ANNUAL REPORT

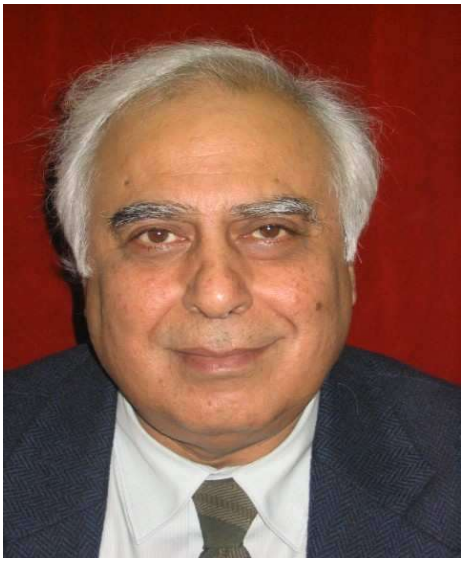
2009-2010

NATIONAL INSTITUTE OF TECHNOLOGY
SILCHAR

Dr. Pratibha Devi Singh Patil

Honourable President

Govt. of India



Mr. Kapil Sibal

Honourable Union Minister

Ministry of Human Resource Development

Govt. of India

Smt D. Purandeswari

Honourable Minister of State

Ministry of Human Resource Development

Govt. of India

Prof. Gautam Barua

Chairman, Board of Governors, NIT Silchar

Prof. P.K. Bose

Director, NIT Silchar

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1.0 INTRODUCTION

1.1 MISSION STATEMENT:

The mission of NIT Silchar is –to train and transform young men and women into responsible thinking engineers, technologists and scientists, to motivate them to attain professional excellence and to inspire them to proactively engage themselves for the betterment of the society.

1.2 VISION STATEMENT:

The vision of NIT Silchar is - establishing unique identity by development of high quality human and knowledge resources in diverse areas of technologies to meet local, national, and global economic and social need and human society at large in self-sustained manner.

1.3 EDUCATION SYSTEM (UG):

1.3.1 Academic Calendar:

The academic session is divided into two semesters, each of approximately 17 weeks duration, an Autumn Semester (July-December) and a Spring Semester (January-June). The AIEEE selected candidates take admission to the Institute on the dates as per Academic Calendar approved by the Senate.

The Senate approves the academic calendar consisting of schedule of activities for a session inclusive of dates for registration, Mid-Semester and End-Semester examinations, Summer-Term courses, semester breaks etc. well in advance of start of a session.

1.3.2 Admission:

Admission to NIT, Silchar will be made in accordance with the instructions received from the Ministry of Human Resources Development (MHRD), Government of India from time to time. Seats are reserved for candidates belonging to scheduled castes and scheduled tribes, physically handicapped candidates and children of defence personnel as per the guidelines issued from MHRD.

Admission to all courses will be made in the odd semester of each session at the first year level through All India Engineering Entrance Examination (AIEEE) conducted by the Central Board of Secondary Education (CBSE).

A limited number of admissions are offered to Foreign Nationals and Indians living abroad in accordance with the rules applicable for such admission to be issued from time to time by the MHRD.

In special cases the Institute may admit students to a programme on transfer from other NITs. Such admissions may be made at any level considered appropriate. However, no student will be permitted transfer during first semester.

If, at any time after admission, it is found that a candidate has not fulfilled all the requirements stipulated in the offer of admission, the Dean of Academic Affairs may revoke the admission of the candidate and report the matter to the Senate.

The Institute reserves the right to cancel the admission of any student and ask him/her to discontinue his/her studies at any stage of his/her career on the grounds of unsatisfactory academic performance or undisciplined conduct.

1.3.3 Attendance:

Attendance in all Lectures, Tutorials, Laboratories, Practicals, Workshops etc. in each subject must be at least 75 percent of the total classes. A student will be awarded F grade in a subject if his/her attendance falls below 75 percent in the subject.

In Extra-Academic Activities (EAC), i.e., NCC, NSS, NSO etc. a student must attend at least 75% of the total classes as also the camps and some other pre-published programmes.

1.3.4 Programme Structure:

Teaching of the courses shall be reckoned in credits; Credits are assigned to the courses based on the following general pattern: two credits for each lecture period,

two credits for each tutorial period, and one credit for each Laboratory or Practical or Project session of one hour. All subjects have a lecture-tutorial–practical-credit component (L-T-P-C) to indicate the contact hours and credit points.

In order to qualify for a B.Tech. degree of the Institute, a student is required to complete the credit requirement as prescribed in the curriculum for a particular programme. The credit requirements for a programme will be in the range of 350-390 credits.

No semester will normally have more than six lecture based courses and four laboratory courses. However, in special cases, students may be permitted to take seven lecture-based and five laboratory/workshop based courses subject to the recommendation of Faculty Advisor and approval of Departmental Undergraduate Programme Committee (DUPC).

In addition to the prescribed credit requirement (350-390) a student shall have to complete the requirements of Extra Academic Activities (EAA) in one of the first 4 semesters. Students will be awarded grades in EAA, which will be recorded in the Grade Card in which a particular students registers for the same but not taken into account for computing the SPI and the CPI.

The course work requirements may be broadly divided into following four main groups of subjects:

(i) Humanities and Social Sciences
(ii) Basic Sciences and Mathematics
(iii) Engineering Sciences & Practice
(iv) Professional Subjects

The total course package for a department consists of the following components:

Institutional Core subjects
Departmental Core subjects
Departmental Elective subjects
Institute Elective subjects

Every B.Tech. programme will have a curriculum and syllabi for the courses approved by the Senate. DUPC will discuss and recommended the syllabi of all the under graduate courses offered by the department from time to time before sending the same to the Board of Academic Council (BOAC). The BOAC will consider the proposals from the departments and make recommendations to the Senate for consideration and approval.

Medium of instruction, examination and project are in English.

The curriculum of an individual department may include industrial training for 6-8 weeks for every undergraduate student. Industrial training and/or fieldwork is to be satisfactorily completed before a student is declared eligible for the degree. The curriculum for an individual department will show a credit allocation for industrial training. Normally industrial training will be arranged during the summer vacation following the sixth semester of studies.

Faculty Advisor: To help the students in planning their courses of study and getting general advice on the academic programme, personality development, career planning and welfare, the concerned department as far as possible will assign Faculty

Advisor(s) for each batch of students. In the first year the Dean of Academic Affairs shall assign Faculty Advisors.

1.3.5 Registration:

Every student is required to register for the approved courses through the Faculty Advisor at the commencement of each semester on the day fixed for such registration and notified in the Academic Calendar.

Students who do not register on the day announced for the purpose may be permitted late registration up to the notified day in Academic Calendar on payment of an additional fee.

Only those students will be permitted to register in the next semester who have

(a) cleared all Institute, Hostel and Library dues and fines (if any) of the previous semesters
(b) paid all required advance payments of Institute and Hostel dues for the current semester, and
(c) cleared the minimum academic requirement.
(d) not been debarred from registering on any specific ground.

During registration following conditions must be fulfilled:

(a) A student must pass all first year courses before registering for the third year courses.
(b) Normally, the number of credits registered for during a semester should not be less than 36 credits and should not exceed 52 credits. The L-T-P loading for a semester should not exceed 32 contact hours per week. Under special circumstances the Dean (Academic) may permit a student to register for more than 52 or less than 36 credits in a semester.

Students obtaining grade 'F' in any compulsory subject in any semester may clear it in the subsequent summer term examination or must repeat it in the next appropriate semester when it is offered.

Those who obtain grade 'F' in an elective subject in any semester may clear it in the summer term examination or, alternatively, register for any elective subject from within the same group of electives offered in the next semester.

In case of failure in Laboratory/Practical subject the student will have to re-register for it in the next appropriate semester.

Similarly, in case of failure in Extra Academic Activities the student will have to re-register for it in the appropriate semester of the next academic session.

A student who obtains a CPI lower than 5.00 with grade 'DD' in some subjects or grade 'F' in some subjects may be permitted by the Dean of Academic Affairs on the recommendations of the DUPC to repeat one or more DD graded subjects along with the failed subjects, provided, the subject(s) is/are being offered therein.

When a student re-registers for a subject, in accordance with paras 8.5 and 8.6 above, his/her new grade will be used for SPI calculation, whereas for CPI calculation, the better of the two grades (the old and the new) of that subject will be considered.

Students may add and drop subject(s) with the concurrence of the Faculty Advisor, and under intimation to the concerned course instructors and the academic section

provided this is done within the date mentioned in the Academic Calendar and as per the conditions mentioned above.

1.3.6 Summer Term Course:

A summer term course may be offered by a department on the recommendation of DUPC and with the approval of the Dean of Academic Affairs. A student shall be allowed to register for a maximum of two courses during a summer term.

Summer term courses will be announced by the Dean of Academic Affairs at the end of the even semester before the commencement of the end semester examination. A student will have to register for summer term courses by paying the prescribed fees within the stipulated time in the announcement.

The total number of contact hours in any summer term course will be the same as in the regular course. The assessment procedure in a summer term course will also be similar to the procedure for a regular semester course.

1.3.7 Duration of the Programme:

Normally a student should complete all the requirements for undergraduate programme in eight semesters. However, academically weaker students who do not fulfil some of the requirements in their first attempt and have to repeat them in subsequent semesters may be permitted up to 12 consecutive semesters (from the first semester registration) to complete all the requirements of the degree.

However, if a student is granted a withdrawal for one or more semesters on medical ground, this will count towards the maximum duration of stay at the Institute.

1.4 Education System (PG):

1.4.1 Introduction

The M.Tech. regulation provides the necessary guidelines for the Post-Graduate programme. The Institute admits M. Tech students under the following categories:

(a) ***Regular (Full-Time)***

These are students who work full time for their M. Tech. They may receive assistantship from the Institute or any other recognized funding agency or may be self financed.

(b) ***Sponsored (Full-Time) Students***

A candidate in the category is sponsored by a recognized organization for doing M. Tech in the Institute on a full time basis. He/She should have at least two years of working experience in the respective field. He/She will not receive any financial support from the Institute. Sponsorship letter (Form I) should be attached with the application.

(c) ***Project Staff***

This category refers to candidates who are working on sponsored projects in the Institute and admitted to the M. Tech. Programme. The duration of the project at the time of admission should be at least 2 years. This category of students may be registered on a full-time or a part-time basis.

(d) ***Part-Time Students***

This category refers to the candidates who are locally and professionally employed personnel, who can attend classes at the Institute while employed. These candidates should be able to attend regular classes as per the schedule of the Institute.

The applicant must be a regular employee of a recognized R & D organization, national institute, governmental organization or industry with at least two years of experience at the time of admission and be engaged in professional work in the discipline in which admission is sought. No financial assistance will be provided by the Institute to such students.

A No Objection certificate from the Head of the Institution/Organization in which he/she is employed (Form-II) must be enclosed at the time of application.

(e) ***Institute Employees***

Institute employees may be sponsored as part-time students by the Director, on recommendation of the Head of the Department of the employee's Department.

A candidate becomes eligible for the award of the M. Tech. degree after fulfilling all the academic requirements prescribed by the Senate of the Institute.

1.4.2 Admission Procedure:

Admission to the M. Tech. Programme of the Institute will normally be in the months of July every year. For admission an advertisement will be issued in the month of April/May.

Admission to all the category of students is granted on the basis of GATE scores and/or performance in B.Tech/B.E./MCA results and/or interview/admission test held usually during the month of June or July every year.

The applicants who have completed or are likely to complete all the examinations including the thesis oral examination, viva etc of the qualifying degree by the date of admission to the programme may be considered for admission; however, if admitted, they must produce the evidence of their having passed the qualifying degree examination with the specified minimum marks/CPI (as specified in clause 3) within 8 weeks of the beginning of the semester, failing which their admission is liable to be cancelled.

Candidates whose selection is approved by the Chairman, Senate will be admitted to the M. Tech. Programme of the Institute after payment of the prescribed fees.

1.5 New Initiatives

All the departments have taken initiatives to focus on Research & Development activities in the forms of guiding M.Tech and Ph.D students. Many members of the faculty have been able to get sanctions of sponsored Research projects from various financial organizations. Moreover, members of faculty (specially the junior ones) are also encouraged to present research papers in the international conferences. The

Director has taken initiatives to reimburse Rs 10,000 and Rs 5,000 for publication of research papers in international referred journal and national referred journal respectively. Many teachers have availed of this opportunity. Departments have also floated various new courses both at Undergraduate and Post Graduate levels.

2. OVERVIEW

2.1 Historical Background

In the late fifties, the Government of India decided to establish Regional Engineering Colleges (RECs) under the Quality Technical Education Policy – one each in every major state – with the prime objective of imparting quality technical education throughout the country and to foster national integration. These Regional Engineering Colleges were established as joint ventures of the Government of India and the respective state governments. Assam is a major state in the North-East region of India and the 15th REC was officially established in Silchar in 1967. Though 14 other RECs started functioning within 1967, it took about another decade for REC Silchar to start its academic programmes due to various constraints.

The College started functioning in 1967 from a camp office in Shillong (the then Capital of Assam) with Dr. S. K. Baruah as Principal and Prof. B.R. Seth, the then Vice-Chancellor of Dibrugarh University as Chairman of the Board of Governors. Subsequently, an area of about 540 acres of land was acquired by the Government of Assam on the outskirts of Silchar town to house the REC. This land was part of Bhorakhai Tea Estate.

The first batch of students was admitted in 1977 in the B.E. programmes in 3 branches of Engineering, namely, Civil Engineering, Mechanical Engineering and Electrical Engineering. The total intake in the first batch was 60 students. The meager infrastructure facilities consisted of only a part of a hostel, two Assam type buildings (for classes and administration), a workshop building, seven faculty quarters and a few staff quarters of the College when the College started its academic programme in November 1977. Initially, the classes started with only 4 full time teachers and with Dr. H. R. Chablani as Principal. The College started its academic programme with affiliation to Gauhati University. The first batch of B.E students was awarded degrees in the year 1982-83. Subsequently, two more branches, namely, (i) Electronics and Telecommunication Engineering and (ii) Computer Science and Engineering started functioning from the year 1983 and 1987 respectively. The affiliation was later shifted to Assam University in 1994.

On the basis of the report of the High Powered Joint Expert Committee of AICTE and UGC under the chairmanship of Prof. S. K. Joshi, Director General of Council for Scientific and Industrial Research (CSIR), Regional Engineering College Silchar has been transformed and upgraded to National Institute of Technology, Silchar with a Deemed University status with effect from 28 June 2002. The institute has been taken over by Government of India and subsequently made into a fully funded Central Government autonomous Institution. This ensures a better financial status for NIT Silchar and will accelerate its growth ensuring that it becomes one of the premier technological institutes of not just the North-East but the entire nation. The institute has remodeled its curriculum and academic activities in line with that of IITs. With its Deemed University status, the institute started awarding degrees from the year 2002 and the first convocation of the institute was held on 16 February 2004 to award degrees to all students who qualified for degree after its transformation into an NIT.

Now, it is a prestigious Institute with reputation for excellence at both Under Graduate and Post Graduate level.

2.2. Location

The institute is situated at Silchar (latitude 24.5^0N, longitude 92.51^0E, at a height of 114.68m above MSL), the headquarters of the district of Cachar in Assam. The location of the institute is at a distance of about eight kilometers to the south of the town of Silchar on the Silchar-Hailakandi road. Cachar is the southernmost district of Assam bordering Mizoram on south, Manipur on east and Tripura and Meghalaya on west. Silchar is well connected with the rest of the country via Guwahati, the major city of the North East region, by air and road and by air via Kolkata. Silchar has direct air link with Imphal, Aizawl and Agartala as well. Buses, Auto-Rickshaws, and Taxis are available from Silchar town to the College campus.

The Institute boasts of state-of-the- art academic and research infrastructure - lecture galleries, laboratories, resource-centres, sports grounds, open-air theatre, hospital, food-courts and many more being embraced by the greenery, expansive teagardens, and lakes.

2.3. Campus

The campus of the institute is spread over an area of 540 acres, set amidst a sprawling landscape of natural quietness, bordered on expansive teagardens. It presents a spectacle of harmony in modern architecture, natural beauty and picturesque surroundings.

The campus area has been organized in three functional sectors:

- Hostel for students
- Instructional buildings and administrative block
- Residential sectors for the staff

The instructional buildings have been so located that these are fairly near to both the hostels and the staff quarters. There is a full-fledged computerized branch of State Bank of India, a Post-Office, and a number of telephone booths with STD/ISD facilities in the campus. The Institute has its own Dispensary with a full-time Senior

Medical Officer and a Lady Medical Officer to attend to the regular medical needs of the students, staff and their families. Patients suffering from serious illness, requiring intensive care, are referred to the Silchar Medical College & Hospital, which is only about two kilometers from the campus. An adequately equipped Canteen is there near the instructional zone and two more buildings for this purpose are under consideration – one of which is now complete – which will provide facilities to the students and the staff during and beyond the working hours. There is a well-equipped Gymkhana and a Students Activity Center which are utilized by students for activities like bodybuilding, indoor games and similar other pursuits. There is a 12 room Guest House in the campus for the visitors. At present, for the extra-curricular activities of the students and staff, there is an Institute hall with a sitting arrangement for an audience of around five hundred. The institute has two buses, which make morning and evening trips to Silchar town. City buses and Auto rickshaws ply between Silchar town and the institute campus. There is a Lower Primary School in the campus for the schooling of children.

Functionally and aesthetically spread out, the campus aims at intellectual growth in an ambience that is free-flowing and community-friendly. The soothing breeze rustling through the naturally gifted lustrous greenery and bluish lakes is just one of the several ingredients that create an amazing atmosphere; just the right conditions essential to concentrate on studies.

Campus Photograph 1

Campus Photograph 2

Campus Photograph 3

2.4. Administration

NIT Silchar is administered by a society registered under Societies Registration Act. According to the Memorandum of Association of this society, a Board of Governors (BOG) is made responsible for superintendence, direction and control of the affairs of the Institute. The Director, ex officio Member Secretary of the BOG, is the principal academic and executive officer of the institute. Besides the Board of Governors, there is a Senate, a Finance Committee and a Building and Works Committee as authorities of the institute.

2.5. Academic Programme

The Institute offers programmes leading to the B.Tech. degree in Civil Engineering, Computer Science & Engineering, Electrical Engineering, Electronics & Communication Engineering, Electronics & Instrumentation Engineering, and Mechanical Engineering,. It also offers Postgraduate programmes in Technology & Science leading to M. Tech. degree in eight specializations in Engineering disciplines and one M.Sc. degree in Chemistry. The Institute also provides opportunities for Part-time M. Tech. in selected fields and also doctoral research in varieties of subjects. During the period under report, the Institute had about 1100 students in the four year B.Tech. Programmes, 97 students in M.Tech. Programmes, 8 students in M.Sc. Programme, and 82 Ph.D. research scholars. All academic programmes are governed by specified regulations duly approved by Senate from time to time.

2.6. Courses Offered

Currently the Institute offers six branches in B.Tech. Programmes, Eight specializations in M.Tech. Programmes, one Post Graduate Programme in Basic Sciences (Chemistry).

(i) B.Tech. programme:

- Civil Engineering
- Computer Science and Engineering
- Electrical Engineering
- Electronics and Communication Engineering
- Electronics and Instrumentation Engineering
- Mechanical Engineering

(ii) M.Tech. programme:

- Earthquake Engineering (under Civil Engineering Department)
- Geo-Technical Engineering (under Civil Engineering Department)
- Transportation Engineering (under Civil Engineering Department)
- Water Resources Engineering (under Civil Engineering Department)
- Microelectronics & VLSI Design (under Electronics and Communication Engineering Department)
- Power and Energy System Engineering (under Electrical Engineering Department)

- Design & Manufacturing (under Mechanical Engineering Department)
- Thermal Engineering (under Mechanical Engineering Department)

(iii) M.Sc. programme:

- Applied Chemistry (under Chemistry Department)

(iv) Ph.D programme:

- Engineering
- Science
- Humanities and Social Sciences

2.7. Admission Procedure

(i) ***B.Tech.***

The admission to 1st year of B.Tech. Programme is made through the All India Engineering Entrance Examination (AIEEE) conducted by CBSE and as per the guidelines framed by Ministry of Human Resource Development, Govt. of India, Department of Secondary and Higher Education. This institute acts as one of the Counseling Centers.

(ii) ***M.Tech.***

The advertisement for M.Tech. Programme was released in leading national newspapers, local dailies and in the website of the institute. Admissions were offered on the basis of marks in the qualifying examination (B.E./B.Tech.), performance in interview and the GATE score. GATE qualified candidates are eligible for institutional financial assistance. Candidates are required to have a minimum of 60 per cent of marks or its equivalent in Bachelor of Engineering/ Technology degree. When GATE qualified candidates are not available, admission may be given to those who are not qualified in GATE on the basis of merit as detailed in P.G. regulation.

(iii) ***M.Sc. (Basic Sciences)***

Admission to M.Sc. courses in Chemistry are based on career marking (weightage for 10th, 12th and B.Sc. are 25%, 25% and 50% respectively). Applicants must have secured at least 50% of total mark in aggregate at B.Sc. level and preference is given to students having Honours in the applied discipline.

(iv) ***Ph.D.***

The advertisement for Ph.D. programme was released in leading national newspapers, local dailies and in the website of the institute. The candidates were selected on the basis of marks in the qualified examinations and on the basis of interview. The candidates with at least 60 per cent of marks (or CPI 6.5) in M.E./M.Tech. for engineering departments, first class with 60 per cent of marks in M.Sc. for science departments, and Masters degree with a minimum of 55% marks or equivalent for Humanities and Social Sciences department are allowed to apply. B.E./B.Tech degree holders with excellent academic record with CPI at least 8 (70 per cent of marks) were also allowed to apply. Assistantship to

regular full-time students with valid GATE/NET score were permitted subject to availability of fund.

(v) **Sponsored Students for Post-Graduate programmes (M.Tech., M.Sc., & Ph.D.)**

(a) Preference will be given to those candidates who are GATE qualified. Sponsored candidates will not be eligible to receive scholarship even if they are qualified in GATE.
(b) The candidates must have a total of minimum two years full time work experience in the sponsored organisation which should be a reputed one.
(c) There will not be any age restriction.
(d) Sponsorship certificate in proper proforma has to be produced from the employer at the time of admission.

2.8. Students

National Institute of Technology, Silchar has always been the preferred destination of the bright students. The present student strength of approximately 2000, can be doubled within the next five years. Students of N.I.T., Silchar are also known for their excellence in socio-cultural activities and in sports. The institute is open to persons of either sex and of whatever race, creed, caste or class and no condition is imposed as to religious belief or profession or any other condition whatsoever in admitting students. M.Tech., M.Sc. and Ph.D. programmes are also open to all. This multilingual and multi-cultured environment is particularly conducive to its future development. The alumni of NIT, Silchar have made a mark in industry and public life. They are taking significant interest in the affairs of the Institute and will continue to do so in future. It has approx. 8000 strong alumni dedicating to further development of the Institute.

2.9. Examination and Evaluation

Since the institute became an Institute of National Importance (Deemed to be University status), the entire examinations and evaluations leading to finalization of B. Tech results, for students admitted from 2002 onwards, were conducted under the direct control and supervision of the office of the Dean (Academic). The evaluations are done based on the Grade system, where examination marks are awarded on credit based system.

2.9.1 The Examination Section of the Institute will centrally conduct the Mid-Semester and the End Semester Examinations in respect of theory components of the subjects unless otherwise permitted. Normally the subject teacher will be one of the Invigilator for mid-semester examination and will keep the answer scripts with him after the examination for evaluation. The end semester answer copies will be despatched to the subject teacher (examiner) on the same day or the immediate next working day of the examination. If the concerned examiner is not available on that -day, the copies will be handed over to the respective Heads of the Department who will pass on the copies to the concerned examiners at the earliest.

a) Assessment of Performance (U.G. Courses):

There will be continuous assessment of a student's performance throughout the semester and grades will be awarded by the teacher concerned or the appropriate committee appointed for this purpose.

In case of theoretical subjects, the evaluation will be based on sessional assessment (attendance, class tests, quizzes, assignments, etc.), mid semester examination and end semester examination. In case of sessional subjects (Laboratory/Design/ Drawing/Practical/Workshop etc.), the evaluation will be on the basis of attendance, assessment of the tasks assigned and the end semester test/viva.

For subjects with a theory component, the subcomponents and the respective weightage assigned are given below:

Subcomponent	Weightage
Sessional Assessment	20%
Mid-Semester Examination	30%
End-Semester Examination	50%

b) Project work

The student is required to submit a project report at the end of 7th & 8th semester in the form of a well bound thesis. The departmental academic committee will constitute one or more evaluation boards for continuous monitoring of the projects. For the purpose of assignment of a grade, the departmental academic committee fixes some appropriate weightage on supervisor's assessment, assessment by Evaluation Boards through oral presentation viva voce, and project report.

c) Course Structure (M.Tech. Programmes):

Teaching for the courses will be reckoned in credits, as specified against each subject. Due credit will be given to lecture, tutorial (theory) and practical components for a given subject.

Full time students have to register for at least 24 credits in each of the first two semesters. Most courses carry 6 credits, while a few carry 8 or 9 credits also. A part-time post-graduate student will be required to register for a minimum of 12 credits in the first two semesters.

The residence requirements for students registered in M. Tech. is four semesters. They will be required to complete a minimum of 96 credits of load of which at least 48 credits shall be through P.G. course work and at least 32 through research. Every M. Tech student must complete the prescribed courses. SPI and CPI will be calculated on the basis of all the Undergraduate and Postgraduate courses taken by the student. No regular student registered for the M. Tech programme shall continue in the programme for more than 3 years and no part-time registration student shall continue for more than 4 years after the first registration. The course and research requirements in individual departments/programmes may be over and above the minimum stated here. The departments/programmes shall obtain prior approval of the SENATE of

such requirements and will also inform the students in their postgraduate programmes at the time of their admission. When in residence, a student has to reside on campus in the designated hostel / house. Exemptions will be granted only in rare cases on proper justifications being provided.

