NATIONAL INSTITUTE OF TECHNOLOGY



National Institute of Technology Nagaland Chumukedima, Dimapur-797 103, Nagaland (under the Ministry of Human Resource Development, Government of India)

t: 03862 240343 | w: www.nitnagaland.ac.in

Annual Report Part - I

1. OVERVIEW

1.1 Introduction

National Institute of Technology Nagaland, a higher education technical Institute of National importance is located at Chumukedima (Dimapur), Nagaland. It is one among the ten newly approved NITs by the Government of India in the year 2009 under the 11th Five Year Plan. This Institute was started initially to function from the academic year 2010, under the mentorship of NIT Silchar in Assam for two years. At the end of the second year, as per schedule, the first academic session of this Institute started functioning on September 2012 in its permanent campus in Chumukedima, Dimapur.

The Institute is located in a picturesque hilly terrain which was identified for a permanent campus for this Institute during January 2012. This place has a healthy climate with moderate temperature ranging from 15°C to 33°C and an average annual rain fall of 300mm. The foundation stone for this Institute was laid by the then Hon'ble Minister of Human Resource Development (and Minister of Communications and Information Technology), Government of India on 13th October, 2012.

This Academic Annual Report is our own report card, providing a transparent measurement of how well we are serving our students' needs and guiding our continuous improvement.

1.2 Access to the permanent campus

The campus is well-connected by air, train and road. Dimapur Airport is about 14 Km and Railway Station is about 18 Km from the campus. Convenient air services are available from and to Kolkata. Regular train services are available from Guwahati to Dimapur. National Highway 29 (NH 29) run through Chumukedima connecting Guwahati in the west which is at a distance of about 300 km and the capital city Kohima in the south east at a distance of 60 Km. Day and Night bus / taxi services are available these cities from Chumukedima.

1.3 Permanent Campus

The land of 291 acres (which had been originally allotted for the Office of the Deputy Commissioner) was handed over by the Government of Nagaland to NIT Nagaland with few buildings for the establishment of its permanent campus. The infrastructure for class rooms, hostel and dining blocks for Boys and Girls were established initially with bamboo structures and thereafter with pre-fabricated buildings. Academic and administrative activities were conducted in the already existing buildings after appropriate refurbishment. Pre-fabricated structures for new class room blocks, laboratories and hostels have been constructed. The Institute's administration goal is to make NIT Nagaland a 'Green Campus' by preventing deforestation, hunting and fishing within its jurisdiction and also actively engaging in 'Tree Plantation' every year on the World Environmental Day i.e. on 5th of June.

1.4 Vision and Mission

Education must evolve to help students succeed in the 21st century economy and NIT Nagaland is trying its best to fulfil its vision to be at the forefront of this movement. We plan to be drivers of innovation within higher education by developing adaptive methodologies that help our students achieve their educational and professional goals.

Vision

To advance knowledge through quality education and research, to cultivate invention improving the human condition and to educate students for a lifetime of professional achievement, service to society and individual fulfilment – moving our world towards a more sustainable path.

To build degree programmes that directly address the shifting economic needs of a skilled workforce and the academic challenges faced by working learners.

Mission

The mission is to advance knowledge and educate students in Science, Technology and other areas of scholarship that will not only best serve this region, but also this nation and the world in the 21st century.

NIT Nagaland is committed to generate, disseminate and preserve knowledge and to work with others to bring this knowledge to bear on the nation's great challenges. NIT Nagaland is dedicated to provide its students with an education that combines rigorous academic study and the excitement of discovery with the support and intellectual stimulation of a diverse campus community. We seek to develop in each member

of the community the ability and passion to work wisely, creatively and effectively for the betterment of humankind.

NIT Nagaland shall strive continuously to:

Impart and develop the skills of the students in order to shape them as outstanding professionals with high ethical standards to solve the societal problems.

Achieve academic excellence through dedication to duty, along with team spirit, commitment to research, innovation in learning and faith in human values.

Mold the students with the state-of-the-art technology resources to match the expectations of the industry and society.

Provide intellectually stimulating environment for the development of human potential to its fullest extent so that intellectually capable and imaginatively gifted leaders can emerge in a wide range of professions needed by the nation.

Provide scientists and technologists, who would be the leaders in research and participate in design, development and technology management of the country to meet global challenges.

1.5 Human Resources

The Institute has since received sanction for faculty and non-faculty posts as per its students' strength. However, the entire process of recruitment could not be completed due to unavailability of qualified candidates willing to serve in this remote area of the country. This problem is not unique. Most of the Centrally-funded Technical Institutes in the North-Eastern Region are facing the same problem. This issue needs immediate attention and solution at the highest possible level. In spite of these difficulties, this Institute is fortunate enough to start its academic journey with the available human resources, infrastructural facilities, etc.

1.6 Road Ahead

This Institute is trying its best to take care of the required academic activities, research work etc. with the existing faculty members, laboratories, library and IT facilities. It has also provided full-fledged hostel facilities located within the campus to all of its students. Due compassion and care is being paid toensure that the students do not feel that they are staying away from home, which provides a congenial

ambience to enable the students to continue their studies in a proper manner.

1.7 Responsibilities

The Institute has been established for imparting technical education to promote multicultural understanding in the State, where students can utilize their skills and proficiency, guiding them into prospective horizons, thereby finding a vocation in which each individual is best fit for. The nobility of the Institute has reframed the mind-set of the people of Nagaland, enabling them to rebuild a better society. NIT Nagaland has indeed raised the hopes of social welfare. Being a premier technological Institute of the State, it aims at promoting the students of Nagaland by advocating scientific and technical pursuits in a rich-resourced topography, which is an excellent measure of learning, understanding and employment.

NIT Nagaland is also responsible for accomplishing a noble task of catering to the needs of the local people and fulfilling the aspirations of the talented youths belonging to the poorest among poor backward people residing in the remotest areas of the State. In order to ensure that the students can avail the facilities of Technical Education, the Institute has to play a bigger role while providing suitable training programme to the students at 10+2 stage in the schools of the State. The Institute is also striving hard to provide necessary technological know-how to the local industries so that the overall pace of industrial development of the State is expedited.

1.8 Conclusion

The Institute has been through many difficulties since its establishment in 2010; but ultimately it has won over all the challenges and is moving forward with more than 455 students on roll, and many excellent members of faculty and competent administrative staff. The Institute is also quite confident to accomplish the entrusted tasks and fulfil its dreams in near future.

2. STATUTORY BODIES

2.1 Board of Governors

The Ministry of Human Resource Development constituted the Board of Governors (BoG) vide itsLetter No. F.No.27-3/2012-TS.III dated 05.10.2012. The current members of the BoG are listed below (Table 2.1):

Table 2.1 Members of the BoG

Sl. No	Name & Designation	Position		
1	Shri Suparno Moitra, Chairman, Board of Governors, NIT Nagaland	Chairperson		
2	Additional Secretary, Department of Higher Education, MHRD	Member		
3	Financial Advisor, Department of Higher Education, Integrated Finance Division, MHRD	Member		
4	Dr. Themrichon Tuithung, Director In-Charge, NIT Nagaland	Member		
5	Dr. V. Jagadeesh Kumar, Professor, Department of Electrical Engineering & Director, Central Electronics Centre, IIT Madras	Member		
6	Dr. Ajay S. Kalamdhad, Associate Professor, Department of Civil Engineering, IIT Guwahati	Member		
7	Dr. G. Venkatesh, Director, Sasken Communication Technologies Ltd, Bangalore Membe			
8	Prof P.S. Robi, Deputy Director, IIT Guwahati	Member		
9	Mr. Binod Doley, Registrar, NIT Nagaland (Secretary)	Member -Secretary		

Shri Suparno Moitra, Former Secretary, Bengal Chamber of Commerce and Industry, Kolkata, was nominated as the second Chairman of the Board of Governors, National Institute of Technology Nagaland.

Dr. Themrichon Tuithung Professor, Department of Computer Science and Engineering, National Institute of Technology Nagaland is appointed as the Director In-charge of National Institute of Technology Nagaland and she assumed charge on 8th February 2017.

2.2 Finance Committee

The Finance Committee was constituted as per the NIT Act 2007, NIT (amendment) Act 2012 and the First Statutes of the NITs with the approval of the Board of Governors. The current members of the Finance Committee are mentioned below in Table 2.2:

Table 2.2 Members of the Finance Committee

Sl. No.	Name & Designation	Position	
1	Shri Suparno Moitra, Chairperson, NIT Nagaland	Chairperson	
2	Joint Secretary, Department of Higher Education, MHRD or his nominee Member		
3	Financial Advisor (Ministry of Human Resource Development) or his nominee, Integrated Finance Division, MHRD		
4	Dr. Themrichon Tuithung, Director In-Charge, NIT Nagaland	Member	
5	Dr. V. Jagadeesh Kumar, Professor, Department of Electrical Engineering & Director, Central Electronics Centre, IIT Madras Member		
6	Mr. Binod Doley, Registrar, NIT Nagaland (Member Secretary)	Member -Secretary	

2.3 Building and Works Committee

The Building and Works Committee was constituted with the approval of the Board of Governors and the members are listed below in Table 2.3:

Table 2.3 Members of the Building and Works Committee

Sl. No.	Name & Designation	Position		
1	Director, NIT Nagaland	Chairperson		
2	Director (TE), Department of Higher Education, MHRD	Member		
3	Director (Finance), Department of Higher Education, Integrated Finance Division, MHRD	, Integrated Member		
4	Dr. V. Jagadeesh Kumar, Professor, Department of Electrical Engineering Director, Central Electronics Centre, IIT Madras	Member		
5	Dr. V. Sankaranarayanan, Former Member Secretary, Tamil Nadu State Council for Science and Technology & Former Director, Tamil Virtual University, Director (University Projects), B.S. Abdur Rahman University	Member		
6	Chief Engineer, PWD (Housing), Kohima, Nagaland	Member		
7	Chief Engineer, Department of Power, Kohima, Nagaland Member			
8	Associate Dean (Planning & Development), NIT Nagaland	Member		
9	Mr. Binod Doley, Registrar, NIT Nagaland	Member -Secretary		

2.4. Senate

As per the approval of the Board of Governors, the Senate of the Institute was constituted. The members of the Senate are mentioned below in Table 2.4:

Table 2.4 Members of the Senate

Sl. No.	Name & Designation	Position
1	Dr. Themrichon Tuithung, Director In-Charge, NIT Nagaland	Chairperson
2	Dr. V. Jagadeesh Kumar, Professor, Department of Electrical Engineering Director, Central Electronics Centre, IIT Madras	Member
3	Dr. V. Sankaranarayanan, Former Member Secretary, Tamil Nadu State Council for Science and Technology & Former Director, Tamil Virtual University, Director (University Projects), B. S. Abdur Rahman University	Member
4	Dr. R.R. Bhargava, Emeritus Professor, Department of Mathematics, IIT Roorkee	Member
5	Dr. Rowena Robinson, Professor, Department of Humanities and Social Sciences, IIT Guwahati	Member
6	Dr. Narayana Prasad Padhy, Professor, Department of Electrical Engineering, IIT Roorkee	Member
7	Dr. S. R. Mahadeva Prasanna, Professor, Department of Electronics and Electrical Engineering, IIT Guwahati	Member
8	Dr. S. Selvakumar, Professor and Head, Department of Computer Science and Engineering, NIT Tiruchirappalli	Member
9	Dr. N. Ammasai Gounden, Professor, Department of Electrical and Electronics Engineering, NIT Tiruchirappalli	Member
10	Dr. B. Venkataramani, Professor, Department of Electronics and Communication Engineering, NIT Tiruchirappalli	Member
11	Dr. R. Kumar, Dean (Academic) & Professor, Department of Electronics and Instrumentation Engineering, NIT Nagaland	Member

12	Dr. Dushmanta Kumar Das, Assistant Professor and Head Department of Electrical and Electronics Engineering, NIT Nagaland	Member
13	Dr. P. Chinnamuthu, Assistant Professor and Head, Department of Electronics and Communication Engineering, NIT Nagaland	Member
14	Dr. Jyoti Prasad Borah, Assistant Professor and Head, Department of Science and Humanities, NIT Nagaland	Member
15	Mr. Nzanthung Ngullie, Assistant Professor, Department of Civil Engineering, NIT Nagaland	Member
16	Mr. Binod Doley, Registrar, NIT Nagaland (Secretary)	Member –Secretary

2.5 Meetings of The Statutory Bodies

The venue and date of various important meetings of the statutory bodies held during the financial year 2016-2017 are mentioned below in Table 2.5:

Table 2.5 List of Statutory Body meetings held during 2016-2017

Sl. No.	Meeting	Venue	Date
1	Fifth meeting of Finance Committee	NIT Transit House	17-08-2016
2	Eighth Board of Governors	NIT Transit House	28-07-2016
3	Eighth meeting of the Senate	NIT Nagaland	07-01-2017
4	Eighth Meeting of Building and Works Committee	NIT Nagaland	07-01-2017

2.6 Board of Studies

The meetings of the Board of Studies were convened during January to March 2017 for the Departments of Electrical and Electronics Engineering, Electronics and Communication Engineering, Computer Science and Engineering, Electronics and Instrumentation Engineering, Civil Engineering and Mechanical Engineering in order to revise the syllabus for the UG and PG Programmes.

2.7 Performance Analysis Committee

The Performance Analysis Committee meeting was held for various Departments at NIT Nagaland to analyze the results of the odd semester during the academic year 2016-2017 for all UG, PG and Five year integrated dual degree programmes.

The Deputy Registrar (Academic) submitted the End Semester Examinations Results and Tabulation Mark Register generated from the Academic Performance Information System (APIS) for the above said batches to the members and the same has been scrutinized and verified.

The question papers for all assessments and end semester examinations were also submitted to the external members for scrutiny. The members gave satisfactory note about the quality of question papers. The randomly selected answer scripts, which were evaluated by the Faculty, had also been submitted to scrutinize the evaluation process. The procedure adopted for moderation of marks in border cases had also been discussed. The members were satisfied and accorded their appreciation that everything is in-line with the academic systems as per expected standards.

3. ADMINISTRATION

3.1 Administrative Officers

Apart from the statutory posts such as Director and Registrar, the following faculty members listed in Table 3.1 are given additional responsibilities to look after various academic and administrative activities of the Institute with the approval of the Senate. Later the same had been intimated to the Board of Governors.

Table 3.1 Administrative Officers

Sl. No.	Name	Designation			
1	Dr. R. Kumar	Dean (Academic)			
2	Dr. G. Seetharaman	Dean(Research and Consultancy)			
3	Dr. R. Dhanalakshmi	Dean(Faculty Welfare)			
4	Mr. Nzanthung Ngullie	Associate Dean (Planning and Development)			
5	Dr. Arambam Neelima	Associate Dean (Academic)			
6	Dr. Jay Chandra Dhar	Associate Dean (Research)			
7	Dr. Amrit Puzari	Associate Dean (Student Affairs)			
8	Dr. Dushmanta Kumar Das	HoD, Department of Electrical and Electronics Engineering			
9	Dr. Themrichon Tuithung	HoD, Department of Computer Science and Engineering			
10	Dr. P. Chinnamuthu	HoD, Department of Electronics and Communication Engineering, Faculty In-charge Purchase Section			

11	Dr. Jyoti Prasad Borah	HoD, Department of Science and Humanities
12	Dr. Naorem Khelchand Singh	Faculty In-charge, Library, Executive Warden (Hostels)
13	Dr. Jhimli Bhattacharyya	Deputy Warden (Girls Hostels)
14	Dr. Shouvik Dey	Deputy Warden (Boys Hostels), Data Center Incharge
15	Dr. Debarun Dhar Purkayastha Purkayastha	Deputy Warden (Boys Hostels)

3.2 Administrative / Non-Teaching Staff

The following members (listed below in Table 3.2) were selected based on the recommendations of the Staff Selection Committee through regular interview following the model recruitment rules.

