



National Institute of Technology Goa
ANNUAL REPORT 2021-2022

राष्ट्रीय प्रौद्योगिकी संस्थान गोवा National Institute of Technology Goa



Annual report
&
Annual Accounts
FY 2021-22



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NATIONAL INSTITUTE OF TECHNOLOGY, GOA

BRIEF PROFILE OF THE INSTITUTE

National Institute of Technology Goa (NIT Goa) is a premier technical Institute of the region. NIT Goa was established in the year 2010 by an act of parliament (NIT act 2007) and it is declared as 'Institute of National Importance'. NIT Goa is an autonomous institute and functioning under the aegis of Ministry of Education (MoE), Govt. of India. The campus is located at Farmagudi, Ponda approximately 29 km southeast of Panaji, the capital of Goa and it is a temporary campus. The state of Goa is well connected by roads, railways and by air with various parts of the country.

NIT Goa started functioning in 2010 with three Engineering Departments: (1) Computer Science and Engineering (2) Electronics and Communication Engineering and (3) Electrical and Electronics Engineering at undergraduate level. NIT Goa attracts students from all over the country and abroad. The Institute admits students to B. Tech degree program on the basis of ranks obtained in the Joint Entrance Examination (JEE Main) with an intake of 38 students in each branch and the scheme of Direct Admission of Students Abroad (DASA). Forty percent (40%) of the seats are reserved for the students of Goa, Ten percent (10%) for Diu Daman, Dadra Nagar Haveli & Lakshadweep and the remaining seats are based on the all India rank. The institute also admits students to M.Tech and Ph.D. degree Programs. The institute is sincerely attempting to deliver quality education and to achieve excellence in teaching, learning and research with high professional ethics.



1.0 INTRODUCTION

1.1 Vision

National Institute of Technology Goa shall emerge as one of the nation's preeminent institutions. Through its excellence, it shall serve the Goan society and the global society at large with all its challenges and opportunities.

1.2 Mission

- * NIT Goa strives for quality faculty, good students and excellent infrastructure.
- * Strives for excellence, through dissemination, generation and application of knowledge laying stress on interdisciplinary approach in all the branches of basic Science, Engineering, Technology, Humanities and Social Sciences with an emphasis on human values and ethics.

1.3 Education

B.Tech

Structure of B.Tech. Programme

The medium of instruction, examination and project reports are done in English.

- Undergraduate (B.Tech Degree) programmes are offered in the following disciplines by the respective Departments.

- i) Computer Science and Engineering (CSE)
- ii) Electrical and Electronics Engineering (EEE)
- iii) Electronics and Communication Engineering (ECE)
- iv) Civil Engineering (CVE)
- v) Mechanical Engineering (Mech. Eng.)

- Other supporting departments are:

Applied Sciences (Appl. Sci.)

- Mathematics (MA)
- Physics (PY)
- Chemistry (CY)



Humanities & Social Sciences (HSS)

- Economics (HSS)
- English (HU)

- The programme structure consists of the following:

- i) A general (common) core programme comprising of basic sciences, engineering sciences, humanities and technical arts
- ii) An engineering core programme introducing the student to the foundations of engineering in the respective branch
- iii) An elective programme enabling the student to opt and undergo a set of courses of interest
- iv) Professional practice including project, seminar and industrial training/internship and,
- v) Courses on Environmental Studies (ES), Physical Education (Phy.Ed.) and Value Education (VE)

- Every branch of the B. Tech. programme will have a curriculum and syllabi for the courses approved by the Senate. Every department has a prescribed course structure which in general terms is known as Curriculum or Course of Study. It prescribes courses to be studied in each semester. The courses of study bulletin are available in the Institute's website.

- The Institute follows a credit based semester system. There are two regular semesters in a year. The semester that begins in July (July to December) is known as 'ODD' semester and the semester that begins in January (January to May) is known as 'EVEN' semester.

- The complete programme will consist of 6 classifications (as given in the Table 1), namely-Basic Sciences, Basic Engineering Sciences, Humanities and Languages, Technical Arts, Professional Theory & Practice, and Others, distributed over eight semesters with two semesters per academic year. Professional Core courses will commence from the third semester onwards. The elective courses will normally be offered from the sixth semester onwards.

- The academic programmes of the Institute follow the credit system. The general pattern is: one credit for each lecture hour per week per semester; two credits for each laboratory/practical of three hours per week per semester. Three credits for the Drawing course of one Lecture plus three hours of drawing.



- The curriculum of any branch of the B. Tech. programme shall have a total of minimum 170 credits.
- Every course of the B. Tech. programme will be placed in one of the 6 classifications as listed in Table.1. Minimum credits to be earned for the award of B. Tech. degree are 170(of which 5 credits of course work done under the Pass/Fail option are not counted towards the calculation of Cumulative Grade Point Average (CGPA)).

Table 1: Course classifications

Sl. No.	Classifications	Minimum Credits		Remarks
		For CGPA	For Pass/Fail	
1	Basic Sciences (BS)	27	0	MA→14,PH→8, CY→5
2	Basic Engineering Sciences (ES)	14	0	EM→3,ME→2, EL→5, CPPS→4
3	Humanities & Languages (HL)	9	0	PC→3, ECO→6
4	Technical Arts (TA)	5	0	ED→3, WP→2
5	Professional Theory & Practice (PT) (Core, Electives (including MOOCs or any other Approved by Institute), Project, Seminar)	110	0	PT
6	Others (Environmental Studies, Physical Education, Value Education) (OT)	-	5	ES →3, Phy. Ed → 1 VE→1
Total Credit		165	5	

REGISTRATION

- Except for the first semester, Course registration is mandatory for all other semesters and enrollment will be done in the beginning of the semester as per the schedule announced by the AAC.
- A student will be eligible to enroll for higher semester only if he/she satisfies the clause (A student who has cleared all the academic requirements upto the previous semester will register for all courses of the current semester as per Institute norms),and additionally;



- i) If he/she has cleared all dues in the Institute, Hostel and Library upto the end of the previous semester and
 - ii) If he/she is not debarred from enrolment by a disciplinary action of the Institute.
- Students are required to submit Course registration form duly filled in, in consultation with his/her faculty adviser.

M.Tech

Structure of M.Tech Programme

- The medium of instruction, examination and project reports will be in English.
- Postgraduate (M.Tech Degree) programmes are offered in the following disciplines by the respective programme hosting Departments.
 - i) Master of Technology in “Computer Science and Engineering” (M.Tech. (CSE)) by the Department of Computer Science and Engineering (CSE)
 - ii) Master of Technology in “VLSI” (M.Tech. (VLSI)) by the Department of Electronics and Communication Engineering (ECE).
 - iii) Master of Technology in “Power Electronics and Power Systems”(M. Tech. (PEPS)) by the Department of Electrical and Electronics Engineering (EEE).Other teaching departments, Humanities and Sciences (HSS) shall offer courses for these three different programmes.
- Each programme of instruction consists of the following:
 - i) An engineering “Programme Core” introduces the students to the state of the art in engineering in the respective branch.
 - ii) A “Programme Elective” gives opportunities to the students to opt for a set of specialized courses.
 - iii) A “Professional Practice”, includes independent study, seminar, comprehensive-viva and technical communication, etc.
 - iv) A “Dissertation Work” on specialized advanced engineering and/or research work of state of art nature.
- Each of the postgraduate programmes will have a curriculum and syllabi for the courses approved by the Senate. Every department has a prescribed course structure which in general terms is known as “Curriculum” or “Courses of Study”. It prescribes courses to be studied in the programme in each of the semesters as well as credits earned. The courses of study bulletin are available in the Institute’s website.
- The Institute follows a credit based semester system. There are two regular semesters in a year. The semester that begins in July (July to December) is known as



“ODD” Semester and the semester that begins in January (January to June) is known as “EVEN” Semester. The general pattern is: One credit for each lecture hour per week per semester; Two credits for each laboratory course of three to four hours per week per semester.

- The complete programme will consist of 4 categories (as given in the Table 2): Core, Electives, Dissertation work and Professional Practices distributed over four semesters with two semesters per academic year.
- The curriculum of any branch of the M. Tech. programmes shall have a total of minimum 64 credits. Minimum credits or each of the categories are specified in Table 2, which has to be earned by students for the award of M.Tech. Degree.

Table 2: Every course of the M. Tech. programme will be placed in one of the 4 categories as listed in

Sl. No.	Category	Minimum Credits	Remarks
1	Program Core	38	The distribution in Core and Electives is specific to each department.
2	Program Electives (including MOOCs or any other Approved by Institute)		
3	Seminar, Viva Voce and communication skills	4	The course on “Communication Skills and Technical Writing” is compulsory and it is an “Audit” course
4	Dissertation Work	22	
Total Credit		64	

Academically well performing students, with CGPA > 8.0, who never had any backlogs, will only be able to register for additional subjects, within the prescribed 2 years duration. It is to be noted that in the final CGPA calculation, all the credited subjects will be included.

Registration & Enrolment

Students are allowed to pre-register for the elective courses to facilitate the selection of suitable electives from the set of electives that the respective department is ready to offer in the ensuing semester.



For all the admitted students, registration is mandatory for all the semesters and enrolment will be done in the beginning of the semester as per the schedule announced by the AAC.

A student will be eligible for enrolment only if he/she satisfies the clause (If at the end of the first two semesters of the normal academic programme, if a student has earned less than 26 credits and has a CGPA of less than 5.5, then his enrolment will be terminated), and additionally if

(i) he/she has cleared all dues in the Institute, Hostel and Library up to the end of the previous semester and (ii) he/she is not debarred from enrolment by a disciplinary action of the Institute.

2.0 AN OVERVIEW

2.1 Historical Background

NIT GOA is one of the ten newly set up NITs during the 11th Five Year Plan by the Ministry of Education (MoE). The institute was to be set up using Rs. 250 crore provided by the central government. The first batch of students was admitted in 2010 and academic activities of NIT Goa started in the academic year 2010-11.

2.2 Location

NIT Goa's present temporary Campus is located at Farmagudi, Ponda, Goa. Farmagudi is located on a plateau 3 km from the main Ponda City on the way towards Panaji. Ponda is a city and a municipal council in North Goa district in the Indian state of Goa. It is located in the central part of Goa. Ponda city lies about 28 km south-east of Panaji and 17 km north-east of Margao and is also the capital of Ponda Taluka. Ponda is well connected by road to the Panaji (Capital of Goa) and main railway junction of Margao.

By Air

Goa's sole airport, the 'Dabolim Airport' in Vasco, caters to domestic and international airlines that stop en route to other Indian destinations. It is at a distance of around 30 km (45 Minutes by car) from the institute.



By Rail

Goa is connected by the South Western and the Konkan Railways. Goa has two rail lines-one run by the South Western Railway and the other by the Konkan Railway. The closest major railway station is 'Madgaon Railway Station' which is around 20 Km (30 Minutes by car) from the institute.

2.3 Campus

The institute was functioning in the premises of Goa Engineering College till December 2012. The campus was shifted to the renovated building of Industrial Training Institute (ITI) in the same premises. The renovation of the building was carried out by NIT Goa. The new buildings accommodate thirteen class rooms, eight laboratories, one conference room, and one seminar hall with seating capacity of 120 persons, a workshop and an administrative office.

In the F.Y 2015-16 Institute also has its own medical centre and canteen facility in the temporary premises.

On July 2017 state Govt. handed-over the land measuring 120 Acres identified for the permanent campus of NIT Goa.

2.4 Administration

The overall head of the institute is the Director with full financial and administrative authority. The Senate, Scrutiny Committee and other Committees of the institute assist the Director. The Board of Governors constituted by the Government of India is the highest body that approves of all major decisions of the institute. The Finance Committee and the Building & Works Committee look after the financial and construction activities of the Institute.

2.5 Academic Programmes

The institute is currently offering B. Tech program in the following departments:

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

The institute is offering M.Tech program in the following departments:

- Computer Science and Engineering
- VLSI
- Power Electronics and Power Systems



The institute is currently offering Ph.D. program in the following streams:

- Computer Science and Engineering
- Electrical and Electronics Engineering
- Electronics and Communication Engineering
- Humanities and Social Sciences
- Applied Sciences

2.6 Courses Offered

Undergraduate Courses (B. Tech):

Branch	Current Year Intake	Year Started in
Computer Science and Engineering	38	2021-2022
Electrical and Electronics Engineering	38	2021-2022
Electronics and Communication Engineering	38	2021-2022
Mechanical Engineering	37	2021-2022
Civil Engineering	37	2021-2022

Postgraduate Courses (M. Tech):

Branch	Current Year Intake	Year Started in
Computer Science and Engineering	23	2021-2022
Power Electronics and Power Systems (PEPS)	22	2021-2022
VLSI	23	2021-2022

Courses Offered Doctorate Courses (Ph.D.):

Branch	Current Year Intake FT+PT	Year Started in
Computer Science and Engineering	2+13=15	2021-2022
Electrical and Electronics Engineering.	0+7=7	2021-2022
Electronics and Communication Engineering	0+5=5	2021-2022
Applied Sciences	2+7=9	2021-2022
Mechanical Engineering	1+0=1	2021-2022
Civil Engineering	2+0=2	2021-2022
Humanities and Sciences	2+0=2	2021-2022



2.7 Admission Procedure

B.Tech.

- Admission to all courses is made in the ODD semester of an academic year at the first year based on relative performance in Joint Entrance Examination (JEE Main), and Direct Admission of Students Abroad (DASA) as per the guidelines issued by the Ministry of Education (MoE), New Delhi from time to time.
- The number of seats in each branch of the B. Tech. programme is decided by the Senate of the Institute following the instructions from MoE, Government of India. Reservation of seats to different states, castes, tribes and other categories shall be as per the directives from MoE, Government of India. Some seats are allotted by MOE under DASA (Direct Admission Student Abroad) category, offered to Foreign Nationals and Indians living abroad in accordance with the rules applicable for such admissions issued from time to time by MoE.
- At the time of admission the candidates should have passed/appeared and are awaiting results of the final examination of the 10+2 system or its equivalent with Mathematics, Physics and Chemistry as main subjects of study.
- Candidates have to fulfill the medical standards required for admission as set out in the information brochure of JEE-Main/or by the Central Seat Allocation Board (CSAB).
- The selected candidates will be admitted to the B. Tech. programme after he/she fulfills all the admission requirements set by CSAB/Institute after payment of the prescribed fees.
- In all matters relating to admission to the B. Tech. programme, the decision of the CSAB and its interpretation given by the Chairperson of the Senate shall be final.
- If at any time after admission, it is found that a candidate has not fulfilled any of the requirements stipulated by CSAB/Institute, the Academic Affairs Committee (AAC) may revoke the admission of the candidate and report the matter to the Senate

M. Tech.

- Admission to all courses is made in the ODD semester of an academic year at the first year level based on relative performance in Graduate Aptitude Test for Engineering



(GATE) in relevant discipline as per guidelines issued by the Ministry of Education (MoE), New Delhi from time to time.

- The number of seats in each branch of the M. Tech. programme is decided by the Senate of the Institute following the instructions from MoE, Government of India. Reservation of seats is made as per the directives from MoE.
- At the time of admission, the candidates should have passed/appeared and awaiting results of the final examination of the qualifying degree in relevant discipline as main subjects of study.
- Candidates have to fulfill the medical standards required for admission as per rules set up by the Institute or guidelines issued by the Ministry of Education (MoE) from time to time.
- The selected candidates will be admitted to the M. Tech. programme after the due admission process.
- In all matters relating to admission to the M. Tech. programme, the decision of the Institute's Post-Graduate Admission Committee (PAC) and its interpretation given by the Chairperson of the Senate shall be final.
- If at any time after admission, it is found that a candidate has not fulfilled any of the requirements stipulated by the Institute, the Academic Affairs Committee (AAC) may revoke the admission of the candidate and report the matter to the Senate.

Ph.D.

• The award of the Ph.D. degree is in recognition of high achievements, independent research and application of knowledge to the solution of engineering, scientific and societal problems. The details of research programmes and faculty research interests may be found in the department websites. NIT Goa currently offers Ph.D. degrees in: Computer Science and Engineering (CSE), Electronics and Communication Engineering (ECE), Electrical and Electronics Engineering (EEE), Humanities and Social Sciences (HSS) and Applied Sciences (APS).

Categories of Ph.D. Candidates

• The Assistantship/Fellowships will be payable for duration fixed by the Ministry of Education (MoE) (or the granting agency) or until the date of submission of thesis, whichever is earlier. The Institute admits Ph.D. candidates under the following categories:



- a. Full time research scholar on Institute fellowship (FT)
- b. Teaching Assistant (TA)
- c. Teaching Assistant through Project (TAP)
- d. Industry Fellowships (IF)
- e. Govt. / Semi Govt. Fellowship Awardees (FA) (CSIR, UGC, DOE, DST, DBT, NBHM, ISEAP etc.)
- f. Sponsored candidates (SP)
- g. Self-Financed (Indian / Foreign) / Study Leave (SF)
- h. Indian Council for Cultural Relations Award (ICCR) (Foreign Nationals)
(The candidate should have qualified GATE/NET examination for scholarship)

Normally, advertisement for Ph.D. programmes is issued in the month of March (for July session) and October (for December-January session) each year in the employment news, department website as well as in leading newspapers. Admissions are carried out in the months of July and December. Candidates seeking admission under this clause must fulfil the required academic qualification/experience at the time of interview. They must join within two weeks after the issuance of admission offers by the Institute/ Department. Admission is subject to vacancy being available in the relevant specializations.

2.8 STUDENTS

- Number of Candidates admitted into First year B. Tech during 2021-22

Sl. No.	Branch	Boys	Girls	Total
1.	CSE	29	11	40
2.	EEE	29	8	29
3.	ECE	29	9	38
4.	MCE	27	7	34
5.	CVE	29	5	34
	Total	143	40	183

- **Students admitted under DASA Scheme**

03 students were admitted into first year B. Tech Courses during 2021-22.



- Number of Candidates admitted into First year M. Tech during 2021-22

Sl. No.	Branch	Boys	Girls	Total
1.	CSE	14	06	20
2.	EEE	13	4	17
3.	ECE	14	7	21
	Total	41	17	58

- Number of Candidates admitted into First year P.h.D during 2021-22

Sl. No.	Branch	Boys	Girls	Total
1.	CSE	8	7	15
2.	EEE	4	3	7
3.	ECE	3	2	5
4.	HSS	2	1	3
5.	CVE	2	0	2
6.	MCE	1	0	1
7.	APS	9	0	9
	Total	29	13	42

2.9 Examination & Evaluation

B.Tech.

Internal Evaluation

- For lecture or lecture cum practical courses, two tests will be conducted. The details of weights of marks for the tests and assignments will be decided by the course coordinator in consultation with the DCC. These details will be announced to the students in the beginning of the semester. The AAC should be informed of these details in the beginning of the semester. For laboratory practicals, the teacher of the laboratory in consultation with the DCC decides the number of tests.
- For all Lectures based courses, mid-term exam (25%) and internal evaluation (25%) through class tests/assignments/quizzes, etc., together carry 50% weight and the End-term examination carries 50% weight. For laboratory practicals, the End-term exam is not mandatory. If the End-term exam is planned for a practical course, it should be conducted before the last instructional day and the weight for it should not exceed 40%. For lecture cum practical courses assessment procedure is to be a



properly weighted combination of those for lecture and those for practical components, and is to be decided in the DCC. For all Pass/Fail courses, the concerned faculty, in consultation with the AAC shall decide the assessment procedure

Examination

There will be one mid-term examination of one and a half hours duration for each lecture based or lecture cum practical course. There will be one End-term examination for three hours duration on each lecture based or lecture cum practical course

Make up examination

- Students who miss the mid-term or the end-term examinations for valid reasons are eligible for a make-up examination.
- Those who miss mid-term and/or end-term exam should apply to the Head of the concerned course department (in the case of third and higher semesters) or to the HoD, HS (in the case of first/second semester) through the faculty advisor within five days after the missed exam, giving the reasons for absence. Applications received after this period will not be entertained. All make-up exams for mid-term tests should be completed with evaluation within 10 days prior to the end-term exam. All the make-up exams pertaining to the end-term exam should be conducted and evaluated before the commencement of the next semester.
- Permission to appear for make-up exam will be given under exceptional circumstances such as admission to a hospital due to illness or grave family calamities, etc. Students residing in the Hostels should produce a Medical Certificate issued by Institute Medical Officer (IMO), certifying that he/she was admitted to hospital during the period of exam. The application should be routed through and approved by Chief Warden.
- Students residing outside the campus must produce a medical certificate from a Registered Medical practitioner and the same should be duly endorsed by parent/guardian and also by IMO, within five days.
- A student who misses the make-up exam will normally not be given another make-up exam. However, in exceptional cases of prolonged illness resulting in the student missing a make-up exam, the Chairperson of the Senate may permit the student to appear for a second make-up exam.



Project Evaluation

The B.Tech. Project is done in the final year of the undergraduate programme and is divided into two stages. Normally, the first stage is done in ODD semester and the second stage in subsequent EVEN semesters. Through the project work, the student has to exhibit both the analytical and practical skills. On completion of the project, the student will submit a project report that will be evaluated by duly appointed examiners. A panel of examiners should be finalized by HoD in consultation with all faculty members of the concerned department. The project evaluation will be based on combining the reports of internal and external examiners (outside the department). Suitable weights must be given to the qualitative and quantitative results of the project and are evaluated by a viva-voce exam.

Grading

1. The faculty members will return evaluated papers of tests, assignments, tutorials etc., within two weeks after their respective test/examinations.
2. Only the final grades (after approval by DCC) and attendance of all the students should be communicated by the teachers of the courses. Students may seek clarification regarding grades etc., from the concerned Course coordinator, if required.
3. The DCC meeting will be convened within ten days after the last day of the end-term examination. The letter grades to be awarded to the students for different subjects will be finalized in the meeting.
4. Based on the relative performance, each student is awarded a final letter grade for each of the course. The letter grades and the grade points are as follows:

Grade	Grade Points (GP)
S	10
A	9
B	8
C	7
D	6
P	5
F	0 (Failure)
W	0 (Failure due to insufficient attendance)
I	0 (Actual grade to be awarded later)
SA	0 (Satisfactory, only for Pass/Fail Courses)
US	0 (Unsatisfactory, only for Pass/Fail Courses)



5. A student is considered to have credited a course or earned credits for a course only if he/she secures a grade other than F, W or I for that course.

6. A 'W' grade is treated as equivalent to 'F' for the purpose of CGPA calculation, and the following criteria, in addition to poor attendance (less than 80%) may be considered for the award of 'W' grade:

- I. Badly incomplete in-semester record (due to non-medical reasons),
- II. Misconduct or use of unfair means in the examination, assignments, etc., or a behaviour serious enough to call for disciplinary action in the opinion of the Faculty advisor or teacher of a course.

In such cases, award of 'W' grade is taken up as an immediate action. Further, the case may be referred to the DC for consideration of further punishment depending on the seriousness of the offence.

M.Tech.

Assessment Procedure

The DCC will decide from time to time the system of tests and examinations in each subject in consultation with AAC and inform the same to the Senate.

Evaluation Method

- For lecture or lecture cum practical courses, a minimum of two tests will be conducted. The details of weightage of marks for the tests and assignments will be decided by the course coordinator in consultation with the DCC. These details will be announced to the students in the beginning of the semester. The AAC should be informed of these details in the beginning of the semester. For laboratory practical, the teacher of the laboratory decides the number of tests.

- For all Lecture based courses, mid-term exam (25%) and internal evaluation through class tests/assignments/quizzes, etc. (25%), together carry 50% weightage and the End-term examination carries 50% weightage. For laboratory practical, end-term exam is not mandatory. If end-term exam is planned for a practical course, it should be normally conducted before the last instructional day and the weight age for it should not exceed 40%. For lecture cum practical courses assessment procedure is to be a properly weighted combination of those for lecture and those for practical components.



Examination

There will be one mid-term examination of one and half hours duration on each lecture based or lecture cum practical course. There will be one end-term examination of three hours duration on each lecture based or lecture cum practical course

Make up Examination

- Students who miss the mid-term or the end-term examinations for valid reasons are eligible for a make-up examination with the due approval of AAC.
- Those who miss mid-term and/or end-term exam should apply to the Head of the concerned department through the faculty advisor within five days after the missed exam, giving the reasons for absence. Applications received after this period will not be entertained. All make-up exams for mid-term tests should be completed with evaluation within 10 days prior to the end-term exam. All the make-up exams pertaining to the end-term exam should be completed with evaluation before the commencement of the next semester.
- Permission to appear for make-up exam will be given under exceptional circumstances such as admission to a hospital due to illness or grave family calamities, etc.
- Students residing in the Hostels should produce a Medical Certificate issued by Institute Medical Officer (IMO), certifying that he/she was admitted to hospital during the period of exam. The application should be routed through and approved by Chief Warden.
- Students residing outside the campus must produce a medical certificate from a Registered Medical practitioner and the same should be duly endorsed by parent/guardian and also by IMO, within five days.
- A student who misses the make-up exam will normally not be given another make-up exam. However, in exceptional cases of prolonged illness resulting in the student missing a make-up exam, the Chairperson of the Senate may permit the student to appear for a second make-up exam.

M.Tech. Dissertation Evaluation

The M.Tech. Dissertation work is done in the last year of the postgraduate programme and is divided into two stages. Normally the first stage is done in ODD semester and the second stage in subsequent EVEN semester. Through the dissertation work, the



student has to exhibit depth in terms of engineering or technological innovation or research ability to solve the contemporary problem. On completion of the work, the student will submit a project report that will be evaluated by duly appointed examiners. It is proposed to have at least one expert as part of the examining committee from external Institute/Organization. The panel of examiners should be finalized by HoD in consultation with all faculty members of the concerned department. The dissertation evaluation will be based on combining the reports of internal examiners and external expert(s). Suitable weightage must be given to the qualitative and quantitative results of the project and evaluated by a viva-voce exam.