Scheme of Evaluation

There will be continuous assessment of a student's performance taking into account the L-T-P components with reference to a given throughout the semester and grades will be awarded by the subject teacher based on the student's performance in the appropriate L-T-P components

2.9.2 A student may be debarred from appearing the end semester examination in any subject due to the following reasons if his/her

(a) If any disciplinary action is taken against him/her.

(b) On recommendation of a teacher, if

(i) his/her attendance in the Lecture/Tutorial /Practical classes has not been satisfactory during the semester, and/or

(ii) his/her performance in the sessional work done during the semester has been unsatisfactory.

2.9.3 (i) Class tests, assignments, tutorials, viva-voce, laboratory assignments, etc., are the constituent components of continuous assessment process, and a student must fulfill all these requirements as prescribed by the teacher / coordination committee of the subject. If due to any compelling reason (such as participation in national / international events with due approval of the institute, his/her illness, calamity in the family, etc.) a student fails to meet any of the requirements within/on the scheduled date and time, the teacher/coordination committee may take such steps (including conduction of compensatory tests/examinations) as are deemed fit.

(ii) Appearing both at the Mid-Semester and End- Semester Examination of theory courses is compulsory.

(a) Students who have missed an end semester examination on valid reasons and awarded 'I' grade are eligible for make up examination. They should make an application to the Dean of Academic Affairs through the Instructor/HOD within seven days from the date of examination missed explaining the reasons for their absence.

(b) No make up examination will be scheduled for the mid semester examination and quizzes. It is entirely up to the teacher to ascertain the proficiency of the student by whatever means considered appropriate to him/her if he/she is satisfied of the bonafides.

Official permission to a make up examination will be given under exceptional circumstances such as admission to a hospital due to illness and a calamity in the family at the time of examination. Students residing in the hostels should produce a medical certificate issued by the Institute Medical Officer only. Students who are permitted to stay outside the campus or who have been authorized to be away from the Institute should produce a medical certificate from a Medical Officer not below the rank of a Civil Surgeon and endorsed by the Institute Medical Officer. Certificate from private medical practitioners will not be accepted. The

Dean of the Academic Affairs can use his/her discretion in giving permission to a student to take a make up examination.
Make up examinations will be held as per dates notified in the Academic Calendar. Make up examinations at any other time can be held only with the permission of the Dean of Academic Affairs.

2.9.4 A student will be permitted to appear in the examinations in only those subjects for which he/she has registered at the beginning of the semester and has not been debarred.

2.9.5 The teacher(s) shall submit two copies of letter grades to the Department Undergraduate Programme Committee (DUPC) to which the subject belongs, by the due date specified in the Academic Calendar. Upon approval by DUPC, the Head of the concerned Department will forward all grades to the Academic Section by the due date specified in the calendar.

2.9.6 All evaluated work in a subject except end semester answer scripts will be returned to the students promptly. End semester examination answer scripts and the sheet containing details of marks converted to grades, shall be preserved by the teacher(s) concerned/academic section for a period of one semester.

2.9.7 End-Semester answer scripts are open for inspection by the students after the grades have been submitted and within one week from the commencement of the next semester.

2.9.8 If a student feels that the grade awarded to him/her in a course is not correct, the student can make an appeal to the Dean (Academic Affairs) citing the reason(s). Any change of grade of a student in a subject, consequent upon detection of any genuine error of omission and/ or commission on part of the concerned teacher, must be approved by the DUPC and must be forwarded by the Head of the concerned Academic Section within one week from the commencement of the next semester.

2.9.9 A *Semester Performance Index (SPI)* will be computed for each semester. The SPI will be calculated as follows:

$$SPI = (C1*G1+C2*G2+C3*G3+\ldots\ldots+Cn*Gn)/(C1+C2+C3\ldots\ldots..+Cn)$$

Where, n is the number of courses registered during the semester.
Ci is the number of credits allotted to a particular course, and
Gi is the grade points corresponding to the grade awarded for the course.

2.9.10 A *Cumulative Performance Index (CPI)* will be computed at the end of each semester and communicated to the students along with the SPI and the grades by them for that semester.

The CPI gives the cumulative performance of the student from the first semester up to the end of the semester to which it refers, and will be calculated as follows:

$$CPI = (C1*G1+C2*G2+C3*G3+\ldots\ldots..+Cm*Gm)/(C1+C2+C3+\ldots\ldots+Cm)$$

Where, m is the number of courses registered up to that semester.

Ci is the number of credits allotted to a particular course, and

Gi is the grade points corresponding to the grade awarded for the course.

Whenever a student repeats or substitutes a course in any semester, the lower grade(s) obtained by him/her in the course is to be ignored in the computation of CPI from that semester onwards.

2.9.11 Both SPI and CPI will be rounded off to second place of decimal and recorded as such. Whenever these CPI are to be used for the purpose of determining the merit ranking of a group of students, only the rounded off values will be used.

2.9.12 A student shall be declared to be eligible for the award of B.Tech. degree if he/she has

(a) completed all the credit requirements for the degree with grade 'DD' or higher grade in each of the subjects (Theoretical, Laboratory, Workshop, Sessional etc.), Seminar, Project etc.

(b) satisfactorily completed all the non-credit requirements for the degree viz.- Extra Academic Activities etc.;

(c) obtained a CPI of 4.00 or more at the end of the semester in which he/she completes all the requirements of the degree. A student shall be awarded first class if he/she secures a CPI of 6.00 or more and a second class if he/she secures a CPI of 4.00 or more but less than 6.00;

(d) no dues to the Institute, Department, Hostels, NCC and NSO; and

(e) no disciplinary action is pending against him.

2.9.13 The award of B.Tech. degree must be recommended by the Senate and approved by the Board of Governors of the Institute.

2.10 Placement

The Institute has a separate full-fledged Training and Placement (T&P) Section headed by a Faculty-in-Charge, under the Dean (SW). In addition to placement and arrangement for industrial training to the students, the Section is responsible for issuing railway and air concession, bona-fide certificates, course completion certificate, character certificate etc. The Section also handles the scholarships of the students.

During the academic session 2009-10, More than 95% students have been awarded jobs through campus interview in various organizations. The detailed break up in Section. 4.10

2.11 Games & Sports

The institute recognizes the extracurricular activities as a part to students' life and hence well-equipped facilities for games and sports are provided within the hostels premises, in other general locations and in the Student Activity Center (SAC). Hostels are equipped with most of the indoor games facilitates. The SAC is used as an indoor stadium. A well laid fenced playing ground is used for outdoor games and tracking events. Besides these, students, faculty and staff have facilities for playing Tennis, Basketball, Volleyball etc. Inter-hostel cricket, football and volleyball events are regularly conducted in the

institute. Inter-college cricket, football and volleyball events are also regularly conducted in the institute. A gymnasium center housing modern keep-fit and gym equipment was in operation during the period of reporting.

2.12 Staff Position

i. Administrative Staff

Name of the Post	Sanctioned Strength	Staff in Position
Director	01	--
Registrar	01	01
Dy. Registrar (Accounts)	01	01
Asstt. Registrar (Acd)	01	--
Asstt. Registrar (Admn)	01	--
Sr. Medical Officer	01	--
Lady Medical Officer	01	01
Assistant Estate Engineer	01	01
Librarian	01	01
Stores Officer	01	01
Special Officer	Kept in abeyance	--
Legal Adviser	On Retainer ship fees	2 Retainers (1 for High Court & 1 for District Court)
Total	**10**	**07**

ii. Academic Staff

a) Academic Staff (before 6th Pay Commission)

Name of the Post	Sanctioned Strength	Staff in Position		
		Regular	CAS	Total
Professor	17	06	06	12
Assistant Professor	33	11	04	15
Lecturer(SG)/Lecturer(SS)/Lecturer	66	24	27	51
Total	**116**	**41**	**37**	**78**

b) Academic Staff (after 6th Pay Commission)

Name of the Post	Sanctioned Strength	Staff in Position		
		Regular	CAS	Total
Professor	17	06	06	12
Associate Professor	33	09	12	21
Assistant Professor	66	45	---	45
Total	**116**	**60**	**18**	**78**

iii. Faculty Position

a) Faculty Position (before 6th Pay Commission)

Name of the Department	Professor			Assistant Professor			Lecturer		Total sanctioned posts Department wise
	Sanctioned Strength	In Position		Sanctioned Strength	In Position		Sanctioned Strength	In Position	
		Regular	CAS		Regular	CAS		Regular	
CE	03	02	01	07	05	03	10	05	20
ME	03	01	02	05	02	---	10	09	18
EE	03	02	01	05	01	---	11	09	19
ECE	02	01	01	06	01	---	09	07	17
CSE	02	---	---	05	01	---	09	08	16
PHY	01	---	---	01	---	01	04	02	06
CHY	01	---	01	01	---	---	04	04	06
MATH	01	---	---	02	---	---	06	04	09
HSS	01	---	---	01	01	---	03	03	05
Total	**17**	**06**	**06**	**33**	**11**	**04**	**66**	**51**	**116**

CE= Civil Engineering, ME=Mechanical Engineering, EE= Electrical Engineering, ECE=Electronics & Communication Engineering, CSE= Computer Science Engineering, PHY= Physics, CHY= Chemistry, Math= Mathematics, HSS= Humanities & Social Sciences

b) Faculty Position (after 6th Pay Commission)

Name of the Department	Professor			Associate Professor			Assistant Professor		Total sanctioned posts Department wise
	Sanctioned Strength	In Position		Sanctioned Strength	In Position		Sanctioned Strength	In Position	
		Regular	CAS		Regular	CAS		Regular	
CE	03	02	01	07	03	03	10	07	20
ME	03	01	02	05	02	04	10	06	18
EE	03	02	01	05	01	01	11	07	19
ECE	02	01	01	06	01	02	09	05	17
CSE	02	---	---	05	01	---	09	08	16
PHY	01	---	---	01	---	01	04	02	06
CHY	01	---	01	01	---	---	04	04	06
MATH	01	---	---	02	---	01	06	03	09
HSS	01	---	---	01	01	---	03	03	05
Total	**17**	**06**	**06**	**33**	**09**	**12**	**66**	**45**	**116**

CE= Civil Engineering, ME=Mechanical Engineering, EE= Electrical Engineering, ECE=Electronics & Communication Engineering, CSE= Computer Science Engineering, PHY= Physics, CHY= Chemistry, Math= Mathematics, HSS= Humanities & Social Sciences.

iv. Supporting Staff (Administration)

Name of the Post	Sanctioned Strength	Staff in Position
Superintendent	3	1
P S to Director/Supdt MC	1	Nil
P A to Director/Steno Gr-II	1	1
Stenographer/Steno Gr-III	6	6
Sr Accounts Assistant.	1	1
Accounts Assistant	2	2

Supervisory Assistant	3	3
UD Assistant	18	14
LD Assistant	18	13
Chief Store Keeper	1	NIL
Store Keeper	5	4
Total	**59**	**45**

v. Supporting Staff (Academic)

Name of the Post	**Sanctioned Strength**	**Staff in Position**
System Programmer	2	NIL
Workshop Superintendent	1	NIL
Assistant Librarian	2	1
Foreman	1	1
Assistant Foreman	1	NIL
Sports-cum- PT Officer	1	NIL
Professor T & P	1	NIL
Library Assistant	6	2
Laboratory Assistant	2	2
Sr Instructor/Tech Gr-A	4	1
Jr Instructor/Tech Gr-B	15	13
Asstt Instructor/Tech Gr-C	10	10
Laboratory Attendant	21	17
Workshop Attendant	10	4
Library Attendant	4	2
Class Room Bearer	1	1
Total	**83**	**54**

vi. Technical & other Supporting Staff

Name of the Post	**Sanctioned Strength**	**Staff in Position**
Pharmacist	1	1
Nurse-cum-Midwife	1	1
Jr Engineer	2	1
Muharrier	2	1
Electrician-cum-Wireman	2	1
Wireman	2	1
Carpenter (Estate)	1	NIL
Draughtsman	4	4
Tracer	2	2
Plumber	3	2
Driver	5	4
Bus Conductor	2	2
Pump Operator-cum-Mechanics	2	2
Mason (Estate)	1	1
Classifier (library)	1	Nil
Store Attendant	2	2
Plumber Attendant	1	Nil
Medical Attendant	3	3

Reneo Machine Operator	1	1
Gate Keeper (library)	2	2
Vehicle Cleaner	1	Nil
Mason Helper	1	Nil
Peon	25	20
Head Watchman	1	Nil
Watchman	24	11
Duftary	4	Nil
Guest House Cook	1	Nil
Guest House Bearer	1	Nil
Guest House Helper	1	Nil
Cook (Hostel)	6	2
Cook-cum-helper (Hostel)	64	58
Mali	9	7
Sweeper	13	8
Total	**191**	**137**

2.13 Fresh Appointments (Regular)

Sl.No.	Title	Name	Designation	Date of Joining
1	Miss	Shila Nath	Nurse-Cum-Midwife	25.02.10

2.14 Fresh Appointments (Contractual)

Sl.No.	Title	Name	Designation	Date of Joining
1	Miss	Anindita Purkayastha	Teaching Asstt. (Maths)	17.08.09
2	Miss	Banashri Sinha	Teaching Asstt. (Maths)	17.08.09
3.	Mr.	Rahul Deb	Teaching Asstt. (CSE)	18.08.09
4	Mrs.	Swetla Barwal	Lecturer (Elect.)	17.08.09
5	Mr.	Partha Sarathi Chakraborty	Lecturer (CSE)	04.09.09
6	Mr.	Rajdeep Deb	Teaching Asstt. (Chem.)	15.09.09
7	Mr.	Nirjhar Bhattacharjee	Teaching Asstt. (Elect.)	12.01.10
8	Mr.	Agnimitra Biswas	Lecturer (Mech)	24.02.10
9	Mr.	Joyanta Bhattacharjee	Technical Asstt. (Civil)	18.08.09
10	Mr.	Sandip Biswas	Technical Asstt. (ECE)	17.08.09
11	Mr.	Satya Saran Biswas	Technical Asstt. (ECE)	17.08.09
12	Miss	Lipi Mahanta	Technical Asstt. (Phy).	18.08.09
13	Miss	Arunima Gogoi	Lib. & Inf. Asstt. (Library)	08.09.09
14	Mr.	Dhrubajyoti Chakraborty	Jr. Engineer (Civil)	16.10.09
15	Mr.	Rahul Suklabaidya	Jr. Engineer (Civil)	16.10.09
16	Mr.	Swapan Das Baishnab	Jr. Engineer (Elect)	16.10.09
17	Miss	Jarina Bahar Mazumder	Technical Asstt. (Phy)	23.02.10

2.15 Staff Relieved on Retirement

Sl.No.	Title	Name	Designation	Date of Relieve
1	Mr.	Akhil Ranjan Choudhury	U.D. Asstt.	31.12.09
2	Mr.	Bani Sarma	Workshop Attendant	30.06.09

2.16 Staff Expired

Sl.No.	Title	Name	Designation	Date of Relieve
1	Mr.	Late Rabindra Roy	Tech. – B	18.10.09
2	Mr.	Late Sailesh Ch. Das	Peon	18.09.09

2.17 Staff (Regular) Relieved on Resignation

Sl.No.	Title	Name	Designation	Date of Relieve
1	Dr.	A.K. Banik	Associate Professor (Civil)	08.01.10
2	Mr.	Prokash Ch. Roy	Asstt. Professor(Mech)	14.09.09
3	Mr.	Sanjeev Rai	Asstt. Professor(ECE)	19.05.09
4	Mr.	Lakshmi Prasad Saikia	Asstt. Professor(CSE)	14.07.09

Staff (Contractual) Relieved on Resignation

Sl.No.	Title	Name	Designation	Date of Relieve
1	Miss	Banashri Sinha	Teaching Asstt. (Maths)	31.12.09
2	Mr.	Rahul Deb	Teaching Asstt. (CSE)	31.12.09
3	Mr.	Partha Sarathi Chakraborty	Lecturer (CSE)	31.12.09

2.18 Staff Members (Non-Teaching) Deputed/Sponsored for Training/Learning

#	Name of Staff	Name of programme	Organizing Institute	Duration
1.	Ms. B. Roy Choudhury	Pension & Other Retirement Benefits	Integrated training & policy research (Training Division)	Dec.17–19, 2009
2.	Ms. Shefali Sinha	- do -	- do -	- do –
3.	Mr. Pijush Bhattacharjee	Managing Office & Staff Development	Centre for Training & Social Research	Dec. 18-19, 2009

3. STAFF POSITION

3.1 ACADEMIC STAFF (TEACHING) & DEPARTMENTAL ACTIVITIES

I. DEPARTMENT OF CIVIL ENGINEERING

1. Academic Staff

(A) HEAD		
Name	***Qualification***	***Specialization Area(s)***
Prof. A.K. Dey (up to 10.01.2010)	Ph.D.	Geotechnical Engineering
Prof. D.N. Bhattacharjee (w.e.f. 11.01.2010)	Ph.D.	Water Resource Engineering

(B) FACULTIES		
Professor		
Name	***Qualification***	***Specialization Area(s)***
Prof. A.K. Dey	Ph.D.	Geotechnical Engineering
Prof. S. Choudhury	Ph.D.	Earthquake Engineering
Prof. P.S. Choudhury	Ph.D.	Water Resource Engineering
Associate Professor		
Name	***Qualification***	***Specialization Area(s)***
Dr. A.K. Das	Ph.D.	Geology
Dr. D. Chakraborty	Ph.D.	Water Resource Engineering
Dr. M.A. Ahmed	Ph.D.	Transportation planning
Dr. P. Rajbangshi	Ph.D.	Transportation Engineering
Dr. A. K. Barbhuiya	Ph.D.	Water resource Engineering
Dr. A. I. Laskar	Ph.D.	Building Technology
Assistant Professor		
Name	***Qualification***	***Specialization Area(s)***
Dr. U. Kumar	Ph.D.	Environmental Engineering
Dr T. Rahman	Ph.D.	Structural Engineering
Mr. A. M. Choudhury	M. Tech.	Structural Engineering
Mr. P. Roy	M. Tech.	Water Resource Engineering
Ms. N. Borthakur	M. Tech.	Geotechnical Engineering
Mr. P. Das	M. Tech.	Structural Engineering
Mrs. P. Sultana	M. Tech.	Geotechnical Engineering

(C) FACULTY APPOINTMENT, PROMOTION, RETIREMENT, RE-EMPLOYMENT AND RESIGNATION			
FACULTY APPOINTMENT			
Post	***Name***	***Qualification***	***Specialization Area(s)***
Assistant Professor	Mrs. P. Sultana	M. Tech.	Geotechnical Engineering

FACULTY PROMOTION			
Post	***Name***	***Qualification***	***Specialization Area(s)***
Professor	Prof. P.S. Choudhury	Ph.D.	Water Resource Engineering

2 Research and Development

(i) Ph.D. Programs existing :		
Sl.No.	Specialization Areas	
1	Water Resource Engineering	
2	Geotechnical Engineering	
3	Earthquake Engineering	
4	Structural Engineering	
5	Environmental Engineering	
(ii) Ph.D.s done so far:		
Submitted: 03		Continuing: 08
(iii) Brief descriptions of on-going activities :		
(i)	Field #1: Ph.D Research work on	
	(a)	Sediment flow modeling for River Reaches
	(b)	Soil Characterization under dynamic Loading
	I	Flood flow modeling for unguaged watersheds
	(d)	ANN application in river flood fore casting
	(e)	ANFIS Models development for river network flow modeling
	(f)	Flood risk & vulnerability assessment for sub zone (2b) & (2c) in India
	(g)	Rheological behavior of fly ash based geopolymer concrete
	(h)	Geotechnical investigation at sonapur site
	(i)	Effect of clay damper on seismic wave amplitude reduction
	(j)	Environmental Pollution
(ii)	Field #2: Sponsored Research	
	(a)	Water Resource Engineering
	(b)	Geotechnical Engineering
	I	Earthquake Engineering
(iv) Thrust Areas :		
1	Water Resource Engineering	
2	Geotechnical Engineering	
3	Earthquake Engineering	
4	Structural Engineering	
(v) ON-GOING RESEARCH PROJECTS		
Sponsored Research Projects (Innovation and Technology Transfer):		

#	**Title of the project**	**Sponsor(s)**	**Name of P.I.**	**Amount (Rs.)**
1	Sediment & Flood flow modeling	NRDMS	Prof. P.S.	25.00 Lacs

	for river networks incorporating contribution from ungauged water sheds	(DST)	Choudhury	completed
2	ANN – GA & NFIS Models for flood fore casting in river networks	SERC (DST)	Prof. P.S. Choudhury	9.00 Lacs
3	L – moment based extreme rainfall and runoff analysis for hydro metrological sub zone (2b) & (2c) of India	Ministry of Earth science (MOES)	Prof. P.S. Choudhury	31.00 Lacs
4	River Bank erosion & its counter measures	DST	Dr. A.K. Borbhuiya	31.00 Lacs
5	Bridge pier scouring	AICTE	Dr. A.K. Borbhuiya	17.00 Lacs

(vi) Institute – Industry Collaboration

Consultancy Projects :

#	Title of the project	Name of P.I.	Sponsor(s)	Amount (Rs.)
1	Geotechnical Investigation of NF Railway	Dr. A.K. Borbhuiya	NF Railway	10.00 Lacs
2	Soil Testing at Assam University	Dr. A.K. Dey	Assam University	7.00 Lacs

3 Theses: Doctoral

#	Name of Scholar	Title of Thesis
1	Dr. B.S. Sil	Sediment flow modeling for River Reaches (*Submitted*)
2	Dr. S. Paul	Characterization of soil at Silchar under dynamic Loading (*Submitted*)
3	Dr. S. Singh	Multiobjective design of acquifer remediation system using simulation optimization approach *(Submitted)*

4 Dissertation: M.Tech.

#	Name of Scholar	Title of Thesis
1	A. Nongbet	Local Scour around circular obstructions in cohesive soils.
2	P.J. Brahmachary	Effect of Masonry infill on performance of frame buildings
3	H.D. Singh	Comparative study of performance of Hospital Building designed as per is code and performance – based design
4	K.V. Singh	Rainfall runoff modeling for an ungauged watershed using GIS
5	A. Sil	Analysis on stability of slope in cohesive embankment under static and dynamic condition.
6	B. Nath	Analysis of prestressed concrete box Girder Bridge
7	K. Leishangthem	Seismic Hazard study of Imphal City

5 Paper Reviewed: 04

#	Name of Faculty	Name of Journal or Conference or Name of Organizing Institute	Number of Papers Reviewed
1	Dr. A.I. Laskar	Construction & Building Material	01
		ACI Journal of Materials	01
		Materials Research	02

6 Seminars / Workshops / Conferences / Symposia / Short Term Courses Attended: Nil

7 Research Publications

Published in International Journals			
#	**Author(s)**	**Title**	**Publication details**
1	Choudhury P.S., Sil B.S.	Integrated sediment and water flow simulation & fare cashing models for river Reaches	Journal of Hydrology, 2010, 10, 1016, Journal of Hydrology, 2010, 02, 034
2	Choudhury P.S.	Co – ordinated reservoir operation model incorporating uncontrolled water flows.	Lake and reservoir Research & Management, 2010, 15, 129-139
3	Rajbonshi P.	Discussion of development of fatigue crakling prediction models using long-term pavement performance database -- *Discussion*	Jr. of Transportation Engineering ASCE (to appear)
4	Rajbonshi P., Das A.	Estimation of temperature stress and low-temperature crack spacing in asphalt pavements	Jr. of Transportation Engineering, ASCE, 2009, 135(10), 745-752
5	Rajbonshi P.	A critical discussion on mechanistic- empirical fatigue evaluation of asphalt pavements -- *Technical note*	International J. of Pavement Research and Technology, 2009, 2(5), 223-226
6	Chakrabarty D.& Singh S.	Simultaneous identification of unknown groundwater pollution sources and estimation of aquifer Parameters	Journal of Hydrology, 2009, 376, 48–57
7	Chakrabarty D.& Singh S.	Optimal dynamic monitoring network design and identification of unknown groundwater pollution sources	Water Resource Management, 2009, 23, 2031–2049
8	Chakrabarty D.& Singh S.	Multi-objective optimization for optimal groundwater remediation design and management systems	Geosciences Journal, 2010, 14(1), 87–97

Published in International Conferences / Seminars / Workshops			
#	**Author(s)**	**Title**	**Publication details**
1	Chakrabarty D.& Singh S.	Significance of remediation time on the optimal remediation design of contaminated aquifers	Proceedings of the 2009 Second International Conference on Environmental and Computer Science (ICECS); ISBN:978-0-7695-3937-9
2	Chakrabarty D.& Singh S.	Chance Constrained Programming (CCP) for optimal remediation design of contaminated aquifers with flexible remediation time	Proceedings of 2010 International Conference on Environmental Science and Development (ISBN 978-1-84626-024-7); Singapore, 26-28 February, 2010

II. DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

1 Academic Staff

(A) HEAD		
Name	***Qualification***	***Specialization Area(s)***
Dr.Biswajit Purkayastha (up to 05.01.10)	Ph.D	Soft Computing, Image Processing
Mr. P. K. Paul (w.e.f.06.01.10)	M.Tech.	Packaging issues in fibre optic sensors, optical interconnect

(B) FACULTIES		
Professor: Nil		
Associate Professor		
Name	***Qualification***	***Specialization Area(s)***
Assistant Professor		
Name	***Qualification***	***Specialization Area(s)***
Prof. Arup Bhattacharjee	M.Tech	Computer Sc. and Engineering
Prof. Ujwala Barua	M.Tech	
Prof. Pinki Roy	M.Tech	Speech processing of languages
Prof. P.S. Neog	M.Tech	Distribute and ubiquitous systems, Information security
Prof. Samir Borgohain	M.Tech	Symbol grounding, NLP
Prof. Biswanath Dey	M.Tech	Computer Network, Wireless Sensor network, Soft computing
Prof. Pantha Kanti Nath	M.Tech	Human Computer Interaction, Computer Network
Prof. Marchang Jims	M.Tech	
Prof. Saroj Kumar Biswas	M.Tech	Multimedia and Software System, VLSI