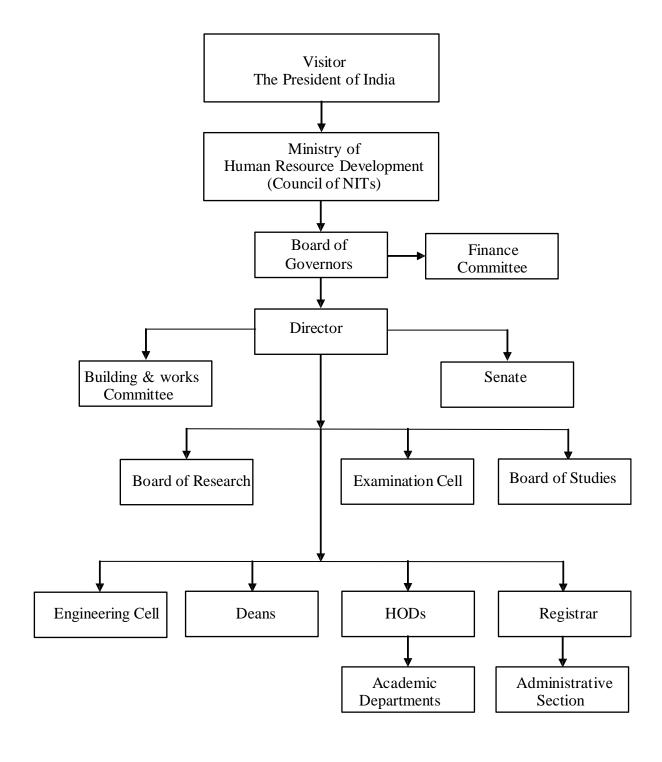
Table 3.2 Administrative / Non-teaching Staff

Sl. No.	Name	Designation	Date of Joining	
1	Mr. Binod Doley	Registrar	30-06-2015	
2	Dr. Lairenlakpam Shanta Meitei	Assistant Librarian	11-08-2014	
3	Mr. Deep Jyoti Gogoi	Sports Officer	01-04-2015	
4	Mr. Eliyamo Kithan	Superintendent	09-03-2015	
5	Mr. Mhonthung Ngullie	Accountant	09-03-2015	
6	Ms. Arenmongla	Nurse	12-03-2015	
7	Mr. Bikash Sarma	Technical Assistant (CSE)	18-08-2014	
8	Mr. Kamal Kant Kashyap	Technical Assistant (ECE)	11-08-2014	
9	Mr. Seizalal Singson	Technical Assistant (ECE)	08-07-2014	

10	Mr. V. Mathivanan	Laboratory Assistant (CSE)	08-07-2014	
11	Mr. Yanger. A. Walling	Junior Assistant	09-03-2015	
12	Mr. Benrio Ngullie	Junior Assistant	09-03-2015	
13	Ms. Sunita Mazumder	Junior Assistant	09-03-2015	
14	Mr. Pappu Kumar Sharma	Junior Assistant	08-04-2015	
15	Mr. Sorenthung Ovung	Library Attendant	08-07-2014	
16	Ms. Meribeni Ngullie	Library Attendant	08-07-2014	
17	Mr. Neichuto Kin	Workshop Attendant	01-08-2014	
18	Ms. Siagailakle	Multitasking Staff	12-03-2015	
19	Ms. Kevisinuo Shuya	Multitasking Staff	12-03-2015	
20	Raju Basumatry	Junior Engineer	01-04-2016	

3.4 Administrative structure:

Figure 3.1. Administrative Structure of NIT Nagaland



4. ACADEMIC ACTIVITIES

4.1 National Institute of Technology in Nagaland

With the coming of NIT Nagaland to Chumukedima (Dimapur), the NIT aspirants have been much benefited. The home state reservation is being one of the key opportunities where many students from Nagaland may get admission to the Institution. Apart from the increase in technical manpower, development of the locality and the society is conspicuously visible with the establishment of NIT Nagaland.

4.2 Courses Offered

The Institute offers four years under graduate programmes (B.Tech.) in Electrical and Electronics Engineering, Electronics and Communication Engineering, Computer Science and Engineering, Electronics and Instrumentation Engineering, Civil Engineering and Mechanical Engineering. The Institute offers four post graduate programmes (M.Tech.) in Power Systems Engineering, Computer Science and Engineering, VLSI Systems and Communication Engineering and five year dual degree programme(B.S.M.S) in Materials Science and M.Sc Data Analytics.

From the academic year 2016-2017, the Institute started the following programmes:

Sl. No.	Degree Programme	Intake
1	B.Tech. (Civil Engineering)	30
2	B.Tech. (Mechanical Engineering)	30
3	B.Tech. (Electronics and Instrumentation Engineering)	30
4	M.Tech. (Communication Engineering)	15

4.3 Students Strength:

The students were admitted through CSAB for the academic year 2016-17 and the details of the total student's intake are furnished below (Table 4.1, 4.2 and 4.3):

Table 4.1 Bachelor of Technology - Student Strength

Year	CSE	ECE	EEE	EIE	Civil	Mech	Total
2013-14	23	19	23	-	-	-	65
2014-15	22	19	21	-	-	-	62
2015-16	12	16	18	-	-	-	46
2016-17	17	06	17	6	16	18	80

Table 4.2 Master of Technology & Master of Science – Student Strength

Year	VLSI	Power Systems	CSE	C.E	M.Sc. Data Analytics	Total
2014-15	14	13	11	-	-	38
2015-16	7	7	4	-	-	18
2016-17	5	7	2	5	01	20

Table 4.3 B.S.M.S. (Materials Science) – Student Strength

Year	B.S.M.S. Materials Science	Total
2014-15	07	07
2015-16	02	02
2016-17	04	04

4.7 Ph.D. Degree Programme

To provide facilities for research activities and to encourage the staff members to pursue research, Ph.D. programme was introduced during the academic year 2012-2013 with special regulations framed in the departments of Electrical and Electronics Engineering, Electronics and Communication Engineering, Computer Science and Engineering, Electronics and Instrumentation Engineering, and Mechanical Engineering, Management Studies, Physics, Chemistry, Mathematics and Humanities and Social Sciences. With the approval of the Senate, research scholars had been admitted into all the departments through regular interview. There are 92 research scholars in total pursuing their research in the Institute as Full time / Part time (Internal) / Part time (External) candidates. The Ph.D. programme is governed by the Special regulations framed to suit the requirements of the newly established Institute. The following table (Table 4.4) shows the number of candidates admitted (department-wise) till the academic year 2016—2017.

Table 4.4 Department-wise Research Scholars' Strength

Sl. No	Department	No. of scholars admitted
1	Electrical and Electronics Engineering	14
2	Electronics and Communication Engineering	16
3	Computer Science and Engineering	28
4	Electronics and Instrumentation Engineering	04
5	Mechanical Engineering	01
6	Management Studies	01
7	Maths	06
8	Physics	06
9	Chemistry	07
10	Humanities and Social Sciences	09
	Total	92

4.8 Details of Guest / Special Lectures

To cope up the academic requirements, Guest Faculties were invited and classes were conducted regularly. The details of the guest lectures delivered during the academic year 2016-17 to meet the academic requirements are furnished below in the Table 4.5:

Table 4.5 Details of Guest / Special Lectures

Sl. No	Department	Name of Guest Faculty	Date of the event	Designation / Resource Person Organization	Course / Lecture Title
1	EEE	Prof. Chandan Kumar Chanda	2nd September- 5th September 2016	IIEST, Shibpur	Power System Stability
2	EEE	Prof. Abhinandan De	2nd November- 5th November 2016	IIEST, Sibpur	High Voltage Engineering
3	EEE	Prof. T. N. Saha	5th September - 13th September 2016	Retired Professor, IIT Kharagpur	Power System Planning
4	Science & Humanities	Dr. Pradosh Prasad Chakrabarty	10/08/2016	Senior Principal ScientistCSIR- Indian Institute of Chemical Technology, Hyderabad	Biodiesel: Problems and Prospects
5	Science & Humanities	Professor T.N. Shanmugam	27/08/2016	Professor Visiting Faculty, NIT Nagaland	Importance of mathematical knowledge for career growth of engineering students

4.9 Result statistics

The fourth batch of B.Tech. Students completed their course and graduated in the academic year 2016-2017. All the grade cards along with their provisional degree certificates, transfer certificates, migration certificates and conduct certificates were provided to those students who have successfully completed their degree programme. The result statistics is mentioned below (Table 4.13):

Table 4.6 No. of students graduated in 2016-2017

Sl. No.	Degree Awarded (2013-2017Batch)	No. of Students	No. of Students passed
1	B.Tech. in Computer Science and Engineering	23	21
2	B.Tech. in Electronics and CommunicationEngineering	19	17
3	B.Tech. in Electrical and Electronics Engineering	23	21

Table 4.7 No. of students post graduated in 2016- 2017

Sl.no	Degree Awarded (2014-2016 Batch)	No. of Students Appeared	No. of Students passed
1	M.Tech. in Computer Science and Engineering	04	04
2	M.Tech. in Power Systems Engineering	06	06
3	M.Tech. in VLSI Systems	07	07

The Institute recognizes the efforts of the students, who have shown academic excellence, by awarding Gold Medals to the toppers of the Institute and also at Department level. The Table 4.8 below shows the list of students who have been awarded with Gold Medals:

Table 4.8 Institute Topper (2013-17 Batch)

Sl. No.	Registration No.	Name of the Student	CGPA	Classification	Department
1.	2013103087	BODAVULA NAGA SAI KRISHNA	9.31	First Class with Distinction	EEE

Department Level Toppers (2013-2017 Batch)

Sl. No.	Registration No.	Name of the Student	CGPA	Classification	Department
1	2013105071	INDRASEN SINGH	9.25	First Class with Distinction	CSE
2	2013104099	NITESH SRIVASTAVA	8.90	First Class with Distinction	ECE
3	2013103087	BODAVULA NAGA SAI KRISHNA	9.31	First Class with Distinction	EEE

5. Academic Departments

5.1. Computer Science and Engineering

The list of Faculty / Staff in the Department of Computer Science and Engineering are mentioned below in the Table 5.1:

Table 5.1 Faculty in Department of Computer Science and Engineering

Name of the Faculty	Designation	
Dr. Themrichon Tuithung	Professor	
Dr. R. Dhanalakshmi	Associate Professor	
Dr. Shouvik Dey	Assistant Professor	
Dr. Neelima Arambam	Assistant Professor	
Mr. Arul Valan	Assistant Professor	
Mr. Nagaraju	Assistant Professor	
Mr. Lithungo Murry	Assistant Professor	
Mr. Dilwar Hussian	Assistant Professor	
Mr. Sibesh Lodh	Assistant Professor	
On Cont	ractual Basis	
Ms. Rumpa Hazarika	Assistant Professor	
Mr. Dolendro Singh	Assistant Professor	

The list of laboratories available in the Department of Computer Science and Engineering are mentioned below (Table 5.2):

Table 5.2 Department of Computer Science and Engineering – Laboratories

Sl. No.	Name of Laboratory
1	Programming Laboratory
2	Computer Networks Laboratory
3	XML and Web Services Laboratory
4	Computer Graphics Laboratory
5	Operating Systems Laboratory
6	Database Management Systems Laboratory
7	Service Oriented Architecture Laboratory

5.1.1 Publications and Patents by the Faculty of the Department - CSE:

- 1. Manashee Kalita and *Themrichon Tuithung*, "A Comparative Study of Steganography Algorithms of Spatial and Transform Domain", International Journal of Computer Applications (0975-8887), National Conference on Resent Trends in Information Technology (NCIT 2016), pp 9-14.
- 2. Manashee Kalita, and *Themrichon Tuithung*, "A novel stenographic method using 8-neighboring PVD (8nPVD) and LSB substitution", International Conference on Systems, Signals and Image Processing (IWSSIP 2016) Bratislava, Slovakia 23-25 May 2016, pp 277-282.
- 3. Manashee Kalita, Swanirbhar Majumder and *Themrichon Tuithung*, "A spatial domain stenographic approach using pixel pair differencing and LSB substitution", 4th International Conference on Signal Processing and Integrated Networks (SPIN) Noida, India, 2-3 Feb. 2017, pp 304-309

- **4. R. Dhanalakshmi**, A. Vadivel, P. Parthiban, "Shortest Path Routing in Solar powered WSNs using Soft computing techniques", **Journal of Scientific & Industrial Research**, Vol.76, pp.23-27, Jan 2017
- 5. SonuRajak, P.Parthiban, **R. Dhanalakshmi** "Sustainable transportation systems performance evaluation using fuzzy logic", Ecological Indicators –Elseveir, Vol.71, pp. 503-513, July 2016
- 6. P.Parthiban, SonuRajak, **R. Dhanalakshmi**, "A Hybrid Meta heuristics Approach for a Multi-Depot Vehicle Routing Problem", 6th International and 27th All India Manufacturing Technology, Design and Research Conference (AIMTDR-2016), December 16-18,2016
- 7. **Arambam Neelima**; Kh Manglem Singh, "Perceptual Hash Function based on Scale-Invariant Feature Transform and Singular Value Decomposition", **The Computer Journal**, Vol. 59(9), pp. 1275–1281, **September 2016**.
- **8. Arambam Neelima**; Kh Manglem Singh, "Collusion and rotation resilient video hashing based on scale invariant feature transform" **The Imaging Science Journal**, Vol. 65(1), pp. 66-74, **March 2017**.
- **9. L. Dolendro Singh** and Kh. Manglem Singh, "Cryptanalysis of symmetric key image encryption using chaotic Rossler system. Optik **International Journal for Light and Electron Optics**", vol. 135, pp. 200-209, February 2017.
- **10. L. Dolendro Singh** and Kh. Manglem Singh, "Cryptanalysis of Image Encryption Scheme Based on Chaotic Tent Map" **International Journal of Precious Engineering Research and Application**, vol. 1, pp. 18-22, September 2016.
- 11. L. Dolendro Singh and Kh. Manglem Singh, "Cryptanalysis of Rawat et al. Fragile Watermarking Scheme with Successful Creation of Counterfeit Watermarked Image", International Journal of Innovations & Advancement in Computer Science, vol. 6, pp. 93-96, March 2017.

5.1.2 Seminar/ Workshops / Conferences / Short-term Courses / organized / attended by the Faculty:

- 1. R. Dhanalakshmi organised a workshop on Intellectual Property Rights on 4th Nov 2016.
- 2. R. Dhanalakshmi organised a workshop on Networking Benchmark tools on 3rd to 6th October 2016.

