



**A Centrally Funded Technical Institute under MoE (Govt. of India)**  
Hatia, Ranchi - 834 003 (Jharkhand) INDIA | [www.niamt.ac.in](http://www.niamt.ac.in)







# ANNUAL REPORT

## 2021-22



**NATIONAL INSTITUTE OF ADVANCED  
MANUFACTURING TECHNOLOGY (Formerly NIFFT)**

A Centrally Funded Technical Institute under MoE (Govt, of India)

Hatia, Ranchi - 834 003 (Jharkhand) INDIA





# C O N T E N T

Sl. No.	Chapter	Page No.
1	Preamble	5
2	Board of Governors	7
3	Administrative & Finance Committee	8
4	Standing Building Committee	9
5	Academic Council	10
6	Department of Foundry Technology	13
7	Department of Forge Technology	16
8	Department of Mechanical & Manufacturing Engineering	19
9	Department of Materials & Metallurgical Engineering	21
10	Department of Applied Sciences and Humanities	23
11	Department of Electronics & Computer Engineering	29
12	General Administration	31
13	Academic Activities	32
14	Centralized Computer Centre Lab	53
15	Library and Documentation Centre	57
16	NIAMT Hostel	58
17	Industrial Liaison Cell	59
18	Student's Gymkhana	61
19	Student Activities	62
20	Institute Events	67
21	Hindi Cell	69
22	Annual Accounts & Audit Report	71







# P R E A M B L E

Since its inception, the National Institute of Advanced Manufacturing Technology (NIAMT), Ranchi (erstwhile National Institute of Foundry and Forge Technology (NIFFT)) has continuously expanded and elevated its academic framework to fulfill the requirements of quality manpower in the manufacturing sector.

Over the years, the Institute has earned widespread recognition in training, education, research, and consultancy, and maintained the character of a National Institute in its governing systems, recruitment of faculty, and admission of students. Alumni of the Institute have played a leading role not only in foundry and forge industries, as engineers and entrepreneurs, but also in IITs, IIMs, PSUs, and UPSC cadres.

In pursuit of its mission, to emerge as a center of excellence in advanced manufacturing, the Institute has changed its name from National Institute of Foundry and Forge Technology to National Institute of Advanced Manufacturing Technology on November 11, 2021, with due approval of Ministry of Education, Government of India.

The Institute aspires to excel as a center for holistic skill and knowledge development in manufacturing technology, emerging in the horizon, by evolving the confluence of multiple domains like Mechanical Engineering, Material Engineering, Computer Engineering, Information Technology, Physical Sciences, Mathematics and Humanities.

The new breed of manpower, produced by this Institute, will inherit the capabilities not only to provide leadership in the futuristic manufacturing sector, but also will inherit the ingenuity to elevate traditional manufacturing practices to the level of the emerging digital manufacturing technology by introducing appropriate backward-forward linkages.

NIAMT, in its framework, inherits the unique commitment, from erstwhile NIFFT, to serve the manufacturing sector of the country, in the emerging spectrum, and to promote the synergy between sustainability and competitiveness in the manufacturing sector.







## BOARD OF GOVERNORS

1	<b>Mr. Sham H. Arjunwadkar</b> CEO, Foundry Geometrix and Mentor, NCTS - IIF	Chairman
<b>Representatives from Government of India</b>		
2	<b>Ms. Soumya Gupta, IAS</b> Joint Secretary (Admin.) Ministry of Human Resource Development, Department of Higher Education, Govt. of India	Member
3	<b>Ms. Darshana M. Dabral,</b> JS & FA Ministry of Human Resource Development Department of Higher Education, Govt. of India	Member
<b>Representatives of Ministry of Industry Government of India</b>		
4	<b>Mohd. Zakaria Khan Yusufzai</b> Senior Development Officer (Engg.) Department for Promotion of Industry and Internal Trade Ministry of Commerce and Industry	Member
<b>Representatives of All India Council for Technical Education</b>		
5	<b>Prof. M.K. Tiwari</b> Department of Industrial Engg. and Management Indian Institute of Technology, Kharagpur	Member
<b>Representatives of Industries Including Public Enterprises</b>		
6	Vacant	Member
7	Vacant	Member
8	<b>Mr. Pradeep Goyal</b> Founder Chairman & Managing Director, Pradeep Metals Limited, Mumbai	Member
9	<b>Mr. Sachin B. Sabnis</b> Managing Director Belgaum Ferrocast India Pvt. Ltd. (BFPL)	Member
10	<b>Prof. Markrand Shrikrishna Kulkarni</b> Department of Mechanical Engineering, Indian Institute of Technology, Bombay	Member
<b>Representatives of Technical Institutes/Engineering Profession</b>		
11	<b>Dr. Pallab Banerji</b> Professor Materials Science Centre Indian Institute of Technology Kharagpur	Member
12	<b>Prof. B.S. Murthy</b> Department of Metallurgical and Materials Engineering NAC Rd. Indian Institute of Technology, Madras	Member
<b>Co-opted members by the Board</b>		
13	<b>Mr. Sudhir Mutalik</b> Founder CMD of Positive Metering Pumps (I) Pvt. Ltd.	Member

14	<b>Mr. Vikas Khanvelkar</b> Founder CMD – Design Tech Systems Ltd.	Member
<b>Co-opted members From Faculty</b>		
15	<b>Prof. K. K. Singh</b> Dept. of Foundry Technology, NIAMT, Ranchi	Member
16	<b>Prof. N.K. Singh</b> Department of Forge Technology, NIAMT	
<b>Member Secretary</b>		
17	<b>Prof. Partha Protim Chattopadhyay</b> Director, NIAMT	Member Secretary

## ADMINISTRATIVE AND FINANCE COMMITTEE

<b>Chairman</b>		
1	<b>Mr. Sham H. Arjunwadkar</b> CEO, Foundry Geometrix and Mentor, NCTS - IIF	Chairman
<b>Representatives from Government of India</b>		
2	<b>Ms. Soumya Gupta, IAS</b> Joint Secretary (Admin.) Ministry of Human Resource Development, Department of Higher Education, Govt. of India	Member
3	<b>Ms. Darshana M. Dabral,</b> JS & FA Ministry of Human Resource Development Department of Higher Education, Govt. of India	Member
<b>Co-opted members From Faculty</b>		
4	<b>Prof. K. K. Singh</b> Dept. of Foundry Technology, NIAMT, Ranchi	
5	<b>Prof. N. K. Singh</b> Department of Forge Technology, NIAMT	Member
<b>Member Secretary</b>		
7	<b>Prof. P P Chattopadhyay</b> Director, NIAMT	Member Secretary



## STANDING BUILDING COMMITTEE

1	<b>Prof. P.P. Chattopadhyay</b> Director, NIAMT, Hatia, Ranchi-03	Chairman
2	<b>Ms. Soumya Gupta, IAS</b> Joint Secretary (Admin), Dept. of Higher Education, MoE, Shastri Bhawan, New Delhi	Member
3	<b>Prof. Debasis Roy,</b> Chairman, Civil Construction and Maintenance, Indian Institute of Technology, Kharagpur	Member
4	<b>Mr. S. Bandyopadhyay</b> A.M, Electrical Engineer Heavy Engineering Corporation Limited Dhurwa, Ranchi-834004	Member
5	<b>Mr. Suman Kumar</b> General Manager NBCC, 4th Floor, 401, Mangal Tower Old H.B. Road, Ranchi	Member
6	<b>Mr. Amrendra Kumar Singh</b> General Manager (Civil) MECON Ltd. Ranchi-834002	Member
7	<b>Prof. K.K. Singh</b> Member, BoG Department of Foundry Technology, NIAMT, Ranchi	Member
8	<b>Prof. Manoj Kumar</b> Dean(P&D) Department of Forge Technology NIAMT, Ranchi	Member
9	<b>Mr. U.C. Prasad,</b> Registrar, NIAMT, Hatia, Ranchi	Member

## ACADEMIC COUNCIL

1	Prof. P.P. Chattopadhyay, Director, NIAMT, Ranchi	Chairman
2	Vice Chancellor, Jharkhand University of Technology or His Nominee	Member
3	Controller of Examinations, Jharkhand University of Technology	Member
4	Vice Chancellor, Ranchi University or his Nominee	Member
5	Prof. Anand Mukut Tigga, Department of Production Engineering, NIT, Jamshedpur	Member
6	Prof. N. K. Singh, HOD (Forge Tech.)	Member
7	Prof. Arvind Pandey, HOD(DASH)	Member
8	Dr. Amitesh Kumar, HOD (Foundry Tech.)	Member
9	Dr. A. K. Sood, HOD (ME)	Member
10	Dr. D. Roy, HOD (MME)	Member
11	Prof. Sanjay Kumar, NIAMT, Ranchi	Member
12	Prof. B. K. Chakraborty, NIAMT, Ranchi	Member
13	Prof. A.K. Singh, NIAMT, Ranchi	Member
14	Prof. A. Mondal, NIAMT, Ranchi	Member
15	Prof. P. Talukdar, NIAMT, Ranchi	Member
16	Prof. K.K. Singh, NIAMT, Ranchi	Member
17	Prof. R.K. Ohdar, NIAMT, Ranchi	Member
18	Prof. A. K. Pathak, NIAMT, Ranchi	Member
19	Prof. Nandita Gupta, NIAMT, Ranchi	Member
20	Prof. S. R. Kumar, NIAMT, Ranchi	Member
21	Prof. Anil Kumar, NIAMT, Ranchi	Member
22	Prof. Manoj Kumar, NIAMT, Ranchi	Member
23	Prof. Vijay Toppo, NIAMT, Ranchi	Member
24	Prof. B.K. Jha, NIAMT, Ranchi	Member
25	Prof. B. Kumar, Dean (Academic)	Member Secretary









## DEPARTMENT OF FOUNDRY TECHNOLOGY

### About Department:

Foundry Technology Department came into existence in 1966 at the time of the inception of the Institute. Department offers Advanced Diploma Course (ADC) in Foundry Technology and jointly M. Tech in Foundry-Forge Technology Foundry Technology. Department provides technical support as consultancy, troubleshooting work, development of latest technology, outreach programme like refresher courses, unit-based programme in the premises of institute as well as at the sight of industry and research to Foundry and allied industries. In order to be competent with the present situation of cutting-edge technology, Foundry Department has geared up noticeably and is capable in establishing the latest areas of research in Foundry Technology.

### FACULTY :

1	<b>Dr. K. K. Singh,</b> B. Sc. Engg. ( Met.), M. Tech. ( Met. Engg.), Ph.D. (I. I. T. Kanpur), LMIFO, LMIIM, FM Institution of Engineer	Professor
2	<b>Dr. Nandita Gupta</b> B.E. Mechanical , PD. Engineering (Ranchi University) MIIF, LMIIM, FIEI	Professor
3	<b>Dr. Amitesh Kumar</b> B.E., M.Tech., Ph.D. (I. I. T. Kharagpur), MIIF, LMIIM, LMIFO	Professor & HOD
4	<b>Dr. Himanshu Khandelwal</b> B.Tech, M.Tech., Ph.D. (I. I. T. Bombay)	Assistant Professor

### ACTIVITIES:

#### Academic Activities:

Number of subjects offered by the department of M.Tech , B. Tech and ADC level are :

M.Tech.: 08

B. Tech : 08

ADC : 11

Faculty members of the department were involved in guiding Seminars and Projects of M. Tech., B. Tech., and Advanced Diploma Course besides their normal classes for long term courses.

#### Ph.D Ongoing:

Number of Ph.D. Scholars - 2

## Projects / Seminar/ Conference/ Presentation / Symposia/ Webinar /Publications/ Online course/workshop :

1. Vijayanand Palani, Amitesh Kumar, K. R. Vijaya kumar & P. Kumaran, Investigations on the Performance Characteristics of Carbon Nano-tubes, Alumina and Titanium Dioxide Based Plasma Sprayed Coatings on AISI 1020 Steel, International Journal of Precision Engineering and Manufacturing volume 22, pages365–372 (2021).
2. Himanshu Khandelwal and Sumeet Kumar, Effect of Mo on Micro-structural and Mechanical Properties of As-Cast Ferritic Spheroidal Graphite Iron, in Transactions of the Indian Institute of Metals (TIIM), 74, 2703–2711 (2021), Springer.
3. Khandelwal, H., Chavan, S. (2023). Electric Mobility: Key Factors, Unresolved Issues and Significance for Foundry Industries. In: Dikshit, M.K., Soni, A., Davim, J.P. (eds) Advances in Manufacturing Engineering. Lecture Notes in Mechanical Engineering. Springer, Singapore. [https://doi.org/10.1007/978-981-19-4208-2\\_22](https://doi.org/10.1007/978-981-19-4208-2_22)
4. Himanshu Khandelwal, Sumeet Chavan, Electric Mobility: Key Factors, Unresolved Issues and Significance for Foundry Industries, in press to be published in Lecture Notes in Mechanical Engineering, Springer, presented at International Conference on Futuristic Advancements in Materials, Manufacturing and Thermal Sciences (ICFAMMT - 2022), Institute of Infrastructure, Technology, Research and Management (IITRAM), Ahmedabad, January 20-21, 2022.
5. Himanshu Khandelwal, Amitesh Kumar, Art to Intelligence: A roadmap for Foundry 4.0, in proceedings of National Conference and Industry Meet on Foundry 4.0 – Opportunities and Challenges, organized by CSIR CMERI and IIF Eastern Region, at CMERI Durgapur, 2022. Feb 24-25.
6. Nandita Gupta attended “Measures for increasing access including online and ODL Education” A zonal and regional workshop on “Implementation of New Education Policy 2020” Jharkhand State Government, Hotel Chanakya Ranchi, 9-10 December 2021.
7. Nandita Gupta attended “Matter, Mind and Consciousness:from information to meaning an exploration to vedic and scientific exploration” International conference Jigyasa 2021” organised by Institute for science and spirituality Delhi and Institute for higher studies Florida 18-19 December 2021 at Delhi,
8. Nandita Gupta, Abhijeet kumar, Susanta Rath, “Study of Deformation Behaviour of High Phosphorous Steel (0.2%)during Hot Rolling” ‘Symposium on “Failure and preventive Maintenance of Machineries (FPMM-2022) “ March 8-9, 2022 “ Venue CMERI Durgapur West Bengal
9. Nandita Gupta, Ganesh Vidyarthi “Effect of salt cores on crack formation due to pattern in Investment Casting” “National Conference and Industrial Meet on Foundry 4.0-Opportunities and Challenges”, 24<sup>th</sup> to 25<sup>th</sup> February, 2022, Venue CMERI Durgapur, West Bengal

## FDP/Short-Term Course Attended

1. Dr. Nandita Gupta attended Faculty Development Programme organized by (AICTE)-“Universal Human Value” 20-24 September 2021
2. Dr. Nandita Gupta attended Faculty Development Programme (AICTE) on “Metallurgical aspect in Additive Manufacturing” 19-23 April 2021, Organised by NIT Andhra Pradesh (AICTE)



**Administrative Assignments:**

1.	Dr. K. K. Singh	<ul style="list-style-type: none"> <li>• Dean Student Affairs</li> <li>• Chairman ILC</li> <li>• Chairman NIFFT Niwas</li> </ul>
2.	Prof. A. K. Singh	<ul style="list-style-type: none"> <li>• Chairman Library Committee</li> </ul>
3.	Dr. .Amitesh Kumar	<ul style="list-style-type: none"> <li>• Member Anti-ragging Committee</li> <li>• Member of Library committee</li> <li>• HOD Foundry Technology Deptt.</li> </ul>
4	Dr. Himanshu Khandelwal	<ul style="list-style-type: none"> <li>• Associate Dean (ADC)</li> </ul>
5	Dr Nandita Gupta	<ul style="list-style-type: none"> <li>• Dean Research February 2022 onwards</li> <li>• Incharge Sand Laboratory Deptt of Foundry Technology</li> <li>• Member in Departmental Contractual Faculty Recruitment Committee February 2022</li> </ul>



## DEPARTMENT OF FORGE TECHNOLOGY

### About Department:

Department of Forge Technology was created in 1966 in which Advanced Diploma Courses (ADC), in Forge Technology, were offered to provide trained manpower in the primary metal processing industries. In 1985, M Tech programme was introduced with the specialization of foundry and forge technology. Subsequently, in 1991, two B Tech programs, one in Metallurgical and Materials Engineering and the other in Manufacturing, was introduced to reinforce the core framework of forging technology. In order to be competent with the present situation, the department grew noticeably and established new areas of research in forging technology. The department is having competent and highly qualified faculty members.

### FACULTY :

1	<b>Dr. N. K. Singh,</b> B.Sc. Engg. (Mech.), M. Tech. (Foundry & Forge Tech.), Ph.D. (Ranchi University)	Professor & HoD
2	<b>Dr. P. Talukdar,</b> B.E. (Met.), M.E. (Met. Engg.), Ph.D. (Jadavpur University)	Professor
3	<b>Dr. R. K. Ohdar,</b> B.E. (Ind. Engg.), M. Tech. (Foundry & Forge Tech.), Ph.D. (IIT Kharagpur)	Professor
4	<b>Dr. Manoj Kumar,</b> B.Sc. Engg. (Mech.), M. Tech. (Foundry & Forge Tech.) Ph.D. (IIT Kanpur)	Professor
5	<b>Mr. Vineet Chak</b> B.Tech (Mech.) M. Tech (IIT Rorkee)	Assistant Professor
6	<b>Dr. Ajit Kumar Pramanik</b> B.Tech(Mech.), M. Tech (IIT Roorkee), Ph.D (Jadavpur University)	Assistant Professor
7	<b>Dr. Deepak Kumar</b> B.Tech (Mech.) M. Tech (AMU Aligarh ), Ph.D. (IIT Rorkee )	Assistant Professor
8	<b>Dr. Kulkarni Rahul Ramesh</b> B.E. (Mech.), M.Tech (NITK), Ph.D. (IIT Bombay)	Assistant Professor

### ACTIVITIES

#### Academic Activities:

Number of subjects offered by the department:

Name of Course	No. of Subjects Offered
B. Tech. Course (ME & MME)	2
M. Tech. Course (Foundry-Forge & Mfg. Engg.)	10
A.D.C. (Foundry Tech. & Forge Tech.)	12



## Research, Consultancy and Industrial Outreach Activities

### (i) Doctoral & Post Doctoral Programmes

- Mr. Abhishek Kumar Ph.D student of Department of Forge Technology is working on "Studies on Parametric optimization of Magnesium alloy forging associated with thermal cycling" under the supervision of Dr. Kulkarni Rahul Ramesh, Assistant Professor and Dr. R. K. Ohdar, Professor of Dept. of Forge Technology.
- Mr. Vineet Chak, Assistant Professor of Dept. of Forge Technology, has submitted Ph. D. Thesis on "Fabrication and characterization of Graphene reinforced Aluminium metal matrix composites" under the guidance of Dr. Himadri Chattopadhyay, Professor of Mechanical Engineering Department, Jadavpur University, Kolkata.

### (ii) SEMINARS/ CONFERENCES/ PUBLICATIONS

1. Ranjan, A., Kumar, A., Kulkarni, R. (2023): "Studies on Annealing Kinetics of Cold Forged AA6082", In: Dikshit, M.K., Soni, A., Davim, J.P. (eds) Advances in Manufacturing Engineering, as part of Lecture Notes in Mechanical Engineering book series. Springer, Singapore, pp 345-351. [Online ISBN: 978-981-19-4208-2, Print ISBN: 978-981-19-4207-5] [Electronic ISSN: 2195-4364, Print ISSN: 2195-4356]. DOI: [https://doi.org/10.1007/978-981-19-4208-2\\_24](https://doi.org/10.1007/978-981-19-4208-2_24) (Scopus Indexed)
2. Rahul Ramesh Kulkarni, Ashvani Kumar, Ashutosh Ranjan (2022): "The Methods of Processing to Produce Fine Grain Structure in Magnesium Alloys: An Overview, AIP Conference Proceedings", 2653 pp 030005-1 to 030005-5 [ISBN: 978-0-7354-4213-9]. DOI: <https://doi.org/10.1063/5.0110832> (Science Citation Indexed Expanded & Scopus Indexed)
3. Kulkarni R.R., Mate S., Joseph S., D'sa N. (2021): "Effect of Heat Treatment on Microstructure and Room Temperature Mechanical Properties in 55Si7 Spring Steel", In: Agrawal R., Jain J.K., Yadav V.S., Manupati V.K., Varela L. (Eds.) Recent Advances in Smart Manufacturing and Materials. Lecture Notes in Mechanical Engineering. Springer, Singapore, pp 65-75. [Online ISBN: 978-981-16-3033-0, Print ISBN: 978-981-16-3032-3] [Electronic ISSN: 2195-4364, Print ISSN: 2195-4356] DOI: [https://doi.org/10.1007/978-981-16-3033-0\\_7](https://doi.org/10.1007/978-981-16-3033-0_7) (Scopus Indexed)
4. Ashutosh Ranjan, Ashvani Kumar, Rahul Kulkarni: "Studies on Annealing Kinetics of Cold Forged AA6082", International Conference on Futuristic Advancement in Materials, Manufacturing and Thermal Sciences (IC-FAMMT 2022) at Institute of Infrastructure, Technology, Research and Management, Ahmedabad (An Autonomous University established by Government of Gujarat), January 20-22, 2022.
5. Rahul Kulkarni, Ashvani Kumar and Ashutosh Ranjan: "An Overview on Processing Methods to Produce Fine Grain Structure in Magnesium Alloys", Virtual International Conference on Product Design, Development and Deployment (PD3 -2021) at Vellore Institute of Technology (Recognized as Institution of Eminence (IoE) by Government of India), Vellore, September 11-12, 2021.
6. D. Kumar, R. Singh, U. Prakash, V.V. Dabhade, K. Laha, and T. Sakthivel, Journal of Materials Engineering and Performance, 31, pp. 994-1002 (2022)
7. Chak V, Chattopadhyay H. "Synthesis of graphene-aluminium matrix nanocomposites: mechanical and tribological properties". Materials Science and Technology. 2021 Mar 24;37(5):467-77. <https://doi.org/10.1080/02670836.2021.1916253>

8. Chak V, Chattopadhyay H, Dora TL. "Application of solid processing routes for the synthesis of graphene-aluminum composites-a review". Materials and Manufacturing Processes. 2021 May 1:1-7. <https://doi.org/10.1080/10426914.2021.1914845>

### **FDP/ Short Term Course Attended**

1. Mr. Vineet Chak, Assistant Professor of Dept. of Forge Technology, attended and successfully completed the AICTE approved FDP courses -8 Modules (8 weeks each) organized by NITTTR Chennai.
2. Dr. Deepak Kumar, Assistant Professor of Dept. of Forge Technology attended and successfully completed the AICTE approved FDP courses -8 Modules (8 weeks each) organized by NITTTR Chennai.
3. Dr. R R Kulkarni, Assistant Professor of Dept. of Forge Technology attended and successfully completed the AICTE approved FDP courses -8 Modules (8 weeks each) organized by NITTTR Chennai.
4. Dr. R R Kulkarni, Assistant Professor of Dept. of Forge Technology attended a Short-term Course on Advanced and Futuristic Manufacturing Process organized by the National Institute of Foundry and Forge Technology, Ranchi, September 25-29, 2021.

### **Administrative Assignments:**

Faculty members of the department were engaged in various administrative activities.





## DEPARTMENT OF MECHANICAL & MANUFACTURING ENGINEERING

### About Department:

Department established in 1985 as Production Engineering Department, and was renamed as Department of Manufacturing Engineering in 1991. The department started the M. Tech. (Manufacturing Engineering) programme in 1991, followed by the B. Tech. (Manufacturing Engineering) programme in 1992 and PhD programme in 2006. The degrees pertaining to all programmes are awarded by Ranchi University, Ranchi. Department is offering undergraduate in mechanical manufacturing and post graduate course in manufacturing engineering.

The department attracts a diverse set of talented students. The curriculum designed is suitable for overall development of Knowledge which helps the students to become industrial and academic leaders. Apart from learning the basic technical concepts, the students are open to avail various elective courses. The department has some finer facilities matching with the best technical institutes in India, to train the undergraduate and postgraduate students, and to enable them to handle the ever challenging needs of technical excellence in all areas of manufacturing engineering. The department has the following laboratories: computer, CAD/CAM/CAE, FMS, metrology, machining, pattern shop and welding. Some new laboratories, such as fluid mechanics and mechanics of solids, etc. are under development.

### FACULTY :

1	<b>Dr. Sanjay Kumar</b> B.Tech. (Met.), M.E.(Mech.), Ph.D., MIIF	Professor
2	<b>Dr. A. Mandal</b> B.Tech. (Mech.), M.Tech.(Prod.), Ph.D., MIIF	Professor
3	<b>Dr. A. K. Pathak</b> B.Sc.Engg.(Mech.), Tech.(Mech.), Ph.D., MIIF, MISTE, MIIM	Professor
4	<b>Dr. K. K. Verma</b> M.Sc. (Maths.), M.Phil. (Applied Maths.), MIIF	Associate Professor
5	<b>Dr. Vijay Toppo</b> B.Sc.Engg.(Mech.), M.Tech.(Mfg.Engg.), PhD, MIIM, MIIF	Professor
6	<b>Dr. G. Rajamohan</b> B.E.(Mech.), M.E.(Mfg.Tech.), PhD, MIE	Associate Professor
7	<b>Dr. A. K. Sood</b> B.E.(Mech.), M.E.(Design.), Ph.D	Associate Professor & HOD
8	<b>Dr. V.M.S. Hussain</b> B.E.(Mech.), M.E.(Prod.), MIIF, Ph.D	Assistant Professor
9	<b>Dr. Ratnakar Das</b> AMIE (Mech.), M.E. (Prod.), Ph.D. (M.E.)	Assistant Professor
10	<b>Dr. Sambit Kumar Parida</b> B.E. (Mech.), M.Tech.(M.E.), Ph.D.	Assistant Professor
11	<b>Mr. Anand Mohan Murmu</b> B.Tech. (Prod.), M.Tech. (Mfg. Sc. & Engg.)	Assistant Professor
12	<b>Mr. Subrato Kumar Soren</b> B.E. (Mech.), M.E. (Thermal Engg.)	Assistant Professor

13	<b>Dr. Jagesvar Verma</b> Ph.D (V.N.I.T, Nagpur)	Assistant Professor
14	<b>Dr. Umesh Khandey</b> Ph.D (IIT Delhi)	Assistant Professor
15	<b>Dr. Aruna Thakur</b> Ph.D (NIT Rourkela)	Assistant Professor

## ACTIVITIES

### Academic Activities:

Number of subjects offered by the department:

Name of Course	No. of Subjects Offered
B.Tech. (M.E. & M.M.E.)	30
M.Tech. Courses (F.F.T.&M.E.)	12
A.D.C.(Foundry Tech. & Forge Tech.)	03

#### A. Research publications :

### Projects / Seminar/ Conference/ Presentation / Symposia/ Webinar /Publications/ Online course/workshop :

1. "Effect of using fibre reinforced epoxy adhesive on the strength of the adhesively bonded Single Lap Joints", Ranjan K. Behera S.K.Parida R.R.Das Composites Part B: Engineering Volume 248, 1 January 2023, 110358.