(C) FACULTY APPOINTMENT, PROMOTION, RETIREMENT, RE-EMPLOYMENT AND RESIGNATION			
FACULTY RESIGNATION			
Post	***Name***	***Qualification***	***Date***
Lecturer (SS)	Mr. L.P. Saikia		14-7-09

2 Research and Development

Ph.D. Programs existing :		
Sl.No.	Specialization Areas	
1	One regular research scholar has joined in Ph.D programme from academic year 2009-10	
Ph.D.s done so far :		
Completed: Nil		Continuing: 01
Proposed Plan for research:		
Sl.No.	Name of the lab / Workshop	Purpose/linkages to an existing/new programme
1	Ph.D (Networking area)	
Brief descriptions of on-going activities :		
(i)	Field #1:	
	(a)	Networking labs & other labs development for B.Tech & M.Tech
(ii)	Field #2:	
	(a)	NIL
Thrust Areas:		
1	M.Tech in Computer Science & Engineering	
2	Ph.D in Networking	
New Acquisitions: NIL		
ON-GOING RESEARCH PROJECTS		
Sponsored Research Projects (Innovation and Technology Transfer): NIL		
Institute – Industry Collaboration: NIL		
Consultancy Projects: NIL		
Innovation and Technology Transfer - Research Projects: NIL		

3 Visits Abroad by Faculty Member: NIL

4 Dissertation M.Tech: NIL

5 Book /Chapters Published: NIL

6 Seminars / Workshops / Conferences / Symposia / Short Term Courses Attended: NIL

7 Research Publications

Published in International Journals			
#	**Author(s)**	**Title**	**Publication details**
1	Dr. Biswajit Purkaystha Associate Professor	Hybrid PSO/Self-adaptive Evolutionary programming for Economic Load Dispatch with non-smooth Cost Function	Int. Joint Journal Conf. in Engineering 2009, IJJCE-2009

Published in International Conferences / Seminars / Workshops			
#	**Author(s)**	**Title**	**Publication details**
1	Prof. Pinki Roy; Asstt. Professor	A New Approach towards Text filtering	2nd Int. Conf. on Computer and Electrical Engg. (ICCEE 2009) at Dubai, UAE

III. DEPARTMENT OF ELECTRICAL ENGINEERING

1 Academic Staff

(A) HEAD		
Name	***Qualification (e.g., B.Tech., M. Tech., Ph.D.)***	***Specialization Area(s)***
Prof. N. Sinha	BE, M.Tech, PhD	Power System Optimization
(B) FACULTIES		
Professor	***Qualification***	***Specialization Area(s)***
Prof. A. K. Roy	BE, ME, PhD	Electric Drives
Dr. A. K. Sinha	BE, M.Tech, Ph.D	Power System Protection
Associate Professor		
Dr. B. K. Roy	BE, M.Tech ,Ph.D.	Control System
Dr. S Choudhury	BE, M.Tech ,Ph.D.	CAD of VLSI
Mr. S. H. Laskar	BE, M.Tech	Elec
Assistant Professor		
Mr. N. B. DevChoudhury	BE, M.Tech	
Mrs. S. Deb	BE, M.Tech	Control System
Mr. L. C. Saikia	BE, M.Tech	Power system
Mr. T. Malakar	BE, M. E. E	Power System
Dr. J. P. MISHRA	M.Tech, PhD	Energy Management, Electric Drives
Mr. D. C. Das	B.Tech, M.Tech	Power and Energy System
Mr. C. Bhattacharjee	BE, M.Tech	Elect. Machine and power system

(C) FACULTY APPOINTMENT, PROMOTION, RETIREMENT, RE-EMPLOYMENT AND RESIGNATION	
FACULTY APPOINTMENT	Nil
FACULTY PROMOTION	Nil
FACULTY RETIREMENT	Nil
FACULTY RE-EMPLOYMENT	Nil
FACULTY RESIGNATION	Nil

2 Research and Development

Ph.D. Programs existing :	
Sl.No.	Specialization Areas
1	Electric Drives
2	Signal Processing in Electrical Engg
3	Wavelet Applications in Electrical Engg,
4	Power System protrection,
5	Control system
6	System Automation
7	Automatic Generation and control,
8	power Quality
9	Fault Detection, and Diagnosis of Dynamic System
10	Soft Computing Techniques
11	Power System optimization, deregulation
12	VLSI Design.

Ph.D.s done so far :	
Completed: Nil	Continuing: 05

Proposed Plan for research: As above specializations

Brief descriptions of on-going activities:		
(i)	Field #1: Ph.D Research work on	
	(a)	R & D Project (AICTE)
(ii)	Field #2: Sponsored Research	
	(a)	R & D Project (AICTE)

Thrust Areas:	
1	Power and Energy system

New Acquisitions:

#	**Name of Laboratory**	**Equipment Details (purpose, facilities, etc.)**
1	Control and instrumentation	

ON-GOING RESEARCH PROJECTS

Sponsored Research Projects (Innovation and Technology Transfer):

#	**Title of the project**	**Sponsor(s)**	**Amount (Rs.)**
1	Application of Intelligent Technique to Improve the Flexibility of Power System	AICTE	05 Lakhs

Institute – Industry Collaboration

Consultancy Projects : NIL

Consultancy Projects : NIL

Innovation and Technology Transfer - Research Projects: NIL

(D) VISITS ABROAD BY FACULTY MEMBER: NIL
(E) LECTURE BY VISITING EXPERT: NIL
(F) INVITED LECTURES BY FACULTY MEMBERS: NIL
(G) THESES DOCTORAL : NIL

3 Dissertation: M.Tech.

#	Name of Scholar	Title of Thesis
1.	Venkataiah Mekala	Modelling and Analysis of Maximum Power Tracing Control for Photovoltaic Energy System
2	Sanjay Kumar	Impact of DG Location and Sizing on Distribution System Planning and Optimization.
3.	G.Pavan Kumar	Automatic Generation Control of Hybrid Distributed Generation System
4	Paushali Paul	LMP Based Optimal and FPGA based optimal capacity Determination of DG Under deregulated environment
5	Shashank Chintha Reddy	Fault Analysis and ride through improvement of Gird connected doubly Fed Induction Generator
6	Ashish Roy	An Inteligent and Efficient Solar PV Module
7	Amit Kumar Singh	Model Based Fault Detection & Diagnosis Power System-simulation Based study
8	Saheli Roy	Solar Tracker: A Simulation based study
9	Rajib Das	Vector Control of Variable speed wind energy conversing system using doubly Fed Induction Generator
10	Navu Sahu	Maximum Power Tracking Control Scheme for variable speed wind energy conversion system
(H)	**BOOK PUBLISHED : NIL**	

4 Paper Reviewed

#	Name of Faculty	Name of Journal or Conference or Name of Organizing Institute	Number of Papers Reviewed
1	Dr. N. Sinha	IEEE Transaction power System	05
		IEEE Transaction on Evolutionary Computation	01
		IEEE Transaction on power Delivery	01
		IET: G3eneration, transmission & Distribution	02

		Elsevier: Electric Power System Research	02
		Elsevier: IJPES	02
		Journal of Franklin Institute	01
		Taylor Francis	01

(I) PATENTS GRANTED : NIL				
(J) LAURELS & DISTINCTIONS :NIL				
(K) SEMINARS / WORKSHOPS / CONFERENCES / SYMPOSIA / SHORT TERM COURSES ORGANIZED : NIL				
(L) SEMINARS / WORKSHOPS / CONFERENCES / SYMPOSIA / SHORT TERM COURSES / TRAINING PROGRAMME ATTENDED				
#	**Name of Faculty(ies)**	**Name of programme**	**Organizing Institute**	**Duration**
1	Dr. A. K. Roy	Nil	Nil	Nil
2	Dr. A. K. Sinha	3rd International Conference on Power Systems	IIT Kharagpur	27-29 Dec. 2009
3	Dr. J.P. Mishra	National Power Electronics Conference (NPEC – 10)	IIT Roorkee	June 10-13, 2010
4	Mr. D. C. Das	QIP Short Term Course on " Fuel Cell and Hydrogen Technology"	Centre for Energy IIT Guwahati,	September 14-18, 2009

2.2 RESEARCH PUBLICATIONS

(a) Published in : International Journals			
#	**Author(s)**	**Title**	**Publication details** (*Name of Journal, Year, Vol., Issue, page no.*)
1	Dr. N. Sinha	A New Hybrid Image Denoising Method.	International Journal of Information Technology and Knowledge Management,March,2010
2	Mr L. C. Saikia	Maiden Application of Bacterial forging based optimization technique in multiarea automatic generation control.	IEEE Trans. On Power Systems, Vol. 24, No. 2, 2009.

(b) Published in National Journals: NIL

(c) Published in : International Conferences / Seminars / Workshops

#	Author(s)	Title	Publication details (*Name of Conference, Year, Editors, Publisher Name, page no.*)
1	Dr. A. K. Roy		
2	Dr. A. K. Sinha	Cost Benefit Analysis of Solar Powered LED Based Lighting System for NIT Silchar	Inter. Conference, 2009, IIT Kharagpur (IEEE),
3	T. Malakar	Linear Perturbation based Repeated Power Flow: A Useful tool for Transfer Capability Calculation in Deregulated Power System.	International Conference on Electrical Energy Systems & Power Electronics in Emerging Economics-2009. April 16th & 17th, 2009. SRM University, Chennai
		Distribution System Load Flow Solution Using Genetic Algorithm.	Third International Conference on Power systems-2009 (ICPS-09) December 27th-29th, IIT Kharagpur. India.

(d) Published in : National Conferences / Seminars / Workshops

#	Author(s)	Title	Publication details (*Name of Conference, Year, Editors, Publisher Name, page no.*)
1	Dr. J.P. Mishra	Sensorless vector control of induction motor using direct adaptive RNN speed estimator	NPEC – 10, Page no. 15, Conference proceeding

IV. DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING

1 Academic Staff

(A) HEAD		
Name	***Qualification***	***Specialization Area(s)***
Prof. F.A. Talukdar (up to 29.04.2009)	Ph.D.	Energy, Analog circuit design for Soft computing, power electronics and drives
Prof. S. Baishya (w.e.f. 30.04.2009)	Ph.D.	Semiconductor Devices Physics, MOS Modelling, VLSI, MEMS

(B) FACULTIES		
Professor		
Name	***Qualification***	***Specialization Area(s)***
Prof. F.A. Talukdar	Ph.D.	Energy, Analog circuit design for Soft computing, power electronics and drives
Associate Professor		
Name	***Qualification***	***Specialization Area(s)***
Mr. P. K. Paul	M.Tech.	Packaging issues in fibre optic sensors, optical interconnect
Ms. M. Chaudhury	M.Tech	Automation & control,
Ms. M. Paul	M.Tech	Radiophysics & Electronics
Assistant Professor		
Name	***Qualification***	***Specialization Area(s)***
Mr. K. L. Baishnab	M.Tech.	Mobile and Wireless Communication system design Digital Signal Processing Analog CMOS Circuit design
Mr. R. H. Laskar	M.Tech.	Signal Processing
Mr. S. K. Gupta	M.Tech.	Digital Signal Processing, VLSI Design, MOS Modelling
Ms. B. Bhowmick (Shome)	M.Tech.	Power electronics ,Solid state device
Mr. J. Mehedi	M.E.	Ad-hoc and sensor networks, digital system design

(C) FACULTY APPOINTMENT, PROMOTION, RETIREMENT, RE-EMPLOYMENT AND RESIGNATION			
FACULTY RESIGNATION			
Post	***Name***	***Qualification***	***Date***
Assistant Professor (Lecturer)	Mr. Sanjeev Rai, Lecturer Dtd.	M.Tech.	19-05-2009

2 Research and Development

(i) Ph.D. Programs existing :		
Sl.No.	Specialization Areas	
1	MOS modelling and simulation	
2	VLSI	
3	Signal Processing	
(ii) Ph.D.s done so far :		
Completed : Nil	Continuing: 04	
(iii) Proposed Plan for research:		
Sl.No.	Name of the lab / Workshop	Purpose/linkages to an existing/new programme
1	National MEMS Design Center	Device Simulation lab
(iv) Brief descriptions of on-going activities :		
(i)	Field #1: MOS modelling and simulation	
	(a) Modelling and Simulation of FinFETs and TunFETs	
(ii)	Field #2: MEMS Design Center	
	(a) Micro-actuator	
(v) Thrust Areas :		
1	MEMS Design	
(vi) New Acquisitions:		
Sl.No.	Name of Laboratory	Equipment Details (purpose, facilities, etc.)
1	DSP laboratories	Vx work for embedded system development

(vii) ON-GOING RESEARCH PROJECTS

Sponsored Research Projects (Innovation and Technology Transfer):

Sl.No.	Title of the project	Sponsor(s)	Name of P.I.	Amount (Rs.)
1	Modelling and Simulation of FinFETs	AICTE	Head of the Department	8.30 Lacs
2	National MEMS Design Center	DRDO	Head of the Department	Received from the National Coordinator at IISc Bangalore
3	MODROB (Modernisation of DSP Lab)	AICTE	Head of the Department	12.00 Lacs

3 Visits Abroad by Faculty Member

#	Faculty Name	Details
1	K.L.Baishnab	Hong Kong to present his paper in the International

		conference CIMSA during 11th -13th May-2009
2	R. H. Laskar	NTU Singapore, to present his paper in the International Conf TENCON 2009 during 24-27 Nov 2009

4 Theses : M.Tech.

#	Name of Scholar	Title of Thesis
1	S.K. Sinha	Synthesis and optimization of a 4-bit magnitude comparator circuit and application of precomputation logic for low power design
2	K. Koley	Subthreshold modelling of the edge & fringing effects on MOS transistor.
3	B. Goswami	Design of viterbi decoders with reduced power consumption.

5 Book /Chapters Published

#	Name of Author(s)	Title	Publisher	Year
1	Mr. R.H. Laskar, Prof. F.A. Talukdar, Mr. R. Bhattacharjee, and Mr. S. Das	Book Chapter: Voice Conversion by Mapping the Spectral and Prosodic Features Using Support Vector Machine	Springer BOOK: Applications of Soft Computing Book Series: Advances in Soft Computing	2009, Vol.58, pp. 519-528, DOI: 10.1007/978-3-540-89619-7_51

6 Seminars / Workshops / Conferences / Symposia / Short Term Courses Attended

#	Name of Faculty(ies)	Name of programme	Organizing Institute	Duration
1	Mr. S.K. Gupta	Algorithms to Architecture – Short Term Course	IIT Madras, Chennai	Feb. 22-26, 2010
2	Mr. K.L. Baishnab	Int. Conf. CIMSA	Hong Kong	May 11-13, 2009
3	Mr. R.H. Laskar	Int. Conf. TENCON 2009	NTU Singapore	Nov. 24-27, 2009

7 Research Publications

A. Published in International Journals			
#	Author(s)	Title	Publication details
1	Nath S.S., Choudhury M., Nath R.K., Gope G.	PVA embedded ZnO Quantum dots for methanol sensing	Nanotrends, 2010, 8(3)
2	Nath S.S.,	Acetone sensing property of	Sensor & Actuaters B

	Choudhury M., Chakdar D., Gope G., Nath R.K.	ZnO quantum dots embedded on PVP	(Chemical), 2010, B-148(2), 353-357
3	Choudhury M., Nath S.S., Nath R.K., Chakder D., Gope D., Das R.	ZnO quantum dots in SBR latex for Methanol sensing	Assam University Journal of Science & Technology: Physical Science & Technology, 2010, 6(II), 46-50
4	Mehedi J., Naskar M.K.	Topology management using fuzzy logic for mobile ad-hoc networks: a semi-distributed approach	International Journal of Computational Intelligence: Theory and Practice, 2009, 4(2), 47-58
5	Mehedi J., Naskar M.K.	A fuzzy based distributed approach to maintain connectivity of nodes in mobile ad-hoc networks considering pursue mobility model	International Journal of Computational Intelligence: Theory and Practice, 2009, 4(2), 79-84
6	Mehedi J., Naskar M.K.	Topology management for mobile ad-hoc networks: a fuzzy based centralized approach	Journal of Applied Computer Science, 2009, 4(6), 48-53
7	Baishya S.	A surface potential and quasi-fermi potential based drain current model for pocket implanted MOS transistors in subthreshold regime	Microelectronics Reliability, 2009, 49, 681–688

B.	**Published in International Conferences / Seminars / Workshops**		
#	**Author(s)**	**Title**	**Publication details**
1	Rahaman M., Baishnab K.L., Talukdar F.A.	A high precision VLSI loser take all circuit for neural network and Fuzzy logic	IEEE conference CIMSA (Computational intelligence measurements systems and applications), Place/Publ., May 10-13, 2009
2	Baishnab K.L., Rahaman M., Talukdar F.A.	High precision VLSI winner-take all (WTA) circuit for neural network and Fuzzy logic	IEIEEE international symposium on signal, circuits and system, Romania IE, July 10-12, 2009
3	Baishnab K.L., Rahaman M., Talukdar F.A.	0.02μV precision VLSI winner-take all (WTA) circuit for neural network and Fuzzy logic	International conference on Methods and Models in Computer science (ICM2CS-09), JNU New Delhi, Dec. 14-15, 2009
4	Baishnab K.L., Nag A.	A very high efficient input shared buffer packet switch for broadband communication	Electro-09, BHU, Banaras, Dec. 22-24, 2009
5	Baishnab K.L., Nag A.	Possible cache –timming attacks on AES and	Electro-09, BHU, Banaras, Dec. 22-24, 2009

		remedies	
6	LaskarR.H., Bhowmick B., Biswas R.	Removal of impulse noise from color image	TENCON 2009, Jan. 2010,
7	Laskar R.H., Talukdar F.A., Bora B., Fernando K.S.P., Anthony J., Doley L.	Complexity reduced multi-tier perceptual based partial encryption for secure speech communication	TENCON 2009, Jan. 2010.

C. Published in National Conferences / Seminars / Workshops			
#	**Author(s)**	**Title**	**Publication details**
1	Baishnab K.L., Dutta A., Nag A.	Improved ad-hoc on-demand vector routing	Assam University Silchar, 2010, Feb. 22-24
2	Baishnab K.L., Dutta A., Nag A.	Switching activity power minimization at various levels of abstraction - a survey	Assam University Silchar, 2010, Feb. 22-24
3	Paul V., Choudhary S., Baishnab K.L.	Switch capacitor ADC	Assam University Silchar, 2010, Feb. 22-24
4	Baishnab K.L., Dutta A., Choudhary S.	Testing combinational circuit using BDD	Assam University Silchar, 2010, Feb. 22-24

V. DEPARTMENT OF ELECTRONICS & INSTRUMENTATION ENGINEERING

1 Academic Staff

(A) HEAD		
Name	***Qualification***	***Specialization Area(s)***
Prof. N. Sinha	BE, M.Tech, PhD	Power System Optimization

VI. DEPARTMENT OF MECHANICAL ENGINEERING

1 Academic Staff

(A) HEAD		
Name	***Qualification***	***Specialization Area(s)***
Prof. K.M. Pandey	Ph.D.	Combustion, IC Engine, CFD, Gas Dynamics, Numerical Methods
(B) FACULTIES		
Professor		
Name	***Qualification***	***Specialization Area(s)***
Prof. R. Gupta	Ph.D.	Thermo-fluid, Design of two-phase flow systems, Non-conventional energy, CFD, Soft-computing
Prof. A.C. Paul	Ph.D.	Design
Associate Professor		
Name	***Qualification***	***Specialization Area(s)***
Dr. K. Chakraborty	Ph.D.	Machine tool, Material Science
Dr. R.D. Misra	Ph.D.	Thermal Engineering, Refrigeration & Air Conditioning, Alternative fuels, IC Engine
Mr. D.H. Das	M.Tech.	Thermal Engineering
Mr. A. Biswas	M.Tech.	Management Sciences
Mr. K.K. Sharma	M.Tech.	Machine Design, Renewable Energy Systems
Dr. P.K. Patowari	Ph.D.	Manufacturing
Assistant Professor		
Name	***Qualification***	***Specialization Area(s)***
Mr. P.L. Choudhury	M.Tech.	Design
Dr. D. Datta	Ph.D.	Optimization/ Operational Research
Mr. L. Roy	M.Tech.	Tribology, Vibration, Kinematics
Mr. S.K. Pattanayak	M.E.	Production Engg.
Mr. K. Mukherjee	M.Tech.	Design, Robotics
Mr. S. Chatterjee	M.M.E.	Applied Mechanics, Energy, Alternative fuels

(C) FACULTY APPOINTMENT, PROMOTION, RETIREMENT, RE-EMPLOYMENT AND RESIGNATION			
FACULTY RESIGNATION			
Post	***Name***	***Qualification***	***Date***
Asstt. Professor	Mr. P.C. Roy	M.E.	14.09.09

2 Research and Development

(i) Ph.D. Programs existing :	
Sl.No.	Specialization Areas
1	Renewable Energy
2	Alternative fuels
3	Combustion
4	Computational Fluid Dynamics

5	Thermo-fluids		
6	Energy, productivity & quality management		
(ii) Ph.Ds done so far:			
Submitted: 01		Continuing: 06	
(iii) Proposed Plan for research:			
Sl.No.	***Name of the lab / Workshop***	***Purpose/linkages to an existing/new programme***	
1	Petroleum Engg. Lab.	Alternative fuels research, IC Engine research	
2	Gas Dynamics Lab.	Wind Tunnel, Air-flow bench, Fluid Mechanics Lab.	
3	Advanced Manufacturing Lab.	Research on non-traditional/advanced manufacturing processes and this is linked to Research Promotional Scheme (RPS) of AICTE titled: *Experimental Investigation of Surface Integrity in Electrodischarge Machining (EDM).*	
(iv) Brief descriptions of on-going activities :			
(i)	Field #1: Alternative fuels		
	(a)	Engine performance & emission characteristics with Bio-fuels	
	(b)	Engine combustion characteristics study with CFD	
(ii)	Field #2: Renewable energy		
	(a)	Experimental & computational works	
(iii)	Field #3: Combustion in supersonic flow		
	(a)	Supersonic nozzle	
(iv)	Field #4: International collaborative works on Operational Research		
	(a)	*Spatial aggregation and compactness of census areas in Canada with a multi-objective genetic algorithm*. Collaboration with Instituto Superior Técnico, Portugal, and University of Western Ontario, Canada.	
	(b)	*Efficient health geographies for England: A multi-objective optimisation approach*. Collaboration with Instituto Superior Técnico, Portugal, and London School of Economics and Political Science, UK.	
	(c)	*Satellite image segmentation through multi-objective metaheuristics*. Collaboration with Instituto Superior Técnico, Portugal, and Complutense University of Madrid, Spain.	
	(d)	*Facility layout with minimum cost.* Collaboration with Instituto Superior Técnico, Portugal, and Nancy School of Mines, France.	
(v)	Field #5: International collaborative works on Optimization		
	(a)	*Integer-coded differential evolution for design problems*. Collaboration with Instituto Superior Técnico, Portugal, and Nancy School of Mines, France.	
	(b)	*Integer-coded particle swarm optimization for design problems*. Collaboration with Instituto Superior Técnico, Portugal, and Nancy	

		School of Mines, France.
	(c)	*Graph partitioning by multi-objective real-valued metahuristics.* Collaboration with Instituto Superior Técnico, Portugal, and Nancy School of Mines, France.
	(d)	*M-ary metrics for comparing performances of multi-objective optimizers.* Collaboration with Instituto Superior Técnico, Portugal, and Nancy School of Mines, France.
(vi)	Field #6: Advanced manufacturing processes	
	(a)	Study on Surface integrity in EDM
(vii)	Field #7: MEMS	
	(a)	Design and analysis of Electrothermal actuators for MEMS applications using COMSOL
(viii)	Field #8: Energy, productivity & quality management	
	(a)	Experimental & computational works

(v) Thrust Areas:

1	Renewable energy
2	Alternative fuels
3	Combustion
4	CFD
5	Non-traditional machining

(vi) New Acquisitions:

Sl.No.	***Name of Laboratory***	***Equipment Details (purpose, facilities, etc.)***
1	IC Engine Lab	Semi-automatic Bomb Calorimeter – determination of heating value of fuels
2	Advanced Manufacturing Lab	A Die Sinking EDM machine

(vii) ON-GOING RESEARCH PROJECTS

Sponsored Research Projects (Innovation and Technology Transfer):

Sl.No.	***Title of the project***	***Sponsor(s)***	***Name of P.I.***	***Amount (Rs.)***
1	Energy Quality and Productivity Audit of KVIC based industries in Barak Valley of Assam	Directorate of Science & Tech., KVIC, Mumbai	Prof. R. Gupta	17.043 Lacs
2	Experimental Investigation of Surface Integrity in Electrodischarge Machining (EDM)	AICTE	Dr. P.K. Patowari & & Prof. Rajat Gupta	20.00 Lacs
3	Extraction of pineapple Fibre for making Commercial Products	Directorate of Science & Tech., KVIC, Mumbai	Prof. R. Gupta	15.318 lakhs

4	Establishing an institute of excellence for advanced studies, training and research in mechanical engineering at lead institution (nationally co-ordinated project)		Prof. K.M. Pandey (co-investigator)	1.5 Lacs

3 Thesis: Doctoral

#	Name of Scholar	Title of Thesis
1	Agnimitra Biswas (Guide: Prof. R. Gupta)	Experimental & Computational Analysis of Vertical Axis Wind Turbines (VAWTs) (*Submitted*)

4 Visits Abroad by Faculty Member

#	*Faculty Name*	*Details*
1	Dr. D. Datta	Visited Portugal for three months in the period of May-August 2009 in connection with a research work at the Instituto Superior Técnico, Lisbon. The visit was financially supported by FCT, Portugal
2	Dr. R. Gupta	Visited University of Porto, Portugal during 15-17 June, 2009 in connection with paper presentation