5.1.3 Research Projects:

1. Dr. Shouvik Dey (Prinicipal Investigator): Project titled "Development of an Automated Intelligent System to comprehend Non-Communicable Autistic Expressions", funded by SERB and Sanctioned amount is 1645600/-, for a duration of 3 years (2016 – 2019)

5.2 Electronics and Communication Engineering

The list of Faculty/Staff in the Department of Electronics and Communication Engineering are mentioned below (Table 5.3):

Table 5.3 Faculty in Department of ECE

Name of the Faculty	Designation	
Dr. P. Chinnamuthu	Assistant Professor	
Dr. G. Seetharaman	Associate Professor	
Dr. Debadatta Pati	Assistant Professor	
Dr. Naorem Khelchand Singh	Assistant Professor	
Dr. Jay Chandra Dhar	Assistant Professor	
Ms. Palungbam Roji Chanu	Assistant Professor	
Mr. Madhusudan Singh	Assistant Professor	
On Con	ntractual Basis	
Dr. Hraziia	Assistant Professor	
Mr. Bijit Choudhuri	Assistant Professor	

The list of laboratories available in the Department of Electronics and Communication Engineering are mentioned below (Table 5.4):

Table 5.4 Department of ECE- Laboratories

Sl. No	Name of Laboratory
1	Electronic Circuit Lab
2	VLSI Design Lab
3	Optical and Microwave Lab
4	Digital Electronics Lab
5	Electronic Circuit Lab
6	LIC Lab
7	Communication Engineering Lab
8	DSP and Embedded Systems Lab

5.2.1 Publications by the Faculty of the Department -:

- 1. L. Sophia Devi and P. Chinnamuthu "Synthesis of Erbia decorated Titania Nanowires Array using Glancing Angle Deposition Technique", ICETNMST, Dimapur, India, January 1st -6th, (2017).
- 2. Monalisa Hazarika, J. P. Borah and P. Chinnamuthu, "Synthesis and Characterization of MnFe2O4/MWCNT Nanocomposites by Hydrothermal Method and their Application as photo catalyst", International Conference on Advances in Nanotechnology, Assam, India, 9-13th January, (2017).
- 3. Ch. Khengdauliu ,Jay Chandra Dhar "Enhanced Photodetection using Ag nanoparticle decorated ZnO thin film" ICETNMST-2017 NIT Nagaland, 4-6th Jan 2017.
- 4. Romeo Meitei, Naorem Khelchand Singh, "Synthesis of In2O3 nanowires forth application of LPG

- sensor" ICETNMST-2017 NIT Nagaland, 4-6th Jan 2017.
- 5. Madhusudan Singh, J. Mishra and D. Pati "Usefulness of linear prediction residual signal for development of replay attacks detection system" NCC, 4-6 March 2017.
- 6. Palungbam Roji Chanu, "Vector Median Filters: A survey", IJCSNS, vol.16, no.12,Dec. 2016

5.2.2 Seminar/ Workshops / Conferences / Short-term Courses / organized / attended by the Faculty:

- Ms. Palungbam Roji Chanu attended "Xilinx vivado design flow targeting Xilinx FPGA and Zynq SOC architecture", NIT Nagaland, April 2016
- 2. Ms. Palungbam Roji Chanu attended "Writing magic with latex", NIT Nagaland, May 2016

5.3 Electrical and Electronics Engineering

The list of Faculty/staff in the Department of Electrical and Electronics Engineering are mentioned below

Table 5.5 Faculty in Dept. of Electrical and Electronics Engineering

Name of the Faculty	Designation
Dr. Dushmanta Kumar Das	Assistant Professor and HOD
Dr. Dipu Sarkar	Assistant Professor
Ms. D. Ganga	Assistant Professor
Mr. M. Prakash	Assistant Professor
Ms. B. Shakila	Assistant Professor
Mr. Swaraj Banerjee	Assistant Professor

On Contractual Basis	
Dr. Asadur Rahman	Assistant Professor
Mr. Gandikota Gurumurthy	Assistant Professor
Dr. Shekha Rai	Assistant Professor

The list of laboratories available in the Department of Electrical and Electronics Engineering are mentioned below:

Table 5.6 Department of Electrical and Electronics Engineering – Laboratories

Sl. No.	Name of Laboratory
1	Power Systems Laboratory
2	Advanced Control Systems Laboratory
3	Electrical Machines and Drives Laboratory
4	Embedded Systems and Design Laboratory
5	Power Electronics Laboratory
6	Data Acquisition Laboratory
7	Instrumentation Laboratory

5.3.1 Publications by the Faculty of the Department -:

1. A. Rahman, L. C. Saikia, N. Sinha. "Automatic Generation Control of Thermal System Using Biogeography Based Optimized Controller" IET Generation, Transmission & Distribution, Vol. 10, Issue. 16, pp. 4118–4129, Dec 2016.

5.3.2 Seminar/ Workshops / Conferences / Short-term Courses / organized / attended by the Faculty:

- **1. Dushmanta K. Das** organized Three days Workshop on "Writing Magic With Latex" as a coordinator on 18th May 2016.
- **2. Dushmanta K. Das** organized One day Workshop on "Internet of Things" as a coordinator from 28th to 30th July 2016
- 3. **Dushmanta K. Das** organized Solar Awareness Training Programme for North-East State (Nagaland) 12th-21st Jan 2017 sponsored by MNRE of project cost 9,30,000/- (Nine Lakhs and Thirty Thousand Only)
- **4. Dushmanta K. Das** attended one day workshop on National Academic Depository sponsored by MHRD on 6th Sep 2016 at Delhi.
- **Dr. Dipu Sarkar** attended a Short Term Training Programme on Industrial Automation using PLC, DCS, SCADA at NITTTR, Kolkata, 24th October, 2016 to 28th October, 2016.
- **6. Dr. Dipu Sarkar** organized a 1 day Work shop on "Recent Trends in Power Systems Engineering" at NIT Nagaland, 25th February, 2017.
- **7. D. Ganga** attended Short Term Course on Condition Monitoring of Mechanical and Electrical Systems using Advanced Signal Processing, IIT Indore, March 6-7, 2017.
- **8. D. Ganga** attended Workshop in Real Time Hypervisor, National Instruments, Bangalore, September 22-24, 2016.
- **9. D. Ganga** attended Workshop in Bluemix Applications, Benchmark, Chennai, September 26-29, 2016.
- **10. Dr. A. Rahman**, Organized 'One-Day Workshop on Writing Magic with Latex', 18th May 2016.
- **11. Gandikota Gurumurthy** attended a workshop on "Advanced Topics in Robust & Nonlinear Control" at IIT (BHU), Varanasi from February 14-20, 2017.

5.3.2 Departmental Activities:

- 1. Department of EEE organized a 1 day Work shop on "Recent Trends in Power Systems Engineering" at NIT Nagaland, 25th February, 2017.
- 2. Department of EEE organized Three days Workshop on "Writing Magic with Latex" as a coordinator on 18th May 2016.
- 3. Department of EEE organized One day Workshop on "Internet of Things" as a coordinator from 28th to 30th July 2016
- 4. Department of EEE organized Solar Awareness Training Programme for North-East State (Nagaland) 12th-21st Jan 2017 sponsored by MNRE of project cost 9,30,000/- (Nine Lakhs and Thirty Thousand Only)

5.3.3 Invited talk/ Paper Presentation/ Resource Person etc.

- 1. Dr. Dipu Sarkar (Resource Person): Topic 'Application of Advanced Process Control in Power Systems', NITTTR Kolkata extension center: Guwahati, 28-29 March, 2017.
- **2. A. Rahman** (Resource person): Topic 'Hybrid solar power', "Solar Training Project North East (Nagaland)" sponsored by MNRE & NISE, New Delhi held at NIT Nagaland, 19 21 Jan' 2017.
- 3. Gandikota Gurumurthy (Resource Person): Topic 'Solar Training Project-North East (Nagaland)' During January 12-21, 2017 on "Energy Access, Remote Village Electrification and Rooftop off grid using RE Technology"

5.4 Electronics and Instrumentation Engineering

The list of faculty in the Department of Electronics and Instrumentation Engineering are mentioned below

Table 5.7 Faculty in Department of Electronics and Instrumentation

Name of the Faculty	Designation
Dr. R. Kumar	Professor
Dr. Dushmanta Kumar Das	Assistant Professor and HOD
On Contra	ctual Basis
Dr. Shubhashish Bhakta	Assistant Professor

The list of laboratories available in the Department of Electronics and Instrumentation Engineering are mentioned below (Table 5.8):

Table 5.8 Department of EIE- Laboratories

Sl. No.	Name of the Laboratory
1.	DCS &PLC Laboratory
2.	RTOS Laboratory
3.	Virtual Instrumentation Laboratory
4.	Transducers and Sensors Laboratory

5.4.1 Publications by the Faculty of the Department EIE -:

- 1. B. Karthikeyan, Sharad Dixit, **R Kumar**, Srinivasa Rao Inabathini "PROGRAMMING WIRELESS SENSOR NETWORK A REVIEW , Journal of Advanced Research in Dynamical and Control Systems, pp 390 406, 02- Issue,2017.
- 2. M Shanmugasundaram, **R Kumar** and Kittur H M, "Fault Tolerant approaches through Scheduling

in Cloud Computing Environment - A State of Art", Journal of Telecommunication, Electronic and Computer Engineering, Vol. 9 No. 2 pp. 29 - 33,2017.

5.4.1 Seminar/ Workshops / Conferences / Short-term Courses / organized / attended by the Faculty:

- **1. R. Kumar** organized a 3 days workshop on "PLC in Automation" at NIT, Nagaland, Feb. 16th to 18th, 2017.
- **2. R. Kumar** organized a 3 days workshop on "Vxworks7 Programming" at NIT, Nagaland, Feb. 20th to 22nd, 2017.

5.5 Civil Engineering

The list of faculty in the Department of Civil Engineering are mentioned below

Table 5.9 Faculty / Staff in Department of Civil Engineering

Name of the Faculty	Designation
Mr. Nzanthung Ngullie	Assistant Professor
Mr. Kevinguto Khate	Assistant Professor
On C	Contractual Basis
Ms. Yagom Gapak	Assistant Professor
Dr. Maheshkumar Singh	Assistant Professor

The list of laboratories available in the Department of Civil Engineering is mentioned below (Table 5.10, Figure 5.1):

Table 5.10 Department of Civil Engineering – Laboratories

Sl. No.	Name of Laboratory
1.	Surveying Laboratory
2.	Concrete Technology Laboratory
3.	Transportation Engineering Laboratory
4.	Fluid Mechanics Laboratory
5.	Environmental Engineering Laboratory
6.	Geotechnical Engineering Laboratory
7.	Computational Engineering Laboratory
8.	Non Destructive Testing Laboratory



Figure 5.1 Civil Lab

5.5.1 Publications by the Faculty of the Department -:

- **1. Gapak, Y.**, Das, G., Yerramshetty, U. and Bharat, T.V. (2017). "Laboratory determination of volumetric shrinkage behavior of bentonites: A critical appraisal", *Applied Clay Science*, Elsevier, 135, 554-566.
- **2. Gapak, Y.**, Yamsani, S. K., Sreedeep, S and Rakesh, R. R. (2017) "Long-term permeability characteristics of soil-geosynthetic combination used in landfill covers." *Advances in Civil Engineering Materials*, ASTM, 6(1), 296-309.
- **N. M. Singh**, Tauhidur Rahman and Ivan G. Wong, May 2016. "A new ground-motion prediction model for Northeastern India (NEI) crustal earthquakes", Bulletin of the Seismological Society of America, 106(3), 1282-1297.

5.5.2 Seminar/ Workshops / Conferences / Short-term Courses / organized / attended by the Faculty:

- 1. Gapak, Y., Yamsani, S. K. and Sreedeep, S. (2016). "Long term performance evaluation of two layered geosynthetic filter" *19th South East Asian Geotechnical Conference and 2nd AGSSEA conference*, June 2016, Kuala Lumpur, Malaysia.
- **2. Gapak, Y**. and Bharat, T.V. (2016). "Water Flow through Unsaturated Compacted Clays", *International conference on soil and environment*, 22nd to 23rd July, IISC Bangalore.
- 3. Solanki, B., Gapak, Y. and Bharat, T.V. (2016). "Capillary Barrier Effects in Unsaturated Layered Soils", *International conference on soil and environment*, 22nd to 23rd July, IISC Bangalore.
- 4. N. Maheshkumar Singh and Tauhidur Rahman, 2016 "A new method of ground motion simulation", 6th International Conference on recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, August 1-6, IIT Roorkee Extension Centre, India.
- **N.Maheshkumar Singh** and Tauhidur Rahman, 2016 "Ground motion prediction model for crustal earthquakes in north east region of India (NERI), 6th International Conference on recent Advances in Geotechnical Earthquake Engineering and Soil Dynamics, August 1-6, IIT Roorkee Extension Centre, India.

5.5.3 Consultancies:

- 1. Kevinguto Khate (Principal Investigator): Construction of canopy structure (Design) for Airport Authority of India, Dimapur.
- **2.** Kevinguto Khate (Principal Investigator): Construction of MDG Postal Building for Indian Postal Service, Dimapur.
- 3. Nzanthung Ngullie & Kevinguto Khate (Principal Investigators): Independent Review and Monitoring Agency (IRMA) for AMRUT (Atal Mission for Rejuvenation and Urban Transformation) projects under Department of Urban Development, Government of Nagaland.

5.6 Mechanical Engineering

The list of faculty in the Department of Mechanical Engineering are mentioned below

Table 5.11 Faculty in Department of Mechanical Engineering

Name of the Faculty	Designation
Rosang Pongen	Assistant Professor
On Contr	ractual Basis
Dr. Thingujam Jackson Singh	Assistant Professor
Kedumese U Mekrisuh	Assistant Professor

The list of laboratories available in the Department of Mechanical Engineering are mentioned below (Table 5.12):

Table 5.12 Department of ME- Laboratories

Sl. No.	Name of Laboratory
1.	Workshop

5.6.1 Publications by the Faculty of the Department -:

- 1. Thingujam Jackson Singh, S. Samanta, "Influence of Kevlar Hybridization on Dielectric and Conductivity of Bamboo Fiber Reinforced Epoxy Composite", *Journal of Natural Fibers*, DOI: 10.1080/15440478.2017.1279583, Vol. 14, no. 6, pp. 837-845 [SCI indexed]
- 2. Thingujam Jackson Singh, S. Samanta, "Multi-Response Parametric Optimization in Drilling of Bamboo/Kevlar Fiber Reinforced Sandwich Composite", *Material Science and Engineering*, vol. 149, no. 1.
- 3. Thingujam Jackson Singh presented a paper titled as "Modelling for Drilling for Bamboo Kevlar Fiber Reinforced Laminated Proxy composite Material", in NCARIMMIEM, 12th-13th Dec. 2016.
- 4. Thingujam Jackson Singh, presented a paper titled as "A Review on Laser Welding and Friction Stir Welding", in Advances in Welding Technology, held on 10th -11th May 2016.