Grading

- The faculty will return evaluated assignments, tutorials, term papers, etc., within two weeks after the respective test/examination.
- Only the final grades (after approval by DCC) and attendance of all the students should be communicated by the teachers of the courses. Students may seek clarification regarding grades etc., from the concerned Course coordinator, if required.
- The DCC will be convened within ten days after the last day of the end-term examination. The letter grades to be awarded to the students for different subjects will be finalized at the meeting.
- Based on the relative performance, each student is awarded a final letter grade in each course. The letter grades and the grade points are as follows:

Grade	Grade Points	Description of Grades
S	10	Outstanding
A	9	Excellent
B	8	Very Good
C	7	Good
D	6	Average
P	5	Below Average
F	0	Failure
W	0	Failure due to insufficient attendance
I	0	Actual grade to be awarded later

1. A student is considered to have credited a course or earned credits in respect of a course if he/she secures a grade other than F, W or I for that course.



2. A 'W' grade is treated as equivalent to 'F' for the purpose of CGPA calculation, and the following criteria, in addition to poor attendance (less than 80%) may be considered for the award of 'W' grade:

- I. Badly incomplete in-semester record (due to non-medical reasons),
- II. Misconduct or use of unfair means in the examination, assignments, etc., or a behaviour serious enough to call for disciplinary action in the opinion of the Faculty advisor or teacher of a course.

In such cases, award of 'W' grade is taken up as an immediate action. Further, the case may be referred to the DC for consideration of further punishment depending on the seriousness of the offence.

Ph.D.

Constitution of DRC and progress during Ph.D.

1. Candidate will enroll for coursework, as self-study/lectures and complete 12 credits achieving a letter grade of at least 7.0 grade points in each course. The choice of coursework is based on decision of the candidate's supervisor and DRC and this is recommended to help the candidate with preparatory work for research.

2. Candidate's DRC will comprise of a Chairperson (Head of Dept. (HoD) or his/her nominee, usually of the rank of Professor) preferably from the same department, Internal Expert - Area expert from the Department, External Expert - Area expert from another department and the Supervisor. The same should be informed to the Dean (Academics) through DRPC. Reconstitution of DRC member(s) with internal/external experts is subjected to approval from DRPC and Dean (Academics). In such a case the outgoing internal/external expert is not responsible for the candidates' further progress.

3. Candidate will have to appear for a Comprehensive Examination, within two years of registration of Ph.D., based on the courses approved by DRC. He/she will have to demonstrate satisfactory progress/performance in written examination or course viva-voce and must fulfil the departmental norms in force for evaluation of course works from time to time.

4. Candidate will present a research seminar as a part of the comprehensive examination to the DRC. In this presentation, he/she should identify his/her problem statement, thesis title and methodologies in the chosen problem area(s). He/she should have preferably published at least one paper in a reputed conference. The DRC



may then approve and recommend him/her for "Confirmation of Registration" of Ph.D. along with confirming the area/title of his/her proposed work by a written communication to Dean (Academic) through DRPC. A maximum of two chances will be given for completion of comprehensive examination within the stipulated time. In case, the student is not able to clear Comprehensive Examination in the first attempt, one last chance will be given for completion, within the stipulated 2 years' time.

5. Candidate will give a research progress seminar every semester before the DRC. His/her progress will be monitored with recommendations that must be effectively incorporated by him/her. Candidate will be evaluated for his/her research progress through the seminar conducted in each semester, which will further be graded as- "SA" for satisfactory and "US" for unsatisfactory. The DRC sends these reports/comments to the Dean (Academic) through DRPC at the end of every semester. The DRC has to maintain an adequate record of the candidate's progress and communicate the same to the Dean (Academics) through DRPC at the end of every year.

6. If a candidate gets "US" for the first time, the DRC warns the candidate and allows him/her to proceed with the research work. In case the candidate gets "US" grade second time, his/her case may be recommended by the DRC for termination of Ph.D. registration. The recommendation should be forwarded in the form of a report to the Dean (Academics) through DRPC.

3.0 STAFF

3.1 Faculty

Department of Computer Science and Engineering

Sr. No.	Name	Designation
1	Dr. Damodar Reddy Edla	Associate Professor
2	Dr. Veena Thenkanidiyoor	Associate Professor
3	Dr. Purushothama B.R.	Associate Professor
4	Dr. Keshavamurthy B. N	Associate Professor
5	Dr. S Mini	Associate Professor
6	Dr. Pravati Swain	Assistant Professor
7	Dr. Venkatanareshbabu Kuppili	Assistant Professor
8	Dr. Modi Chirag Navinchandra	Associate Professor
9	Mrs. Helga V Lobo	Faculty on Contract



Department of Electrical and Electronics Engineering

Sr. No.	Name	Designation
1	Dr. Suresh Mikkili	Associate Professor
2	Dr. B. Venugopal Reddy	Associate Professor
3	Dr. Sree Raj E.S	Associate Professor
4	Dr. Amol Deodas Rahulkar	Associate Professor
5	Dr. C. Vyjayanthi	Associate Professor
6	Dr. Soumitra Das	Associate Professor
7	Mrs. Anudevi Samuel	Faculty on Contract
8	Dr. Ansal V.	Faculty on Contract

Department of Electronics and Communication Engineering

Sr. No.	Name	Designation
1	Dr. Vasantha M. H. Rao	Associate Professor
2	Dr. T. Veerakumar	Associate Professor
3	Dr. Anirban Chatterjee	Associate Professor
4	Dr. Nithin Kumar Y. B	Associate Professor
5	Dr. Trilochan Panigrahi	Associate Professor
6	Dr. Prashanth G. R.	Associate Professor
7	Dr. Shivnarayan Patidar	Assistant Professor
8	Dr. Lalat Indu Giri	Assistant Professor
9	Dr. Pragati Patel	Assistant Professor
10	Dr. E. Mallikarjun	Assistant Professor
11	Dr. Lokesh Kumar Bramhane	Assistant Professor
12	Dr. Shubhro Chakrabartty	Faculty on Contract

Department of Humanities and Sciences & Applied Sciences

Sr. No.	Name	Designation
1	Dr. Saidi Reddy Parne	Associate Professor
2	Dr. Velavan Kathirvelu	Associate Professor
3	Dr. Sarani Ghosal Mondal	Associate Professor
4	Dr. Ragoju Ravi	Associate Professor
5	Dr. Ravi Prasad K. J	Associate Professor
6	Dr. Shangerganesh L.	Assistant Professor
7	Dr. Sunil Kumar A.	Assistant Professor
8	Dr. G. Shiva Kumar Reddy	Faculty on Contract



9	Dr. Gajanan T. Hivale.	Faculty on Contract
10	Dr. Suman Gandhi	Faculty on Contract
11	Dr. Lasitha P.	Faculty on Contract

Department of Mechanical Engineering

Sr. No.	Name	Designation
1	Dr. B Santhi	Assistant Professor
2	Dr. Prasenjit Dey	Assistant Professor
3	Dr. Pankaj Kumar	Faculty on Contract
4	DR. Anoop A D	Faculty on Contract
5	Dr. Shubham Tripathi	Faculty on Contract
6	Dr. Pravin Anandrao Pawar	Faculty on Contract
7	Dr. Manvendra Tiwari	Faculty on Contract
8	Dr. Vinod Kumar Singh	Faculty on Contract
9	Dr. Avinish Tiwari	Faculty on Contract

Department of Civil Engineering

Sr. No.	Name	Designation
1	Dr. Harish N.	Assistant Professor
2	Dr. Harikumar M.	Assistant Professor
3	Ms. Vanessa Fernandes	Faculty on Contract
4	Dr. Ankit Balvanshi	Faculty on Contract
5	Dr. Nithin V. L.	Faculty on Contract
6	Dr. Ande Bhuvaneshwari Devi	Faculty on Contract

3.2 Non- Academic Staff

Sr. No.	Name	Designation
1.	Dr. Shashidhar K Kudari	Registrar
2.	Mr. Amit Kabiraj	Assistant Registrar
3.	Mr. Manmohan Sakhuja	Assistant Registrar
4.	Mr. Digamber D. Mayekar	Accountant
5.	Mr. Sudharsan S	Technical Assistant
6.	Mr. Venkata Raman Grandhi	Technical Assistant
7.	Mr. Rameez Rahman Kadavath	Technical Assistant
8.	Mr. Vijeesh V P	Technical Assistant
9.	Ms. Suvida Bipeen Madkaiker	Technical Assistant
10.	Mr. Patitapaban Pradhan	Technical Assistant



11.	Mr. Pinaki Chatterjee	Technical Assistant
12.	Mr. Digambar Ramchandra Dhengole	Technician
13.	Mr. Srinath Revoori	Technician
14.	Mr. Nijin M.	Technical Assistant
15.	Mr. Rohit Madhu Gawas	Technician
16.	Mr. Shri Ram Kumawat	Technical Assistant
17.	Ms. Swara S. Lotliker	Stenographer
18.	Mrs. Sweta Prashant Parwar	Junior Assistant
19.	Ms. Namrata Prajesh Sawant	Junior Assistant
20.	Mr. Karthikeyan M.	Junior Assistant
21.	Ms. Tallulah Rodrigues	Junior Assistant
22.	Mr. Amit Ajit Naik	Superintendent
23.	Mr. Kanneboina RajKumar	Multi- Tasking Staff
24.	Mr. Arjun Singh	Technician
25.	Mr. Pritam Nageshkar	Multi- Tasking Staff
26.	Mr. Sandeep Jaishwar	Junior Assistant
27.	Ms. Dipti Gaude	Multi- Tasking Staff
28.	Mrs. Asmita Pritam Nageshkar	Multi- Tasking Staff
29.	Mrs. Reshma R. Castelino	Technical Assistant
30.	Mr. Nikhil Uday Naik	Technician
31.	Ms. Supriya Shivaji Shet	Junior Assistant
32.	Ms. Priyanka Arun Parab	Technician
33.	Mrs. Teju Vasim Shaikh	Junior Assistant
34.	Mr. Kokate Santosh Parvatrao	Technician
35.	Mr. Anand Gachchinamath	Superintendent
36.	Mr. Koushik Shit	Technician
37.	Dr. Madhuri Debsikdar	Medical Officer on Contract
38.	Mr. Vallabh Ganapati Shenvi Velingkar	Resident Engineer on Contract
39.	Mr. B. V Raghu	Security & Housekeeping In charge on Contract
40.	Dr. S. Kumaraguru	Student Activity and Sports Officer on Contract



4.0 ACADEMIC PROGRAMMES 2021-2022

Course-wise Enrolment

Course-wise enrolment Undergraduate Courses (B. Tech)

	Total Number of Students			Out of total no. of Students																	
				SC			ST			OBC			EWS			General			DASA		
B (Boys) G (Girls)	B	G	T	B	G	T	B	G	T	B	G	T	B	G	T	B	G	T	B	G	T
2021-2022	143	40	183	18	8	26	13	3	16	39	9	48	16	2	18	55	17	72	2	1	3

***B-Boys, G-Girls, T-Total**

4.1 Total number of Students in 2021-22

Under Graduate Students: **658**

4.2 Course-wise enrolment Postgraduate Courses (M. Tech)

	Total Number of Students			Out of total no. of Students														
				SC			ST			OBC			EWS			General		
B (Boys) G (Girls)	B	G	T	B	G	T	B	G	T	B	G	T	B	G	T	B	G	T
2021-2022	41	17	58	8	2	10	1	1	2	13	5	18	3	1	4	16	8	24

***B-Boys, G-Girls, T-Total**

Total number of Students in 2021-22

Postgraduate Graduate Students: **111**



4.3 Course-wise enrolment Doctorate Courses (Ph.D.)

	Total No. of Students			Out of total no. of Students														
				SC			ST			OBC			General			Others		
B (Boys) G (Girls)	B	G	T	B	G	T	B	G	T	B	G	T	B	G	T	B	G	T
2021-2022	29	13	42	1	1	2	1	0	1	10	2	12	17	10	27	0	0	0

***B-Boys, G-Girls, T-Total**

Total number of Students in 2021-22 Ph.D. Students: PT-51 FT-54 = 105 (Studying)

5.0 ADMINISTRATIVE AND STATUTORY BODIES AND OTHER COMMITTEES

The Board of Governors of National Institute of Technology Goa was constituted as per NIT Act, 2007 and NIT (Amendment) Act, 2012, by MOE, New Delhi vide letter no. F.No.23-2/2012-TS.III. Dated 13th August 2012.

5.1 Board of Governors

Prof. Gopal Mugeraya Director, National Institute of Technology Goa	Chairman & Ex-Officio Member
Smt. Darshana M Dabral Financial Advisor, Dept of Higher Education MOE, Govt of India	Member (Nominated by Central Govt.)
Ms. Saumya Gupta IAS Joint Secretary (NIT), MoE, Govt of India,	Member (Nominated by Central Govt.)
Prof. B. G. Fernandes Professor & Head of Department of Electrical Engineering, Director, IIT Bombay)	Member
Dr. Venkatesh Ganesh Prabhu Desai Chairman, Chandranath Education Society, Assolda, Quepem, Goa	Member (State Nominee)
Mr. Vijaykumar Chandrakant Verekar Educationist, 226, Chandrakant Building, Sunder Peth, Sanquelim, Goa-403505	Member (State Nominee)



Dr. Velavan Kathirvelu Associate Professor, Department of AS NIT Goa	Internal Board Member
Dr. Damodar Reddy Edla, Associate Professor Department of CSE NIT Goa	Internal Board Member
Dr. Shashidhar K Kudari Registrar , NIT Goa	Member Secretary

5.2 Finance Committee

Prof. Gopal Mugeraya Director, National Institute of Technology Goa	Chairman & Ex-Officio Member
Smt. Darshana M Dabral Financial Advisor, Dept of Higher Education, MOE, Govt of India	Member (Nominated by Central Govt.)
Ms. Saumya Gupta IAS Joint Secretary (NIT), MoE, Govt of India	Member
Dr. Velavan Kathirvelu Associate Professor, Department of AS NIT Goa	Member
Dr. Shashidhar K Kudari Registrar	Member Secretary

5.3 Senate

Prof. Gopal Mugeraya Director, NIT Goa	Chairman
Dr. Veerakumar T., Dean Academics Associate Professor ECE, NIT Goa	Member
Dr. Velavan Kathirvelu, Dean (Students Welfare) Associate Professor of AS, NIT Goa	Member
Dr. Vyjayanthi C, Dean (Faculty Welfare) Associate Professor of EEE, NIT Goa	Member
Dr. P. Saidi Reddy , Dean (Research & Consultancy) Associate Professor of AS, NIT Goa	Member
Dr. Vasantha M.H., Dean (Planning & Development) Associate Professor of ECE, NIT Goa	Member
Dr. Trilochan P., Dean (Institutional Relations & Alumni Affairs) Associate Professor of ECE, NIT Goa	Member
Dr. Prashanth G.R Associate Professor, HoD, ECE, NIT Goa	Member



Dr. Soumitra Das, Associate Professor, HoD, EEE, NIT Goa	Member
Dr. Purushothama B.R. Associate Professor, HoD, CSE, NIT Goa	Member
Dr. Sarani Ghosal Mondal, Associate Professor, HoD, HS, NIT Goa	Member
Dr. Damodar Reddy Edla Associate Professor, HoD, Mechanical Engineering, NIT Goa	Member
Dr. Dr. Sree Raj E.S Associate Professor, HoD, Civil Engineering, NIT Goa	Member
Prof. Vijay H Desai Department of Mechanical Engineering, NIT Karnataka, Surathkal	External Member
Prof. N C Shivaprakash Department of Instrumentation, Indian Institute of Science, Bangalore	External Member
Dr. Geetha B Department of Humanities and Social Sciences, BITS Pilani, K K Birla Goa Campus	External Member
Dr. Shashidhar K Kudari Registrar, NIT Goa	Secretary

5.4 Building and Works Committee

Prof. (Dr.) Gopal Mugeraya Director, NIT Goa	Chairman
Shri. Vallabh G. S. Velingkar Project Manager cum Resident Engineer (On Contract) by State PWD (Civil) the State Govt.)	Member (Expert Nominated)
Dr. C. Vyjayanthi Dean (FW), NIT Goa	Member (Nominated by Board NIT Goa)
Dr. Vasantha M.H Dean (P&D) NIT Goa	Member
Prof. B. V. S. Viswanadham Dean (P&D), IIT Bombay	Member
Dr. Shashidhar K. Kudari Registrar, NIT Goa	Ex-Officio, Member Secretary



6.0 CONCESSIONS FOR SCs, STs and PwD STUDENTS

6.1 Concessions provided for students:

- SC, ST and Physically Handicapped students in the institute are helped in many ways.
- There is reservation for admission for the UG courses as per the norms of the government of India.(15% for SC, 7.5% for ST and 2.5 % for Handicapped, 27% for OBC and 10% reservation for EWS students from supernumerary seats)
- Scholarships are given to the SC/ST Students(Vide section 4.6)

6.2 Concessions provided for staff

- There is reservation for the SC and ST Candidates for appointment and promotion as per the Govt. Norms. (15% for SC and 7.5% for ST and 27% for OBC and 10% for EWS).

7.0 PUBLICATIONS, SEMINARS,WORKSHOPS

Several workshops had been conducted and the faculty members engaged themselves actively in the research works.

7.1 Publications accepted /published or Book Chapters:

Sr. No.	Publication details	Faculty Member	Department
1.	Ketan Sabale, Saunhita Sapre, S. Mini: Obstacle Handling Mechanism for Mobile Anchor Assisted Localization in Wireless Sensor Networks, IEEE Sensors Journal, 21 (19), pp. 21999 - 22010, October 2021.	Dr. S. Mini	CSE
2.	Ketan Sabale, S. Mini: Localization in Wireless Sensor Networks with Mobile Anchor Node Path Planning Mechanism, Information Sciences (Elsevier), vol. 579, pp. 648-666, November 2021.	Dr. S. Mini	CSE
3.	Jaiswal, A., Chandel, S., Muzumdar, A., Modi, C., G. M., M., Vyjayanthi, C. (2022). NITG Chain: A Scalable, Private and Permissioned Blockchain with Proof of Reputation Consensus Method. In:	Dr. Modi Chirag N	CSE



	Rao, U.P., Patel, S.J., Raj, P., Visconti, A. (eds) Security, Privacy and Data Analytics. Lecture Notes in Electrical Engineering, vol 848. Springer, Singapore.		
4.	Dudeja, H., Modi, C. (2021). Runtime Program Semantics Based Malware Detection in Virtual Machines of Cloud Computing. In: Venugopal, K.R., Shenoy, P.D., Buyya, R., Patnaik, L.M., Iyengar, S.S. (eds) Data Science and Computational Intelligence. ICInPro 2021. Communications in Computer and Information Science, vol 1483. Springer, Cham.	Dr. Modi Chirag N	CSE
5.	G. M. Madhu, C. Vyjayanthi and C. N. Modi, "Investigation on Effect of Irradiance Change in Maximum Power Extraction From PV Array Interconnection Schemes During Partial Shading Conditions," in IEEE Access, vol. 9, pp. 96995-97009, 2021.	Dr. Modi Chirag N	CSE
6.	A. A. Muzumdar, C. N. Modi, M. G. M and C. Vyjayanthi, "A trustworthy and incentivized smart grid energy trading framework using distributed ledger and smart contracts," Journal of Network and Computer Applications, Elsevier, vol. 183, pp. 103074-103089, 2021	Dr. Modi Chirag N	CSE
7.	A. A. Muzumdar, C. N. Modi, M. G. M and C. Vyjayanthi, "Designing a Robust and Accurate Model for Consumer Centric Short Term Load Forecasting in Microgrid Environment," in IEEE Systems Journal, doi: 10.1109/JSYST.2021.3073493.	Dr. Modi Chirag N	CSE
8.	M. G M, C. Vyjayanthi and C. Modi, "Change in Power based P&O Algorithm for Maximum Power Extraction in Solar Energy Conversion System," 2021 9th IEEE International Conference on Power Systems (ICPS), 2021, pp. 1-6, doi: 10.1109/ICPS52420.2021.9670210.	Dr. Modi Chirag N	CSE
9.	Shilpee Prasad and Purushothama B R, "CCA Secure and Efficient Proxy Re-Encryption Scheme Without Bilinear Pairing", Journal of Information Security and Applications, Vol. 58, 2021, pp. 102703, Elsevier, DOI: 10.1016/j.jisa.2020.102703.	Dr. Purushothama B R	CSE



10.	Payal Sharma, B. R. Purushothama, Security Analysis of Group Key Management Schemes in Wireless Sensor Networks Against IND-SAOA Game. SN Comput. Sci. 2(4): 261 (2021)	Dr. Purushothama B R	CSE
11.	Gaurav Pareek, B. R. Purushothama, Secure and efficient revocable key-aggregate cryptosystem for multiple non-predefined non-disjoint aggregate sets. J. Inf. Secur. Appl. 58: 102799 (2021)	Dr. Purushothama B R	CSE
12.	Gaurav Pareek, B. R. Purushothama, Blockchain-based decentralised access control scheme for dynamic hierarchies. Int. J. Inf. Comput. Secur. 16(3/4): 324-354 (2021)	Dr. Purushothama B R	CSE
13.	Shravani Mahesh Patil, B. R. Purushothama, Pixel co-ordinate-based secret image sharing scheme with constant size shadow images. Comput. Electr. Eng. 89: 106937 (2021)	Dr. Purushothama B R	CSE
14.	Gaurav Pareek, B. R. Purushothama, KAPRE: Key-aggregate proxy re-encryption for secure and flexible data sharing in cloud storage. J. Inf. Secur. Appl. 63: 103009 (2021)	Dr. Purushothama B R	CSE
15.	Gaurav Pareek, B. R. Purushothama, TP-PRE: threshold progressive proxy re-encryption, its definitions, construction and applications. J. Ambient Intell. Humaniz. Comput. 12(2): 1943-1965 (2021)	Dr. Purushothama B R	CSE
16.	Diana Miranda, Veena Thenkanidiyoor, Dileep Aroor Dinesh, "Review on approaches to concept detection in medical images", Biocybernetics and Biomedical Engineering, 42, 2022, 453-462	Dr. Veena Thenkanidiyoor	CSE
17.	Synthesis and characterization of spray deposited nanostructured WO ₃ thin films for ammonia sensing applications SS Rao, SR Parne, P Nagaraju, VSCS Vaddadi, Y Vijayakumar, DR Edla Inorganic Chemistry Communications 144, 109892	Dr. Damodar Reddy Edla	CSE
18.	A Survey on Convolutional Neural Networks for MRI Analysis S Hardaha, DR Edla, SR Parne Wireless Personal Communications, 1-21	Dr. Damodar Reddy Edla	CSE
19.	Intelligent IDS: Venus Fly-Trap Optimization with Honeypot Approach for Intrusion Detection and Prevention SC Movva, S Nikudiya, VS Basanaik,	Dr. Damodar Reddy Edla	CSE



	DR Edla, H Bhukya Wireless Personal Communications, 1-23		
20.	Understanding the Surface Morphology of High Strength Cryorolled Aluminum Alloy 5754 by Atomic Force Microscopy. P Kumar, PS Reddy, DR Edla IUP Journal of Mechanical Engineering 15 (3)	Dr. Damodar Reddy Edla	CSE
21.	Fibonacci tree structure based privacy preserving public auditing for IoT enabled data in cloud environment R Mishra, D Ramesh, DR Edla, N Mohammad Computers and Electrical Engineering 100, 107890	Dr. Damodar Reddy Edla	CSE
22.	A customized acutance metric for quality control applications in MRI S Venuji Renuka, DR Edla, J Joseph Medical & Biological Engineering & Computing 60 (5), 1511-1525	Dr. Damodar Reddy Edla	CSE
23.	Prospects of spray pyrolysis technique for gas sensor applications-A comprehensive review SR Sriram, SR Parne, N Pothukanuri, DR Edla Journal of Analytical and Applied Pyrolysis, 105527	Dr. Damodar Reddy Edla	CSE
24.	Epileptic seizure endorsement technique using DWT power spectrum A Ghuli, DR Edla, JMRS Tavares The Journal of Supercomputing 78 (6), 8604-8624	Dr. Damodar Reddy Edla	CSE
25.	A Noise-robust and Overshoot-free Alternative to Unsharp Masking for Enhancing the Acuity of MR Images DR Edla, VR Simi, J Joseph Journal of Digital Imaging, 1-20	Dr. Damodar Reddy Edla	CSE
26.	DS-Chain: A secure and auditable multi-cloud assisted EHR storage model on efficient deletable blockchain R Mishra, D Ramesh, DR Edla, L Qi Journal of Industrial Information Integration 26, 100315	Dr. Damodar Reddy Edla	CSE
27.	Automated MRI restoration via recursive diffusion DR Edla, S Venuji Renuka, J Joseph The European Physical Journal Plus 137 (2), 1-14	Dr. Damodar Reddy Edla	CSE



28.	Blockchain assisted privacy-preserving public auditable model for cloud environment with efficient user revocation R Mishra, D Ramesh, DR Edla, MC Trivedi Cluster Computing, 1-25	Dr. Damodar Reddy Edla	CSE
29.	A Location-less Energy Efficient Algorithm for Load Balanced Clustering in Wireless Sensor Networks S Madhu, RK Prasad, P Ramotra, DR Edla, A Lipare Wireless Personal Communications 122 (2), 1967-1985	Dr. Damodar Reddy Edla	CSE
30.	An objective measure for assessing the quality of contrast enhancement on magnetic resonance images SV Renuka, DR Edla, J Joseph Journal of King Saud University-Computer and Information Sciences	Dr. Damodar Reddy Edla	CSE
31.	Prediction of malignancy in lung nodules using combination of deep, fractal, and gray-level co-occurrence matrix features A Naik, DR Edla, R Dharavath Big data 9 (6), 480-498	Dr. Damodar Reddy Edla	CSE
32.	Nanostructured WO ₃ based gas sensors: A short review SR Sriram, S Parne, VSCS Vaddadi, D Edla, P Nagaraju, RR Avala, ... Sensor Review	Dr. Damodar Reddy Edla	CSE
33.	A no-reference metric to assess quality of denoising for Magnetic Resonance images VR Simi, DR Edla, J Joseph Biomedical Signal Processing and Control 70, 102962	Dr. Damodar Reddy Edla	CSE
34.	Elimination of EOG signals from raw EEG signals using step size based recursive least squares-least mean fourth adaptive algorithm S Chintala, J Thangaraj, DR Edla Applied Acoustics 180, 108097	Dr. Damodar Reddy Edla	CSE
35.	Experimental analysis of machine learning methods for credit score classification D Tripathi, DR Edla, A Bablani, AK Shukla, BR Reddy Progress in Artificial Intelligence 10 (3), 217-243	Dr. Damodar Reddy Edla	CSE
36.	Book Publication: Scramjet Combustion- Fundamental and Advances, Butterworth-Heinemann Publisher, Elsevier 2022, ISBN: 978-0-323-99565-8.	Dr. Manvendra Tiwari	MCE