### FDP/ Short Term Course Attended

1. Mr Anand Mohan Murmu completed 8 online compulsory courses of the National Initiative for Technical Teacher Training (NITTT).

### Administrative Assignment

Faculty members of the department were engaged in various administrative activities.





## DEPARTMENT OF MATERIALS AND METALLURGICAL ENGINEERING

### About Department:

The department of Materials and Metallurgical Engineering has been dedicated in inculcating its students to make them world class engineers, creating outstanding research environment and giving the nation a direction for tomorrow in the Materials and Metallurgical Engineering sectors. The faculty members, students and staffs have been continuously putting their best to incorporate their contribution in the mentioned activities. Some of the salient achievements are listed as follows:

### FACULTY :

1	<b>Dr. B. K. Chakrabarty</b> PhD (IIT, Kharagpur)	Professor
2	<b>Dr. B. Kumar</b> PhD (IIT, Kharagpur)	Professor
3	<b>Dr. Bimal Kumar Jha</b> PhD (University of Roorkee)	Professor
4	<b>Dr. B. Mallik</b> PhD (IIT, Kharagpur)	Associate Professor
5	<b>Dr. G. Das</b> PhD (IIT, Mumbai)	Associate Professor
6	<b>Dr. D. Roy</b> PhD (IIT, Kharagpur)	Associate Professor & HoD
7	<b>Dr. C. Chattopadhyay</b> PhD (IIT, Kanpur)	Assistant Professor
8	<b>Dr. R. K. Gupta</b> PhD (Brown University, USA)	Assistant Professor
9	<b>Mr. K. Sikdar</b> M.Tech (IIT, Kanpur)	Assistant Professor
10	<b>Dr. Tapabrata Maity</b> PhD (IIT, Kharagpur)	Assistant Professor

### ACTIVITIES

#### Academic Activities:

Number of subjects offered by the department:

Name of Course	No. of Subjects Offered
B.Tech. (M.E.&M.M.E.)	30
M.Tech. Courses (F.F.T.&M.E.)	12
A.D.C.(Foundry Tech. & Forge Tech.)	03

**PhD Awarded:** Mr. Subhabrata chakraborty (Degree Awarded 30th December 2021) under the guidance of Dr Debdas Roy Jointly with Prof A. Basu Mallick (IEST, Sibpur)

**Patent:** Title: "A BONE IMPLANT SYSTEM", Indian: Patent No: 390367, Application No: 2464/DEL/2013, Application Date: 20/08/2013, Date of Grant: 25/02/2022

Inventor: Dr. Debdas Roy

Dr. D. Roy selected Fellow of Institute of Engineers India (IEI) 2022

### Projects / Seminar/ Conference/ Presentation / Symposia/ Publications

1. "Fatigue life assessment of dissimilar thickness resistance spot welded C-Mn steel using Weibull distribution", by Siddharth, Kanwer Singh Arora, Tapabrata Maity, Debdas Roy Welding International Volume 36, 4 (2022) Pages 193-207
2. "Effect of Aging on Hardness and Tensile Properties of Advanced Mg-Sn Based Alloys", by Sonika, A P Murugesan, Debdas Roy, Palash Poddar, Journal of Metallurgy and Materials Science Vol. 63, No. 1-2, (2021) 61-73
3. "Stable nanocrystalline structure attainment and Strength enhancement of Cu base alloy using bi-modal distributed tungsten dispersoids" by Debdas Roy, Snehanishu Pal, Chandra Sekhar Tiwary, Ashish Kumar Gupta, Pokula Narendra Babu, Rahul Mitra, Philosophical Magazine 102 (2021) (3)189-209
4. "Synergistic effect of Nb and Zr additions on the structure-property relationships of nanocrystalline Cu processed by mechanical alloying and hot pressing" by D.Roy, S.Chakraborty, A. K. Gupta, A. Basu Mallick, R O Scattergood, Carl C. Koch, Journal of Alloy and Compounds 854 ( 2021), 15717
5. "Development of bulk Nanocrystalline Cu-Nb-Zr alloys using laser assisted manufacturing for structural members of landing gears in Aerospace applications" Project bagged by the department, Funding agency: AICTE, File Number. 8-124/ FDC/ RPS/POLICY-I /2021-22.

### Administrative Assignments:

Faculty members of the department were engaged in various administrative activities.





## DEPARTMENT OF APPLIED SCIENCES AND HUMANITIES

### About Department:

The department is an integral part of the Institution and it is ready to meet any responsibility assigned it to facilitate the progress of different courses. The department comprises the following Subjects Physics, Chemistry, Mathematics, Environmental Engineering, Electrical Engineering, Electronics Engineering and Humanities.

The department provides excellent laboratory facilities for both under graduate and post graduate students. It provides wide spectrum of Digital Electronics, Analog Electronics, Microprocessor, Control system, Electrical Machine, Electronics, Physics, Chemistry, Instrumentation, etc, laboratories. Apart from these students are offered different projects. The technical and general staff of this department is very helpful to conduct the routine practical of UG & PG programs. The department has started two years full-time course in M.Tech (Environmental Engineering) in 2007 to cater the specific requirement of industries. The syllabus of the course has been designed to full fill the requirement of industries. The department is supporting the UG courses of the Institute offering a compulsory subject in environmental engineering. The department is having various equipment required for courses like water pollution, air pollution, noise pollution, etc. It also serves the post graduate students of Environmental Engineering to augment the research and consultancy facilities in this emerging field.

### Faculty

1	<b>Dr. S. R. Kumar</b> Ph. D. (Materials Science)	Professor & HOD
2	<b>Dr. Anil Kumar</b> M. Tech. (Surface Sc. and Engg.); Ph. D (Engg.) in Metallurgy and Materials Engineering	Professor
3	<b>Dr. Arvind Pandey</b> Ph.D (Physics)	Professor
4	<b>Ms. Sujata S. Gupta</b> MA (English)	Assistant Professor
5	<b>Ms. Madhu Kumari</b> B. Sc. Engg. (E & C), M. Tech. (IT)	Assistant Professor
6	<b>Dr. Partha Sarathi Mondal,</b> Ph. D (Physics)	Assistant Professor
7	<b>Dr. Vikash Kumar Gupta</b> M. Tech. (Electrical Engg.) & Ph.D (Electrical Engineering)	Assistant Professor
8	<b>Dr. Subhanka r Basu</b> M. Tech. (Environmental Engineering) Ph. D (Bioscience Engg.)	Assistant Professor
9	<b>Dr. H. Vignesh Babu</b> Ph.D (Chemistry)	Assistant Professor
10	<b>Dr. Abhilash T. Nair</b> Ph.D (Environmental Engineering)	Assistant Professor
11	<b>Dr. Sriparna Chattopadhyay</b> Ph.D (Mathematics)	Assistant Professor

## Activities

### A. Academic Activities

- (i) The Department of Applied Sciences & Humanities (DASH) offers courses for B.Tech. and M.Tech. programs.
- (ii) DASH offers M.Tech. programme in Environmental Engineering.

### B. Offers Doctoral Programme.

### C. Research and Development Activities

#### Projects / Seminar/ Conference/ Presentation / Symposia/ Webinar /Publications/ Online course/workshop :

1. Structural, Morphological, Electrical and Optical Properties of Zn doped CdTe Thin Films, by Sudeshna Surabhi, Kumar Anurag, S.R.Kumar, Chalcogenide Lett., 19(2022), 143-152 (SCIE),
2. "Electrochemical Flaking of Graphene In Aqueous System", Book Entitle: "Nanofabrication: Enrapturing Cues and Produgal Applications", by Kumar Anurag, S.R.Kumar ", CRC Press, Tylor& Francis (ISSN/ISBN No. 382628).
3. "Development and Characterization of As-Deposited CdTe Thin Films In Non-Aqueous Medium", Book Entitle: "Diversity and Applications of New Age Nanoparticles", by Sudeshna Surabhi, Kumar Anurag, S.R.Kumar, IGI Global ( ISBN No. 1668473585).
4. "Direct Exfoliation of Graphite to Graphene Via Electrochemical Exfoliation Technique," presented by Kumar Anurag, S.R. Kumar in an International Conference on Condensed Matter and Device Physics (ICCMDP-2021), 9-11 September 2021, PDEU, Gandhinagar, India.
5. Mr. Rakesh Ranjan Arya (2020-22) has completed his M.Tech. project entitled "Waste Water Treatment in sewerage Treatment Plant" under the supervision of S.R.Kumar.
6. Mr. Murli Manohar (2020-22) has completed his M. Tech. project "Surface Water Quality in Hajipur Industrial Area and It's Surroundings : A case Study" under the supervision of S.R.Kumar.
7. "Reactive power planning problem considering multiple type of FACTS in power systems", published by Vikash Kumar Gupta and Rohit Babu, In the International Journal of System Assurance Engineering and Management-Springer, pp. 1-10, 2022.
8. "An Approach to Unravel the Optimal PMU Placement Problem for Full Observability of Power Network In View of Contingencies", published by Rohit Babu and Vikash Kumar Gupta, in the International Journal of System Assurance Engineering and Management-Springer, pp. 1-17, 2021.
9. "A Comparative Performance Evaluation of a Set of Swarm Intelligence based Optimization Algorithms for Economic Operation with FACTS Devices in Power Systems", published by Vikash Kumar Gupta and Sudhansu Kumar Mishra, In the Journal of Scientific & Industrial Research, vol. 80, pp. 499-507, 2021.
10. M.Tech. project "Public understanding of E- waste and its disposal in India" completed under the supervision of Dr. Vikash Kumar Gupta.



11. "Aluminium fumarate-based polymer matrix composite for selective removal of fluoride from groundwater" by Ranjana Kumari, Anil Kumar and Subhankar Basu ,in the book Environmental Nanotechnology, Monitoring and Management, Volume 17, Year 2022
12. "Prediction of compressive strength of geopolymers products using central composite design" , by Singh J.P.;Jain M.K.;Singh A.K.;Mandal A.;Kumar A. in the book Materials Today: Proceedings, Volume 45, Year 2021, Pages 4483-4489 (Awarded Best Research Paper)
13. "Durability Properties of Admixture of Fly ash, Bottom Ash And GBFS", by Anil Kumar, P. Jitendra Singh, K. Manish Jain & K. Deependra Sinha in the book Proceedings of International Conference on Innovative Technologies for Clean and Sustainable Development (ICITCSD -2021), Volume 1, Year 2022, Pages 675—696, by Springer
14. "MOF Encapsulated Beads for Fluoride Removal from Water" by Ranjana Kumari, Anil Kumar and Subhankar Basu, in the book Environmental Science and Engineering Year 2022, Pages 993-1002 by Springer
15. Ph. D Thesis "Study on Development of green building components based on industrial waste effluents" by J.P. Singh under the supervision of Dr. Anil Kumar.
16. Ph. D Thesis "Development of MOF based materials for fluoride removal from water" by Ranjana Kumari under the supervision of Dr. Anil Kumar .
17. M. Tech. dissertations "Analysis of strength of Geopolymer samples using central composite"Design by Anant Khaware supervised by Dr. Anil Kumar.
18. M. Tech. dissertations "Study of Eco- Friendly Geopolymer Samples" by Rakesh Roushan supervised by Dr. Anil Kumar.
19. M. Tech. dissertations "Environmental analysis of Fly ash" by Pawan Kumar supervised by Dr. Anil Kumar.
20. M. Tech. dissertations "Air pollutants analysis from various agro based industries" by Navneet Kiran supervised by Dr. Anil Kumar.
21. M. Tech. project "Modelling and Analysis of Water Quality of Ganga River Basin Using CCME WQI" by Mr. Bijendra Kumar supervised by Dr. H. Vignesh Babu.
22. M. Tech. project "Studies on bio-methanation potential of individual volatile fatty acids and two stage anaerobic digestion of organic waste to generate value added products" by Mr. Sujit Kumar supervised by Dr. H. Vignesh Babu
23. M. Tech. project "Biological treatment of industrial wastewaters for biogas generation and targeted pollutants removal" by Mr. Vishwajeet Kumar supervised by Dr. H. Vignesh Babu.
24. M. Tech. seminar "Removal of Heavy Metal Ions From Wastewater by Adsorption" Mr. Bijendra Kumar supervised by Dr. H. Vignesh Babu.
25. "Chemistry for a Sustainable Planet" an Online Webinar Organised by Indian Science Academies / Kongu Engineering College on 08th and 09th April, 2021 attended by Dr. H. Vignesh Babu.
26. IOT enabled smart irrigation system, monitoring, and water harvesting in different soils — By Madhu Kumari and Anant Kumar Sah, R No. — AS19M03

27. IOT Enabled Smart irrigation and its challenges: A review report Paper ID: URAR21B1247, Vol. 8, Issue 2 — By Madhu Kumari and Anant Kumar Sah
28. Encoded hybrid digital watermarking scheme to target high PSNR using HAAR-2D discrete wavelet technology to transform to stationary images. — By Madhu Kumari and Dr. P.K. Singh ,IIT(ISM DHANBAD), published in Research Journal of Engineering Technology and Medical Sciences (ISSN 25826212), Vol 4 - issue -02-2021.
29. M. Tech project "IoT Enabled smart irrigation system, monitoring, and water harvesting in different soils" by Anant Kumar Sah, supervised by Madhu Kumari.
30. A mini project "Designing of Solar Energy Monitoring Systems using low-cost IOT application submitted by Mr. Jai Prashant, supervised by Madhu Kumari.
31. M.Tech project "Modelling of health impact due to improved air quality during COVID-19 lockdown in India" supervised by Dr. Abhilash T. Nair.
32. M.Tech project "Application of PYTHON for analysing air quality during CO VID- 19 lockdown supervised by Dr. Abhilash T. Nair.
33. "Analysis of the COVID-19 lockdown effect on the PM2.5 concentrations in India using BENMAP-CE" by Abhilash T. Nair, Praveen Kumar Bharati received 2nd prize in Indian international Conference on Air Quality Management, organised by IIT Madras, 16- 18 December 2021.
34. Chapter "Microalgae Coupled Biofuel Production and Carbon Capture from Thermal Power Plant: A Biorefinery Approach", by Sruthi. V.Jyothirmai, P.Anagha, E.,Aishwarya. S.,Abhilash T. Nair.,Samarshi Chakraborty, Sivagami, K. Book -Title: Zero Waste Biorefinery, Published by Springer Singapore, 2021.
35. "Electrooxidation of leachate: Understanding effect of cathode material and process optimization using Response Surface Methodology", presented by Chintavi Patel, Abhilash T. Nair, Abhipsa R Makwana in the 1st International Conference on "Advances in Water Treatment and Management" 25-26 March 2022,at Gandhinagar, Gujarat, India
36. An online workshop conducted by Abhilash T. Nair on "Publishing Your Research", on 24th November 2021.
37. An online workshop conducted by Abhilash T. Nair on "Decentralized Wastewater treatment and Fecal Sludge Management", on 26th November 2021.
38. "Development of cellulose acetate-chitosan-metal organic framework forward osmosis membrane for recovery of water and nutrients from wastewater", R. Lakra, M. Balakrishnan, S. Basu, J Environmental Chemical Engineering 9 (2021) 105882.
39. "Active layer modification of commercial Nanofiltration membrane using CuBTC/PVA matrix for improved surface and separation characteristics", U. Sharma, S. Shalini, S. Basu, P. Saravanan, M. Jang, J Applied Polymer Science, 138 (21) (2021) 1-12.
40. "Activated Carbon Incorporation on Forward Osmosis Membrane Surface for Enhanced Performance". R. Lakra, M. Balakrishnan. S. Basu, Water Science and Technology-Water Supply 22 (2022) 409.
41. "Aluminium Fumarate-based polymer matrix composite for selective removal of fluoride from ground water", R. Kumari, A. Kumar. S. Basu. Environmental Nanotechnology, Monitoring & Management 17 (2022) 100642.



42. M.Tech project "Application of forward osmosis (FO) process for water recovery from wastewater", supervised by Dr. Subhankar Basu.
43. M.Tech project "The application of pyrolysis on energy recovery from plastic marine debris (PMD): An efficient way for waste to wealth conversion", supervised by Dr. Subhankar Basu.
44. M.Tech project "Removal of Selenium ion from aqueous solution using activated natural clay by adsorption", supervised by Dr. Subhankar Basu.
45. M.Tech project "Removal of fluoride ions from aqueous solution using thermally activated homogenous mixture of clay and active aluminium oxide by adsorption", supervised by Dr. Subhankar Basu.
46. "Recovery protein and carbohydrate from dairy wastewater using ultrafiltration and forward osmosis processes", by Reshma Lakra, Sonali Choudhury, Subhankar Basu, Materials Today:Proceedings 47 (2021)1400-1403.
47. "Separation of Lignin from pulp and paper mill wastewater using forward osmosis process, by Nimisha Singh, Yashi Gautam, Malini Balakrishnan. Subhankar Basu, Materials Today: Proceedings 47 (2021)1423-1429.
48. "Reclamation of water from dairy wastewater using membrane bioreactor (MBR) — Membrane filtration processes", by Ranjana Kumari, Himanshu Ankit, Subhankar Basu, Materials Today: Proceedings 47 (2021 )1452-1456.
49. "Recovery of protein and carbohydrate from whey water using integrated membrane processes", by R. Lakra and S. Basu. Krispon Advancing Science, I (2021) 7
50. "MOF Encapsulated Beads for Fluoride Removal from Water", by Ranjana Kumari, Anil Kumar, Subhankar Basu, Advances in Chemical, Bio, and Environmental Engineering, Springer, 2022
51. "Separation of Congo Red Dye from Water Using AgNPs Based Hybrid UF Membrane, by Subhankar Basu, Reshma Lakra, Ranjana Kumari, Wasim A. Shaikh, and Sukalyan Chakraborty, Advances in Chemical, Bio, and Environmental Engineering, Springer, 2022

### FDP/Short-Term Course Attended

1. Dr. Vikash Kumar Gupta attended Desalination by using Green Technology, ATAL Academy, National Institute of Foundry and Forge Technology, 09-13 August 2021.
2. Dr. Vikash Kumar Gupta attended Stress Management, ATAL Academy, University College of Engineering Nagercoil, 14-18 December 2021.
3. Dr. Anil Kumar attended Desalination by using Green Technology, ATAL Academy, National Institute of Foundry and Forge Technology, 09-13 August 2021.
4. Dr. H. Vignesh Babu attended Desalination by using Green Technology, ATAL Academy, National Institute of Foundry and Forge Technology, 09-13 August 2021.
5. Madhu Kumari attended Desalination by using Green Technology, ATAL Academy, National Institute of Foundry and Forge Technology, 09-13 August 2021.
6. Dr. Shubhankar Basu attended AICTE Training and Learning (ATAL) Academy FDP "Desalination by using Green Technology", 10-05-2021.

7. Dr. Shubhankar Basu attended “Current Trend in Engineering Nanomaterials, Characterizations & Their Applications” from 06/12/2021 to 10/12/2021 at Indira Gandhi National Tribal University.
8. Dr. Shubhankar Basu attended “Stress Management” from 14/12/2021 to 18/12/2021 at University College of Engineering Nagercoil.

### **Administrative Assignment**

Faculty members of the department were engaged in various administrative activities.





## DEPARTMENT OF ELECTRONICS AND COMPUTER ENGINEERING

### About Department:

This youngest department of the Institute was established in November 2020 with the mandate of starting two new undergraduate programmes, viz., B. Tech. in Computer Engineering, and B. Tech. in Electronics and Automation Engineering, and to carry out research to support the Institute's vision of becoming an advanced centre for manufacturing research. The B. Tech. programme in Computer Engineering is a unique blend of Computer Science and Engineering and Digital Manufacturing. The application for approval has been submitted and it is expected that the programme will commence from the 2022-23 academic session. The B. Tech. programme in Electronics and Automation Engineering will also be a unique blend of Electronics and Communication Engineering and Manufacturing Automation, and it will be launched during 2024-25 academic session. These courses are expected to produce students with training in two distinct disciplines under one programme. The laboratories needed for the B. Tech. programme in Computer Engineering are under development and will be established in a phased manner.

### Faculty

1	Dr. G. Rajamohan B. E. (Mech.), M. E. (Mfg.), PhD (Mech.), MIE	Professor & HOD
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### Activities

#### A. Academic Activities

Detailed curriculum for the B. Tech. programme in Computer Engineering has been prepared and vetted by Professors of Indian Institute of Technology Kharagpur.

#### B. Offers Doctoral Programme.

#### B. Research and Development Activities

- 1) **PhD Guidance:** Mr. Shariqul Hoda, who joined as a Fulltime Scholar with Institute Scholarship is continuing his research work on form metrology under the guidance of Dr. G. Rajamohan.
- 2) **M. Tech. Guidance:** The following M. Tech. dissertations are in progress.
  - a) Palash Ghosh: Study on the selection of parameterization method for fitting freeform curve - Jointly guided by Dr. G. Rajamohan and Dr. A. Mandal (Department of Mechanical and Manufacturing Engineering).
  - b) Prameet Ranjan: Optimization of cutting parameters during boring operation on Al 6061 - Guided by Dr. G. Rajamohan.

#### Projects / Seminar/ Conference/ Presentation / Symposia/ Webinar /Publications/ Online course/workshop :

1. G. Rajamohan, "An algorithm for minimum zone sphericity evaluation from coordinate data", Second International Conference on Industrial and Manufacturing Systems (CIMS 2021), Punjab Engineering College, Chandigarh.

### FDP/Short-Term Course Attended

1. Dr. G. Rajamohan attended Successfully completed the AUKOM Level 2 certification programme at Carl Zeiss Academy, Bangalore during April 2021.

### Administrative Assignment

1.	Dr. G. Rajamohan	Head of the Department Member of Library Committee and Proprietary Committee. In-charge for Metrology Laboratory and FMS Laboratory QIP Coordinator Carried out the work entrusted by the Director, NIAMT from time to time
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## GENERAL ADMINISTRATION

APPOINTMENT : NIL

RESIGNATION : NIL

### RETIREMENT

Sl.No.	Name	Designation	Date of Retirement
1.	Dr. Bimal Kumar Jha	Professor	30.04.2021
2.	Dr. Pinaki Talukdar	Professor	30.09.2021
3.	Dr. Anil Kumar Singh	Professor	31.12.2022
4.	Mr. R. K. Mishra	Senior Librarian	31.10.2021
5.	Mr. A.B. Prasad	Tech. Gr. "A"	31.12.2021
6.	Mr. Garib Mahto	STA	31.01.2022

### DEATH

Sl. No.	Name	Designation	Date of Death
1.	Mr. Nagendra Kumar	UDC	02.05.2021

### STAFF STRENGTH AS ON 31.03.2021

Director	01
Professor	13
Associate Professor	07
Assistant Professor	25
Registrar	01
Dy. Registrar	01
Sr. Medical Officer	01
Librarian Sr.	00
Accountant	01
Assistant Registrar	02
Assistant Superintendent Workshop	01
Hindi Officer	01
Sr. Technical Assistant	02
Assistant	03
Upper Division Clerk	03
LDC/Typist	01
Technician Gr. "A"	00
Technician Gr. "B"	05
Peon	04
Laboratory Attendant	05
Sweeper	01
Cook	02
<b>Total :</b>	<b>80</b>



## ACADEMIC ACTIVITIES

### Regular Activities of Academic Section

All the regular activities of Academic Section such as conducting semester examinations, publishing of results have been carried out as per schedule. Classes of First semester M. Tech.-2021, B. Tech. 2021 and ADC 2021 had been started as per schedule.

#### Admission -2021

##### 1. Ph. D. Programme

Admission of Ph. D. students selected through written test & interview conducted by respective departments.

Department	No. of seats	No. of seats filled
1. Metallurgy and Material Engineering	3	3
2. Forge Technology	3	2
3. Foundry Technology	3	1
4. Manufacturing Engineering	3	3
5. DASH	3	3

##### 2. M.Tech.

Admission through CCMT-2021

Branch	No. of seats	No. of seats filled
1. Manufacturing Engineering	38	01
2. Foundry-Forge Technology	35	04
3. Environmental Engineering	38	25
4. Materials Science & Engineering	35	04

##### 3. B. Tech.

Admission through JoSAA/CSAB-2021

Branch	No. of seats	No. of seats filled
Mechanical Engineering	75	68
Metallurgy and Materials Engineering	75	64

##### 4. ADC

Admission through a written test conducted by the Institute.