5.7 Science & Humanities

Table 5.13 Faculty in Department of Science & Humanities

Name of the Faculty	Designation
Dr. Jyoti Prasad Borah	Assistant Professor
Dr. Amrit Puzari	Assistant Professor
Dr. Jhimli Bhattacharyya	Assistant Professor
Dr. Manoj Kumar Patel	Assistant Professor
Dr. Debarun Dhar Purkayastha	Assistant Professor
Dr. Prem Prakash Mishra	Assistant Professor
Dr. Wati Walling	Assistant Professor

On Contractual Basis			
Dr. Nirmala Devi	Assistant Professor		
Dr. Nibedita Paul	Assistant Professor		
Mr. Anirban Majumdar	Assistant Professor		
Dr. Jagat Dwipendra Ray	Assistant Professor		
Dr. Sanjib Choudhury	Assistant Professor		
Dr. Deep Sarmah	Assistant Professor		
Visiti	ng Faculty		
Dr. Rosaline Jamir			
Dr. T. N. Shanmugam			

The list of laboratories available in the Department of Science & Humanities is mentioned below (Table 5.14):

Table 5.14 Department of Science & Humanities – Laboratories

Sl. No.	Name of Laboratory
1	Physics Laboratory
2	Chemistry Laboratory
3	Sophisticated Instrument Laboratory
4	Thin Film Laboratory

5.7.1 Publications by the Faculty of the Department -:

- 1. D Saikia, J. P. Borah, "Ferromagnetic ordering in chemically synthesized ZnS:Mn diluted magnetic semiconductor: A density functional theory explanation", Physics Letters A 381 (2017) 3743
- 2. RD. Raland, D Saikia, **J.P. Borah**, "Heating efficiency and correlation between the structural and magnetic properties of oleic acid coated MnFe₂O₄ nanoparticles for magnetic hyperthermia application", **J. Phys. D: Appl. Phys 50 (32) 325004 (2017)**
- 3. Nibedita Paul, **J.P. Borah** and Dambarudhar Mohanta, "Temperature Responsive Gadolinium Oxide Nanoparticles for Hyperthermia Application" **AIP Conference Proceeding 1832, 050125 (2017)**
- 4. D Saikia, **J.P.Borah**, "Investigations of doping induced structural, optical and magnetic properties of Ni doped ZnS diluted magnetic semiconductors", **Journal of Materials Science: Materials in Electronics** 28 (11), 8029–8037 (**2017**)
- 5. RD. Raland, **J.P.Borah** "Efficacy of heat generation in CTAB coated Mn doped ZnFe₂O₄ nanoparticles for magnetic hyperthermia", **J. Phys. D: Appl. Phys.** 50 (**2017**) 035001
- 6. D Saikia, RD. Raland, **J.P.Borah** "Influence of Fe doping on the structural, optical and magnetic properties of ZnS diluted magnetic semiconductor" **Physica E 83 (2016) 56-63**
- 7. D Saikia, J.P.Borah, Manjeet, A. Puzari "Investigation of photo-physical properties of ZnS:Mn²+ nanoparticles" Indian Journal of Physics 90(5), (2016) 549-555
- 8. RD. Raland, J.P.Borah, "Surfactant controlled size and magnetic properties of superparamagnetic NiFe₂O₄ nanoparticles" 2016, Advanced Science Engineering and Medicine. 8(5), (2016) 386-391.
- 9. Shyamal Baruah, Nirmala Devi and **Amrit Puzari**, "Tuning of conducting properties of poly (*p*-phenylenediamine) through structural engineering with TiO₂ nanoparticles", **Inorganic Nano-metal Chemistry**, under review.
- 10. Shyamal Baruah, **Amrit Puzari**, "Development of a new methodology for the synthesis of chloro(glycinato)1,10-phenanthroline copper(II) monohydrate and analogous complexes and study of their catalytic activity towards selective hydroxylation of phenol", **Inorganic Nano-Metal Chemistry**: DOI: 10.1080/24701556.2017.1357607.

- 11. Shyamal Baruah, Alexander Fisyuk, Ivan V. Kulakov, **Amrit Puzari**, "An atom economic acid catalysed synthetic method for aromatic imines", **Asian Journal of Chemistry and Pharmaceutical Science**, Vol 1(1) (2016) 1-4.
- 12. Dipraj Saikia, J.P. Borah, Manjeet and **Amrit Puzari**, "Investigation of Photo physical properties of ZnS: Mn2+ nanoparticles" Indian Journal of Physics, 90(5)(2016)549.
- 13. **M. K. Patel** (with S. Kumar and A. K. Singh), Optimization of Weibull Deteriorating items Inventory Model under the effect of Price and Time dependent demand with partial backlogging, *Sadhana Academy Proceedings in Engineering Science*, *Vol. 41*, *No. 9*, 2016, *pg 977-984*, DOI 10.1007/s12046-016-0533-4 (*Springer*).
- 14. **M. K. Patel** (with A. K. Singh, S. Pattanayak, A. K. Mahato), On Negacyclic Codes Over the Ring Zp[u]/<u^k>, *Open Physics, Vol. 14*, **2016**, *1-14*, ISSN: 0256-2499 (*DE Gruyter Open*).
- 15. **M. K. Patel**, Properties of Semi-Projective Modules and their Endomorphism Rings, *Springer Proceedings in Mathematics & Statistics*, Vol. 174, Edt. By Syed Tariq Rizvi et al: Algebra And Its Applications, 978-981-10-1650-9, 419130_1_En (19), 2016.
- 16. M. K. Patel, On (Completely) Weak* Red-⊕-Supplemented Modules, Springer Proceedings in Mathematics & Statistics (Accepted) 2017.
- 17. **M. K. Patel** (with V. Kumar and A. J. Gupta), On Semi-Projective Module and their endomorphism rings, (2017), *Asian European Journal of Mathematics* (*World Scientific*) https://doi.org/10.1142/S1793557118500298.
- 18. Praveena Ravipati, S. Sameera Vanjarana, **Debarun D. Purkayastha**, and Ghanashyam K. Mamidipudi, "Iodization-Induced Reversible Wettability in Nanostructured Ag Films" Phys. Status Solidi A, 00, 2017, 1700335, doi: 10.1002/pssa.201700335.
- 19. Talinungsang, Nibedita Paul, **Debarun Dhar Purkayastha**, "SnO₂/TiO₂ bilayer thin films exhibiting superhydrophilic properties" AIP Conference Proceedings 1832 (2017) 080035, doi: 10.1063/1.4980495.
- 20. **Nibedita Paul**, D. Mohanta, Evaluation of optoelectronic response and Raman active modes in Tb3+ and Eu3+-doped gadolinium oxide (Gd2O3) nanoparticle systems. *Appl. Phys. A* **122**, 845(1-

- 10), (2016).
- 21. **Nibedita Paul**, J. P. Borah, and DambarudharMohanta, Temperature responsive gadolinium oxide nanoparticles for hyperthermia application, *AIP Conference Proceedings* 1832, 050125 (2017).
- 22. Talinungsang, **Nibedita Paul** and Debarun Dhar Purkayastha, SnO₂/TiO₂ bilayer thin films exhibiting superhydrophilic properties, *AIP Conference Proceedings*, 1832, 080035 (2017).
- 23. **Rosaline Jamir,** 'Reinventions of 'Myth' in A. D. Hope's poems', *Literary Endeavour*, Vol. VII(1), 88-92, 2016.
- 24. **Nirmala Devi,** M. Sarmah, B. Khatun, T.K. Maji. Encapsulation of active ingredients in polysaccharide-protein complex coacervates. *Advances in Colloid and Interface Science*. 239, 136-146, 2017.
- C. Deka, L. Aidew, Nirmala Devi, A. K. Buragohain and D. K Kakati. Synthesis of Curcumin-loaded Chitosan Phosphate Nanoparticle and Study of its Cytotoxicity and Antimicrobial Activity,
 Journal of Biomaterials Science, Polymer Edition, Vol 27 (16), 1659–1673, 2016.
- 26. Prem Prakash Mishra and S.S. Mishra, S.K. Yadav "Quantification of Node Wise Commodity in Supply Chain and Its Cost Analysis" American Journal of Operation Research. Vol.7 No.1, January 2017.
- 27. Prem Prakash Mishra & T. Poongudi "Algorithmic Approach to Optimization of flow through critical path with time and cost Analysis" In the proceeding of 15th International Conference of Logistic & Supply Chain Management Congresss 2017, Dogus University, Istanbul, Turkey ISBN 978-9944-5789-6-7.
- 28. P.P. Mishra, S.K. Yadav, Lakhan Singh, & Surandre Kumar "A Median Based Regression Type Estimator of the Finite Population Mean" International Journal Of Agricultural And Statistical Science VOL.13, 1, pp 265-271, 2017.

5.7.2 Seminar/ Workshops / Conferences / Short-term Courses / organized / attended by the Faculty:

1. **Dr. Jyoti Prasad Borah and Amrit Puzari o**rganized (as Convener) International Conference on Emerging Trends in Nanomaterials Science and Technology held at NIT Nagaland from January 4-6, 2017.

- 2. D Saikia, R D. Raland, C. Boragohain, J.P.Borah Presented poster at International Conference on Recent Trends in Nanomaterials Science and Technology (ICETNMST-2017) January 4-6, 2017, Department of Science and Humanities, NIT Nagaland, Dimapur, India Title: Investigation of Structural and Magnetic Properties of Ni doped ZnS Diluted Magnetic Semiconductors".
- 3. Monalisha Hazarika, **J.P.Borah**, P. Chinnamuthu Presented poster at International Conference on Advances in Nanotechnology, January 9- 13, 2017, Assam Don Bosco University, Assam, India Title: Synthesis and Characterization of MnFe₂O₄/ MWCNT nanocomposites by Hydrothermal Method and their application as photocatalyst.
- 4. RD. Raland, D Saikia, **J.P.Borah**, presented poster at International Conference on Recent Trends in Nanomaterials Science and Technology (ICETNMST-2017) January 4-6, 2017, Department of Science and Humanities, NIT Nagaland, Dimapur, India. Title: Tailoring the Dielectrical Properties of Zinc Ferrite Nanoparticle Through the doping Concentration of Mn Ions
- 5. RD. Raland, D Saikia, **J.P.Borah** "Novelity of CTAB coated superparamagnetic ZnFe₂O₄ nanoparticles for Hyperthermia Application" International Conference on Advances in Nanotechnology, January 9- 13, 2017, Assam Don Bosco University, Assam, India.
- 6. Shyamal Baruah, Nirmala Devi and **Amrit Puzari,** Presented poster at International Conference on Advances in Nanotechnology held at Assam Donbosco University from 9th 13th January 2017 Title: Poly(p-phenylenediamine) polymer composite with TiO₂ nanoparticles for detection of phenolic pollutants in water.
- 7. Shyamal Baruah and **Amrit Puzari**, Presented poster at 20th CRSI National Symposium in Chemistry And 11th CRSI-RSC Joint Symposium held at Guwahati University, Assam from 2-5 February 2017 Title: Hydroxylation of Phenol by Hydrogen Peroxide Catalysed by Mixed Ligand Copper(II) Complexes and The Selectivity of Ortho Hydroxylation.
- 8. Shyamal Baruah, Nirmala Devi and **Amrit Puzari,** Presented poster at International Conference on Emerging Trends in Nanomaterials Science and Technology (ICETNMST 2017) held at NIT Nagaland, Chumukedima, Dimapur from 4 6 January 2017.

Title: Structural Investigation Of Hybrid Polymer Nanocomposite Derived From 1,4 Diaminobenzene and TiO₂ Nanoparticle.

- 9. Dr. Manoj Kumar Patil Presented on "Characterization of weak Rad--supplemented Modules" in International Conference on Algebra and its Applications held at Department of Mathematics, AMU, Aligarh during November 12-14, 2016.
- 10. Dr. Manoj Kumar Patil delivered a talk entitled on "On (Cofinitely) weak Rad-Å-supplemented" in the International Conference on Algebra and its Applications-2017 at Dept. of Mathematics, Faculty of Science and Technology, Moulay Ismail University, Errachidia, Morocco during April 26-28, 2017.
- 11. Talinungsang, and **Debarun Dhar Purkayastha** presented paper titled Photo-induced hydrophilicity of SnO₂ thin films modified by stearic acid in the International Conference on Emerging Trends in Nanomaterials Science & Technology, January 4 6, 2017, Department of Science and Humanities, NIT Nagaland.
- 12. Talinungsang, Nibedita Paul and **Debarun Dhar Purkayastha** presented paper titled SnO₂/TiO₂ bilayer thin films exhibiting superhydrophilic properties, 61st DAE Solid State Physics Symposium, December 26-30, 2016, KIIT University, Bhubaneswar, Odisha.
- 13. Dr. Nibedita Paul presented paper titled 'Magnetooptic behavior of gamma irradiated Tb3+ doped Gd2O3 nanoparticle based novel ferrofluids' in National Thematic workshop on Advances in Nanostructured Materials: Applications and perspectives (ANMAP), at Kaziranga University, Assam, from 1-2 June, 2016.
- 14. Dr. Nibedita Paul presented paper titled "*Temperature Responsive Gadolinium Oxide Nanoparticles for Hyperthermia Application*" at the 61st DAE Solid State Physics Symposium (DAE SSPS 2016) to be held during 26-30 December, 2016 at KIIT University, Bhubaneswar, Odisha.
- 15. Dr. Nibedita Paul presented paper titled "Structural and magneto-optic properties of ã-irradiated Gd2O3 and Tb3+ doped Gd2O3 nanoparticle-based ferrofluids" in the International Conference on Emerging Trends in Nanomaterials Science & Technology (ICETNMST-2017) held on 4-6 January, 2017 at National Institute of Technology (NIT) Nagaland, Chumukedima, Nagaland, India.
- 16. Dr. Nirmala Devi presented paper titled 'Plant Oils: *Greening Agriculture to Polymer Materials*' in the 6th International IUPAC conference on Green Chemistry (ICGC-6) at Venice, Italy during 4-8 September, 2016.

- 17. Dr. Nirmala Devi presented paper titled 'Poly (p-phenylene diamine) based hybrid nanocomposites' in the *International Conference on Emerging Trends in Nanomaterials Science & Technology* (ICETNST) held on 4-6 January, 2017 at the National Institute of Technology Nagaland, India.
- 18. Prem Prakash Mishra attended a one-week workshop on "Recent trends on Optimization Techniques in Science and Engineering (ROTS) under TEQIP" NIT Silchar during 15th to 20th March 2017.
- 19. Prem Prakash Mishra attended a one-week Short Term Course under QIP on "Algebra, Analysis and Applications" July 03-09, 2017, IIT BHU.
- 20. Prem Prakash Mishra presented a paper titled as 'Algorithmic Approach to Optimization of flow through critical path with time and cost Analysis' in 15th International Conference Dogus University, 19-20 Oct.2017, Istanbul, Turkey.

5.7.3 Departmental Activities:

1. International Conference on Emerging Trends in Nanomaterials Science & Technology (ICETNMST-2017) held during 4-6 January, 2017.

5.7.4 Invited talk/ Paper Presentation/ Resource Person etc.

- 1. **J. P. Borah-** (**Invited Talk**): **Topic** "Efficacy of heat generation in ferrite based magnetic nanoparticles for hyperthermia application' National Conference on Hard and Soft Condensed Matter Physics" held at Department of Physics, Tezpur University, Assam from 2 to 4 March, 2017.
- 2. **Dr. Jhimli Bhattacharyya (Invited talk)**: **Topic** "Estimation of Hysteric Thermal Curves of Locked Nucleic Acid Hybrids under Molecular Crowding Condition"; at "National Seminar on Interdisciplinary Research in Chemical Sciences" NSIRCS 2016; Kohima Science College; Sept 2016.
- 3. **Dr. Jhimli Bhattacharyya (Invited talk)**: **Topic** "On the Stabilization Mechanism of Modified Nucleic Acid Duplexes"; at "New Frontiers in Chemistry From Fundamentals to Applications-II (NFCFA 2017)"; BIT (Pilani) Goa Campus; January 2017.
- 4. **Dr. Jhimli Bhattacharyya** (**Invited talk**): **Topic** "On Environmental Challenges and Scope of Research at Dimapur"; at CSIR National Environmental Engineering Research Institute, Kolkata

- Zonal Center; January 2017.
- 5. **Dr. Nirmala Devi (Invited Talk): Topic** 'Encapsulation Technology: An Overview of Tuning Particle Size and Morphology' in the *International Conference on Advancements in Polymeric Materials* (APM 2017) held on 11-13 February, 2017 at the Indian Institute of Science, Bengaluru, India.
- 6. **Rosaline Jamir-** (**Resource Person**): Topic 'Remedial Coaching Classes', Don Bosco College: Itanagar, January, 2016.
- 7. **Rosaline Jamir-** (*Resource Person*): Topic '*Lecture Series for Under-Graduates*', Capital College of Higher Education: Kohima, March 2016.
- 8. **Wati Walling** (*Chaired*): Topic '*Gender and Politics: Rhetoric and Applicability*', ICFAI University Nagaland, Dimapur, 11-12 February, 2016.