37.	Dey, Prasenjit, Sandip K. Saha, and Sandip Sarkar. "Study of the interactions of sneezing droplets with particulate matter in a polluted environment. " Physics of Fluids 33, no. 11 (2021): 113310.	Dr. Prasenjit Dey	MCE
38.	Dey, Prasenjit, Danush Raj, and Sandip K. Saha. "A Numerical Study on Condensation Heat Transfer Characteristics of R134a in Microchannel Under Varying Gravity Conditions." Microgravity Science and Technology 33, no. 3 (2021): 1-20.	Dr. Prasenjit Dey	MCE
39.	Dey, Prasenjit. "Optimal position of square cylinder vortex generator in channel is not a function of ordinate only—A heat transfer and optimization study." Engineering Science and Technology, an International Journal 28 (2022): 101013.	Dr. Prasenjit Dey	MCE
40.	Experimental and Numerical Investigations of Fatigue and Fracture Performance of Metal Inert Gas Welded Al 3.4 Mg Aluminium Alloy. Journal of the Brazilian Society of Mechanical Sciences and Engineering	Dr. Pankaj Kumar	MCE
41.	Experimental and extended finite element simulations for tensile fracture phenomenon of cryorolled aluminium alloy 5754. Part C: Journal of Mechanical Engineering Science	Dr. Pankaj Kumar	MCE
42.	Subhamoy Sen, Eshwar Kuncham, Pankaj Kumar, Himanshu Pathak. An Online Model-based Fatigue Life Prediction Approach Using Extended Kalman Filter. Theoretical and Applied Fracture Mechanics	Dr. Pankaj Kumar	MCE
43.	Raviraj Verma, Pankaj Kumar, R. Jayaganthan, Himanshu Pathak: Extended Finite Element Simulation on Tensile, Fracture Toughness and Fatigue Crack Growth Behaviour of Additively Manufactured Ti6Al4V Alloy. Theoretical and Applied Fracture Mechanics	Dr. Pankaj Kumar	MCE
44.	Numerical Investigation of Fracture Performance of Additively Manufactured Titanium-Alloy, In book: Advanced Materials for Biomechanical Applications, Chapter: 12, Publisher: Taylor and Francis, Editors: Ashwani Kumar, Mangey Ram,	Dr. Manvendra Tiwari, Dr. Pankaj Kumar	MCE



	Yogesh kumar Singla		
45.	Understanding the surface morphology of high strength cryorolled aluminium alloy 5754 by atomic force microscopy. IUP Publications [Accepted, 2022]	Dr. Pankaj Kumar, Dr. Parne Saidi Reddy, Dr. Damodar Reddy Edla	MCE, APS, CSE
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47.	Dipty Sarin Isaac, Vinish V Nair, Harikumar Mohanan, 2022, Background review and development of a coir-based hybrid geosynthetic, Arabian Journal of Geosciences,15:1308, doi.org/10.1007/s12517-022-10584-7 JULY 2022	Dr. Harikumar M	Civil
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138.	L. Shangerganesh, G. Sathishkumar, N. Nyamoradi and S. Karthikeyan, Blow-up phenomena of a cancer invasion model with nonlinear diffusion and haptotaxis term, Bulletin of the Malaysian Mathematical Sciences Society, 44 (2021) 1215-231.	Dr. L. Shangerganesh	APS
139.	J Manimaran and L Shangerganesh, Error estimates for the Galerkin finite element approximations of time-fractional nonlocal diffusion equation, International Journal of Computer Mathematics, 98(7) (2021) 1365-1384.	Dr. L. Shangerganesh	APS
140.	J. Manimaran, L. Shangerganesh and A. Debbouche, Finite element error analysis of a time-fractional nonlocal diffusion equation with the Dirichlet energy, Journal of Computational and Applied Mathematics, 382(2021) 113066.	Dr. L. Shangerganesh	APS



141.	GSK Reddy, Ravi Ragoju, Thermal instability of a Maxwell fluid saturated porous layer with chemical reaction, Special Topics & Reviews in Porous Media — An International Journal 13.	Dr. Ravi Ragoju	APS
142.	S Shekhar, Ravi Ragoju, GJ Reddy, MA Sheremet The Coriolis Effect on Thermal Convection in a Rotating Sparsely Packed Porous Layer in Presence of Cross-Diffusion , Coatings 12 (1), 23.	Dr. Ravi Ragoju	APS
143.	GSK Reddy, R Ragoju, Thermal instability of a power-law fluid-saturated porous layer with an internal heat source and vertical throughflow, Heat Transfer 51 (2), 2181-2200	Dr. Ravi Ragoju	APS
144.	S Shekhar, R Ragoju, D Yadav, The effect of variable gravity on rotating Rayleigh-Bénard convection in a sparsely packed porous layer, Heat Transfer 51 (5), 4187-4204.	Dr. Ravi Ragoju	APS
145.	R Ragoju, M Singh, Secondary instabilities on double-diffusive convection in an anisotropic porous layer with Soret effect, Heat Transfer 51 (5), 4799-4818.	Dr. Ravi Ragoju	APS
146.	Spin-speed independent thickness and molecular adsorption behaviour of polyelectrolyte multilayers, Boranna, Rakshith; Nataraj, Chandrika Thondagere; Jagannath, Raviprasad Kogravalli; Pahal, Suman; Varma, Manoj M; Prashanth, Gurusiddappa R; The European Physical Journal Applied Physics.	Dr. Ravi Prasad KJ	APS
147.	An inertial sensing mechanism for measuring gait parameters and gait energy expenditure, Vidyarani, KR; Talasila, Viswanath; Megharjun, N; Supriya, M; Prasad, KJ Ravi; Prashanth, GR; Biomedical Signal Processing and Control.	Dr. Ravi Prasad KJ	APS
148.	An Exponential Filtering Based Inversion Method for Microwave Imaging, Magdum, Amit; Erramshetty, Mallikarjun; Jagannath, Ravi Prasad K; Radioengineering.	Dr. Ravi Prasad KJ	APS



149.	A 2× 2 planar array of Clover-leaf shaped printed antennas for weather-monitoring based applications, Kola, Kalyan Sundar; Chatterjee, Anirban; Jagannath, Ravi Prasad K; International Journal of RF and Microwave Computer-Aided Engineering.	Dr. Ravi Prasad KJ	APS
150.	Design of highly-directive Night-flowering Jasmine-shaped printed radiator based array for Ku-band applications, Sundar Kola, Kalyan; Chatterjee, Anirban; Jagannath, Ravi Prasad K; International Journal of Communication Systems.	Dr. Ravi Prasad KJ	APS
151.	Design of highly-directive night-flowering Jasmineshaped printed radiator-based array for Ku band applications, Kola, KS; Chatterjee, A; Jagannath, RPK; Int J Commun Syst.	Dr. Ravi Prasad KJ	APS
152.	Fluorescence Signal Enhancement by a Spray-Assisted Layer-by-Layer Technique on Aluminum Tape Devices for Biosensing Applications, Boranna, Rakshith; Nataraj, Chandrika Thondagere; Bannur Nanjunda, Shivananju; Pahal, Suman; Jagannath, Raviprasad Kogravalli; Prashanth, Gurusiddappa R;.	Dr. Ravi Prasad KJ	APS
153.	Comparative Analysis of Ridge and Slot Sidewall-Etched Waveguide Bragg Grating for Cancer Cell Detection, Vishwaraj, Naik Parrikar; Dhanyashree, KC; Nataraj, Chandrika T; Jagannath, Ravi Prasad K; Prashanth, Gurusiddappa R; Langmuir, 2022 Workshop on Recent Advances in Photonics (WRAP).	Dr. Ravi Prasad KJ	APS
154.	Fractional Regularized Distorted Born Iterative Method for Permittivity Reconstruction, Magdum, Amit; Erramshetty, Mallikarjun; Jagannath, Ravi Prasad K; Boranna, Rakshith; Vishwaraj, Naik Parrikar; Pahal, Suman	Dr. Ravi Prasad KJ	APS
155.	Fast-Dip Layer-by-Layer Self-Assembly of Polyelectrolytes as a Low-Cost Biosensing Platform, Macromolecular Chemistry and Physics, Nataraj, Chandrika Thondagere; Jagannath, Raviprasad Kogravalli; Nanjunda, Shivananju Bannur; Prashanth, Gurusiddappa , Radioengineering Macromolecular Chemistry and	Dr. Ravi Prasad KJ	APS



	Physics		
156.	Al-Balushi M, Lakkimsetty NR, Varghese MJ, Lakavat M, Reddy PS, Gandhi S. Evaluating the solar Photo-Fenton as photocatalyst process by response surface methodology to treat the saline water. <i>Materials Today: Proceedings</i> . 2021 Jul 13. https://doi.org/10.1016/j.matpr.2021.07.024	Dr. Suman Gandhi	APS
157.	Rao LN, Lakavat M, Gandhi S, Reddy PS, Sri GK. Extraction and characterization of cellulose from agricultural waste materials. <i>Materials Today: Proceedings</i> . 2021 Jul 14. https://doi.org/10.1016/j.matpr.2021.07.030	Dr. Suman Gandhi	APS
158.	Guddla GT, Katta VK, Gandhi S, Ambadipudi S, Ravuri BR. The role of titanium content in $(\text{Ni}_{75}\text{Cr}_{15}\text{Si}_{10})_{100-x}\text{Ti}_x$ bulk metallic glass systems to elevate mechanical and corrosion properties. <i>Phase Transitions</i> . 2021 Oct 3;94(10):679-90. https://doi.org/10.1080/01411594.2021.1957103	Dr. Suman Gandhi	APS
159.	Gandhi S, Panda SS, Parne SR, Lakavat M, Lakkimsetty NR, Gandhi SS. Amorphous $\text{SnO-Sb}_2\text{O}_3\text{-SiO}_2$ glassy anode: high-performance electrode materials for Na-ion batteries. <i>Journal of Materials Science: Materials in Electronics</i> . 2021 Nov;32(22):26709-15. https://doi.org/10.1007/s10854-021-07048-1	Dr. Suman Gandhi	APS
160.	Vaddadi VS, Parne SR, Vijeesh VP, Gandhi S, Cenkeramaddi LR. Design and Implementation of Density Sensor for Liquids Using Fiber Bragg Grating Sensor. <i>IEEE Photonics Journal</i> . 2021 Nov 22;14(1):1-6. https://doi.org/10.1109/JPHOT.2021.3129587	Dr. Suman Gandhi	APS
161.	Gandhi S, Vaddadi VS, Panda SS, Parne SR, Lakavat M, Bhaumik A. Tribological Studies of Bulk Metallic Glasses: Structure, Preparation, Surface Treatment, and Coating. In <i>Handbook of Research on Tribology in Coatings and Surface Treatment 2022</i> (pp. 330-358). IGI Global. https://doi.org/10.4018/978-1-7998-9683-	Dr. Suman Gandhi	APS



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162.	Gandi S, Vaddadi VS, Panda SS, Goona NK, Parne SR, Lakavat M, Bhaumik A. Recent progress in the development of glass and glass-ceramic cathode/solid electrolyte materials for next-generation high capacity all-solid-state sodium-ion batteries: A review. Journal of Power Sources. 2022 Feb 15;521:230930. https://doi.org/10.1016/j.jpowsour.2021.230930	Dr. Suman Gandhi	APS
163.	Reddy, G. S. K., Koteswararao, N. V., Ravi, R., Paidipati, K. K., & Chesneau, C. (2022). Dissolution-Driven Convection in a Porous Medium Due to Vertical Axis of Rotation and Magnetic Field. Mathematical and Computational Applications, 27(3), 53.	Dr. Shiva Kumar Reddy	APS
164.	Ramchandraiah, C., Kishan, N., Reddy, G. S. K., Paidipati, K. K., & Chesneau, C. (2022). Double-Diffusive Convection in Bidispersive Porous Medium with Coriolis Effect. Mathematical and Computational Applications, 27(4), 56.	Dr. Shiva Kumar Reddy	APS
165.	Rafeek, K. V. M., Reddy, G. J., Ragoju, R., Reddy, G. S. K., & Sheremet, M. A. (2022). Impact of Throughflow and Coriolis Force on the Onset of Double-Diffusive Convection with Internal Heat Source. Coatings, 12(8), 1096.	Dr. Shiva Kumar Reddy	APS
166.	Reddy, G. S. K., Ravi, R., & Matta, A. (2022). Onset of triply diffusive convection in a power-law fluid saturated porous layer. Meccanica, 57(9), 2269-2280.	Dr. Shiva Kumar Reddy	APS
167.	Singh, M., Ragoju, R., Reddy, G., Matta, A., Paidipati, K. K., & Chesneau, C. (2022). Non-linear magnetoconvection in a bidispersive porous layer: a brinkman model. Earth Science Informatics, 1-10.	Dr. Shiva Kumar Reddy	APS
168.	Reddy, G. S. K., Ragoju, R., Dey, P., & Matta, A. (2022). Nonlinear magneto convection in an inclined porous layer with artificial neural network prediction. Mathematical Methods in the Applied Sciences.	Dr. Shiva Kumar Reddy	APS



169.	Kalyan Sundar Kola, Anirban Chatterjee, "A highly-directive hybrid-fractal radiator-based printed array for X-band amateur radio applications," <i>International Journal of Electromagnetic Waves and Applications</i> . vol. 36, no. 14, pp. 1935-1956, March 2022, [SCIE, Taylor & Francis, 1.335]	Dr. Anirban Chatterjee	ECE
170.	K.S.Kola, A. Chatterjee, R.P.K. Jagannath, "Design of highly-directive Night-flowering Jasmine-shaped printed radiator based array for Ku-band applications," <i>Int J Commun Syst.</i> , vol. 35, no. 6, pp. 1-23, Dec. 2021. [SCIE, Wiley, 1.882]	Dr. Anirban Chatterjee	ECE
171.	Kalyan Sundar Kola, R Kousalya, BNS Mahalakshmi, Anirban Chatterjee, "A high-gain and low cross-polarized wave-fractal shaped printed antenna for DBS application," <i>International Journal of Electromagnetic Waves and Applications</i> . vol. 36, no. 5, pp. 607-625, Sept. 2021. [SCIE, Taylor & Francis, 1.335]	Dr. Anirban Chatterjee	ECE
172.	Kola, KS., Chatterjee, A., "Design of a Right-Handed Circularly Polarized Printed Antenna for Vehicular Communication," <i>Wireless Personal Communications</i> , vol. 121, no. 4, pp. 2735-2756, Dec. 2021, https://doi.org/10.1007/s11277-021-08846-w . [SCIE, Springer, 1.671]	Dr. Anirban Chatterjee	ECE
173.	Kola, KS., Chatterjee, A, "A high-gain and low cross-polarized printed fractal antenna for X-band wireless application," <i>Int J Commun Syst.</i> vol. 34, no. 10, pp. 1-25, July 2021. [SCIE, Wiley, 1.882].	Dr. Anirban Chatterjee	ECE
174.	Amit Magdum, M. Erramshetty, R.P. K. Jagannath, " Fractional regularized Distorted Born Iterative Method for Permittivity Reconstruction" <i>Journal of Radio engineering</i> , 2022 JAN 2022	Dr. E. Mallikarjun	ECE
175.	A. Magdum, E. Mallikarjun, RPK Jagannath, "An Exponential Filtering Based Inversion Method for Microwave Imaging", <i>Journal of Radio</i>	Dr. E. Mallikarjun	ECE



	engineering. 2021. MAY 2021		
176.	Book Chapter: Utkarsh Umarye, Vishal Rathod, Trilochan Panigrahi, Samrat L Sabat, "Designing Low-Cost and Easy-to-Access Skin Cancer Detector Using Neural Network Followed by Deep Learning," in the book Deep Learning, Machine Learning and IoT in Biomedical and Health Informatics, Pages - 249-267, Publisher CRC Press, 2022	Dr. Trilochan Panigrahi	ECE
177.	Journals publication: Bandaru Bhavana, Shwetha Namburu, T. Panigrahi, and Samrat L Sabat, "Robust Methods for Wideband Compressive Spectrum Sensing under Non-Gaussian Noise," in <i>IEEE Communications Letters</i> , vol. 25, no. 10, pp. 3398-3402, Oct. 2021.	Dr. Trilochan Panigrahi	ECE
178.	Saran Shrihari Sripad Panda, T. Panigrahi, Saidi Reddy Parne, Samrat L. Sabat and Linga Reddy Cenkeramaddi, "Recent Advances and Future Directions of Microwave Photonic Radars: A Review," in <i>IEEE Sensors</i> , vol. 21, no. 19, pp. 21144-21158, 1 Oct.1, 2021.	Dr. Trilochan Panigrahi	ECE
179.	Annet M. Wilson, T. Panigrahi, Bishnu Prasad Mishra, and Samrat L Sabat, "Adaptive Geman-McClure Estimator for Robust Distributed Channel Estimation," in <i>IEEE Access</i> , vol. 9, pp. 93691-93702, 2021.	Dr. Trilochan Panigrahi	ECE
180.	Sumit Kale, N. K. Hem Latha, Lokesh Bramhane, "Design and Development of Reconfigurable Silicon Nanowire Schottky Barrier Transistors for Biosensor Applications", Silicon, March 2022. DOI: 10.1007/s12633-022-01840-2 MAR 2022.	Dr. Lokesh Kumar Bramhane	ECE



7.2 Workshops Conducted/Participated/attended

Sr. No.	Workshop Details (Attended)	Faculty Member	Department
1.	SPARC online workshop on “Nuclear Energy and Measurement” Organized by the Department of Instrumentation and Control Engineering, National Institute of Technology – Tiruchirappalli from 23 rd to 25 th September 2021.	Dr. Pravin Anandrao Pawar	MCE
2.	DST-SERB sponsored a five-day Karyashala (High-End International Workshop) on “Vibration Condition Monitoring and Control for Automobile and Industrial Applications” (Online Mode) Organized by the Department of Mechanical Engineering, National Institute of Technology Rourkela, Odisha, from 20 th to 24 th December 2021.	Dr. Pravin Anandrao Pawar	MCE
3.	Online faculty development program on “Biovalorisation: Trend and Prospects of Value-Added Products” Organized by Department of Biotechnology, National Institute of Technology Andhra Pradesh, Tadepalligudem, from 3 rd to 7 th January 2022.	Dr. Pravin Anandrao Pawar	MCE
4.	Two days online course on Marine Robotics Organized by IIT Palakkad held on 22 nd -23 rd January, 2022.	Dr. Pravin Anandrao Pawar	MCE
5.	One day Indo-USA SPARC workshop on Additive Manufacturing: Materials and Applications, Organized by National Institute of Technology Surathkal. 7 th February 2022.	Dr. Pravin Anandrao Pawar	MCE
6.	SERB Sponsored One Day Research Facility Training Programme (Hybrid Mode) on “Development of Ti alloy-based composites by mechanical alloying and stirrer casting route for dental applications” Organized by Department of Mechanical Engineering, IIT (BHU), Varanasi on 12 th February, 2022.	Dr. Pravin Anandrao Pawar	MCE
7.	SPARC Indo-US International virtual workshop on “India Mission for Green Hydrogen and Go Electric”, Organized by IIT Mandi on 16 th and 17 th March, 2022.	Dr. Pravin Anandrao Pawar	MCE



8.	Five Day's Online Workshop on "Sustainable Energy Research, Innovation & Business Plan" conducted by the Department of Electrical Engineering, National Institute of Technology, Silchar from 21st to 25th March 2022.	Dr. Prasenjit Dey	MCE
9.	Computational Techniques for Smart Materials Modelling and Bio-medical Applications	Dr. Pankaj Kumar	MCE
10.	National Webinar on Foundations for Infrastructure Facilities: Principles and Sustainable Practices, Don Bosco College of Engineering, Goa, Sep 2021	Dr. Harikumar M	CIVIL
11.	International Virtual Short-term course on Application of Unsaturated Soil Mechanics on the Analysis of Slopes, IIT Mandi, Durham University and Universiti Kebangsaan Malaysia	Dr. Harikumar M	CIVIL
12.	Organized an AICTE ATAL Faculty Development Program on Environmental Geotechnology from 21st-25th June 2021	Dr. Harikumar M	CIVIL
13.	Three weeks online certificate program on "Hydrometeorological and Extreme Events Disaster Risk Management" jointly organized by Indian Institute of Technology Indore and National Institute of Disaster Management.	Dr. Ankit Balvanshi	CIVIL
14.	Five Days Online AICTE Sponsored ATAL FDP on "Challenges and Opportunities in Integration of Electric Vehicles with Smart Electric Grids", 16th to 20th August 2021- Coordinator	Dr. Suresh Mikkili	EEE
15.	Delivered 3 Invited Talks at Rashtram University, Sonipat: Sri Aurobindo and the Romantic Sublime-7/01/2022	Dr. Sarani Ghosal Mondal	HSS
16.	Sri Aurobindo's Sonnets-10/01/2022	Dr. Sarani Ghosal Mondal	HSS
17.	Sri Aurobindo and the Western Tradition-12/01/2022	Dr. Sarani Ghosal Mondal	HSS
18.	Participated in NEP Conclave Series 2021 on "Implementation of NEP 2020 with a view of Bharatiya Culture" by Shri Mukul Kanitkar, National Organizing Secretary, Bharatiya Shikshan Mandal, held at Indian Institute of InformationTechnology, Nagpuron 10th April 2021.	Dr. Gajanan Hivale	HSS
19.	Participated in One Week Virtual Workshop on Recent Research Trends in Literature organized by	Dr. Gajanan Hivale	HSS



	Department of English, School of Humanities and Management, NIT Andhra Pradesh 1-7 March, 2021		
20.	ATAL FDP Programmes (AICTE Approved Programmes) Faculty Development Programme on “Productivity Enhancement” during 15th -19th March 2021. Organized in collaboration with Art of Living under AICTE Training And Learning (ATAL) Academy, New Delhi, Five-Days(15th -19th March 2021)-Workshop conducted	Dr. Saidi Reddy Parne	APS
21.	2nd Version of Faculty Development Programme on “Productivity Enhancement” during 20th -24th July 2021. Organized in collaboration with Art of Living under AICTE Training And Learning (ATAL) Academy, New Delhi, Five-Days(20th -24th July 2021)- Workshop conducted	Dr. Saidi Reddy Parne	APS
22.	Five-Day Online Faculty Development Program on Augmented Reality Supported Industrial Internet of Things (IIoT) for Electrical Drive Systems	Dr. Lokesh Kumar Brmhane	ECE
23	Resource person (Subject Expertise) for Five Days Online ATAL Faculty Development Program on “Applications of IoT in Aerospace Engineering” (Advanced) from 27th - 31st December 2021, will be conducted by Visvesvaraya Technological University, Belagavi, Sponsored by AICTE Training and Learning Academy (ATAL) Delhi.	Dr. Trilochan Panigrahi	ECE
24	EICT academy coordinators at MNIT Jaipur, IIT Guwahati, NIT Patna and IIITDM Jabalpur we thank you for delivering expert talk in in 2- Weeks online FDP on “Advanced Optimization Techniques and Hands on with MATLAB/SCILAB” from 6 to 17 Sept 2021. In this FDP total 530 participants registered from all parts of the country.	Dr. Trilochan Panigrahi	ECE

Workshop Photographs







7.3 Papers Presented/Conferences Attended

Sr. No.	Papers Presented	Faculty Member	Department
1.	“NITG Chain: A Scalable, Private and Permissioned Blockchain with Proof of Reputation Consensus Method, ” at International Conference on Security, Privacy and Data Analytics (ISPDA-2021), December 13-15, 2021, NIT Surat.	Dr. Modi Chirag N	CSE
2	“Runtime Program Semantics Based Malware Detection in Virtual Machines of Cloud Computing” The Sixteenth International Conference on Information Processing (ICInPro 2021), 22-24 October, 2021, Bangalore.	Dr. Modi Chirag N	CSE
3	Prediction of malignant lung nodules in CT scan images using cnn and feature selection algorithms J Fernandes, N Simoes, D Vaz, S Tiwari, A Naik, DR Edla 2022 International Conference on Applied Artificial Intelligence	Damodar Reddy Edla	CSE
4	Effect of Corner Curvature of Square Cylinder on Flow Transition and Heat Transfer	Dr. Prasenjit Dey	MCE
5	Numerical investigation of crack propagation in industrial pipeline using extended finite element method, Springer Proceedings, ISTAM 2022 (Accepted)	Dr. Pankaj Kumar	MCE



6	Experimental and numerical investigations of cyclic plastic deformation of cryorolled AA 5754. Springer Proceedings, ISTAM 2022 (Accepted)	Dr. Pankaj Kumar	MCE
7	Extended finite element analysis of fracture behaviour of lattice structured materials. Procedia Structural Integrity, IMPLAST 2022 (Accepted)	Dr. Pankaj Kumar	MCE
8	Papers Presented in Int. Conferences : 01 V C Chavan, Suresh Mikkili, and Praveen Kumar B, 'Novel Shade Dispersion Method to Extract Maximum Power under partial shading condition', in proceedings of 47th Annual Conference of the IEEE Industrial Electronics Society IEEE IECON 2021, 13th to 16th October 2021, Toronto, Canada	Dr. Suresh Mikkili	EEE
9	"Stock Volatility Effects of Covid-19: Insights from Indian Banking Sector" In IRTM International Conference on Interdisciplinary Research in Technology & Management in collaboration with IEEE Kolkata Section and supported by SMART Society, USA during Feb 24-26,2022 (online)	Dr. Sunil Kumar	HSS
10	"Innovation, Entrepreneurship, and Economic growth: A literature survey" in 2nd PAN NIT HSS international conference on Resilience and transformation for Global restructuring held at MNIT Jaipur from Jan 7-9, 2022.	Dr. Sunil Kumar	HSS
11	"Impact of firm size on firm performance: evidence from Indian Manufacturing sector" in 2nd PAN NIT HSS international conference on Resilience and transformation for Global restructuring being held at MNIT Jaipur during Jan 7-9, 2022	Dr. Sunil Kumar	HSS
12	International Conference on "Artificial Intelligence and Sustainable Engineering" (AISE-2020). Organized in collaboration with G L Bajaj Institute of Technology and Management, Gr. Noida, India. I am One of the Convener and Organizing Secretary. Three Days(18-20 January 2021)	Dr. Saidi Reddy Parne	APS