5 Lecture by Visiting Expert: Nil

6 Invited Lectures by Faculty Members

#	*Faculty Name*	*Details*
1	Dr. D. Datta	A lecture on "*Multi-Objective Metaheuristics for Graph Partitioning Problem and Empirical Metrics for Comparing Performances of Multi-Objective Metaheuristics*" at CA3 (UNINOVA), Computational Intelligence Research Group, Lisbon; a member of the European Centre for Space Applications (ECSA) (01 July 2009).
2	Prof. R. Gupta	A lecture on " Prosperity through Productivity at Cachar Paper Mill under HPC" during Feb 2010

7 Dissertation: M.Tech.

#	*Name of Scholar*	*Title of Thesis*
1	P. Sharma	CFD analysis of thermal distribution of weathering section and productivity analysis of Rosekandy Tea Estate
2	B.K. Debnath	Analysis of Savonious rotor wind turbines using computational fluid dynamics
3	V. Kumar	Studies on free jet flow in supersonic flow regime: a numerical analysis with Fluent software

4	S.K. Yadav	Studies on rocket nozzle with combustion chamber for supersonic flow, with Fluent software
5	S. D. Barma	Computational and experimental analysis on controlling noise pollution from internal combustion engine
6	A. Roy	CFD analysis of flow distribution inside the combustion chamber of turbojet engine
7	S. Lotha	Finite time optimization of an integrated absorption refrigeration system in Brayton cycle based micro-gas turbine power plant
8	N. Kalita	CFD analysis of room air distribution for comfort air-conditioning
9	P. Mukherjee	Thermal aspects of electric discharge machining and its parametric effect on work piece materials
10	T.S. Dey	A computational approach for the analysis of flow characteristics along the inlet and exhaust passages of a turbojet engine

8 Book /Chapters Published: Nil

9 Paper Reviewed

#	***Name of Faculty***	***Name of Journal or Conference or Name of Organizing Institute***	***Number of Papers Reviewed***
1	Dr. D. Datta	Journal on Applied Soft Computing (Elsevier)	4
		European Journal of Operational Research (Elsevier)	2
		Journal of Evolutionary Computation (MIT Press)	2
		International Journal of Evolutionary Intelligence (Springer)	1
		International Journal of Modelling, Identification and Control (InderScience)	3
2	Dr. R. Gupta	Journal of Mechanical Engineering Research	1
3	Dr. K.M. Pandey	International conference on Modelling, simulation and identification at Beijing, China, October 12-14, 2009 organised by IASTED.	4
		International conference on applied simulation and modelling, at Palma de Mallorca in Spain from September 07-09 2009 organised by IASTED.	2
		IASTED Conference on modelling and simulation at Banff, Canada from 6-8 July 2009	4

10 Seminars / Workshops / Conferences / Symposia / Short Term Courses Organized: Nil

11 Seminars / Workshops / Conferences / Symposia / Short Term Courses / Training Programme Attended

#	*Name of Faculty*	*Name of programme*	*Organizing Institute*	*Duration*
1	Dr. R. Gupta	NCFMFP-2009	College of Engineering Pune, Maharastra	17-19 Dec 2009
		ICCST-10	University of Porto, Portugal	15-17 June, 2009
2	Dr. K.M. Pandey	NCFMFP-2009	College of Engineering Pune, Maharastra	17-19 Dec 2009
3	Dr. R.D. Misra	IUCEE 2009 FLI course on - Modern Approach to Introduction to Engineering	IUCEE at Infosys, Mysore Centre.	July 6-10, 2009
4	Dr. P.K. Patowari	IUCEE 2009 FLI course on - Innovate, Create, Manufacture and Manage Digitally	IUCEE at Infosys, Mysore Centre.	July 6-10, 2009
5	Dr. P.K. Patowari	Third SERC School on micromachining	IIT Kanpur	July 20-25, 2009
6	Mr. S. Chatterjee	Fuel Cell and Hydrogen Technology	Centre for Energy, IIT Guwahati	Sept. 14-18, 2009
7	Mr. S. Chatterjee	Mechanical Engineering Education	Mech. Engg. Deptt., IIT Guwahati	Dec. 7-11, 2009
8	Mr. S.K. Pattanayak	IUCEE 2009 FLI course on – Engineering Mechanics	IUCEE at Infosys, Mysore Centre.	July 6-10, 2009

12 Research Publications

A. Published in International Journals

#	*Author(s)*	*Title*	*Publication details*
1	Gupta R. & Biswas A.	CFD Analysis of a Combined Three-Bucket Savonius & Three-Bladed Darrieus Rotor at Various Overlap Conditions	Journal of Renewable and Sustainable Energy 1, 033110, 2009
2	Gupta R. & Biswas A.	An Artificial Neural Network Based Methodology for the Prediction of Power & Torque Coefficients of a Two Bladed Airfoil Shaped H-Rotor	Open Renewable Energy Journal, Vol 2, pp 43-51, 2009

3	Gupta R. & Biswas A.	Performance Measurement of a twisted three-bladed airfoil-shaped H-rotor.	Int. J. Renewable Energy Technology Vol. 1, No. 3, pp. 279-300, 2009
4	Gupta R. & Biswas A.	Wind Data Analysis of Silchar (Assam) India by Rayleigh's and Weibull Methods	Journal of Mechanical Engineering Research Vol. 2(1), pp. 010–024, 2010
5	Gupta R. & Biswas A.	CFD Analysis of a Twisted Two-Bladed Airfoil Shaped H-Darrieus Turbine	Accepted for ISESCO journal of Science and Technology Vision
6	Gupta R. & Biswas A.	Prediction of Performance of Combined Savonius-Darrieus Rotor using Hybrid Neuro-Fuzzy Controller	Under Review in Journal of Applied Soft Computing
7	Gupta R. & Dey S.K.	Design & Techno-economic analysis of a gasification plant based on bamboo dust waste of Cachar Paper Mill	Under Review in International Journal of Design & Manufacturing Technologies
8	Gupta R. & Dey S.K.	Productivity analysis using coefficient of functional productivity method of a tea industry	Under review in Journal of Productivity Analysis
9	Gupta R. & Dey S.K.	Energetic and exergetic analysis of the withering heater of a tea industry	Under review in Journal of Mechanical Engineering Research
10	Gupta R. & Biswas A.	Comparative study of the performances of twisted two-bladed & three-bladed airfoil shaped H-Darrieus turbines by computational and experimental methods	Under review for Int. Journal of Renewable Energy Technology
11	Gupta R. & Biswas A.	CFD Analysis of Flow Physics and Aerodynamic Performance of a Combined Three-bucket Savonius and Three-bladed Darrieus Turbine	Under review in Journal of Green Energy
12	K.M.Pandey, K.Deb and U. Kumar	Experimental studies on controlling piston slap noise of standard engine of hero honda splendour	International Journal of Environmental Research and Development (JERAD), Vol. 04,number1 ,July-September 2009,, PP.239-253
13	K.M. Pandey, K.Deb and U. Kumar	Experimental studies on effect of noise level control for 7.5 KVA Diesel generator set with an enclosure	International Journal of Environmental Research and Development (JERAD), Vol. 04, Number2, Oct-Dec 2009,PP. 506-516

14	S. Pathak and K.M.Pandey	Experimental investigation on morphological aberrations of the peas with variation in doses of pesticides	International Journal of Environmental Research and Development (JERAD), Volume 4. No. 3, Jan.-March 2010, PP. 713-725
15	Dubey, M., Rajput, S.P.S., Misra, R.D., Nag, P.K.	Energy Analysis of a Coupled Power-Refrigeration Cycle	Journal of Power and Energy, Institution of Mechanical Engineers, Part A, UK, (Paper No: JPE-894)
16	Roy L.	Thermo-hydrodynamic performance of grooved oil journal bearing	Tribology International, Available online 9 April 2009

B.	**Published in National Journals**		
#	***Author(s)***	***Title***	***Publication details***
1	Gupta R. & Dey S.K.	Integration of Safety and Productivity in the tea industries of Assam- An Overview	Journal of Industrial Safety Chronicle, Vol. No. XLI July-Sept, pp. 986-988, 2010
2	Gupta R. & Biswas A.	An Experimental Investigation on the Fabrication and Mechanical Characterization of Aluminum-Silica Gel Metal Matrix Composite (MMC) By Die Casting Technique	Under review in Indian Journal of Engineering & Material Science
3	Dubey, M., Rajput, S.P.S., Misra, R.D., Nag, P.K.	Energy Analysis of a Coupled Power-Refrigeration Cycle	Journal of Power and Energy, Institution of Mechanical Engineers, Part A, UK, (Paper No: JPE-894)

C.	**Published in International Conferences / Seminars / Workshops**		
#	***Author(s)***	***Title***	***Publication details***
1	Misra R.D., Sahoo P.K.	Thermoeconomic Optimization of a single effect H_2O/LiBr Absorption Chiller System Using Evolutionary Programming	4th International Exergy, Energy and Environment Symposium (IEEES-4), AUS, Sharjah, UAE, April 19-23, 2009
2	Dubey M., Rajput S.P.S., Misra R.D., Nag P.K.	Energetic Modeling of a Coupled Power-Refrigeration Cycle	Indo-Italian Conference on Emerging Trends in Waste Management Technologies (ETWMT-09), MAEER's MIT College of Engineering, Pune & Maharashtra Institute of Technology, Pune, December 03-04, 2009, pp. 476-488
3	Mukherjee P.,	Analysis of Temperature	Sixth International Conference

	Patowari P.K., Misra R.D.	Distribution during Electro Discharge Machining Process and Its Effect	on "*Precision, Meso, Micro and Nano Engineering (COPEN-6)*", PSG College of Technology and Amrita Vishwa Vidyapeetham (University), Coimbatore, pp. G-1:G-6, Dec. 11-12, 2009
4	Murthy M.S., Misra R.D.	Strategic policies and keys issues for sustainable development of bio fuels	International Conference on "Advances in Mechanical and Building Sciences In the 3rd Millennium (ICAMB– 2009)", Dec. 14-16, 2009
5	Murthy M.S., Misra R.D.	Corn Based Ethanol vs. Cellulosic Ethanol	International Conference on "Advances in Mechanical and Building Sciences In the 3rd Millennium (ICAMB– 2009)", Dec. 14-16, 2009
6	Dubey M., Rajput S.P.S., Misra R.D., Nag P.K.	Exergetic Modeling of a Coupled Power-Refrigeration Cycle	International Conference on Simulation Modelling and Analysis (COSMA 2009), NIT Calicut, Calicut, December 17-19, 2009, pp. 404-409
7	Dubey M., Rajput S.P.S., Misra R.D., Nag P.K.	Energy Analysis of a Coupled Power and Refrigeration Cycle	International Conference on Simulation Modelling and Analysis (COSMA 2009), NIT Calicut, Calicut, December 17-19, 2009, pp. 404-409
8	Misra R.D., Kalita N.	CFD Analysis of a Room with one Window Air Conditioner with Experimental Validation	23rd International Conference on "Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems (ECOS 2010)", Lausanne, Switzerland, during June 14-17, 2010
9	Dubey M., Rajput S.P.S., Misra R.D., Nag P.K.	Energy Analysis of a Coupled ORC-Compression Refrigeration Cycle	23rd International Conference on "Efficiency, Cost, Optimization, Simulation and Environmental Impact of Energy Systems (ECOS 2010)", Lausanne, Switzerland, during June 14-17, 2010
10	Mukherjee P., Patowari P.K., Misra R.D.	Analysis of Temperature Distribution during Electro Discharge Machining Process and Its Effect	Sixth International Conference on "*Precision, Meso, Micro and Nano Engineering (COPEN-6)*", PSG College of Technology and Amrita Vishwa Vidyapeetham (University), Coimbatore, pp. G-1:G-6, Dec. 11-12, 2009
11	Patowari P.K.,	Analysis of Submerged Arc	Sixth International Conference

	Barua S., Das S., Patir R., Deka D.,	Welding Process with the Application of Taguchi Method	on "*Precision, Meso, Micro and Nano Engineering (COPEN-6)*", PSG College of Technology and Amrita Vishwa Vidyapeetham (University), Coimbatore, pp J-27-J-31, Dec. 11-12, 2009
12	Gupta R. & Biswas A.	XRD Analysis of Aluminium-Silica Gel Metal Matrix Composite (MMC)	5th International Conference on Composite Structure, 15-17 June, 2009, Porto, Portugal
13	Gupta R. & Dey S.K.	Productivity Measurement of Rosekandi Tea Estate- A Case Study	International Conference on Productivity and Performance Measurement (ICQPPM '09), Malaysia, November 2009
14	Singha Y. K & Gupta R	Finned Body Planetary Entry	8th IAA International Conference on Low Cost Planetary Missions (LCPM8), 31st August - 4th September 2009, Goa, India
15	K.M.Pandey and A. Sarkar	Thermal analysis of nuclear fuel elements with Ansys software	International Conference on Nuclear Engineering(ICONE-17) organized by ASME, Brussels, Belgium, July 12-16, 2009 (the paper was presented but it is not published in the proceedings)
16	K.M. Pandey,A.P Singh and R. Sudersan	Computational studies on total pressure loss in De Laval Nozzle at Mach 2.1 in Sudden expansion duct with fluent software	3rd International Conference at advances in Mechanical Engineering, department of mechanical engineering, SVNIT Surat, Jan. 4-6,2010, pp.224-228
17	K.M.Pandey	Studies on Base Pressure in Suddenly Expanded Circular Ducts: A Fuzzy Logic Approach	2nd International Conference on Machine Learning and Computing (ICMLC 2010), Bangalore, India, February 9-11, 2010, PP.237-242, ISBN 978-0-7695-3977-5
18	G.Sharma, R.Jagannath and	Wall Static Pressure Variation in Sudden	2nd International Conference on Machine Learning and

	K.M.Pandey	Expansion in Flow Through Nozzles at Mach 1.74 and 2.23: A Fuzzy Logic Approach	Computing (ICMLC 2010) Bangalore, India, February,9-11,2010, PP.243-247, ISBN 978-0-7695-3977-5
19	K.M.Pandey, S. Yadav and A P Singh	Study on rocket nozzles with combustion chamber, using fluent software at Mach 2.1	10th asian symposium on visualization, March1-5,2010, SRM University, Chennai, India
20	K.M.Pandey , V. Kumar and A P Singh	Study on free single jet flow: a numerical analysis with fluent software	10th asian symposium on visualization, March1-5,2010, SRM University, Chennai, India
21	K.M.Pandey, P. Srivastava, K.C.Sharma and A.P.Singh	Study on supersonic flows in the De Laval nozzle at Mach number 1.5 and its flow development in a suddenly expanded duct	10th asian symposium on visualization, March1-5,2010, SRM University, Chennai, India
22	K.M Pandey, L.Roy, A.P.Singh, S.S.Saha, I. Haque	CFD Analysis For Pressure And Temperature Of Multilobe Bearings At 20000 Rpm For A Gas Turbine Engine	10th asian symposium on visualization, March1-5,2010, SRM University, Chennai, India
23	K.M.Pandey, P.L.Choudhury, A.P.Singh A. K Singh and K. Singh	CFD Analysis Of Journal Bearing Of Hydraulic Turbine For 210 Mw Power Output	10th asian symposium on visualization, March1-5,2010, SRM University, Chennai, India
24	K.M.Pandey, P. Srivastava, K.C.Sharma and A.P.Singh	Study on supersonic flows in the De Laval nozzle at Mach number 1.5 and its base pressure in a suddenly expanded duct	10th asian symposium on visualization, March1-5,2010, SRM University, Chennai, India

D. Published in National Conferences / Seminars / Workshops			
#	***Author(s)***	***Title***	***Publication details***
1	Sharma K.K., Gupta, R.	Performance study of a three-bladed Darrious-Savonious Rotor	36th National Conference on Fluid Mechanics & Fluid Power (NCFMFP-2009), College of Engg., Pune, Dec. 17-19, 2009
2	Biswas A. &	Performance Measurement	36th National Conference on

	Gupta R	of Three-Straight Bladed H-Darrieus Rotor	Fluid Mechanics & Fluid Power (NCFMFP-2009), College of Engg., Pune, Dec. 17-19, 2009
3	Debnath B. and Gupta R	Prediction of performance of three-bucket Savonius rotor using Artificial Neural Network	36th National Conference on Fluid Mechanics & Fluid Power (NCFMFP-2009), College of Engg., Pune, Dec. 17-19, 2009
4	K.M.Pandey	An analysis of flow development in a rectangular draft tube of reaction turbine with fluent software	7th national conference in modern trends in power engineering and power plants, department of mechanical engineering, college of engineering, Trivandrum, Kerala, 8-9 October 2009, PP 35-41 (*the presentation was considered one among top five presentations in the conference*)
5	G. Kumari and K.M.Pandey	Recent advances in software technology related to mechanical engineering	Accepted for presentation in 7th national conference in modern trends in power engineering and power plants, department of mechanical engineering, college of engineering , Trivandrum, Kerala, 8-9 October 2009.
6	K.M.Pandey, S.Deb Verma, A.P.Singh, A. Kumar and U.Kumar	Computational analysis on controlling noise pollution from internal combustion engines	7th national conference in modern trends in power engineering and power plants, department of mechanical engineering, college of engineering , Trivandrum, Kerala, 8-9 October 2009, PP 129-140
7	K.M.Pandey, A.P.Singh, S.Pahari and A. Kumar	Flow analysis of convergent-divergent nozzles of maximum angle of divergence using fluent software at Mach 5	36th National Conference on Fluid Mechanics and Fluid Power, Department of Mechanical Engineering, College of Engineering Pune, Maharastra, December 17-19,2009
8	K.M.Pandey, A.P.Singh, S.Pahari, and P. Srivastava	Flow analysis of convergent-divergent nozzle of minimum angle of divergence at Mach 3 using fluent software	36th National Conference on Fluid Mechanics and Fluid Power, Department of Mechanical Engineering, College of Engineering Pune, Maharastra, December 17-

			19,2009
9	K.M.Pandey, A.P.Singh, P.L.Chaudhary, V.Bahuguna and A. Kumar	Some theoretical studies on gas foiled bearings	36th National Conference on Fluid Mechanics and Fluid Power, Department of Mechanical Engineering, College of Engineering Pune, Maharastra, December 17-19,2009
10	K.M.Pandey, A.P.Singh, Ankur, S. Gupta, R.Sudarsan and Issac	Computational analysis of noise pollution in a four cylinder Diesel engine with Fluent software	36 th National Conference on Fluid Mechanics and Fluid Power, Department of Mechanical Engineering, College of Engineering Pune, Maharastra, December 17-19,2009
11	K.M.Pandey, P.L.Chaudhury, A.P.Singh, and P.Srivastava	CFD analysis of a journal bearing with fluent software	36 th National Conference on Fluid Mechanics and Fluid Power, Department of Mechanical Engineering, College of Engineering Pune, Maharastra, December 17-19,2009
12	K.M.Pandey, S.Deb Verma, A.P.Singh, A. Kumar and U.Kumar	Computational analysis on controlling noise pollution from internal combustion engines	36 th National Conference on Fluid Mechanics and Fluid Power, Department of Mechanical Engineering, College of Engineering Pune, Maharastra, December 17-19,2009
13	G. Kumari, K.M.Pandey and A.K.Pandey	Management of technical education in India: an overview	National Conference on 'Innovations in Business Horizons' Department of Business Administration ,Gurgaon Institute of Technology and Management, March 05 2010
14	G. Kumari, K.M.Pandey and A.K.Pandey	Energy Management in changing business scenario	National Conference on 'Innovations in Business Horizons' Department of Business Administration ,Gurgaon Institute of Technology and Management, March 05 2010
15	G. Kumari, K.M.Pandey and A.K.Pandey	Innovative practices in performance appraisal in industries in India	National Conference on 'Innovations in Business Horizons' Department of Business Administration, Gurgaon Institute of Technology and Management, March 05 2010

VII. DEPARTMENT OF CHEMISTRY

1 Academic Staff

(M) HEAD		
Name	***Qualification***	***Specialization Area(s)***
Prof. A K Sil (up to 31.01.10)	Ph.D.	Environmental chemistry specific to water
Dr. S.S. Dhar (w.e.f.01.02.2010)	Ph.D.	Green chemistry
(N) FACULTIES		
Professor		
Name	***Qualification***	***Specialization Area(s)***
Prof. A K Sil	Ph.D.	Environmental chemistry specific to water
Associate Professor	NIL	
Assistant Professor		
Name	***Qualification***	***Specialization Area(s)***
Dr. S.S. Dhar	Ph.D	Green chemistry
Dr. M.A. Zaman	Ph. D	Energy and Environment
Dr. P. Barman	Ph. D	Synthetic Organic Chemistry
Dr. (Mrs) R. Rano	Ph. D	Coal utilization

2 Research and Development

Ph.D. Programs existing :			
Sl.No.	Specialization Areas		
1	Energy and Environment, Green chemistry, Reaction mechanism and kinetics		
2	Synthetic Organic Chemistry, Coal utilization		
Ph.D.s done so far :			
Completed: Nil		Continuing: 06	
Proposed Plan for research :			
Sl.No.	Name of the lab / Workshop	Purpose/linkages to an existing/new programme	
1	NA	Ph. D programmes will continue in the existing areas	
Brief descriptions of on-going activities :			
(i)	Field #1: Research and Development		
	(a)	Energy and Environment, Green chemistry, Reaction mechanism and kinetics	
	(b)	Synthetic Organic Chemistry, Coal utilization	
(ii)	Field #2: M.Sc. Programme		
	(a)	Applied Chemistry started in July 2009	
Thrust Areas :			
1	Green Chemistry		

2	Energy and fuels

New Acquisitions :

#	Name of Laboratory	Equipment Details (purpose, facilities, etc.)
1	M. Sc Laboratory	Major equipment yet to be purchased

ON-GOING RESEARCH PROJECTS

Sponsored Research Projects (Innovation and Technology Transfer):

#	Title of the project	Sponsor(s)	Name of P.I.	Amount (Rs.)
1	Solvent free oxidations and bromitation of organic substrates catalyzed and/or promoted by peroxo-metal complexes	DST, New Delhi	Dr. S.S. Dhar	8.52 Lacs

3 Paper Reviewed

#	Name of Faculty	Name of Journal or Conference or Name of Organizing Institute	Number of Papers Reviewed
1	Dr. M.A. Zaman	Microporous and Mesoporous Materials	01
2		Journal of Hazardous Materials	01
3		Chemical Engineering Journal	01
4		Indian Journal of Chemical Technology	01
5		Water Science and Technology	01
6		Applied Clay Science	01
7		Environmental Technology	01

4 Research Publications

B. Published in International Journals

#	Author(s)	Title	Publication details
1	Zaman M.A.	Role of Fly Ash in the Removal of Organic Pollutants from Wastewater	Energy & Fuels, 2009, 23, 1494-1511
2	Zaman M.A., Lakshmi Gayatri S.	Batch Adsorption of 4-Nitrophenol by Acid Activated Jute Stick Char: Equilibrium, Kinetic and Thermodynamic Studies	Chemical Engineering Journal, 2010, 158, 173-180
3	Zaman M.A.	A Review on the Utilization of Fly Ash	Progress in Energy and Combustion Science, 2010, 36, 327-363

C. Published in National Journals

#	Author(s)	Title	Publication details
1	Zaman M.A., Lakshmi Gayatri S.	Adsorption Technique Used for the Removal of Phenolic Compounds from Wastewater Using Low-Cost Adsorbants	Assam University Journal of Science and Technology: Physical Sciences and Technology, 2010, 5(11), 156-166

VIII. DEPARTMENT OF PHYSICS

1 Academic Staff

(A) HEAD		
Name	***Qualification***	***Specialization Area(s)***
Dr. (Mrs) B. Choudhury	(MSc., Ph.D.)	Condensed Matter Physics (Liquid Crystals)

(B) FACULTIES		
Professor	NIL	
Associate Professor		
Name	***Qualification***	***Specialization Area(s)***
Dr. (Mrs) B. Choudhury	(MSc., Ph.D.)	Condensed Matter Physics (Liquid Crystals)
Assistant Professor		
Name	***Qualification***	***Specialization Area(s)***
Dr. A. Roy	(MSc., Ph.D.)	Ferroelectric thin films for memory devices, Ultrathin high-lq dielectrics for nano-scaled MOSFETs
Dr. A. Bhattacharjee	(MSc., Ph.D.)	Condensed Matter Physics, Liquid Crystals, Raman Spectroscopy, Thin films

2 Research and Development

(i) Ph.D. Programs existing :	
Sl.No.	Specialization Areas
1	Experimental Condensed Matter Physics
2	Field of Liquid Crystals
3	Ferroelectric thin film & Multi ferroic
(ii) Ph.D.s done so far :	
Completed : 02 Thesis submitted: 02	Continuing: 07
(iii) Proposed Plan for research:	

Sl.No.	Name of the lab / Workshop	Purpose/linkages to an existing/new programme
1	Experimental Condensed Matter Physics lab	Up gradation of existing lab

3 Theses : Ph.D.

#	**Faculty Scholar**	**Details**
1	G. Gope	Preparation of Quantum Dots on polymer Matrix and their applications in Electronics and Optics

2	D. Chakdar	Synthesis of Semiconductor quantum Dots and their applications in Photonics and Nonlinear Optics

4 Research Publications

A. Published in International Journals			
#	**Author(s)**	**Title**	**Publication details**
1	Tewari S., Bhattacharjee A.	Synthesis and characterization of Cadmium chalcogenide CdX (X= S,Te) thin films	Int. J. Chem. Sci., 2009, 7(1), 105-115.
2	Tewari S., Bhattacharjee A.	Studies on the Structural, Optical and Elecrtical properties of Spray Deposited ZnO Thin Films	Pramana J. Physics, Jan. 2010 (Accepted)

B. Published in National Journals			
#	**Author(s)**	**Title**	**Publication details**
1	Datta Sarkar S., Choudhury B.	Texture study of binary mixtures of two liquid crystalline samples	Asian Journal of Physics, 2010, 18(3)

C. Published in National Conferences / Seminars / Workshops			
#	**Author(s)**	**Title**	**Publication details**
1	Datta Sarkar S., Choudhury B.	Study of Optical Birefringence and Order Parameter of a Nematogen	VIth National Conference of the Physics Academy of North East, 2 – 4 April, 2009, Tripura University, Tripura
2	Datta Sarkar S., Choudhury B.	Study of Optical birefringence of a monotropic nematogen	Seminar on Contemporary Areas in Physical and Life Sciences, IQAC, Karimganj College in association with CARE, SINP, Kolkata, Nov. 26–27, 2009
3	Kiranmala Devi Th., Bhattacharjee A., Choudhury B.	Study of Birefringence of a liquid crystalline compound by using HE-Ne light,	Seminar On Contemporary Areas in Physical & Life Sciences, IQAC, Karimganj College, Nov 26-27, 2009.