5.7.5 Research Projects:

- 1. J. P. Borah (Principal Investigator): Project Titled as "Development of CNT/Metal Ferrite Nanocomposites for Biomedical Applications" UGC-DAE CSR" Mumbai, India, Sanctioned No. CRS-M-239. Duration: 2017-2019 and Sanctioned amount: Rs. 11,43,000.00
- 2. Amrit Puzari (Principal Investigator): Project titled as 'Design and Synthesis of Scaffolds based on Oxazolidinones and 3-Aminopyridin 2(1H)-Ones for Peptidomimetics, using preferably green synthetic methodology" has been completed. Project was jointly sponsored by Department of Science & Technology (DST), Government of India and Russian Federation for Basic Research (RFBR). Russian collaborator is Prof. Alexander Fisyuk, Department of Chemistry; OMSK State University. Duration: 2015-2017 and Sanctioned amount: Rs. 17,51,000.00
- 3. Jhimli Bhattacharyya (Principal Investigator): Project titled as "'Drug-Gold Nano Particle Bioconjugates: Synthesis, Characterization and Applications Under Dilute & Molecular Crowding Conditions". Funding agency: UGC-DAE, Mumbai Center, BARC, Mumbai. Duration: 2017-2019 and Sanctioned amount: Rs. 11,43,000.00
- 4. Dr. Debarun Dhar Purkayastha (Principal Investigator): Project titled as "Metal (Cr, Fe, Ni, Cu) doped and buffer layered Tin Oxide thin films as anti-reflecting self-cleaning surfaces for solar cells" sponsored by SERB, Department of Science & Technology (DST), Government of India. Duration: (2016-2018) and Sanctioned amount: Rs. 23,00,000.00

- 5. Dr. Nirmala Devi (Principal Investigator): Project titled as "Study of Non-edible Plant Oils of North-East: Extraction, Compositional Characterization and Analysis for Industrial Application" is currently undergoing and is sponsored by North Eastern Council, Government of India. Duration: 2017-2019 and Sanctioned amount: Rs. 17,76,000.00
- 6. Dr. Wati Walling (Principal Investigator): Project titled as "Dominance, Compliance and Customary Practices in Nagaland: Belief and Core-Belief of Religion and Relevance" Funding Agency: Indian Council of Social Science Research, New Delhi. Duration: 2017-2018 and Sanctioned amount: 1,50,000.00

5.7.6 Awards Achieved:

- 1. **Dr. Nirmala Devi** received Best Oral Presentation Award in National Conference on Environmental Research held in 4-5 June, 2016 in Indian Institute of Technology Guwahati.
- 2. **Dr. Nirmala Devi** received DST-Senior Scientist International Travel Grant for presenting paper in the 6th International IUPAC conference on Green Chemistry held in **Venice**, **Italy** in 4-8 September, 2016.

6. Training and Placements

6.1 Introduction

The Training and Placement Cell of the Institute plays a vital role in counselling and providing guidance to the students of the Institute for their professional growth and successful career placement. The placement is a crucial stage between the completion of academic programme of studies and entry into suitable employment. In order to provide sufficient opportunities to the students to secure proper placement, the Placement Cell conducts soft skills training, technology boot camp workshops and mock interviews.

The Cell of the Institute centrally handles all aspects of campus placements for the graduating students of all the departments. The Cell is well-equipped with excellent infrastructure to support all the stages of the placement processes. The concerned staff members also assist in arranging pre-placement talks, written tests, group discussions and interviews etc. as per the requirements of the product, service based and public sector organizations.

6.2 Placements for the students

The placement details of the students in the following organizations are listed in the tables given below:

Table 6.1 2012-2016 students' placement details

S. No.	NAME OF THE ORGANIZATION	CTC (LPA INRS.)	EEE	ECE	CSE	TOTAL
1.	IBM GLOBAL SERVICE	3.14LPA		3	1	4
2.	JOHNSON CONTROL INDIA	4.5 LPA	1			1

3.	INFOSYS	3.6 LPA		5	4	9
4.	D.E.S.L.	3.55LPA	1			1
5.	RAMCO	4 LPA	2	4	2	8
6.	HUAWAI CAMPUS DRIVE	6 LPA			1	1
7.	PRADAN				1	1
8.	MPHASIS	3.2LPA		2	2	4
9.	CAPITAL VIA				1	1
10.	POWER GRID	8.5LPA	2			2
11.	WAYS 2 CAPITAL	3.45LPA	2	2	2	6
12.	CIRSP, M/O. DONER (6 MONTHS INDUSTRIAL TRAINING FOLLOWED BY PLACEMENT)		2	5	6	13

Table 6.2 2013-2017 students' placement details

S. No.	NAME OF THE ORGANIZATION	CTC (LPA INRS.)	EEE	ECE	CSE	TOTAL
1.	MPHASIS	4 LPA	3	6	4	13
2.	CAPGEMINI	6 LPA	1	4	3	8
3.	WIPRO	3.25LPA	2	1	4	7
4.	SAP LABS	7.5 LPA			1	1
5.	CGI	3.25 LPA			1	1
6.	WAYS 2 CAPITAL	3.45LPA	1	3	1	5
7.	POWER GRID	AT PAR SCALE	1			1

7. Central Facilities and Services

7.1 Computer Centre

The Institute has a computer centre to provide campus-wide networking via dedicated NKN connectivity of 1Gbps bandwidth. The Institute also has redundant 8Mbps connectivity from BSNL. All the activities related to Internet connectivity are taken care of by the experienced staff members of the centre.

7.2 Central Library

The Central Library of NIT Nagaland supports teaching, learning, research and creative endeavors of the Institute. The Central Library provides modern collection of knowledge resources and innovative information through acquisition, organization and dissemination of knowledge resources and also provides on—demand access to the available intellectual resources and research products to the faculty and students of the Institute, as well as to the greater community of learners beyond NIT Nagaland with the support of value-added services to the users.

The Central Library has a total collection of over 9500 volumes in Engineering, Technology, Physical Sciences, Management, Social Sciences and Humanities including textbooks and reference books. The Central Library also having 2500 + e-books as well as 700+ e-journals on computer science, engineering, materials science and physical science and other e-resources materials such as audio-visual materials, NPTEL videos, CDs/DVDs, etc. The library also has the latest collection of periodicals, magazines and newspapers. Well-designed furniture including book shelves are made available in the Library and books are arranged subject-wise according to the Dewey Decimal Classification scheme (Figure 7.1).



Figure 7.1 Central Library

The Library is fully computerized by using "iKollege" Web based Integrated Management System with RFID Technology and circulation services are executed through RFID enabled Smart ID systems. The computerized bibliographic database for the entire collection is available in Machine Readable format and tagging of RFID of entire collections is up to date. The library is connected to the campus LAN and Wi-Fi to facilitate the users to access the electronic resources available in the library. Photocopy, printing and scanning facilities are also available in the library in limited quantity at nominal rate.

7.3 Data Centre

NIT Nagaland has built the Campus Network, Data centre, IP Telephony and Wireless Network to enhance the computing facility of the Institute by deploying several dedicated Servers to run various applications which will include the following main components:

Campus Networking components - for Data, Voice & Video Communication

Network Security - Firewall & Antivirus

Servers & Storage - for enhancing the computing facilities and protecting the data

An appropriate I.T. Infrastructure has been built to set up data, voice and video connectivity in the campus and among the users in the campus. With the help of this infrastructure, the Institute aims at distributing high-speed Internet in the campus and connectivity among the users which will improve teaching

effectiveness, student outcomes and administrative efficiency; and simplify operations and support complex research initiatives in higher education. The infrastructure connects various sections of the campus viz., administrative building, academic blocks and residential parts (staff quarters, Hostels, Guest House, etc.) with high speed wired connectivity and with a backup of wireless access as well. The existing backbone allow data, voice and video traffic seamlessly across the various sections of the campus. With the existing I.T. infrastructure, the Smart Classroom facility has been created through which guest faculties / experts deliver lectures over the Internet and recruiters conduct their recruitment process from any part of the country using video-conferencing.

Redundant Optical Fibre Cable communication with strength 1Gbps and 8 Mbps are established by NKN and BSNL. All the students, research scholars can avail the facility to connect to the online video lecturers conducted in various reputed Institutes across the globe. The Institute has established the facilities for Video Conferencing to conduct classes of other renowned professors in remote and to view video lectures of NPTEL during the class. The Phase I contents of NPTEL courses were obtained from IIT- Madras for the students and staff to refer.

Highlights of Campus Networking (as mentioned above) are brought out hereunder:

High-speed Campus Network - using Single Mode Fiber-optic cabling to connect the various buildings in the campus and Cat 6 A UTP Cabling inside the building to support Gigabit data transfer to the users' desk.

Network Architecture is designed to support 10G bandwidth in the backbone connectivity in future when number of network users increases in the campus.

Wireless Network in the campus for users to connect their laptops, smart phones. PDA, Tablets, etc for easy access to Internet and network of the Institute.

Offers video-based professional exchanges.

Provides a phone number in every LABs, Hostels, Quarters, Guest House, Administrative staff, faculties and a voicemail account for key personnel.

Uses digital signs and video to communicate more effectively with outstation faculty and recruiters.

Automate registration and curriculum sharing, with ease of access to applications and software(s).

Shares scarce resources across multiple sites.

Extends beyond college boundaries.

7.4 Dispensary

The Institute has a dispensary facility with a visiting doctor from the District Government hospital, Dimapur on a weekly basis. Due care is being taken towards health of all students. The Institute's vehicle (ambulance) is available on 24X7 basis and the students can use this facility to visit the District Hospital in case of emergency.

7.5 Hostel facilities

Staying in hostels is mandatory for all undergraduate students of the Institute. Accommodations are also provided to PG students. NIT Nagaland houses seven Hostels i.e. "*Home away from home*". At present, the hostel capacity is 330 (Figure 7.2).

Table 7.2 Capacity of various student's hostels

Sl. No.	Name of the hostel	Branch	Total Capacity
1	SARAMATI A, B & C	B.TECH	36
2	JAPFU	B.TECH	64
3	TIYI	В.ТЕСН	62
4	PATKAI A, B & C	В.ТЕСН	64
5	DZUKOU(Girls' Hostel)	В.ТЕСН & М.ТЕСН	64
6	ZANIBU (PG Boys' Hostel)	М.ТЕСН	32
7	BARRACK	В.ТЕСН	8
		TOTAL	330

NIT Nagaland also provides a clean and very wholesome mess facility (Vegetarian and Non-Vegetarian) for all the students, and few faculties and members of staff. NIT Nagaland has also Wi-Fi connectivity in all the hostels giving them ample scope for research and other day-to-day learning activities.



Figure 7.2 Hostel Blocks

7.6 Other facilities

The Institute has an extension counter of the State Bank of India where the SBI personnel attend three days in a week to offer necessary banking services. The Institute is also equipped with an ATM of the State Bank of India for the convenience of students and staff members. The Institute has a Canteen and healthy and tasty food items are available there. A new mess building was established with modern kitchen facilities for the preparation of food and dining purposes. The Institute has a Dispatch Section which takes care of handing over the letters, postal / parcels to the students and staff members.



Figure 7.3 Canteen Building

8. Centre of Excellence and IPR activities

8.1.1 Intel Centre of Excellence

Centre of Excellence that supports education vision, can build a robust infrastructure —all keys to driving a holistic solution for professors and student's success. The vision of the lab is "To become a Centre for excellence in education and research in VLSI design and technology and meet the needs of fast growing VLSI industries". And mission to reach the vision is "Design and implement VLSI devices in wide range of application areas using state-of-the-art tools and technologies". The Intel FPGA lab with US\$ 2 million worth of industry standard Tools and IP-Cores to reach the vision and mission. Lab will provide quality research, training services and developing new products.

This Intel FPGA- NITN COE lab with complete infrastructure will serve the purpose of

- Regular laboratories in graduate level
- Scholar work with research and development
- Attract and retain eminent professors and researchers
- Sustained linkage with industries
- Research hub for nearby institutions
- Develop new patents and product

8.1.2 Siemens Centre of Excellence

❖ Distributed Control System (DCS) and Programmable Logic Controllers (PLC)

Monitoring and control of all the equipment and machines in all the laboratories in the Institute using Integrated Distributed Control Systems (DCS) and Programmable Logic Controllers (PLC) in order

to establish a Centre of Excellence which will cater to the need for higher semester laboratories and Research. The whole idea is to integrate the existing Power Systems, Electrical Machines and Drives, Power Electronics and Control Systems Laboratories and also to establish a private Cloud using the existing networking facilities. However this laboratory can be used as Distributed control system(DCS) lab, Programmable logic control (PLC) lab, Process control lab, IOT (Internet Of Things) lab, Solar energy lab and extended for project work which will be available for undergraduate(UG) students and postgraduates(PG) students. Same laboratory will be available for research activities related to IOT (Internet Of Things), Process control. Control system and Distributed control system. The DCS and PLC mainly used for branches such as EIE, EEE, CSE, and ECE and it is highly required to conduct Real Time hands on exercise for the embedded system subjects and laboratories. Laboratory for the benefit of B.Tech, M.Tech., and Research Scholars.

These initiatives are intended to bridge the gap between industry requirements and technical education system by providing solutions which make technical institutes more aligned with industry needs and graduate students industry ready. We offer programs to foster, empowering students and professionals with state-of-art knowledge and Technological skills with centre of excellence by providing real-world experience (Figure 8.1).

Hardware:

- 1. PCS7 410 STANDARD DCS Controller
- 2. SIMATIC S7-1500 CPU 1511-1 PN PLC

Software:

- 1. COMOS Planet Engineering Software with P&ID, Logical and EI&C modules
- 2. SIMIT Framework: Virtual plant commissioning software



Figure 8.1 DCS Lab

8.2 Intellectual Property Rights Cell:

National Institute of Technology Nagaland inaugurated the Intellectual Property Rights Cell followed by an awareness program for the benefit of B.Tech/M.Tech Students and Research Scholars on 04-Nov-2016. Concepts of IPR, Patenting Procedures and Design, and Copy Rights and related issues were discussed during the session.

9. Student's Activities and other Celebrations

9.1 Literary and Cultural Activities

The Institute also encourages all the students to participate in various cultural and literary activities which are periodically conducted throughout the academic year. The literary competitions like technical speech, debate, knowledge quiz etc., were organized by the students. The cultural activities were celebrated by the students, faculty and staff members during the academic year 2016-2017 (Figure 9.1)



Figure 9.1 Swachh Bharat Abhiyan

9.2 Celebration of Fresher's Welcome and Farewell events

The Students' community of the Institute organized the Fresher's welcome party, **Yuva-2016** on 24th September 2016. In true sense, it is an introductory function for the new-comers where they get to know about the adopted culture of the Institution of which they are a part now after. The students expressed their talents in the form of folk dance, group dance, songs etc. Farewell party was organized to the final year students by the junior students during 24th April 2016.