13	Effect of alkyl chain length on the extraction properties of U and Th using novel CnmimNTf2/isophthalamide systems, Online international conference on Chemistry for sustainable development, organized by Central University of Jharkhand, ICCSD-P17.	Dr. Velavan Kathirvelu	APS
14	Effect of isophthalamide ligand and imidazolium based ionic liquids on the extraction properties of U and Th, International Web Conference on Emerging Fields in Chemistry: Advances and Applications, organized by Govt. Kamla Devi Rathi Girls P. G. College, Rajnandgaon, C.G, India, IWC KDRGPGC CHEM'21, page 25.	Dr. Velavan Kathirvelu	APS
15	Synthesis of Isophthalamide ligand and its application for efficient extraction of UO ₂ ²⁺ and Th ⁴⁺ in ionic liquid: Mechanism and Speciation, 2nd International Conference on Chemical, Bio & Environmental Engineering, Organized by Department of Chemical Engineering, NIT Jalandhar, CHEMBIOEN-2021 A-149, page 188.	Dr. Velavan Kathirvelu	APS
16	Tuning the extraction mechanism of uranyl ion in Bicyclooctanium, Propylpyridinium, Piperidinium and Imidazolium based ionic liquids: First ever evidence of 'Cation exchange', 'Anion exchange' and 'Solvation' mechanism, International twitter conference "ChemSci2021: Leaders in the Field Symposium, third edition of the RSC sponsored virtual symposium, organized by Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR) Bangalore in association with the Chemical Science journal.	Dr. Velavan Kathirvelu	APS
17	Synthesis and application of novel diisopropylisophthalamide ligand for uranyl ion extraction in various ionic liquids, 1st International Virtual Conference on "Recent Advances in Material Science and Organic Synthesis" (RAMSOS 2021, OP 157, page 56.	Dr. Velavan Kathirvelu	APS



18	Exploring novel functionality for efficient extraction of UO ₂ ²⁺ and Th ⁴⁺ in ionic liquid: Mechanism, Speciation, Selectivity, Stability and Stripping, A National Conference on Sustainable Environment: Challenges and Opportunities, organized by Center for Continuing Education and Department of Chemistry, NIT Jalandhar. SECO 2021, PP-2, page 47.	Dr. Velavan Kathirvelu	APS
19	Comparative Analysis on Production of Biodiesel from Waste Cooking Oil by using Transesterification and Microwave Methods. International Conference on Environment and Environment (ICEE 2021), April 09-10, 2021. Jyothi Engineering College, Cheruthuruthy, Thrissur, Kerala 679531, India	Dr. Suman Gandhi	APS
20	Solar Photocatalytic Treatment of Oil Produced Water Using Zinc Oxide Photocatalys. International Conference on Environment and Environment (ICEE 2021), April 09-10, 2021, Jyothi Engineering College, Cheruthuruthy, Thrissur, Kerala 679531, India.	Dr. Suman Gandhi	APS
21	Experimental investigation on solar photofenton as photocatalyst to treat the saline water by response surface methodology” International Virtual Conference “Recent Innovations in Science & Technology (RIST 2021)” conducted on 19th & 20th June 2021, organized by ERANAD Knowledge City Technical Campus, Malappuram, Kerala, India in association with ISET Research & HEXAIND Technologies and Services.	Dr. Suman Gandhi	APS
22	Green synthesis of carbon quantum dots embedded onto titanium dioxide nanorods for enhancing photocatalytic activity" (paper-id: RIST-CH-111) in the international virtual conference, recent innovations in science & technology (RIST 2021) conducted on 19th & 20th June 2021. Organized by: Eranad Knowledge City Technical Campus, Manjeri, Kerala, India	Dr. Suman Gandhi	APS



23	Synthesis, characterization of biodiesel production from restaurant waste cooking oil" (paper-id: RIST-CH-110) in the international virtual conference, recent innovations in science & technology (RIST 2021) conducted on 19th & 20th June 2021. Organized by: Eranad Knowledge City Technical Campus, Manjeri, Kerala, India.	Dr. Suman Gandhi	APS
24	Micro structural characterization of Nanomaterials for electrochemical energy Conversion and storage technologies" in Five-day International Faculty Development Programme (Online) on "Emerging Trends in Nano Technology" 9th-13th November, 2021, Organized by Department Of Basic Science (Chemistry & Physics), Vishnu Institute Of Technology, Bhimavaram	Dr. Suman Gandhi	APS
25	International Conference on Current Trends in Advanced Materials and their Applications for Societal Development" (ICTAMASD-2022) March 8th-10th, 2022 (Online) organized by the Department of Physics, Dr. Harisingh Gour Vishwavidyalaya Sagar [MP].	Dr. Suman Gandhi	APS
26	Keynote Speaker (Topic- Remote Sensing Medical) in STTP named 'Recent Trend in Communication & Amp; EmbeddedSystem' held between 19-23 October 2022 at G H Raisonni College of Engineering, Nagpur, Maharashtra, India.	Dr. Lokesh Kumar Bramhane	ECE
27	Khekare, G., Turukmane, A.V., Dhule, C., Sharma, P., Kumar Bramhane, L. (2022). Experimental Performance Analysis of Machine Learning Algorithms. In: Qian, Z., Jabbar, M., Li, X. (eds) Proceeding of 2021 International Conference on Wireless Communications, Networking and Applications. WCNA 2021. Lecture Notes in Electrical Engineering. Springer, Singapore. https://doi.org/10.1007/978-981-19-2456-9_104 JULY 2022	Dr. Lokesh Kumar Bramhane	ECE



28	“A Simplified Deep Learning model for Acoustic Feedback Cancellation in Digital Hearing Aid,” in IEEE International Symposium of Asian Control Association on Intelligent Robotics and Industrial Automation (IRIA), 20-22nd September 2021, Virtual Conference, IIT Goa, India.	Dr. Trilochan Panigrahi	ECE
29	“Molecular Communication via Diffusion – An Experimental Setup using Alcohol Molecule,” in International Conference on Intelligent Computing and Advances in Communication (ICAC), 25-26th Nov 2021, ITER, Bhubaneswar, Odisha, India.	Dr. Trilochan Panigrahi	ECE

7.4 Conferences:

Sr. No	Conference Details	Faculty Member	Department
1.	ICFTES'22: 1 st International Conference in Fluid, Thermal and Energy Systems- 2022, Organized in NIT Calicut, INDIA	Dr. Prasenjit Dey	MCE
2.	67th Congress of the Indian Society of Theoretical and Applied Mechanics (ISTAM, 2022) international conference, IIT Mandi.	Dr. Pankaj Kumar	MCE
3.	13th International Symposium on Plasticity and Impact Mechanics (IMPLAST, 2022)	Dr. Pankaj Kumar	MCE
4	Modelling sustainability risks in sugar industry using AHP-BWM”, Materials Today: Proceedings, SEP 2021	Dr. B Santhi	MCE
5	Dipty Sarin Isaac, Vinish V Nair, Harikumar Mohanan, 2022, Development of a Monitoring System for Laboratory Investigation of Slope Failure, Proceedings of the Second International Conference on Next Generation Intelligent Systems, Rajiv Gandhi Institute of Technology, Kottayam, Kerala. JULY 2022	Dr. Harikumar M	CIVIL
6	Harikumar M, Fersana Mohamed, Ashique Muhammed, Irshad Ashraf, Shahansha M, Anand A G,2021, Clay Bricks Using Building Debris, Proceedings of the International	Dr. Harikumar M	CIVIL



	conference on Sustainable Materials and Practices for Built Environment, Manipal University Jaipur, Nov. 25-26 NOV 2021		
7	Balvanshi, A. & Tiwari, H.L. (Accepted 2021), "Quantitative Estimation of the Impact of Climate Change on Crop Evapotranspiration and Yield in Central Region of India", Russian Meteorology and Hydrology, 46(10), 696-700. 2021	Dr. Ankit Balvanshi	CIVIL
8	Balvanshi, A. & Tiwari, H.L. (Accepted 2021), "Quantitative Estimation of the Impact of Climate Change on Crop Evapotranspiration and Yield in Central Region of India", Russian Meteorology and Hydrology, 46(10), 696-700. 2021	Dr. Ankit Balvanshi	CIVIL
9	Balvanshi, A. & Tiwari, H.L. (2021), "Hydrological Simulation of a Basin using MIKE 11 NAM Model", International Conference on Ecosystem Restoration for Resilience and Sustainability: Living with nature" (World Environment Day-Launch of UN decade for Ecosystem Restoration), during 5th – 7th Jun 2021, IIT Indore. JUN 2021	Dr. Ankit Balvanshi	CIVIL
10	Devi, A.B., Deka, D., Aneesh, T.D., Srinivas, R. and Nair, A.M., 2021. Modeling the impact of future Land Use Land Cover changes on surface runoff in the Periyar River Basin, India DEC 2021	Dr. Anand Bhuvaneshwari Devi	CIVIL
11	K. T. Swetha, A. Robinson, V. R. Barry and H. K. V. Gadiraju, "An Improved Crow Search Algorithm to Control MPPT Under Partial Shading Conditions," 2021 9th IEEE International Conference on Power Systems (ICPS), pp. 1-6, 16-18 Dec. 2021	Dr. B. Venugopal Reddy	EEE
12	K. T. Swetha and V. R. Barry, "Modified Jaya Algorithm for Photovoltaic Power Tracking under Partial Shading Conditions," 2021 National Power Electronics Conference (NPEC), pp. 1-5, 15-17 Dec. 2021.	Dr. B. Venugopal Reddy	EEE
13	G. H. K. Varma, V. R. Barry and R. K. Jain, "Reconfiguration TCT Array Strategy for Superior Performance of PV Water Pumping	Dr. B. Venugopal Reddy	EEE



	System," 2021 National Power Electronics Conference (NPEC), pp. 01-06, 15-17 Dec. 2021.		
14	K. T. Swetha, V. R. Barry, A. Robinson and R. K. Jain, "A Novel Spotted Hyena Optimization algorithm for MPPT under Partial Shading Conditions," IECON 2021 – 47th Annual Conference of the IEEE Industrial Electronics Society, pp. 1-6, 13-16 Oct.2021	Dr. B. Venugopal Reddy	EEE
15	Nithin Kumar Goona, Saidi Reddy Parne, S. Sashidhar, "A proposal for Switched Magnetization Superconductor Motor", IEEE 14th Workshop on Low Temperature Electronics (WOLTE), 2021. DOI: https://doi.org/10.1109/WOLTE49037.2021.9555440	Dr. Saidi Reddy Parne	APS
16	Ahoud AL Mukhaini, Motilal Lakavat, Nageswara Rao L, Saidi Reddy Parne, and Suman Gandhi, "Synthesis, Characterization of Biodiesel Production from Restaurant Waste Cooking Oil" International Virtual Conference Recent Innovations in Science & Technology (RIST 2021), ERANAD Knowledge City Technical Campus, Kerala.	Dr. Saidi Reddy Parne	APS
17	Majan Al-Balushi, Varghese Manappallil Joy, Nageswara Rao Lakkim Setty, Motilal Lakavat, Saidi Reddy Parne and Suman Gandhi, "Experimental Investigation on Solar Photo-Fenton as Photocatalyst to Treat the Saline Water by Response Surface Methodology', International Virtual Conference Recent Innovations in Science & Technology (RIST 2021), ERANAD Knowledge City Technical Campus, Kerala.	Dr. Saidi Reddy Parne	APS
18	Suman Gandhi, Saran Srihari Panda, Saidi Reddy Parne, Motilal Lakavat and Shyam Sundar Gandhi, "Green synthesis of carbon quantum dots embedded onto titanium dioxide nanorods for enhancing photocatalytic	Dr. Saidi Reddy Parne	APS



	activity”, International Virtual Conference Recent Innovations in Science & Technology (RIST 2021), ERANAD Knowledge City Technical Campus, Kerala.		
19	K. S. Kola and A. Chatterjee, “A 1x2 Array of High-gain Radiators for Direct Broadcast Satellite (DBS) Services under Ku-band,” 8th International Conference on Signal Processing and Integrated Networks (SPIN), Aug. 2021, pp. 297-302, doi: 10.1109/SPIN52536.2021.9566011. [SCOPUS,IEEE].	Dr. Anirban Chatterjee	ECE
20	K. S. Kola and A. Chatterjee, “An Array of Tulip-flower shaped Printed Radiators for Direct Broadcast Satellite (DBS) Applications,” Advanced Communication Technologies and Signal Processing (ACTS), Dec. 2021, pp. 1-6,2021.[SCOPUS, IEEE].	Dr. Anirban Chatterjee	ECE
21	Patanvariya, Deven G., and Anirban Chatterjee, “A Low Profile Four Element Dual-band Monopole Antenna for Pattern Diversity MIMO Applications,”2nd International Conference on Range Technology (ICORT), pp. 1-4, IEEE, Nov. 2021. [SCOPUS,IEEE].	Dr. Anirban Chatterjee	ECE
22	S Bandyopadhyay, A.Chatterjee, A Datta, “Genetic Algorithm Driven Linear Antenna Array Sidelobe Level Reduction,” Indian Conference on Antennas and Propagation (InCAP), March 2022, pp. 52-55. [SCOPUS, IEEE].	Dr. Anirban Chatterjee	ECE
23	D. G. Patanvariya and A. Chatterjee, “A Novel Compact Monopulse Patch Antenna Array,” Indian Conference on Antennas and Propagation (InCAP), March 2022, pp. 80-82. [SCOPUS, IEEE].	Dr. Anirban Chatterjee	ECE
24	Bandaru Bhavana, Samrat L. Sabat, Swetha Namburu and T. Panigrahi, “Wavelet based non-reconstructive Compressed Spectrum Sensing against non-Gaussian noise,” in <i>14th IEEE International Conference on COMMunication Systems & NETWORKS</i>	Dr. Trilochan Panigrahi	ECE



	(COMSNET 2022), January 3 – 9, 2022, Bengaluru, India.		
25	Bishnu P Mishra, Annet Merry Wilson, T. Panigrahi, and Samrat L Sabat, "A Robust Adaptive Algorithm using Inverse Square Root Cost Function for Underwater Channel Estimation," in <i>IEEE International Conference on Advanced Networks and Telecommunications Systems (ANTS 2021)</i> , 13-16 th Dec, 2021, Hyderabad, India.	Dr. Trilochan Panigrahi	ECE
26	Meera Dash and T. Panigrahi, "Molecular Communication via Diffusion – An Experimental Setup using Alcohol Molecule," in <i>International Conference on Intelligent Computing and Advances in Communication (ICAC)</i> , 25-26 th Nov 2021, ITER, Bhubaneswar, Odisha, India.	Dr. Trilochan Panigrahi	ECE
27	Kaksha Posnaik, T. Panigrahi, Samrat L. Sabat and Meera Dash, "A Simplified Deep Learning model for Acoustic Feedback Cancellation in Digital Hearing Aid," in <i>IEEE International Symposium of Asian Control Association on Intelligent Robotics and Industrial Automation (IRIA)</i> , 20-22 nd September 2021, Virtual Conference, IIT Goa, India.	Dr. Trilochan Panigrahi	ECE
28	Yeduri Sreenivasa Reddy, Garima Chopra, Ankit Dubey, Abhinav Kumar, T. Panigrahi and Linga Reddy Cenkeramaddi, "Splitting Random Access Mechanism for Massive Machine Type Communications in 5G Cellular Internet-Of-Things," in <i>32nd Annual International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC): IEEE PIMRC 2021</i> , 13-16 September 2021, Virtual Conference.	Dr. Trilochan Panigrahi	ECE



7.5 STUDENTS' ACHIEVEMENTS

Computer Science Engineering

- 1) 15 M. Tech students (out of total 18) selected for internships in various MNCs and currently pursuing the same.
- 2) Mandar Patade (B.Tech. CSE batch 2019-2023) was ranked among the top 2.5% of programmers across the globe on LeetCode.
- 3) Shreya Hardaha (M. Tech CSE student) received IISc Bangalore, ARTPARK Student Innovation Grant.

Civil Engineering

1. Shrey Sankalp Amonkar (21CVE1028)
 - a. 1st place in Rubik's Cube for Resonance 2021 held at Goa Engineering College on 18th November 2021.
 - b. 2nd place in Rubik's cube for inspirus 2021 held at Don Bosco College of Engineering, Fatorda, Goa on 29th to 30th October 2021.
2. Aditya Khadilkar (21CVE1001)
 - a. Secured 1st rank in open(unrated category) in ASPCC chess tournament held on 31st October and 1st November at BLDEA (commerce) college, Vijayapura district.
 - b. Got selected for state level chess tournament from Sangli district held on 6th March 2022.
3. Nayan Katke (19CVE1015)
 - (a) Secured 1st prize in treasure hunt competition, held during Utkranti '21 at NIT Goa during 31st October-1st November 2021

Data of Placements and Higher Studies

- **RAJKUMAR MEENA - HCL**
- **TAYI SREE NITHYA - HCL**
- **SACHIN M SAJEEVAN - Merkle Sokrati**
- **SANDRA ANN SAJI - ASEC Inc.**
- **MAYANK ASHTIKAR - Capgemini**
- **SANAT SHETYE - Larsen and Toubro**
- **YASHWANTH K - CGI**
- **SIDDHANTH NAIK - Cognizant Technology Solutions**
- **NIRAJ KERKAR - Tredence Analytics**
- **RAHUL SHOURI - M.Tech in Environmental Engineering, NITK Surathkal**
- **SOURABH RANE - M.Tech in Geoinformatics, NITK Surathkal**
- **KATA SRI VENKATA MAHITHA - Masters in Construction Management and Technology, Arizona State University**



FACULTY ACHIEVEMENTS:

Name	Department	Achievements
Dr. Modi Chirag Navinchandra	CSE	Best Paper Award at Sixteenth International Conference on Information Processing (ICInPro 2021), Bangalore. Paper Title: “Runtime Program Semantics based Malware detection in virtual Machines of Cloud Computing”
Dr. Damodar Reddy	CSE	1) Appointed as the Associate Editor to the journal “IEEE Transactions on Instrumentation & Measurement” (2021) 2) Awarded INSA Visiting Scientist-2022. 3) Received “Student Innovation Grant award” for PG project from ARTPARK, IISc Bangalore (2021)
Dr. Venkatanaresbhabu Kuppili	CSE	1. Editorial Board Member for Systems and Soft Computing Journal, Elsevier 2. Naik, Akshata K., and Venkatanaresbhabu Kuppili. “Dynamic relevance and interdependent feature selection for continuous data.” Expert Systems with Applications 191 (2022): 116302. (Impact Factor 8.665)

8.0 OUTREACH CELL ACTIVITIES

Swach Bharat Abhiyan (SBA)

Honorable Prime Minister, in his Independence Day speech on 15th August 2014, espoused the need for a clean India. He called for Swachh Bharat Abhiyaan (SBA), a massive mass movement that seeks to engage everyone in the task of cleaning homes, work places, villages, cities and surroundings, in a collective quest.

NIT Goa is actively participating in Swachha Bharat Abhiyaan (SBA) activities since its inception. The Institute has organized many cleanliness drives and awareness programs during this academic year in the surroundings of NIT Goa including the premises of the hostels. Under SBA, NIT Goa has implemented clean and green campus.





Rajbhasha Samiti of NIT Goa

Rajbhasha samiti of the Institute is entrusted with the responsibility of implementation of Official Language Hindi in administrative and other activities of the Institute. Rajbhasha Samiti organises different activities and competition for staff & students to promote Hindi and is making best efforts for making Hindi as an integral part of the system of NIT Goa. For this the dedicated team is working under the Chairmanship of Director, NIT Goa who is inspiring his team.

During the F.Y. 2021-2022 the Institute has provided the platform of Hindi magazine “**Urba**” which not only students but Institute faculty and staff members have also put in their dedicated efforts in creating Institute’s Ist edition of Hindi Magazine “**Urba**”.

We feel that the Institute will definitely make efforts to rase the bar and contribute maximum for the implementation of Hindi language in all the spheres of the Institute



9.0 PLACEMENT DETAILS FOR ACADEMIC YEAR 2021- 22



NATIONAL INSTITUTE OF TECHNOLOGY GOA TRAINING AND PLACEMENT CELL

CAMPUS RECRUITMENT DETAILS OF STUDENTS ACADEMIC YEAR 2021-22

More than **150 companies** visited NIT Goa for the campus recruitment of 2022 graduating batch.

PLACEMENT RECORD FOR THE ACADEMIC YEAR 2021-22 (Branch wise)

Department	Total No. of Students (EL)	Total No. of Students placed	Percentage of students
CSE	25	25	100%
ECE	26	26	100%
EEE	25	24	96%
MCE	23	18	78%
CVE	19	10	53%

EL : Eligible

PLACEMENT RECORD FOR THE ACADEMIC YEAR 2021-22 (Overall)

Total No. of Students (EL)	118
Total No. of Students Placed	103
Percentage of Placements	87.28%

Placement percentage of circuit branches (CSE, EEE & ECE) : 98.68%

Maximum pay Package : 44 LPA

Average pay Package : 13.1 LPA

(Civil Engineering and Mechanical Engineering, took part in their debut campus recruitment process and received a competitive average package of nearly 7 LPA excluded in the overall average package).

Minimum pay Package : 4.5 LPA



National Institute of Technology Goa
ANNUAL REPORT 2021-2022

ANNUAL ACCOUNTS FINANCIAL YEAR 2021-2022



**NATIONAL INSTITUTE OF TECHNOLOGY GOA
BALANCESHEET AS AT 31ST, MARCH, 2022**

		Amount in Rupees	
SOURCES OF FUND		As at 31.03.2022	As at 31.03.2021
COPRUS/CAPITAL FUND	Sch.		
DESIGNATED/EARMARKED / ENDOWMENT FUNDS	1	1,07,04,62,513.69	67,92,51,955.63
SECURED LOANS	2	1,22,40,040.00	1,07,52,269.00
CURRENT LIABILITIES & PROVISIONS	3	70,75,69,848.00	-
	4	51,39,76,019.94	83,85,33,377.33
TOTAL		2,30,42,48,421.63	1,52,85,37,601.96
APPLICATION OF FUNDS		As at 31.03.2022	As at 31.03.2021
FIXED ASSETS	Schedule		
Tangible Assets	5	7,57,50,134.47	7,82,93,625.47
Intangible Assets		21,64,035.00	45,29,007.00
Capital Works-In-Progress		99,89,00,304.00	18,26,08,893.00
INVESTMENTS FROM EARMARKED / ENDOWMENT FUNDS	6		
Long Term		-	-
Short Term		-	-
INVESTMENTS - OTHERS	7		
CURRENT ASSETS	8	91,40,32,713.27	83,86,28,016.69
LOANS, ADVANCES & DEPOSITS	9	31,34,01,234.89	42,44,78,059.80
TOTAL		2,30,42,48,421.63	1,52,85,37,601.96
SIGNIFICANT ACCOUNTING POLICIES			
CONTINGENT LIABILITIES AND NOTES TO ACCOUNTS	24		
	25		

FOR AND ON BEHALF OF THE BOARD


REGISTRAR

PLACE: PONDA, GOA
DATE: 19-08-2022

IN TERMS OF OUR INTERNAL AUDIT REPORT
FOR R.K PIKALE AND ASSOCIATES
CHARTERED ACCOUNTANTS

FRN: 127641W



CA YASH KUMAR PALIWAL
PARTNER
MEM NO. 438038





NATIONAL INSTITUTE OF TECHNOLOGY GOA
INCOME AND EXPENDITURE ACCOUNT FOR THE PERIOD/YEAR ENDED 31ST, MARCH, 2022

PARTICULARS	Amount in Rupees	
	As at 31.03.2022	As at 31.03.2021
INCOME		
Academic Receipts		
Grants / Subsidies	5,28,89,813.39	4,08,38,515.00
Income from investments	21,77,31,675.95	20,13,48,294.20
Interest earned	1,92,09,617.00	3,20,32,940.00
Other Income	5,61,946.00	2,78,383.00
Prior Period Income	5,49,447.52	7,63,874.35
TOTAL (A)	29,09,42,499.86	27,52,62,006.55
EXPENDITURE		
Staff Payments & Benefits (Establishment expenses)		
Academic Expenses	15,40,89,828.00	11,99,87,409.00
Administrative and General Expenses	3,43,99,926.00	3,75,49,122.00
Transportation Expenses	1,48,53,311.00	1,54,70,981.07
Repairs & Maintenance	23,55,099.00	23,46,134.00
Finance costs	2,09,78,147.50	2,59,71,075.00
Depreciation	1,12,30,043.30	23,761.93
Other Expenses	1,80,02,226.00	1,91,55,906.00
Prior Period Expenses	40.00	-
TOTAL (B)	25,59,08,620.80	22,05,04,389.00
Balance being excess of Income over Expenditure (A-B)	3,50,33,879.06	5,47,57,617.55
- Transfer (to) / from		
Capital Fund (Sch-1)	(1,80,02,226.00)	-
Corpus Fund (Sch-1)	(5,30,36,105.06)	-
Significant Accounting Policies		
Contingent Liabilities And Notes To Accounts		
	24	
	25	

FOR AND ON BEHALF OF THE BOARD

[Signature]
REGISTRAR

IN TERMS OF OUR INTERNAL AUDIT REPORT
FOR R.K PIKALE AND ASSOCIATES
CHARTERED ACCOUNTANTS



FRN: 127641W

[Signature]
CA YASH KUMAR PALIWAL
PARTNER
MEM NO. 438038

PLACE: PONDA, GOA
DATE: 19-08-2022



GFR 12 - A
[(See Rule 238 (1))]