IX. DEPARTMENT OF MATHEMATICS

1 Academic Staff

(A) HEAD			
Name	***Qualification***	***Specialization Area(s)***	***Remarks***
Mr. B. Nath	M.Sc.	Modern Algebra & Functional Analysis	up to 12-01-2010
Mr. S. Roy	M.Sc.	Modern Algebra & Functional Analysis	W.e.f. 13-01-2010

(B) FACULTIES		
Professor	Nil	
Associate Professor		
Name	***Qualification***	***Specialization Area(s)***
Mr. B. Nath	M.Sc.	Modern Algebra & Functional Analysis
Assistant Professor		
Name	***Qualification***	***Specialization Area(s)***
Mr. S. Roy	M.Sc.	Modern Algebra & Functional Analysis
Dr.(Mrs) M. Sen	M.Sc. Ph.D.	Modern Algebra & Functional Analysis
Dr. G. Ramesh	M.Sc. Ph.D.	Complex Analysis

2 Research and Development

(i) Ph.D. Programs existing :	
Sl.No.	Specialization Areas
1	Fuzzy Mathematics
(ii) Ph.D.s done so far :	
Completed : Nil	Continuing: 04
(iii) Proposed Plan for research:	
Sl.No.	Name of the lab / Workshop	Purpose/linkages to an existing/new programme
1	One computer Lab having 20 PCs with internet connectivity	To start M.Sc. programme in Mathematics & more Ph.D. Programmes.
(iv) Thrust Areas :	
1	Fuzzy Mathematics

X. DEPARTMENT OF HUMANITIES & SOCIAL SCIENCE

1 Academic Staff

(A) HEAD		
Name	***Qualification***	***Specialization Area(s)***
Dr. G. Das (up to 05.01.2010)	M.A. (Economics), Ph.D.	Development Economics
Dr. A.K. Das (w.e.f. 06.01.2010)	M.Com, M.Phil, Ph.D	Management Accounting and Finance

(B) FACULTIES		
Professor	NIL	
Associate Professor		
Name	***Qualification***	***Specialization Area(s)***
Dr. G. Das	M.A. (Economics), Ph.D.	Development Economics
Assistant Professor		
Name	***Qualification***	***Specialization Area(s)***
Dr. R. Sanasam	M.A. (English), Ph.D	Feminism
Dr. N. B. Singh	M.A. (Economics), Ph.D	Agricultural Economics

2 Research and Development

Ph.D. Programs existing :	
Sl.No.	Specialization Areas
1	Development Economics
2	International Trade
3	Economics of Education
4	Economic Sociology
5	Regional Economics
6	Agricultural and Rural Development
7	Small Scale industry
8	Industrial Management
9	Feminism

Ph.D.s done so far :		
Completed: 01	Submitted: 01	Continuing: 24

Proposed Plan for research:		
Sl.No.	Name of the lab / Workshop	Purpose/linkages to an existing/new programme
1	Electronic Data Bank	

Brief descriptions of on-going activities:
Currently there are 24 Ph D Students pursuing their research programme. The name

of the scholars and the field of their respective area of research are given below:	
1	Indo-Bangladesh Bilateral Trade Relations: With special Reference to Border Trade of North East India
2	Education and Economic Well Being: Study of Inter linkages (With Special Reference to Barak Valley of Assam)
3	A Study on Reforms and Development Inter linkages --With Special Reference to Farm Sector of Assam
4	Marketing of Tea in India: A Study on the Tea Industry of Assam
5	Teaching English with Technology : A Case Study of Institutes of Technology in North East India
6	Continuity and Change: A Study of Adjustment of the Kaibarta Community of Barak Valley
7	The Quality of Primary Education in Assam
8	The Role of Foreign Direct Investment in Economic Development: The Indian Experience since Economic Reforms
9	Formation of Ethnic Identity: A case study of the Nagas
10	Economics of Small Tea Growers: A Study on Golaghat District of Assam
11	National Periphery and Economic Development: A Case Study of Barak Valley in Assam
12	Agriculture in Char Areas of Assam
13	An Evaluation of National Rural Health Mission: A case study of three districts of Barak Valley
14	Solid Waste Management: A case study of Silchar Municipality
15	Emergence of Ethnic Identity among the Hmar's of Mizoram
16	Livelihood Security of Tea Garden Workers: A study of Tea Garden in North Bengal with Special reference to SC/ST Community
17	Industrial sickness in micro and small industries - A Case Study of Tripura
18	SME and Industrial Cluster in Assam
19	Agriculture and Rural Development in North East
20	Femisnism and Virginia Wolf
21	Political Economy of India's Look East Policy
22	Human Resource Management in Indian PSU Bank.
23	Health and Lifestyle: A case study of Cancer Patients in Silchar
24	Transculturalism in the work of Amitabh Ghosh
Thrust Areas :	
1	Development Economics
2	Regional Economics
3	Agricultural and Rural Development
4	Industrial Management
5	Feminism

3 Invited Lectures by Faculty Members

#	Faculty Name	Details
1	Dr. G. Das	Two Lectures delivered on "Role of Empiricism in Social Science Research" on 11/2/2010 in Research Methodology in Social Science Research organized by ICSSR-NERC, Shillong and Assam University, Silchar

		Delivered three lectures on "Development Discourse" during 29-31/3/2010 in School for Doctoral scholars in Economics organized by ICSSR-NERC, Shillong.
		Two Lectures delivered on " Political Economy of Globalization" during 23-24/11/2009 Advance Course on Political Science for the Doctoral Scholars organized by ICSSR-NERC, Shillong

4 Theses: Ph.D.

#	Name of Scholar	Title of Thesis
1	K. G. Singh (Awarded)	Security and Development: The Political Economy of Insurgency in Manipur
2	Mrs. R. Nath Choudhury (Submitted)	Swami Vivekananda: Modernity and Social Ethics-A Critical Study

5 Book /Chapters Published

#	Name of Author(s)	Title	Publisher	Year
1	Das G., Thomas C.J. (eds)	India-China: Trade and Strategy for Frontier Development	Bookwell, New Delhi	2010

6 Seminars / Workshops / Conferences / Symposia / Short Term Courses Attended

#	Name of Faculty(ies)	Name of programme	Organizing Institute	Duration
1	Dr. R. Sanasam	Pedagogy and teaching methodology training programme	IIT Kharagpur	March 8-16, 2009

7 Research Publications

A. Published in National Journals			
#	Author(s)	Title	Publication details
1	Das G.	Indo-Bangladesh Relations: Issues in Trade, Transit and Security	Himalayan and Central Asian Studies, 2009, 13(4)
2	***Das G.***, Singh K.G.	Insurgency and Nationalism in Manipur	Man and Society, 2009, VI
3	Das G.	Identity and Underdevelopment: On Conflict and Peace in Assam	The Social Scanner, 2009, 1
4	Sanasam R.	Human identities and Transculturalism in Kiran Desai's Inheritance of Loss	Journal of Literature, Cultural and Media Studies, 2009, 1(1)

B. Published in International Conferences / Seminars / Workshops			
#	**Author(s)**	**Title**	**Publication details**
1	Das G.	Connectivity and Regional Development: The Case of India's North East	In the international workshop on Regional Consultations on Enhancing Regional Connectivity in the Decade of 2010-2020: Issues and Approaches in South Asia at IIC, New Delhi, Friedrich Ebert Stiftung, New Delhi, Feb 14-16, 2010

C. Published in National Conferences / Seminars / Workshops			
#	**Author(s)**	**Title**	**Publication details**
1	Das G.	Politics of Boundary Maintenance: Who is an Assamese in Assam?	In the national seminar on "Politics of Boundary Maintenance: Inclusion-Exclusion Dynamics in North East India", IIAS, Shimla and ICSSR-NERC, Shillong, Nov. 17-18, 2009
2	Das G.	Identity, Underdevelopment and Violence: A Roadmap for the Restoration of Peace in India's North East	In the national seminar on "Social Unrest and Peace Initiatives in North East India", Sanskriti: North Eastern Institute of culture and Religion, Guwahati, Nov. 20-22, 2009
3	Das G.	Development of National Peripheries through Mobilizing Cross-Border Synergies: A Case for Sino-Indian Cooperation for the Development of India's Northeast and China's Southwest	In , India-China: Trade and Strategy for Frontier Development, Das, Gurudas and C Joshua Thomas, (eds), 2010, Bookwell, New Delhi
4	Das A.K.	Sustainability in Tea Industry: An Indian Perspective	Edited by P.K. Jain and Others, January, 2010, Mittal Publication, New Delhi
5	Das A.K.	Small Tea Garden – A New Opportunity for the People of Assam	1st National conference on "Indigenous Technology, Livelihood Options and Habitat Utilization: Concepts and Perspectives of Development", Nov. 22-24, 2009, North Eastern Center for Research and Development, Guwahati

3.2 ACADEMIC STAFF (NON-TEACHING)

Sl.No.	Name of the Post	Sanctioned Strength	In Position	Vacancy Position
1	Superintendent	3	1	2
2	P S to Director/Supdt MC	1	Nil	1
3	P A to Director/Steno Gr-II	1	1	--
4	Stenographer/Steno Gr-III	6	6	--
5	Sr Accounts Assistant.	1	1	--
6	Accounts Assistant	2	2	--
7	Supervisory Assistant	3	3	--
8	UD Assistant	18	14	4
9	LD Assistant	18	13	5
10	Chief Store Keeper	1	Nil	1
11	Store Keeper	5	4	1
12	System Programmer	2	NIL	2
13	Workshop Superintendent	1	NIL	1
14	Assistant Librarian	2	1	1
15	Foreman	1	1	--
16	Assistant Foreman	1	NIL	1
17	Sports-cum- PT Officer	1	NIL	1
18	Professor T & P	1	NIL	1
19	Library Assistant	6	2	4
20	Laboratory Assistant	2	2	--
21	Sr Instructor/Tech Gr-A	4	1	3
22	Jr Instructor/Tech Gr-B	15	13	2
23	Asstt Instructor/Tech Gr-C	10	10	--
24	Laboratory Attendant	21	17	4
25	Workshop Attendant	10	4	6
26	Library Attendant	4	2	2
27	Class Room Bearer	1	1	--

3.3 NON-ACADEMIC STAFF (NON-TEACHING)

Sl.No.	Name of the Post	Sanctioned Strength	In Position	Vacancy Position
1	Pharmacist	1	1	--
2	Nurse-cum-Midwife	1	1	--
3	Jr Engineer	2	1	1
4	Muharrier	2	1	1
5	Electrician-cum-Wireman	2	1	1
6	Wireman	2	1	1
7	Carpenter (Estate)	1	NIL	1
8	Draughtsman	4	4	--

9	Tracer	2	2	--
10	Plumber	3	2	1
11	Driver	5	4	1
12	Bus Conductor	2	2	--
13	Pump Operator-cum-Mechanics	2	2	--
14	Mason (Estate)	1	1	--
15	Classifier (library)	1	Nil	1
16	Store Attendant	2	2	--
17	Plumber Attendant	1	Nil	1
18	Medical Attendant	3	3	--
19	Reneo Machine Operator	1	1	--
20	Gate Keeper (library)	2	2	--
21	Vehicle Cleaner	1	Nil	1
22	Mason Helper	1	Nil	1
23	Peon	25	20	5
24	Head Watchman	1	Nil	1
25	Watchman	24	11	13
26	Duftary	4	Nil	4
27	Guest House Cook	1	Nil	1
28	Guest House Bearer	1	Nil	1
29	Guest House Helper	1	Nil	1
30	Cook (Hostel)	6	2	4
31	Cook-cum-helper (Hostel)	64	58	6
32	Mali	9	7	2
33	Sweeper	13	8	5

3.4 TRAINING STATUS

	Training Details			
#	**Name of Staff**	**Name of programme**	**Organizing Institute**	**Duration**
1.	Ms. B. Roy Choudhury	Pension & Other Retirement Benefits	Integrated training & policy research (Training Division)	Dec.17–19, 2009
2.	Ms. Shefali Sinha	- do -	- do -	- do –
3.	Mr. Pijush Bhattacharjee	Managing Office & Staff Development	Centre for Training & Social Research	Dec. 18-19, 2009

4. TEACHING PROGRAMMES

4.1 Courses Offered

Currently the Institution offers six B.Tech. programmes, eight M.Tech. programmes in various specializations and one M.Sc. programme in Basic Science (Chemistry).

(i) B.Tech. programme:

- Civil Engineering
- Computer Science and Engineering
- Electrical Engineering
- Electronics and Communication Engineering
- Electronics and Instrumentation Engineering
- Mechanical Engineering

(ii) M.Tech. programme:

- Earthquake Engineering (under Civil Engineering Department)
- Geo-Technical Engineering (under Civil Engineering Department)
- Transportation Engineering (under Civil Engineering Department)
- Water Resources Engineering (under Civil Engineering Department)
- Microelectronics & VLSI Design (under Electronics and Communication Engineering Department)
- Power and Energy System Engineering (under Electrical Engineering Department)
- Design & Manufacturing (under Mechanical Engineering Department)
- Thermal Engineering (under Mechanical Engineering Department)

(iii) M.Sc. programme:

- Applied Chemistry (under Chemistry Department)

(iv) Ph.D. programme:

- Engineering
- Science
- Humanities and Social Sciences

4.2 B. Tech. Enrolment

The following table shows the semester-wise, course wise enrolment with sex and caste breakup for the period 2009-10. The excess intake (over and above the intake capacity) was carried out as per the seat distribution programme made by MHRD.

Sem	Branch	Open		OBC		SC		ST		PH		Total
		Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Total
1st & 2nd	CE	38	06	32	01	13	01	06	02	1	-	100
	ME	36	03	30	-	14	-	06	01	03	-	93
	EE	43	05	27	03	12	02	07	01	01	-	101
	ECE	35	08	32	04	10	03	04	04	-	-	100
	EIE	05	-	07	01	03	01	03	-	-	-	20
	CSE	29	02	22	03	08	02	05	01	1	-	73
		186	**24**	**150**	**12**	**60**	**09**	**31**	**09**	**06**	**-**	**487**
3rd & 4th	CE	34	2	20	5	11	2	7	-	02	-	83
	ME	42	-	27	-	14	-	8	-	02	01	94
	EE	44	4	21	4	12	1	10	-	01	-	97
	ECE	46	4	26	-	14	2	5	2	01	01	101
	CSE	39	4	24	5	12	1	5	1	02	02	95
	TOTAL	**205**	**14**	**118**	**14**	**63**	**6**	**35**	**3**	**08**	**04**	**470**
5th & 6th	CE	32	5	-	-	7	-	3	-	-	-	47
	ME	43	1	-	-	5	-	6	-	-	-	55
	EE	35	7	-	-	6	4	1	3	-	-	56
	ECE	44	9	-	-	8	1	4	-	-	-	66
	CSE	39	7	-	-	7	1	3	1	-	-	58
	TOTAL	**193**	**29**			**33**	**6**	**17**	**4**	**-**	**-**	**282**
7th & 8th	CE	26	6	-	-	7	2	4	1	-	-	46
	ME	44	1	-	-	6	-	6	-	-	-	57
	EE	30	8	-	-	3	2	4	-	-	-	47
	ECE	42	6	-	-	9	-	2	1	-	-	60
	CSE	40	5	-	-	5	2	4	-		-	56
	TOTAL	**182**	**26**	**-**	**-**	**30**	**6**	**20**	**2**	**-**	**-**	**266**
		767	**93**	**269**	**26**	**187**	**27**	**103**	**18**	**11**	**04**	**1505**

Note: *Reservation of OBC started from 2008 batch of students.*

CE= Civil Engineering, ME=Mechanical Engineering, EE= Electrical Engineering, ECE=Electronics & Communication Engineering, CSE= Computer Science Engineering, EIE= Electronics & Instrumentation Engineering.

The following is a summary table of the number of B.Tech. students on the roll of NIT Silchar during 2009-10.

Year	CE	ME	EE	ECE	CSE	EIE	Total
1st	100	93	101	100	73	20	487
2nd	83	94	97	101	95	-	470
3rd	47	55	56	66	58	-	282
4th	46	57	47	60	56	-	266
Total	**276**	**299**	**301**	**327**	**282**	**20**	**1505**

CE= Civil Engineering, ME=Mechanical Engineering, EE= Electrical Engineering, ECE=Electronics & Communication Engineering, CSE= Computer Science Engineering, EIE= Electronics & Instrumentation Engineering.

4.2.1 Admission Statistics

(a) Indian Students Admitted

The following table shows the state-wise and course-wise admission statistics with category breakup for the year 2009-10:

Sl.No	States	Category	CE	ME	EE	ECE	CSE	EIE	Total
1	Assam	Open	21	23	27	24	17	4	**116**
		OBC	13	17	12	16	11	6	**75**
		SC	7	11	7	11	4	3	**43**
		ST	3	5	2	7	3		**20**
		OPPH		1					**1**
		SCPH	1						**1**
2	Manipur	OBC				1			**1**
		Open			1	1	1		**3**
		ST						1	**1**
3	Nagaland	OBC			1				**1**
		Open	1		2				**3**
		ST	1						**1**
4	Rajasthan	OBC	2	1	4	2	1		**10**
		Open	8	2		1	3		**14**
		SC		1	1				**2**
		ST	2	1	2			1	**6**
5	Bihar	OBC	12	8	5	8	4	2	**39**
		OBPH		1					**1**
		Open	2		3				**5**
		OPPH		1	1		1		**3**
		SC	3		1		1	1	**6**
		ST	1				2		**3**
6	Uttar Pradesh	OBC	2	6	4	2	4		**18**
		Open	2	3	3	1	4		**13**
		SC	2	2	4		3		**11**
7	Andhra Pradesh	OBC			1	4	1		**6**
		Open	1	3	4	7			**15**
		SC	2			1	1		**4**
		ST	1			1	1		**3**
8	Jharkhand	OBC	1	2	1	1			**5**
		Open		1	1		1		**3**
		SC						1	**1**
9	Delhi	OBC		1		1	1		**3**
		Open			2	1	1		**4**
		SC					1		**1**

10	Kerala	Open	1						**1**
		OBC					1		**1**
11	Haryana	OBC					1		**1**
12	Sikkim	Open	1				1		**2**
		OBC					1		**1**
		ST			1				**1**
13	Orissa	Open	1						**1**
		SC				1			**1**
14	Maharashtra	Open		1					**1**
15	Meghalaya	Open				1			**1**
		OBC			1				**1**
16	Mizoram	Open			1	1	1		**3**
17	West Bengal	Open	1						**1**
		SC			1				**1**
18	Madhya Pradesh	Open			2				**2**
		OBC	2		1				**3**
		ST			1				**1**
19	Arunachal Pradesh	OBC				1	1		**2**
		ST		1	2				**3**
20	Uttarakhand	Open						1	**1**
21	Punjab	Open	1						**1**
		SC				1			**1**
22	Andaman & Nicobore	Open					1		**1**
		OBC	1						**1**
23	Tripura	Open				1			**1**
24	Jammu & Kashmir	Open				1			**1**
Total			**96**	**92**	**99**	**97**	**73**	**20**	**477**

CE= Civil Engineering, ME=Mechanical Engineering, EE= Electrical Engineering, ECE=Electronics & Communication Engineering, CSE= Computer Science Engineering, EIE= Electronics & Instrumentation Engineering.

(b) Foreign Students Admitted

The following table shows the admission statistics of foreign students *(Bangladesh, Bhutan, and Srilanka)* for the year 2009-10:

Sl. No.	*Courses*	*Admitted*
1	Civil Engineering	04
2	Mechanical Engineering	01
3	Electrical Engineering	02
4	Electronics and Communications Engineering	03
5	Computer Science and Engineering	-
6	Electronics and Instrumentation Engineering	-
Total		**10**

4.2.2 Course-wise Admission Statistics

Sl No.	*Courses*	*Intake Capacity*	*Admitted*	*Remarks*
1	Civil Engineering	92	100	The excess intake (over & above the intake capacity) was carried out as per seat distribution programme made by MHRD
2	Mechanical Engineering	92	93	
3	Electrical Engineering	92	101	
4	Electronics and Communications Engineering	92	100	
5	Computer Science and Engineering	92	73	
6	Electronics and Instrumentation Engineering	30	20	
	Total	**490**	**487**	

4.3 M.Tech., M.Sc. & Ph.D. Enrolment

The following table shows course-wise admission statistics of PG programmes (M.Tech., M.Sc. and Ph.D) for the year 2009-10:

Deptt.	**Sanctioned strength**	**M. Tech. & M. Sc. specialization**	**No. of PG students**	
			M.Tech/M.Sc/Ph.D	Total
CE	20	M. Tech. in water Resource Engg.	04	04
	20	M. Tech. in Earthquake Engg.	10	10
	10	M. Tech. in Transportation Engg.	04	04
	10	M. Tech. in Geo-Technical Engg	05	05
	-	Ph.D.	03	03
ME	20	M. Tech. in Thermal Engg	12	12
	20	M. Tech. in Design & Manufacturing	09	09
EE	20	M.Tech. in Power & Energy system Engg.	10	10
	-	Ph.D.	02	02

ECE	20	M. Tech. in Micro-electronics & VLSI Design	09	09
	-	Ph.D.	01	01
CSE	-	Ph.D. only	01	01
PHY	-	Ph.D. only	03	03
CHY	10	M.Sc. in Applied Chemistry	08	08
	-	Ph.D.	01	01
Math	-	Ph.D. only	02	02
HSS	-	Ph.D. only	12	12
Grand Total (M.Tech. + M.Sc. + Ph.D)			**63 + 8 = 71** **25**	**96**

CE= Civil Engineering, ME=Mechanical Engineering, EE= Electrical Engineering, ECE=Electronics & Communication Engineering, CSE= Computer Science Engineering, PHY= Physics, CHY= Chemistry, Math= Mathematics, HSS= Humanities & Social Sciences .

The following is a summary table of the number of PG students on the roll of NIT Silchar during 2009-10.

Courses	**CE**	**ME**	**EE**	**ECE**	**CSE**	**PHY**	**CHY**	**MATHS**	**HSS**	**TOTAL**
M.Tech.	33	33	17	14	-	-	-	-	-	97
M.Sc.	-	-	-	-	-	-	08	-	-	08
Ph.D.	13	07	06	06	06	06	08	04	26	82
Total	**46**	**40**	**23**	**20**	**06**	**06**	**16**	**04**	**26**	**187**

CE= Civil Engineering, ME=Mechanical Engineering, EE= Electrical Engineering, ECE=Electronics & Communication Engineering, CSE= Computer Science Engineering, PHY= Physics, CHY= Chemistry, Math= Mathematics, HSS= Humanities & Social Sciences .

4.4 Student Strength

The following table shows the total student strength on the roll (course wise) of the year 2009-10 at NIT Silchar:

Courses		**Branches**	**Total students strength (course-wise)**
UG (B.Tech.)		Civil Engineering	276
		Mechanical Engineering	299
		Electrical Engineering	301
		Electronics & Communication Engineering	327
		Computer Science & Engineering	282
		Electronics & Instrumentation Engineering	20
PG	M.Tech.	Postgraduate Courses (all engineering departments)	97
	M.Sc.	Applied Chemistry	08
	Ph.D	All departments (Regular & Part-Time)	82
TOTAL (B.Tech. + M.Tech.+ Ph.D.)			**1692**

4.5 The Hostels

The institute is essentially residential and provides hostel accommodation for students. Separate hostel accommodation is available for girl students. It is mandatory for all the students to stay in hostels. However, under special and extraordinary cases a student may be permitted on application during beginning of each semester to live with his/her parents or local guardian at Silchar. Students permitted to stay outside hostels are exempted from payment of mess charges, seat rent, electricity and water charges under hostel fees but they will have to pay the hostel establishment charges. The name, full address, office and residence telephone number, designation and willingness of local guardian have to be furnished at the time of admission. Room allotment in the hostels is done in such way that students from different region of the country freely intermingle with each other, depicting national integration.

4.6 Scholarships/ Assistantship

The students of this Institute are awarded various types of scholarships. Institutional Merit and Merit-cum-Means scholarships are awarded by this Institute to 25 per cent of the students admitted in NIT Silchar per year or 25 per cent of intake capacity, whichever is less. Two-third of this 25 per cent receives Merit-cum-Means scholarship and the rest one-third receives Merit scholarship. Other than this also, students receive various scholarships offered by various State Governments, PSUs, Charitable Trust/Organizations. During the period under review, 249 students received scholarships/stipends from various sources.