9.3 Literary and Cultural Affairs

Institute also encourages the students to participate in various cultural and literary activities which are periodically conducted throughout the whole academic year. The literary and cultural activities of the students are supervised by the Literary and Cultural Board, which consists of both the members of faculty and student. The board envisages to provide a platform to the hidden talents of students and to encourage and appreciate their ideas through various inter and intra-NIT competitions. The literary competitions like debate, general quiz, technical quiz were organized by the students during whole academic year. Details are given below:

Sl. No.	Cultural and Technical Activity	Date
1	Ekarikthin	31.03.17-02.04.17
2	Farewell	22.04.2017
3	World environmental day	05.06.2017
4	International Yoga Day	21.06.2017
5	Teachers' Day	05.09.2016
6	Foundation day celebration	14.10.2016
7	Swach Bharat Abhiyan	29.10.2016
8	Singing Competition	01.11.16 – 04.11.16

9.4 Games and Sports Activity

Students participated in the below Games and Sports activities during the year 2016-2017 (Figure 9.2)

S. No.	Games and Sports Activity	Date
1	Inter NIT Jaipur (Basketball)	05.11.16 - 07.11.16
2	4 men Soccer (Futsal)	27.09.16 -30.09.16
3	Tug of war	27.09.16 - 30.09.16
4	Chess (Open)	28.10.10 - 29.10.16
5	Arm Wrestling	21.10.16 - 23.10.16
6	Basketball	25.10.16 - 28.10.16
7	Volleyball	09.11.16 - 15.11.16
8	Cricket	05-11-16-07.11.16
9	Inter NIT cricket	27.01.17-31.01.17







Figure 9.2 Games and Sports Activities

Audit Report Part - II

NATIONAL INSTITUTE OF TECHNOLOGY NAGALAND CHUMUKEDIMA :: DIMAPUR :: NAGALAND - 797103

BALANCE SHEET FOR THE YEAR ENDED 31ST MARCH 2017

Amount in Rupees

SOURCES OF FUNDS	Schedule	31.03.2017	31.03.2016
CORPUS/CAPITAL FUND	1	1939889298.86	1414233136.08
DESIGNATED/ EARMARKED / ENDOWMENT FUNDS	2	0.00	0.00
CURRENT LIABILITIES & PROVISIONS	3	227694874.27	44446012.27
TOTAL		2167584173.13	1458679148.35

APPLICATION OF FUNDS	Schedule	31.03.2017	31.03.2016
FIXED ASSETS	4	1114719778.00	1076438846.00
Tangible Assets			
Intangible Assets		38336860.86	25553735.08
Capital Works-In-Progress		786832660.00	312240555.00
INVESTMENTS FROM EARMARKED / ENDOWMENT FUNDS	5		
Long Term		0.00	0.00
Short Term		0.00	0.00
INVESTMENTS - OTHERS	6	0.00	0.00
CURRENT ASSETS	7	105031571.27	17900696.27
LOANS, ADVANCES & DEPOSITS	8	122663303.00	26545316.00
TOTAL		2167584173.13	1458679148.35

Director Registrar

Place: Chumukedima

Date: 21-06-2017

CHUMUKEDIMA::DIMAPUR::NAGALAND-797103

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2017

Amount in Rupees

Particulars Particulars	Schedule	31.03.2017	31.03.2016
INCOME			
Academic Receipts	9	29030422.25	28498783.00
Grants / Subsidies	10	86690957.39	70506105.65
Income from investments	11	874803.00	2077435.00
Interest earned	12	0.00	0.00
Other Income	13	2765303.00	2115647.00
Prior Period Income	14	60000.00	594834.00
TOTAL (A)		119421485.64	103792804.65
EXPENDITURE			
Staff Payments & Benefits (Establishment expenses)	15	69727927.00	59501690.00
Academic Expenses	16	25539567.00	26420584.76
Administrative and General Expenses	17	14945866.00	13818710.00
Transportation Expenses	18	608672.00	530186.00
Repairs & Maintenance	19	5090232.00	2861513.00
Finance costs	20	33780.89	109820.89
Depreciation	4	71764225.00	60046212.00
Other Expenses	21	0.00	0.00
Prior Period Expenses	22	3475440.75	550300.00
TOTAL (B)		191185710.64	163839016.65
Balance being excess of Income over Expenditure (A-B)		-71764225.00	-60046212.00
Transfer to / from Designated Fund			
Building fund			
Others (specify)			
Balance Being Surplus / (Deficit) Carried to Capital Fund		-71764225.00	-60046212.00

Significant Accounting Policies 23
Contingent Liabilities and Notes to Accounts 24

Director Registrar

Place : Chumukedima Date : 21-06--2017

NATIONAL INSTITUTE OF TECHNOLOGY NAGALAND CHUMUKEDIMA:: DIMAPUR:: NAGALAND - 797103

RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2017

						A	Amount in Rupees
	RECEIPTS	31.03.2017	31.03.2016		PAYMENTS	31.03.2017	31.03.2016
T.	Opening Balance			I. Ex	Expenses		
	a) Cash Balances	389.00	16389.00	(a)	a) Establishment Expenses	69727927.00	59501690.00
	b) Bank Balance			(q	b) Academic Expenses	25539567.00	26420584.76
	i. In Current accounts	17426558.27	80133226.58	(c)	c) Administrative Expenses	14945866.00	13818710.00
	ii. In Deposit accounts	0.00	00.00	(p	d) Transportation Expenses	608672.00	530186.00
	iii. Savings accounts	473749.00	473749.00	(e)	e) Repairs & Maintenance	5090232.00	2861513.00
Ξ	Grants Received			(J	f) Prior period expenses	3475440.75	550300.00
	a) From Government of India	868100000.00	2800000000.00	(g	g) Finance Cost	33780.89	109820.89
	b) From State Government	00.0	00.0	II. $\frac{Pa}{Er}$	Payments against Earmarked/ Endowment Funds	0.00	0.00
	c) From other sources (details)			$\mathrm{III.} \left egin{matrix} \mathrm{P}a \\ \mathrm{Pr} \end{array} ight $	Payments against Sponsored Projects/Schemes	2651824.75	1470669.00
				$\frac{Pa}{IV}$	Payments against Sponsored Fellowships/Scholarships	0.00	0.00
				V. In	Investments and Deposits made		
III.	Academic Receipts	29030422.25	28498783.00	a) fu	a) Out of Earmarked/Endowments funds	0.00	0.00
IV.	Receipts against Earmarked/ Endowment Funds	0.00	00.0	(9 O	b) Out of own funds (Investments-Others)	0.00	0.00
V.	Receipts against Sponsored Projects/Schemes	4367978.00	4814328.00	VI. Te	Term Deposits with Scheduled Banks	0.00	0.00
VI.	Receipts against sponsored Fellowships and Scholarships	00.00	00.0	$_{ m VII.}$ $_{ m Ce}^{ m Ex}$	Expenditure on Fixed Assets and Capital Works - in- Progress		
VII.	Income on Investments from			.,	a) Fixed Assets	122828282.78	118393967.66
	a) Earmarked/Endowment funds	00.00	0.00	_	b) Capital Works- in- Progress	474592105.00	134891410.00
	b) Other investments	0.00	O.00 VIII		Other Payments including statutory payments	11394148.00	10960318.00

NATIONAL INSTITUTE OF TECHNOLOGY NAGALAND CHUMUKEDIMA:: DIMAPUR:: NAGALAND - 797103

RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR ENDED 31ST MARCH 2017

585829116.58	1431935439.44	TOTAL		585829116.58	1431935439.44	TOTAL	
0.00	0.00	In Deposit Accounts		0.00	0.00	XIV Any Other Receipts - Capital Work in Progress refund	×
473749.00	7021755.25	In Savings Accounts		11203818.00	7080233.00	XIII. Miscellaneous Receipts including Statutory Receipts	X
17426558.27	97997890.02	In Current Accounts		175900907.00	501756003.92	XII. Deposits and Advances	×
		b) Bank balances		2710481.00	2825303.00	XI. Other income (including Prior Period Income)	_ <
389.00	11926.00	a) Cash in hand		0.00	0.00	X. Term Deposits with Scheduled Banks encashed	
		0.00 XII. Closing balances	XII.	00.00	00.0	IX. Investments encashed	I
00.00	00.00	XI. Other Payments	XI.	00.0	00.0	c) Savings Bank Accounts	
198419251.00	596016022.00	0.00 X. Deposits and Advances	×.	00.00	00.00	b) Loans and Advances	
		2077435.00 IX. Refunds of Grants	X.	2077435.00	874803.00	a) Bank Deposits	
						VIII. Interest received on	\ \ \
Amount in Rupees	Am						

Director

Registrar

Place: Chumukedima Date: 21-06-2017

CHUMUKEDIMA::DIMAPUR::NAGALAND-797103

SCHEDULE - 1 CORPUS/CAPITAL FUND

Amount in Rupees

	Particulars	31.03.2017	31.03.2016
	Balance at the beginning of the year	1414233136.08	1220993970.42
Add:	Contributions towards Corpus/Capital Fund	0.00	0.00
Add:	Grants from UGC, Government of India and State Government to the extent utilized for capital expenditure	597420387.78	253285377.66
Add:	Assets Purchased out of Earmarked Funds	0.00	0.00
Add:	Assets Purchased out of Sponsored Projects, where ownership vests in the institution	0.00	0.00
Add:	Assets Donated/Gifts Received	0.00	0.00
Add:	Other Additions	0.00	0.00
(Deduct)	B/F Unutilised Grant transferred to Current Liabilities	0.00	0.00
Add:	Excess of Income over expenditure trasferred from the Income & Expenditure Account	0.00	0.00
	Total	2011653523.86	1474279348.08
(Deduct)	Deficit transferred from the Income & expenditure Account	71764225.00	60046212.00
	Balance at the year end	1939889298.86	1414233136.08

CHUMUKEDIMA::DIMAPUR::NAGALAND-797103

SCHEDULE 2 - DESIGNATED/ EARMARKED / ENDOWMENT FUNDS

Amount in Rupees

					Amount	in Rupees		
	Fund wise Breakup		Total					
Particulars	Fund	Fund	Fund	Endowment	31.03.2017	31.03.2016		
	AAA	BBB	CCC	Funds				
Λ								
A.								
a) Opening balance	0.00	0.00	0.00	0.00	0.00	0.00		
b) Additions during the year	0.00	0.00	0.00	0.00	0.00	0.00		
c) Income from investments made of the funds	0.00	0.00	0.00	0.00	0.00	0.00		
d) Accrued Interest on investments/Advances	0.00	0.00	0.00	0.00	0.00	0.00		
e) Interest on Savings Bank a/c	0.00	0.00	0.00	0.00	0.00	0.00		
f) Other additions (Specify nature)	0.00	0.00	0.00	0.00	0.00	0.00		
Total (A)	0.00	0.00	0.00	0.00	0.00	0.00		
В.								
Utilisation/Expenditure towards objectives of fur	nds							
ii) Capital Expenditure	0.00	0.00	0.00	0.00	0.00	0.00		
ii) Revenue Expenditure	0.00	0.00	0.00	0.00	0.00	0.00		
Total (B)	0.00	0.00	0.00	0.00	0.00	0.00		
		•			,			
Closing balance at the year end (A - B)	0.00	0.00	0.00	0.00	0.00	0.00		
		•			,			
Represented by								
Cash And Bank Balances	0.00	0.00	0.00	0.00	0.00	0.00		
Investments	0.00	0.00	0.00	0.00	0.00	0.00		
Interest accrued but not due	0.00	0.00	0.00	0.00	0.00	0.00		
Total	0.00	0.00	0.00	0.00	0.00	0.00		

NATIONAL INSTITUTE OF TECHNOLOGY NAGALAND CHUMUKEDIMA :: DIMAPUR :: NAGALAND - 797103

SCHEDULE 3- CURRENT LIABILITIES & PROVISIONS

Amount in Rupees

		Amount in Rupees
	31.03.2017	31.03.2016
A. CURRENT LIABILITIES		
1. Deposits from staff	0.00	0.00
2. Deposits from students (Caution Money)	3252786.00	2424936.00
3. Sundry Creditors	0.00	0.00
a) For Goods & Services (As per Annexure 'A')	20639826.00	20838901.00
b) Others	0.00	0.00
4. Deposit-Others (including EMD, Security Deposit) (As per Annexure 'B')	8646038.92	7436780.00
5. Statutory Liabilities (GPF, TDS, WC TAX, CPF, GIS, NPS): (As per Annexure 'C')		
a) Overdue	1262412.00	960963.00
b) Others	0.00	0.00
6. Other Current Liabilities	0.00	0.00
a) Salaries	0.00	0.00
i) BARC Project -Salary Payable	9935.00	0.00
b) Receipts against sponsored projects	5069812.25	3343659.00
c) Receipts against sponsored fellowships & scholarships	23950.00	23950.00
d) Unutilised Grants	186455710.10	2467055.27
e) Grants in advance	0.00	0.00
f) Other funds	0.00	0.00
g) Other liabilities (As per Annexure 'D')	1734404.00	6349768.00
Total (A)	227094874.27	43846012.27
B. PROVISIONS		
1. For Taxation	0.00	0.00
2. Gratuity	0.00	0.00
3. Superannuation Pension	0.00	0.00
4. Accumulated Leave Encashment	0.00	0.00
5. Trade Warranties/Claims	0.00	0.00
6. Others - Internal Audit	600000.00	600000.00
Total (B)	600000.00	600000.00
Total (A+ B)	227694874.27	44446012.27

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SCHEDULE 3A - SPONSORED PROJECTS

0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 10000000 10000.00 DEBIT CLOSING BALANCE (31.03.2017)0.00 Amount in Rupees 5069812.25 479891.00 292446.50 125069.00 404156.75 710000.00 1441107.50 257994.00 1359147.50 CREDIT 0.00 2651824.75 257285.50 262500.50 222443.25 478276.00 15258.00 12335.00 783929.00 619797.50 Expenditure during the year 7711637.00 1698393.00 958167.00 554947.00 140327.00 270329.00 773929.00 1978945.00 626600.00 710000.00 Total 5445.00 0.00 0.00 4367978.00 2730.00 270329.00 1978945.00 626600.00 710000.00 773929.00 Receipts/Recoveries during the year 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 DEBIT **OPENING BALANCE** 01.04.2016) 0.00 0.00 958167.00 552217.00 140327.00 0.00 0.00 0.00 3343659.00 1692948.00 CREDIT ISHAAN VIKAS Diety Project **Particulars** DST RBFR SMDP BARC NISE YSSAIS NEC TOTAL S. No.

8

The Projects may be listed agency-wise, with sub-totals for each agency.

