehicles	879,076	-	-	-	-	879,076
b) Special Repairs to Vehicles	74,562	-	-	-	-	74,562
<b>4- Postage, Telephone and Communication Charges</b>						
a) Postage & Telegram	336,344	-	-	-	-	336,344
b) Telephone Charges	1,210,846	16,007	-	-	-	1,226,853
<b>5- Printing and Stationary</b>						
a) News Paper & Magazine	671,525	66,600	-	9,760	-	747,885
b) Professional Charges	43,456	-	-	-	-	43,456
<b>6- Hospital, Medical and other Charges</b>						
a) Hospital, Medical and other Charges	1,160,090	-	-	11,000	-	1,171,090
<b>7- Departmental operating cost</b>						
a) Departmental operating cost	999,894	-	-	-	-	999,894
<b>8- Advertisement and Publicity</b>						
a) Advertisement and Publicity	1,445,692	-	-	-	-	1,445,692
<b>9- E Resources &amp; Journals</b>						
a) E Resources & Journals	1,078,020	5,600	-	156,053	-	1,239,673
<b>10- Study tours of students</b>						
a) Study tours of students	7,098,794	-	-	-	-	7,098,794
<b>11- Survey Camp</b>						
a) Survey Camp	-	-	-	-	-	-
<b>12- Campus interview for Students</b>						
a) Campus interview for Students	145,832	-	-	-	-	145,832
<b>13- Misc. Contingencies</b>						
a) Misc. Contingencies	21,677	-	-	-	-	21,677
<b>14- Other Administrative Expenses</b>						
a) Other Administrative Expenses	1,730,934	1,840,159	357	38,283	-	3,609,733
<b>15- Hindi Saptah Sammelan</b>						
a) Hindi Saptah Sammelan	155,110	-	-	-	-	155,110
<b>16- Summer School</b>						
a) Summer School	56,789	-	-	-	-	56,789
<b>17- AMC Charges</b>						
a) AMC Charges	-	-	-	-	-	-
<b>18- Computer softwares</b>						
a) Computer softwares	237,502	-	-	-	-	237,502
<b>19- Diesel and Petrol</b>						
a) Diesel and Petrol	3,708,442	743,684	-	-	-	4,452,126
<b>20- Library Expenses</b>						
a) Library Expenses	849,856	-	-	-	-	849,856
<b>21- NIT Transit House Contribution</b>						
a) NIT Transit House Contribution	105,358	-	-	-	-	105,358
<b>22- TOTAL</b>						
<b>TOTAL</b>	44,534,297	2,733,436	357	215,096	-	47,483,186
						67,790,202

84/-  
Director  
National Institute Of Technology,  
Kurukshetra



# NATIONAL INSTITUTE OF TECHNOLOGY, KURUKSHETRA

## RECEIPT AND PAYMENT ACCOUNT FOR THE YEAR ENDED 31st March, 2013

RECEIPTS		Current Year Amount (₹)	Previous Year Amount (₹)
<b>A- Main Account</b>			
<b>Opening Balance</b>			
<b>a) Bank Balances</b>		<b>18,401,876</b>	<b>399,683,290</b>
i) SBI Saving A/c (Main)		(5,720,870)	-
ii) IDBI Saving A/c (Main SAF)		1,729	-
iii) IDBI Saving A/c (Main TDS)		5,973,394	153,000,000
iv) SBI Saving A/c (CPF)		18,147,623	-
<b>Grants Received from GOI</b>			
a) Non Plan Grant		380,000,000	190,000,000
b) Plan Grant for Fixed Assets		280,000,000	310,000,121
c) Plan Grant for General		50,000,000	-
d) Plan Grant OBC		-	100,000,000
<b>Interest Received</b>			
a) Bank Deposit and FDR		79,418,586	11,484,151
<b>Income from Fees</b>			
a) Tuition Fees		170,508,233	122,005,976
b) Water Charges		178,407	32,940
c) Admission Fee		26,667	-
d) RTI Fee		7,556	-
e) License Fee		449,635	-
f) Misc. Income		3,121,275	1,221,504
<b>Other Income</b>			
a) Sale of Prospectus		1,253,321	3,818,299
b) Hire of Vehicles		44,428	95,566
c) Lease of Land		1,186,962	1,175,960
d) Income form Xerox		10,600	4,800
e) Sale of Tender Forms		54,450	50,500
f) Income from Rent		502,198	331,904
g) Seat Rent		14,071,270	-
h) Guest House Charges		36,893	-
i) Watch & Ward		7,892,948	-