Sl. No.	NAME OF THE SCHOLARSHIP	Name of the State	Amount of scholarship awarded in 2009-10	No. of students received Scholarship
1.	Govt. of Meghalaya	Meghalaya	48,110/-	5
2.	Govt. of Nagaland	Nagaland	55,200/-	4
3.	Govt. of Tripura	Tripura	11,000/-	2
4.	DTE, Assam	Assam	6,950/-	3
5.	National Talent Scholarship	Govt. of India	6,000/-	1
6.	Govt. of Bihar, Jharkhand	Bihar	4,36,205/-	20
7	Govt. of Uttar Pradesh	Uttar Pradesh	3,59,080/-	12
8	Govt. of Andhra Pradesh	Andhra Pradesh	1,97,584/-	5
9	Assam SC/ST/OBC	Assam	9,53,415/-	42
10	Govt. of Himachal Pradesh	Himachal Pradesh	26,250/-	4
11	Institutional Merit & Merit-cum-Means Scholarship	NITS	12,720/-	9

12	NCERT Scholarship	NCERT	6,000/-	1
13	Indian Oil Scholarship	IOS	96,000/-	8
14	ICCR, Foreign Students	ICCR	11,20,880/-	31
15	Govt. of Chhattisgarh	Chhattisgarh	63,480/-	2
16	Govt. of Rajasthan	Rajasthan	37,319/-	2
17	NEC (Shillong)	Shillong	4,66,400/-	44
18	PhD/M.Tech	UGC	19,000/-	2
19	Institutional Assistantship, NIT Silchar	NITS	31,92,000/-	29
20	Engineering India Ltd.	Engineering India	18,000/-	1
21	UGC (New Delhi)	New Delhi	4,15,725/-	3
22	Minority, Assam	Assam	5,03,180/-	17
23	Doctoral Fellowship ICSSR (New Delhi)	ICSSR	36,000/-	1
24	Junior Research Fellowship	Delhi	1,82,600/-	1
25	Railway Bank, BSNL, MHRD, Parent Deptt etc.	NIT Silchar only Recommending & Forwarding Application		

A part from the aforesaid Scholarships, guardians of our students also avail reimbursement of educational expenditure from their employers like – BSNL, Railways, Banks, ONGC and other Govt./PSUs on our recommendations**.**

Assistantships (M.Tech & Ph. D): Students admitted in the M.Tech. and Ph.D programmes in the Institute are awarded Assistantship as per norms of this Institution. To be eligible for this Assistantship, a student must have cleared GATE/NET/UGC exams and must be a regular non-sponsored student.

4.7 Games and Sports

Apart from academic activities, NITians are very enthusiastic in games and sports. Students play football, volleyball, basketball, cricket and others games. It is an acknowledged fact that NIT Silchar along with its emphasis on academics gives no less priority to games and sports. Throughout the year, there are a number of games and sports activities, which give ample opportunities to the students to prove their proficiency. Generally at weekends or during holidays internal competitions are held. Regular events like inter-hostel tournaments in various games took place during the year under review as well. Besides this, students participated in competitions organized on the occasions of Republic Day, etc. Our Institute took the initiative in forming Organization for Inter-NIT Student Activities (O-INSA) that co-ordinates extra-academic student activities of all NITs.

4.8 Awards

The Institute offered the following awards during the period under consideration:

(A)	**Institute Gold Medal**		
Sl.No.	**Title of the Medal**	**Department**	**Awardees**
1	Best B.Tech. Graduate	Electronics & Communication Engineering	Shri Sandeep Chanda

(B)	**Institute Silver Medals**	
Sl.No.	**Title of the Medal**	**Awardees**
1	Best B.Tech. Graduate in Civil Engineering	Shri Jyoti Chaubey
2	Best B.Tech. Graduate in Computer Science & Engineering	Shri Aasha Medhi
3	Best B.Tech. Graduate in Electrical Engineering	Shri Krishna Kumar
4	Best B.Tech. Graduate in Mechanical Engineering	Shri Subhasish Sarma Thakur

(C)	**Kalikrishna Mrinalini Krori Gold Medal**		
Sl.No.	**Title of the Medal**	**Department**	**Awardees**
1	Best B.Tech. Graduate on overall performance, sponsored by Institute of Engineers (India)	Electronics & Communication Engineering	Shri Mustafijur Rahman

4.9 EXAMINATION DETAILS

- Even semester examinations were held in the month of May/June, 2009 (both B.Tech. & M.Tech.)
- Odd semester examinations were held in the month of December,2009 (both B.Tech & M.Tech.)

4.9.1 Statistics of the Results

a) End Semester Examinations Held in May-June 2009

Programme	***Branch & course***	***Number Appeared***	***Number passed***	***Percentage passed***	***Remarks***
M.Tech.	Civil Engg. (water Resources Engg.)	05	05	100%	
	Civil Engg. (Earthquake Engg.)	03	03	100%	
	Mech. Engg. (Thermal Engg.)	10	10	100%	
	Elect. Engg. (Power & Energy System Engg.)	10	10	100%	

	Electronics Comm. Engg. (Microelectronics & VLSI Design)	03	1+2*	100%	*July,2009 Provisionally declared
B.Tech.	Civil Engg.	35	32	91.43	
	Mech. Engg.	52	51	98.08	
	Elect. Engg.	40	40	100%	
	Electronics Comm. Engg.	40	35	87.50	02 withheld
	Computer Sc. & Engg.	39	31	79.49%	01 withheld

b) B. Tech. (Old Batches) Passed prior to May, 2009 and Degree awarded in Convocation -2009

Branch	*Appeared*	*Passed*	*Remarks*
Civil Engineering	01	01	
Electrical Engineering	02	02	01 – Grade System 01 – Marks System
Electronics & Communication Engg.	03	03	

c) Ph.D. during 2009-2010

#	*Name of Scholar*	*Department*	*Remarks*
1	Sri Goutam Gope	Physics	*July,2009 Provisionally declared
2	Sri Dipankar Chakdar	Physics	
3	Sri K. Gyanendra Singh	Humanities & Social Sciences	

d) Summery of Results

Programme	*Branch & course*	*Number Appeared*	*Number passed*	*Percentage passed*	*Remarks*
M.Tech.	Civil Engg. (water Resources Engg.)	05	05	100%	
	Civil Engg. (Earthquake Engg.)	03	03	100%	
	Mech. Engg. (Thermal Engg.)	10	10	100%	
	Elect. Engg. (Power & Energy System Engg.)	10	10	100%	
	Electronics Comm. Engg. (Microelectronics & VLSI Design)	03	03*	100%	*July,2009 Provisionally declared (2 nos.)

B.Tech.	Civil Engg.	36	33	91.66	
	Mech. Engg.	52	51	98.08	
	Elect. Engg.	42	42	100%	
	Electronics Comm. Engg.	43	38	88.37	
	Computer Sc. & Engg.	39	31	79.49%	
Ph.D.	Physics Department	02	02		Provisionally awarded July 09
	HSS Department	01	01		Provisionally awarded Nov. 09

4.10 TRAINING AND PLACEMENT

Placement Record - 2009-10: National Institute of Technology, Silchar

Sl No.	NAME OF THE ORGANISATION	CTC (in LPA)	CE	EE	ME	ECE	CSE	TOTAL	M.Tech
1	**John Deere**	3.25	-	-	2	-	-	2	-
2	**Indian Oil Corporation Limited**	7.28-7.83	3	4	3	-	-	10	-
3	**Telcon**	4.09	-	-	2	-	-	2	0
4	**Energy Infratech**	3.26	5	2	3	-	-	10	-
5	**Gammon India**	Gross 3 lpa	5	-	-	-	-	5	-
6	**Grail Research**	3	0	0	0	0	0	0	-
7	**Bharat Heavy Electricals Limited**	7.61	8	6	14	-	-	28	-
8	**Indian Navy**		0	0	0	0	0	0	-
9	**D-Link**	INR 15,000 p.m.	0	0	0	0	1	1	-
10	**DRDO**	6.5	-	-	0	*1*	0	1	-
11	**Deem Roll Tech**	INR 15,000 p.m.	-	-	-	-	-	-	-
12	**KEC International**	INR 21,000 p.m. + bonus	3	*1*	-	-	-	4	-
13	**Vedanta Resources**	3.6	0	1	2	0	0	3	-
14	**NTPC**	8	-	2	2	-	-	4	-
15	**ITDC**	3.06	-	5	-	21	21	47	1
16	**TCS**	3.15	-	-	-	20	19	39	1
17	**IBM**	3.23	2	-	-	-	-	2	-
18	**TATA Motors**	4.99	-	-	5	-	-	5	-
19	**MAHINDRA AND MAHINDRA**	3.6 + furnished acco.	-	2	4	-	-	6	-
20	**Larsen & Toubro - Heavy Engineering Div.**	3.35	-	0	1	-	-	1	-
21	**Patel Engineering**	15000+Acc.+Canteen+Travel	5	-	3	-	-	8	-

22	**ZTE Telecom India Private Limited**	3.4,4.1(MTech)	-	-	-	4	-	-	2
23	**TVS Motors**	3.5	-	0	0	*1*	-	1	-
24	**SONY India Software Centre**	3	1	1	0	0	0	2	-
25	**Pradan**	INR 15,000 p.m.	0	1	0	0	0	1	-
26	**L&T ECC**	3.26	2	0	2	-	-	4	-
27	**Asia Motor Works**	3	-	-	-	-	-	-	-
28	**Tata Teleservices**	3.25	-	-	-	*2*	-	2	-
29	**Ericsson**	3.36	-	-	-	4+ *19*	*3*	26	-
30	**4AM Design and Technology Labs**	2.16	-	-	-	0	0	0	-
31	**Brahmaputra Crackers and Polymers Ltd (BCPL)**		5	4	3	-	-	12	-
32	**SEW Infrastructure Private Limited**	2.16	-		-	0	2	2	-
33	**Interra IT**	3.04	0	-	-	-	-	0	-
34	**Nagarjuna Construction Company Limited**	12500pm	*1*	2	0	1	1	5	-
35	**Tech Mahindra**	2.9	-	3	3		1		-
36	**Sterlite Technologies**	3.6	0	0	*1*	-	-	1	-
37	**Engineers India Limited**	6.6	-	-	1	-	-	-	-
38	**British Oxygen Corporation**	4.2	0	-	1	-	-	1	-
39	**Punj Lloyd Limited**	3.8							-
40	**Indigo Architects**	2.4-3.2	-	4+*8*	1+*3*	-	-	16	-
41	**Coal India Limited**	8+	1+*2*	-	-	-	-	3	-
42	**Simplex Infrastructure Limited**	19000 pm+added benefits	*1*	0	0	*1*	1+*8*	12	-
43	**CSC**	3.5	*4*+1	*1*	-	-	-	6	
44	**Bharti Infratel Ltd.**	17500pm	0	0	1	-	-	1	
45	**Denso Corporation**	19500 pm	-	0	-	2	1	3	
46	**DSC Limited**	3.5	1***+2***	2+***1***	1+***1***	-	-	8	

47	**Rural Electrification Corporation Ltd.**	9							
48	**Ingersoll Rand**	3	-	***1***	-	-	-	1	
49	**Capgemini**							2	
50	**Denso Gurgaon Pvt Ltd.**							1	
	TOTAL Students having CPI 6.00 & Above		39	37	50	55	52	231	
	TOTAL PLACED having CPI 6.00 & Above		39	37	49	48	47	221	
	TOTAL Students having CPI 5.00 - 6.00		3	5	7	4	5	24	
	TOTAL PLACED having CPI 5.00 - 6.00		3	1	4	0	0	8	
	Total Students Placed		42	38	53	46	46	223	
	Remaining Students		0	4	4	8	7	22	
	TOTAL NO. OF JOBS CREATED		52	51	58	75	57	290	

The numbers in italics indicates double Job

5. REASEACH AND DEVELOPMENT

5.1 Ph.D. Programmes Existing and Proposed

The Institution has produced 3 Ph.D.s till date in various Engineering and Science Depts. Experienced and competent faculty are available in the various specializations. The areas in which Ph.D. works are being pursued have been given below:

A. Engineering

Sl.No.	*Department*	*Specialization Areas*
1	Civil Engineering	Water Resource Engineering, Geotechnical Engineering, Earthquake Engineering, Structural Engineering
2	Computer Science and Engineering	-
3	Electrical Engineering	Electric Drives, Signal Processing in Electrical Engg, Wavelet Applications in Electrical Engg, Power System protrection, Control system, System Automation, Automatic Generation and control, power Quality, Fault Detection, and Diagnosis of Dynamic System, Soft Computing Techniques, Power System optimization, deregulation, VLSI Design
4	Electronics and Communication Engineering	MOS modelling and simulation, VLSI, Signal Processing
5	Electronics and Instrumentation Engineering	-
6	Mechanical Engineering	Renewable Energy, Alternative fuels, Combustion, Computational Fluid Dynamics, Thermo-fluids, Energy, productivity & quality management

B. Basic Sciences & Humanities

Sl.No.	*Department*	*Specialization Areas*
1	Chemistry	Energy and Environment, Green chemistry, Reaction mechanism and kinetics, Synthetic Organic Chemistry, Coal utilization
2	Physics	Experimental Condensed Matter Physics, Field of Liquid Crystals, Oxide Materials
3	Mathematics	Fuzzy Mathematics
4	Humanities and Social Sciences	Development Economics, International Trade, Economics of Education, Economic Sociology, Regional Economics, Agricultural and Rural Development, Small Scale industry, Industrial Management, Feminism

5.2 Details of Ph.Ds Completed

Sl.No.	*Department*	*Completed*	*Continuing*
1	Civil Engineering	02* (* Thesis submitted)	09
2	Computer Science and Engineering	-	01
3	Electrical Engineering	-	05
4	Electronics and Communication Engineering	-	04
5	Electronics and Instrumentation Engineering	-	04
6	Mechanical Engineering	01 (Thesis Submitted)	06
7	Chemistry	-	06
8	Physics	02 + 02* (* thesis submitted)	07
9	Mathematics	-	04
10	Humanities and Social Sciences	01 + 01* (* thesis submitted)	25

5.3 Proposed Plan for Research

Department	*Name of Lab./Workshop*	*Programme*
1. Civil Engineering	-	-
2. Computer Science and Engineering	-	-
3. Electrical Engineering	-	-
4. Electronics and Communication Engineering	National MEMS Design Center	Device Simulation lab
5. Electronics and Instrumentation Engineering	-	-
6. Mechanical Engineering	Petroleum Engg. Lab.	Alternative fuels research, IC Engine research
	Gas Dynamics Lab	Wind Tunnel, Air-flow bench, Fluid Mechanics Lab
	Advanced Manufacturing Lab	Research on nontraditional/advanced manufacturing processes and this is linked to Research Promotional Scheme (RPS) of AICTE titled: *Experimental Investigation of Surface Integrity in Electrodischarge Machining (EDM)*
7. Chemistry	-	Ph. D programmes will continue in the existing areas
8. Physics	Experimental Condensed Matter Physics lab	Up gradation of existing lab

9. Mathematics	One computer Lab having 20 PCs with internet connectivity	To start M.Sc. programme in Mathematics & more Ph.D. Programmes
10. Humanities and Social Sciences	Electronic Data Bank	-

5.4 Institute-Industry Collaboration

NIT Silchar has made a significant progress in the arena of sponsored research. The institute has gained significant research credibility and the funding organizations like DST, AICTE, MHRD, Ministry of Information and Technology, Ministry of Earth Sciences, KVIC are increasingly putting more reliance on the research aptitude of our faculty. At present 23 sponsored projects are on progress amounting to Rs 333.74 Lakhs. Further, it is to be mentioned that NIT Silchar has been working as one of the technical interfaces of KVIC Mumbai. 778 consultancy works have been undertaken to the tune of Rs 55.55 Lakhs during this year. Moreover, Industry Institute Partnership Cell has also been established in 2009.

6. THE COUNCIL, BOG, AND SENATE

6.1 Institute's Council

The Composition of the Council is as under:

(A)	The Minister-in-Charge of the Ministry or Department of the Central Government having administrative control of the Technical Education (Ex-officio)		Chairman
(B)	The Secretary to the Government of India in charge of the Ministry or Department of the Central Government having administrative control of the Technical Education (Ex-officio)		Vice-Chairman
(C)	Chairperson of every Board (Ex-officio)		
	(i)	Motilal Nehru National Institute of Technology, Allahabad	Member
	(ii)	Maulana Azad National Institute of Technology, Bhopal	Member
	(iii)	National Institute of Technology, Calicut	Member
	(iv)	National Institute of Technology, Durgapur	Member
	(v)	National Institute of Technology, Hamirpur	Member
	(vi)	Malaviya National Institute of Technology, Jaipur	Member
	(vii)	Dr. B. R. Ambedkar National Institute of Technology, Jalandhar	Member
	(viii)	National Institute of Technology, Jamshedpur	Member
	(ix)	National Institute of Technology, Kurukshetra	Member
	(x)	Visvesvaraya National Institute of Technology, Nagpur	Member

	(xi)	National Institute of Technology, Patna	Member
	(xii)	National Institute of Technology, Rourkela	Member
	(xiii)	National Institute of Technology, Silchar	Member
	(xiv)	National Institute of Technology, Srinagar	Member
	(xv)	Sarder Vallabhbhai National Institute of Technology, Surat	Member
	(xvi)	National Institute of Technology, Karnataka, Surathkal	Member
	(xvii)	National Institute of Technology, Tiruchirappalli	Member
	(xviii)	National Institute of Technology, Warangal	Member
	(xix)	National Institute of Technology, Raipur	Member
	(xx)	National Institute of Technology, Agartala	Member
(D)	Director of every Institute (Ex-officio)		
	(i)	Motilal Nehru National Institute of Technology, Allahabad	Member
	(ii)	Maulana Azad National Institute of Technology, Bhopal	Member
	(iii)	National Institute of Technology, Calicut	Member
	(iv)	National Institute of Technology, Durgapur	Member
	(v)	National Institute of Technology, Hamirpur	Member
	(vi)	Malaviya National Institute of Technology, Jaipur	Member

	(vii)	Dr. B. R. Ambedkar National Institute of Technology, Jalandhar	Member
	(viii)	National Institute of Technology, Jamshedpur	Member
	(ix)	National Institute of Technology, Kurukshetra	Member
	(x)	Visvesvaraya National Institute of Technology, Nagpur	Member
	(xi)	National Institute of Technology, Patna	Member
	(xii)	National Institute of Technology, Rourkela	Member
	(xiii)	National Institute of Technology, Silchar	Member
	(xiv)	National Institute of Technology, Srinagar	Member
	(xv)	Sarder Vallabhbhai National Institute of Technology, Surat	Member
	(xvi)	National Institute of Technology, Karnataka, Surathkal	Member
	(xvii)	National Institute of Technology, Tiruchirappalli	Member
	(xviii)	National Institute of Technology, Warangal	Member
	(xix)	National Institute of Technology, Raipur	Member
	(xx)	National Institute of Technology, Agartala	Member
(E)	Chairman, University Grants Commission (Ex-officio)		Member
(F)	Director-General Council of Scientific & Industrial Research (Ex-officio)		Member
(G)	Four Secretaries to the Government of India, to represent the Ministries or Departments of the		

	Central Government dealing with biotechnology, atomic energy, information technology and space (Ex-officio)		
	(i)		Member
	(ii)		Member
	(iii)		Member
	(iv)		Member
(H)	Chairman, All India Council for Technical Education (Ex-officio)		
(I)	Nominees of the Visitor (Not less than three) (Not more than five persons)		
	(i)		Member
	(ii)		Member
	(iii)		Member
	(iv)		Member
	(v)		Member
(J)	Three members of Parliament (Two from Lok Sabha and one from Rajya Sabha)		Member
	(i)	Member-Secretary	Member
	(ii)		Member
	(iii)		Member
(K)	Two Secretaries to the State Government (Ex-officio)		Member
	(i)	Member-Secretary	Member
	(ii)		Member
(L)			

		Member
(M)		Member-Secretary

6.2 Board of Governors

#	***Name and Address***	***Position***
1	Prof. Gautam Baura Director, IIT Guwahati Guwahati –781 039	Chairperson
2	Prof. P. K. Bose Director, NIT Silchar (Ex-Officio) Silchar –788 010	Member
3	Sri N.K. Sinha, IAS, Joint Secretary (Technical), MHRD, Deptt. of Higher Education, Govt. of India, Shastri Bhavan, C-Wing, New Delhi.	Member
4	Sri S.K. Ray, Financial Adviser & Jt. Secretary, Deptt. of Higher Education, MHRD, Govt. of India, New Delhi.	Member
5	Sri H.M. Cairae, IAS, Principal Secretary, Govt. of Assam, Higher Education (Tech.) deptt., Guwahati.	Member
6	Dr. P.K. Goswami, Director of Technical Education, Govt. of Assam, Guwahati.	Member
7	Prof. S.Dhar, Head of Electronics Sciences, University of Calcutta, Kolkata.	Member
8	Prof. Uma Bhattacharya, Head, Deptt. of Computer Science & Engineering, B.E.S.U., Sibpur, Howrah.	Member
9.	Dr. K.M. Pandey, Professor in Mechanical Engg. deptt., NIT Silchar.	Ex-officio Member
10.	Dr.(Mrs.) Basana Choudhury, Assoc. Professor in Physics, NIT Silchar.	Ex-officio Member
11.	Sri Sushil Kumar, Registrar, NIT Silchar.	Ex-officio Secretary

6.3 Finance Committee

#	*Name and Address*	*Position*
1	Prof. Gautam Baura Director, IIT Guwahati Guwahati –781 039	Chairperson
2	Prof. P. K. Bose Director, NIT Silchar (Ex-Officio) Silchar –788 010	Member
3	Sri Madan Mohan, Director (NITs), Deptt. of Higher Education, MHRD, Shastri Bhavan, C-Wing, New Delhi.	Member
4	Director (Finance), MHRD, Govt. of India, New Delhi.	Member
5	Dr.(Mrs.) Basana Choudhury, Assoc. Professor in Physics, NIT Silchar.	Ex-officio Member
6	Sri Sushil Kumar, Registrar, NIT Silchar.	Ex-officio Member-Secretary

6.4 Building and Works Committee

#	*Name and Address*	*Position*
1	Prof. P. K. Bose Director, NIT Silchar (Ex-Officio) Silchar –788 010	Chairperson
2	Sri Madan Mohan, Director (NITs), Deptt. of Higher Education, MHRD, Shastri Bhavan, C-Wing, New Delhi.	Member
3	Sri S.P. Singh, Supdt. Engineer, CPWD, Silchar.	Member
4	Supdt. Engineer, APWD, Silchar.	Member
5	Prof. Satyabrata Choudhury, Dean(P&D), NIT Silchar	Member
6	Prof. D.N. Bhattacharjee, HOD, Civil Engg. , NIT Silchar	Member (Board Nominee)
7	Sri Sushil Kumar, Registrar, NIT Silchar.	Member-Secretary

6.5 Senate

#	*Name and Address*	*Position*
1	Prof. P.K. Bose, Director, NIT Silchar.	Chairperson
2	Dy. Director, NIT Silchar.	Member (vacant)
3	Prof. A.K. Roy, Deptt. of Electrical Engg., NIT Silchar.	Member
4	Prof. Rajat Gupta, Deptt. of Mechanical Engg., NIT Silchar.	Member
5	Prof. A.K. Sil, Deptt. of Chemistry, NIT Silchar.	Member
6	Prof. D.N. Bhattacharjee, Deptt. of Civil Engg., NIT Silchar.	Member
7.	Prof. A.K. Sinha, Deptt. of Electrical Engg., NIT Silchar.	Member
8.	Prof. K.M. Pandey, Deptt. of Mech. Engg., NIT Silchar	Member
8.	Prof. Fazal A. Talukdar, Deptt. of Elect. Engg., NIT Silchar.	Member
9.	Prof. Nidul Sinha, Deptt. of Elect. Engg., NIT Silchar.	Member
10.	Prof. A.K. Dey, Deptt. of Civil Engg., NIT Silchar	Member
11.	Prof. Satyabrata Choudhury, Deptt. of Civil Engg., NIT Silchar	Member
12.	Prof. S. Baishya, Deptt. of E.C.E., NIT Silchar.	Member
13.	Prof. P.S. Choudhury, Deptt. of C.E., NIT Silchar	Member
14.	Prof. A.C. Paul, Deptt. of Mech. Engg., NIT Silchar	Member
13.	Prof. R.D. Misra, Deptt. of Mech. Engg., NIT Silchar	Member
14.	Dr.(Mrs.) Basana Choudhury, Deptt. of Physics, NIT Silchar	Member
15.	Mr. Biswajit Purkayastha, Deptt. of C.S.E., NIT Silchar	Member
16.	Dr. Ashim Kr. Das, Deptt. of H.S.S., NIT Silchar	Member
17.	Mr. Santanu Roy, Deptt. of Mathematics, NIT Silchar	Member
18.	Dr. S.S. Dhar, Deptt. of Chemistry, NIT Silchar	Member

19.	Prof. Purusottam Bhattacharjee, Deptt. of International Relation, Faculty of Arts, Jadavpur University, Kolkata	Member
20.	Prof. Mita Nasipuri, Deptt. of Computer Science & Engg., Faculty of Engineering & Technology, Jadavpur University, Kolkata	Member
21.	Prof. N.V.S. Rao, Deptt. of Chemistry, Assam University, Silchar	Member
22.	Sri Sushil Kumar, Registrar, NIT Silchar	Member-Secretary

7. CONCESSION FOR SC, ST, AND HANDICAPPED STUDENTS

7.1 Concession Provided for Students

The admission to 1st year of B.Tech. course is made through the All India Engineering Entrance Examination (AIEEE) conducted by CBSE and reservation of seats for SC, ST and OBC , Handicapped category of candidates is followed as per the guidelines framed by Ministry of Human Resource Development, Govt. of India, Department of Secondary and Higher Education.

7.1 Concessions Provided in Admission of Students

Course	Types of concessions	Category of students	Magnitude
B. Tech	Reservation at admission stage	ST	7.5%
		SC	15%
		PH	3%
		OBC	27%
	Foreign and other category of students		15% of sanctioned intake
M. Tech	Reservation at admission stage	ST	7.5%
		SC	15%
		PH	3%
		OBC	27%

B. Tech: There is no concession provided to the SC, ST and PH students for their payments towards Institution and Hostel fees.

M. Tech. & Ph. D: For ST, SC students tuition fees are waived.

7.2 Concession Provided for Staff

Statutory reservation policy and concession is followed by the institute for teaching and non-teaching posts. All fees for institutional faculties who enrol for doing Ph D are waived except their caution money and registration fees.