The total of Col. 8 (Credit) will appear under the above head on the liabilities side of the Balance Sheet (Schedule 3) 2 6

The total of Col. 9 (Dedit) will appear as Receivables in Schedule 8, Loans, Advances and Deposits, on the Assets side of the Balance Sheet

SCHEDULE 4 FIXED ASSETS

			Gross Block	Rlock			Denreciation for the Year	for the Vear		Net Block	Amount in Kupees
			2010	DIOCR			Depleciation	וחו וווב זבמו		1 1247	DIOCR
S. o	Assets Heads	Opening Balance On 01.04.2016	Additions	Deductions	Closing Balance	Depreciation Opening Balance	Depreciation for the Year	Deductions/ Adjustment	Total Depreciation	31.03.2017	31.03.2016
Н	Land	0.00	00.00	00.00	00.0	0.00	0.00	00.00	0.00	00.00	00.00
7	Site Development	0.00	00:00	00'0	00.00	00'0	0.00	00:00	00.00	00:00	00.00
3	Buildings	936516758.00	14495730.00	00.00	951012488.00	85021169.00	17319826.00	00.00	102340995.00	848671493.00	851495589.00
4	Roads & Bridges	0.00	00:0	00.00	0.00	0.00	0.00	0.00	0.00	00.00	0.00
വ	Tubewells & Water Supply	6519381.00	861646.00	00.00	7381027.00	281536.00	141990.00		423526.00	6957501.00	6237845.00
9	Sewerage & Drainage	0.00	00:00	0.00	00.00	0.00	0.00	0.00	00.00	00:00	0.00
7	Electrical Installation and equipment	5729384.00	2881692.00	0.00	8611076.00	718335.00	394637.00	0.00	1112972.00	7498104.00	5011049.00
8	Plant & Machinery	346860.00	31125.00	0.00	377985.00	35872.00	17106.00	00:00	52978.00	325007.00	310988.00
6	Scientific & Laboratory Equipment	141923341.00	48228798.00	0.00	190152139.00	25307737.00	13187552.00	0.00	38495289.00	151656850.00	116615604.00
10	10 Office Equipment	2510772.00	00:0	0.00	2510772.00	216529.00	172068.00	00.0	388597.00	2122175.00	2294243.00
11	Audio Visual Equipment	721310.00	172500.00	0.00	893810.00	212182.00	51122.00	00.00	263304.00	630506.00	509128.00
12	12 Computers & Peripherals	81423612.00	7939099.00	00.00	89362711.00	38838166.00	10104909.00	00:00	48943075.00	40419636.00	42585446.00
13	Furniture, Fixtures & Fittings	56581780.00	7617629.00	0.00	64199409.00	11861255.00	3925362.00	0.00	15786617.00	48412792.00	44720525.00
14	14 Vehicles	2731835.00	00'0	00.00	2731835.00	645022.00	208681.00	00.0	853703.00	1878132.00	2086813.00
15	Lib. Books & Scientific Journals	8996013.00	2259031.00	0.00	11255044.00	4424397.00	683065.00	00'0	5107462.00	6147582.00	4571616.00
16	Small Value Assets	518123.00	00:00	0.00	518123.00	518123.00	0.00	00.00	518123.00	00:00	0.00
	Total (A)	1244519169.00	84487250.00	0.00	1329006419.00	168080323.00	46206318.00	0.00	214286641.00	1114719778.00	1076438846.00

312240555.00	
786832660.00	
00.0	
00.0	
0.00	
0.00	
786832660.00	
00'0	
474592105.00	
312240555.00	
17 Capital Work in Progress (B)	

NATIONAL INSTITUTE OF TECHNOLOGY NAGALAND CHUMUKEDIMA:: DIMAPUR:: NAGALAND - 797103

SCHEDULE 4 FIXED ASSETS

1414233136.08	0.00 270926274.00 1939889298.86	270926274.00		71764225.00	0.00 2210815572.86 199162049.00 71764225.00	2210815572.86		1613395185.08 597420387.78	1613395185.08	Grand Total (A+B+C)	
25553735.08	38336860.86	56639633.00	0.00	00'2062557	31081726.00	94976493.86	0000	38341032.78	56635461.08	Total (C]	
0.00	00.00	00.00	0.00	00'0	00'0	00'0	00.00	0.00	0.00	20 Patents	20
11337967.08	10492938.86	17230908.00	0.00	00'7675669	10235616.00	27723846.86	0.00	6150263.78	21573583.08	19 E-Journals	19
14215768.00	27843922.00	39408725.00	00'0	18562615.00	20846110.00	67252647.00	00.0	32190769.00	35061878.00	18 Computer Software	18
Balance as on 31.03.2016	Balance as on 31.03.2017	Total Amortization /Adjustments	Amortization Deductions/ for the Year Adjustments	Amortizatio n Deductions/ for the Year Adjustments	Depreciation Opening Balance	Deductions Closing Balance	Deductions	Additions	Opening Balance On 01.04.2016	V Intangible Assets	S.N.
Amount in Rupees	A										

SCHEDULE 5: INVESTMENTS FROM EARMARKED/ENDOWMENT FUNDS

		31.03.2017	31.03.2016
1	In Central Government Securities	0.00	0.00
2	In State Government Securities	0.00	0.00
3	Other approved Securities	0.00	0.00
4	Shares	0.00	0.00
5	Debentures and Bonds	0.00	0.00
6	Term Deposits with Banks	0.00	0.00
7	Others (to be specified)	0.00	0.00
	Total	0.00	0.00

SCHEDULE 6: INVESTMENTS — OTHERS

	31.03.2017	31.03.2016
1 In Central Government Securities	0.00	0.00
2 In State Government Securities	0.00	0.00
3 Other approved Securities	0.00	0.00
4 Shares	0.00	0.00
5 Debentures and Bonds	0.00	0.00
6 Others (to be specified)	0.00	0.00
TOTA	L 0.00	0.00

SCHEDULE 7: CURRENT ASSETS

	Am	ount in Rupees
	31.03.2017	31.03.2016
1. Stock:		
a)Stores and Spares	0.00	0.00
b)Loose Tools	0.00	0.00
c)Publications	0.00	0.00
d)Laboratory chemicals, consumables and glass ware	0.00	0.00
e)Building Material	0.00	0.00
f)Electrical Material	0.00	0.00
g)Stationery	0.00	0.00
h)Water supply material	0.00	0.00
2. Sundry Debtors:		
a)Debts Outstanding for a period exceeding six months	0.00	0.00
b)Others	0.00	0.00
3. Cash and Bank Balances		
a) With Scheduled Banks:		
- In Current Accounts		
ICICI Bank A/C No. 256705000011	50215721.55	596573.83
ICICI Bank A/C No. 256705000012	96126.59	284980.09
ICICI Bank A/C No. 047605000219	1440.00	1440.00
SBI Bank A/C No. 32712310676	378957.00	379587.00
SBI Bank A/C No. 32201262075	33123487.13	16163977.35
SBI Bank A/C No. 35747839287	14182157.75	0.00
- In term deposit Accounts		
State Bank of India	0.00	0.00
- In Savings Accounts		
SBI, A/C No. 31440720459	473749.00	473749.00
SBI, A/C No. 36274407439 (AIS PROJECT)	368405.75	0.00
SBI, A/C No. 36470681269 (SMDP PROJECT)	969202.50	0.00
SBI, A/C No. 36616673041 (NEC PROJECT)	698000.00	0.00
SBI, A/C No. 36271555026 (YSS PROJECT)	137196.50	0.00
SBI, A/C No. 36271555140(DST BFR)	465201.50	0.00
SBI, ICETNMST	3910000.00	0.00
h) With non Schodulad Ranks		
b) With non-Scheduled Banks:	0.00	0.00
In term deposit Accounts	0.00	0.00
In Savings Accounts c) Cash in hand:	11926.00	389.00
4. Post Office- Savings Accounts	0.00	0.00
4. Fost Office- Savings Accounts TOTAL	105031571.27	17900696.27
TOTAL	100001071.27	17,000,0.27

SCHEDULE 8 - LOANS, ADVANCES & DEPOSITS

	31.03.2017	31.03.2016
1 Advances to ampleyees (Non-interest bearing)	31.03.2017	31.03.2010
1. Advances to employees: (Non-interest bearing)	0.00	0.00
a)Salary	0.00	0.00
b)Festival		0.00
c)Medical Advance	0.00	155700000 10
d)Other - Institution Activity (As per Annexure 'E')	4615513.00	3139062.00
e) NPS LEGACY RECOVERABLE	1096976.75	0.00
f) TDS Refunded to Staff	15966.00	0.00
2. Long Term Advances to employees: (Interest bearing)	0.00	
a)Vehicle loan	0.00	0.00
b)Home loan	0.00	0.00
c)Others (to be specified)	0.00	0.00
3. Advances and other amounts recoverable in cash or in kind or for value to be received:		
a)On Capital Account	0.00	0.00
b)to Suppliers (As per Annexure 'F')	115592184.25	21623741.00
c)Others - Staff Welfare Account	0.00	0.00
4. Prepaid Expenses		
a)Insurance	0.00	0.00
b)Other expenses -Leased Line Charges	921948.00	921948.00
5. Deposits		
a)Telephone	0.00	0.00
b)Lease Rent	180000.00	180000.00
c)Electricity	0.00	0.00
d)AICTE, if applicable	0.00	0.00
f)Others - Gas Cylinder	71115.00	71115.00
		0.00
6. Income Accrued:		
a)On Investments from Earmarked/ Endowment Funds	0.00	0.00
b)On Investments-Others	0.00	0.00
c)On Loans and Advances	0.00	0.00
d)Others (includes income due unrealized) (Tuition Fees etc)	159600.00	609450.00
7. Other - Current assets receivable from UGC/sponsored projects		
a)Debit balances in Sponsored Projects (ITDS DEDUCTED - NISE)	10000.00	0.00
b)Debit balances in Sponsored Fellowships & Scholarships	0.00	0.00
c)Grants Receivable	0.00	0.00
d)Other receivables from UGC	0.00	0.00
8. Claims Receivable	0.00	0.00
TOTAL	122663303.00	26545316.00

SCHEDULE 9 - ACADEMIC RECEIPTS

		Amo	ount in Rupees
		31.03.2017	31.03.2016
A. FEI	S FROM STUDENTS		
A. Aca	demic		
1	Admission Fee	62400.00	20600.00
2	Medical Exam Fee	12700.00	8400.00
3	Alumini Life Membership	81000.00	43000.00
4	Tuition Fee	8219448.00	9920500.00
5	Computer Fee	697300.00	634000.00
6	Internet Charges	209100.00	190800.00
7	Library Fee	697000.00	634000.00
8	Registration Enrollment Fee	120000.00	126800.00
9	Establishment Charges	2457050.00	2300000.00
		D	
	Total (A)	12555998.00	13878100.00
B. Exa	minations		
1	Examination Fee	280800.00	269650.00
2	Grade Card	24300.00	12900.00
3	Arrear Examination Fees	0.00	64000.00
4	Back Paper Fees	0.00	0.00
5	Supplementary Exam Fee	120200.00	3000.00
	Total (B)	425300.00	349550.00
COH	ner Fees	120000.00	549550.00
1	Transport Facility	0.00	0.00
2	Association and Cultural Fee	620900.00	580000.00
3	Student Aid Fee	120150.00	115800.00
4	CONTROL OF THE CONTRO		
	Sports Center	60100.00	57900.00
5 6	Medical & Insurance Fee	198650.00	143300.00
	Hostel Admission Fee	37900.00	23400.00
7	Mess Advance (Dinning Charges)	11130000.00	10271300.00
8	Hostel Seat Rent, Fan, Electricity & Water Charges	2484000.00	2357800.00
9	Fine/ Miscellaneous Fees	16300.00	25280.00
10	Late Fine	38900.00	48000.00
11	Duplicate Identity Card Fee	600.00	1200.00
12	Other Fees receipts from Students	1282474.25	344753.00
	Total (C)	15989974.25	13968733.00
	e of Publications		
	ale of Admission forms "	48900.00	0.00
	ale of syllabus and Question Paper, etc.	0.00	0.00
3.S	ale of prospectus including admission forms	0.00	0.00
	Total (D)	48900.00	0.00
	er Academic Receipts	1	
	egistration fee for workshops, programmes	10250.00	0.00
	egistration fees (Academic Staff College)	0.00	0.00
3	CCMT 2015	0.00	262400.00
4	JOSAA 2015	0.00	40000.00
	Total (E)	10250.00	302400.00
Grand	Total (A+B+C+D+E)	29030422.25	28498783.00

SCHEDULE 10 - GRANTS / SUBSIDIES (IRREVOCABLE GRANTS RECEIVED)

						A	Amount in Rupees
		Plan				tuonin')	Drosmone
		Ω	UGC			Year	Year
	Govt. of				Non Plan	(31.03.2017)	(31.03.2016)
Particulars	India	Plan	Specific Schemes	Total Plan	OGC	Total	Total
Balance B/F	2467055.27	0.00	00.00	2467055.27	0.00	2467055.27	46258538.58
Add: Receipts during the year	868100000.00	0.00	00.00	868100000.00	0.00	868100000.00	280000000.00
Total	870567055.27	0.00	00.0	870567055.27	0.00	870567055.27	326258538.58
Less: Refund to UGC Balance	0000	0.00	00'0	00.0	0.00	00.0	
Less: Utilised for Capital expenditure							
(A)	597420387.78	0.00	00.00	597420387.78	0.00	597420387.78	253285377.66
Balance	273146667.49	0.00	00:00	273146667.49	0.00	273146667.49	72973160.92
(B)	86690957.39	0.00	00'0	86690957.39	0.00	86690957.39	70506105.65
Balance C/F (C)	186455710.10	0.00	00.00	186455710.10	00.00	186455710.10	2467055.27

A-Appears as addition to Capital Fund as well as additions to Fixed Assets during the year.

B-Appears as income in the Income & Expenditure Account.

C-(I) Appears under Current Liabilities in the Balance Sheet and will become the opening balance next year.

(II) Represented by Bank balances, Investments and Advances on the assets side.

SCHEDULE 11- INCOME FROM INVESTMENTS

SCHEDOLE II-INCOME FROM INVESTMENTS			An	Amount in Rupees
	Earmarked / Enc	Earmarked / Endowment Funds	Other In	Other Investments
Particulars	31.03.2017	31.03.2016	31.03.2017	31.03.2016
1. Interest				
a.On Government Securities	00.00	00.00	00.00	0.00
b.Other Bonds/Debentures	00.00	00'0	00.00	0.00
2. Interest on Term Deposits	874803.00	2077435.00	00.00	0.00
3. Income accrued but not due on Term Deposits/Interest bearing				
advances to employees	0.00	0.00	0.00	0.00
4. Interest on Savings Bank Accounts	00.00	00.0	00.00	0.00
5. Others (Specify)	0.00	0.00	0.00	0.00
Total	874803.00	2077435.00	0.00	0.00
Transferred to Earmarked/Endowment Funds	0.00	0.00		
Balance	Nil	Nil		

NATIONAL INSTITUTE OF TECHNOLOGY NAGALAND CHUMUKEDIMA:: DIMAPUR:: NAGALAND - 797103

SCHEDULE 12: INTEREST EARNED

		Amount in Rupees
Particulars	31.03.2017	31.03.2016
1. On Savings Accounts with scheduled banks	00'0	0.00
2. On Loans		
a.Employees/Staff	00.0	0.00
b.Others	00.0	0.00
3. On Debtors and Other Receivables	00.0	0.00
Total	000	00.0

SCHEDULE 13- OTHER INCOME

A. Income from Land & Buildings	31.03.2017	31.03.2016
1.Hostel Room Rent	0.00	0.00
2.License fee	9840.00	10455.00
	0.00	0.00
3,Hire Charges of Auditorium/Play ground/Convention Centre, etc		
4,Electricity charges recovered	0.00	0.00
5.Water charges recovered	0.00	0.00
6.House Rent - Staff	210053.00	152277.00
Total	219893.00	162732.00
B. Sale of Institute's publications	0.00	0.00
C. Income from holding events		
1.Gross Receipts from annual function/ sports carnival	280000.00	338000.00
Less: Direct expenditure incurred on the annual		
function/ sports carnival	0.00	0.00
2.Gross Receipts from fetes	0.00	0.00
Less: Direct expenditure incurred on the fetes	0.00	0.00
3.Gross Receipts for educational tours	0.00	0.00
Less: Direct expenditure incurred on the tours	0.00	0.00
4.Others (to be specified and separately disclosed)	0.00	0.00
Total	280000.00	338000.00
D. Others		
1. Income from consultancy	322178.00	0.00
2. RTI fees	0.00	0.00
3. Income from Royalty	0.00	0.00
4. Sale of application form (recruitment)	0.00	60900.00
5. Misc. receipts (Sale of tender form)	285872.00	292800.00
6. Profit on Sale/disposal of Assets		
a)Owned assets	0.00	0.00
b)Assets received free of cost	0.00	0.00
7. Grants/Donations from Institutions, Welfare Bodies		
and International Organizations	0.00	0.00
8. Others (specify)		Annual Province
a) Transportation Fees - Staff	132200.00	238050.00
b) Hostel Management Fee - Staff	0.00	16800.00
c) Scholarship	936550.00	402980.00
d) CCMT 2015	0.00	194943.00
e) JOSAA 2015	0.00	408442.00
f) CCMT 2016	231360.00	0.00
g) JOSAA 2016	357250.00	0.00
Total	2265410.00	1614915.00
Grand Total (A+B+C+D)	2765303.00	2115647.00