Branch	No. of seats	No. of seats filled
Foundry Technology	58	55
Forge Technology	57	44



## Students Passed out in 2021

### M.Tech. (2019-2021)

Branch	No. of students passed out
Manufacturing Engineering	13
Foundry-Forge Technology	14
Environmental Engineering	04
Materials Science & Engineering	09

### B.Tech. (2017-2021)

Branch	No. of students passed out
Manufacturing Engineering	19
Metallurgy and Materials Engineering	57

### 48<sup>th</sup> ADC

Branch	No. of students passed out
Foundry Technology Forge Technology	41
Dean (Academic)	38



## M. Tech. 2019-2021 batch (Project Topic branch wise)

### Foundry-Forge Technology

Sl No.	JUT Registration No.	Name Of Student	Project Topic	Name of the Guide
1	19053790001	Abinash Pradhan	Optimization of process parameter on knuckle joint by using taguchi method	Dr. R. K. Ohdar
2	19053790002	Abira Rashid	Optimization and simulation of grinding media balls casting	Dr. K.K. Singh
3	19053790003	Ashish Kumar Nayak	Experimental investigation of the effect of silicon carbide particles reinforced aluminium a356 metal matrix composites the influence of ultrasonic vibration	Dr. Nandita Gupta
4	19053790004	Ashutosh Ranjan	Studies on heat treatment kinetics and mechanical properties for cold forged al-1.Asi-097mg alloy	Dr. R. R. Kulkarni
5	19053790005	Diksha Dwivedi	Study of synthesization and characterization of grey cast iron by slope casting	Dr. A.K. Singh
6	19053790006	Kumar Abhinav	Simulation study of dimensional deviation in metal casting with varying part geometry	Dr. Himanshu Khandelwal
7	19053790008	Mohit Sharma	Effect of process parameters of cooling slope on microstructure and mechanical properties of a383	Dr. Nandita Gupta
8	19053790009	Prakash Chandra	Study of processing and fabrication of oxide dispersion strengthening (ods) steel	Dr. Deepak Kumar
9	19053790010	Prashant Kumar Maurya	Determination of the coefficient of friction for different forging lubricants using ring compression test	Dr. Manoj Kumar
10	19053790011	Rahul Oraon	Effect of temperature and strain rate on upsetting of ring using ring compression test	Dr. Manoj Kumar
11	19053790012	Rajiv Kumar	Simulation of multi axial forging of az80 mg alloy	Dr. A.K. Pramanick
12	19053790013	Rakesh Vishwas	A review on the properties of aluminium metal matrix nanocomposites fabricated through powder forging	Mr. Vineet Chak
13	19053790014	Rohit Upadhyaya	Die design optimization of front axle beam using simulation software	Dr. N.K. Singh
14	19053790015	Vijay Yadav	Digital solutions in high pressure moulding machines	Dr. Amitesh Kumar

## M. Tech. 2019-2021 batch (Project Topic branch wise)

### Manufacturing Engineering

Sl No.	JUT Registration No.	Name of Student	Project Topic	Name of the Guide
1	19053800001	Alok Suna	Effect of conventional tig welding and a-tig welding on distortion of dissimilar stainless steel joints	Dr. A. Mondal
2	19053800002	Abhay Kumar Shrivastava	An experimental and simulation analysis on fluidity of aluminum a356 using visual cast	Dr. A. Mondal/ Dr. K. K. Verma
3	19053800003	Amrendra Raj	A study on reduction of defects in friction stir welding using failure mode and effects analysis	Dr. V.M.S. Hussain
4	19053800004	Arun Kumar Bambam	To study the effect of processing parameters on the tensile strength of alsi10mg part fabricated through slm process	Dr. Anoop Kumar Sood
5	19053800005	Divisha Singh	A comparative study of influence of vegetable oil based cutting fluids on aisi304 stainless steel	Dr. Umesh Khandey
6	19053800007	Jagabandhu Sahoo	Numerical simulation & experimental characterization of al-li-cu alloy weldments by friction stir welding process	Dr. J. Verma
7	19053800009	Kumar Kanhaiya	Stability of pre-twisted sandwich beams under various boundary conditions	Dr. Sanjay Kumar
8	19053800012	Pappu Kumar Verma	Synthesis and characterization of cr2o3-al2o3 clad coating on mild steel using tig process	Dr. S.K. Parida
9	19053800015	Pradip Mandal	Welding of dissimilar low alloy cr-mo steel plates p91 and p22 by gas metal arc welding	Dr. A.K. Pathak
10	19053800016	Priyesh Kumar	An experimental study and analysis of stir casting and ultrasonic casting of aluminium (al6063) with nanoparticles of titanium dioxide (tio2)	Mr. S. K. Soren
11	19053800017	Sourav Dolui	Influence of electrodes on machined surface quality during edm of nimonic c-263	Dr. Aruna Thakur
12	19053800018	Stuti Bajpai	Evaluation of form deviations using nurbs	Dr. G. Rajamohan
13	19053800019	Vikash Kumar	A study of burr formation and hole quality in drilling of aa-6351-t6 aluminium alloy	Dr. Ratnakar Das



## M. Tech. 2019-2021 batch (Project Topic branch wise)

### Materials Science and Engineering

Sl No.	JUT Registration No.	Name of Student	Project Topic	Name of the Guide
1	19053810001	Gaurav Prakash	Characterization of dissimilar weld joints of aisi 430 and aisi 304l stainless steels prepared by tig welding	Dr. Binod Kumar
2	19053810002	Kolli Siddardha Naidu	Synthesis and characterization of $Cr_2O_3$ - $Al_2O_3$ clad coating on mild steel using tig method	Dr. B. Mallik
3	19053810003	Kunal Bhalchandra Bhole	Modelling and simulation of wear on pin on disc using ansys	Dr. Ghanshyam Das
4	19053810004	Sudhanshu Shekhar Rana	Mechanical property enhancement of nanocrystalline cuw alloy	Dr. D. Roy



## M. Tech. 2019-2021 batch (Project Topic branch wise)

### Environmental Engineering

Sl No.	JUT Registration No.	Name of Student	Project Topic	Name of the Guide
1	19053780002	Anant Khaware	Analysis of strength of geopolymers samples using central composite design	Dr. Anil Kumar
2	19053780003	Anant Kumar Sah	IoT enabled smart irrigation system monitoring and water harvesting in different soils	Mrs. Madhu Kumari
3	19053780004	Bijendra Kumar	Modeling and analysis of water quality of Ganga river basin using CAME WQI	Dr. H. V. Babu
4	19053780005	Gyan Prakash	Application of Python for analysing air quality during COVID-19 lockdown	Dr. T. Abhilash Nair
5	19053780006	Praveen Kumar Bharti	Modelling of health impact due to improved air quality during COVID-19 lockdown in India	Dr. T. Abhilash Nair
6	19053780007	Raj Kumar	Study of TiO <sub>2</sub> photocatalyst assisted advanced oxidation process	Dr. P.S. Mandal
7	19053780008	Rohit Keshri	Recycling and management of waste lead acid batteries	Dr. S. Basu
8	19053780009	Ruman Saghir	Public understanding of e-waste and its disposal in India	Dr. V.K. Gupta
9	19053780010	Santosh Kumar	Assessment of air pollutants in Ranchi city before and during lockdown due to COVID-19	Dr. Arvind Pandey



## B. Tech. 2017-2021 batch (Project and Seminar Topic branch wise)

### Manufacturing Engineering

Sl No.	Roll No.	Name of Student	Project Topic	Name of the Guide
1	101/17	Aditya Gupta	Total quality management in advance manufacturing	Prof. Sanjay Kumar
2	102/17	Dhiraj Kumar	Mechanical properties of engineering materials	Dr. Umesh Khandey
3	103/17	Sudhanshu Ranjan	Total quality management in advance manufacturing	Prof. Sanjay Kumar
4	104/17	Bobde Yogesh Dattarao	Ultrasonic casting	Mr. S.K Soren
5	105/17	Vivek Ranjan	Experimental and transient thermal analysis of heat sink fins of various types	Mr. S.K.Soren
6	106/17	Shashank Kumar Chaurasia	Additive manufacturing	Mr. A .M. Murmu
7	107/17	Pranaj Sharma	Industrial internet of things	Dr. Umesh Khandey
8	109/17	Abhishek Kumar	Design and fabrication of automatic sheet metal cutting machine using geneva mechanism	Dr. Ratnakar Das
9	110/17	Jayhind Chauhan	Design and fabrication of automatic sheet metal cutting machine using geneva mechanism	Dr. Ratnakar Das
10	111/17	Aman Raj	Ultrasonic casting	Mr. S.K.Soren
11	112/17	Sumit Raj	Total quality management in advance manufacturing	Prof. Sanjay Kumar
12	114/17	Akash Verma	Total quality management in advance manufacturing	Prof. Sanjay Kumar
13	115/17	Sushant Shekhar	Kitchen waste disposal machine	Dr. Ratnakar Das
14	116/17	Chandrapal Rao	Ultrasonic casting	Mr. S.K.Soren
15	117/17	Jay Singh	Mechanical properties of engineering material	Dr. Umesh khandey
16	118/17	Narahari Krishna Potluri	Mechanical properties of engineering materials	Dr. Umesh khandey
17	129/16	Sunny Dewol Kumar Paswan	Study of structure and properties of gray cast Iron,	Dr. Amitesh kumar
18	133/16	Manish Kumar	Study of structure and properties of grey cast iron	Dr. Amitesh Kumar



## B. Tech. 2017-2021 batch (Project and Seminar Topic branch wise)

### Metallurgy and Materials Engineering

Sl No.	Roll No.	Name of Student	Project Topic	Name of the Guide
1	201/17	Munukutla Sri Sai Ramesh	Heat treatment optimised astm a668 steels developed for turbine shafts	Dr. Debdas Roy
2	202/17	Divya Ojha	Effect of austempering on sg iron	Dr. Debdas Roy
3	203/17	Divyanshu Raj	Study of heat treatment and corrosion behaviour of 316l steel	Dr. Ratnesh Kumar Gupta
4	204/17	Nitish Kumar	Optimization of ferro alloys usage in steelmaking	Dr. Tapabrata Maity
5	205/17	Dasari Harika Chowdary	Effect of cooling rate on hardness and microstructure of low alloy steel on heating to austenitic temperature	Dr. Debdas Roy
6	206/17	Rishabh Ranjan	Study of mechanical properties of aisi 304 l and aisi 430 dissimilar weldments	Prof. Binod Kumar
7	207/17	Singaraju Sai Naga Aditya Viswanath	Structural characterisation and analysis of deformation induced phase transformation in 304l stainless steel.	Mr. Koushik Sikdar
8	208/17	Shaista Perween	Characterization of amorphous alloy dispersed aluminium matrix composites	Dr. Debdas Roy
9	209/17	Rajneesh Prakash	Characterization of amorphous alloy dispersed aluminium matrix composites	Dr. Debdas Roy
10	210/17	Digvijay Samir	Multiobjective optimization of forging process: soft computing based approach	Prof. R. K. Odhar
11	211/17	Sumit Kumar Jha	Study of corrosion behavior of dissimilar weld joints of aisi 304 l and aisi 430 in different corrosive media	Prof. Binod Kumar
12	212/17	Sweta Sharma	Effect of austempering on sg iron	Dr. Debdas Roy
13	213/17	Gaurav Kumar Mishra	Heat treatment optimised astm a668 steels developed for turbine shafts	Dr. Debdas Roy
14	214/17	Shyamal	Clamping of composites on sheet metal	Ms. Madhu Kumari
15	216/17	Naman Tyagi	Quality prediction of froth floatation in mining process using machine learning	Dr. Krishna Kumar Verma
16	217/17	Suraj Kumar	Clamping of sheet metal on metal composites for consumer purposes	Mrs. Madhu Kumri
17	218/17	Nitish Kumar	Data driven modeling of hot strip rolling	Dr. Partha Protim Chattopadhyay & Dr. Subhamita Chakroborty

Sl No.	Roll No.	Name of Student	Project Topic	Name of the Guide
18	219/17	Md Shoaib Ansari	Study of heat treatment and corrosion behaviour of aisi 304l steel	Dr. Ratnesh Kumar Gupta
19	220/17	Subham Akhouri	Effect of heat treatment on mechanical properties of aisi 304 stainless steel	Dr. Ratnesh Kumar Gupta
20	221/17	Shristi Dhanuka	Effect of cooling rate on hardness and microstructure of low alloy steels on heating to austenitic temperature	Dr. Debdas Roy
21	222/17	Satyam Kumar	Corrosion behaviour of duplex stainless steel	Dr. Ghanshyam Das
22	223/17	Anandarup Ghosh	Effect of heat treatment on mechanical properties of aisi 304 stainless steel	Dr. Ratnesh Kumar Gupta
23	224/17	Shubham Kumar	Optimization of ferro alloys usage in steelmaking	Dr. Tapabrata Maity
24	225/17	Shubham Priyadarshi	Total quality management and it's impact on iron and steel industry	Dr. B. Malik
25	226/17	Utkarsh Kumar	Study of corrosion behavior of dissimilar weld joints of aisi 304l and aisi 430 in different corrosive media	Prof. Binod Kumar
26	227/17	Probir Chakraborty	Effect of cold rolling on corrosion of stainless steel	Dr. Ghanshyam Das
27	228/17	Shashi Kant Sharma	Quality prediction of froth floatation in mining process using machine learning	Dr. Krishna Kumar Verma
28	229/17	Aditya Kumar Jha	Different source of heat and energy consideration for melting in solidification of materials	Dr. Chinmoy Chattopadhyay
29	230-17	Ankit Kumar Kasaudhan	Influence of heat treatment on the corrosion of micro alloyed steel in sodium chloride solution.	Dr. Ghanshyam Das
30	231/17	Abhay Kumar	Study of corrosion problems on cast iron pipes	DR. Ghanashyam Das
31	232/17	Vikas Kumar	Study of corrosion problems on cast iron pipes	Dr. Ghanshyam Das
32	233/17	Sonu Kumar Rawani	Influence of heat treatment on the corrosion of microalloyed steel in sodium chloride solution.	Dr. Ghanshyam Das
33	234/17	Sriram Naveen Kumar	Structural characterization and analysis of deformation induced phase transformation in 304l stainless steel	Mr. Koushik sikdar
34	235/17	Nagmani	Optimization of ferro alloys usage in steelmaking	Dr. Tapabarta Maity
35	236/17	Anurag Bagaria	Synthesis of shape memory alloys by powder metallurgy route	Mr. Koushik Sikdar

Sl No.	Roll No.	Name of Student	Project Topic	Name of the Guide
36	237/17	Vishal Yadav	"Corrosion behavior of duplex stainless steel"	Dr. Ghanshyam Das
37	238/17	Banty Kumar	To study the microstructure and mechanical properties of dual phase steel	Dr. B. Mallik
38	239/17	Abhishek Kumar	Influence of heat treatment on the corrosion of carbon steel in environment containing carbon dioxide and acetic acid	Dr. Ghanshyam Das
39	240/17	Dharmendra Kumar	Supply chain management	Dr. R.K. Ohdar
40	241/17	Raj	Effect of cold rolling on corrosion of stainless steel	Dr. Ghanshyam Das
41	242/17	Santosh Prasad	Influence of heat treatment on the corrosion of carbon steel in environment containing carbon dioxide and acetic acid	Dr. Ghanshyam Das
42	243/17	Siddharth Yadav	Review of cold forging of al-mg alloy	Dr. Tapabrata Maity
43	244/17	Nazneen Parveen	Multiobjective optimization of forging process:soft computing based approach	Prof. R. K Odhar
44	245/17	Yash Nishant	Effect of cooling rate on solidification	Dr. Chinmoy Chattopadhyay
45	246/17	Om Prakash Kumar	Study of impact in the hardness and microstructure of aluminium alloys on addition of copper and magnesium	Dr. Tapabrata Maity
46	247/17	Rohika Kumari	Study of heat treatment and corrosion behaviour of 316L steel	Dr. Ratnesh Kumar Gupta
47	248/17	Sudhanshu Kumar	To study the microstructure and mechanical properties of dual phase steel	Dr. B. Mallik
48	249/17	Jyotiman Barman	Synthesis of shape memory alloys by powder metallurgy routes	Prof. Koushik Sikdar
49	250/17	Marripati Hemanth	Effect of heat treatment on corrosion behavior of 304 steel	Mr. Koushik Sikdar
50	253/17	Anugrah Fedric Kujur	Development of tungsten dispersed copper composite for electrical application	Mr. Koushik Sikdar
51	254/17	Nenavath Kubbu Nayak	Study of impact in the hardness and microstructure of aluminium alloys on addition of copper and magnesium	Dr. Tapabrata Maity



Sl No.	Roll No.	Name of Student	Project Topic	Name of the Guide
52	255/17	Amaladasu Jagadesh Lakshimipathi	Effect of heat treatment on corrosion behavior of 304 steel	Mr. Koushik Sikdar
53	256/17	Ashish Kumar	Development of tungsten dispersed copper composite for electrical application	Mr. Koushik Sikdar
54	257/17	Ranjit Kumar	Total quality management and its impact on iron and steel industries	Dr. B. Mallik
55	239/16	Guguloth Rakesh	Mechanical properties of aluminum - copper composite metallic materials	Dr. B. Mallik
56	114/15	Mangalagiri Rajesh	Mechanical properties of aluminum - copper composite metallic materials	Dr. B. Mallik
57	121/15	Rajen Baraik	Mechanical properties of aluminum - copper composite metallic materials	Dr. B. Mallik



## B. Tech. 2017-2021 batch (Project and Seminar Topic branch wise)

### Metallurgy and Materials Engineering

Sl No.	Roll No.	Name of Student	Seminar Topic	Name of the Guide
1	201/17	Munukutla Sri Sai Ramesh	Structure analysis tools	Dr. Debdas Roy
2	202/17	Divya Ojha	Quenched and partitioned hot rolled steels	Dr. Debdas Roy
3	203/17	Divyanshu Raj	Desulphurisation of liquid steel in low carbon grade	Dr. Ratnesh Kumar Gupta
4	204/17	Nitish Kumar	Production of galvanized steel and its consumption in India	Dr. Tapabrata Maity
5	205/17	Dasari Harika Chowdary	Nanocrystalline materials	Dr. Debdas Roy
6	206/17	Rishabh Ranjan	High entropy alloys	Prof. Binod Kumar
7	207/17	Singaraju Sai Naga Aditya Viswanath	Strengthening mechanisms in materials.	Mr. Koushik Sikdar
8	208/17	Shaista Perween	Cast iron	Dr. Debdas Roy
9	209/17	Rajneesh Prakash	Age hardening	Dr. Debdas Roy
10	210/17	Digvijay Samir	Isothermal forging:an overview	Prof. R. K. Odhar
11	211/17	Sumit Kumar Jha	Shape memory alloys	Prof. Binod Kumar
12	212/17	Sweta Sharma	Metal 3D printing	Dr. Debdas Roy
13	213/17	Gaurav Kumar Mishra	Non destructive testing	Dr. Debdas Roy
14	214/17	Shyamal	Clamping of composite on sheet metal	Ms. Madhu Kumari
15	216/17	Naman Tyagi	Introduction to nanomaterials and graphene	Dr. Krishna Kumar Verma
16	217/17	Suraj Kumar	Supply chain management	Ms. Madhu Kumri
17	218/17	Nitish Kumar	Remote health monitoring system using iot	Dr. Partha Protim Chattopadhyay & Dr. Subhamita Chakroborty
18	219/17	Md Shoaib Ansari	Graphene and its properties	Dr. Ratnesh Kumar Gupta
19	220/17	Subham Akhouri	Oppertunities with additive manufacturing	Dr. Ratnesh Kumar Gupta
20	221/17	Shristi Dhanuka	Smart materials	Dr. Debdas Roy

Sl No.	Roll No.	Name of Student	Seminar Topic	Name of the Guide
21	222/17	Satyam Kumar	Study and application of piezoelectric materials	Dr. Ghanshyam Das
22	223/17	Anandarup Ghosh	Iron manufacturing technology (corex process)	Dr. Ratnesh Kumar Gupta
23	224/17	Shubham Kumar	Carbon fibre	Dr. Tapabrata Maity
24	225/17	Shubham Priyadarshi	Ultrasonic technique and its recent advancements in quality assurance	Dr. B. Malik
25	226/17	Utkarsh Kumar	High strength steels in electric vehicles	Prof. Binod Kumar
26	227/17	Probir Chakraborty	Effect of lubrication on hot rolling mill	Dr. Ghanshyam Das
27	228/17	Shashi Kant Sharma	Uses of artificial neural network and multiple linear regression in metallurgy	Dr. Krishna Kumar Verma
28	229/17	Aditya Kumar Jha	Different source of heat and energy consideration for melting in solidification of materials	Dr. Chinmoy Chattopadhyay
29	230-17	Ankit Kumar Kasaudhan	Computer application in metallurgy.	Dr. Ghanshyam Das
30	231/17	Abhay Kumar	Utilization and prospects of nanomaterials	DR. Ghanashyam Das
31	232/17	Vikas Kumar	Recent developments in cast iron pipes	Dr. Ghanshyam Das
32	233/17	Sonu Kumar Rawani	Shape memory alloys	Dr. Ghanshyam Das
33	234/17	Sriram Naveen Kumar	Strengthening mechanism of materials	Mr. Koushik Sikdar
34	235/17	Nagmani	Shape memory alloys	Dr. Tapabarta Maity
35	236/17	Anurag Bagaria	Introduction to aerospace structures and materials	Mr. Koushik Sikdar
36	237/17	Vishal Yadav	Study and application of magnetostrictive materials	Dr. Ghanshyam Das
37	238/17	Banty Kumar	Ultrasonic technique and its recent advancements in quality assurance	Dr. B. Mallik
38	239/17	Abhishek Kumar	Protection against corrosion the ships	DR. Ghanshyam Das
39	240/17	Dharmendra Kumar	Supply chain management	Dr. R.K. Ohdar
40	241/17	Raj	Lubrication effect on hot rolling mill	Dr. Ghanshyam Das
41	242/17	Santosh Prasad	Marine corrosion of steel	Dr. Ghanshyam Das



Sl No.	Roll No.	Name of Student	Seminar Topic	Name of the Guide
42	243/17	Siddharth Yadav	Biodegradable magnesium alloys	Dr. Tapabrata Maity
43	244/17	Nazneen Parveen	Types of forging defects and its remedies	Prof. R. K. Odhar
44	245/17	Yash Nishant	Effect of cooling rate on solidification	Dr. Chinmoy Chattopadhyay
45	246/17	Om Prakash Kumar	Study of impact in the hardness and microstructure of aluminium alloys on addition of copper and magnesium	Dr. Tapabrata Maity
46	247/17	Rohika Kumari	Plasticity without dislocation in a polycrystalline Intermetallic	Dr. Ratnesh Kumar Gupta
47	248/17	Sudhanshu Kumar	Electroslag refining of steel	Dr. B. Mallik
48	249/17	Jyotiman Barman	Quality control	Prof. Koushik Sikdar
49	250/17	Marripati Hemanth	Nano materials synthesis	Mr. Koushik Sikdar
50	253/17	Anugrah Fedric Kujur	Development of tungsten dispersed copper composite for electrical application	Mr. Koushik Sikdar
51	254/17	Nenavath Kubbu Nayak	Various type of heat treatment	Dr. Tapabrata Maity
52	255/17	Amaladasu Jagadesh Lakshimipathi	Nano technology	Mr. Koushik Sikdar
53	256/17	Ashish Kumar	Fascinating shape memory alloys	Mr. Koushik Sikdar
54	257/17	Ranjit Kumar	Recent advancement in radiography testing and technique	Dr. B. Mallik
55	239/16	Guguloth Rakesh	Forging defects , causes and its remedies	Dr. B. Mallik
56	114/15	Mangalagiri Rajesh	Mechanical properties of aluminum - copper composite metallic materials	Dr. B. Mallik
57	121/15	Rajen Baraik	Forging defects , causes and its remedies	Dr. B. Mallik



## 49th ADC (2019-2021)

### Foundry & Forge Technology Project Topic

Sl No.	Roll No.	Name of the Students	Branch	Project Topic	Name of the Guide	Final Semester Overall CGPA
1	48105	Amarjeet Kumar Bhagat	Foundry Technology	Multi-gate gating system (water model)	Dr. Himanshu Khandelwal	8.17
2	48106	Atanu Neogi	Foundry Technology	Repetitive mulling of bentonite bonded sand	Prof. Nandita Gupta	7.77
3	48115	Deepesh Yadav	Foundry Technology	Effect of repetitive mulling on bentonite bonded sand	Dr. Nandita Gupta	7.99
4	48118	Gaurav Kumar	Foundry Technology	Addition of copper in cast iron	Dr. Amitesh Kumar	8.03
5	48119	Gyanendra Kumar	Foundry Technology	Design and development of multi gate multi cavity of gray cast iron and stimulation	Dr. Himanshu Khandelwal	8.67
6	48120	Md Irfan Anwar	Foundry Technology	Effect of manganese on microstructure and mechanical properties of gray cast iron	Dr. Amitesh Kumar	8.55
7	48125	Mrinal Barman	Foundry Technology	Effect of manganese on microstructure and mechanical properties of gray cast iron	Dr. Amitesh Kumar	7.64
8	48127	Nirbhay Kumar Ray	Foundry Technology	Multi- gate gating system(water model)	Dr Himanshu Khandelwal	8.1
9	48136	Rajni Kumari	Foundry Technology	Defects in casting.		8.03
10	48137	Ranjit Kumar Saw	Foundry Technology	Effect of copper addition on structure properties of grey cast iron	Dr. Amitesh Kumar	8.19
11	48138	Raushan Thakur	Foundry Technology	Effect of copper addition on structure properties of gray cast iron	Dr. Amitesh Kumar	8.16
12	48139	Ravi Kumar Nayak	Foundry Technology	Development of ai-mg alloy by conventional casting method	Dr. Amitesh Kumar	9