8. FINANCIAL STATUS

8.1 Analysis of Plan, Non-Plan and OSC Grants

(Rupees in lakh)

Sl. No.	Particulars	Plan	Non-Plan	OSC	
				Non-Plan	Plan
1	Opening balance as on 01.04.09	-168.23	359.76	30.01	740.44
2	Grants received from GOI during the year	1200.00	1743.00	300.00	2200.00
3	Institute income during the year	0.00	471.91	48.68	0.00
4	Total (1+2+3)	1031.77	2574.67	378.69	2940.44
5	Expenditure during the year	926.67	2135.50	216.37	1984.41
6	Balance as on 01.04.2010	105.10	439.17	162.32	956.03

8.2 Sources of Funds

Plan	Grant-in-Aid sanctioned by the Govt. of India (MHRD) for normal development activity of the Institute.
Non-Plan (Recurring)	(i) Grant-in-Aid sanctioned by the Govt. of India (MHRD) and (ii) Revenue from the Institute
OSC	Grant-in-Aid sanctioned by the Govt. of India (MHRD) to meet up the additional expenditure for creation of infrastructure and other recurring expenses

8.3 Expenditure Position for Staff

Sl.No.	Head of Accounts	Amount (Rupees in lakh)
1	Salary component (including 6th CPC arrear)	1634.90
2	Salary of Muster Roll staff	54.11
3	Leave Salary	15.23
4	Bonus for Group C & D staff	9.60

5	Contribution to CPF	170.50
6	Contribution to Gratuity fund	72.80
7	Medical reimbursement	5.23
8	LTC/HTC	5.56
9	Security Service	36.94
10	Professional Development allowance	13.55
	Total: -	**2018.42**

9. CENTRAL FACILITIES AND SERVICES

9.1 Central Computer Centre

HEAD		
Name	***Qualification***	***Specialization Area(s)***
Mr. S.K. Borgohain	M.Tech.	IT

9.1.1 FACILITIES:

a) Internet Facility

For Internet access and email access, Internet Bandwidth services of 16 Mbps leased line as well as 64Kbps ERNET link are available for the users to serve the heavy bandwidth demand at NIT Silchar.

b) Network Facility

NIT Silchar has a gigabit network with gigabit backbone. The institute network is built with modern, sophisticated, state of the art fiber optic cable & network switches. The Central Computer centre of the institute acts as the centre of the institute network. The CCC administers and maintains this network. All the departments/offices are connected to this network by edge switches and are configured as separate VLANs. All the Hostels are also connected to the institute via dedicated distribution switch and every room is provided with a data outlet.

9.2 Central Workshop

Head		
Name	***Qualification***	***Remarks***
Prof. K.M. Pandey	Ph.D	Head, Mech. Engg.
Workshop Superintendent		
Name	***Qualification***	***Remarks***
Mr. K. Mukherjee	M.Tech	Faculty-in-charge
Foreman		
Name	***Qualification***	***Specialization Area(s)***
Mr. B.K. Nath	Diploma	

9.2.1 FACILITIES

The workshop of the Mechanical Engineering Department acts as a Central Workshop of the Institute. It is one of the major service sections of the Institute having following units :

a) Machine Shop

- Lathe (GD lathe, Capstan lathe, Turret lathe, Speed lathe)
- Milling machine (Horizontal and vertical)

- Surface Grinder
- Shapper
- Double Housing Planner
- Slotter
- Radial Drilling machine

b) Fitting Shop

- Bench Drilling machine
- Power Hacksaw
- Fitting Tables with vices
- Wall mounted Grinding machine
- Pedestal Grinder

c) Carpentry Shop

- Carpentry Tables with vices
- Wood Turning lathe
- Surface planner
- Thickness planner

d) Welding Shop

- Oxy-Acetylene Gas Welding
- Arc Welding
- TIG
- MIG
- Submerged Arc Welding

e) Smithy Shop

- Hearth Furnace
- Blower

f) Foundry Shop

- Furnace
- Mould making
- Core making
- Pattern making
- Sieve analyzer
- Permeability tester

g) Sheet Metal Shop

- Bending machine

- Shearing machine

All the shops are equipped with necessary tools.

Common workshop classes are held in the workshop along with workshop classes for higher semesters of Mechanical Engineering branch. Different project works for the undergraduate students are also carried out in the workshop. The workshop is well equipped for the project works of the PG students of the Department. However, continuous efforts are being taken to augment the facilities of the workshop commensurate with the change in technology. The workshop is also used for fabrication work for the Institute.

9.3 Central Library

Chairman		
Name	***Qualification***	***Position***
Prof. A.C. Paul	Ph.D.	Dean (Acad.)
Librarian		
Name	***Qualification***	***Specialization Area(s)***
Mr. K.C. Satpathy	M.A(Edu), MLISc, PGDLAN	Information Management, IT Application in LIS
Asstt. Librarian		
Name	***Qualification***	***Specialization Area(s)***
Mrs. K. Singha	B.Sc., MLISc, PGDM, PGDHRM	Library Management

In 2009-10, NIT Silchar Library continued to make progress towards the realization of the key strategies designed to improve support for the institute's learning, teaching and research activities. The Library has developed its collection by acquiring latest information resources during the year.

The library continued to provide basic services like circulation and OPAC (Online Public Access Catalogue) services along with other allied services i.e. scanning, photocopying service and reference services etc. to its users throughout the year.

The library is one of the biggest technical libraries in North East India and its URL is *http://www.nits.ac.in/library/library.html#page=default*.

9.3.1 Document Collections

The Central acquired 2857 general books, 302 book bank books during year. It also added 43 thesis; 152 IRC Codes besides reprint and annual reports of other universities. The library subscribes 40 journals for the subscription year 2010.

Sl. No.	**Name of Resources**	**Total No. available as on 31.03.08**	**Total No. available as on 31.03.09**	**Total N0. available as on 31.03.10**	**No of Documents added during the reporting year**
	Books	67960	71,668	74,525	2857

	Print Journal	121	61	40	0
	Bound Volume	4921	4921	4921	0
	CD-ROMs	2274	2374	3074	700
	Databases	20	20	20	0
	Videos	909	909	909	0
	ISI Code (Printed)	8621	8621	8627	6
	Reports	338	340	340	0
	Book Bank (General)	8836	8836	8836	0
	Book Bank (SC/ST)	6640	6758	5292 (SC/ST) + 932 (ST) + 836 (SC) = 7060	302
	IRC Codes			152	
	Thesis			43	
	Annual Reports			113	

9.3.2 Circulation

The books circulation activities are fully automated and serve the users consisting of the faculty, research scholars, students and staff. The books circulation service is kept open for 40 hours a week. On the average, the monthly circulation transactions are about 10000.

9.3.3 Digital Library

Central Library, NIT Silchar has taken up a programme of extending the digital library facilities by acquiring e-resources. The library renewed subscription to 3 databases that were subscribed during the previous year. Library has added 49 new professional journals of Wiley, Elsevier & T&F etc. during the year. The following e-resources, e-books, e-journals and e- databases) have been procured for Digital library section of the Central Library.

E- book:

Knovel ME books
Knovel CE books

E- journals:

i. Analog Integrated Circuits and Signal Processing An International Journal
ii. International Journal of Modelling, Identification and Control
iii. International Journal of Power and Energy Conversion
iv. International Journal of Renewable Energy & Technology
v. Journal of Earth System Science
vi. Journal of Low Power Electronics
vii. Victorian Studies
viii. Control and Intelligent Systems
ix. Ground Water
x. International Journal of Modelling and Simulation

xi. International Journal of Power and Energy Systems
xii. International Journal of Robotics and Automation
xiii. Physical Review E
xiv. Applied Physics Letter
xv. Integration, the VLSI Journal
xvi. Journal of Applied Physics
xvii. Journal of Approximation Theory
xviii. Conformal Geometry & Dynamics
xix. Journal of the American Mathematical Society
xx. Mathematics of Computation
xxi. Memoirs of the American Mathematical Society
xxii. Proceedings of the American Mathematical Society
xxiii. Representation Theory
xxiv. St. Petersburg Mathematical Journal
xxv. Theory of Probability & Mathematical Statistics
xxvi. Transactions of the American Mathematical Society
xxvii. Transactions of the Moscow Mathematical Society
xxviii. Applied Ontology
xxix. Earthquake Engineering And Structural Dynamics
xxx. Electric Power Components & Systems
xxxi. Hydrological Processes
xxxii. Informatica
xxxiii. International Journal of Hybrid Intelligent Systems
xxxiv. International Journal of Pavement Engineering
xxxv. Journal Of Computer Security
xxxvi. Journal of Earthquake Engineering
xxxvii. Journal of High Speed Networks
xxxviii. Journal of The American Water Resources Association
xxxix. Urban Water Journal
xl. Wind Energy

E- Database (Full Text) :

i. American Economic Review
ii. Lecture Notes in Computer Science
iii. ACS Web Edition
iv. ACM Digital Library
v. ASCE
vi. ASME (including AMR)
vii. ASTM Standards and Journals
viii. IEL Online (5 Users)
ix. Nature
x. ProQuest Science (formerly ASTP)
xi. Science Direct
xii. Springer Link

9.3.4 Book Fair

The Library organized a book fair during 16 to 19 March 2010 to facilitate the users to select books. Publishers/distributors participated in the book fair. Around 500 students & faculty members visited the fair.

9.3.5 Infrastructure Facilities:

Library has a Techfocuz Library server, which can host more than 2500 CDs to host the Digital Library. There are three computers kept inside the library to facilitate information accessing by users. Library is having VCP, Scanner and HP LaserJet Printer. Library is using Libsys-integrated library management software for automating various functions in the Library like book procurement, circulation. Library is using RFID technology for book security purpose.

9.3.6 Additional Information

Published in International Conferences / Seminars / Workshops			
#	**Author(s)**	**Title**	**Publication details**
1	Dakshinamurti, Ganga B., ***Satpathy K.C.***	The Pro-Active Librarian: The How and The Why: illustrated by Case Studies From Canada and India	IFLA World Library and Information Congress; Milan, Italy, Aug. 23-27, 2009. http://www.ifla.org/files/hq/papers/ifla75/202-dakshinamurti-en.pdf

Published in National Conferences / Seminars / Workshops			
#	**Author(s)**	**Title**	**Publication details**
1	Satpathy, K.C.	Information Management Through DL: A Case study of NIT Silchar	In the Proc. "Library & Information User in Digital Era", Chatterjee A. et al. ed. (Kolkata: IASLIC Pub.), 2009
2	Satpathy, K.C.	Information Management Through Digital Library: A Case Study of NIT Silchar	IASLIC National Conference held during Dec 2009 at KIIT, Bhubaneswar, Orissa

9.4 LABORATORIES

Deptts.	**Name of the Laboratories**	**Main equipments available/experiments conducted**
Civil Engg.	• Strength of Materials • Fluid Mechanics • Environmental Engineering • Transportation Engineering • Concrete • Survey • Soil Mechanics • Computation	*Universal Testing Machine* (100 T), Compression, Impact Testing Machines, Hardness Testing Machines, Spring Testing Machines, Torsion Testing Machines. *Wind Tunnel* (Sub sonic), Cascade Tunnel, Centrifugal Pump Test Rig, Reciprocating Pump Test Rig, Gear-Oil Pump Test Rig, *Kaplan Turbine* Test Rig, Francis Turbine Test Rig, Pelton Wheel. *Gas Analyser*, Digital pH/Turbidity Meter, Spectrophoto meter, Universal Titrator, *Automatic Penetrometer*, Centrifuge Extractor, Deval Attrition Machine, Ductility Testing Machine, Marshal Stability Apparatus, Benkelman Beam Apparatus, Aggregate Impact Value Apparatus. *Compaction Factor* apparatus, Mortar Mixer, Rock-Tiaxial Machine, Los-Angles Abrasion Machine, Vee-Bee Apparatus, Rock Cutter Machine.

		Total Station, Wild T-2 Theodolite, etc. Triaxial Testing apparatus, CBR Testing Machine, Direct Shear Apparatus, Consolidation Apparatus, Motorised Vane shear Apparatus, Proctor Compaction Apparatus, etc. SUN Ultra-10 High end Computation System, ANSYS Software, Pentiun-4 PCs, etc. *Cyclic Triaxial* Test set up *Computerized district shear* test set up *B & K Pulse analyzer* Advanced computational laboratory with computers of latest configuration
Mechanical Engg.	• Computational • Machine Dynamic & Vibration • Instrumentation • Energy • I.C. Engine & Automobile • Heat Transfer • CNC lab • Material Science • Metrology • Steam Power • Refrigeration and Air conditioning	Different types of transducers, data logger and script chart recorder; Torsional vibration system of single rotor with viscous damping, Longitudinal vibration system of Spring, Universal Governor, Motorised Gyroscope, Whiling of shaft, Cam Analysis Machine, Vibration of rotor system, Journal Bearing apparatus; Digital pressure indicator, Various torque sensor, Various Load Cell, Radiation Pyrometer, Strain gauge, temperature indicator, Strain Measurement tutor, Temperature Measurement tutor using RTD sensor, Temperature Measurement tutor CTC Sensor, Speed Measurement tutor, Load measurement tutor using load cell, Pressure measurement tutor using pressure transducer, Water level measurement using water level transducer, Long range linear measurement tutor using potentiometric transducer, Inductive measurement tutor, Light measurement tutor, Pressure Cells, Inductor Measurement Tutor, Rotary Measurement Tutor, Height Measurement Tutor, Pressure meter train kit, Thermocouple Measurement Kit, Various thermocouples, Educational Software data logging package Robot Stimulation Software , Mechatronic Training Package; 2 and 4 Stroke Petrol engine, 4-Stroke single cylinder Diesel engine, Petrol Jeep vehicle, TATA engine 312M, Air compressor, hydraulic machine, Nozzle tester; Thermal conductivity measurement, Emissivity measurement, Parallel flow/Counter flow Heat Exchanger, Cross-flow heat exchanger, Forced convection, Condensation apparatus; NISA 3D Fluid Flow Package, Projection Manometer; Starturn CNC Bench turning center with accessories like 3 Jaw S.C. Chuck, 8-Station indexing tool post, Manual quick change tool holder body, Quick change tool holder for external and internal turning, External and internal cutting tools; Kaplan Turbine, Airflow Bench complete with accessories as Drag Force Apparatus, Memo meter with tube and Boundary Layer Apparatus; Different types of Microscopes, Field Microscope, Polishing facilities, Hardness testing machine, Impact testing machine, spectrometers; The infrastructure facilities for different study of microstructure & mechanical properties; Oil fires Boiler; Computerised Refrigeration and Air-conditioning test rig, Ice Plant, Refrigeration Lab Unit (R 714) with Data acquisition upgrade (RC 714) etc.
Electrical Engg.	1. Basic Machines 2. Basic Electrical Sc 3. Measurement & Instrumentation 4. Control System	Different kinds of general purpose Synchronous, Induction, DC machines; Transformers, Schrage Motors, Study of different electrical and magnetic circuits, measurement of various parameters, and electrical quantities; Servo motors kits , Analog Computers, Instrumentation tutor, Control System trainer, Different

	5. Microprocessor 6. Power Electronics & Electric Drives 7. Computer 8. Non-conventional Energy 9. Analog-Digital Electronics	types of Microprocessors with different head-on cards, Different types of power converters kits, Characteristics of different power devices. Solar photo voltaic cells, Solar radiation Detector, Wind Turbine with on-line data logging. Analog and Digital IC components, Trainers, Oscilloscopes, IC Test benches, Oscilloscopes of 100MHz. Characteristics of semiconductor devices, Registers, Counters, Digital Clocks etc. Efforts are made to upgrade/modernize the laboratories.
Electronics & Communications Engg. **Computer Science and Engg.**	• Basic Electronics Lab • Digital Electronics Lab • Communication Engg Lab • CAD of VLSI Lab • Advanced Communication Lab • Data Structure & OOP Lab • Microprocessor & Microcontroller Lab • System Programming & Operating System • DBMS Lab • UNIX/NT Lab • DSP & Embedded System Lab • Computer Graphics & Multi Media Laboratory • ICP Lab • Project Lab	The laboratories are equipped with 350 MHz Synchroscope, 100 MHz Storage scope, 16 channel Logic Analyzer, 8510B Network Analyzer, Microwave Frequency Counter, RF Spectrum Analyzer, NT Server, Workstations (P-III), ORCAD, MATLAB, SIMULINK, Electronic Work-bench, ISDN Emulator, Fibre Optic training kits, UNIX Servers, NT Server besides other standard software. COMMSIM Trident Lab software (25 users license), ELANIX System view software (10 users license), LAN Trainer from BENCHMARK (04 Kits), DSKTMS320C 6713 & 6416 board from Crans s/w international (05 each set), DSP TMS320DM64X based communication interface (One set), DSK 6713 video/image interface or captured board with camera from EDUTECH (three), Micro-controller development board for 8051(08), PCB Fabrication tools (One set), Oscilloscope (20), Workstations, Embedded system Board 1.8540 2.ARM Processor 3.IMX21 (Software) (05 number of 8540+02 number of ARM processor), Itanium server (03), MT-9000 microwave Test Bench (2), IBM Rational Rose university relation program (Software) (2 nos each of total 20 license users), Man and Tel Blue-tooth Trainer Model BT 2001 (01), Man and Tel Mobile communication (01), VHDL ACTIVE HDL Simulation software (0001 set).
Physics	• Physics Laboratory (B.Tech. programme) • Condensed Matter Physics Research Laboratory • Computer Room	Laboratory has the facilities for undergraduate Programmes Laboratory is well-equipped with advanced facilities for carrying out research in the emerging areas of science and technology. Major facilities available are High Vacuum Coating Unit (HHV make), 6514 Electrometer (Keithley make), LCR Hitester (Hioki Model No. 3522-50), PerkinElmer Lambda 35 UV/VIS Spectrophoto-meter, Hall Measurement set-up, Polarising Microscope, Impedance Analyser (Solartron Model No. 1260 A), XRD System etc. PC-Pentium with internet connectivity and other relevant software available
Chemistry	UG Chemistry Lab Instrument Laboratory	Polarimeter, TG-DTAFTIR, UV-VISIBLE, GC, PH-METER, DO-METER

9.5 HOSPITAL, POST OFFICE, SHOPPING CENTRE

9.5.1 Hospital

The Institute has a dispensary having staff, as on 31-3-2009, given below:

Sl No	Staff Positions	Numbers
1.	Senior Medical Officer	0
2.	Lady Medical Officer	1
3.	Pharmacist	1
4.	Nurse-cum-midwife	0
5.	Medical Attendant	3

Senior Medical officer retired on 31.1.2008. All the staff and students of the Institute avail medical aid from the dispensary. The Institute also has an ambulance for carrying patients to Silchar Medical College Hospital for emergency treatment.

9.5.2 Post Office

The Institute has a sub Post Office within the campus. The sub Post Office has facilities like registration, money order, and speed post. The post office functions from 9.30 AM to 2.30 PM. Students and staff and people from the surrounding villages take advantage of the facilities of this Post Office.

9.5.3 Bank

A fully computerized full-fledged core-banking branch of State bank of India with ATM facility operates in this campus. The students, staff and people of the villages surrounding the campus avail the facilities of the Bank.

9.5.4 Shopping Centre

A portion of the old LTD building houses the Institute Stores Section and the remaining portion is being used for sopping & other purposes with Post Office, Bank, PCOs, Fax Centres, DTP Centres and Bookshops etc. One Nescafe Corner, located adjacent to this building, operated by Nestle India Ltd. (under agreement with NITS) has opened during the year of reporting and is in operation.

9.5.5 Staff Canteen

A full-fledged Canteen, named NITS Café, is in operation catering quality foods to students, staff and visitors.

9.6 EPABX

FACULTY-IN-CHARGE		
Name	***Qualification***	
Mr. L.C. Saikia	M.Tech.	

The Institute has an EPABX system which provides telephone connections to all faculties, officers, department offices, section offices, and laboratories. The controlling and maintenance of the telephone connections are carried out through a centralised exchange. This office is working under the Dean (P&D).

9.6.1 Works completed:

The following works have completed during the reporting year:

- Feature enhancement of Ericsson MD110 EPABX system by provisioning of four port auto attendant system and one digital phone (Dial 4222) for maintenance purpose.
- Enhancement of Ericsson MD110 EPABX system by 96 Analog extension ports, i.e. 6 cards (one card contains 16 Analog extension ports) with connection cable EPABX system to system side MDF and MDF with Krone modules.
- 120 nos. of telephone sets were purchased and installed.
- Telephone wiring works for the faculty rooms of 1st floor of Mech. Engg. deptt. building.
- Laying of a 5-pair cable from EPABX exchange to Mech. Engg. deptt. building.
- Laying of a 20-pair cable from EPABX exchange to ECE deptt. building.
- Regular maintenance of the EPABX system.

9.6.2 Works in the pipeline:

The following projects are being processed for implementation:

- Telephone wiring works for the three floors of the new ECE & CSE building.
- Telephone cabling works for the new ECE & CSE, Mech. Engg., and administrative buildings.

9.7 STUDENTS' GYMKHANA

DEAN		
Name	***Qualification***	
Prof. A.K. Sinha	PhD	
ASSOCIATE DEANS		
Name	***Qualification***	
Dr. M. Ali Ahmed	PhD	
Dr. A.I. Laskar	PhD	
BOARD OF HOSTEL MANAGEMENT		
Name	***Qualification***	
Prof. A.K. Sinha	PhD	
Dr. M. Ali Ahmed	PhD	
Dr. P. Rajbonshi	PhD	
WARDENS		

Hostel No.	Name	Qualification	Department
1	Mr. P.C. Roy Dr. J.P. Mishra	M.Tech PhD	ME EE
2	Dr. P. Rajbonshi	PhD	CE
3	Dr. S.S. Dhar	PhD	Chemistry
4	Dr. Ayon Bhattacherjee	PhD	Physics
5	Mr. S.K. Pattanaik	M.Tech	ME
6	Dr. P Barman	PhD	Chemistry
7	Dr. A.K. Das Dr. Asim Roy	PhD PhD	Humanities Physics
GH 1	Dr. Reena Senasam Dr. Mousumi Sen	PhD PhD	Humanities Mathematics
GH 2	Dr. Mousumi Sen	PhD	Mathematics

GYMKHANA OFFICE BEARERS

Name	Port-Folios	Semester	Tenure
Priyonka Das	Vice President	6th	1 Year
Chanchal Rana	General Secretary	-do-	-do-
Pallav Mishra	GS, Cultural	-do-	-do-
Sashwat Prakesh	GS, Sports	-do-	-do-
Ms. Tanmayee Saikia	Secretary, Publication	-do-	-do-
Parag Talukdar	Secretary, Football	-do-	-do-
Pragoti Pran Bora	Secretary, Volleyball	-do-	-do-
R. Sudarsan	Secretary, Basketball	-do-	-do-
Kamalendra Singha	Secretary, Cricket	-do-	-do-
Prabhjyot Singh	Secretary, Photography	-do-	-do-
Krishna Chakraborty	Secretary, Mountaineering, Trekking & Gymnasium	-do-	-do-

FACULTY ADVISORS OF GYMKHANA

Port-Folios	Name	Designation	Department
Vice President	Dr. M. Ali Ahmed	Associate Prof	CE
General; Secretary	Dr. A.K. Barbhuiya	-do-	CE
GS, Cultural	Dr. Ayon Bhattacherjee	Asstt. Prof	Physics
GS, Sports	Dr. A.K. Das	-do-	Humanities
Secretary, Publication	Dr. Ayon Bhattacherjee	-do-	Physics
Secretary, Football	Mr. Pallab Das	-do-	CE
Secretary, Volleyball	Mr. Pallab Das	-do-	CE
Secretary, Basketball	Mr. P.C. Roy	-do-	ME
Secretary, Cricket	Mr. L.C. Saikia	-do-	EE
Secretary, Photography	Dr. Ayon Bhattacherjee	-do-	Physics

Secretary, Mountaineering, Trekking & Gymnasium	Dr. G. Ramesh	-do-	Mathematics

In pursuit of excellence and giving life a meaningful direction, Students' Gymkhana of NIT Silchar works towards profound personality development of NIT students by infusing in them a spirit of constructive co-operation, leadership qualities and organizational capabilities. This is being achieved by involving them in a wide spectrum of Sports and Games as well as Social & Cultural and Technological activities throughout the year.

The year 2009-2010 was also full of activities and achievements and proved to be matching the high standards of organizational and leadership capabilities.

9.7.1 Sports and Games

- Intra College, Football
- Intra College, Cricket
- Intra College, Night Cricket
- Intra College, Volleyball
- Intra College, Basketball
- Intra College, Gymkhana

9.7.2 Social and Cultural

- Debate Competition
- Quiz Competition

9.7.3 Gymkhana Awards

- Best Blood Donation Comp. Award for last four years, Barak Valley

9.8 FACILITIES FOR GAMES & SPORTS

The Institute has a playground measuring 150m x 90m with facility for playing football, Cricket, Hockey and other games. NIT Silchar also has a hard court for playing basketball and is provided with hard courts for playing Volleyball and Badminton. It has got a Lawn Tennis court within the campus. It also has a Student's Activity Center (SAC) building for indoor games. Glimpses are given below.

Football/Cricket ground	30,600.00 Sq m
Basket ball court	1 No.
Tennis court	3 Nos.
Badminton court	3 Nos.
Students' Activity Centre	1,145.00 Sq m
Amenities Building	1,739.00 Sq m

9.9 TRAINING & PLACEMENT

Campus recruitment process conducted by the Institute is a very vital activity. A Training and Placement Committee (TPC) was formed during the period under consideration involving a few final year students. The TPC contacted various companies for campus recruitment. A College information brochure was prepared. T&P Cell received positive response from a number of companies and a number of students were selected in the companies that visited the Institute during the period under consideration. The T&P Cell conducted its functions through Faculty-in-Charge (T&P). The T&P Cell consists of one office room, one interview room, one group discussion room, and one working room. Besides this, the Cell also arranges summer training programmes for all 6th semester B. Tech students. The Placement Statistics are given below pp. 81-83.