FORM OF UTILIZATION CERTIFICATE FOR AUTONOMOUS BODIES OF THE GRANTEE ORGANIZATION
FINAL UTILIZATION CERTIFICATE FOR THE YEAR 2021-22 in respect of recurring/non-recurring GRANTS-IN-AID/SALARIES/CREATION OF CAPITAL ASSETS

1. Name of the Scheme : Plan Grant
2. Whether recurring or non-recurring grants : Recurring
3. Grants position at the beginning of the Financial year
 - (i) Cash in Hand/Bank : 32,66,10,892.79
 - (ii) Unadjusted advances : 39,87,00,330.50
 - (iii) Total : 72,53,11,223.29
4. Details of grants received, expenditure incurred and closing balances: (Actuals)

1 Unspent Balances of Grants received years [figure as at Sl. No.3 (iii)]***	2 Interest Earned thereon *	3 Interest / Grants deposited back to the Government	4 Grant received during the year			5 Total Available funds (1+2-3+4)	6 Expenditure incurred**	7 Closing Balances (5-6)
			Sanction No. (i)	Date (ii)	Amount (iii)			
112-31	96,15,871.00	1,95,02,152.00	F.No.36 - 4/2021 - TS.III	07/05/2021	1,08,00,000.00	6,68,48,747.83	28,32,94,827.93	
			F.No.36 - 4/2021 - TS.III	02/06/2021	45,00,000.00			
			F.No.36-1/2021-TS.III-TSA	27/09/2021	9,00,000,000.00			
			F.No.36-1/2021-TS.III-TSA	28/01/2022	36,38,243.00			
			F.No.36-5/2021-TS.III-TSA	28/03/2022	10,58,96,250.00			
112-35	79,89,975.00	11,41,40,725.18	N.A	N.A	-	73,73,491.61	12,12,57,428.01	
112-36	24,21,318.00	8,06,31,448.00	F.No.36 - 4/2021 - TS.III	07/05/2021	1,57,00,000.00	6,86,15,735.60	6,96,50,416.35	
			F.No.36 - 4/2021 - TS.III	02/06/2021	67,00,000.00			
			F.No.36-4/2021-TS.III-TSA	12/08/2021	75,00,000.00			
			F.No.36-4/2021-TS.III-TSA	24/08/2021	75,00,000.00			
			F.No.36-4/2021-TS.III-TSA	23/09/2021	75,31,000.00			
			F.No.36-4/2021-TS.III-TSA	29/10/2021	97,00,000.00			
			F.No.36-4/2021-TS.III-TSA	17/11/2021	97,00,000.00			
			F.No.36-4/2021-TS.III-TSA	16/12/2021	96,00,000.00			
			F.No.36-4/2021-TS.III-TSA	01/02/2022	3,48,00,000.00			
			F.No.36-4/2021-TS.III-TSA	15/02/2022	3,48,00,000.00			
			F.No.36-4/2021-TS.III-TSA	19/03/2022	3,47,00,000.00			
789-31	-	77,708.00	F.No.36 - 4/2021 - TS.III	07/05/2021	14,00,000.00	1,15,67,675.55	(2,43,96,640.44)	
			F.No.36 - 4/2021 - TS.III	02/06/2021	6,00,000.00			
			F.No.36-1/2021-TS.III-TSA	27/09/2021	1,00,00,000.00			
789-35	-	97,05,075.00	N.A	N.A	-	13,41,610.55	(4,13,89,508.00)	
789-36	-	52,32,800.00	F.No.36 - 4/2021 - TS.III	07/05/2021	20,00,000.00	1,24,84,668.05	(1,94,17,849.94)	
			F.No.36 - 4/2021 - TS.III	02/06/2021	8,00,000.00			
			F.No.36-4/2021-TS.III-TSA	04/08/2021	5,00,000.00			
			F.No.36-4/2021-TS.III-TSA	25/08/2021	5,00,000.00			
			F.No.36-4/2021-TS.III-TSA	22/09/2021	5,00,000.00			
			F.No.36-4/2021-TS.III-TSA	28/10/2021	6,00,000.00			
			F.No.36-4/2021-TS.III-TSA	17/11/2021	6,00,000.00			



796-31	(1,15,27,404.41)	-	1,69,161.00	F.No.36-4/2021-TS.III-TSA F.No.36-4/2021-TS.III-TSA F.No.36-4/2021-TS.III-TSA F.No.36-4/2021-TS.III-TSA	14/12/2021 31/01/2022 14/02/2022 16/03/2022	7,00,000.00 22,00,000.00 22,00,000.00 23,00,000.00	(95,02,290.49)
796-35	(1,20,47,532.59)	-	49,68,750.00	F.No.36-4/2021-TS.III F.No.36-4/2021-TS.III F.No.36-1/2021-TS.III-TSA	07/05/2021 02/06/2021 27/09/2021	14,00,000.00 6,00,000.00 58,96,250.00	57,01,975.07
796-36	16,57,975.50	-	23,96,504.00	N.A F.No.36-4/2021-TS.III F.No.36-4/2021-TS.III F.No.36-4/2021-TS.III-TSA F.No.36-4/2021-TS.III-TSA F.No.36-4/2021-TS.III-TSA F.No.36-4/2021-TS.III-TSA F.No.36-4/2021-TS.III-TSA F.No.36-4/2021-TS.III-TSA F.No.36-4/2021-TS.III-TSA F.No.36-4/2021-TS.III-TSA F.No.36-4/2021-TS.III-TSA F.No.36-4/2021-TS.III-TSA F.No.36-4/2021-TS.III-TSA	N.A 07/05/2021 02/06/2021 04/08/2021 26/08/2021 22/09/2021 28/10/2021 17/11/2021 14/12/2021 02/02/2022 18/02/2022 16/03/2022	20,00,000.00 8,00,000.00 2,00,000.00 2,00,000.00 1,00,000.00 2,00,000.00 2,00,000.00 2,44,000.00 4,00,000.00 4,00,000.00 3,00,000.00	(1,76,81,721.42) (18,86,923.85)
	32,66,10,892.79	2,00,27,164.00	23,68,24,323.18			43,09,05,743.00	18,07,91,738.45
							35,99,27,738.16

Component wise utilization of grants:

Grant-in-aid-General - 31	Grant-in-aid-Salary - 36	Grant-in-aid-creation of capital assets -35	Total			
112-31	6,69,48,747.83	112-36	6,86,15,735.60	112-35	73,73,491.61	14,28,37,975.03
789-31	1,15,67,675.55	789-36	1,24,84,668.05	789-35	13,41,610.55	2,53,93,954.15
796-31	57,01,975.07	796-36	61,92,395.35	796-35	6,65,438.84	1,25,59,809.26
TOTAL	8,41,18,398.45		8,72,92,799.00		93,80,541.00	18,07,91,738.45

Details of grants position at the end of the year

(i) Cash in Hand/Bank :	35,99,27,738.16
(ii) Unadjusted Advances :	86,35,923.00
(iii) Total:	36,85,63,661.16

Certified that I have satisfied myself that the conditions on which grants were sanctioned have been duly fulfilled/are being fulfilled and that I have exercised following checks to see that the money has been actually utilized for the purpose for which it was sanctioned:

- The main accounts and other subsidiary accounts and registers (including assets registers) are maintained as prescribed in the relevant Act/Rules/Standing Instructions (mention the Act/Rules) and have been duly audited by designated auditors. The figures depicted above tally with the audited figures mentioned in financial statements/accounts.
- There exist internal controls for safeguarding public funds/assets, watching outcomes and achievements of physical targets against the financial inputs, ensuring quality in asset creation etc. & the periodic evaluation of internal controls is exercised to ensure their effectiveness.
- To the best of our knowledge and belief, no transactions have been entered that are in violation of relevant Act/Rules/standing instructions and scheme guidelines.
- The responsibilities among the key functionaries for execution of the scheme have been assigned in clear terms and are not general in nature.
- The benefits were extended to the intended beneficiaries and only such areas/districts were covered where the scheme was intended to operate.
- The expenditure on various components of the scheme was in the proportions authorized as per the scheme guidelines and terms and conditions of the grants-in-aid.
- It has been ensured that the physical and financial performance under (Name of the scheme has been according to the requirements, as prescribed in the guidelines issued by Govt. of India and the performance/targets achieved statement for the year to which the utilization of the fund resulted in outcomes given at Annexure - I duly enclosed.



(viii) The utilization of the fund resulted in outcomes given at Annexure – II duly enclosed (to be formulated by the Ministry/Department concerned as per their requirements/specifications.)
(ix) Details of various schemes executed by the agency through grants-in-aid received from the same Ministry or from other Ministries is enclosed at Annexure –II (to be formulated by the Ministry/Department concerned as per their requirements/specifications).

Date: 16.11.2022

Place: Farmagudi, Ponda, Goa - 403 401

Signature :
Name : Dr. Shashidhar K. Kudari
Registrar

Signature :
Name : Dr. Gopal Mugeraya
Director

**Note: The interest for the F.Y-2021-22 will be refunded once the accounts are finalized as per GFR Rule 230(8). Interest is allocated between different heads having positive balance arrived on the basis of average of opening and closing balance of respective heads before adding of interest.

** As per Rule 238(4) of GFR the advances given to Suppliers has been shown as amount spent under expenditure head as there is cash outflow.

*** The provision for Retirement Benefits of the Current year (net of payment during the year of Rs.4,74,582/-) of Rs. 2,01,74,297/- is deducted from the Salaries head (OH-36) to arrive at the expenditure during the year.

*** The provision for Retirement Benefits of the earlier years of Rs. 4,66,22,723/- is deducted from the total expenditure under Salaries head (OH-36) to arrive at the expenditure during the year in order to rectify the SAR para raised by the C&AG. The total actual expenditure under the Salaries head (OH-36) during the F.Y-2021-22 is Rs.13,39,15,631/-

**** The column no. 3 above includes the interest on Grants refunded to MOE from the F.Y-2017-18 to F.Y-2020-21 of Rs.16,10,85,783.18/-. It also includes Grants lapsed under TSA as on 31.03.2022 of Rs.7,57,38,540/- under Salaries OH-36.



NATIONAL INSTITUTE OF TECHNOLOGY GOA
SCHEDULES FORMING PART OF BALANCESHEET AS AT 31ST, MARCH, 2022
SCHEDULE - 1. COPRUS/CAPITAL FUND

Particulars	Amount in Rupees		
	Capital Fund	Corpus Fund	As at 31.03.2022
Balance at the beginning of the year	26,02,03,840.83	41,90,48,114.80	67,92,51,955.63
Add: Contributions towards Corpus/Capital Fund	-	-	-
Add: Grants from UGC, Government of India and State Government to the extent utilized for capital expenditure	39,97,47,202.00	-	39,97,47,202.00
Add: Assets Purchased out of Earmarked Funds	-	-	-
Add: Assets Purchased out of Sponsored Projects, where ownership vests in the institution	30,52,209.00	-	30,52,209.00
Add: Assets Donated/Gifts Received	-	-	-
Add: Excess of Income over expenditure transferred from the Income & Expenditure Account	-	5,30,36,105.06	5,30,36,105.06
TOTAL	66,30,03,251.83	47,20,84,219.86	1,13,50,87,471.69
Less: Transfer to Earmarked Funds	-	-	-
Less: Retirement provisions of earlier years w/off	-	4,66,22,732.00	4,66,22,732.00
Less: Other Deductions (Transfer/Refund of MIKE Conference expenditure)	-	-	-
Less: Depreciation for the year	1,80,02,226.00	-	1,80,02,226.00
Balance at the year end	64,50,01,025.83	42,54,61,487.86	1,07,04,62,513.69
			67,94,62,818.63
			2,10,863.00
			67,92,51,955.63



**NATIONAL INSTITUTE OF TECHNOLOGY GOA
SCHEDULES FORMING PART OF BALANCESHEET AS AT 31ST, MARCH, 2022**

SCHEDULE 2 - DESIGNATED/ EARMARKED / ENDOWMENT FUNDS

Particulars	Amount in Rupees			TOTAL
	Institute Devt Fund	Hostel Devt Fund	As at 31.03.2022	
A.				
a) Opening balance	1,06,02,996.00	1,49,273.00	1,07,52,269.00	94,56,720.00
b) Additions during the year	-	-	-	-
c) Income from investments made of the funds	-	-	-	-
d) Accrued Interest on investments/Advances	-	-	-	-
e) Interest on Savings Bank a/c	4,64,800.00	5,971.00	4,70,771.00	4,13,549.00
f) Other additions (Specify nature) (Collected from students)	10,17,000.00	-	10,17,000.00	8,82,000.00
i. Collected from Students				
ii. Transfer from Capital Fund				
Total (A)	1,20,84,796.00	1,55,244.00	1,22,40,040.00	1,07,52,269.00
B.				
Utilization /Expenditure towards objectives:				
i) Capital Expenditure	-	-	-	-
ii) Revenue Expenditure	-	-	-	-
Total (B)				
Closing Balance at the year End (A-B)	1,20,84,796.00	1,55,244.00	1,22,40,040.00	1,07,52,269.00
Represented by				
Cash and Bank Balances	1,20,84,796.00	1,55,244.00	1,22,40,040.00	1,07,52,269.00
Investments	-	-	-	-
Interest Accrued but not due	-	-	-	-
Total		1,55,244.00	1,22,40,040.00	1,07,52,269.00



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SCHEDULES FORMING PART OF BALANCESHEET AS AT 31ST, MARCH, 2022

SCHEDULE 3 - SECURED LOANS

	Amount in Rupees	
	As at 31.03.2022	As at 31.03.2021
Higher Education Funding Agency (HEFA) Loan A/c. No-00101100000139	70,75,69,848.00	-
Total	70,75,69,848.00	-



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SCHEDULES FORMING PART OF BALANCESHEET AS AT 31ST, MARCH, 2022

SCHEDULE 4 - CURRENT LIABILITIES & PROVISIONS

	Amount in Rupees	
	As at 31.03.2022	As at 31.03.2021
A. CURRENT LIABILITIES		
1. Deposits from staff	-	-
2. Deposits from students (Sub Schedule 1)	3,85,40,104.33	3,05,85,533.33
3. Sundry Creditors		
a) For Goods & Services (Sub Schedule 2)	74,64,218.00	6,57,788.00
b) Others	-	-
4. Deposit-Others (including EMD, Security Deposit) (Sub Schedule 3)	27,54,844.00	25,97,010.00
5. Statutory Liabilities (GPF, TDS, WC TAX, CPF, GIS, NPS):		
a) Overdue	-	-
b) Others (Sub Schedule 4)	7,48,186.00	5,07,008.00
6. Other Current Liabilities (Sub Schedule 5)		
a) Salaries	1,06,25,544.00	84,00,175.00
b) Receipts against sponsored projects(Net) (as per Schedule 3a)	1,25,67,756.45	1,40,18,497.71
c) Receipts against sponsored fellowships & scholarships (Net) (as per Schedule 3b)	79,205.00	5,83,029.00
d) Unutilised Grants (as per Schedule 3c)	36,85,63,661.16	72,53,11,223.29
e) Grants in advance	-	-
f) Other funds (Sub Schedule 5)	6,13,877.00	7,25,925.00
g) Other liabilities (Sub Schedule 5)	51,81,095.00	82,38,256.00
Total (A)	44,71,38,490.94	79,16,24,445.33
B. PROVISIONS		
1. For Taxation	-	-
2. Gratuity	1,93,44,760.00	1,31,17,882.00
3. Superannuation Pension	-	-
4. Accumulated Leave Encashment	4,74,52,269.00	3,35,04,850.00
5. Trade Warranties/Claims	-	-
6. Others (Specify) (Sub Schedule 6)	40,500.00	2,86,200.00
Total (B)	6,68,37,529.00	4,69,08,932.00
Total (A+B)	51,39,76,019.94	83,85,33,377.33

Note: Unutilized grants 6 (d) will include grants received in advance for the next year.



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SCHEDULES FORMING PART OF BALANCESHEET AS AT 31ST. MARCH, 2022

SCHEDULE - 4(a) - SPONSORED PROJECTS

1. Sr. No.	2. Name of the Project	Opening Balance		5. Receipts/Recoveries during the year	6. Bank Interest	7. Total	8. Expenditure/Revenue during the year	Closing Balance	
		3. Credit	4. Debit					9. Credit	10. Debit
1	Convective Instabilities in Double Diffusive Systems-SERB-Dr. Ravi Rajguru	1,80,554.00	-	1,50,000.00	2,105.00	3,32,659.00	3,32,659.00	-	-
2	Deep-Learning Assisted Tomographic Ground Penetrating Radar for the Detection of Electrical and Morphological Features of Buried Objects-SERB- Dr. Malikarjun E.	1,90,000.00	-	7,40,651.00	32,997.00	9,63,648.00	1,02,323.00	8,61,325.00	-
3	Design and Development of Acoustic Methods for early detection of Stem and Root Borer Plocaederus spp infestation in cashew-SERB- Dr. Veerakumar T.	5,01,130.00	-	1,00,000.00	18,240.00	6,19,370.00	3,95,908.00	2,23,462.00	-
4	Design and Development of Compact and Wideband Dielectric Resonator Antennas -SERB -Dr. Pragati Patel	7,56,197.00	-	-	37,402.00	7,93,599.00	7,93,599.00	-	-
5	Design & Development of a Dynamic Photovoltaic Array Fed Single Stage PV System Using an Open WIM-Dr. Venugopal Reddy	5,35,651.00	-	3,50,000.00	20,922.00	9,06,773.00	5,71,074.00	3,35,699.00	-
6	Design & Development of Roast Distributed Nonlinear Channel Equalization & Identification sponsored by SERB - Dr. Trilochan P.	-	-	91,990.17	-	91,990.17	91,990.17	-	-
7	Designing Efficient Algebraic Activation Functions In Deep Learning For Classification Of Electroencephalography (Eeg) Data -SERB- Dr. Damodar Reddy Edla	8,041.00	-	2,00,000.00	2,443.00	2,10,484.00	1,25,148.00	85,336.00	-
8	Design of Superior Pulsewidth Modulation Schemes for High-Performance Multilevel Converter Based Grid-Connected Photovoltaic System-SERB- Dr. Soumitra Das	1,58,193.97	-	-	5,189.00	1,63,382.97	-	1,63,382.97	-
9	Developing Smart Controller for Optimum Utilization of Energy and Trustworthy Management in a Micro Grid Environment -SERB - Dr. Chirag Modi	56,41,821.00	-	-	2,29,803.00	58,71,624.00	30,20,587.00	28,51,037.00	-
10	Developing Smart Controller for Optimum Utilization of Energy and Trustworthy Management in a Micro Grid Environment - Siemens - Dr. Chirag Modi	-	-	3,65,694.00	-	3,65,694.00	43,046.00	3,22,648.00	-
11	Development of a Multipurpose Intelligent Controller for a Nano Grid Operation sponsored by MNRE - Dr. C. Vyjayanthi	1,43,819.00	-	-	-	1,43,819.00	-	1,43,819.00	-
12	Development of Coordination Control Schemes for Hybrid AC/DC Micro Grids for Stable and Reliable System Operation-SERB-Dr. C.Vyjayanthi	15,05,128.24	-	-	31,042.00	15,36,170.24	15,36,170.24	-	-



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13	Energy Efficient Lighting with Visible Light based Communication & Power Line Communication sponsored by DST - Dr. Ankit Dubey.	3,35,248.00	-	-	13,464.00	3,48,712.00	24,967.00	3,23,745.00	-
14	Interference Rejection Using Built-in Filter Based Band-Pass Sigma Delta Modulators -SERB- Dr. Nithin Kumar Y.B.	23,06,594.00	-	8,00,000.00	92,226.00	31,98,820.00	4,48,003.00	27,50,817.00	-
15	Harnessing Technological Innovations for Sustainable Development: The Role of Intellectual Property Rights - ICSSR (MHRD) - Dr. Sunil Kumar A.	80,940.00	-	1,50,000.00	2,646.00	2,33,586.00	1,61,558.00	72,028.00	-
16	Off Grid Sensor Controlled Irrigation Using Bank Filtration Technology- TERI -Dr.Lalait Indu Giri	4,55,664.00	-	-	19,425.00	4,75,089.00	4,52,103.00	22,986.00	-
17	Special Manpower Development Program for Chips to System Design sponsored by Central Electronics Engineering Research Institute - Dr. Nithin Kumar	8,36,844.02	-	6,16,433.00	29,833.00	14,83,110.02	14,83,110.02	-	-
18	Visvesvaraya Phd Scheme for Electronics and IT -(Batch 2014-15) sponsored by Media Lab Asia -Dr. Nithin Kumar Y.B.	25,600.23	-	-	1,046.00	26,646.23	-	26,646.23	-
19	Visvesvaraya Phd Scheme for Electronics and IT - (Batch 2015-16) sponsored by Media Lab Asia -Dr. Nithin Kumar Y.B.	3,56,872.25	-	5,82,578.00	21,080.00	9,60,530.25	5,56,076.00	4,04,454.25	-
20	Development of Metaheuristic Algorithms based Maximum Power Point Tracking Controllers for various Grid-Connected/Stand -Alone PV System to Enhance the Maximum Power Generation Capability -SERB -Dr. Suresh Mikkilil	-	-	21,96,400.00	9,915.00	22,06,315.00	1,16,827.00	20,89,488.00	-
21	Wind Energy Harvesting from Vortex Induced Vibration of Multiple Cylinders using novel multiple Piezoelectric Strips Arrangement -SERB -Dr Prasenjit Dey	-	-	20,47,105.00	8,973.00	20,56,078.00	1,65,195.00	18,90,883.00	-
22	All India Council for Technical Education(AICTE)	-	-	93,000.00	-	93,000.00	93,000.00	-	-
Total		1,40,18,497.71	-	84,83,851.17	5,78,751.00	2,30,81,099.88	1,05,13,343.43	1,25,67,756.45	-

1. The Projects may be listed agency-wise, with sub-totals for each agency.
2. The total of Col. 9 (Credit) will appear under the above head on the liabilities side of the Balance Sheet (Schedule 4).
3. The total of Col. 10 (Debit) will appear as Receivables in Schedule 8, Loans, Advances and Deposits, on the Assets side of the Balance Sheet.



**NATIONAL INSTITUTE OF TECHNOLOGY GOA
SCHEDULES FORMING PART OF BALANCESHEET AS AT 31ST, MARCH, 2022**

SCHEDULE - 4(b) SPONSORED FELLOWSHIPS AND SCHOLARSHIPS

1. Sr. No.	2. Name of the Sponsor	Amount in Rupees					
		Opening Balance as on 01.04.2021		Transactions during the year		Closing Balance as on 31.03.2022	
		3. Credit	4. Debit	5. Credit	6. Debit	7. Credit	8. Debit
1	Scholarship EDCIL (India) Ltd.	-	-	2,28,004.60	2,28,004.60	-	-
2	Scholarship from Ministry of Tribal Affairs	-	-	-	-	-	-
3	Scholarship from Ministry of Social Justice	1,34,880.00	-	-	81,600.00	53,280.00	-
4	Scholarship Govt. of Madhya Pradesh	-	-	45,866.00	45,866.00	-	-
5	Inspire Fellowship-Dept. of Science & Technology	-	-	-	-	-	-
	Bank Interest	16,629.00	-	9,296.00	-	25,925.00	-
	Contingency	-	-	-	-	-	-
	Fellowship	3,72,000.00	-	-	3,72,000.00	-	-
	H.R.A.	59,520.00	-	-	59,520.00	-	-
6	Other Scholarships	-	-	62,500.00	62,500.00	-	-
	Total	5,83,029.00	-	3,45,666.60	8,49,490.60	79,205.00	-

Note:

1. The total of Col. 7 (Credit) will appear under the above head, on the liabilities side of the Balance Sheet (Schedule 4).
2. The total of Col. 8 (Debit) will appear as Receivables on the Assets side of the Balance Sheet in Schedule 9(Loans, Advances and Deposits).