Sl No.	Roll No.	Name of the Students	Branch	Project Topic	Name of the Guide	Final Semester Overall CGPA
13	48140	Sachin Mahato	Foundry Technology	"Effect of varying thickness on mechanical and microstructure properties of ductile iron casting"	Dr. Himanshu Khandelwal	7.57
14	48141	Sajeed Ansari	Foundry Technology	Semi solid casting of aluminium alloy	Dr Amiteash Kumar	7.97
15	48142	Moh Salauddin Ansari	Foundry Technology	Effect of inoculant on structure & properties of ductile iron.	Dr. K.K. Singh	8.4
16	48143	Md Shah Alam	Foundry Technology	Semi solid casting of aluminium alloys	Dr. Amitesh Kumar	8.02
17	48145	Shubhadeep Ghosh	Foundry Technology	Bimetallic casting of gray cast iron and steel	Dr. Amitesh Kumar	7.82
18	48146	Sk Murselim Ali	Foundry Technology	Effect of manganese on microstructure of grey cast iron	Dr. Amitesh Kumar	8.4
19	48150	Sourav Kundu	Foundry Technology	Effect of Cu addition on the microstructure and properties of Al-Si alloy	Dr. K. K. Singh	8.26
20	48151	Sourav Sing Sardar	Foundry Technology	"Effect of Cu addition on the microstructure & mechanical properties of Al-Si alloys".	Dr. K. K. Singh	7.51
21	48154	Sunil Singh	Foundry Technology	Effect of inoculant on structure & properties of ductile iron	Dr. K.K. Singh	7.94
22	48155	Victor Samanta	Foundry Technology	Step bar with percentage of inoculations	Dr. K.K. Singh	9.11
23	48203	Anand Chautasiya	Forge Technology	Effect of strain rate and temperature on mechanical properties and microstructure of hot forged medium carbon steel	Dr. Manoj Kumar	7.97



Sl No.	Roll No.	Name of the Students	Branch	Project Topic	Name of the Guide	Final Semester Overall CGPA
24	48207	Bablu Tudu	Forge Technology	Effect of heat treatment on medium carbon steel (en9)	Dr. Deepak Kumar	8.12
25	48209	Biplab Manna	Forge Technology	Effect of intermediate cold forging during heat treatment on impact resistance in aluminium alloy 6082	Dr. Rahul Kulkarni	8.6
26	48211	Chandan Kumar	Forge Technology	Die design of bevel gear blank	Dr. Rajkumar Ohdar	8.77
27	48212	Dhananjay Mahato	Forge Technology	Effect of strain rate and temperature on mechanical properties and microstructure of hot forged medium carbon steel	Dr. Manoj Kumar	8.53
28	48214	Gobinda Maity	Forge Technology	Heat treatment of en19 (tempering) and hardness test , micro structure test	Dr. Ajit Kumar Pramanick	8.13
29	48215	Kiran Dutta	Forge Technology	Effects of heat treatment on medium carbon steel(en9)	Dr. Deepak Kumar	8.86
30	48217	Kumar Tarun	Forge Technology	Die design of an idler gear and simulation	Dr. Niranjana Kumar Singh	8.13
31	48218	Manik Bouri	Forge Technology	To study the effects on mechanical properties of en9 steel by forging deformation	Dr. Rajkumar Ohdar	7.92
32	48221	Pramod Kumar Sahu	Forge Technology	Study on effect of heat treatment on d3 tool steel	Dr. Ajit Kumar Pramanick	7.87
33	48222	Prasenjit Pandey	Forge Technology	Heat treatment on medium carbon steel (en9) & analysing the grain structure and mechanical properties	Dr. Deepak Kumar	8.49

Sl No.	Roll No.	Name of the Students	Branch	Project Topic	Name of the Guide	Final Semester Overall CGPA
34	48224	Ravi Kumar Mahto	Forge Technology	Die design of an idler gear and simulation	Dr. Niranjana Kumar Singh	8.09
35	48225	Ritesh Kumar	Forge Technology	Die design of bevel gear blank	Dr. Rajkumar Ohdar	8.56
36	48226	Sachin Kumar Mahto	Forge Technology	Effect of strain rate and temperature on mechanical properties and microstructure of hot forged medium carbon steel	Dr. Manoj Kumar	7.58
37	48227	Saheb Digar	Forge Technology	Febrication of al-sic composite through powder forging	Dr. Vineet Chak	7.79
38	48229	Sandeep Kumar	Forge Technology	Study on effect of heat treatment on en9 steel	Dr. Ajit Kumar Pramanick	8.37
39	48230	Sasthi Pada Achar	Forge Technology	Effects of heat treatment on medium carbon steel(en9).	Dr. Deepak Kumar	7.83
40	48232	Sayantan Paria	Forge Technology	Comparative study on formability of aa6082 with and without thermomechanical processing	Dr. Rahul Ramesh Kulkarni	8.24
41	48233	Shivshankar Pandit	Forge Technology	Time reduction in die change over	Dr. Niranjana Kumar Singh	8.7
42	48234	Shubham Kumar	Forge Technology	To study the effect on mechanical properties of en9 steel by forging deformation	Dr. Rajkumar Ohdar	9
43	48236	Shumail Nazeer	Forge Technology	Powder forging	Dr. Vinit Chak	7.9
44	48237	Situ Paul	Forge Technology	Study the forged d3 tool steel	Dr. Ajit Kumar Pramanick	9.06
45	48239	Sourav Barman	Forge Technology	Effects of heat treatment on medium carbon steel (en9)	Dr. Deepak Kumar	7.64
46	48242	Suman Kumar Banik	Forge Technology	Analysis of effort of forging on en8d steel	Dr. Ajit Kumar Pramanick	7.69

Sl No.	Roll No.	Name of the Students	Branch	Project Topic	Name of the Guide	Final Semester Overall CGPA
47	48242	Sudipta Halder	Forge Technology	Fabrication of al- sic composite through by powder forging	Dr. Vineet Chak	8.03
48	48243	Supriya Adhikari	Forge Technology	Effects of heat treatment on medium carbon steel (en9)	Dr. Deepak Kumar	9.07

## 49th ADC (2019-2021)

### Foundry & Forge Technology Seminar Topic

Sl No.	Roll No.	Name of the Students	Branch	Seminar Topic	Name of the Guide	Final Semester Overall CGPA
1	48105	Amarjeet Kumar Bhagat	Foundry Technology	Core related defects	Dr. Himanshu Khandelwal	8.17
2	48106	Atanu Neogi	Foundry Technology	Gating system	Dr. Nandita Gupta	7.77
3	48115	Deepesh Yadav	Foundry Technology	Analysis of permanent mold distortion in aluminium casting	Dr. Nandita Gupta	7.99
4	48118	Gaurav Kumar	Foundry Technology	Core making process	Nandita Mam	8.03
5	48119	Gyanendra Kumar	Foundry Technology	Semisolid casting process	Dr. Himanshu Khandelwal	8.67
6	48120	Md Irfan Anwar	Foundry Technology	Sodium silicate process	Dr. Amitesh Kumar	8.55
7	48125	Mrinal Barman	Foundry Technology	Overview of mn steel	Dr. Amitesh Kumar	7.64
8	48127	Nirbhay Kumar Ray	Foundry Technology	Rapid prototyping	Dr. Himanshu Khandelwal	8.1
9	48136	Rajni Kumari	Foundry Technology	Casting in electric vehicle	Dr. Himanshu Khandelwal	8.03
10	48137	Ranjit Kumar Saw	Foundry Technology	Production of ductile iron	Dr. Amitesh Kumar	8.19
11	48138	Raushan Thakur	Foundry Technology	Study of core making	Dr. Amitesh Kumar	8.16
12	48139	Ravi Kumar Nayak	Foundry Technology	Bio medical application of mg- alloy	Dr. Amitesh Kumar	9



Sl No.	Roll No.	Name of the Students	Branch	Seminar Topic	Name of the Guide	Final Semester Overall CGPA
13	48140	Sachin Mahato	Foundry Technology	"Review on moulding machine in foundries"	Dr. Himanshu Khandelwal	7.57
14	48141	Sajeed Ansari	Foundry Technology	Foundry industry	Dr. Amitesh Kumar	7.97
15	48142	Moh Salauddin Ansari	Foundry Technology	Microstructure & properties of grey cast iron.	Dr. K.K. Singh	8.4
16	48143	Md Shah Alam	Foundry Technology	Die casting	Dr. Amitesh Kumar	8.02
17	48145	Shubhadeep Ghosh	Foundry Technology	Foundry manufacturing processes	Dr. Amitesh Kumar	7.82
18	48146	Sk Murselim Ali	Foundry Technology	Furnace lining and sintering process	Dr. Amitesh Kumar	8.4
19	48150	Sourav Kundu	Foundry Technology	Production and application of mg alloy	Dr. K. K. Singh	8.26
20	48151	Sourav Sing Sardar	Foundry Technology	"Effect of varying thickness on mechanical and microstructure properties of ductile iron casting".	Dr. K. K. Singh	7.51
21	48154	Sunil Singh	Foundry Technology	Structure-properties of ductile iron "	Dr. K. K. Singh	7.94
22	48155	Victor Samanta	Foundry Technology	Ductile iron	Dr. K. K. Singh	9.11
23	48203	Anand Chautasiya	Forge Technology	Lubricants for hot forging of steel	Dr. Manoj Kumar	7.97
24	48207	Bablu Tudu	Forge Technology	Yield improvement of forging component	Dr. Deepak Kumar	8.12
25	48209	Biplab Manna	Forge Technology	Thixo-forging	Dr. Rahul Kulkarni	8.6
26	48211	Chandan Kumar	Forge Technology	Heat treatment and it's application	Dr. Rajkumar Ohdar	8.77
27	48212	Dhananjay Mahato	Forge Technology	Forging die life	Dr. Manoj Kumar	8.53
28	48214	Gobinda Maity	Forge Technology	Forging defect	Dr. Ajit Kumar Pramanick	8.13
29	48215	Kiran Dutta	Forge Technology	Forging process and forging defects(underfill)	Dr. Deepak Kumar	8.86
30	48217	Kumar Tarun	Forge Technology	Precision forging	Dr. Niranjana Kumar Singh	8.13

Sl No.	Roll No.	Name of the Students	Branch	Seminar Topic	Name of the Guide	Final Semester Overall CGPA
31	48218	Manik Bouri	Forge Technology	Recent trends in powder forging	Dr. B. Malik	7.92
32	48221	Pramod Kumar Sahu	Forge Technology	Forging process and defect	Dr. Ajit Kumar Pramanick	7.87
33	48222	Prasenjit Pandey	Forge Technology	Basic concepts of surface hardening	Dr. Deepak Kumar	8.49
34	48224	Ravi Kumar Mahto	Forge Technology	Forging defects	Dr. Niranjana Kumar Singh	8.09
35	48225	Ritesh Kumar	Forge Technology	Forging defects	Dr. Rajkumar Ohdar	8.56
36	48226	Sachin Kumar Mahto	Forge Technology	Ring rolling	Dr. Manoj Kumar	7.58
37	48227	Saheb Digar	Forge Technology	Surface hardening process.	Dr. Vineet Chak	7.79
38	48229	Sandeep Kumar	Forge Technology	Mechanical properties of stainless steel	Dr. B. Mallick	8.37
39	48230	Sasthi Pada Achar	Forge Technology	Analysis of mechanical press.	Dr. Deepak Kumar	7.83
40	48232	Sayantan Paria	Forge Technology	Forgeability of mg-al-zn alloy	Dr. Rahul Ramesh Kulkarni	8.24
41	48233	Shivshankar Pandit	Forge Technology	Heat treatment process	Dr. Niranjana Kumar Singh	8.7
42	48234	Shubham Kumar	Forge Technology	Recent technique in ultrasonic testing for welded joints	Dr. B. Mallick	9
43	48236	Shumail Nazeer	Forge Technology	Emerging trend in forging operation	Dr. Vinit Chak	7.9
44	48237	Situ Paul	Forge Technology	Magnetic particles inspection technique	Dr. B. Mallick	9.06
45	48239	Sourav Barman	Forge Technology	Vertical counter blow hammer	Dr. Deepak Kumar	7.64
46	48242	Suman Kumar Banik	Forge Technology	Heat treatment process	Dr. Ajit Kumar Pramanick	7.69
47	48242	Sudipta Halder	Forge Technology	Consideration of die design	Dr. Vineet Chak	8.03
48	48243	Supriya Adhikari	Forge Technology	Forging defects and its remedies	Dr. Deepak Kumar	9.07



## CENTRALIZED COMPUTER CENTRE

Central Computer Center (C.C.C.) is mainly concerned to boost the IT infrastructure development, maintenance, and growth of employees and students at NIAMT. This lab is fully air-conditioned.

It provides Campus Wide Wired Network, Wi-Fi Network, advanced computing facility, and campus wide software. The campus-wide wired local area network of the institute encompasses the entire institute and provides a primary gigabit converged network to all the departments, centers, and sections of the institute including their computer laboratories, academic, technical, and administrative staff offices and classrooms. The wireless facility is available in the boys' and girls' student hostels and staff residences.

Centralized Computer Centre (C.C.C.) comprises the following members:

<b>Dr. Anoop Kumar Sood</b> Professor (ME)	Chairman
<b>Mr. Manoj Kumar Xalxo</b> Assistant Registrar (SP & EM)	Member
<b>Dr. Jagesvar Verma</b> Assistant Professor (ME)	Member
<b>Dr. Vikash Kumar Gupta</b> Assistant Professor (DASH)	Member
<b>Dr. Himanshu Khandelwal</b> Assistant Professor (Foundry Technology)	Coordinator

### Facilities Developed at Centralized Computer Centre

- The wireless and LAN facility is available for students.
- Presently, CCC Lab has 120 numbers of Desktop Computer dedicated to providing facilities to students. The Internet is also connected to these computers.
- All the computers and other equipment's are connected to online UPS for power backup.
- 4 nos. of servers are installed in C.C.C lab for e-Office and other applications of institute.
- It manages the email application for the Faculty and Students of the Institute. The audio-visual system is also available.
- The additional facility developed recently is Digital Classroom with Camera and audio-visual system.
- In this facility the faculty can take their online or offline classes with recording.



## The Softwares available in the C.C.C lab are:

- MATLAB
- ANSYS
- DEFORM
- PROCAST
- SIMUFACT WELDING & FORMING
- MINITAB
- MICROSOFT 365 A3 (WORD, EXCEL, POWERPOINT)
- SOPHOS (ANTIVIRUS FOR ALL THE DESKTOP COMPUTERS OF THE INSTITUTE)
- CATIA
- ADOBE PHOTOSHOP











## LIBRARY AND DOCUMENTATION CENTRE

### EXISTING FACILITIES:

The Library and Documentation Centre of NIAMT rendering valuable services to the Institute and Users it has 51605 reading materials (Books, Journals, Standards etc.)

The Library is kept open from 08:00 AM to 08:00 PM on all Monday to Saturday . The Centre provides Reading Facilities, Borrowing Facilities, and References Services. The Library has the following users viz, faculties, students and staff of the Institute and provides sitting space to about 100 people at a time.

### NEW SERVICES:

1. Library is providing online access to e-resources through Elsevier B.V.
  - (i) **Science Direct-5 Subject Collections**
    - # Engineering
    - # Material Science
    - # Environmental Science
    - # Computer Science
    - # Physics and Astronomy
2. Library is providing online access to e-resources through e-shodh Sindhu of the following package.

List of e-resources available through e-shodh Sindhu

- # Institute for Studies in Industrial Development (ISID) Database
- # JGate Plus (JCCC)
- # JSTOR
- # Nature
- # Oxford University Press



## HOSTEL

Residential facilities are provided to students in four boys' hostels and one girls' hostel. The detail about each hostel is provided below.

1. Nirala Chatrawas
2. Homi J Bhaba Chatrawas
3. M. Visveshwaraya Chatrawas
4. Jagdish Chandra Bose Chatrawas
5. Kalpana Chawla Chatrawas

Name of Hostel	Hostel Warden	Type of Hostel	Accommodation
Nirala Chatrawas	Dr. Ratnesh Gupta	Boys' Hostel	150 Double/triple
H.J.B. Chatrawas	Dr. H. Vignesh Babu	Boys' Hostel	300 Double
M.V. Chatrawas	Dr. Kulkarni Rahul Ramesh	Boys' Hostel	176 Single
J.C. Bose Chatrawas	Mr. Anand Mohan Murmu	Boys' Hostel	240 Single
Kalpana Chawla Single/double/triple Chatrawas	Dr. Aruna Thakur	Girls' Hostel	100 Double/triple

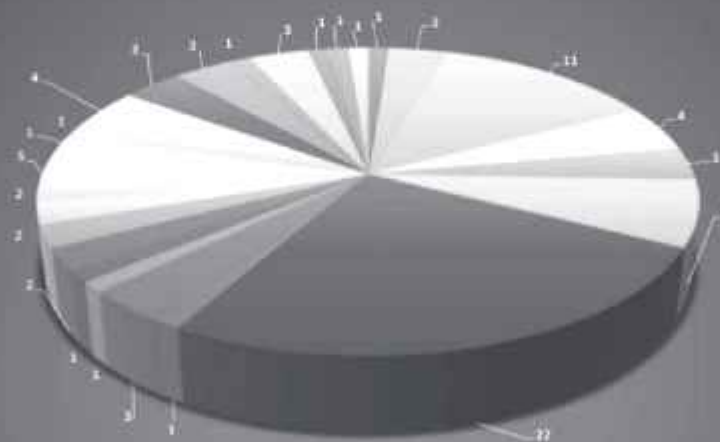


## INDUSTRIAL LIAISON CELL

### COMMITTEE MEMBERS

Faculty	
Dr. A.K. Singh Professor Dept. of Foundry Technology	Chairman
Dr. Subhankar Basu Assistant Professor Dept. of Applied Science and Humanities	Member
Dr. Ratnesh Gupta Assistant Professor Dept. of MME	Member
Dr. Umesh Khande Assistant Professor Dept. of ME	Member Secretary

### PLACEMENT STATS FOR BATCH 2018-22



ROUSENA GROUP	TATA METALS	EMFTSMAN AUTOMATION	NEDSVM INDUSTRIES LIMITED	SHIRAM PISTON AND RINGS
TATA AUTOCOMP	VEDANTA	OFF BUSINESS	SONA CONSTAR	ISDC
PVA	WELDOMAC ENGINEERING	TUVO	SDIC SP STEEL	TMF MOTORS AND TRACTORS LTD
CONTINENTAL ENGINES	SONFELDI	ISW STEEL	SMS GROUP	REVAL PROFILES
ELSHA MARTIN	ISB LTD	BANSAL CLASSES	ROSEM ROLL TECH LTD	IBC INDUSTRIES



## PLACEMENT 2021-22

Sl. No.	COMPANY	B.TECH.		ADVANCE DIPLOMA		M.TECH.			
		HIGHEST PAY- 9.4 LPA		HIGHEST PAY- 3.4 LPA		HIGHEST PAY- 4.5 LPA			
		AVERAGE PAY- 6.4 LPA		AVERAGE PAY- 2.55 LPA		AVERAGE PAY-3.3LPA			
		ME	MME	FOUNDRY	FORGE	FFT	ME	EE	MSE
1	TAFE MOTORS AND TRACTORS LTD	-	-	-	-		-	-	-
2	CRAFTSMAN AUTOMATION LTD	7	-	-	-		-	-	-
3	SHRIRAM PISTON & RINGS	1	-	-	-		-	-	-
4	TATA AUTOCOMPONENT SYSTEMS LTD	5	1	-	-		-	-	-
5	CRAFTSMAN AUTOMATION LTD	-	4	-	-		-	-	-
6	NEOSYM INDUSTRY LTD	2	-	-	-		-	-	-
7	VEDANTA	10	12	-	-		-	-	-
8	TAFE MOTORS AND TRACTORS LTD	3	-	-	-		-	-	-
9	ISGEC UP STEELS	1	1	-	-		-	-	-
10	SONA COMSTAR	1	-	-	-		-	-	-
19	KSB LTD	2	-	-	-		-	-	-
20	USHA MARTIN	1	-	-	-		-	-	-
21	NEOSYM INDUSTRY LTD	-	-	-	-		-	-	-
22	TSUYO	1	1	-	-		-	-	-
23	OFF BUSINESS	1	-	-	-		-	-	-
24	BONFIGLIOLI	1	-	-	-	1	-	-	-
25	CONTINENTAL ENGINES	-	1	-	-		-	-	-
26	ISGEC HEAVY ENGINEERING LTD	-	1	-	-		-	-	-
27	JSW STEEL	-	4	-	-		-	-	-
28	JYVA	-	1	-	-		-	-	-
29	RAUSHEENA GROUP	-	1	-	-		-	-	-
30	SHRIRAM PISTON & RINGS	-	2	-	-		-	-	-
31	SMS GROUP	-	3	-	-		-	-	-
32	SONA COMSTAR	-	2	-	-		-	-	-
33	TAFE MOTORS & TRACTORS LTD	-	2	-	-		-	-	-
34	TATA METALIKS	-	3	-	-		-	-	-
35	VIRAJ PROFILES LIMITED	-	3	-	12		-	-	-
36	WELDOMAC ENGINEERING	-	2	-	-		-	-	-
37	BANSAL FORGING			-	3		-	-	-
38	HIM TECHNOLOGY LTD			-	3		-	-	-
39	KEMS FORGING LTD			-	9		-	-	-
40	NF FORGING PVT LTD			-	1		-	-	-
41	RKFL			-	7		-	-	-
42	SHIVAM AUTOTECH			-	3		-	-	-
43	BHATIYA ALLOY PRIVATE FORGING LTD					2			
44	ISGEC PVT. LTD					1			
45	SHIVAM AUTOTECH						4		
46	RAJASTHAN UDYOG					2			
	STUDENTS PLACED	36	44	0	38	6	4	0	0

## NIAMT STUDENTS' GYMKHANA

### COMMITTEE MEMBERS

<b>Dr. Shubhankar Basu</b> Assistant Professor Dept. of Applied Science and Humanities	Chairman
<b>Dr. Ratnakar Das</b> Assistant Professor Dept. Of ME	Member
<b>Dr. Sriparna Chattopdhyay</b> Assistant Professor Dept. of Applied Science and Humanities	Member
<b>Dr. Mamta Sharma</b> Hindi Officer	Member
<b>K. Verma</b> Assistant Registrar (Academics)	Member Secretary

Following were the events that took place in the session 2021-2022 by NIAMT Student's Gymkhana :-

Activities	Events
Cultural	Spicy Macay Programme (Kalbelia Dance from Rajasthan) Independence Day and Republic Day Programme
Sports	Participated in the inter-college sports meet at CUJ and BIT Mesra Ranchi Conducted inter hostel's sports meet
Motivating speeches	Guest Lecture on Stress Management and by Prof. Laxmidhar Behera, Director IIT Mandi



## STUDENT ACTIVITIES

### Kartavya- An effort towards educated INDIA

An idea born out of true social service is shining today with the name KARTAVYA. An NGO initiative started in the year 2007 by B.Tech students of NIAMT Ranchi, aims at uplifting the economically and socially backward children of Ranchi. At present three centers are being operated by Kartavya in Ranchi namely Hatia center, Tupudana center & NIAMT center. The NIAMT center is fully run by the girls of NIAMT. Currently, we are providing free & quality education to around 95 students, with the help of our dedicated volunteers & committee members. Our major source of funding comes from alumni, sponsors & Kartavya Stall.

During the academic year from 1st April 2021 to 31st March 2022, we ensured that the organization run smoothly and continue to grow at the same time. For this, we took a number of steps like we started the culture of Parent Teacher Meetings (PTM), conducting fresh surveys and updating students' profiles, starting practical lab classes, revising our curriculum, and many more. These initiatives have helped the student to develop a keen interest in studies which has uplifted their academic performance. In addition to this we at Kartavya believe in the all-round development of a child, to ensure this we conducted a number of cultural events all around the year like drawing, singing, etc, especially during the festive days like Janmashtami, Raksha Bandhan, and even Independence Day celebration.

With the support from our alumni, sponsors & volunteers, Kartavya has been consistently taking small but successful steps to reach it's goal of impacting the lives of many unprivileged children through education.





## NIAMT Alumni Association (NIAMTAA)

### Inauguration of NIAMTAA's office



On 26th January 2022, NIAMTAA Office has been inaugurated by prof.N.K.singh who is senior Alumni of NIAMT in the presence of prof.K.K.Singh (Dean SAA, NIAMT) and prof.D.Roy (secretary of the Alumni cell) took place. The facility has been given by NIAMT Administration which will be helpful for future works of the association

### ONLINE SESSION



On 12th February 2022, the online session was held with Mr. Rohit Singh (B.Tech, Manufacturing Engineering, (2000-2004), Vice President, xeraya capital, Kuala Lumpur, Malaysia. The journey from Manufacturing Engineering to an investment Banker was discussed during the session which paved the way for students towards their future.



The topic of Core Manufacturing, supply chain procurement and new trends in manufacturing was discussed by Mr Sanjay Mandal (B.Tech, Manufacturing Engineering-2004) on 13th November 2022. He is currently working as Global Commodity Leader (GCL), Electrical System, GE Hydro Solution with seven years experienced at GE Renewable Energy. He mentioned his technical education of casting and forging helped in knowing the basics of technical parts in job.

### MOU and CONTRACT inked between NIAMT and TSUYO for E-Mobility Projects.



On 16th Feb 22, NIAMT, Ranchi signed an industry-Academic partnership contract with a renowned Electric Vehicle start-up, TSUYO Manufacturing. Pvt Ltd, Delhi. This is a 3- years Contract between NIAMT and TSUYO to lead EV projects on Two wheeler conversion with a Make-in-India powertrain supported by TUSYO

## RECONNECT INTERVIEW SEASON 1.0



The session was conducted on 28th February 2022 with our esteemed alumni Mr Bishnu Prasad Dash (B.Tech, Metallurgy and Materials Engineering 2012-2016). He is currently a Doctoral Research Fellow, Operations Management at IIM Ranchi.

## RECONNECT INTERVIEW SEASON 2.0

This Offline Interview Session for B.Tech. And ADC Students. Mr. Rajni Kant, (M.Tech. And B.Tech ) in ME, conducted offline interview sessions for B.Tech. And ADC students, Over 50 students benefitted from that session and played an important role in achieving 100% placement for the institution.