9.10 ESTATE

Dean (P&D)			
Name	***Qualification***		
Prof. S. Choudhury	Ph.D.		
Associate Deans			
Name	***Qualification***		
Dr. D. Chakraborty	Ph. D		
Mr. D. H. Das	M. Tech		
Other Officers			
Name	***Position***	***Qualification***	***Remarks***
Mr. T.N. Das	Superintending Engineer	BE (Civil)	Contractual up to 15.10.09
Mr. D. Dey	Asstt. Estate Engineer	Diploma (Civil)	**Regular**
Mr. S. Chauhan	Junior Engineer	Diploma (Electrical)	**Regular**
Mr. A. Das	Junior Engineer	Diploma (Civil)	Contractual
Mr. S. Das	Junior Engineer	Diploma (Civil)	Contractual
Mr. R. Suklabaidya	Junior Engineer	Diploma (Civil)	Contractual w.e.f. 16.10.09
Mr. D. Chakraborty	Junior Engineer	Diploma (Civil)	Contractual w.e.f. 16.10.09
Mr. S. Das Baishnab	Junior Engineer	Diploma (Elect.)	Contractual w.e.f. 16.10.09

9.11. PHYSICAL FACILITIES

PART – A: INSTITUTE CIVIL WORKS

Considering future increase in the students intake as well as increase in faculty strength, the Civil Works Unit under Estate Section of the Institute has taken up

several new construction works as well as expansion works of existing buildings. They are in different stages of progress.

1 Works completed:

The following constructions works have completed during the reporting year :

a) Roof Structure and sheeting over Type-D Building (3 Nos.) at NIT Silchar
b) Construction of Security Wall (balance portion) at NIT Silchar
c) Construction of road for Boys' Hostel No. 6 & 7
SH: Earth work, WBM, Pre-mix carpeting etc.
d) Renovation/repairing of existing road of the campus at NIT Silchar
e) Vertical Expansion of Dispensary Building
f) Renovation of toilet block under Civil, Electrical, Physics & Chemistry Department at NIT Silchar`
g) Provision of rack shelves, laboratory, partition wall etc. for faculty room at extended block of Physics Department at NIT Silchar
h) Repairing work at Prof. qtrs. No. 3B, Prof. qtrs. No.1 & 5 at NIT Silchar
i) Construction of Gas Bank of Boys' Hostel No.7 at NIT Silchar
j) Construction of caging for plantation in the campus at NIT Silchar Ph-I
k) Provision of fixed grill & collapsible gate for Boys' Hostel No. 6 & 7 at NIT Silchar
l) Provision of hall under Mechanical Engg. dept. as Seminar Hall
SH: Provision of false ceiling, aluminium doors windows etc. at NIT Silchar
m) Venation blind in windows, black film for ventilator and numbering of classroom at NIT Silchar
n) Construction of Septic Tank at Hostel No.3
o) Painting of SAC Building at NIT Silchar
p) Provision of hall under Mechanical Engineering Department as Computer Laboratory
SH: Provision of false ceiling, aluminium doors windows etc. at NIT Silchar-10
q) Renovation of CET Hall at NIT Silchar
SH: Provision of false ceiling, aluminium doors windows etc.
r) Renovation of Seminar Hall under Civil Engineering Department.
SH: Provision of false ceiling, aluminium doors windows etc. at NIT Silchar-10
s) Replacement of sheet roofing and outside painting with weather coat anti-fungal paint at Directors bungalow at NIT Silchar
t) Construction of platform at Classroom at NIT Silchar
u) Renovation of seminar hall under Electrical Engineering department.
SH: Provision of false ceiling, aluminium doors, windows etc. at NIT Silchar

2 On-going works:

The following new projects are being implemented:

a) Construction of 500 capacity Boys' Hostel No. 8
b) Construction of Type-VI(EL) (Prof. qtrs.) – 12 units building
c) Construction of Type-V(E) (Asst Prof. qtrs.) – 20 units building
d) Construction of Type-IV(E) (Lecturer qtrs.) -28 units building
e) Construction of Classroom Expansion Part-II building
f) Construction of CEC building
g) Construction of 100 bed Girls' Hostel No. 2

3 Works in the pipeline :

The following projects are being processed for implementation:

- Water Supply Intake Augmentation & Distribution Network
- Production Engineering Laboratory
- Earthquake Engineering Laboratory
- Sports Complex

PART – B: INSTITUTE ELECTRICAL WORKS

Considering future increase in the students intake as well as increase in faculty strength, the Electrical Works Unit under Estate Section of the Institute has taken up several new assignments as well as expansion works of existing systems. They are in different stages of progress.

1 Works completed:

The following constructions works have completed:

a) Electrification of Institute Gate and Road (Phase-I) at NIT Silchar
b) Supplying & installation of panel in Administrative block and Gr.IV colony at NIT Silchar-10
c) Providing supplying and installation of the sub-station accessories at NIT Silchar-10
d) Providing & laying UPS line & power line for accommodation of Dean's chamber at Administrative building
e) Providing & making of ceiling fan hook and fitting fixing including connection of ceiling fan at Girls' Hostel (Old) ground floor at NIT Silchar
f) Renovation of seminar hall in Electrical Engg. dept
SH: Internal & External Electrification works at NIT Silchar
g) Renovation of CET Hall at NIT Silchar
SH: Internal & External Electrification works
h) Provision of seminar hall at Mechanical Engg. dept.
SH: Internal & External Electrification works at NIT Silchar
i) Provision of computer hall at Mechanical Engg. dept.
SH: Internal & External Electrification works at NIT Silchar
j) Renovation of seminar hall under Civil Engineering Department
SH: Provision of ductable A.C ducting etc. at NIT Silchar
k) Renovation of seminar hall in Civil Engg. dept.
SH: Internal & External Electrification work at NIT Silchar
l) Providing Earth Station and Lightning conductor at E.E dept.
m) Renovation of Seminar Hall under Electrical Engineering department.
SH: Provision of ductable A.C ducting etc. of undergraduate computer lab at NIT Silchar
n) Renovation of CET Hall at NIT Silchar
SH: Provision of ductable A.C ducting etc. of undergraduate computer lab.

2 Works in the pipeline :

The following projects are being processed for implementation :

- Construction of 33 KVA Sub-Station

PART – C: INSTITUTE WATER WORKS

Considering future increase in the students intake as well as increase in faculty strength, the water Works Unit under Estate Section of the Institute has taken up several new assignments as well as expansion works of existing systems. They are in different stages of progress.

1 Works completed :

The following works have completed :

- Extension of pipe line of distribution network up to the underground sump of the newly constructed Girls' Hostel

2 On-going works :

The following new projects are being implemented :

- Water Supply Distribution Network in the campus along with augmentation of water supply

3 Works in the pipeline :

The following projects are being processed for implementation :

- Raw water intake pipe, intake structure and WTP by PHE, Assam

PART – D: MAJOR ACTIVITIES

In addition to the normal maintenance jobs, the following major jobs were undertaken by Estate Section during 2009-2010:

- Construction of 500 capacity Boys' Hostel No. 8

9.12 VEHICLE MANAGEMENT

Sl. No.	Vehicle Registration No.	Type of Vehicle	Purpose
1	AS-11-6913	Maruti Van Ambulance	Medical purpose for Staff & Students

2	AS-11B-0930	Tata Bus	For Service to Staff & Student
3	AS-11B-2703	Tata Bus	For Service to Staff & Students
4	AS-11C-0043	Ambassador Car	Director
5	AS-11D-7736	Tata Indigo Car	T&P, Academic & Office Purpose
6	AS-11B-2701/2702	Tractor & Trailor	Estate Branch

9.13 ALUMNI

The institute's alumni association has been established in this reporting year. The office bearers are as follows:

President-	Mr. D.H. Das, Deptt. of Mechanical Engg.
Secretary-	Dr. B.K. Roy, Deptt. of Electrical Engg.
Vice President-	Dr. A.K. Dey, Deptt. of Civil Engg.
Joint Secretary cum Treasurer-	Dr. D. Chakraborty, Deptt. of Civil Engg.

9.13.1 Activities

NIT Silchar Alumni Association has donated a Tata Indigo car (AS-11D-7736) mainly for the use of training and placement of NIT Silchar.

10. NOTABLE ACHIEVEMENTS

10.1 Past Achievements

Since inception in 1977, the Institute has produced more than 4300 undergraduate engineers in Civil Engineering, Electrical Engineering, Mechanical Engineering, Electronics & Telecommunication Engineering and Computer Science & Engineering streams. The Institute has produced more than 70 M.Tech. recipients in various specializations. Two numbers of Ph Ds were awarded from the department of Physics. Besides this, a good number of PhD scholars from deptt. of Mechanical, Civil are on the verge of submission of their PhD thesis. Many faculty members have publications in reputed international & national journals. And many research projects have also been granted to various faculty members of NIT Silchar.

10.2 Achievements during the Reporting Year

(a) *Publication in International Journals/Chapter Contributed in Books*

Name of Faculty	Title of the Paper	Publication Details
Civil Engineering Department		
P Rajbongshi	Discussion of development of fatigue crakling prediction models using long-term pavement performance database -- *Discussion*	Jr. of Transportation Engineering ASCE (to appear)
Rajbonshi P., Das A.	Estimation of temperature stress and low-temperature crack spacing in asphalt pavements	Jr. of Transportation Engineering, ASCE, 2009, 135(10), 745-752
Rajbonshi P.	A critical discussion on mechanistic- empirical fatigue evaluation of asphalt pavements -- *Technical note*	International J. of Pavement Research and Technology, 2009, 2(5), 223-226
Choudhury P.S., Sil B.S.	Integrated sediment and water flow simulation & fare cashing models for river Reaches	Journal of Hydrology, 2010, 10, 1016, Journal of Hydrology, 2010, 02, 034
Choudhury P.S	Co – ordinated reservoir operation model incorporating uncontrolled water flows.	Lake and reservoir Research & Management, 2010, 15, 129-139
Chakraborty D.	Simultaneous identification of unknown groundwater pollution sources and estimation of aquifer Parameters	Journal of Hydrology, 2009, 376, 48–57
	Optimal dynamic monitoring network design and identification of unknown groundwater pollution sources	Water Resource Management, 2009, 23, 2031–2049
	Multi-objective optimization for optimal groundwater remediation design and management systems	Geosciences Journal, 2010, 14(1), 87–97

Mechanical Engineering Department		
Gupta R. & Biswas A.	CFD Analysis of a Combined Three-Bucket Savonius & Three-Bladed Darrieus Rotor at Various Overlap Conditions	Journal of Renewable and Sustainable Energy 1, 033110, 2009
Gupta R. & Biswas A.	An Artificial Neural Network Based Methodology for the Prediction of Power & Torque Coefficients of a Two Bladed Airfoil Shaped H-Rotor	Open Renewable Energy Journal, Vol 2, pp 43-51, 2009
Gupta R. & Biswas A.	Performance Measurement of a twisted three-bladed airfoil-shaped H-rotor.	Int. J. Renewable Energy Technology Vol. 1, No. 3, pp. 279-300, 2009
Gupta R. & Biswas A.	Wind Data Analysis of Silchar (Assam) India by Rayleigh's and Weibull Methods	Journal of Mechanical Engineering Research Vol. 2(1), pp. 010–024, 2010
Gupta R. & Biswas A.	CFD Analysis of a Twisted Two-Bladed Airfoil Shaped H-Darrieus Turbine	Accepted for ISESCO journal of Science and Technology Vision
Gupta R. & Biswas A.	Prediction of Performance of Combined Savonius-Darrieus Rotor using Hybrid Neuro-Fuzzy Controller	Under Review in Journal of Applied Soft Computing
Gupta R. & Dey S.K.	Design & Techno-economic analysis of a gasification plant based on bamboo dust waste of Cachar Paper Mill	Under Review in International Journal of Design & Manufacturing Technologies
Gupta R. & Dey S.K.	Productivity analysis using coefficient of functional productivity method of a tea industry	Under review in Journal of Productivity Analysis
Gupta R. & Dey S.K.	Energetic and exergetic analysis of the withering heater of a tea industry	Under review in Journal of Mechanical Engineering Research
Gupta R. & Biswas A.	Comparative study of the performances of twisted two-bladed & three-bladed airfoil shaped H-Darrieus turbines by computational and experimental methods	Under review for Int. Journal of Renewable Energy Technology
Gupta R. & Biswas A.	CFD Analysis of Flow Physics and Aerodynamic Performance of a Combined Three-bucket Savonius and Three-bladed Darrieus Turbine	Under review in Journal of Green Energy
Pandey K.M., Deb K.& Kumar U.	Experimental studies on controlling piston slap noise of standard engine of hero honda splendour	International Journal of Environmental Research and Development (JERAD), Vol. 04,number1 ,July-September 2009,, PP.239-253.

Pandey K.M., Deb K.& Kumar U.	Experimental studies on effect of noise level control for 7.5 KVA Diesel generator set with an enclosure	International Journal of Environmental Research and Development (JERAD), Vol. 04, Number2, Oct-Dec 2009,PP. 506-516
Pathak S. and Pandey K.M.	Experimental investigation on morphological aberrations of the peas with variation in doses of pesticides	International Journal of Environmental Research and Development (JERAD), Volume 4. No. 3, Jan.-March 2010, PP. 713-725
Dubey, M., Rajput, S.P.S., ***Misra, R.D.***, Nag, P.K	Energy Analysis of a Coupled Power-Refrigeration Cycle	Journal of Power and Energy, Institution of Mechanical Engineers, Part A, UK, (Paper No: JPE-894)
L Roy	Thermo-hydrodynamic performance of grooved oil journal bearing	Tribology International, Available online 9 April 2009
S Chatterjee	'Recent Inventions in Biodiesel Production and Processing- A Review'	Journal of Recent Patent on Engineering (2008) 2: 47-58.
Electrical Engineering Department		
N Sinha	A New Hybrid Image Denoising Method.	International Journal of Information Technology and Knowledge Management, March,2010
L. C. Saikia	Maiden Application of Bacterial forging based optimization technique in multiarea automatic generation control.	IEEE Trans. On Power Systems, Vol. 24, No. 2, 2009.
Electronics and Communication Engineering Department		
S Baishya	A surface potential and quasi-fermi potential based drain current model for pocket implanted MOS transistors in subthreshold regime	Microelectronics Reliability, 2009, 49, 681–688
Nath S.S., Choudhury M., Nath R.K., Gope G.	PVA embedded ZnO Quantum dots for methanol sensing	Nanotrends, 2010, 8(3)
Nath S.S., Choudhury M., Chakdar D., Gope G., Nath R.K.	Acetone sensing property of ZnO quantum dots embedded on PVP	Sensor & Actuaters B (Chemical), 2010, B-148(2), 353-357
Choudhury M., Nath S.S., Nath R.K., Chakder D., Gope D., Das R.	ZnO quantum dots in SBR latex for Methanol sensing	Assam University Journal of Science & Technology: Physical Science & Technology, 2010, 6(II), 46-50

J Mehedi, M K Naskar	Topology management using fuzzy logic for mobile ad-hoc networks: a semi-distributed approach	International Journal of Computational Intelligence: Theory and Practice, 2009, 4(2), 47-58
	A fuzzy based distributed approach to maintain connectivity of nodes in mobile ad-hoc networks considering pursue mobility model	International Journal of Computational Intelligence: Theory and Practice, 2009, 4(2), 79-84
	Topology management for mobile ad-hoc networks: a fuzzy based centralized approach	Journal of Applied Computer Science, 2009, 4(6), 48-53
R.H. Laskar, F.A. Talukdar, R. Bhattacharjee, and S. Das	Book Chapter: Voice Conversion by Mapping the Spectral and Prosodic Features Using Support Vector Machine	Springer Book: Applications of Soft Computing, Series: Advances in Soft Computing, 2009, Vol.58, pp. 519-528, DOI: 10.1007/978-3-540-89619-7_51
Computer Science and Engineering Department		
B Purkayastha	Hybrid PSO/Self-adaptive Evolutionary programming for Economic Load Dispatch with non-smooth Cost Function.	Int. Joint Jour. Conf. in Engineering 2009, IJJCE-2009
Physics Department		
Tewari S., Bhattacharjee A	Synthesis and characterization of Cadmium chalcogenide CdX (X= S,Te) thin films	Int. J. Chem. Sci., 2009, 7(1), 105-115.
	Studies on the Structural, Optical and Elecrtical properties of Spray Deposited ZnO Thin Films	Pramana J. Physics, Jan. 2010 (Accepted)
Chemistry Department		
Zaman M.A.	Role of Fly Ash in the Removal of Organic Pollutants from Wastewater	Energy & Fuels, 2009, 23, 1494-1511
Zaman M.A., Lakshmi Gayatri S.	Batch Adsorption of 4-Nitrophenol by Acid Activated Jute Stick Char: Equilibrium, Kinetic and Thermodynamic Studies	Chemical Engineering Journal, 2010, 158, 173-180
Zaman M.A.	A Review on the Utilization of Fly Ash	Progress in Energy and Combustion Science, 2010, 36, 327-363

Mathematics Department		
M Sen	Vector valued paranormed l(p) spaces associated with multiplier sequences	Fasciculi Mathematici, No. 39 (2008), 125-133
G Ramesh	Approximation of Entire functions over Jordan domains	Communications in Mathematical Analysis, Vol-7, No 1 (2009).

(b) *Publication in the National Journals/Chapter contribution in Books*

Name of faculty	Title of Paper	Publication Details
Physics Department		
Datta Sarkar S., ***Choudhury B.***	Texture study of binary mixtures of two liquid crystalline samples	Asian Journal of Physics, 2010, 18(3)
Mechanical Engineering Department		
R Gupta	"An Experimental Investigation on the Fabrication and Mechanical Characterization of Aluminum-Silica Gel Metal Matrix Composite (MMC) By Die Casting Technique".	Under review in Indian Journal of Engineering & Material Science (IJEMS)
Humanities and Social Science Department		
Das G	Indo-Bangladesh Relations: Issues in Trade, Transit and Security	Himalayan and Central Asian Studies, 2009, 13(4)
Das G., Singh K.G.	Insurgency and Nationalism in Manipur	Man and Society, 2009, VI
Das G.	Identity and Underdevelopment: On Conflict and Peace in Assam	The Social Scanner, 2009, 1
Sanasam R.	Human identities and Transculturalism in Kiran Desai's Inheritance of Loss	Journal of Literature, Cultural and Media Studies, 2009, 1(1)
Das G., Thomas C.J. (eds)	India-China: Trade and Strategy for Frontier Development	Bookwell, New Delhi, 2010
Chemistry Department		
Zaman M.A., Lakshmi Gayatri S	Adsorption Technique Used for the Removal of Phenolic Compounds from Wastewater Using Low-Cost Adsorbants	Assam University Journal of Science and Technology: Physical Sciences and Technology, 2010, 5(11), 156-166

(c) Chairing of Technical Sessions

Name of Faculty	**Achievements**
Prof. R Gupta	Chaired a Technical Session in 36th National Conference on Fluid Mechanics and Fluid Power, Department of Mechanical Engineering, College of Engineering Pune, Maharastra, December 17-19,2009
Prof. K.M. Pandey	Chaired a Technical Session in 36 th National Conference on Fluid Mechanics and Fluid Power, Department of Mechanical Engineering, College of Engineering Pune, Maharastra, December 17-19,2009
	Chair, Technical Session in for the second International Conference on Machine Learning and Computing, Feb.9-10, 2010, (ICMLC 2010), Royal

	Orchid, RAMADA, Bangalore

(d) Invited Lectures / Keynote Speaker

#	*Faculty Name*	*Details*
1	Dr. D. Datta	A lecture on "*Multi-Objective Metaheuristics for Graph Partitioning Problem and Empirical Metrics for Comparing Performances of Multi-Objective Metaheuristics*" at CA3 (UNINOVA), Computational Intelligence Research Group, Lisbon; a member of the European Centre for Space Applications (ECSA) (01 July 2009).
2	Prof. R. Gupta	A lecture on " Prosperity through Productivity at Cachar Paper Mill under HPC" during Feb 2010
3	Prof. K.M. Pandey	Key note speaker for the second International Conference on Machine Learning and Computing, Feb.9-10, 2010, (ICMLC 2010), Royal Orchid, RAMADA, Bangalore

(e) PhDs done/ PhD Thesis Submitted

Name of Scholar	Title of Thesis	Guide
Civil Engg. Department		
S. Paul	Characterization of soil at Silchar under dynamic Loading (thesis submitted)	Prof. A.K. Dey *(First PhD thesis submitted in the Deptt. of Civil Engg of NIT Silchar.)*
B.S. Sil	Sediment flow modeling for River Reaches (thesis submitted)	Prof. P.S. Choudhury
Mechanical Engineering Department		
Agnimitra Biswas	Experimental & Computational Analysis of Vertical Axis Wind Turbines (Thesis submitted)	Prof. R. Gupta *(First PhD thesis submitted in the Deptt. of Mechanical Engg. of NIT Silchar)*
Physics Department		
G. Gope	Preparation of Quantum Dots on polymer Matrix and their applications in Electronics and Optics. (Awarded)	Prof. S.S. Nath
D. Chakdar	Synthesis of Semiconductor quantum Dots and their applications in Photonics and Nonlinear Optics. (Awarded)	Prof. S.S Nath
Humanities & Social Science Department		
K. G. Singh	Security and Development: The Political Economy of Insurgency in Manipur (Awarded)	Prof. G. Das *(First PhD thesis submitted in the Deptt. of HSS of NIT Silchar.)*

R. Nath Choudhury	Swami Vivekananda: Modernity and Social Ethics-A Critical Study (thesis submitted)	Prof. G. Das

(f) Students' Achievements

1. During the reporting year, Mr. Y. Kamaleshwar Singha of final year Mech. Engg. student under the mentor ship of Prof. Rajat Gupta of Mechanical Engg. Deptt.bagged the Best Student Paper Award in the 8th IAA International Conference on Low Cost Planetary Missions (LCPM8) held in Goa during 31st August - 4th September 2009. The International Conference was organized by International Academy of Astronautics (IAA) and hosted by ISRO and ASI. The title of the paper was "Finned Body Planetary Entry".

2. In the same reporting year, a group of pre-final year B.Tech, Mech. Engg. students under the mentorship of Dr. P.K. Patowari of Mechanical Engg. Deptt won the Stage-I of the competition related to DRDO Golden Jubilee Celebrations for Student's Innovative Engineering Products Development Competition and had been awarded an amount of Rs 50,000/-. The title of the work was ''Development of Deployable Low Cost Outdoor Surveillance System with Remote Access to Sensor Imagery''. They participated in Stage-II of the game competition during June 8-9, 2009.

10.3 Sponsored Research Projects

With the initiative of the Director, Dean (Research & Consultancy) and members of faculty, the following sponsored research projects have been awarded to the NIT Silchar during the reporting year-

Sl.No.	***Title of Research Project***	***Name of PI & Department***
1	Special Manpower Development programme for VLSI Design and related software (SMDP-II)	Mr. S.K. Gupta, Asstt. Professor, ECE Department
2	ANN-GA and ANFIS models development for Flood forecasting with multiple inflows in Barak River network	Dr. P. Choudhury, Associate Professor, CE Department
3	L-moments based Regional Extreme Rainfall and Flood Frequency Analysis for Hydro-meteorological sub zones 2(b) & 2(c) of India	Dr. P. Choudhury, Associate Professor, CE Department
4	Management of Soil and land Resources for Eco-restoration of Barak watershed, India using Remote Sensing and GIS Technologies	Dr. Dibakar Chakrabarty, Associate Professor, CE Department
5	Solvent Free Oxidations and brominations of organic substrates catalyzed and/or promoted by Peroxometal complexes	Dr. S.S. Dhar, Asstt. Prof., Chem. Department
6	Experimental Investigation of Surface Integrity in electrodischarge Machining (EDM)	Dr. P.K. Patwari, Associate Prof. & Prof. Rajat Gupta, Mech. Engg. Department
7	Sub threshold Modeling and Simulation of FinFETs	Dr. S. Baishya, Professor in ECE Department

8	Scour of Bridge Pier in Cohesive Soil	Dr. A.K. Barbhuiya, Associate Prof., CE Department
9	Characterization of Fly ash from Paper Mills for Potential	Dr. Ruma Rano. Lecturer, Chem. Department
10	Application of Intelligent Techniques to improve the operating Flexibility of Power systems under both Conventional and Deregulated Environment	Dr. Nidul Sinha, Professor in EE Department
11	Development of a Commercial Rheometer for High Performance Concrete	Dr. A.I. Laskar, Associate Prof., CE Department
12	Behavior of clay damper under impact loading	Dr. A.K. Dey, Prof. in CE Department
13	Reduction of Stress Wave Amplitudes using clay Dampers	Dr. A.K. Dey, Prof. in CE Department
14	Modernization of Structural Engg. lab	Dr. A.K. Dey, Prof. in CE Department
15	Modernization of Geotechnical Engg. lab	Dr. A.K. Dey, Prof. in CE Department
16	Modernization of Earthquake Engg. Lab	Dr. A.K. Dey, Prof. in CE Department
17	Modernization of GIS Lab under CE Department	Dr. A.K. Dey, Prof. in CE Department
18	River bank erosion and its counter measures	Dr. A.K. Barbhuiya, Associate Prof. in CE Department
19	Non Conventional Energy Systems	Dr. A.K. Roy, Prof. in EE Department
20	Modernization of Power Electronics and Electric Drives Lab	Dr. Nidul Sinha, Prof. in EE Department
21	Modernization of DSP and Embedded lab	Mr. K.L. Baishnab, Asstt. Prof. in ECE Department
22	Energy Quality and Productivity Audit of KVIC based industries in Barak Valley of Assam	Prof. Rajat Gupta, Prof. in Mech. Engg. Department
23	Extraction of Pineapple Fibre for making commercial products	Prof. Rajat Gupta, Prof. in Mech. Engg. Department

Audit Certificate and Report on the accounts of National Institute of Technology, Silchar for the year 2009-2010

STATEMENT OF ACCOUNTS

FOR THE FINANCIAL YEAR 2009-2010