NATIONAL INSTITUTE OF TECHNOLOGY GOA
SCHEDULES FORMING PART OF BALANCESHEET AS AT 31ST. MARCH, 2022

SCHEDULE 4(c) UNUTILISED GRANTS FROM UGC, GOVERNMENT OF INDIA AND STATE GOVERNMENTS

Particulars	Amount in Rupees					
	OH-31 (General)	OH-31 (HEFA Loan Principal)	OH-31 (HEFA Loan Interest)	OH-36 (Salaries)	OH-35 (Capital)	As at 31.03.2022 As at 31.03.2021
A. Plan Grants : Government of India						
Balance B/F						
Add: Receipts during the year for Expenditure	8,28,03,699.97	-	-	2,53,02,873.73	61,72,04,647.59	72,53,11,223.29
Add: Receipts during the year towards HEFA Loan repayment	1,93,00,000.00	-	-	19,61,75,000.00	21,54,75,000.00	89,65,15,469.49
Act: Provision of Retirement Benefits of earlier years w/back	-	21,17,92,500.00	36,38,243.00	-	-	20,14,00,000.00
Add: Interest earned during the year	96,15,871.00	-	-	4,66,22,732.00	4,66,22,732.00	-
Total (a)	11,17,19,570.97	21,17,92,500.00	36,38,243.00	27,05,21,925.73	62,51,94,622.59	1,97,10,839.00
Less: Refunds back to MOE				7,57,38,540.00	7,57,38,540.00	
Less: Interest refunded back to the MOE	1,97,49,021.00	-	-	1,25,22,212.00	12,88,14,550.18	
Less: Utilized for HEFA Loan Principal Repayment	-	-	-	-	-	
Less: Utilized for HEFA Loan Interest Repayment	-	-	1,12,08,091.00	-	-	
Less: Utilized for Capital Expenditure - 35	7,26,08,053.95	-	-	-	-	
Less: Utilized for Revenue Expenditure	9,23,57,074.95	-	-	13,39,15,531.00	39,97,47,202.00	8,13,60,885.20
Total (b)	9,23,57,074.95	-	1,12,08,091.00	22,21,76,283.00	52,85,61,752.18	31,09,54,200.00
Unutilized Carried Forward (a-b)	1,93,62,496.02	21,17,92,500.00	(75,69,848.00)	4,83,45,642.73	9,66,32,870.41	72,53,11,223.29
B. UGC grants: Plan						
C. UGC grants: Non Plan						
D. Grants from State Govt.						
Grand Total (A+B+C+D)	1,93,62,496.02	21,17,92,500.00	(75,69,848.00)	4,83,45,642.73	9,66,32,870.41	72,53,11,223.29

Notes:-

- Unutilized grants includes advances on Capital Account
- Unutilized grants includes grants received in advance for the next year
- Unutilized grants are represented on Assets side by Bank balances, Short term Deposits with Banks and Advances on Capital Account

The Revenue expenditure met out of non plan grants calculated is as follows:

Particulars	General - 31	General -31 HEFA Interest	Salaries - 36	Total
Expenditure as per Expenditure schedules (Non Plan column) of the Income and Expenditure Account	9,06,10,279.95	1,12,08,091.00	15,40,89,828.00	25,59,08,198.95
Less: Provision made in the year for retirement benefits	-	-	2,06,48,879.00	2,06,48,879.00
Add: Actual payments made in the year for retirement benefits	1,80,02,226.00	-	4,74,562.00	4,74,562.00
Less: Depreciation during the year	7,26,08,053.95	-	-	7,26,08,053.95
Revenue expenditure met out of non - plan grants.		1,12,08,091.00	13,39,15,531.00	21,77,31,675.95



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SCHEDULES FORMING PART OF BALANCESHEET AS AT 31ST, MARCH, 2022

SCHEDULES 5 FIXED ASSETS

S.No.	Assets Heads	GROSS BLOCK			DEPRECIATION			Amount in Rupees		
		Opening Balance as on 01.04.2021	Additions	Deductions	Closing Balance as on 31.03.2022	Depreciation Opening Balance as on 01.04.2021	Depreciation for the Year	Deductions/ Adjustment	Total Depreciation as on 31.03.2022	NET BLOCK
1	Land	-	-	-	-	-	-	-	-	-
2	Site Development	-	-	-	-	-	-	-	-	-
3	Buildings	-	-	-	-	-	-	-	-	-
4	Roads & Bridges	-	-	-	-	-	-	-	-	-
5	Tubewells & Water Supply	-	-	-	-	-	-	-	-	-
6	Sewerage & Drainage	-	-	-	-	-	-	-	-	-
7	Electrical installation and equipment	8,39,657.50	31,47,179.00	-	39,86,836.50	3,43,019.00	1,99,344.00	-	5,42,363.00	34,44,473.50
8	Plant & Machinery	1,20,76,074.99	1,82,900.00	-	1,22,60,974.99	27,22,617.00	6,13,054.00	-	33,35,671.00	89,25,303.99
9	Scientific & Laboratory Equipment	5,57,47,098.35	31,39,626.00	-	5,98,86,724.35	1,75,31,905.00	47,10,934.00	-	2,22,42,839.00	3,66,43,885.35
10	Office Equipment	10,05,764.00	4,96,969.00	-	15,02,733.00	3,15,959.00	1,12,707.00	-	4,28,666.00	10,74,067.00
11	Audio Visual Equipment	48,18,520.25	1,49,999.00	-	49,68,519.25	19,74,121.00	3,72,642.00	-	23,46,763.00	26,21,756.25
12	Computers & Peripherals	4,67,87,730.73	32,28,743.00	-	5,00,16,473.73	3,65,56,100.73	51,09,520.00	-	4,16,65,620.73	83,50,853.00
13	Furniture, Fixtures & Fittings	2,49,86,906.87	6,11,871.00	-	2,55,98,777.87	1,20,84,751.00	19,19,926.00	-	1,40,04,677.00	1,15,94,100.87
14	Vehicles	32,14,129.00	-	-	32,14,129.00	17,54,543.00	3,21,414.00	-	20,75,957.00	11,38,172.00
15	Library Books & Scientific Journals	57,53,230.51	3,55,205.00	-	61,08,435.51	36,54,557.00	4,96,442.00	-	41,50,999.00	19,57,436.51
16	Small Value Assets	12,44,583.58	-	-	12,44,583.58	12,44,497.58	-	-	12,44,497.58	86.00
	Total (A)	15,64,75,695.78	1,13,12,492.00	-	16,77,88,187.78	7,81,82,070.31	1,38,55,983.00	-	9,20,38,053.31	7,57,50,134.47
17	Capital Work in Progress (B)	18,26,08,893.00	81,62,91,411.00	-	99,89,00,304.00	-	-	-	-	99,89,00,304.00
	Total (A+B)	33,90,84,588.78	94,75,403.00	-	36,76,84,491.78	7,81,82,070.31	1,38,55,983.00	-	9,20,38,053.31	85,55,337.47
	Total (A+B+C)	37,13,13,499.78	82,93,85,174.00	-	40,06,70,645.78	10,58,81,974.31	1,80,02,226.00	-	12,38,84,200.31	27,67,86,445.47
19	Intangible Assets	8,25,154.00	-	-	8,25,154.00	8,25,153.00	-	-	8,25,153.00	1.00
19	Journals (perpetual)	3,09,93,537.00	13,33,500.00	-	3,23,27,037.00	2,67,50,333.00	40,50,908.00	-	3,08,01,241.00	42,43,204.00
19	Computer software	4,10,220.00	4,47,771.00	-	8,57,991.00	1,24,418.00	95,335.00	-	2,19,753.00	6,38,238.00
20	Patents & Copyrights	3,22,28,911.00	17,81,271.00	-	3,40,10,182.00	2,76,99,904.00	41,46,243.00	-	3,18,46,147.00	45,29,007.00
	Total (C)	8,25,154.00	17,81,271.00	-	3,40,10,182.00	2,76,99,904.00	41,46,243.00	-	3,18,46,147.00	21,64,035.00
	Grand Total (A+B+C)	37,13,13,499.78	82,93,85,174.00	-	40,06,70,645.78	10,58,81,974.31	1,80,02,226.00	-	12,38,84,200.31	27,67,86,445.47

Note: The figure in Column "Deductions" under Gross Block against the head Capital Work in Progress represents the transfer from Work in Progress to Assets during the year.
The figure in Column "Additions" during the year under Gross Block against 1 to 14 include transfer from Work in Progress during the year, as well as further acquisitions during the year.



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SCHEDULES 5 (a) FIXED ASSETS PLAN GRANTS

S.No.	Assets Heads	GROSS BLOCK			DEPRECIATION			Amount in Rupees			
		Opening Balance as on 01.04.2021	Additions	Deductions	Closing Balance as on 31.03.2022	Depreciation Opening Balance as on 01.04.2021	Depreciation for the Year	Deductions/ Adjustment	Total Depreciation as on 31.03.2022	31.03.2022	31.03.2021
1	Land	-	-	-	-	-	-	-	-	-	-
2	Site Development	-	-	-	-	-	-	-	-	-	-
3	Buildings	-	-	-	-	-	-	-	-	-	-
4	Roads & Bridges	-	-	-	-	-	-	-	-	-	-
5	Tube wells & Water Supply	-	-	-	-	-	-	-	-	-	-
6	Sewerage & Drainage	-	-	-	-	-	-	-	-	-	-
7	Electrical installations and equipments	8,39,657.50	31,47,179.00	-	39,86,836.50	3,43,019.00	1,99,344.00	-	5,42,363.00	34,44,473.50	4,96,638.50
8	Plant and Machinery	1,20,78,074.99	1,82,900.00	-	1,22,60,974.99	27,22,617.00	6,13,054.00	-	33,35,671.00	89,25,303.99	93,55,457.99
9	Scientific & Lab. Equipments	3,70,28,043.60	16,46,001.00	-	3,86,72,044.60	1,29,44,369.00	30,93,764.00	-	1,60,38,133.00	2,26,33,911.60	2,40,81,674.60
10	Office Equipments	10,05,764.00	4,96,669.00	-	15,02,733.00	3,15,959.00	1,12,707.00	-	4,28,666.00	10,74,067.00	6,89,605.00
11	Audio Visual Equipment	48,18,520.25	1,49,999.00	-	49,68,519.25	19,74,121.00	3,72,642.00	-	23,46,763.00	26,21,756.25	28,44,399.25
12	Computer and Peripherals	4,22,37,116.73	16,70,159.00	-	4,39,07,275.73	3,30,55,057.73	40,64,193.00	-	3,71,19,250.73	67,88,025.00	91,82,059.00
13	Furniture, Fixtures & Fittings	2,49,88,906.87	6,11,871.00	-	2,55,98,777.87	1,20,84,751.00	19,19,926.00	-	1,40,04,677.00	1,15,94,100.87	1,29,02,155.87
14	Vehicles	32,14,129.00	-	-	32,14,129.00	17,54,543.00	3,21,414.00	-	20,75,957.00	11,38,172.00	14,59,686.00
15	Library Books & Scientific Journals	56,73,842.51	3,55,205.00	-	60,29,047.51	36,22,797.00	4,88,502.00	-	41,11,299.00	19,17,748.51	20,51,045.51
16	Small Value Assets	12,44,583.58	-	-	12,44,583.58	12,44,497.58	-	-	12,44,497.58	86.00	86.00
	Total (A)	13,31,24,639.03	82,60,283.00	-	14,13,84,922.03	7,00,61,731.31	1,11,85,546.00	-	8,12,47,277.31	6,01,37,644.72	6,30,62,907.72
17	Capital Work in Progress (B)	18,26,08,893.00	38,97,05,648.00	-	57,23,14,541.00	-	-	-	-	57,23,14,541.00	18,26,08,893.00
	Total (A+B)	31,57,33,532.03	1,21,57,30,181.00	-	71,46,99,463.03	7,00,61,731.31	1,11,85,546.00	-	8,12,47,277.31	6,58,60,785.72	6,48,89,796.72
	Total (A+B+C)	34,72,42,731.03	39,97,47,202.00	-	74,69,89,833.03	9,70,58,726.31	1,63,28,989.00	-	11,23,87,715.31	63,46,02,217.72	25,01,84,004.72
18	Intangible Assets										
19	Journals (perpetual)	8,25,154.00	-	-	8,25,154.00	8,25,153.00	-	-	8,25,153.00	1.00	1.00
20	Computer software	3,02,99,025.00	13,33,500.00	-	3,16,32,525.00	2,60,55,824.00	40,50,908.00	-	3,01,06,732.00	15,25,793.00	42,43,201.00
21	Patents & Copyrights	3,85,020.00	4,47,771.00	-	8,32,791.00	1,16,018.00	92,535.00	-	2,08,553.00	6,24,238.00	2,69,002.00
	Total (C)	3,15,09,199.00	17,81,271.00	-	3,32,90,470.00	2,69,96,995.00	41,43,443.00	-	3,11,40,438.00	21,50,032.00	45,12,204.00



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SCHEDULES 5(b) FIXED ASSETS - HEFA LOAN

S.No.	Assets Heads	GROSS BLOCK				DEPRECIATION				Amount in Rupees NET BLOCK	
		Opening Balance as on 01.04.2021	Additions	Deductions	Closing Balance as on 31.03.2022	Depreciation Opening Balance as on 01.04.2021	Depreciation for the Year	Deductions/Adjustment	Total Depreciation as on 31.03.2022	31.03.2022	31.03.2021
1	Land										
2	Site Development										
3	Buildings										
4	Roads & Bridges										
5	Tubewells & Water Supply										
6	Sewerage & Drainage										
7	Electrical Installation and equipment										
8	Plant & Machinery										
9	Scientific & Laboratory Equipment										
10	Office Equipment										
11	Audio Visual Equipment										
12	Computers & Peripherals										
13	Furniture, Fixtures & Fittings										
14	Vehicles										
15	Library Books & Scientific Journals										
16	Small Value Assets										
	Total (A)										
17	Capital Work in Progress (B)		42,65,85,763.00		42,65,85,763.00					42,65,85,763.00	
Sr.No	Intangible Assets	Opening Balance as on 01.04.2021	Additions	Deductions	Closing Balance as on 31.03.2022	Depreciation Opening Balance as on 01.04.2021	Depreciation for the Year	Deductions/Adjustment	Total Depreciation as on 31.03.2022	31.03.2022	31.03.2021
18	E-journals (perpetual)										
19	Computer software										
20	Patents & Copyrights										
	Total (C)										
	Grand Total (A+B+C)		42,65,85,763.00		42,65,85,763.00					42,65,85,763.00	



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SCHEDULE 5C - INTANGIBLE ASSETS

Sr.No	Assets Heads	Amount in Rupees									
		Opening Balance as on 01.04.2021	Additions	Deduction \$	Closing Balance as on 31.03.2022	Depreciation Opening Balance as on 01.04.2021	Depreciation for the Year	Deductions / Adjustment	Total Depreciation as on 31.03.2022	31.03.2022	31.03.2021
1	E-journals (perpetual)	8,25,154.00	-	-	8,25,154.00	8,25,153.00	-	-	8,25,153.00	1.00	1.00
2	Computer software	3,02,99,025.00	13,33,500.00	-	3,16,32,525.00	2,60,55,824.00	40,50,908.00	-	3,01,06,732.00	15,25,793.00	42,43,201.00
3	Patents & Copyrights	3,85,020.00	4,47,771.00	-	8,32,791.00	1,16,018.00	92,535.00	-	2,08,553.00	6,24,238.00	2,69,002.00



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SCHEDULE 5 (C)(i) - PATENTS AND COPYRIGHTS

Particulars	Opening Balance as on 01.04.2021	Additions	Deductions	Closing Balance as on 31.03.2022	Depreciation Opening Balance as on 01.04.2021	Depreciation for the Year	Deductions/ Adjustment	Total Depreciation as on 31.03.2022	Amount in Rupees	
									31.03.2022	31.03.2021
A. Patents Granted										
1. Balance as on 31.03.2022 of Patents obtained in 2008-09 (Original Value Rs..... /-)	-	-	-	-	-	-	-	-	-	-
2. Balance as on 31.03.2022 of Patents obtained in 2010-11 (Original Value Rs..... /-)	-	-	-	-	-	-	-	-	-	-
3. Balance as on 31.03.2022 of Patents obtained in 2012-13 (Original Value Rs..... /-)	-	-	-	-	-	-	-	-	-	-
4. Patents granted during the As at 31.03.2022	-	3,45,071.00	-	3,45,071.00	-	38,341.00	-	38,341.00	3,06,730.00	-
Total	-	3,45,071.00	-	3,45,071.00	-	38,341.00	-	38,341.00	3,06,730.00	-
B. Patents Pending in respect of Patents applied for										
1. Expenditure incurred during 2016-17	23,520.00	-	-	23,520.00	15,683.00	2,614.00	-	18,297.00	5,223.00	7,837.00
2. Expenditure incurred during 2017-18	90,000.00	-	-	90,000.00	39,999.00	10,000.00	-	49,999.00	40,001.00	50,001.00
3. Expenditure incurred during 2018-19	90,500.00	-	-	90,500.00	30,168.00	10,056.00	-	40,224.00	50,276.00	60,332.00
4. Expenditure incurred during 2019-20	90,500.00	-	-	90,500.00	20,112.00	10,056.00	-	30,168.00	60,332.00	70,388.00
5. Expenditure incurred during 2020-21	90,500.00	-	-	90,500.00	10,056.00	10,056.00	-	20,112.00	70,388.00	80,444.00
5. Expenditure incurred during 2021-22	-	1,02,700.00	-	1,02,700.00	-	11,412.00	-	11,412.00	91,288.00	-
Total	3,85,020.00	1,02,700.00	-	4,87,720.00	1,16,018.00	54,194.00	-	1,70,212.00	3,17,508.00	2,69,002.00
C. Grand Total (A+B)	3,85,020.00	4,47,771.00	-	8,32,791.00	1,16,018.00	92,535.00	-	2,08,553.00	6,24,238.00	2,69,002.00

Note: The addition in Part A (Patents Granted), will be figure of Patents granted during the year, transferred from Part B (column - Patents granted/rejected). The amount against patents rejected during the year is written off in the Income and Expenditure Account



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SCHEDULES 5D. FIXED ASSETS - OTHERS, SPONSORED PROJECTS ASSETS

S.No.	Assets Heads	GROSS BLOCK					DEPRECIATION					Amount in Rupees		
		Opening Balance as on 01.04.2021	Additions	Deductions	Closing Balance as on 31.03.2022	Depreciation Opening Balance as on 01.04.2021	Depreciation for the Year	Deductions/ Adjustment	Total Depreciation as on 31.03.2022	31.03.2022	31.03.2021			
1	Land	-	-	-	-	-	-	-	-	-	-	-	-	-
2	Site Development	-	-	-	-	-	-	-	-	-	-	-	-	-
3	Buildings	-	-	-	-	-	-	-	-	-	-	-	-	-
4	Roads & Bridges	-	-	-	-	-	-	-	-	-	-	-	-	-
5	Tubewells & Water Supply	-	-	-	-	-	-	-	-	-	-	-	-	-
6	Sewerage & Drainage	-	-	-	-	-	-	-	-	-	-	-	-	-
7	Electrical Installation and equipment	-	-	-	-	-	-	-	-	-	-	-	-	-
8	Plant & Machinery	-	-	-	-	-	-	-	-	-	-	-	-	-
9	Scientific & Laboratory Equipment	1,87,21,064.75	14,93,625.00	-	2,02,14,679.75	45,87,536.00	16,17,170.00	-	62,04,706.00	1,40,09,973.75	-	1,41,33,518.75	-	-
10	Office Equipment	-	-	-	-	-	-	-	-	-	-	-	-	-
11	Audio Visual Equipment	-	-	-	-	-	-	-	-	-	-	-	-	-
12	Computers & Peripherals	45,50,614.00	15,58,584.00	-	61,09,198.00	35,01,043.00	10,45,327.00	-	45,46,370.00	15,62,828.00	-	10,49,571.00	-	-
13	Furniture, Fixtures & Fittings	-	-	-	-	-	-	-	-	-	-	-	-	-
14	Vehicles	-	-	-	-	-	-	-	-	-	-	-	-	-
15	Library Books & Scientific Journals	79,388.00	-	-	79,388.00	31,760.00	7,940.00	-	39,700.00	39,688.00	-	47,628.00	-	-
16	Small Value Assets	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total (A)	2,33,51,056.75	30,52,209.00	-	2,64,03,265.75	81,20,339.00	26,70,437.00	-	1,07,90,776.00	1,56,12,489.75	-	1,52,30,717.75	-	-
17	Capital Work in Progress (B)	-	-	-	-	-	-	-	-	-	-	-	-	-
	Total (A+B)	2,33,51,056.75	30,52,209.00	-	2,64,03,265.75	81,20,339.00	26,70,437.00	-	1,07,90,776.00	1,56,12,489.75	-	1,52,30,717.75	-	-
Sr.No	Intangible Assets	Opening Balance as on 01.04.2021	Additions	Deductions	Closing Balance as on 31.03.2022	Depreciation Opening Balance as on 01.04.2021	Depreciation for the Year	Deductions/ Adjustment	Total Depreciation as on 31.03.2022	31.03.2022	31.03.2021			
18	E-journals (perpetual)	-	-	-	-	-	-	-	-	-	-			
19	Computer software	6,94,512.00	-	-	6,94,512.00	6,94,509.00	-	-	6,94,509.00	3.00	3.00			
20	Patents & Copyrights	25,200.00	-	-	25,200.00	8,400.00	2,800.00	-	11,200.00	14,000.00	16,800.00			
	Total (C)	7,19,712.00	-	-	7,19,712.00	7,02,909.00	2,800.00	-	7,05,709.00	14,003.00	16,803.00			
	Grand Total (A+B+C)	2,40,70,768.75	30,52,209.00	-	2,71,22,977.75	88,23,248.00	26,73,237.00	-	1,14,96,485.00	1,56,26,492.75	1,52,47,520.75			

Note: The Additions during the year include additions from
 Gifted
 Earmarked Funds
 Sponsored Projects 30,52,209.00
 HEFA Loan 4265,85,763.00
 Own Funds 3997,47,202.00
 Total 8293,85,174.00



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SCHEDULES 6: INVESTMENTS FROM EARMARKED/ENDOWMENT FUNDS

	Amount in Rupees	
	As at 31.03.2022	As at 31.03.2021
1. In Central Government Securities	-	-
2. In State Government Securities	-	-
3. Other approved securities	-	-
4. Shares	-	-
5. Debentures and Bonds	-	-
6. Term Deposits with Banks	-	-
7. Others (to be specified)	-	-
TOTAL	-	-

SCHEDULES 6(A): INVESTMENTS FROM EARMARKED/ENDOWMENT FUNDS (FUNDS WISE)

Funds	Amount in Rupees	
	As at 31.03.2022	As at 31.03.2021
1	-	-
2	-	-
3	-	-
4	-	-
5 Endowment Fund Investments	-	-
TOTAL	-	-

Note: The Total in this Schedule will agree with the total in Schedule 5.

SCHEDULES 7: INVESTMENTS - OTHERS

	Amount in Rupees	
	As at 31.03.2022	As at 31.03.2021
1. In Central Government Securities	-	-
2. In State Government Securities	-	-
3. Other approved securities	-	-
4. Shares	-	-
5. Debentures and Bonds	-	-
6. Others (to be specified)	-	-
TOTAL	-	-



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SCHEDULE 8 - CURRENT ASSETS

Amount in Rupees

	As at 31.03.2022	As at 31.03.2021
1. Stock		
a) Stores and Spares	-	-
b) Loose Tools	-	-
c) Publications	-	-
d) Laboratory Chemicals, consumables and glass ware	-	-
e) Building Materail	-	-
f) Electrical Material	-	-
g) Stationery	-	-
h) Water supply material	-	-
2. Sundry Debtors		
a) Debts Outstanding for a period exceeding six months	-	-
b) Others	-	-
3. Cash and Bank Balances		
a) Cash in Hand		
Cash	-	-
b) With Scheduled Banks:		
-In Current Accounts	-	-
-In Term Deposits Accounts	73,64,83,133.00	78,98,44,428.00
-In Savings Accounts	17,75,49,580.27	4,87,83,588.69
c) With Non - Scheduled Banks:		
-In Term Deposits Accounts	-	-
-In Savings Accounts	-	-
4. Post Office Savings Accounts	-	-
TOTAL	91,40,32,713.27	83,86,28,016.69

Note: Annexure A shows the details of Bank Accounts

ANNEXURE A

Amount in Rupees

	As at 31.03.2022	As at 31.03.2021
I. Saving Bank Accounts		
Canara Bank - NIT Goa HEFA Escrow 3 A/c. No. -1164101017423	14,13,03,255.00	-
Canara Bank - NIT Goa HEFA Escrow 4 A/c. No. -1164101017424	1,150.00	-
Union Bank of India CSAB/CCMT A/c No.SB/01/2538-520101026778293	86,716.90	1,50,020.30
Union Bank of India Growth Fund A/c No.SB/1935-520101026774646	2,08,038.78	69,69,350.26
Union Bank of India Hostel A/c No.SB/01/1250-520101026768530	4,65,731.61	7,63,058.41
Union Bank of India Mis. A/c No.SB/01/1915-520101026774476	52,008.18	1,08,150.58
Union Bank of India NITGOARC-SB/01/4333-520101026782665	17,806.30	17,286.30
Union Bank of India NIT Plan A/c No.SB/000653-520101026763067	94,15,897.03	81,93,213.86
Union Bank of India NIT Plan A/c No.SB/01/4284-520101026782460	49,894.90	2,39,207.30
Union Bank of India NIT Plan A/c No.SB/01/4363-520101026782843	70,192.90	50,802.30
Union Bank of India SB - Director NIT GOA Fees A/c No. 520101253886	69,39,180.71	1,33,20,279.21
Union Bank of India NIT Goa HEFA Escrow 2 A/c. No. - 520101263652423	23,447.90	-
Union Bank of India - NIT Goa Projects Overhead PDA SB A/c. No. - 520101252614922	5,463.00	5,303.00
Union Bank of India SB/01/003573-520101026780557	1,89,10,797.06	1,89,66,917.17
II. Current Account	-	-
III. Term Deposits with Schedule Banks		
Investment A/c. No. KCC/01/170012-530401087497108	53,59,295.00	53,59,295.00
Investment A/c. No. KCC/01/170013-530401087497159	53,59,295.00	53,59,295.00
Investment A/c. No. KCC/01/170015-530401087497132	37,51,507.00	37,51,507.00
Investment A/c. No. KCC/01/170016- 530401087497140	42,87,436.00	42,87,436.00
Investment A/c. No. KCC/01/170017-530401087497116	53,59,295.00	53,59,295.00
Investment A/c No.530401024338896	-	99,00,000.00
Investment A/c No.530401024338964	-	99,00,000.00
Investment A/c No.530401024339022	-	99,00,000.00
Investment A/c No.530401024339107	-	99,00,000.00
Investment A/c No.-530401024339169	-	99,00,000.00
Investment A/c No.530401024339282	-	99,00,000.00
Investment A/c No.530401024339404	-	99,00,000.00