  

PAYMENTS		Current Year Amount (₹)	Previous Year Amount (₹)
<b>A- Main Account</b>			
<b>Expenses</b>			
a) Establishment Expenses		333,794,988	271,396,914
b) Administrative Expenses		45,113,517	67,223,163
<b>Loan and Advance</b>			
a) Advance to CPWD		168,559,228	35,946,000
b) CPF Loan		146,815,250	-
c) Advance to Staff		1,338,234	-
<b>Any Other Payments</b>			
a) Professional Services		1,160,090	2,591,350
b) Paid to the Creditors		3,896,474	6,328,638
c) Salary & Other Allowance		14,828,818	13,440,430
d) MBA		3,518,710	4,559,270
e) MCA		-	1,904,220
f) Earnest Money		2,688,240	3,138,127
g) Security		305,290	13,716,276
h) Alumni Association		-	1,122,000
i) Addition to Fixed Assets		269,850,757	217,558,000
j) CCMT		6,764	-
k) NIC		1,114,178	-
l) Investment Made		164,055,855	-



# **RECEIPT & PAYMENT ACCOUNT**







**NATIOANL INSTITUTE OF TECHNOLOGY  
KURUKSHETRA**

**SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH, 2013**

**NOTES TO ACCOUNTS**

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**SCHEDULE-**

**1. ACCOUNTING CONVENTION**

The Financial statement are prepare on the basis of historical cost convention, unless otherwise stated and on accrual method of accounting.

**2. INVENTORY VALUATION**

Stores and Spares are valued at cost.

**3. FIXED ASSETS**

Fixed Assets are valued at the Cost of acquisition inclusive of inward Freight, duty taxes and incidental and direct expenses related to acquisition as per Annexure contain with the instruction received from the Govt. of India, Ministry of Finance, Department of Expenditure, New Delhi D.O. Letter No CDN/MF-CGA/98/99 dated 31.08.2000 the Assets have been grouped accordingly.

**4. DEFERRED INCOME**

Deferred Income has not been capitalized and not credited in the ratio of depreciation as per past practice. So giving the right effect amount stood at corpus transferred to deferred income equivalent to the amount of fixed asset as on 31.03.2013 and deferred income would be written off in the ratio of depreciation complying AS-12.

**5. TEQIP-I**

Assets standing at the same amount since inception and has not been given any treatment adhering world bank guidelines. As per stipulation no depreciation shall be provided on the Assets owned by grant. So fixing the error same has been written off from profit & loss as the assets cease to exist.

**6. DEPRECIATION**

While preparing the annual accounts depreciation on fixed assets charged as per rate specified in the Income Tax Act. 1961. However no depreciation has been provided on the assets created out of Grant of World Bank project. i.e. Technical Education Quality Improvement Program as per instruction of the MHRD & NPIU.

**7. GOVERNMENT GRANTS**

Plan Grant received from the Govt. of India has been taken under Earmarked Fund. Grant received from the Govt. of India has been accounted for on realization basis.

**8. RETIREMENT BENEFITS**

Provision of retirement gratuity and accumulation of leave has been made as suggested by the Audit.

**9. FEES AND FUNDS** collected from the students have been taken on cash basis.

**10. PROVISION OF PAY/SALARY** for the month of March, 2013 has been made.

Sd/-

Director  
National Institute Of Technology,  
Kurukshetra



**NATIOANL INSTITUTE OF TECHNOLOGY  
KURUKSHETRA**

**SCHEDULE FORMING PART OF BALANCE SHEET AS AT 31ST MARCH, 2013**

**SCHEDULE-**

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**CONTINGENT LIABILITIES.**

Nothing Stands as Contingent Liabilities At 31.03.2013.

**Sd/-  
Director  
National Institute Of Technology,  
Kurukshetra**