SCHEDULE 14 - PRIOR PERIOD INCOME

Particulars	31.03.2017	31.03.2016
1.Academic Receipts	0.00	29200.00
2.Income from Investments	0.00	0.00
3.Interest earned	0.00	0.00
4. Other Income	60000.00	0.00
i) Grant	0.00	500000.00
ii) Reimbursement of Expenses	0.00	65634.00
Total	60000.00	594834.00

SCHEDULE 15 - STAFF PAYMENTS & BENEFITS (ESTABLISHMENT EXPENSES)

					An	Amount in Rupees
	31.0	31.03.2017			31.03.2016	91(
	Plan	Non Plan	Total	Plan	Non Plan	Total
a)Salaries and Wages	69093220.00	00:0	69093220.00	58720455.00	00:00	58720455.00
b) Allowances and Bonus	00:00	00:00	00.00	00.00	00:00	00.00
c)Contribution to Provident Fund	0.00	00.0	00.00	00.00	00.00	0.00
d)Contribution to Other Fund (specify)	00:00	00:0	00.00	00.00	00.00	00.00
e)Staff Welfare Expenses	326207.00	00:0	326207.00	94735.00	00:00	94735.00
f)Retirement and Terminal Benefits	00:00	00:00	00.00	00:00	00:00	0.00
g)LTC facility	0.00	00.0	00.00	00.00	00.0	0.00
h)Medical facility	00:00	00:00	00.00	00.00	00.00	0.00
i)Children Education Allowance	00:00	00.00	00.00	00.00	00.00	0.00
j)Honorarium	308200.00	00.0	308200.00	686500.00	00.0	686500.00

0.00

0.00

0.00

0.00

0.00 0.00 59501690.00

0.00 0.00

59501690.00

69727927.00

0.00

69727927.00

TOTAL

I) Others - Mess Workers Salary

SCHEDULE 16 - ACADEMIC EXPENSES

					Amc	Amount in Rupees
		31.03.2017			31.03.2016	
	Plan	Non Plan	Total	Plan	Non Plan	Total
a)Laboratory expenses	161070.00	0.00	161070.00	225939.00	00'0	225939.00
b)Field work/Participation in Conferences	46086.00	0.00	46086.00	0.00	0.00	0.00
c)Expenses on Seminars/Workshops	1304637.00	0.00	1304637.00	368749.76	0.00	368749.76
d)Payment to visiting faculty	1852786.00	0.00	1852786.00	798424.00	00.00	798424.00
e)Examination	775136.00	0.00	775136.00	1962604.00	00.00	1962604.00
f)Student Welfare expenses	1652453.00	0.00	1652453.00	197680.00	00.00	197680.00
g)Admission expenses	00.0	0.00	00.0	00.0	00'0	0.00
h)Convocation expenses	00.00	0.00	00.0	9183651.00	00'0	9183651.00
i) Publications	0.00	0.00	00.0	00.00	00'0	0.00
j)Stipend/means-cum-merit scholarship	6010634.00	0.00	6010634.00	2939000.00	00:00	2939000.00
k)Subscription Expenses	0.00	00:0	00.0	00'8929	00'0	00'89/9
I) Others (specify)						
i) Hostel Management Expenses	11492980.00	0.00	11492980.00	9299230.00	00.00	9299230.00
ii) Medical Centre	00.00	0.00	00.00	00.0	00.00	0.00
iii) Sports Activity	294932.00	0.00	294932.00	282497.00	00'0	282497.00
iv) Student Placement	280680.00	0.00	280680.00	00.0	00'0	0.00
v) CCMT	448336.00	0.00	448336.00	194943.00	00'0	194943.00
vi) JOSAA	00.00	0.00	00.0	408442.00	0.00	408442.00
vii) Teaching Aids	0.00	0.00	00.0	157058.00	00'0	157058.00
viii) Annual Day Funtion	295596.00	0.00	295596.00	16000.00	00.00	16000.00
ix) CPDA Expenses	557923.00	0.00	557923.00	379599.00	00'0	379599.00
x) CSAB	366318.00	0.00	366318.00	00.00	0.00	0.00
TOTAL	25539567.00	00.00	25539567.00	26420584.76	0.00	26420584.76

SCHEDULE 17 - ADMINISTRATIVE AND GENERAL EXPENSES

		31.03.2017	710		31.03.2016	910
	Plan	Non Plan	Total	Plan	Non Plan	Total
A Infrastructure						
a) Electricity and power	3912260.00	0.00	3912260.00	3166419.00	0.00	3166419.00
b)Water charges	1324094.00	00:00	1324094.00	1113552.00	00:00	1113552.00
c)Insurance	0.00	00.00	0.00	81644.00	00:00	81644.00
d)Rent, Rates and Taxes (including property tax)	476400.00	0.00	476400.00	353000.00	00.00	353000.00
B Communication						
e)Postage and Telegram	00.00	00.00	0.00	00.00	00:00	0.00
f)Telephone, Fax and Internet Charges	104025.00	0.00	104025.00	1027611.00	00.00	1027611.00
C Others						
g)Printing and Stationery (consumption)	1838846.00	0.00	1838846.00	594133.00	00.00	594133.00
h)Travelling and Conveyance Expenses/TA/DA	189459.00	0.00	189459.00	2015637.00	00.00	2015637.00
i)Hospitality	668027.00	0.00	668027.00	668341.00	00:00	668341.00
j) Auditors Remuneration	00.000009	0.00	6000000.00	379792.00	0.00	379792.00
k)Professional Charges	437486.00	0.00	437486.00	129000.00	00:00	129000.00
1) Advertisement and Publicity	1160070.00	00:00	1160070.00	1598764.00	00:00	1598764.00
m)Magazines & Journals	0.00	0.00	0.00	0.00	00:00	0.00
n)Others (as per details below)						
Office Expenses	1137345.00	0.00	1137345.00	690831.00	00:00	690831.00
Recruitment	0.00	0.00	0.00	0.00	00.00	0.00
Security Services	0.00	0.00	0.00	0.00	00:00	0.00
Subsription for NIT Transit House	250000.00	00.00	250000.00	250000.00	00.00	250000.00
Meetings	2847854.00	0.00	2847854.00	1749986.00	00.00	1749986.00
TOTAL	AL 14945866.00	00.00	14945866.00	13818710.00	00.00	13818710.00

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SCHEDULE 18 TRANSPORTATION EXPENSES

	Particulars		31.03.2017			31.03.2016	
		Plan	Non Plan	Total	Plan	Non Plan	Total
	Vehicles (owned by Institution)						
	a)Running expenses	531283.00	00.00	531283.00	493686.00	00.00	493686.00
	b)Repairs & maintenance	00.00	00.00	00:00	36500.00	0.00	36500.00
	c) Insurance expenses	77389.00	00.00	77389.00	00.00	00.00	0.00
CA	2 Vehicles taken on rent/lease						
	a) Rent/lease expenses	0.00	00.00	00.00	00.00	00.00	0.00
(r)	3 Vehicle (Taxi) hiring expenses	0.00	00.00	00.00	00.00	00.00	0.00
	Total	608672.00	00.00	608672.00	530186.00	00.0	530186.00

SCHEDULE 19 - REPAIRS & MAINTENANCE

			31.03.2017			31.03.2016	
	rarticulars	Plan	Non Plan	Total	Plan	Non Plan	Total
a)	Buildings	3037744.00	0.00	3037744.00	793649.00	0.00	793649.00
(q	Furniture & Fixtures	0.00	0.00	00:0	00.0	0.00	00.00
c)	Plant & Machinery	15260.00	00'0	15260.00	00'0	0.00	00'0
ф (р	Office Equipment	135778.00	00.0	135778.00	00'0	0.00	00.00
e)	Computers	0.00	0.00	0.00	0.00	0.00	0.00
(J	Laboratory & Scientific equipment	0.00	0.00	0.00	00.00	0.00	0.00
(8)	Audio Visual equipment	0.00	0.00	00:00	0.00	0.00	00:00
(H	Cleaning Material & Services	433026.00	0.00	433026.00	321629.00	0.00	321629.00
i)	Book binding charges	0.00	0.00	00.0	0.00	0.00	00.00
	Gardening	0.00	0.00	00.00	00.00	0.00	0.00
k)	Estate Maintenance	98330.00	0.00	00'0£286	00'0	0.00	00'0
	Others - Electrical	1370094.00	0.00	1370094.00	1746235.00	0.00	1746235.00
	Total	5090232.00	0.00	5090232.00	2861513.00	0.00	2861513.00
l							

SCHEDULE 20 - FINANCE COSTS

					An	Amount in Rupees
Particulars		31.03.2017			31.03.2016	
	Plan	Non Plan	Total	Plan	Non Plan	Total
a) Bank charges	33780.89	0.00	33780.89	109820.89	0.00	109820.89
b) Others (specify)	00:0	00.00	00:0	00.00	0.00	0.00
Total	33780.89	0.00	33780.89	109820.89	0.00	109820.89

SCHEDULE 21 - OTHER EXPENSES

Doubles		31.03.2017			31.03.2016	
raticulars	Plan	Non Plan	Total	Plan	Non Plan	Total
a) Provision for Bad and Doubtful Debts/Advances	0.00	0.00	00.00	0.00	0.00	00.00
b) Irrecoverable Balances Written - off	00.00	00.00	00.0	00.00	00.00	0.00
c) Grants/Subsidies to other institutions/organizations	0.00	0.00	00:00	0.00	0.00	00.00
d) Others (specify)	00.00	00'0	0.00	0.00	00.00	0.00
Total	00.00	00.00	0.00	00.00	00.00	0.00

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,		31.03.2017			31.03.2016	
Farticulars	Plan	Non Plan	Total	Plan	Non Plan	Total
1 Establishment expenses	00.00	00.0	00.00	00.00	0.00	0.00
2 Academic expenses	00.00	00.0	00.00	00.00	0.00	0.00
3 Administrative expenses	630.00	00.0	630.00	550300.00	0.00	550300.00
4 Transportation expenses	00'0	00.0	00.0	00.0	0.00	0.00
5 Repairs & Maintenance	00'0	00.0	00.00	00.00	0.00	0.00
Other expenses (STAFF NPS 6 EARLIER YEARS)	3474810.75	0.00	3474810.75	0.00	0.00	0.00
Total	3475440.75	0.00	3475440.75	550300.00	0.00	550300.00

ANNEXURE A: DETAILS OF SUNDRY CREDITORS FOR GOODS & SERVICES AS ON 31-03-2017

Sl.No.	Particulars	C/B As on 31.03.2017
1	Ampitron Products	360.00
2	Agilent Technologies India Pvt Ltd.	29743.00
3	BMG Informatics Pvt Ltd.	73618.00
4	DRD Agencies	3380.00
5	Jas Effects I T Solutions Pvt Ltd.	4465.00
6	Joy Supply Agencies	112468.00
7	I R Services Technologies Pvt Ltd.	575088.00
8	Kapal Industries	273424.00
9	Lotus Sales Enterprise	137310.00
10	Mejestic Printers	22408.00
11	National Industrial Corpation	127816.00
12	Netcom Solution	14899460.00
13	Solarland Renewable Energy (India) Pvt Ltd.	57960.00
14	Sushama Electronics	1281900.00
15	Triesten Technologies Pvt Ltd.	13867.00
16	Imperial Decor	44445.00
17	PacerPower Solutions Pvt Ltd.	14716.00
18	Vishal Vyapar Vikash	2967398.00
		20639826.00

ANNEXURE C: DETAILS OF STATUTORY LIABILITIES AS ON 31-03-2017

Sl.No.	Particulars	C/B As on 31.03.2017
1	GPF Payable (Director)	352000.00
2	Income Tax FY 2014-15	27819.00
3	TDS Payable FY 2016-17 (Staff)	189389.00
4	NPS Payable (Staff)	591744.00
5	Pension / Leave Payable (Director)	57208.00
6	Professional Tax FY 2015-16 Payable	15808.00
7	Professional Tax FY 2014-15	-1456.00
8	Tds Payable 13-14	30000.00
9	TDS 2015-16	-100.00
		1262412.00

ANNEXURE D: DETAILS OF OTHER LIABILITIES AS ON 31-03-2017

Sl.No.	Particulars	C/B As on 31.03.2017
1	Audit Fees Payable	80000.00
3	Mess Advance	956605.00
4	Mess Dues	4510.00
5	NIT Silchar Liability	693289.00
		1734404.00

ANNEXURE E: DETAILS OF ADVANCE TO STAFF AS ON 31-03-2017

Sl.No.	Particulars	C/B As on 31.03.2017
1	Amrit Puzari	39000.00
2	Arul Valan	-76.00
3	DebabattaPatti	135000.00
4	Dr Dipu Sarkar	-3935.00
5	Dr Nirmala Devi	12000.00
6	Dushmanta Kumar	230130.00
7	Eliyamo Khitan	22000.00
8	G Seetharaman	30000.00
9	Jyoti Prasad Borah	3203930.00
10	K Govindarajan	<i>-</i> 16679.00
11	Mathivanan	-5400.00
12	MP Ganeshamoorty	-41455.00
13	Nzanthung Ngullie	301004.00
14	R Kumar	30000.00
15	Rosaline Jamir	26000.00
16	Shouvik Dey	-1000.00
17	V Laxminarayana	119535.00
18	V Ramachandran	30459.00
19	Departmental Advance	500000.00
20	Hostel Bank Account Advance	5000.00
		4615513.00

ANNEXURE F: DETAILS OF ADVANCES TO SUPPLIER AS ON 31-03-2017

Sl.No.	Particulars	C/B As on 31.03.2017
1	Adyar Travel Bureau Pvt Ltd	2048774.00
2	Agaram Industries	1015545.00
3	Advance Electronics Industries	18621626.00
4	Benchmark Electronics Systems Pvt Ltd.	1169438.00
5	Elmax Projects & Services	6478816.00
6	Edutech Inida Pvt Ltd.	17611896.00
7	Engineers Devlopement Council	592057.25
8	Festo India Pvt Ltd.	16820299.00
9	Global Tube Wells	1200000.00
10	Hindusthan Prefab Limited	13564212.00
11	Login Edu Tree Pvt Ltd.	324900.00
12	Nagaland Bamboo Devlopement Agency	6806056.00
13	Netcom Solutions	6891286.00
14	N R Chakeshang	3019099.00
15	Niathu Resort	525.00
16	Nandlal Mangilal Jain	1080465.00
17	PK Travels	125069.00
18	Ricoh India Limited	1875331.00
19	Tectos	129952.00
20	VI Micro Systems	16216838.00
		115592184.25





National Institute of Technology Nagaland Chumukedima, Dimapur-797 103, Nagaland (under the Ministry of Human Resource Development, Government of India)

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