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Investment A/c No.530401024339459	-	99,00,000.00
Investment A/c No.-530401024339596	-	99,00,000.00
Investment A/c No.530401024339695	-	99,00,000.00
Investment A/c No.530401024339770	-	99,00,000.00
Investment A/c No.-530401024339824	-	99,00,000.00
Investment A/c No.-530401024339879	-	99,00,000.00
Investment A/c No.-530401024339886	-	99,00,000.00
Investment A/c No.-530401024339961	-	99,00,000.00
Investment A/c No.-530401024339992	-	99,00,000.00
Investment A/c No.-530401024340073	-	99,00,000.00
Investment A/c No.-530401024340097	-	99,00,000.00
Investment A/c No.-530401024340172	-	99,00,000.00
Investment A/c No.-530401024340202	-	99,00,000.00
Investment A/c No.-530401024340271	-	99,00,000.00
Investment A/c No.530401024340288	-	99,00,000.00
Investment A/c No.530401024340318	-	99,00,000.00
Investment A/c No.-530401024340325	-	99,00,000.00
Investment A/c No.530401024340394	-	99,00,000.00
Investment A/c No.530401024340462	-	99,00,000.00
Investment A/c No.530401024340516	-	99,00,000.00
Investment A/c No.530401024340561	-	99,00,000.00
Investment A/c No.530401024340646	-	99,00,000.00
Investment A/c No.530401024340653	-	99,00,000.00
Investment A/c No.530401024340738	-	99,00,000.00
Investment A/c No.530401024340745	99,00,000.00	99,00,000.00
Investment A/c No.530401024340752	99,00,000.00	99,00,000.00
Investment A/c No.-530401024340783	99,00,000.00	99,00,000.00
Investment A/c No.-530401024340790	99,00,000.00	99,00,000.00
Investment A/c No.-530401024340806	99,00,000.00	99,00,000.00
Investment A/c No.-530401024340851	99,00,000.00	99,00,000.00
Investment A/c No.-530401024340875	99,00,000.00	99,00,000.00
Investment A/c No.-530401024340905	99,00,000.00	99,00,000.00
Investment A/c No.-530401024340943	99,00,000.00	99,00,000.00
Investment A/c No.530401024340967	99,00,000.00	99,00,000.00
Investment A/c No.-530401024340974	99,00,000.00	99,00,000.00
Investment A/c No.-530401024340981	99,00,000.00	99,00,000.00
Investment A/c No.-530401024341018	99,00,000.00	99,00,000.00
Investment A/c No.-530401024341025	99,00,000.00	99,00,000.00
Investment A/c No.-530401024341049	99,00,000.00	99,00,000.00
Investment A/c No.-530401024341063	99,00,000.00	99,00,000.00
Investment A/c No.530401024341094	99,00,000.00	99,00,000.00
Investment A/c No.-530401024341131	99,00,000.00	99,00,000.00
Investment A/c No.-530401024341179	99,00,000.00	99,00,000.00
Investment A/c No.-530401024341186	99,00,000.00	99,00,000.00
Investment A/c No.-530401024341223	99,00,000.00	99,00,000.00
Investment A/c No.-530401024341247	99,00,000.00	99,00,000.00
Investment A/c No.-530401024341285	99,00,000.00	99,00,000.00
Investment A/c No.-530401024341308	99,00,000.00	99,00,000.00
Investment A/c No.-530401024341377	99,00,000.00	99,00,000.00
Investment A/c No.-530401024341384	99,00,000.00	99,00,000.00
Investment A/c No.-530401024341391	99,00,000.00	99,00,000.00
Investment A/c No.-530401024341445	99,00,000.00	99,00,000.00
Investment A/c No.530401024342312-DASA A/c	60,00,000.00	60,00,000.00
Investment A/c. No.530401041264567-DASA	66,00,000.00	66,00,000.00
Investment A/c. No. 530401024342527-Hostel Dev. Fund	1,27,600.00	1,27,600.00
Investment A/c No.-530401024342695-Misc. Fines	7,00,000.00	7,00,000.00
Investment A/c No.-530401024342749	7,00,000.00	7,00,000.00
Investment A/c. No.530101343585581	-	99,00,000.00
Investment A/c No.-530401034273484	99,00,000.00	99,00,000.00
Investment A/c No.-530401036091840	90,00,000.00	90,00,000.00
Investment A/c No.-530401036092069	70,00,000.00	70,00,000.00
Investment A/c No.-530401036092236	70,00,000.00	70,00,000.00
Investment A/c No.-530401036092502	40,00,000.00	40,00,000.00
Investment A/c. No. - 530401041263874	1,50,00,000.00	1,50,00,000.00



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Investment A/c No.-530401041264000 - Misc. Fines	10,00,000.00	10,00,000.00
Investment A/c No.530401041264291-Alumni	4,00,000.00	4,00,000.00
Investment A/c No.530401041264369-CSAB	15,00,000.00	15,00,000.00
Investment A/c. No.530401041264482 - Hostel	60,00,000.00	60,00,000.00
Investment A/c. No. - 530401041288907	1,50,00,000.00	1,50,00,000.00
Investment A/c. No. - 530401041308322	-	1,00,00,000.00
Investment A/c. No.-KCC 530401721030914	8,00,000.00	8,00,000.00
Investment A/c No.-132823030000037	50,00,000.00	50,00,000.00
Investment A/c No.-132823030000038	-	90,00,000.00
Investment A/c No.-132823030000039	-	90,00,000.00
Investment A/c. No.-132823030000040	90,00,000.00	90,00,000.00
Investment A/c. No.-132823030000041	90,00,000.00	90,00,000.00
Investment A/c No.-132823030000042	-	90,00,000.00
Investment A/c. No.-132823030000043	90,00,000.00	90,00,000.00
Investment A/c. No.-132823030000044	-	90,00,000.00
Investment A/c No.530401042096051	30,00,000.00	30,00,000.00
Investment -132823030000118-Convocation A/c	2,00,000.00	-
Investment A/c. No.-132823030000045	90,00,000.00	-
Investment A/c No - 132823030000067	1,85,00,000.00	-
Investment A/c No - 132823030000068	1,85,00,000.00	-
Investment A/c No - 132823030000069	1,67,98,750.00	-
Investment A/c No - 132823030000070	1,85,00,000.00	-
Investment A/c No - 132823030000071	1,85,00,000.00	-
Investment A/c No - 132823030000072	1,85,00,000.00	-
Investment A/c No - 132823030000074	1,85,00,000.00	-
Investment A/c No - 132823030000075	1,33,96,250.00	-
Investment A/c. No.- 132823030000115 - DASA	1,40,00,000.00	-
Investment Ac. no. -132823030000116	8,00,000.00	-
Investment A/c. No. 132823030000117 Misc Fines A/c	3,50,000.00	-
Investment CSAB No. 132823030000114	27,00,000.00	-
Canara Bank Investment No. 140026634988/1	1,95,00,000.00	-
Canara Bank Investment No. 140026634988/2	1,97,00,000.00	-
Canara Bank Investment No. 140026634988/3	1,98,00,000.00	-
Canara Bank Investment No. 140026634988/4	1,99,00,000.00	-
Canara Bank Investment No. 140026634988/5	1,94,00,000.00	-
Canara Bank Investment No. 140026634988/6	1,95,00,000.00	-
Canara Bank Investment No. 140026634988/7	1,90,00,000.00	-
Canara Bank Investment No. 140026634988/8	43,93,705.00	-
Total	91,40,32,713.27	83,86,28,016.69



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NATIONAL INSTITUTE OF TECHNOLOGY GOA
SCHEDULES FORMING PART OF BALANCESHEET AS AT 31ST, MARCH, 2022

SCHEDULE 9 - LOANS, ADVANCES & DEPOSITS

	As at 31.03.2022		As at 31.03.2021	
1. Advances to employees: (Non - Interest bearing)				
a) Salary	-		-	
b) Festival	-		-	
c) Medical Advance	-		-	
d) Others (to be Specified)	-	-	-	-
2. Advances to employees: (Non - Interest bearing)				
a) Vehicle Loan	-		-	
b) Home Loan	-		-	
c) Others (to be Specified)	-	-	-	-
3. Advances and other amounts receivable in cash or in kind or for value to be received:				
a) On Capital Account	27,65,51,220.00		39,35,03,644.00	
b) to Suppliers	-		99,857.50	
c) Others (Sub Schedule 7)	-	27,65,51,220.00	-	39,36,03,501.50
4. Prepaid Expenses				
a) Insurance	-		-	
b) Other Expenses (Sub Schedule 7)	54,98,940.00	54,98,940.00	50,96,829.00	50,96,829.00
5. Deposits				
a) Telephone (Sub Schedule 8)	-		-	
b) Lease Rent (Sub Schedule 8)	-		-	
c) Electricity	5,00,000.00		-	
d) AICTE, if applicable	-		-	
e) Others (to be Specified)	-	5,00,000.00	-	-
6. Income Accrued:				
a) On Investments from earmarked/endow. Funds	-		-	
b) On Investments - others (Sub Schedule 7)	2,64,42,647.70		2,56,42,986.70	
c) On Loans and Advances	-		-	
d) Others (Includes Income due unrealised Rs...)	-	2,64,42,647.70	-	2,56,42,986.70
7. Other - Current Assets receivable from UGC/MHRD/sponsored projects				
a) Debit balances in Sponsored Projects	-		-	
b) Debit balances in Sponsored Fellowships & Scholarships	-		-	
c) Grants Receivable	-		-	
d) Other receivables from UGC	-		-	
8. Claims Receivable		44,08,427.19		1,34,742.60
TOTAL		31,34,01,234.89		42,44,78,059.80

Note:

1.If revolving funds have been created for House Building, computer and Vehicle advances to employees, the advances will appear as part of Earmarked/endowment Funds. The balance against these interest bearing advances will not appear in this schedule.



NATIONAL INSTITUTE OF TECHNOLOGY GOA
SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT FOR PERIOD/YEAR
ENDED 31ST, MARCH, 2022

SCHEDULE 10 - ACADEMIC RECEIPTS

	Amount in Rupees	
	2021-2022	2020-2021
FEES FROM STUDENTS		
Academic		
1. Tuition fee	4,93,99,077.00	3,83,58,056.00
2. Admission fee	42,000.00	-
3. Enrolment fee	-	-
4. Library Admission fee	-	-
5. Laboratory fee	-	-
6. Art & Craft fee	-	-
7. Registration fee	-	-
8. Syllabus fee	-	-
9. Other Fee	28,18,000.00	22,46,000.00
10. Application Fee	1,56,500.00	-
Total (A)	5,24,15,577.00	4,06,04,056.00
Examinations		
1. Admission test fee	-	-
2. Annual Examination fee	-	-
3. Mark sheet, certificate fee	-	-
4. Entrance examination fee	-	-
Total (B)	-	-
Other Fees		
1. Identity card fee	-	-
2. Fine/ Miscellaneous fee	80,036.39	43,459.00
3. Medical fee	-	-
4. Transportation fee	-	-
5. Hostel fee	3,90,700.00	81,000.00
Total(C)	4,70,736.39	1,24,459.00
Sale of Publications		
1. Sale of Admission forms	-	-
2. Sale of syllabus and Question Paper, etc.	-	-
3. Sale of prospectus including admission forms	-	-
Total (D)	-	-
Other Academic Receipts		
1. Registration fee for workshops, programmes	3,500.00	1,10,000.00
2. Registration fees (Academic Staff College)	-	-
Total (E)	3,500.00	1,10,000.00
GRAND TOTAL (A+B+C+D+E)	5,28,89,813.39	4,08,38,515.00

Note:

In case fees like entrance fee, subscriptions etc are material and are in the nature of capital receipts, such amount should be recognized to the Capital Fund. Otherwise such fees will be appropriately incorporated in this schedule.

**NATIONAL INSTITUTE OF TECHNOLOGY GOA
SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT FOR PERIOD YEAR ENDED 31ST MARCH, 2022
SCHEDULE 11- GRANTS /SUBSIDIES (IRREVOCABLE GRANTS RECEIVED)**

Particulars	Amount in Rupees										
	OH-31 (General)	OH-31 (HEFA Loan Principal)	OH-31 (HEFA Loan Interest)	OH-38 (Salaries)	OH-35 (Capital)	Plan		Total Plan	Non Plan UGC	As at 31.03.2022	As at 31.03.2021
						Govt. of India	UGC				
Balance B/F	8,28,03,689.87	-	-	2,53,02,875.73	61,72,04,647.59	-	-	72,93,11,223.29	-	72,93,11,223.29	86,65,15,469.49
Add: Receipts during the year for Expenditure	1,93,00,000.00	-	-	19,61,75,000.00	-	-	-	21,54,75,000.00	-	21,54,75,000.00	20,14,00,000.00
Add: Receipts during the year towards HEFA Loan repayment (Principal + Interest)	-	21,17,92,500.00	36,38,243.00	-	-	-	-	21,54,30,743.00	-	21,54,30,743.00	-
Add: Provision for Retirement Benefits of earlier years whack	-	-	-	4,66,22,732.00	-	-	-	4,66,22,732.00	-	4,66,22,732.00	-
Add: Interest earned during the year	96,15,871.00	-	-	24,21,318.00	79,89,975.00	-	-	2,00,27,164.00	-	2,00,27,164.00	1,97,10,639.00
Total	11,17,19,570.87	21,17,92,500.00	36,38,243.00	27,05,21,925.73	62,51,94,622.59	-	-	1,22,28,66,862.29	-	1,22,28,66,862.29	1,11,76,26,308.49
Less: Refunds back to MOE	-	-	-	7,57,38,540.00	-	-	-	7,57,38,540.00	-	7,57,38,540.00	-
Less: Interest earned on grants refunded back to the MOE	1,97,49,021.00	-	-	1,25,22,212.00	12,88,14,550.18	-	-	16,10,85,783.18	-	16,10,85,783.18	-
Balance	9,19,70,549.87	21,17,92,500.00	36,38,243.00	18,22,81,173.73	49,63,80,072.41	-	-	98,60,42,539.11	-	98,60,42,539.11	1,11,76,26,308.49
Less: Utilized for Capital expenditure -35	9,19,70,549.87	21,17,92,500.00	36,38,243.00	18,22,81,173.73	39,97,47,202.00	-	-	39,97,47,202.00	-	39,97,47,202.00	19,09,66,791.00
Balance	-	-	-	-	9,66,32,870.41	-	-	58,62,95,337.11	-	58,62,95,337.11	92,66,59,517.49
Less: Utilized for HEFA Loan Principal Repayment	-	-	-	-	-	-	-	-	-	-	-
Less: Utilized for HEFA Loan Interest Repayment (B)	-	-	1,12,08,091.00	-	-	-	-	1,12,08,091.00	-	1,12,08,091.00	-
Less: Utilized for General Revenue Expenditure -31 (C)	7,26,08,063.95	-	-	-	-	-	-	7,26,08,063.95	-	7,26,08,063.95	8,13,60,885.20
Less: Utilized for Salaries Expenditure -36	-	-	-	13,39,15,531.00	-	-	-	13,39,15,531.00	-	13,39,15,531.00	11,99,87,409.00
Balance C/F (E)	1,93,62,466.02	21,17,92,500.00	(75,69,848.00)	4,83,45,642.73	9,66,32,870.41	-	-	36,85,63,661.16	-	36,85,63,661.16	72,93,11,223.29

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

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

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

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

The Revenue expenditure met out of non plan grants calculated is as follows:

Particulars	General - 31		General -31 HEFA Interest		Total	
	General - 31	Salaries - 36	General -31 HEFA Interest	Salaries - 36	General - 31	Total
Expenditure as per Expenditure schedules (Non Plan column) of the Income and Expenditure Account	9,06,10,279.95	15,40,89,828.00	1,12,08,091.00	15,40,89,828.00	26,59,08,198.95	
Less: Provision made in the year for retirement benefits	-	2,06,48,879.00	-	2,06,48,879.00	2,06,48,879.00	
Add: Actual payments made in the year for retirement benefits	-	4,74,582.00	-	4,74,582.00	4,74,582.00	
Less: Depreciation during the year	1,80,02,226.00	-	-	-	1,80,02,226.00	
Revenue expenditure met out of non - plan grants.	7,26,08,063.95	13,39,15,531.00	1,12,08,091.00	13,39,15,531.00	21,77,31,675.95	



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SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT FOR PERIOD/YEAR ENDED 31ST. MARCH. 2022

SCHEDULE 12: INCOME FROM INVESTMENTS

Amount in Rupees

	Investment from Earmarked Fund		Investment -Others	
	2021-2022	2020-2021	2021-2022	2020-2021
1. Interest				
a. On Govt. Securities	-	-	-	-
b. Other Bonds/Debentures	-	-	-	-
2. Interest on Term Deposits	-	-	1,92,09,617.00	3,20,32,940.00
3. Income accrued but not due on Term Deposits/Interest bearing advances to employees	-	-	-	-
4. Interest on Savings Bank Accounts	4,70,771.00	4,13,549.00	-	-
5. Others (Specify)	-	-	-	-
TOTAL	4,70,771.00	4,13,549.00	1,92,09,617.00	3,20,32,940.00
Transferred to Earmarked / Endowment Funds	4,70,771.00	4,13,549.00	-	-
Balance	-	-	1,92,09,617.00	3,20,32,940.00

Note: Interest accrued but not due on Term Deposits from HBA fund, conveyance advance fund and Computer Advance fund and on interest bearing advances to employees will be included here (Item 3), only where Revolving funds (EMF) for such advances have been set up.

SCHEDULE -13: INTEREST EARNED

Amount in Rupees

	2021-2022	2020-2021
1. On Savings Account with Scheduled Banks	5,61,946.00	2,78,383.00
2. On Loans		
a. Employee/Staff	-	-
b. Others	-	-
3. Interest on Debtors and Other Recoverables	-	-
TOTAL	5,61,946.00	2,78,383.00

Note:

1. The amount against item 1, in respect of Bank Accounts of Earmarked/Endowment Funds is dealt with in Schedule 12 (First Part) and Schedule 2.

2. Item 2(a) is applicable only if Revolving funds have not been constituted for such advances.



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SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT FOR PERIOD/YEAR ENDED 31ST, MARCH, 2022.

SCHEDULE 14: OTHER INCOME

- Items of material amounts included in Miscellaneous Income should be separately disclosed.

	Amount in Rupees	
	2021-2022	2020-2021
A. Income from Land & Buildings		
1. Hostel Room Rent	-	-
2. License fee	-	-
3. Hire Charges of Canteen/Auditorium/Play ground/Convention Centre, etc	-	-
4. Electricity charges recovered	-	-
5. Water charges recovered	-	-
B. Sale of Institute's publications		
C. Income from holding events		
1. Gross Receipts from annual function/ sports carnival	-	-
Less: Direct expenditure incurred on the annual function/ sports carnival	-	-
2. Gross Receipts from fetes	-	-
Less: Direct expenditure incurred on the fetes	-	-
3. Gross Receipts for educational tours	-	-
Less: Direct expenditure incurred on the tours	-	-
4. Others (to be specified & separately disclosed)	-	-
Gross Receipts from Workshops, Short Term courses, etc	5,700.00	-
Less: Direct expenditure incurred on Workshops, Short Term courses, etc	15,986.00	(10,286.00)
D. Others		
1. Income from consultancy	-	-
2. Income from Overheads of Sponsored Projects	4,30,178.00	5,43,074.00
2. RTI fees	150.00	130.00
3. Income from Royalty	-	-
4. Sale of application form (recruitment)	-	-
5. Misc. receipts (Sale of tender form, waste paper, etc.)	-	-
6. Profit on Sale/disposal of Assets	-	-
a. Owned assets	-	-
b. Assets received free of cost	-	-



7. Grants/Donations from Institutions, Welfare Bodies and International Organizations	-	-	-	-
8. Foreign Exchange Gain	23,048.92	2,645.10		
9. Recruitment Application Fees	11,000.00	-		
10. Salary in Lieu of Notice	26,397.00	-		
9. Others (specify) (Credit Balances w/off / Liquidated Damages)	68,959.60	5,59,733.52	2,18,025.25	7,63,874.35
Total		5,49,447.52		7,63,874.35

SCHEDULE 15- PRIOR PERIOD INCOME

Particulars	Amount in Rupees	
	2021-2022	2020-2021
1. Academic Receipts	-	-
2. Income from Investments	-	-
3. Interest earned	-	-
4. Other Income	-	-
Total	-	-



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SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT FOR PERIOD/YEAR ENDED 31ST, MARCH, 2022

Particulars	Amount in Rupees			
	2021-2022		2020-2021	
	Plan	Non Plan	Plan	Non Plan
a) Laboratory expenses	53,488.00	-	3,47,905.00	-
b) Field work/Participation in Conferences	-	-	-	-
c) Expenses on Seminars/Workshops	-	-	-	-
d) Payment to visiting faculty	12,73,641.00	-	2,44,000.00	-
e) Examination	-	-	-	-
f) Student Welfare expenses	63,027.00	-	1,37,411.00	-
g) Admission expenses	-	-	-	-
h) Convocation expenses	2,65,635.00	-	2,41,115.00	-
i) Publications	-	-	-	-
j) Stipend/means-cum-merit scholarship	3,29,10,646.00	-	3,59,41,882.00	-
k) Subscription Expenses	(1,66,511.00)	-	6,36,809.00	-
l) Others (specify)	-	-	-	-
TOTAL	3,43,99,926.00	-	3,75,49,122.00	-

SCHEDULE 18- ADMINISTRATIVE AND GENERAL EXPENSES

Particulars	Amount in Rupees			
	2021-2022		2020-2021	
	Plan	Non Plan	Plan	Non Plan
A. Infrastructure				
a) Electricity and power	16,65,953.00	-	14,96,071.00	-
b) Water charges	1,29,821.00	-	1,13,348.00	-
c) Insurance	-	-	-	-
d) Rent, Rates and Taxes (including property tax)	6,17,399.00	-	7,66,025.00	-
B. Communication				
e) Postage and Stationery	11,260.00	-	13,042.00	-
f) Telephone, Fax and Internet Charges	6,48,822.00	-	9,72,863.00	-
TOTAL	16,65,953.00	-	16,65,953.00	-
	1,29,821.00	-	1,29,821.00	-
	6,17,399.00	-	6,17,399.00	-
	11,260.00	-	11,260.00	-
	6,48,822.00	-	6,48,822.00	-



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C. Others	2021-2022		2020-2021		TOTAL
	Plan	Non Plan	Total	Total	
g) Printing and Stationery (consumption)	5,31,587.00	-	5,31,587.00	2,03,475.00	2,03,475.00
h) Travelling and Conveyance Expenses	95,300.00	-	95,300.00	21,950.00	21,950.00
i) Hospitality	4,32,534.00	-	4,32,534.00	3,34,998.00	3,34,998.00
j) Auditors Remuneration	4,07,475.00	-	4,07,475.00	3,61,950.00	3,61,950.00
k) Professional Charges	11,800.00	-	11,800.00	11,800.00	11,800.00
l) Advertisement and Publicity	2,13,756.00	-	2,13,756.00	-	-
m) Magazines & Journals	20,947.00	-	20,947.00	17,851.00	17,851.00
n) Staff Recruitment/Training Expenses	66,960.00	-	66,960.00	-	-
o) Medical Expenses	3,57,007.00	-	3,57,007.00	4,55,484.00	4,55,484.00
p) Seed Money / PDA Expenses	2,84,655.00	-	2,84,655.00	18,65,898.00	18,65,898.00
q) Security Expenses	86,22,038.00	-	86,22,038.00	87,94,692.00	87,94,692.00
r) Membership	-	-	-	-	-
s) Foreign Exchange Loss	800.00	-	800.00	5,509.07	5,509.07
t) GST Paid	7,11,487.00	-	7,11,487.00	-	-
u) Miscellaneous Expenses	23,710.00	-	23,710.00	36,025.00	36,025.00
TOTAL	1,48,53,311.00	-	1,48,53,311.00	1,54,70,981.07	1,54,70,981.07

SCHEDULE 19-TRANSPORTATION EXPENSES

Particulars	2021-2022		2020-2021		Total
	Plan	Non Plan	Total	Total	
1 Vehicles (owned by institution)					
a) Running expenses	6,09,791.00	-	6,09,791.00	1,93,187.00	1,93,187.00
b) Repairs & maintenance	-	-	-	1,45,183.00	1,45,183.00
c) Insurance expenses	78,070.00	-	78,070.00	63,164.00	63,164.00
2 Vehicles taken on rent/lease					
a) Rent/lease expenses	16,46,800.00	-	16,46,800.00	19,44,600.00	19,44,600.00
3 Vehicle (Taxi) hiring expenses	20,438.00	-	20,438.00	-	-
TOTAL	23,55,099.00	-	23,55,099.00	23,46,134.00	23,46,134.00



NATIONAL INSTITUTE OF TECHNOLOGY GOA
SCHEDULES FORMING PART OF INCOME & EXPENDITURE ACCOUNT FOR PERIOD/YEAR ENDED 31ST, MARCH, 2022
SCHEDULE 20- REPAIRS & MAINTENANCE

Particulars	2021-2022			2020-2021		
	Plan	Non Plan	Total	Plan	Non Plan	Total
	a) Buildings	17,35,367.00	-	17,35,367.00	1,19,42,766.00	-
b) Furniture & Fixtures	-	-	-	82,600.00	-	82,600.00
c) Plant & Machinery	-	-	-	-	-	-
d) Office Equipment	2,65,621.50	-	2,65,621.50	1,00,844.00	-	1,00,844.00
e) Computers (including Software)	49,02,322.00	-	49,02,322.00	24,91,179.00	-	24,91,179.00
f) Laboratory & Scientific equipment	-	-	-	-	-	-
g) Audio Visual equipment	-	-	-	-	-	-
h) Cleaning Material & Services	1,38,55,343.00	-	1,38,55,343.00	1,11,57,618.00	-	1,11,57,618.00
i) Book binding charges	-	-	-	-	-	-
j) Gardening	-	-	-	-	-	-
k) Estate Maintenance	-	-	-	-	-	-
l) Others (Specify)	2,19,494.00	-	2,19,494.00	1,96,068.00	-	1,96,068.00
Total	2,09,78,147.50	-	2,09,78,147.50	2,59,71,075.00	-	2,59,71,075.00

SCHEDULE 21- FINANCE COSTS

Particulars	2021-2022			2020-2021		
	Plan	Non Plan	Total	Plan	Non Plan	Total
	a) Bank charges	21,952.30	-	21,952.30	23,761.93	-
b) Interest on HEFA Loan	1,12,08,091.00	-	1,12,08,091.00	-	-	-
c) Others (specify)	-	-	-	-	-	-
Total	1,12,30,043.30	-	1,12,30,043.30	23,761.93	-	23,761.93

Internal Auditors Note:

The NIT Goa has taken HEFA Loan for the construction of new campus at Cuncolim. As per the Accounting Standard - 16 if any loan has been taken for creation of Capital Assets and utilised for that purpose, interest paid on that specified loan has to be capitalised as capital expenditure till the date of completion and should be added with the cost of assets. As per the financial statement prepared by the management we have noticed that the construction work of New campus building are still in progress and the management has claimed the interest paid on HEFA loan as revenue expenditure during the year considered as current year expense.



If the amount is not material, the head Bank charges could be omitted and these could be accounted as Administrative expenses in Schedule 17.