## OFFLINE SESSIONS.



The session was conducted under coffee with alumni by Ms. Sujata on 4th July with Mr Mithun Mridha (B.Tech, ME). He is PPM Practice Manager, Organizational Transformation Consultant, Agile Coach and International Speaker. He discussed developing skills in the field of one's interest which will be helpful in the long run. He shared his experiences about his challenges and shortcomings and how he overcame his obstacles in his college days.



Brajesh Kumar Singh (2002, MME), He is currently working with Tata Motors, JSR, He interacted with students. The main focus of this session was about the future trend in manufacturing engineering. he spoke about the how can you ready for interview and for industry

## ONE DAY INDUSTRIAL VISIT TO SNL BEARING



SNL is an IATF 16949 : 2016 certified company promoted by NRB Bearings Limited. Among the very few SNL Bearings Ltd. co uide establish itself as one of the leading Needle Roller Bearing manufacturers mainly for automobile industries. For more than two decades it has been remained one of the leading suppliers to various big names in Automobile manufacturing like BAJAJ, LML, KINETIC ENGG.TVS, MARUTI and TATA MOTORS. Many of the student visit to industry from collage along with Mr. Rajni Kant.



## Infra Structure Development



Extension of Kalpana Chawla Hostel  
76 bedded girls' hostel is under construction.



Extension of Nirala Hostel  
64 bedded boys' hostel is under construction.



New lab building is under construction  
To setup center of excellence in advance manufacturing.

## INSTITUTE EVENTS



### Hindi Diwas



### Independence Day





Constitution Day



Gourav Diwas



Yoga Day



## HINDI CELL

Hindi Cell of the Institute is working in accordance with official language policy of Govt. of India and annual program issued there under. The activities of Hindi Cell during the years were as follows:

- 1) Hindi workshop was organized for employees.
- 2) Day today translation work & other work related to O.L was performed by Hindi Cell.
- 4) The Institute has regular representation in the meetings of TOLIC
- 5) Besides official language Activities Dr. Mamta Sharma Hindi Officer is contributing to the following committee:
  - Member Language Communication Skill Development Center Management Committee
  - Co-Ordinator Annual Report preparation committee
  - Co-Ordinator National function organizing committee
  - Member Bid Opening committee
  - Member Internal complaints Committees (ICC) under the sexual harassment of women at workplace(prevention, prohibition and redressal Act,2013).
  - Member student Induction Program (SIP) cell.
  - Member, Universal human Value (VHV) cell.
  - Member student Fostering unit (Gymkhana).
  - Member Gymkhana Committee.



**NATIONAL INSTITUTE OF ADVANCED  
MANUFACTURING TECHNOLOGY (Formerly NIFFT)**

**A Centrally Funded Technical Institute Under Ministry of Education,  
Govt. of India**

**HATIA, RANCHI- 834003 (JHARKHAND)**



**Statement of Accounts**

**For the Financial Year 2021-22**

**(As per Revised Formats of Financial Statements for  
Central Higher Educational Institutions)**

**Audited by**

**M/s Manmohan Singh & Co.  
(Chartered Accountants) Ranchi**





**NATIONAL INSTITUTE OF ADVANCED  
MANUFACTURING TECHNOLOGY (Formerly NIFFT)**

**STATEMENT OF ACCOUNTS  
FOR THE FINANCIAL YEAR 2021-22.**

**CONTENTS**

Sl.NO	PARTICULAR	Page No.
1	Balance Sheet as on 31.03.2022	74
2	Schedule forming part of Balance Sheet (1 to 5)	75
3	Income & Expenditure A/c for the FY 2021-22	85
4	Schedules Forming Part of Income & Expenditure account (6 to 15)	86
5	Receipts & Payments Accounts for the FY 2021-22	95
6	Schedules Forming Part of Receipts & Payments account (16 to 24)	96
7	Bank Reconciliation Statements	103
8	General Provident Fund Account for the FY 2021-22	105
9	Technical Education Quality Improvement Programme Account for the FY 2021-22	111

**NATIONAL INSTITUTE OF ADVANCED MANUFACTURING TECHNOLOGY**  
**HATIA, RANCHI-834003**

**BALANCE SHEET AS ON 31ST MARCH 2022**

SOURCES OF FUNDS	Schedule	Current Year 2021-22	Previous Year 2020-21
CORPUS/CAPITAL FUND	1	1,20,16,00,773.91	1,15,05,09,184.78
CURRENT LIABILITIES	2	15,51,82,224.88	13,30,46,427.88
HEFA LOAN	2 (A)	8,64,41,921.00	5,45,97,502.00
EARMARKED FUND	2 (B)	1,06,20,163.40	75,66,877.40
<b>TOTAL</b>		<b>1,45,38,45,083.19</b>	<b>1,34,57,19,992.06</b>

APPLICATION OF FUNDS	Schedule	Current Year 2021-22	Previous Year 2020-21
FIXED ASSETS	3		
a) Tangible Assets		29,53,51,443.88	28,52,66,048.53
b) Capital work-In-Progress		80,54,15,139.00	70,62,38,473.00
c) Intangible Assets		2,62,60,019.26	2,59,00,294.73
CURRENT ASSETS	4	16,98,67,175.99	15,77,59,361.60
LOANS, ADVANCES & DEPOSITS	5	15,69,51,305.06	17,05,55,814.20
<b>TOTAL</b>		<b>1,45,38,45,083.19</b>	<b>1,34,57,19,992.06</b>

**AS INTERNAL AUDITOR**

For M/s Mannohan Singh & Co.  
Chartered Accountants



*(Signature)*

CA J. P. Sharma  
(Partner)  
M.NO. 402655

*(Signature)*  
Director

*(Signature)*  
Registrar

*(Signature)*  
Deputy Registrar



## SCHEDULE - 1 - CORPUS/CAPITAL FUND

Particulars	Current Year	Previous Year
Balance at the beginning of the year	1,15,05,09,184.78	1,10,38,23,585.65
Add: Contributions towards Corpus/Capital fund	-	-
Add: Grants from UGC, Govt. of India, state Government to the extent utilised for capital expenditure	8,30,00,000.00	6,70,06,000.00
Add: Assets Purchased out of Earmarked Funds	-	-
Add: Assets Purchased out of Sponsored Projects, where ownership vests in the institution	-	-
Add: Assets Donated / Gifts Received	-	-
Add: Others Additions (Building appreciation)	-	-
Less: Others Deduction (Capital Grant Unutilized Refundable to MOE)	(68,73,198.00)	-
Add: Excess of Income over Expenditure transferred from the Income & Expenditure Account	-	(2,03,20,400.87)
<b>TOTAL</b>	<b>1,22,66,35,986.78</b>	<b>1,15,05,09,184.78</b>
Deduct: Deficit transferred from Income & Expenditure Account	(2,50,35,212.87)	-
Deduct: Amount reversed during the year based on CAG observation	-	-
<b>Balance at the year end</b>	<b>1,20,16,00,773.91</b>	<b>1,15,05,09,184.78</b>



## SCHEDULE - 2 - CURRENT LIABILITIES

CURRENT LIABILITIES		FY 2021-22	FY 2020-21
1	Deposit From Staff	19,78,698.00	13,81,772.00
2	Deposit From Student		
a	Caution Money	92,87,703.50	78,91,003.50
b	Unclaimed fees	-	-
3	Deposit-Others		
a	Earnest Money	35,20,653.00	57,03,591.00
b	Security Deposit	1,74,738.30	1,74,738.30
c	Performance Security	1,25,567.00	-
4	Statutory Liabilities		
a	LIC Premium	7,753.40	7,753.40
b	TDS U/s 192A	(30,895.00)	1,23,554.00
c	TDS U/s 194C	2,55,052.00	81,065.00
d	TDS U/s 194I	5,933.00	5,475.00
e	Employees Loan Repayment	19,607.00	19,607.00
f	Professional Tax on Salary	75,670.00	72,874.00
g	New Pension Scheme (Employees Contribution)	17,314.00	17,314.00
h	New Pension Scheme (Employer Contribution)	1,04,581.00	1,04,581.00
i	CPF Deduction from Salary	-	7,68,585.00
j	CGST TDS (1%)	65,781.00	-
k	SGST TDS (1%)	65,781.00	-
l	IGST TDS (2%)	1,52,342.00	-
5	Other Current Liability		
a	Receipt against Sponsored Projects	1,00,69,244.00	77,21,784.00
b	Receipt against Sponsored Fellowship & Scholarship	17,85,613.00	13,23,063.00
c	Other Liabilities		
a	Account Payable/ Receivable	2,23,441.00	2,23,441.00
b	AICTE	1,40,000.00	1,40,000.00
c	Grant From CBSE Board	50,000.00	50,000.00
d	M/s Total Library Solution	52,784.00	92,784.00
e	Provisional Expenses	2,14,59,709.00	2,20,07,703.00
f	Amount Payable to Manoj Kumar	45,000.00	45,000.00
g	Amount Received From IIPC Project A/c: 2730101004765	10,99,915.50	10,99,915.50
h	Unutilized Grant refundable to MOE	8,60,10,517.00	6,81,36,000.00
i	Interest Earned on Grant refundable to MOE	1,74,95,792.00	1,54,19,469.00
j	Amount Received from Unidentified Person	5,90,950.18	2,50,637.18
k	Deposit from CBI	1,70,000.00	1,70,000.00
l	UG & PG Summer Examination -2020	13,920.00	13,920.00
m	Amount Received from JUT	58,000.00	-
		15,51,82,224.88	13,30,46,427.88



**(ANNEXURE-I TO SCHEDULE - 2) SPONSORED PROJECTS**

Sr. No.	Name of the Project	Opening Balance		Receipts	Total	Expenditure	Closing Balance	
		Credit	Debit				Credit	Debit
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
1	Direct Admission of Students Abroad (DASA)	1,28,175	-	-	1,28,175	-	1,28,175	-
2	Project-Board of Research in Nuclear Science (BRNS)	16,39,363	-	-	16,39,363	-	16,39,363	-
3	Project-Science and Engineering Research Board (Old)	1,80,450	-	-	1,80,450	-	1,80,450	-
4	Project-Science & Engineering Research Board (New 1)	2,96,849	-	-	2,96,849	-	2,96,849	-
5	Project-Science & Engineering Research Board (S.Basu)	1,66,756	-	3,55,980	5,22,736	5,07,346	15,390	-
6	Technical Education Quality Improvement Programme	18,704	-	-	18,704	-	18,704	-
7	Buriapur Surgical Cluster, MSME (West Bengal)	5,00,000	-	-	5,00,000	5,00,000	-	-
8	Unnat Bharat Abhiyan	-	-	-	-	-	-	-
9	Science Research Engineering Board (P.S. Mondal)	26,82,392	-	1,18,584	28,00,976	4,87,610	23,13,366	-
10	Project Development Institute-Nigeria	4,69,095	-	-	4,69,095	-	4,69,095	-
11	Science Research Engineering Board (D.Roy)	16,40,000	-	-	16,40,000	2,69,880	13,70,120	-
12	Science Research Engineering Board (A.K. Pramanik)	-	-	22,66,900	22,66,900	-	22,66,900	-
13	AICTE Project (D.Roy)	-	-	13,70,832	13,70,832	-	13,70,832	-
	<b>Total</b>	<b>77,21,784</b>	<b>-</b>	<b>41,12,296</b>	<b>1,18,34,080</b>	<b>17,64,836</b>	<b>1,00,69,244</b>	<b>-</b>

**(ANNEXURE-II SCHEDULE - 2) SPONSORED FELLOWSHIP AND SCHOLARSHIPS**

Sr. No.	Name of the Project	Opening Balance		Receipts	Total	Expenditure	Closing Balance	
		Credit	Debit				Credit	Debit
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
1	Govt. of India SC/ST Scholarship	54,700	-	5,63,200	6,17,900	5,63,200	54,700	-
2	S N Sinha Memorial Scholarship	5,000	-	-	5,000	-	5,000	-
3	State Scholarship for Students	12,55,863	-	23,13,600	35,69,463	20,00,050	15,69,413	-
4	Scholarship from Mahindra & Mahindra Ltd.	7,500	-	-	7,500	-	7,500	-
5	Tata Steel Ltd. (For PGCSM Course)	-	-	1,50,000	1,50,000	-	1,50,000	-
	<b>Total</b>	<b>13,23,063</b>	<b>-</b>	<b>30,26,800</b>	<b>43,49,863</b>	<b>25,63,250</b>	<b>17,86,613</b>	<b>-</b>





## SCHEDULE - 2 (A) HEFA LOAN

	Particulars	FY 2021-22	FY 2020-21
1	Opening Balance	5,45,97,502.00	2,13,45,881.00
2	Add: Loan from HEFA (Amount directly paid to CPWD )	5,00,00,000.00	6,00,00,000.00
3	Add: Loan from HEFA (Amount directly paid to Supplier)	1,26,64,419.00	40,71,621.00
4	Add: Interest charged by HEFA	62,21,628.00	24,71,906.00
5	Less: Principal Installment Paid to HEFA Against Loan	3,08,20,000.00	3,08,20,000.00
6	Less: Interest paid to HEFA	44,59,522.00	24,71,906.00
7	Less: 4 <sup>th</sup> QTR Interest payable to Next FY	17,62,106.00	
	<b>Closing Balance (1+2+3+4-5-6)</b>	<b>8,64,41,921.00</b>	<b>5,45,97,502.00</b>



**SCHEDULE - 2(B) -EARMARKED FUND**

Sr. No.	Name of the Project	Opening Balance	Receipts	Total	Expenditure	Closing Balance
1	2	3	4	5(3+4)	6	7(5-6)
1	Earmarked Fund for CISD Committee	24,58,300.00	-	24,58,300.00	4,58,300.00	20,00,000.00
2	Earmarked Fund for NIFFT Alumni Cell	15,76,959.40	91,896.00	16,68,855.40	-	16,68,855.40
3	Earmarked Fund (IRG)	35,31,618.00	13,70,025.00	49,01,643.00	-	49,01,643.00
4	Earmarked Fund-Project Overhead	-	12,50,551.00	12,50,551.00	-	12,50,551.00
5	Income Tax Refund	-	5,86,750.00	5,86,750.00	-	5,86,750.00
6	CISD Modular Kitchen Development (Utsav Mahto)	-	4,58,300.00	4,58,300.00	2,45,936.00	2,12,364.00
	<b>Total</b>	<b>75,66,877.40</b>	<b>37,57,522.00</b>	<b>1,13,24,399.40</b>	<b>7,04,236.00</b>	<b>1,06,20,163.40</b>



SCHEDULE - 3 - PLANT FIXED ASSETS

Sl. No	Assets Heads	Rate of Depreciation (%)	Gross Block			Depreciation for the Year			Net Block	
			Opening Balance 01.04.2021	Additions	Deduction	Closing Balance	Depreciation On	Total Depreciation	At on 31.03.2022	As on 31.03.2022
2		3	4	5	6	7=4+5-6	8	10=8+9	11=12+5-6-9	12
1	Land	0%	-	-	-	-	-	-	-	-
2	Site Development	0%	-	-	-	-	-	-	-	-
3	Buildings (New)	2%	13,90,86,595.00	11,75,414.00	-	14,02,71,109.00	27,81,913.90	55,87,236.08	13,45,83,772.92	13,62,13,781.10
4	Building (Old)	2%	16,65,43,001.73	-	-	16,65,43,001.73	3,61,95,718.26	6,95,30,478.11	9,70,12,423.42	10,03,13,281.95
5	Roads & Bridges	2%	-	-	-	-	-	-	-	-
6	Sewerage & Drainage	2%	-	-	-	-	-	-	-	-
7	Electricity Installation and Equipment	5%	12,25,28,261.97	-	-	12,25,28,261.97	22,25,05,887.24	12,25,05,947.24	-	-
8	Plant & Machinery	5%	37,92,130.00	4,28,450.00	-	42,20,580.00	5,50,450.05	7,61,513.95	31,59,126.95	32,43,709.95
9	Scientific & Laboratory Equipment	8%	1,42,35,417.00	90,07,678.00	-	2,32,43,095.00	29,59,262.87	48,17,190.40	1,84,06,904.00	1,77,97,154.20
10	Office Equipment	7.5%	62,64,070.55	11,990.00	-	62,76,020.36	20,07,891.63	3,15,057.00	39,15,001.74	42,62,139.78
11	Audio Visual Equipment	7.5%	6,10,607.00	1,80,904.00	-	7,91,511.00	1,87,710.86	59,285.16	3,41,096.44	4,22,190.16
12	Computers & Peripherals	20%	2,27,43,654.00	11,84,237.00	-	2,39,27,891.00	81,74,464.40	45,82,076.40	1,27,56,813.00	1,06,71,309.00
13	Furniture, Fixtures & Fittings	7.5%	2,50,12,690.89	4,64,638.00	-	2,54,77,328.89	2,30,09,888.80	2,30,219.11	32,31,172.53	19,96,793.64
14	Vehicle	10%	65,63,819.00	-	-	65,63,819.00	42,74,802.90	6,72,811.00	47,47,613.80	27,99,000.10
15	Lib. Books & Scientific Journals	10%	11,18,36,504.58	1,44,16,802.00	-	12,62,53,306.58	10,31,48,114.08	25,72,857.40	2,07,10,888.00	88,66,754.40
16	Tubs wells & Water Supply	2%	4,20,250.00	-	-	4,20,250.00	5,55,069.00	26,928.37	5,48,145.63	3,95,028.00
17	Small Value Assets (Sports Equipment)	100%	-	-	-	-	-	-	-	-
18	Equipment UNRESCD AND	8%	34,97,117.00	-	-	34,97,117.00	24,97,217.00	24,97,217.00	-	-
	<b>Total (A)</b>		<b>67,16,24,536.53</b>	<b>2,70,34,892.00</b>		<b>69,86,59,428.53</b>	<b>33,78,10,636.23</b>	<b>1,44,89,219.67</b>	<b>29,40,09,486.46</b>	<b>28,34,63,914.12</b>
19	Capital work in Progress (B)		70,62,36,273.00	10,59,73,743.00	67,97,077.00	80,54,15,139.00	-	-	80,54,15,139.00	70,02,38,473.00
	<b>Total (A+B)</b>									

Sl. No	Intangible Assets	Rate of Depreciation (%)	Gross Block			Depreciation for the Year			Net Block	
			Opening Balance 01.04.2021	Additions	Deduction	Closing Balance	Depreciation On	Total Depreciation	As on 31.03.2022	As on 31.03.2022
20	Computer Software	40%	1,46,58,594.00	2,12,85,107.00	-	3,59,43,601.00	3,79,43,601.00	5,31,23,042.40	1,55,02,763.00	93,95,078.40
21	Patents	40%	5,81,77,604.00	46,71,222.00	-	6,28,48,826.00	9,78,46,836.00	1,54,17,457.40	1,01,45,968.60	1,38,91,064.00
22	Patents	9 Years	-	-	-	-	-	-	-	-
	<b>Total (C)</b>		<b>7,48,36,198.00</b>	<b>3,05,56,329.00</b>		<b>10,53,92,427.00</b>	<b>10,57,92,427.00</b>	<b>3,05,91,977.80</b>	<b>2,62,48,352.40</b>	<b>2,58,86,961.20</b>
	<b>Grand Total (A+B+C)</b>		<b>3,40,36,89,099.53</b>	<b>15,39,64,964.00</b>	<b>67,97,077.00</b>	<b>3,55,98,66,886.53</b>	<b>44,31,03,063.23</b>	<b>4,70,88,257.47</b>	<b>1,12,38,72,978.09</b>	<b>1,01,53,88,348.52</b>





SCHEDULE - 3 (A) NON PLAN FIXED ASSETS

S.No	Assets Heads	Rate of Depreciation (%)	Gross Block			Depreciation for the Year			Net Block	
			Opening Balance 01.04.2021	Additions	Deduction	Closing Balance	Depreciation OB	Depreciation for the Year	As on 31.03.2022	As on 31.03.2021
1	2	3	4	5	6	7=4+5-6	8	9	10=8+9	11=12+5-6-9
1	Land	0%	-	-	-	-	-	-	-	12
2	Site Development	0%	-	-	-	-	-	-	-	-
3	Buildings	2%	-	-	-	-	-	-	-	-
4	Roads & Bridges	2%	-	-	-	-	-	-	-	-
5	Tube wells & Water Supply	2%	1,17,495.00	-	-	1,17,495.00	14,099.40	2,349.90	16,449.30	1,03,995.60
6	Sewage & Drainage	2%	-	-	-	-	-	-	-	-
7	Electrical Installation and Equipment	5%	-	-	-	-	-	-	-	-
8	Plant & Machinery	5%	60,737.00	1,53,650.00	-	2,23,387.00	19,051.60	11,169.35	30,262.95	1,93,124.05
9	Office Equipment	7.5%	5,30,496.00	40,167.00	-	5,70,663.00	79,882.95	42,799.73	1,22,682.68	4,47,980.32
10	Audio Visual Equipment	7.5%	2,93,740.00	-	-	2,93,740.00	1,22,836.75	22,030.50	1,44,867.25	1,48,882.75
11	Computers & Peripherals	20%	33,40,173.00	67,248.00	-	34,07,421.00	25,75,604.60	6,13,268.40	31,88,873.00	7,84,568.40
12	Furniture, Fixtures & Fittings	7.5%	1,74,048.00	-	-	1,74,048.00	43,369.28	13,053.60	56,422.88	1,17,625.11
13	Vehicles	10%	-	-	-	-	-	-	-	-
14	U/s Books & Scientific Journals	10%	1,26,057.00	-	-	1,26,057.00	28,435.80	12,605.70	41,041.50	85,015.50
15	Scientific & Laboratory Equipment	8%	49,560.00	-	-	49,560.00	15,859.20	3,964.80	19,824.00	29,736.00
16	Small Value Assets	100%	-	-	-	-	-	-	-	-
Total (A)			47,01,306.00	2,61,065.00	-	49,62,371.00	28,99,171.58	7,21,241.98	36,70,413.56	13,41,957.43
17	Capital work in Progress	(B)	-	-	-	-	-	-	-	-
Total (B)			-	-	-	-	-	-	-	-
S.No	Intangible Assets	Rate of Depreciation	Gross Block			Depreciation for the Year			Net Block	
			Opening Balance 01.04.2021	Additions	Deduction	Closing Balance	Depreciation OB	Depreciation for the Year	As on 31.03.2022	As on 31.03.2021
18	Computer Software	40	-	-	-	-	-	-	-	-
19	E-Journals	40	-	-	-	-	-	-	-	-
20	Patents	9 Years	15,000.00	-	-	15,000.00	1,666.67	1,666.67	3,333.34	13,333.33
Total (C)			15,000.00	-	-	15,000.00	1,666.67	1,666.67	3,333.34	13,333.33
Grand Total (A+B+C)			47,16,306.00	2,61,065.00	-	49,77,371.00	29,00,838.25	7,22,908.65	36,73,746.90	13,55,624.09
Grand Total (A+B+C)			47,16,306.00	2,61,065.00	-	49,77,371.00	29,00,838.25	7,22,908.65	36,73,746.90	13,55,624.09



## SCHEDULE - 4 - CURRENT ASSETS

		PARTICULAR	FY 2021-22	FY 2020-21
<b>1</b>	<b>Sundry Debtors:</b>			
a	Debts outstanding for a period exceeding six months		5,14,152.68	5,14,152.68
<b>2</b>	<b>Cash and Bank Balances</b>			
a	In Saving Accounts			
i	Canara Bank SB A/c No. 2730101006939 (IRG)		2,92,40,305.28	3,39,54,957.00
ii	Canara Bank SB A/c No. 273010109959 (Closed)		-	-
iii	SBI Hatia SB A/c No.-11026359877 (O.B) (Closed)		-	-
iv	Canara Bank SB A/c No. 2730101011451 (OH-31)		3,82,39,741.75	5,07,28,264.02
v	Canara Bank SB A/c No. 2730101011452 (OH-35)		5,78,81,468.83	4,79,04,567.50
vi	Canara Bank SB A/c No. 2730101011453 (OH-35)		1,52,98,033.00	19,44,504.00
vii	Canara Bank SB A/c No. 2730101012429 (SERB Project II)		60,53,326.00	43,58,368.00
viii	Canara Bank SB A/c No. 2730101011923 (SERB Project I)		11,323.00	1,73,281.00
ix	Canara Bank Escrow A/c -2730101012032 (Principal Payment Account)		1,63,72,148.00	1,59,07,334.00
x	Canara Bank Escrow A/c -2730101012033 (Interest Payment Account)		2,770.00	65.00
xi	Canara Bank Escrow A/c -2730101012029 (Fees Receivable Account)		-	-
xii	Canara Bank Escrow A/c -2730101012031 (Grant Receivable Account)		63,553.00	-
xiii	Canara Bank A/c No.-2730101001031 (Allumni Cell)		46,921.40	45,585.40
xiv	Canara Bank SB A/c No. 2730101012610 (Online)		21,75,388.17	12,78,316.00
xv	SBI online Account-38979437865		30,18,107.88	-
<b>3</b>	<b>Cash</b>			
a	Cash in hand		-	30.00
<b>4</b>	<b>Allumni Fund Investment</b>			
a	FDR/2730401001400/10		1,60,823.00	1,60,823.00
b	FDR/2730401001401/10		1,31,148.00	1,31,148.00
c	FDR/2730401001697/4		5,19,853.00	5,19,853.00
<b>5</b>	<b>TDS Receivable</b>		1,38,113.00	1,38,113.00
<b>TOTAL</b>			<b>16,98,67,175.99</b>	<b>15,77,59,361.60</b>





**SCHEDULE - 5 - LOANS, ADVANCES & DEPOSITS**

		FY 2021-22	FY 2020-21
<b>1</b>	<b>Advances to Employees: (Non Interest Bearing)</b>		
a	Expenses Advance	2,66,042.00	7,05,190.00
b	Festival Advance	-	-
c	Leave Travel Concession Advance	1,46,972.00	6,46,243.00
d	Medical Advance	18,12,188.00	13,99,788.00
e	Travelling Advance	53,327.00	66,868.00
f	Rolling Advance	3,35,239.00	2,68,589.00
g	CPDA Advance	71,300.00	5,60,698.00
<b>2</b>	<b>Advances to Employees: (Interest Bearing)</b>		
a	Computer Advance	1,50,100.00	2,26,794.00
b	Car/Motorcycle/Scooter Advance	4,000.00	28,000.00
<b>3</b>	<b>Advances &amp; Other amounts Recoverable</b>		
<b>I</b>	<b>Institute Activities</b>		
a	NIFFT-Golden Jubilee Celebration	20,10,199.33	20,10,199.33
b	Contribution to Annual Feast-JIINKS	24,80,000.00	24,80,000.00
c	SBI online A/c -36228721268 (Old)	13,10,662.20	13,10,662.20
d	Advance to NIFFT Student's Gymkhana	60,000.00	60,000.00
e	SBI online A/c -38979437865 (New)	-	26,565.14
<b>II</b>	<b>Advance to Suppliers</b>		
a	M/s Ed.CIL (India) Ltd. (for Campus Wide Networking)	-	13,53,195.00
b	M/s National Informatic Centre	3,29,29,545.00	3,29,29,545.00
c	M/s Patents Info	15,000.00	15,000.00
d	M/s Sreeleathers	3,235.00	3,235.00
e	Central Public Works Department (CPWD)	10,39,09,604.00	11,61,23,558.00
f	Advance to SPIC Macy	10,000.00	10,000.00
g	Advance paid to Sharda Services	-	9,204.00
h	CarrierMedia Pvt. Ltd.	11,888.00	-
i	Kirloskar Oil Engine Ltd.	58,174.00	-
<b>4</b>	<b>Prepaid Expense</b>		
a	Pre Paid Internet Expenses	9,77,349.00	-





Contd...

		FY 2021-22	FY 2020-21
<b>5</b>	<b>Deposit with suppliers</b>		
<b>I</b>	<b>Telephone</b>		
<b>a</b>	Security Deposit With P&T Department	29,550.00	29,550.00
<b>II</b>	<b>Electricity</b>		
<b>a</b>	Security Deposit With Jharkhand Electricity Board	12,15,000.00	12,15,000.00
<b>III</b>	<b>Medical</b>		
<b>a</b>	M/s. Mecon Ltd.	5,00,000.00	5,00,000.00
<b>IV</b>	<b>Academic</b>		
<b>a</b>	AICTE	1,88,047.00	1,88,047.00
<b>b</b>	Security Deposit With Ranchi University	2,50,000.00	2,50,000.00
<b>V</b>	<b>Others</b>		
<b>a</b>	CBI Attachment	5,54,613.00	5,54,613.00
<b>b</b>	Security Deposit & Earnest Money (O.B.)	2,16,707.00	2,16,707.00
<b>c</b>	SBI (FDR) Scholar Fund	23,378.00	23,378.00
<b>d</b>	Security Deposit With Jayant Gas Co.	32,501.00	32,501.00
<b>e</b>	Student Welfare Fund	21,563.00	21,563.00
<b>f</b>	Deposits Against Foreign Letter of Credit with Canara Bank	65,21,899.53	65,21,899.53
<b>VI</b>	<b>Income Accrued:</b>		
<b>a</b>	On Advance to Employees	14,143.00	14,143.00
<b>VII</b>	<b>Claims Receivable</b>		
<b>a</b>	Amount Receivable from M. tab	1,80,000.00	1,80,000.00
<b>b</b>	Amount Receivable from Pensioners	56,450.00	56,450.00
<b>c</b>	Income Tax (TDS) Refundable-Unrealized	4,96,476.00	4,96,476.00
<b>d</b>	Rent Receivable from BSNL	21,000.00	21,000.00
<b>e</b>	TDS - Unrealized	1,153.00	1,153.00
<b>f</b>	Amount Recoverable from S N Singh	14,000.00	-
		<b>15,69,51,305.06</b>	<b>17,05,55,814.20</b>



**NATIONAL INSTITUTE OF ADVANCED MANUFACTURING TECHNOLOGY**  
HATIA, RANCHI-834003

**INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED ON 31ST MARCH, 2022**

I N C O M E		Schedule	Current Year 2021-22	Previous Year 2020-21
ACADEMIC RECEIPTS		6	2,03,05,206.00	2,02,17,155.00
GRANTS (QH-31 and OH-36 from MOE)		7	34,09,98,681.00	29,20,47,982.00
INCOME FROM INVESTMENT		8		
INTEREST EARNED		9	2,30,989.00	89,595.00
OTHER INCOME		10	81,05,641.75	19,62,943.20
<b>TOTAL(A)</b>			<b>36,97,30,517.75</b>	<b>31,43,17,685.20</b>
E X P E N D I T U R E		Schedule	Current Year 2021-22	Previous Year 2020-21
STAFF PAYMENT & BENEFITS (Establishment Expenses)		11	29,23,10,772.98	24,39,67,810.00
ACADEMIC EXPENSES		12	2,23,09,311.27	2,60,54,737.00
ADMINISTRATIVE AND GENERAL EXPENSES		13	2,67,45,034.15	2,13,83,087.96
TRANSPORTATION EXPENSES		14	5,08,579.00	4,39,193.00
REPAIR & MAINTENANCE EXPENSES		15	50,84,867.00	19,33,143.00
DEPRECIATION		3	4,78,07,166.12	4,17,69,115.11
<b>TOTAL(B)</b>			<b>39,47,65,730.62</b>	<b>33,46,38,086.07</b>
Balance Being Surplus/(Deficit) Carried to Capital Fund (A-B)			<b>(2,50,35,212.87)</b>	<b>(2,03,20,400.87)</b>

For M/s Manmohan Singh & Co.  
Chartered Accountants



*(Signature)*

CA J. P. Sharma  
(Partner)  
M.NO. 402655

*(Signature)*  
Director

*(Signature)*  
Registrar

*(Signature)*  
Deputy Registrar

## SCHEDULE - 6 - ACADEMIC RECEIPTS

PARTICULAR		FY 2021-22	FY 2020-21
FEES FROM STUDENTS			
<b>1 Academic</b>			
a Admission Fee		54,800.00	74,800.00
b Application Fee		2,05,000.00	1,16,700.00
c Computer Fee		7,88,000.00	8,65,500.00
d Grade Card Fee		36,450.00	56,550.00
e Library Access Fee		7,99,250.00	8,65,500.00
f Registration/Enrolment Fee		1,73,400.00	1,91,800.00
g Seat Rent		5,49,000.00	73,800.00
h Tuition Fees		1,52,48,450.00	1,53,82,050.00
<b>Total (A)</b>		<b>1,78,54,350.00</b>	<b>1,76,26,700.00</b>
<b>2 Examinations</b>			
a Examination Fee-Institute		3,93,000.00	4,34,600.00
b Examination Fee-Ranchi University		1,82,700.00	3,89,550.00
c Examination Fees-Jharkhand Technical University		7,400.00	6,16,915.00
<b>Total (B)</b>		<b>5,83,100.00</b>	<b>14,41,065.00</b>
<b>3 Other Fees</b>			
a Fines & Penalties		556.00	600.00
b Gymkhana Fee		2,28,900.00	2,59,050.00
c Hostel Fee		54,200.00	21,000.00
d Hostel Maintenance Fee (Establishment Charges)		9,18,000.00	1,23,000.00
e Identity Card Fee (Re-issued)		50.00	-
f Internet Access Fee		2,36,400.00	2,59,650.00
g Medical Fee		4,21,500.00	4,78,500.00
h Seminar/Thesis Fees		8,150.00	7,600.00
<b>Total (C)</b>		<b>18,67,756.00</b>	<b>11,49,400.00</b>
<b>GRAND TOTAL (A+B+C)</b>		<b>2,03,05,206.00</b>	<b>2,02,17,165.00</b>





## SCHEDULE - 7 GRANTS

PARTICULAR	Govt. of India(MOE)		FY 2021-22	FY 2020-21
	Plan*	Non Plan		
Grant Refundable to MOE for 2020-21 Reversed	-	5,81,35,000.00	6,81,36,000.00	18,07,76,582.00
Add: Receipts during the Year	8,30,00,000.00	35,20,00,000.00	35,20,00,000.00	17,94,13,000.00
Less: Amount Refundable to MOE	68,73,198.00	7,91,37,319.00	7,91,37,319.00	6,81,35,000.00
<b>Total</b>			<b>34,09,98,681.00</b>	<b>29,20,47,982.00</b>

\*For Information purpose only no part of Income &amp; Expenditure

## SCHEDULE - 8 - INCOME FROM INVESTMENTS

PARTICULAR	FY 2021-22	FY 2020-21
1. Interest on Term Deposit with Nationalized Bank	-	15,10,256.00
Less: Transfer to Interest Refundable to MOE	-	15,10,256.00
2. Interest accrued on Term Deposit but not received	-	-
<b>Total</b>	<b>-</b>	<b>30,20,512.00</b>

## SCHEDULE - 9 - INTEREST EARNED

PARTICULAR	Plan	Non Plan	FY 2021-22	FY 2020-21
1. Interest on Saving Account with scheduled banks	6,23,124.00	14,53,199.00	-	52,42,848.00
Less: Interest earned on Govt. fund transferable to MOE	6,23,124.00	14,53,199.00	-	52,42,848.00
2. Interest Earned as Income	-	-	-	-
3. Interest on Loans of Employees	-	-	2,30,989.00	89,595.00
<b>Total (2+3)</b>			<b>2,30,989.00</b>	<b>89,595.00</b>



## SCHEDULE -10- OTHER INCOME

PARTICULAR	FY 2021-22	FY 2020-21
<b>A. Income from Land &amp; Buildings</b>		
1. Electricity Charges Recovered	2,60,148.00	2,53,197.00
2. Rent Recovered	1,18,750.00	26,500.00
3. License Fee Recovered	6,22,240.00	5,06,118.00
4. Water Charges Recovered	1,330.00	1,325.00
5. Rent for Ground	18,000.00	-
6. Rent for Auditorium	2,000.00	-
<b>Total (A)</b>	<b>10,22,468.00</b>	<b>7,87,240.00</b>
<b>B. Others</b>		
<b>1. Others Incomes</b>		
a) Bus Charges Recovery	24,615.00	20,600.00
b) Certificate Verification & Transcript Fee	30,120.00	13,000.00
c) Photocopy Charges	-	-
2. Income From Consultancy	-	-
3. Misc. Receipts	5,735.15	2,22,252.20
4. Recruitment Fees	-	8,000.00
5. RTI Fees	80.00	80.00
6. Mess Fees	63,26,649.00	12,300.00
7. Insurance Claim of Vehicles	-	16,791.00
8. Triable Area Allowance Recovery	5,46,764.00	8,73,680.00
9. Bonus Recovery	1,87,200.00	-
10. Donation	50,000.00	-
11. Ticket Cancellation Refund	2,010.60	-
<b>Total (B)</b>	<b>71,73,173.75</b>	<b>11,75,703.20</b>
<b>Grand Total (A+B)</b>	<b>81,95,641.75</b>	<b>19,62,943.20</b>



## SCHEDULE - 11 - STAFF PAYMENTS &amp; BENEFITS (ESTABLISHMENT EXPENSES)

PARTICULAR	FY 2021-22			FY 2020-21		
	Plan	Non Plan	Total	Plan	Non Plan	Total
<b>1. Salaries and Wages</b>						
a) Salaries and Wages (Teaching & Non Teaching)	-	13,82,10,547.00	13,82,10,547.00	-	11,32,72,526.00	13,32,72,526.00
b) Salary Arrears	-	74,62,272.00	24,62,272.00	-	5,50,080.00	5,50,080.00
<b>2. Allowance and Bonus</b>						
<b>3. Retirement and Terminal Benefits</b>						
a) Composite Transfer/TA Grant	-	1,50,874.00	1,50,874.00	-	2,93,945.00	2,93,945.00
b) Encashment of Leave	-	18,92,292.00	18,92,292.00	-	47,60,403.00	47,60,403.00
c) Leave Salary & Pension Contribution	-	4,53,482.00	4,53,482.00	-	4,51,962.00	4,51,962.00
d) Earned Leave	-	68,27,620.00	68,27,620.00	-	-	-
e) Payment of Gratuity	-	92,78,945.00	92,78,945.00	-	32,36,052.00	32,36,052.00
f) Pension	-	5,75,57,659.00	5,75,57,659.00	-	5,10,28,654.00	5,10,28,654.00
g) Commutation	-	1,21,83,638.00	1,21,83,638.00	-	38,58,658.00	38,58,658.00
h) Arrears to Pensioner	-	1,24,01,864.00	1,24,01,864.00	-	5,14,582.00	5,14,582.00
<b>4. Leave Travel Concession facilities</b>						
a) Leave Travel Facility	-	2,77,174.00	2,77,174.00	-	35,02,951.00	35,02,951.00
<b>5. Medical Facility</b>						
a) Medical Facility	-	25,38,756.00	25,38,756.00	-	32,91,491.00	32,91,491.00
<b>6. Children Education Allowance</b>						
a) Children Education Allowance	-	12,15,000.00	12,15,000.00	-	13,50,000.00	13,50,000.00
<b>7. Honorarium</b>						
a) Honorarium	-	5,000.00	5,000.00	-	2,85,438.00	2,85,438.00
<b>8. Telephone Facility</b>						
a) Telephone Facility	-	3,15,090.00	3,15,090.00	-	76,753.00	76,753.00
<b>9. CPDA Allowance</b>						
a) CPDA Allowance	-	9,78,077.98	9,78,077.98	-	-	-
<b>10. Payment to Adhoc Staff</b>						
a) Consultants & Contractual Staff	-	-	-	-	8,16,079.30	8,16,079.30
b) Salary-System Administrator	-	-	-	-	5,44,031.00	5,44,031.00
c) Salary-Lab Staffs	-	-	-	-	2,13,832.00	2,13,832.00
d) Indian Allied Security-Manpower Supply	-	-	-	-	53,70,018.00	53,70,018.00
e) Bombay Intelligence Security-Sweeping & Cleaning	-	-	-	-	44,79,812.00	44,79,812.00
f) Salary-Physical Trainer	-	-	-	-	45,080.00	45,080.00
g) Account-Supervisor	-	-	-	-	4,20,000.00	4,20,000.00
h) Salary-cultural and health activity instructor's	-	-	-	-	59,376.00	59,376.00
i) Salary-Security Supervisor	-	-	-	-	4,20,001.00	4,20,001.00
j) Salary-Academic Assistant	-	-	-	-	1,11,111.00	1,11,111.00
k) Salary-Admin Supervisor	-	-	-	-	1,65,000.00	1,65,000.00
l) Harvest Human Resource-Manpower Supply	-	1,59,41,956.00	1,59,41,956.00	-	1,24,99,888.00	1,24,99,888.00
m) Bull Fighter Security-Manpower Supply	-	3,58,65,656.00	3,58,65,656.00	-	1,01,60,581.00	1,01,60,581.00
n) Salary-Lekhan Rajak	-	1,74,439.00	1,74,439.00	-	-	-
o) Housekeeping & Sanitation	-	95,19,026.00	95,19,026.00	-	-	-
p) Other Services Outsourcing	-	61,404.00	61,404.00	-	-	-
<b>TOTAL</b>	-	<b>29,73,10,772.98</b>	<b>29,73,10,772.98</b>	-	<b>24,30,57,810.00</b>	<b>24,30,57,810.00</b>





## SCHEDULE - 12 - ACADEMIC EXPENSES

PARTICULAR	FY 2021-22			FY 2020-21		
	Plan	Non Plan	Total	Plan	Non Plan	Total
1. Examination Expenses	-	66,555.00	66,555.00	-	6,53,600.00	6,53,600.00
2. Payment to Visiting Faculty	-	2,26,700.00	2,26,700.00	-	2,24,240.00	2,24,240.00
3. Admission Expenses	-	68,000.00	68,000.00	-	-	-
4. Stipend / Merit Cum Means Scholarship	-	-	-	-	-	-
a) Merit-Cum-Means Scholarship	-	27,20,000.00	27,20,000.00	-	12,58,000.00	12,58,000.00
b) Scholarship to M.Tech Students	-	30,89,695.00	30,89,695.00	-	99,20,000.00	99,20,000.00
c) Stipend to Advanced Diploma Course Students	-	42,10,000.00	42,10,000.00	-	25,70,000.00	25,70,000.00
d) Stipend to PhD Scholars	-	39,68,000.00	39,68,000.00	-	50,42,367.00	50,42,367.00
5. Student Welfare Expenses	-	-	-	-	-	-
a) NIFT Clinic Expenses	-	-	-	-	1,58,380.00	1,58,380.00
b) Student Medical Reimbursement	-	-	-	-	-	-
c) Students Recreation Activities	-	-	-	-	28,870.00	28,870.00
d) Medical Insurance of Students	-	3,97,530.00	3,97,530.00	-	4,59,020.00	4,59,020.00
6. Laboratory & Workshop Expenses	-	8,82,377.00	8,82,377.00	-	6,55,159.00	6,55,159.00
7. Participation in Seminar & Conferences	-	-	-	-	3,91,420.00	3,91,420.00
8. Seminar/Workshop/Conference Expenses	-	2,30,603.27	2,30,603.27	-	1,32,486.00	1,32,486.00
9. Other Academic Expenses	-	-	-	-	5,23,893.00	5,23,893.00
10. Deemed University Fees	-	-	-	-	15,00,000.00	15,00,000.00
11. Subscription/Membership Fees	-	-	-	-	32,580.00	32,580.00
12. Financial Assistance for Courses/Seminar	-	1,67,217.00	1,67,217.00	-	25,04,722.00	25,04,722.00
13. NIAMT Registration Expenses	-	59,000.00	59,000.00	-	-	-
14. Membership Fees	-	2,242.00	2,242.00	-	-	-
15. IRG Expenditure	-	-	-	-	-	-
1. Examination Expenses-IRG	-	4,83,080.00	4,83,080.00	-	-	-
2. Mess Bill Reimbursement	-	56,21,730.00	56,21,730.00	-	-	-
3. SPIC MACAY Expenses	-	24,182.00	24,182.00	-	-	-
4. Student Medical Expenditure	-	92,400.00	92,400.00	-	-	-
<b>TOTAL</b>	<b>-</b>	<b>2,23,09,311.27</b>	<b>2,23,09,311.27</b>	<b>-</b>	<b>2,60,54,737.00</b>	<b>2,60,54,737.00</b>



## SCHEDULE - 13 - ADMINISTRATIVE AND GENERAL EXPENSES

PARTICULAR	FY 2021-22			FY 2020-21		
	Plan	Non Plan	Total	Plan	Non Plan	Total
<b>A) Infrastructure</b>						
a) Electricity & Power						
a) D.G. Set Fuel Expenses	-	7,75,790.00	7,75,790.00	-	2,80,077.00	2,80,077.00
b) Jharkhand Bijli Vitran Nigam Ltd.	-	75,81,756.00	75,81,756.00	-	65,71,327.00	65,71,327.00
<b>b) Rent, Rates and Taxes</b>						
a) Lease Rent to M/s HEC Ltd.	-	51,804.00	51,804.00	-	51,804.00	51,804.00
b) Municipal Tax	-	13,65,004.00	13,65,004.00	-	1,25,724.00	1,25,724.00
c) Solid Waste Collection Charges	-	-	-	-	5,00,000.00	5,00,000.00
<b>B) Communication</b>						
a) Telephone, Fax and Internet Charges						
a) M/s BSNL	-	90,479.84	90,479.84	-	5,50,325.00	5,50,325.00
b) Other Mobile & Landline	-	-	-	-	-	-
c) BSNL Internet Leased Line	-	13,20,764.00	13,20,764.00	-	11,90,000.00	11,90,000.00
d) Internet Charges-NICSI/Ernet	-	-	-	-	-	-
b) Postage & Stationery Expenses	-	25,326.00	25,326.00	-	25,146.00	25,146.00
<b>C) Others Expenditure</b>						
i) Advertisement & Publicity						
a) M/s Jagran Prakashan Ltd.	-	-	-	-	-	-
b) M/s Employment News	-	-	-	-	-	-
c) M/s Hindustan Media Ventures Ltd.	-	-	-	-	-	-
d) M/s. ABP Pvt. Ltd.	-	-	-	-	-	-
e) Ridge Advertisement Marketing Consultant	-	5,70,796.00	5,70,796.00	-	14,27,126.00	14,27,126.00

Contd.,



PARTICULAR	FY 2021-22			FY 2020-21		
	Plan	Non Plan	Total	Plan	Non Plan	Total
II) Hospitality Expenses	-	1,04,544.00	1,04,544.00	-	4,17,272.00	4,17,272.00
III) Internal & CAG Auditor Remuneration	-	2,71,078.00	2,71,078.00	-	2,72,292.00	2,72,292.00
IV) Magazine/Journals/News Paper/Subscriptions	-	3,961.00	3,961.00	-	34,893.00	34,893.00
V) Printing & Stationary (Consumption)	-	9,37,870.00	9,37,870.00	-	7,70,723.00	7,70,723.00
VI) Rajbhasha Activities Expenses	-	-	-	-	6,000.00	6,000.00
VII) Security Expenses	-	-	-	-	-	-
<i>Jharkhand Home Guards</i>	-	85,67,350.00	85,67,350.00	-	77,84,250.00	77,84,250.00
VIII) Sitting Charges for Meetings	-	5,13,728.00	5,13,728.00	-	2,67,000.00	2,67,000.00
IX) Travelling & Conveyance	-	3,15,494.25	3,15,494.25	-	2,96,568.66	2,96,568.66
X) Legal Expenses	-	97,850.00	97,850.00	-	99,450.00	99,450.00
XI) Bank Charges	-	19,879.16	19,879.16	-	10,300.30	10,300.30
XII) Celebration & other Activities Expenses	-	-	-	-	4,14,996.00	4,14,996.00
XIII) Miscellaneous Expenditure	-	17,82,590.00	17,82,590.00	-	5,04,130.00	5,04,130.00
XIV) SP/C MACAY Expenses	-	-	-	-	19,000.00	19,000.00
XV) Excess Provision Write off FY 2019-20	-	-	-	-	(2,05,316.00)	(2,05,316.00)
XVI) Gardning & Horticulture	-	1,42,910.00	1,42,910.00	-	-	-
XVII) Office & Departmental Expenses	-	13,23,812.00	13,23,812.00	-	-	-
XVIII) Admin Function/Event	-	2,93,038.00	2,93,038.00	-	-	-
XIX) Other Professional Fees	-	5,89,210.00	5,89,210.00	-	-	-
<b>TOTAL</b>	-	<b>2,67,45,034.25</b>	<b>2,67,45,034.25</b>	-	<b>2,13,83,087.96</b>	<b>2,13,83,087.96</b>





**SCHEDULE- 14 - TRANSPORTATION EXPENSES**

PARTICULAR	FY 2021-22			FY 2020-21		
	Plan	Non Plan	Total	Plan	Non Plan	Total
<b>1. Vehicles (Owned by Institutions)</b>						
A) Insurance Expenses	-	2,26,362.00	2,26,362.00	-	1,56,604.00	1,56,604.00
B) Running Expenses (Fuel)	-	1,79,696.00	1,79,696.00	-	1,52,876.00	1,52,876.00
C) Vehicles Repairs & Maintenance	-	1,02,521.00	1,02,521.00	-	1,20,713.00	1,20,713.00
<b>2. Vehicles Hiring Expenses</b>	-	-	-	-	-	-
<b>Total</b>	-	5,08,579.00	5,08,579.00	-	4,30,193.00	4,30,193.00

**SCHEDULE- 15 - REPAIRS & MAINTENANCE**

PARTICULAR	FY 2021-22			FY 2020-21		
	Plan	Non Plan	Total	Plan	Non Plan	Total
<b>1. Annual Maintenance Cost</b>						
a) AMC of Others	-	13,10,479.00	13,10,479.00	-	5,605.00	5,605.00
b) AMC of Photocopier	-	-	-	-	11,000.00	11,000.00
c) AMC of Water Purifiers	-	1,43,274.00	1,43,274.00	-	-	-
d) AMC of DG Set	-	47,200.00	47,200.00	-	-	-
2. Building Maintenance (Civil)	-	13,32,477.00	13,32,477.00	-	20,31,098.00	20,31,098.00
3. Cleaning Material & Services	-	1,61,078.00	1,61,078.00	-	95,624.00	95,624.00
4. Computer Maintenance	-	43,807.00	43,807.00	-	3,38,311.00	3,38,311.00
5. Electrical Maintenance	-	15,55,589.00	15,55,589.00	-	10,18,082.00	10,18,082.00
6. Furniture & Fixtures Maintenance	-	5,27,447.00	5,27,447.00	-	55,779.00	55,779.00
7. Gardening	-	-	-	-	59,663.00	59,663.00
8. Office Equipments Maintenance	-	3,93,009.00	3,93,009.00	-	2,07,973.00	2,07,973.00
9. Repair & Maintenance-Others	-	41,535.00	41,535.00	-	14,55,875.00	14,55,875.00
10. Provision Write-off	-	(10,76,856.00)	(10,76,856.00)	-	(33,45,867.00)	(33,45,867.00)
11. Plant & Machinery Maintenance	-	6,05,828.00	6,05,828.00	-	-	-
<b>Total</b>	-	50,84,867.00	50,84,867.00	-	19,33,143.00	19,33,143.00



## NATIONAL INSTITUTE OF ADVANCED MANUFACTURING TECHNOLOGY

HATIA, RANCHI-834003

## RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR ENDED ON 31ST MARCH, 2022

RECEIPTS	Sch. No.	Current Year 2021-22	Previous Year 2020-21	PAYMENTS	Sch. No.	Current Year 2021-22	Previous Year 2020-21
<b>I. Opening Balances</b>				<b>I. Expenses</b>			
A) Cash Balances		30.00	48,363.00	1. Non Plan Expenses	20	15,41,84,951.00	20,57,06,814.00
B) Bank Balances				1. Staff Payments & Benefits (Est. Expenses)		34,53,436.00	1,03,38,121.00
<b>In Savings Accounts</b>				2. Academic Expenses		7,41,76,244.69	1,62,13,120.10
SB A/c No. 2730101006939 (Non-Plan)		3,39,54,957.00	3,56,02,216.62	3. Administrative and General Expenses		2,26,162.00	2,07,641.00
SB A/c No. 2730101007913 (Plan)		12,78,316.00	-	4. Transportation Expenses		1,08,289.00	10,13,230.00
SB A/c No. 2730101009959 (IDF)		-	1,127.00	5. Repair & Maintenance		-	-
SBI Hatia (O.B)		-	3,344.10	<b>II. Payments Against Sponsored Projects</b>	21 (B)	9,33,569.00	8,10,122.00
Canara Bank SB A/c No. 2730101011451(OH-31)		5,07,28,264.02	6,94,28,890.02	<b>III. Payments Against Sponsored Fellowship/Scholarship</b>	21 (A)	10,03,200.00	36,75,850.00
Canara Bank SB A/c No. 2730101011452(OH-36)		4,79,04,567.50	14,52,91,757.50	<b>IV. Expenditure on Fixed Assets</b>			
Canara Bank SB A/c No. 2730101011453(OH-35)		19,44,504.00	7,84,32,890.00	1. Plan Fixed Assets	22	60,57,300.00	3,76,45,073.00
Canara Bank SB A/c No. 2730101011923(SERB Project I)		1,73,281.00	1,75,472.00	2. Non Plan Fixed Assets		-	1,56,876.00
Canara Bank SB A/c No. 2730101012032 (Principal A/c)		1,59,07,334.00	1,54,09,982.00	<b>V. Interest on Loan of Employees/Staff</b>		-	7,755.00
Canara Bank SB A/c No. 2730101012429(SERB Project II)		43,58,358.00	28,46,632.00	<b>VI. Loans, Advances and Deposits</b>	23	3,71,89,676.00	3,73,72,296.00
Canara Bank SB A/c No. 2730101012033 (Escrow A/c.)		55.00	-	<b>VII. Other Payments</b>	24	25,06,49,464.88	12,19,28,171.00
Canara Bank SB A/c No. 2730101001031 (Allumni Cell)		45,585.40	-	<b>VIII. Loan From HEFA</b>		-	3082200.00
SBI online Account-38079437865		26,585.14	-	<b>IX. Current Assets</b>		-	16,90,00,000.00
<b>II. Grants Received</b>				Term Deposit		-	7,62,825.00
From Government of India(MOE)				Annual Fund Investment		-	48,003.00
1. Plan Grant		8,30,00,000.00	-	TDS Receivable		-	-
2. Non Plan Grant		35,20,00,000.00	17,38,69,649.00				
<b>III. Academic Receipts</b>	16						
1. Academic		1,07,95,550.00	82,76,700.00				
2. Examination		4,46,600.00	10,67,415.00				
3. Other Fees		1,08,86,206.00	1,23,62,600.00				
<b>IV. Receipts Against Sponsored Projects</b>	2(b)	40,62,296.00	27,04,764.00				
<b>V. Receipt Against Sponsored Fellowship</b>	2(c)	30,76,800.00	17,22,450.00				



					X. Closing Balances			
VII. Interest Received on					A) Cash Balances	-	30.00	
1. On SB Accounts(Non Plan)					B) Bank Balances			
2. On Loans & Advances					In Savings Accounts			
3. On Term Deposits					Canara Bank SB A/c No. 2730101006959 (Mon Plan)	2,92,40,305.28	3,39,54,957.00	
4. On SB Accounts(Plan)					Canara Bank online A/c. 2730101012610	21,75,388.17	12,78,316.00	
					Canara Bank SB A/c No. 2730101009959 (IDF)			
VIII. Term Deposits Encashed					SBI Hatis SB A/c (O.B.)			
FQ Encashment					Canara Bank SB A/c No. 2730101011451 (OH-31)	3,82,39,741.75	5,07,28,264.02	
					Canara Bank SB A/c No. 2730101011452(OH-36)	5,78,81,468.93	4,79,04,567.50	
VIII. Other Income					Canara Bank SB A/c No. 2730101011453(OH-35)	1,52,98,033.00	19,44,504.00	
1. other income	17	83,70,275.09		20,40,911.20	Canara Bank SB A/c No. 2730101011923(SERB Project-I)	11,323.00	1,73,281.00	
					Canara Bank SB A/c No. 2730101012032 (Principal A/c)	1,63,72,148.00	1,59,07,334.00	
IX. Miscellaneous receipts including Liability	18	5,02,06,454.00		5,78,17,045.18	Canara Bank SB A/c No. 2730101012429(SERB Project-II)	60,53,326.00	43,58,368.00	
					Canara Bank SB A/c No. 2730101012033 (Escrow A/c.)	2,770.00	65.00	
X. Deposits & Advances	19	41,21,734.73		40,12,122.00	Canara Bank SB A/c No. 2730101001031 (Allurmi Cell)	46,921.40	45,885.40	
					Canara Bank SB A/c No. 2730101012051 (Escrow A/c)	63,553.00	-	
XI.Earmarked Fund		30,80,996.00		8,08,410.40	SBI Online Account -38979437865	30,18,107.88	-	
TOTAL		69,63,85,578.88	89,00,02,169.02		TOTAL	59,63,85,578.88	80,00,02,169.02	

As Internal Auditor

For M/s Mannohan Singh & Co.  
Chartered Accountants



*[Signature]*  
Director

Deputy Registrar

CA J. J. Sihartha  
(Partner)  
M.N.D. 402633



## SCHEDULE- 16 - ACADEMIC RECEIPTS

PARTICULARS	AMOUNT
<b>1.Academic</b>	
a. Admission Fee	23,400.00
b. Application Fee	2,05,000.00
c. Computer Fee	5,16,000.00
d. Grade Card Fee	17,550.00
e. Library Access Fee	5,27,250.00
f. Registration/Enrolment Fee	1,19,000.00
g. Seat Rent	95,400.00
h. Tuition Fees	92,91,950.00
<b>(1) Sub Total</b>	<b>1,07,95,550.00</b>
<b>2.Examination Fees</b>	
a. Examination Fees-Institute	2,56,500.00
b.Examination Fees-Ranchi University	1,82,700.00
c.Examination Fees(Jharkhand Technical University)	7,400.00
<b>(2) Sub Total</b>	<b>4,46,600.00</b>
<b>3.Other Fees</b>	
a.Fine & Penalties	556.00
b.Gymkhana Fee	1,47,300.00
c.Hostel Fees	22,800.00
d.Hostel Establishment Charges	1,62,000.00
e.Internet Access Fee	1,54,800.00
f.Medical Fee	2,85,500.00
g.Thesis Fees	9,100.00
h. Identity Card Fees	50.00
<b>4.Admission Fees from CSAB 2021</b>	<b>89,26,000.00</b>
<b>5.CCMT 2021</b>	<b>11,78,100.00</b>
<b>(3) Sub Total</b>	<b>1,08,86,206.00</b>



**SCHEDULE- 17 - OTHER INCOME**

<b>PARTICULARS</b>		<b>AMOUNT</b>
<b>1.Other</b>		
a.Bus Charges Recovery		24,615.00
b.Certificate/Transcript verification fees		30,120.00
c. Misc. Receipts (sale of Tender Form etc.)		100.49
d.RTI Fees		80.00
e.Mess Fees		63,26,649.00
f.Triable Area Allowance Recovery		5,46,764.00
g.Donation		50,000.00
h.Bonus Recovery		1,80,292.00
i.Mess Payment Return from Hiralal		62,160.00
j. Pension Recoverable		1,05,478.00
k.Employee Allowance		22,198.00
l.Ticket Cancellation Charges Refund		2,010.60
<b>2.Income from Land &amp; Building</b>		
a.Electricity charges Recovered		2,59,848.00
b.Rent Recovered		1,18,750.00
c. Licence Fees		6,19,890.00
d.Water Charges Recovery		1,320.00
e.Rent of Auditorium		2,000.00
f.Rent for Ground		18,000.00
<b>TOTAL</b>		<b>83,70,275.09</b>



18. MISCELLANEOUS RECEIPT INCLUDING LIABILITIES	
PARTICULARS	AMOUNT
<b>1. Deposit From Staff</b>	
a. P. Talukdar-With held Amount	2,00,000.00
b. R K Mishra-With Held Amount	2,00,000.00
<b>2. Deposit From Student</b>	
a. Caution Money	5,70,500.00
<b>3. Statutory Liabilities</b>	
a. GPF Deduction from Salary	1,88,67,261.00
b. GIS Premium	26,825.00
c. LIC Premium	10,87,786.00
d. New Pension Scheme (Employees Contribution)	55,99,511.00
e. New Pension Scheme (Employers Contribution)	78,39,226.00
f. Professional Tax on Salary	1,73,053.00
g. TDS Payable U/sec. 192A	2,21,95,024.00
h. TDS Payable U/sec. 194C	1,18,322.00
i. TDS Payable U/sec. 194J	19,500.00
<b>4. Other Current Liability</b>	
i. Indian Statistical Institute	45,400.00
ii. NIFT Alumni Association	27,900.00
iii. Amount Received From Unidentified Person	3,52,813.00
iv. AICTE-Faculty Dev. Programme	93,000.00
v. Interest transferable to MOE	20,75,323.00
vi. Amount Received from JUT	58,000.00
vii. Amount Payable to Goutam Bose	2,020.00
viii. Andhra Pradesh Trasury	89,400.00
ix. CCMT Counselling Fees	1,60,600.00
x. Guest House Food Bill Reimbursement	8,990.00
<b>5. Deposit-Others</b>	
i. Earnest Money	3,95,000.00
<b>TOTAL</b>	<b>6,02,06,454.00</b>





**SCHEDULE- 19 - DEPOSIT & ADVANCES**

PARTICULARS	AMOUNT
<b>1.Advance to Supplier</b>	
a.Advance to Concept Media Group Films	
b.Advance to CPWD	58,916.00
c.EDCIL (India) Ltd.	13,53,195.00
d.Advance paid to Sharda Services	9,204.00
<b>2.Advance to Employees (Interest Bearing)</b>	
a.Car/Motorcycle/Scooter Advance	24,000.00
b.Computer Advance	77,550.00
<b>3.Advance to Employees (Non Interest Bearing)</b>	
a.Expenses Advance	5,20,492.73
b.Leave Travel Concession Advance	5,42,354.00
c.Medical Advance	13,54,597.00
d.Rolling Advance	52,491.00
e.Travelling Advance	12,366.00
f.CPDA Advance	1,16,569.00
<b>TOTAL</b>	<b>41,21,734.73</b>





## SCHEDULE-20 - NON-PLAN EXPENSES

PARTICULARS	AMOUNT
<b>1. Academic Expenses</b>	
a. Examination Expenses (OH-31)	4,000.00
b. Payment to Visiting Faculty	
c. Stipend/Ment cum means Scholarship	26,34,400.00
d. Student Welfare Expenses	
e. Laboratory & workshop Expenses	50,042.00
f. Seminar/Workshop/Conference Expenses	
g. Deemed University Fees	
h. Other Academic Expenses	
i. Admission Expenses	68,000.00
j. EDC Cell (Entrepreneur ship Meet)	1,54,217.00
k. PG/CSM Course Activity Expenses	3,577.00
l. Examination Expenses (IUT)	2,41,250.00
m. Examination Expenses (RU)	1,87,950.00
<b>(1) Sub Total</b>	<b>34,53,436.00</b>
<b>2. Administrative General Expenses</b>	
a. Communication	5,499.28
b. Infrastructure	49,65,187.00
c. Others Expenditure	6,92,05,558.41
	<b>7,41,76,244.69</b>
<b>3. Repair &amp; Maintenance</b>	
a. AMC Website Maintenance	15,794.00
b. Computer Maintenance	18,728.00
c. Electrical Maintenance	
d. Furniture & Fixture Maintenance	26,450.00
e. Repair & Maintenance-Printer	5,782.00
f. Repair & Maintenance-others	41,535.00
<b>(3) Sub Total</b>	<b>1,08,289.00</b>
<b>4. Staff Payments &amp; Benefits (Est. Expenses)</b>	
a. Allowances & Bonus	
b. Children Education Allowance	10,80,000.00
c. Leave Encashment	1,57,823.00
d. Leave Travel Concession Facilities	7,727.00
e. Medical Facility	19,06,013.00
f. Payment to Adhoc Staff	
g. Retirement & Terminal Benefits	
h. Salaries & Wages	13,91,77,156.00
i. Telephone Facility	95,095.00
j. Terminal Benefit	1,17,51,177.00
<b>(4) Sub Total</b>	<b>15,41,84,951.00</b>
<b>5. Transportation Expenses</b>	
a. Vehicles (Owned by Institution)	
b. Vehicles Repair & Maintenance	2,26,362.00
<b>(5) Sub Total</b>	<b>2,26,362.00</b>
<b>TOTAL</b>	<b>23,21,49,282.69</b>

**SCHEDULE- 21 - PAYMENT AGAINST SPONSORED PROJECT AND FELLOWSHIP/SCHOLARSHIP**

PARTICULARS	AMOUNT
<b>A.RECEIPT AGAINST SPONSORED FELLOWSHIP/SCHOLARSHIP</b>	
i) Govt. of India SC/ST Scholarship	5,63,200.00
ii) State Scholarship for Students	4,40,000.00
<b>21 (A) TOTAL</b>	<b>10,03,200.00</b>
<b>B.RECEIPT AGAINST SPONSORED PROJECT</b>	
i) Buriapur Surgical Cluster, MSME (West Bengal)	3,99,999.00
ii) Project-Science & Engineering Research Board(S.Basu)	2,30,021.00
iii) Project-Science & Engineering Research Board (P.S.Mondal)	2,81,196.00
iv) Project-Science & Engineering Research Board (D.Roy)	22,353.00
<b>21 (B) TOTAL</b>	<b>9,33,569.00</b>

**SCHEDULE- 22 - PLAN FIXED ASSETS**

PARTICULARS	AMOUNT
i. Capital Work in Progress	44,59,522.00
ii. Computer & Peripherals	24,544.00
iii. Library Books & Scientific Journals	25,793.00
iv. Scientific Laboratory Equipment	15,47,441.00
<b>22 TOTAL</b>	<b>60,57,300.00</b>





**SCHEDULE- 23 - LOAN ADVANCES & DEPOSITS**

PARTICULARS	AMOUNT
<b>1.Advance &amp; Other Amount Receivable in cash/kind</b>	
a. Advance to Suppliers	3,08,70,062.00
b. On Capital Account	-
<b>2.Advance to Employees ( Non Interest Bearing)</b>	
a. Expenses Advance	25,81,698.00
b. Leave Travel Concession Advance	1,88,840.00
c. Medical Advance	7,22,000.00
d. Rolling Advance	2,95,633.00
e. Travelling Advance	11,200.00
f.CPDA Advance	3,62,894.00
<b>3.Prepaid Expenses</b>	
a. Advance to Power Grid Corp.India Ltd.	9,77,349.00
b.Prepaid Internet Expenses	11,80,000.00
<b>TOTAL</b>	<b>3,71,89,676.00</b>

**SCHEDULE- 24 - OTHER PAYMENT**

PARTICULARS	AMOUNT
<b>1.Deposit from Staff</b>	
a. R K Mishra-With-held Gratuity	2,00,000.00
<b>2.Deposit-Other</b>	
a. Earnest Money	26,53,824.00
<b>3.Deposit From Students</b>	
a. Caution Money	2,72,800.00
<b>4.Other Current Liabilities</b>	
a. Expenses Payable	15,67,34,202.00
b.AICTE Faculty Dev. Programme	93,000.00
c.Kailash Store	41,140.00
d.Kraft Service Station	50,593.00
e. P B C Pillai (Pensioner)	1,80,586.00
f.R S Trading & Co.	2,500.00
g.Loan From HEFA	3,08,20,000.00
<b>5.Statutory Liabilities</b>	
a. GPF Deduction from Salary	1,88,67,261.00
b. GIS Premium	26,825.00
c. LIC Premium	10,87,786.00
d. New Pension Scheme(Employees Contribution)	55,99,511.00
e. New Pension Scheme(Employers Contribution)	78,39,226.00
f. TDS Payable 92A	2,37,70,367.00
g. TDS Payable 94C	6,64,054.00
h. TDS Payable 94J	1,44,186.00
i. CPF Deduction from Salary	7,68,585.00
j. CGST TDS 1%	90,236.94
k. IGST TDS 2%	28,806.00
l. Professional Tax on Salary	1,70,257.00
m. SGST TDS 1%	90,236.94
n. Leave Salary Pension Contribution-Director	4,53,482.00
<b>TOTAL</b>	<b>25,06,49,464.88</b>

**NATIONAL INSTITUTE OF ADVANCED MANUFACTURING TECHNOLOGY**  
**HATIA, RANCHI-834003**

**BANK RECONCILIATION STATEMENT AS ON 31.03.2022**

**1) CANARA BANK SB A/C NO. 2730101006939 (NON PLAN A/c)**

Particulars	Amount
Balance as per Ledger as on 31.03.2022	2,92,40,305.28
Add: Amount credited in cash book but not debited in Pass Book (Anx-ii)	21,490.00
Less: Amount debited in cash book but not credited in Pass Book (Anx-ii)	15,500.00
Balance as per Ledger as on 31.03.2022 (After Calculation)	2,92,46,295.28
Balance as per Bank Statement as on 31.03.2022	2,92,46,295.28
Difference	-

**2) CANARA BANK SB A/C NO. 2730101011451**

Particulars	Amount
Balance as per Ledger as on 31.03.2022	3,82,39,741.75
Add: Amount credited in cash book but not debited in Pass Book (Anx-ii)	25,26,758.00
Less: Amount debited in cash book but not credited in Pass Book (Anx-ii)	2,00,00,079.00
Balance as per Ledger as on 31.03.2022 (After Calculation)	2,07,66,420.75
Balance as per Bank Statement as on 31.03.2022	2,07,66,420.75
Difference	-

**3) CANARA BANK SB A/C NO. 2730101011452**

Particulars	Amount
Balance as per Ledger as on 31.03.2022	5,78,81,468.83
Add: Amount credited in cash book but not debited in Pass Book	3,78,474.00
Add: Amount Credited in Pass Book but not debited in Cash Book	25,589.00
Less: Amount debited in cash book but not credited in Pass Book	3,18,92,000.00
Balance as per Ledger as on 31.03.2022 (After Calculation)	2,63,93,531.83
Balance as per Bank Statement as on 31.03.2022	2,63,93,531.83
Difference	-

**4) CANARA BANK SB A/C NO. 2730101011453**

Particulars	Amount
Balance as per Ledger as on 31.03.2022	1,52,98,033.00
Add: Amount credited in cash book but not debited in Pass Book	47,21,548.00
Balance as per Ledger as on 31.03.2022 (After Calculation)	2,00,19,581.00
Balance as per Bank Statement as on 31.03.2022	2,00,19,581.00
Difference	-

**5) CANARA BANK SB A/C NO. 2730101012429 (SERB Project II)**

Particulars	Amount
Balance as per Ledger as on 31.03.2022	60,53,326.00
Add: Amount credited in cash book but not debited in Pass Book	37,761.00
Balance as per Ledger as on 31.03.2022 (After Calculation)	60,91,087.00
Balance as per Bank Statement as on 31.03.2022	60,91,087.00
Difference	-



**Annexures Forming Part of Bank Reconciliation Statement  
CANARA BANK SB A/C NO. 2730101006939 (NON PLAN A/c)**

**ANNEXURE- II:**

Amount credited in cash book but not cleared from Bank 31.03.2022

Date	Particulars	Chq. No.	Amount
31.03.2022	Ayush Prabhakar (114/19)	710359	12,500.00
31.03.2022	Amount paid to K P Panigrahi		8,990.00
<b>TOTAL</b>			<b>21,490.00</b>

Amount debited in cash book but not credited in Pass Book 31.03.2022

Date	Particulars	Chq. No.	Amount
01.04.2021	Ayush Prabhakar (114/19)	443335	500.00
18.01.2022	Amount paid to K P Panigrahi	009493	15,000.00
<b>TOTAL</b>			<b>15,500.00</b>

**Annexures Forming Part of Bank Reconciliation Statement  
CANARA BANK SB A/C NO. 27301010011451 (GENERAL HEAD OH-31)**

Amount credited in cash book but not cleared from Bank 31.03.2022

Date	Particulars	Chq. No.	Amount
20.01.2022	One Student ADC Scholarship	C012239749329	30,000.00
31.03.2022	Amount paid to Shop & Shop	C0821291708818	13,352.00
31.03.2022	Amount paid for 30 Bills (Consolidated)	655630	24,83,406.00
<b>TOTAL</b>			<b>25,26,758.00</b>

Cheque deposit but not cleared in Bank as on 31.03.2022

Date	Particulars	Chq. No.	Amount
20.09.2021	A K Verma-Expense Advance	000292	79.00
31.03.2022	Grant in Aid-OH-31		2,00,00,000.00
<b>TOTAL</b>			<b>2,00,00,079.00</b>

**Annexures Forming Part of Bank Reconciliation Statement  
CANARA BANK SB A/C NO. 27301010011452 (Salary-OH-36)**

AMOUNT CREDITED IN CASH BOOK BUT NOT DEBITED IN PASS BOOK

Date	Particulars	Chq. No.	Amount
31.03.2022	Total 16 Bill Payment (Consolidated payment)	738890	3,78,474.00
<b>TOTAL</b>			<b>3,78,474.00</b>

AMOUNT CREDITED IN PASS BOOK BUT NOT DEBITED IN CASH BOOK

Date	Particulars	Chq. No.	Amount
18.03.2022	ECS 2065331C03224105399		22,006
29.03.2022	Amount received from Amitesh Kumar	208810413052	3,583.00
<b>TOTAL</b>			<b>25,589.00</b>

AMOUNT DEBITED IN CASH BOOK BUT NOT CREDITED IN PASS BOOK

Date	Particulars	Chq. No.	Amount
31.03.2022	Grant in Aid-OH-36		3,18,92,000.00
<b>TOTAL</b>			<b>3,18,92,000.00</b>

**Annexures Forming Part of Bank Reconciliation Statement  
CANARA BANK SB A/C NO. 27301010011453 (OH-35)**

AMOUNT CREDITED IN CASH BOOK BUT NOT DEBITED IN PASS BOOK

Date	Particulars	Chq. No.	Amount
10.03.2022	Payment to CPWD (Electrical)	211718	17,00,000.00
31.03.2022	Three Consolidate Bill Payment	557542	8,68,636.00
31.03.2022	ESI Software Pvt. Ltd.	557541	21,52,912.00
<b>TOTAL</b>			<b>47,21,548.00</b>





**NATIONAL INSTITUTE OF ADVANCED  
MANUFACTURING TECHNOLOGY (Formerly NIFFT)**

**A Centrally Funded Technical Institute Under Ministry of Education,  
Govt. of India**

**HATIA, RANCHI- 834003 (JHARKHAND)**



**Statement of Accounts for  
General Provident Fund  
For the Financial Year 2021-22**  
(As per Revised Formats of Financial Statements for  
Central Higher Educational Institutions)

**Audited by  
M/s Manmohan Singh & Co.  
(Chartered Accountants) Ranchi**

## NATIONAL INSTITUTE OF ADVANCED MANUFACTURING TECHNOLOGY

HATIA, RANCHI-834003

GENERAL PROVIDENT FUND ACCOUNT  
BALANCE SHEET AS AT 31st MARCH, 2022

Previous Year 2020-21	Liabilities	Current Year 2021-22	Previous Year 2020-21	Assets	Current Year 2021-22
11,55,45,129.00	<b>GPF</b>	11,45,81,517.00	8,50,47,580.00	<b>Investment in Term Deposit</b>	11,45,19,002.00
	Opening Balance	11,55,45,129.00		2730307000001/4	88,42,868.00
	Add: Subscription	1,87,13,261.00		2730401002217/7	1,13,77,433.00
	Add: Advances Recovered			2730401001442/10	3,75,00,000.00
	Less: Withdrawals	31,90,000.00		2730401001442/12	1,93,17,021.00
	Less: GPF Final settlements	2,37,17,017.00		2730401001627/5	1,74,70,365.00
	Add: Interest Credited	72,30,144.00		2730401001848/9	86,33,881.00
	<b>Closing Balance</b>	<b>11,45,81,517.00</b>		2730401002218/7	1,13,77,434.00
97,26,073.99	<b>Interest Reserve</b>	81,40,985.13	31,57,276.70	Accrued Interest	30,64,124.75
	Opening Balance	97,26,073.99	4,97,399.00	TDS on FD Interest	11,98,686.09
	Less: Excess of Expense over Income	15,85,088.86		Cash at Bank	
	<b>Closing Balance</b>	<b>81,40,985.13</b>	3,65,68,947.29	Canara Bank SB A/c No. 2730101007115	39,40,689.29
<b>12,52,71,202.99</b>	<b>Total</b>	<b>12,27,22,502.13</b>	<b>12,52,71,202.99</b>	<b>Total</b>	<b>12,27,22,502.13</b>

As Internal Auditor

For M/s Manmohan Singh & Co.  
Chartered AccountantsCA J. P. Sharma  
(Partner)  
M.NO. 402655

  
Director


  
Registrar


  
Deputy Registrar

## NATIONAL INSTITUTE OF ADVANCED MANUFACTURING TECHNOLOGY

HATIA, RANCHI-834003

GENERAL PROVIDENT FUND ACCOUNT  
INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31st MARCH 2022

Previous Year 2020-21	EXPENDITURE	Current Year 2021-22	Previous Year 2020-21	INCOME	Current Year 2021-22
72,30,666.00	Interest credited to GPF Account	72,30,144.00	51,46,032.63	Interest Earned on Investment Interest received on FDR Add: Interest accrued on 31.03.2022 Less: Interest Accrued on 31.03.2021	50,94,351.14
959.00	Bank Charges	72.00	8,63,476.00 12,22,116.37	Interest on Saving Bank Account Excess of Expenditure over Income adjust From Interest Reserve Account	5,50,776.00 15,85,088.86
72,31,625.00	Total	72,30,216.00	72,31,625.00	Total	72,30,216.00

As Internal Auditor

For M/s Manmohan Singh & Co.  
Chartered AccountantsCA J. P. Sharma  
(Partner)  
M.NO. 402655

  
Director


  
Registrar


  
Deputy Registrar



**NATIONAL INSTITUTE OF ADVANCED MANUFACTURING TECHNOLOGY**  
HATIA, RANCHI-834003

**GENERAL PROVIDENT FUND ACCOUNT**  
**RECEIPT AND PAYMENT ACCOUNT FOR FINANCIAL YEAR ENDED 31st MARCH 2022**

Previous Year 2020-21	RECEIPTS	Current Year 2021-22	Previous Year 2020-21	PAYMENTS	Current Year 2021-22
2,62,13,163.29	Opening Balance				
	Canara Bank SB A/c No. 2730101007115	3,65,68,947.29	40,75,609.00	FD Investment	2,37,17,017.00
2,27,48,876.00	GPF Subscription	1,87,13,261.00	92,30,000.00	GPF Final Settlement	31,90,000.00
-	GPF Advance recovery		959.00	GPF Withdrawal	72.00
-	FD Encashment(2730401001442/11)	1,24,86,195.00		Bank Charges	
-	Interest on FD Encashment	28,599.00		FD Encashment(2730401001442/10)	3,75,00,000.00
8,63,476.00	Interest on Saving Bank Account	5,50,776.00		Closing Balance	
			3,65,68,947.29	Canara Bank SB A/c No. 2730101007115	39,40,689.29
4,98,25,515.29	Total	6,83,47,778.29	4,98,25,515.29	Total	6,83,47,778.29

As Internal Auditor

For M/s Mannohan Singh & Co.  
Chartered Accountants



CA J. P. Sharma  
(Partner)  
M.NO. 402655

*(Signature)*  
Registrar

*(Signature)*  
Deputy Registrar

## NATIONAL INSTITUTE OF FOUNDRY &amp; FORGE TECHNOLOGY

HATIA, RANCHI-834003

GENERAL PROVIDENT FUND ACCOUNT  
DETAILS OF TERM DEPOSITS AS ON 31.03.2022

S. No.	Account Number	Date of Investment/ Reinvestment	Bank	Principal	Interest Accrued	TDS on FD
1	2730401001627/5	30.11.2020	CANARA	1,74,70,365.00	9,29,265.00	85,126.00
2	2730401001442/10	20.07.2021	CANARA	3,75,00,000.00	7,34,458.00	73,446.00
3	2730401001442/12	26.11.2021	CANARA	1,93,17,021.00	2,46,292.00	-
4	2730401001848/9	12.02.2022	CANARA	86,33,881.00	-	-
5	2730401002218/7	20.05.2021	CANARA	1,13,77,434.00	4,48,932.00	44,893.00
6	2730307000001/4	28.05.2021	CANARA	88,42,868.00	-	-
7	2730401002217/7	20.05.2021	CANARA	1,13,77,433.00	4,48,932.00	44,893.00
Total:				11,45,19,002.00	28,07,879.00	2,48,358.00



## NATIONAL INSTITUTE OF ADVANCED MANUFACTURING TECHNOLOGY

HATIA, RANCHI-834003

## Bank Reconciliation Statement as on 31.03.2022

## 1) CANARA BANK SB A/C NO. 2730101007115 (NIFFT GPF A/C)

Particulars	Amount
Balance as per Ledger as on 31.03.2022	39,40,689.29
Balance as per Bank Statement as on 31.03.2022	39,40,689.29
Difference	-





**NATIONAL INSTITUTE OF ADVANCED  
MANUFACTURING TECHNOLOGY (Formerly NIFFT)**

**A Centrally Funded Technical Institute Under Ministry of Education,  
Govt. of India**

**HATIA, RANCHI- 834003 (JHARKHAND)**



**Statement of Accounts for  
Technical Education Quality  
Improvement Programme Account  
For the Financial Year 2021-22  
(As per Revised Formats of Financial Statements for  
Central Higher Educational Institutions)**

**Audited by  
M/s Manmohan Singh & Co.  
(Chartered Accountants) Ranchi**

## NATIONAL INSTITUTE OF ADVANCED MANUFACTURING TECHNOLOGY

HATIA, RANCHI-834003

## TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME ACCOUNT

## BALANCE SHEET AS AT 31st MARCH, 2022

SOURCES OF FUNDS	Schedule	Current Year 2021-22	Previous Year 2020-21
CORPUS/CAPITAL FUND	1	1,85,36,775.66	2,15,13,950.36
<b>TOTAL</b>		<b>1,85,36,775.66</b>	<b>2,15,13,950.36</b>
APPLICATION OF FUNDS	Schedule	Current Year 2021-22	Previous Year 2020-21
FIXED ASSETS	2	1,66,76,537.55	1,96,53,712.25
CURRENT ASSETS	3	7,05,484.11	7,05,484.11
LOANS, ADVANCES & DEPOSITS	4	11,54,754.00	11,54,754.00
<b>TOTAL</b>		<b>1,85,36,775.66</b>	<b>2,15,13,950.36</b>

As Internal Auditor

For M/s Manmohan Singh & Co.  
Chartered Accountants

CA J. P. Sharma  
(Partner)  
M.NO. 402655

Director

Deputy Registrar

# NATIONAL INSTITUTE OF ADVANCED MANUFACTURING TECHNOLOGY

HATIA, RANCHI-834003

## TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME ACCOUNT

### INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED ON 31st MARCH, 2022

INCOME	Schedule	Current Year 2021-22	Previous Year 2020-21
GRANTS	-	-	-
OTHER INCOME	-	-	-
<b>TOTAL(A)</b>		-	-

EXPENDITURE	Schedule	Current Year 2021-22	Previous Year 2020-21
OTHER EXPENSES	-	-	-
DEPRECIATION	2	29,77,174.70	30,20,571.81
<b>TOTAL(B)</b>		29,77,174.70	30,20,571.81
<b>Balance Being Deficit Carried to Capital Fund</b>		<b>(29,77,174.70)</b>	<b>(30,20,571.81)</b>

As Internal Auditor

For M/s Mannohan Singh & Co.

Chartered Accountants



CA J. P. Sharma

(Partner)

M.NO. 402655

*[Signature]*  
Registrar

*[Signature]*  
Deputy Registrar



## NATIONAL INSTITUTE OF ADVANCED MANUFACTURING TECHNOLOGY

HATIA, RANCHI-834003

## TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME ACCOUNT

RECEIPTS AND PAYMENTS ACCOUNT FOR THE YEAR ENDED 31.03.2022

Previous Year 2020-21	RECEIPTS	Current Year 2021-22	Previous Year 2020-21	PAYMENTS	Current Year 2021-22
1,255.00 7,04,229.11	Opening Balances A) Cash Balances B) Bank Balances	1,255.00 7,04,229.11	-	Expenses	-
-	Receipts	-	1,255.00 7,04,229.11	Closing Balances A) Cash Balances B) Bank Balances	1,255.00 7,04,229.11
7,05,484.11		7,05,484.11	7,05,484.11		7,05,484.11

As Internal Auditor

For M/s Manmohan Singh & Co.  
Chartered Accountants

*(Signature)*  
CA J. P. Sharma  
(Partner)  
M.NO. 402655

*(Signature)*  
Director

*(Signature)*  
Deputy Registrar

**SCHEDULE - 1 - CORPUS/CAPITAL FUND**

Particulars	Current Year	Previous Year
Balance at the beginning of the year	2,15,13,950.36	2,45,34,522.17
Add: Contributions towards Corpus/Capital fund	-	-
Add: Grants Received	-	-
Add: Excess of Income over Expenditure transferred from the Income & Expenditure Account	-	-
<b>TOTAL</b>	<b>2,15,13,950.36</b>	<b>2,45,34,522.17</b>
Deduct: Deficit transferred from Income & Expenditure Account	(29,77,174.70)	(30,20,571.81)
<b>Balance at the year end</b>	<b>1,85,36,775.66</b>	<b>2,15,13,950.36</b>



**SCHEDULE - 2- TEQIP FIXED ASSETS (O.B)**

S.No	Assets Heads	Opening Balance	Additions	Deductions	Total	Depreciation for the Year	Closing Balance
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
1	Scientific & Laboratory Equipment	1,96,53,712.25	-	-	1,96,53,712.25	29,77,174.70	1,66,76,537.55
2	Furniture, Fixtures & Fittings	-	-	-	-	-	-
	<b>Total ( C )</b>	<b>1,96,53,712.25</b>	<b>-</b>	<b>-</b>	<b>1,96,53,712.25</b>	<b>29,77,174.70</b>	<b>1,66,76,537.55</b>

**SCHEDULE- 3 - CURRENT ASSETS(OB)**

Particulars	Current Year 2021-22	Previous Year 2020-21
1. cash in Hand	1,255.00	1,255.00
2. Cash at Bank	7,04,229.11	7,04,229.11
<b>Total</b>	<b>7,05,484.11</b>	<b>7,05,484.11</b>

**SCHEDULE- 4 - LOANS & ADVANCES(OB)**

Particulars	Current Year 2021-22	Previous Year 2020-21
1. M/s Ed.CIL (India) Ltd.	11,23,225.00	11,23,225.00
2. M/s NIFFT	31,529.00	31,529.00
<b>Total</b>	<b>11,54,754.00</b>	<b>11,54,754.00</b>





**NATIONAL INSTITUTE OF ADVANCED  
MANUFACTURING TECHNOLOGY (Formerly NIFFT)**

**A Centrally Funded Technical Institute Under Ministry of Education,  
Govt. of India**

**HATIA, RANCHI- 834003 (JHARKHAND)**



**Seperate Audit report  
For the Financial Year 2021-22**





BRANCH: DIRECTOR GENERAL OF AUDIT (CENTRAL), LUCKNOW AT RANCHI

Address



Date: 01 Dec 2022

To,

Director, National Institute of Advance Manufacturing Technology, Hatia, Ranchi-834003

Subject: Separate Audit Report on account of National Institute of Advanced Manufacturing Technology (earlier NIFFT) Ranchi (to Unit)

Sir/Madam,

To

The Director,

National Institute of Advance Manufacturing Technology,

Hatia,

Ranchi-834003.

Subject: Separate Audit Report on the accounts of National Institute of Advance Manufacturing Technology, Ranchi for the year 2021-22.

Sir,

I enclose a Separate Audit Report (SAR) on the Annual Accounts of National Institute of Advance Manufacturing Technology, Ranchi for the year 2021-22 for information and necessary action.

2. A copy of Separate Audit Report is also being sent to the Secretary to the Government of India, Ministry of Education, New Delhi for information and necessary action.

3. The audited Annual Accounts, Audit Report should be duly considered and adopted by the Governing Body (BOG) of the NIAMT, Ranchi in the Annual General Meeting before these are laid in the House of parliament.

4. A copy of (i) Resolution of Governing Body adopting the Audit Report with audited Annual Accounts, (ii) Date of its presentation before the House of Parliament and (iii) Annual Report of the Institute may be furnished to this office in due course for our records and onward transmission to the Comptroller and Auditor General of India, New Delhi.

5. The Hindi version of this SAR may be furnished to this office within one week.

6. The receipt of this letter with enclosures may please be acknowledged.

Yours faithfully,

Encl: - As above.

Principal Director of Audit (Central), Lucknow

Yours faithfully,

Encls: As above

Kumar Shrivendra  
Sr AO

Copy to:-

Deputy Registrar, National Institute of Advance Manufacturing Technology, Hatia, Ranchi-834003



## Separate Audit Report of the Comptroller & Auditor General of India on the accounts of National Institute of Advance Manufacturing Technology, Hatia, Ranchi for the year ended 31 March 2022.

We have audited the Balance Sheet of National Institute of Advance Manufacturing Technology, Hatia, Ranchi as at 31 March 2022 and the Income & Expenditure Account and Receipt & Payment Account for the year ended on that date under Section 20(1) of the Comptroller & Auditor General's (Duties, Powers & Conditions of Service) Act, 1971 read with Section 20 (i to ii) of the Memorandum of Association of National Institutes of Advance Manufacturing Technology Society. The audit has been entrusted for the period up to 2017-22. These financial statements are the responsibility of the Institute's management. Our responsibility is to express an opinion on these financial statements based on our audit.

2. This separate Audit Report contains the comments of the Comptroller & Auditor General of India (CAG) on the accounting treatment only with regard to classification, conformity with the best accounting practices, accounting standards and disclosure norms, etc. Audit observations on financial transactions with regard to compliance with the Law & Rules & Regulations (Propriety and Regularity) and efficiency-cum-performance aspect, etc., if any are reported through Inspection Report/CAG's Audit Reports separately.

3. We have conducted our audit in accordance with auditing standards generally accepted in India. These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatements. An audit includes examining, on a test basis, evidences supporting the amounts and disclosure in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of financial statements. We believe that our audit provides a reasonable basis for our opinion.

4. Based on our audit, we report that:

(i) We have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of our audit.

(ii) The Balance Sheet, Income & Expenditure Account and Receipt & Payment Account dealt with by this report have been drawn up in the format approved by the Government of India, Ministry of Education.

(iii) In our opinion, proper books of accounts and other relevant records have been maintained by the National Institute of Advance Manufacturing Technology, Hatia, Ranchi as required under Section 20 (i to ii) of the Memorandum of Association of National Institutes of Advance Manufacturing Technology Society in so far as it appears from our examination of such books.

(iv) We further report that;

## A Balance sheet

### A.1 Corpus/Capital Fund (Schedule-1) – ₹ 120.16 crore

**A.1.1** If sanction of a grant is received on or before 31<sup>st</sup> March and the amount of grant is received in April then as per accrual basis of accounting, the Grant receivable account is to be debited by credit to grant account.

During scrutiny of Bank statement we noticed that the Institute received sanction of revenue grant amounting to ₹ 5.19 crore under the head salary and general on 28.03.2022 and the amount was actually received after closure of financial year 2021-22 in April 2022. The Institute, however, accounted for the above amount in cash book on 28.03.2022.

The irregular treatment resulted in overstatement of Current Assets (Bank balance) and understatement of Loans and Advances (Grant receivable by) ₹ 5.19 crore.

**A.1.2** The Institute had unutilized grant of ₹ 22.12 crore under the head Capital at the beginning of the year. During the year the Institute received grant of ₹ 8.30 crore under the head capital. Thus, the total fund available with the Institute was ₹ 30.42 crore. During the year the Institute purchased fixed assets amounting to ₹ 6.44 crore. As such, the Institute was required to exhibit ₹ 23.98 crore as refundable to Ministry at the end of year. The Institute exhibited ₹ 0.69 crore (Schedule 7 - grant refundable to MoE) as unutilized grant refundable to ministry.

The irregular treatment resulted in understatement of current liabilities under the head unutilized grant refundable to ministry and overstatement of capital fund by ₹ 23.28 crore.

### A.2 Current Liabilities (Schedule-2) - ₹ 15.52 crore

**A.2.1** The Institute did not make any suitable provisions for expenditure of salary for the month of March 2022 amounting to ₹ 1.14 crore in the books of accounts. This resulted in understatement of liability and provisions amounting to ₹ 1.14 crore and overstatement of the Capital Fund of the same amount.

**A.2.2** During scrutiny of Form-65 submitted by CPWD (Electrical), it is noticed that the Institute deposited with CPWD (Electrical) ₹ 1.04 crore for 05 works against which CPWD incurred expenditure of ₹ 1.25 crore up to 31.3.2022. As such the Institute was required to exhibit ₹ 0.21 crore as liability. The non-depiction resulted in understatement of liability and Fixed Assets by ₹ 0.21 crore.

### A.3 Fixed Assets (Schedule-3) - ₹ 112.56 crore

**A.3.1** The Institute showed an outstanding advance amounting to ₹ 3.29 crore with M/s National Informatics Centre (NIC) in schedule 5 (3-(II-b) i.e Loans, Advances and Deposit.

Scrutiny of ledger and other relevant records revealed that the Institute paid an advance of ₹ 3.29 crore to National Informatics Centre (NIC) between the period March 2014 to March 2018 for establishing Local Area Network in the Institute. NIC completed the work and installed it in the campus by 22.10.2018.



The value of work completed was ₹ 3.09 crore. As the work was completed and entered into the Asset Register, it should have been added in fixed assets. But the Institute showed it in advance instead of fixed assets. Thus the irregular treatment of completed work led to the understatement of fixed assets by ₹ 3.09 crore and overstatement of advances by the same amount with consequential understatement of depreciation.

**A.3.2** As per significant accounting policies mentioned in the format of financial statements prescribed by Ministry of Education fixed assets are valued at cost less accumulated depreciation and is provided on Straight line method.

During scrutiny of the Annual Accounts 2021-22 it was noticed that calculation of depreciation on various assets had not been provided on the basis of the closing balance of the respective heads. This resulted in understatement of depreciation and overstatement of assets by ₹1.06 crore with consequential overstatement of Income over expenditure as detailed in Annexure-I.

**A.3.3** The CPWD (civil) completed the 13 nos works of ₹ 44.01 crore during the year 2016-17. Since works have been completed and handed over, the same should have been capitalised. But the Institute did not transfer these assets since long to the respective fixed assets. This resulted in understatement of fixed assets and overstatement of WIP by ₹ 44.01 crore as detailed in Annexure-II.

Further the Institute did not charge the depreciation @2% on assets acquired up to 2016-17 amounting to ₹ 4.40 crore ( $44.01 \times 2\% \times 5$  years from 2017-18 to 2021-22).

#### **A.4 Current Assets (Sch-4) – ₹ 16.99 crore**

**A.4.1** As per new format of financial statements prescribed by Ministry of Education for Central Higher Educational Institutions, bank accounts with its balances are to be shown under current assets. Scrutiny of Annual Accounts revealed that the Institute had showed the SBI Online Bank Account No. 36228721268 (old) with balance amount of ₹ 13.11 lakh under head Loans, Advances & Deposits (schedule-5). This resulted in overstatement of Loans, Advances & Deposits by ₹ 13.11 lakh and understatement of current assets (Bank balance) by the same amount.

**A.4.2** The Institute has entered an amount of ₹ 5,86,750/- received as Income Tax refund in Earmarked Fund (Schedule 2(B) instead of Corpus Fund. This led to overstatement of Earmarked Fund to the tune of ₹ 5.87 lakh and understatement of Corpus Fund by the same amount.

#### **B. Income & Expenditure Account**

**B.1** As per format of financial statements prescribed by Ministry of Education, items of prior period income are those items against which incomes do not pertain to the current year but pertain to the previous year and have occurred during the current year, should be kept in 'Schedule 14 - Prior Period Income'. Scrutiny of Annual Accounts revealed that the Institute recovered amount of ₹ 7.34 lakh from employees and pensioner during the year and booked as other income instead of prior period income. This resulted understatement of prior period income by ₹ 7.34 lakh and overstatement of other income



by the same amount.

### **C. Accounting Policy and Notes to Accounts**

**C.1** The accounting policy adopted by the Institute contravene Accounting Standard-15 (AS-15) issued by ICAI as well as format of financial statements prescribed by Ministry of Education require that retirement benefits should be accounted on actuarial valuation basis. But, we noticed that the Institute is accounting retirement benefit pension, gratuity and leave encashment on cash basis. The same needs to be amended

### **D. General**

**D.1** Scrutiny of "Schedule 2 - Current Liabilities" revealed that the following liabilities had been carried forwarded and no claim has been received by the Institute. However, the unclaimed liabilities of ₹ 5.06 lakh are pending since long. A policy to finalise the long pending unclaimed liabilities may be made and disclosed in Notes to Accounts.

**D.2** As per Form-65 submitted by the CPWD, the outstanding deposit with CPWD (Civil and Electrical) was ₹ 5.39 crore but as per ledger and annual accounts of the Institute the deposit with CPWD was ₹10.39 crore. The difference between CPWD accounts and Institute amounting to ₹ 4.99 crore was required to be reconciled.

**D.3** Fund under the head Designated/Earmarked/Endowment Fund is represented by investment, Bank balance and accrued interest. Scrutiny of records revealed that there was a difference of ₹ 0.91 crore between fund under the head Designated/Earmarked/Endowment Fund and investment there against. The same needs to be reconciled.

### **E. Lack of Response**

The Draft SAR was issued to the Management of 16.10.2022. However, no reply has been received within the stipulated period of 14 days and is still awaited till date.

### **F. Grants- in-Aid**

The Institute received Grants amounting to ₹ 43.50 crore (Capital ₹ 8.30 crore and Revenue ₹ 35.20 crore) from Ministry of Education during 2021-22. The interest earned on Govt. Grant was Rs. 0.20 crore (Capital – 0.06 crore, Revenue – 0.14 crore). The unspent balance of previous year was ₹ 29.88 crore (Capital-₹ 22.12 crore and Revenue-₹ 7.76 crore). Thus, the Institute had total fund of ₹ 73.58 crore (Capital-₹ 30.48 crore, Revenue-₹ 43.10 crore). Out of which the Institute utilized a sum of ₹ 40.54 crore (Capital-₹ 6.44 (excluding software purchase from HEFA amounting to ₹ 1.27 crore) and Revenue-₹ 34.10 crore) leaving a balance of ₹ 33.04 crore (Capital-₹ 24.04 which includes ₹1.17 crore given to CPWD as advance and Revenue-₹ 9.00 crore) as unutilized amount as on 31.03.2022.

### **G. Management letter**

Deficiencies which have not been included in the Audit Report have been brought to the notice of the

Institute through a management letter issued separately for remedial/corrective action.

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

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

(a) In so far as it relates to the Balance Sheet, of the state of affairs of the National Institute of Advance Manufacturing Technology (NIAMT) , Hatia, Ranchi as at 31<sup>st</sup> March 2022, and

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

For and on behalf of the C&AG of India

Place: Lucknow

Date: .11.2022

Principal Director of Audit (Central) Lucknow

## Annexure to Separate Audit Report

### 1. Adequacy of Internal Audit system:

The Internal Audit Wing has not been established in the Institute. Besides, no Internal Audit Manual has been prepared. Internal audit is conducted by a CA Firm.

### 2. Adequacy of Internal Control System:

The internal control system in the Institute reflected deficiencies in the following areas:

- The Institute has not prepared Internal Audit and Office Procedure of Accounting Manual. Besides, definition and job description of the officers and staff and procedure for maintaining accounts and records and has not been put in place.
- No transfer policy of the officials especially the employees dealing with cash, valuables, stores and stock have been put in place.
- Physical progress of the work-in- progress of buildings was not monitored by the concerned authority, resulting in delays in completion of the projects.
- No Management Reporting system exists in the Institute.
- There is no Investment Committee in the Institute for investment of GPF and other surplus funds.
- Register of valuables has not been maintained.
- No proper procedures for checking, reconciliation, and authentication of ledgers have been designed.
- The following Registers were not maintained by the Institute.
  - (i) Expenditure control register
  - (ii) Investment register
  - (iii) Grant-in-Aid Register

### 3. System of physical verification of Fixed Assets and Inventory

The Institute did not carry out physical verification of fixed assets as well as consumable and non-consumable items since a long time. In absence of physical verification, actual existence of assets could not be ascertained in Audit. Besides, no fixed assets register was maintained by the Institute.

### 4. Regularity in payment of statutory dues:

The institute was regular in payment of statutory dues.



## ANNEXURE-I

(Refer Para A.3.2)

(amount in ₹)

	Assets Head	Rate of depreciation applicable	Opening Balance	Addition	Closing Balance	Depreciation provided in the accounts	Amount of depreciation at the applicable rate	Difference
1	Office Equipment	7.50%	62,64,070	11,950	62,76,020	3,55,067	4,70,702	1,15,635
2	Computers & Peripherals	20.00%	2,22,43,494	11,84,237	2,34,27,731	45,82,026	46,85,546	1,03,519
3	Furniture, Fixtures & Fittings	7.50%	2,50,12,691	4,64,638	2,54,77,329	2,30,219	19,10,800	16,80,581
4	Vehicles	10.00%	65,63,829	0	65,63,829	4,72,811	6,56,383	1,83,572
5	Lib. Books & Scientific Journals	10.00%	11,18,36,505	1,44,16,802	12,62,53,307	25,72,867	1,11,30,071*	85,57,204
				Total:				<b>1,06,40,511</b>

### Library books & Scientific Journals

\*Opening gross balance as on 1.4.2022

Opening Depreciation as per Annual Accounts

Depreciated value as on 1.4.2022 (A)-(B)

Add depreciation on addition during the year (10% of 1,44,16,802)

Total depreciation during the year (C)+(D)

: 11,18,36,505 (A)  
 : 10,21,48,114 (B)  
 : 96,88,391 (C)  
 : 14,41,680 (D)  
 : **1,11,30,071**

**ANNEXURE-II****(Refer Para A.3.3)**

(Amount in crore)

S.No.	Works	Expenditure	Remarks
1	400 bedded boys hostel and dining block building.	24.11	Completed
2	Boundary wall of Director Bungalow.	0.36	Completed
3	C/o Boundary Wall	2.19	Completed
4	Construction of Cubical for N14 HIP.	0.05	Completed
5	Development of Road and Area Around main Gate.	0.12	Completed
6	Drain old damages boundary wall of NIAMT near Nakati.	0.05	Completed
7	Girls Hostel	5.04	Completed
8	Gymkhana and Allied facilities Building.	7.09	Completed
9	Main gate including security booth with toilet.	0.16	Completed
10	Physics lab.	0.12	Completed
11	Road renovation inside campus.	1.44	Completed
12	Roof treatment of computer Lab, Foundry Lab, Class room.	0.08	Completed
13	Two storeyed extension work on the 66 bedded Hostel	3.20	Completed
<b>Total</b>		<b>44.01</b>	