SCHEDULE 22: OTHER EXPENSES

Particulars	Amount in Rupees					
	2021-2022		2020-2021		Total	
	Plan	Non Plan	Plan	Non Plan	Plan	Total
a) Provision for Bad and Doubtful Debts/Advances	-	-	-	-	-	-
b) Irrecoverable Balances Written-off	40.00	-	40.00	-	80.00	80.00
c) Grants/Subsidies to other institutions/organizations	-	-	-	-	-	-
d) Others (specify)	-	-	-	-	-	-
Total	40.00	-	40.00	-	80.00	80.00

Note:

Other expenses shall be classified as writes - off, provisions, miscellaneous expenses, loss on sale of investments, loss of fixed assets and loss on sale of fixed assets etc and disclosed accordingly.

SCHEDULE 23: PRIOR PERIOD EXPENSES

Particulars	Amount in Rupees					
	2021-2022		2020-2021		Total	
	Plan	Non Plan	Plan	Non Plan	Plan	Total
1 Establishment expenses	-	-	-	-	-	-
2 Academic expenses	-	-	-	-	-	-
3 Administrative expenses	-	-	-	-	-	-
4 Transportation expenses	-	-	-	-	-	-
5 Repairs & Maintenance	-	-	-	-	-	-
6 Other expenses (Consumables W/off)	-	-	-	-	-	-
Total	-	-	-	-	-	-



NATIONAL INSTITUTE OF TECHNOLOGY GOA
SCHEDULES FORMING PART OF ACCOUNTS FOR PERIOD/YEAR ENDED 31ST, MARCH, 2022

SCHEDULE -24 - SIGNIFICANT ACCOUNTING POLICIES

1) BASIS FOR PREPARATION OF ACCOUNTS

The Institute is governed by "The National Institute of Technology Act 2007". As per MHRD, GOI Letter No. 29-4/2012-IFD DT 17.04.2015 the accounts of the Institute is prepared in Revised formats of accounts of Central Educational Institutions. The accounts are prepared on the basis of historical cost convention, unless otherwise stated and on the accrual method of accounting.

2) REVENUE RECOGNITION

2.1 Fees from Students (except Tuition Fees), Sale of Admission Forms, Royalty and Interest on Savings Bank account are accounted on receipt basis. Tuition Fees collected separately for each semester is accounted on accrual basis.

2.2 Income from Land, Buildings and Other Property and Interest on Investments are accounted on accrual basis.

3) FIXED ASSETS AND DEPRECIATION

3.1 Fixed assets are stated at cost of acquisition including inward freight, duties and taxes and incidental and direct expenses related to acquisition, installation and commissioning. Cost includes all attributable cost in bringing the assets to its working condition for the intended use.

3.2 All the assets that are acquired out of Government grants, the cost of assets acquired during the year is considered as utilization of grants for non-recurring purposes and to the extent utilized towards capital expenditure (on accrual basis), government grants and grants from MHRD are transferred to the Capital Fund. While computing the capital expenditure met out of grants during the year (for the purpose of crediting to Capital Fund) care has been taken to exclude from the additions during the year (column 2 of Gross Block) the work in progress transferred to the Asset Accounts during the year.

3.3 Gifted/Donated assets are valued at the declared value where available; if not available, the value is estimated based on the present market value adjusted with reference to the physical condition of the asset. They are set-up by credit to Capital Fund and merged with the Fixed Assets of the Institution. Depreciation is charged at the rates applicable to the respective assets.

3.4 Fixed assets are valued at cost less accumulated depreciation. Depreciation on fixed assets is provided on Straight line method, at the following rates:



Tangible Assets:

1. Land	0%
2. Site Development	0%
3. Buildings	2%
4. Roads & Bridges	2%
5. Tubewells & Water Supply	2%
6. Sewerage & Drainage	2%
7. Electrical Installation and equipment	5%
8. Plant & Machinery	5%
9. Scientific & Laboratory Equipment	8%
10. Office Equipment	7.5%
11. Audio Visual Equipment	7.5%
12. Computers & Pheripherals	20%
13. Furniture, Fixtures & Fittings	7.5%
14. Vehicles	10%
15. Library Books & Scientific Journals	10%

Intangible Assets (amortization):

1. E-journals (perpetual)	40%
2. Computer software	40%
3. Patents & Copyrights	9 Years

3.5 Depreciation is provided for the whole year on additions/sale/buyback/deductions during the year.

3.6 Where an asset is fully depreciated, it will be carried at a residual value of Re.1 in the Balance Sheet and will not be further depreciated. Thereafter, depreciation is calculated on the additions of each year separately at the rate of depreciation applicable for that asset head.

3.7 Assets created out of Earmarked Funds and funds of Sponsored Projects, where the ownership of such assets vests in the Institution, are setup by credit to Corpus/Capital Fund and merged with the Fixed Assets of the Institution. Depreciation is charged at the rates applicable to the respective assets. Assets created out of Sponsored Project funds, where the ownership is retained by the sponsors but held and used by the Institution are separately disclosed in the Notes on Accounts.

3.8 Assets, the individual value of each of which is Rs. 2000 or less (except Library Books) are treated as Small Value Assets, 100% depreciation is provided in respect of such assets at the time of their acquisition. However physical accounting and control are continued by the holders of such assets.

4) Intangible Assets: Patents and copy rights, E Journals and Computer Software are grouped under Intangible Assets.

4.1. **PATENTS:** The expenditure incurred from time-to-time (application fees, legal expenses etc.) for obtaining Patents is temporarily capitalized and shown as part of Intangible Assets in the Balance Sheet. If applications for patents are rejected, the cumulative expenditure incurred on the particular patent is written off to the Income & Expenditure Account in the year the application is rejected. The expenditure on Patents granted is written off over a life of 9 years on a conservative basis.

4.2. Perpetual Electronic Journals (E-Journals) are separated from Library Books in view of the limited benefit that could be derived from the on-line access provided. Perpetual E-journals are not in a tangible form, but temporarily capitalized and in view of the magnitude of expenditure and the benefit derived in terms of perpetual knowledge acquired by the Academic and Research Staff. Depreciation is provided in respect of Perpetual E-journals at a higher rate of 40% as against depreciation of 10% provided in respect of Library Books. Expenditure other than Perpetual E-journals are not perpetual in nature and hence expenditure for respective year is treated as expenditure in Income & Expenditure Account and expenditure for subsequent year is transferred to prepaid expenses in Balancesheet.

4.3. Expenditure on acquisition of software has been separated from computers and peripherals, as apart from being intangible assets, the rate of obsolescence in respect of these is very high. Depreciation is provided in respect of software at a higher rate of 40% as against depreciation of 20% provided in respect of Computers & Peripherals.

5) INVENTORY

Expenditure on purchase of chemicals, glassware, publications and other stores is accounted as revenue expenditure during the year of purchase. NIT GOA is located in transit campus till date and since there is space constraint, stores and spares are purchased to the extent required.

6) RETIREMENT BENEFITS

Retirement benefits i.e., pension, gratuity and leave encashment are provided on the basis of actuarial valuation. The Actual payments of Pension, Gratuity and Leave encashment are debited in the Accounts to the respective provisions. Other retirement benefits viz. Deposit Linked Insurance, Contribution to New Pension Scheme, Medical reimbursement to retired employees and Travel to Home Town on retirement are accounted on accrual basis (actual payments plus outstanding bills at the end of the year).

7) INVESTMENTS

a. Long term investments are carried at their cost or face value whichever is lower. However any permanent diminution in their value as on the date of the Balance Sheet is provided for.

b. Short Term investments are carried at their cost or market value (if quoted) whichever is lower.



8) Earmarked/Endowment Funds

The following long terms funds are earmarked for specific purposes. Since the balances in the funds are small and multiplicity of bank accounts operated by the institute, they are deposited in common bank account. Those with large balances also have investments in Term Deposits with Banks. The interest earned on the earmarked fund lying in saving account is transferred to the respective fund at the end of the year at the rate applicable on saving bank accounts from time to time i.e 4%. The income from investments / advances (House Building Conveyance and computer) on accrued basis and interest on savings Bank Accounts are credited to the respective Funds. The expenditure and advances (in the case of House Building & Conveyance/Computer) are debited to the fund. The assets created out of Earmarked Funds where the ownership Vests in the Institution, are merged with the assets of the Institution by crediting an equal amount to the Corpus/Capital Fund. The balance in the respective funds is carried forward and is represented on the assets side by the balance at Bank , Investments and accrued interest.

8.1 CORPUS/CAPITAL FUND was established in 2010. Matching contribution to the extent of Fixed Assets purchased from Plan Grants from MHRD, Recognition/Affiliation fee received from Colleges and other academic institutions and contributions from Research Projects are treated as additions to Corpus/Capital fund.

The Corpus/Capital Fund is utilized for both Revenue and Capital expenditure based on the guidelines by the MHRD and the Executive council of the Institution from time to time. The assets created out of the Plan Grants of MHRD are merged with the assets of the Institution by crediting an equal amount to the Corpus/Capital Fund.

8.2 Endowment Funds :Endowments are funds received from various individual donors, Trusts and other organizations, for establishing Chairs and for Medals & Prizes, as specified by the Donors. While each of the Endowment funds has its own investment there is one savings Bank Account for all the Endowment funds, as the uninvested balances against them are negligible.

The income from investment of each Endowment Fund is added to the Fund. The interest on Savings Bank a/c is allocated to all the Endowment funds in the ratio of the year end closing balances in each fund. The expenditure on Medals & Prizes is met from the interest earned on investment of the respective Endowment Funds and the balance is carried forward. In respect of Chairs, however, the corpus of the Endowment is also used.

The balances are represented by investment in RBI Bonds and Fixed Deposits and balance in the Saving Bank Account common for all Endowments, and Accrued Interest on Investments.

9) GOVERNMENT GRANTS

9.1 Government of India, Ministry of Human Resources Development provides grant-in-aid to the Institute as Annual Plan Grants for meeting the recurring and non-recurring expenditure. The grants released by the Government has to be utilized only for the purpose for which it is granted and a Utilization Certificate in Form GFR-12A has to be furnished showing the actual amount utilized and the balance available at the close of the financial year. The unspent grant is carried forward for utilization in the subsequent years. As such the unspent amount of grants is a liability of the Institute and is disclosed as "Unutilised Grants" under Current Liabilities.

9.2 Expenditure of non-recurring nature (Capital expenditure for acquiring fixed assets) is shown as a deduction from this account (since it represents expenditure for the purpose for which the grant is sanctioned) and an equal amount is credited to Corpus/Capital Fund.

9.3 Government Grants and UGC grants are accounted on realization basis. However, where a sanction for release of grant pertaining to the financial year is received before 31st March and the grant is actually received in the next financial year, the grant is accounted on accrual basis and an equal amount is shown as recoverable from the Grantor.

9.4 To the extent utilized towards capital expenditure, (on accrual basis) government grants and grants from UGC are transferred to the Capital Fund.

9.5 Government and UGC grants for meeting Revenue Expenditure (on accrual basis) are treated, to the extent utilized, as income of the year in which they are realized.

9.6 Reconciliation of Grants as per books & Utilization Certificate is as below:

Particulars	General Head -31	Capital Head -35	Salaries Head -36	Total
Opening Balance as per Accounts on 01.04.2021	8,28,03,699.97	61,72,04,647.59	2,53,02,875.73	72,53,11,223.29
Add: Grant Received during the year	23,47,30,743.00	-	19,61,75,000.00	43,09,05,743.00
Add: Interest earned during the year	96,15,871.00	79,89,975.00	24,21,318.00	2,00,27,164.00
Add: Provision for Retirement Benefits of earlier years	-	-	4,66,22,732.00	4,66,22,732.00
Less: Grants refunded during the year	-	-	7,57,38,540.00	7,57,38,540.00
Less: Interest refunded to MOE during the year	1,97,49,021.00	12,88,14,550.18	1,25,22,212.00	16,10,85,783.18
Less: Expenditure during the year	8,38,16,144.95	39,97,47,202.00	13,39,15,531.00	61,74,78,877.95
Less: Closing balance of Advances	54,98,940.00	31,36,983.00	-	86,35,923.00
Closing Balance as per UC as on 31.03.2022	21,80,86,208.02	9,34,95,887.41	4,83,45,642.73	35,99,27,738.16

Note 1: Reconciliation of Balance of Grants as per Accounts and Utilization Certificates

Grants as per Accounts as on 31.03.2022

36,85,63,661.16

Less: Advances to Suppliers as per Rule 238(4) of GFR 2017

86,35,923.00

Grants as per Utilization Certificates as on 31.03.2022

35,99,27,738.16

9.7 Interest earned on Plan Grants is allocated in Utilization Certificates between specified heads of grants (i.e General-31, Salaries-35 and Capital asset-36) having positive balances on the basis of average of opening and closing balance of respective heads before adding of interest. Interest during the year will be refunded to MHRD, Govt. of India once the accounts are finalized as per GFR Rule 230(8) of GFR 2017.



9.8 As per Rule 238(4) of GFR the advances given to Suppliers has been shown as amount spent under expenditure head of Utilization Certificate as there is cash outflow.

9.9 Unutilized grants (including advances paid out of such grants) are carried forward and exhibited as a liability in the Balance Sheet.

9.10 The Ministry of HRD vide its Letter F.No.33-2/2016-TS-III(Pt.) dated 27.09.2016 has issued a clarification and guidance note on merger of Plan and Non- Plan Grants and Utilization. Vide said circular it has been clarified that the Plan and Non-Plan Classification will be done away with and the focus is only on Revenue and Capital classification. As such, the Institute receives only Plan grants from MHRD and accordingly appropriate disclosure as to utilization is given in the accounts. However, the format in Schedule 11 in common format of annual accounts has not been revised to that extent and no clarification is received regarding disclosure in line with the said proposal of Plan and non-plan merger.

10) TAXATION

National Institute of Technology, Goa being an Institution wholly financed by the Government is exempted from tax on its income under Section 10(23A) of the Income Tax Act, 1961. No provision for taxation is therefore made in the accounts.

11) INVESTMENTS

Investments are long term assets specifically made for earning income. Endowments or Corpus/Capital funds are only invested in such manner. Terms Deposits with banks for short duration which is to be encashed as and when money is required is treated as Current Assets and interest realized on the same is transferred to Interest Earned.

12) FOREIGN CURRENCY TRANSACTIONS

Transactions denominated in foreign currency are accounted at the exchange rate prevailing on the date of the transaction.

13) LEASE

Lease rentals are expended with reference to lease terms.

14) SPONSORED PROJECTS

14.1 In respect of ongoing Sponsored Projects, the amounts received from sponsors are credited to the head "Current Liabilities and Provisions -Current Liabilities -Other Liabilities -Receipts against ongoing sponsored projects." As and when expenditure is incurred /advances are paid against such projects, the concerned project account is debited and the liability account is debited.

14.2 In addition to the Earmarked Fund for the Junior Research Fellowships funded by the University Grants Commission, Fellowships and Scholarships are also sponsored by various organizations. These are accounted in the same way as Sponsored Projects except that the expenditure generally is only on disbursement of Fellowships and Scholarships, which may include allowances for contingent expenditure by the Fellows and scholars.

14.3 The Institution itself also awards Fellowships and Scholarships from the Plan Grants, which are accounted as Academic expenses.

14.4 Following Projects are ongoing / completed at the institute :

Name of the Project	Name of PI	Funding Agency
1) An Integrated Computational and Experimental Approach to Structural design for ballistic impacts and blasts	Dr. G.R.C. Reddy	IISC Bangalore
2) Visvesvaraya PhD Scheme for Electronics & IT- Batch 2014-15	Dr. Nithin Kumar Y.B.	Media Lab Asia
3) Visvesvaraya PhD Scheme for Electronics & IT- Batch 2015-16	Dr. Nithin Kumar Y.B.	Media Lab Asia
4) Design, Simulation and Implementing of Band-pass Sigma-Delta Modulator	Dr. Nithin Kumar Y.B.	SERB
5) Development Of Efficient Algorithms For Photoacoustic Tomography (Pat)	Dr. Raviprasad K.J	SERB
6) EPR Studies of some Ni(II) complex in crystalline environment	Dr. Velavan Kathirvelu	SERB
7) Special Manpower Development Programme for Chips to System Design	Dr. Nithin Kumar Y.B.	CEERI, Pilani
8) Suspended functional magnetic microparticle array based point-of-care diagnostic system for multiplexed bio-molecular sensing and diagnostic	Dr. Prasanth G.R.	SERB
9) Design and implementation of an inverter for a grid connected Photovoltaic System which is a part	Dr Sreeraj E.S.	SERB
10) Development of Secure Key Management Protocols for Group Communication Being Grant Received from SERB for Project Development of Secure Key Management Protocols for Group Communication Under Active Outsider Attack Model	Dr. Purushothama B.R.	SERB
11) Enhanced Automation of 3-Axis CNC Milling Machine using Computer Vision and Artificial	Dr. Pravati Swain	SERB
12) Energy Efficient Lighting with Visible Light based Communication & Power Line Communication	Dr. Ankit Dubey	DST
13) Design & Development of a Photovoltaic - Thermoelectric Hybrid Energy System	Dr. Lalat Indu Giri	SERB
14) Design & Development of Roast Distributed Nonlinear Channel Equalization & Identification	Dr. Trilochan Panigrahi	SERB

15) MonitAir: An IoT Based Air Pollution Monitoring System	Dr. S. Mini & Dr. Trilochan Panigrahi	SERB
16) Computational and Theoretical Studies on Parabolic Partial Differential Equations in Cancer Modelling-	Dr. Shangerganesh	SERB
17) Design of Compact Shaped Beam Antenna Array for Dedicated Short Range Communication Service	Dr. Anirban Chatterjee	SERB
18) Development of a Multipurpose Intelligent Controller for a Nano Grid Operation	Dr. C Vyjayanthi	MNRE
19) Improved PHY and MAC Strategies for M2M Communications in Smart Grid Over Wireless and PLC Heterogenous Network	Dr. Ankit Dubey	SERB
20) Secure and efficient communications inside partitioned socialoverlaynetworks	Dr. Keshavamurthy BN	SERB
21) Smart City Surveillance using Decentralized Multi Camera Network	Dr. Badrinarayan Subudhi	SERB
22) Designing out-of-VM Monitoring based Virtual	Dr. Chirag Modi	SERB
23) MonitNoise: An IoT Based Noise Level Assessment System in Urban Cities of India	Dr. Trilochan Panigrahi	SERB
24) Design and Development of Fingerprint and Face Recognition Systems for Infants and Toddlers (IATs)	Dr. Amol Deodas	SERB
25) Design and Development of efficient Grid Integrated Distributed Maximum Power Point Tracking to Photovoltaic System for Enhancing Power Quality Under Partial Shading Condition	Dr. Suresh Mikkili	SERB
26) Development of coordination control schemes for hybrid AC/DC micro grids for a stable and reliable system operation.	Dr. C Vyjayanthi	SERB
27) Design of Superior Pulsewidth Modulation Schemes for High-Performance Multilevel Converter based Grid Connected Photovoltaic Systems	Dr. Soumitra Das	SERB
28) Analysis of Cardiovascular Disorders Using Heart Sound Signals	Dr. Shivrnarayan Patidar	SERB
29) Development of Efficient Algorithms for Predicting The Incidence of Malaria Cases in India Using Spiking Neuron Models	Dr. Venkatanarashbabu Kupilli	SERB
30) Off Grid Sensor Controlled Irrigation Using Bank Filtration Technology	Dr.Lalat Indu Giri	DST
31) Equipment - Design and Development of Compact and Wideband Dielectric Resonator Antennas	Dr. Pragati Patel	SERB
32) Design & Development of a Dynamic Photovoltaic Array Fed Singlae Stage PV System Using an Open Winding Induction Motor	Dr.Venugopal Reddy	SERB

33) Manpower-Design and Development of Acoustic Methods for early detection of Stem and Root Borer Plocaederus spp infestation in cashew	Dr. Veerakumar T.	SERB
34) Convective Instabilities in Double Diffusive Systems	Dr. Ravi Ragoju	SERB
35) Harnessing Technological Innovations for Sustainable Development: The Role of Intellectual Property Rights - ICSSR (MHRD) -	Dr. Sunil Kumar A.	ICSSR
36) Developing Smart Controller for Optimum Utilization of Energy and Trustworthy Management in a Micro Grid Environment	Dr. Chirag Modi	SERB
37) Designing Efficient Algebraic Activation Functions In Deep Learning For Classification Of Electroencephalography (Eeg) Data	Dr. Damodar Reddy Edla	SERB
38) Interference Rejection Using Built-In Filter Based Band-Pass Sigma Delta Modulators	Dr. Nithin Kumar Y.B.	SERB
39) Deep-Learning Assisted Tomographic Ground Penetrating Radar for the Detection of Electrical and Morphological Features of Buried Objects	Dr. Mallikarjun E.	SERB
40) Wind Energy Harvesting from Vortex Induced Vibration of Multiple Cyclinders using novel multiple Piezoelectric Strips Arrangement	Dr Prasenjit Dey	SERB

The grants received for above projects are disclosed under separate fund under Current Liabilities & Provisions under schedule 4 A 6(b) .

14.5 The Overheads Charges from the Projects are distributed as per policy approved as per letter No. NITG/F&A/2019/Ow/35 sent to MHRD dtd 25.01.2019 and approved in Board meeting held on 01.05.2019 as below:

a) Institute Income	50%
b) Faculty & Staff Welfare	50%
Total	100%

Note: The Share of Institute Income will be shown as Income in Income & Expenditure for the year under Schedule 14 - Other Income and Faculty & Staff Welfare Share will be disclosed as other Funds under Schedule 4 - Current Liabilities & Provisions.



NATIONAL INSTITUTE OF TECHNOLOGY GOA
SCHEDULES FORMING PART OF ACCOUNTS FOR PERIOD/YEAR ENDED 31ST, MARCH, 2022

SCHEDULE -25 - CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS

1) CONTINGENT LIABILITIES

1.1 Claims against the Institute not acknowledged as debts - Rs. NIL (As at 31.03.2021 - Rs. NIL)

1.2 In respect of :

- Bank Guarantees given by / on behalf of the Institute - Rs. NIL (As at 31.03.2021 - Rs. NIL)
- Letters of Credit opened - Rs. NIL (As at 31.03.2021 - Rs. NIL)
- Bills discounted with banks - Rs. NIL (As at 31.03.2021 - NIL)

1.3 Disputed demands in respect of :

- Income Tax - Rs. NIL (As at 31.03.2021 - Rs. NIL)
- Sales - tax - Rs. NIL (As at 31.03.2021 - Rs. NIL)
- Municipal Taxes - Rs. NIL (As at 31.03.2021 - Rs. NIL)

1.4 In respect of claims from parties for non-execution of orders, but contested by the Institute - Rs. NIL (As at 31.03.2021 - Rs. NIL)

2) CAPITAL COMMITMENTS

Estimated value of contracts remaining to be executed on capital account and not provided for (net of advances) - Rs. NIL (As at 31.03.2021 - Rs. NIL)

3) FIXED ASSETS

The Institute was functioning in the premises of Goa Engineering College till December 2012. The Campus was shifted to the renovated building of Industrial Training Institute (ITI) in the same premises. The renovation of the building was carried out by NIT Goa. The Land at Cuncolim, Goa for permanent campus of Institute is handed over by Govt. of Goa on 15th, July, 2017 and the institute will be shifted once the permanent campus construction thereon is completed. The MHRD, Govt. of India has approved the proposal of establishment of permanent campus for National Institute of Technology Goa at the estimate cost of Rs.496.63 crores (Rs.362.63 crores towards Capital, Rs.134.00 crores towards recurring) on the basis of the recommendations of the Standing Finance Committee (SFC) on 01.03.2019. A built up area of 63,764 sqm at the estimated cost of Rs.304.33 crore has been proposed for the construction of permanent campus of NIT Goa for the 1260 students by 2021-2022 having construction cost/sqm as Rs.47727.56 per sqm and Sq Mt per student worked out to be 50.61. Initially keeping in view the very minimal IRG of NIT Goa, the appropriate window of financing the loan under HEFA was proposed under Window IV (grant would be provided for complete servicing of loan through OH 31 for funding construction of permanent campuses) subject to concurrence of Department of Expenditure. But Ministry of education vide their letter No.F.No.23-4/2018.TS-III dtd. 07/04/2021 has approved to place NIT Goa under Window II for availing HEFA loan in accordance with HEFA guidelines. The project should be completed by 2021-22 and there will be no other phases of the project till 2021-22. HEFA has sanctioned term Loan of Rs.282.39 crores vide their letter Ref. SAN/NITG/250/2019-20 dtd 12.09.2019 towards construction of the new campus at Cuncolim. The construction of the New Campus at Cuncolim is handed to CPWD, Goa. The Construction of the boundary wall of the New Campus at Cuncolim is handed over to the State PWD. The expenditure incurred at NIT Goa in transit campus is treated as revenue expenditure and not capitalised as the ownership of campus is not with NIT Goa. The institute as on 31.03.2022 has incurred following amounts in terms of advances and expenditure in respect of temporary campus :



National Institute of Technology Goa

ANNUAL REPORT 2021-2022

Sr.No.	Executing Agency	Type of Work	Amount(Rs.)
1	CPWD, Goa	Renovation and conversion of Type III quarter to dispensary and sports room	19,42,501.00
2	CPWD, Goa	Horticulture Work for Hostel Bldg, ITI, NIT Goa	2,82,000.00
3	CPWD, Goa	Providing service connection, compound Lighting, water supply pumps and DLP bus bar trunking and split AC units in computer lab and water cooler for hostel building of ITI	11,44,500.00
4	CPWD, Goa	Providing Split AC units in Conference hall and additional computer Lab at Hostel Bldg. of ITI for NIT	1,58,550.00
5	CPWD, Goa	LT Connection from ITI transformer to NIT	7,00,000.00
6	CPWD, Goa	Repairing structural retrofitting and upgradation of Hostel Bldg. of ITI for NIT at Farmagudi, Goa	1,85,81,083.00
7	CPWD, Goa	Providing & Fixing Sun Control Frim to Class Room	4,00,000.00
8	CPWD, Goa	Construction of Canteen at Backside of newly constructed classrooms, interior works in lab, development of porch, corridor area in academic block and construction of toe/planter wall, filling good earth, construction of two wheeler parking, water proofing for NIT Goa	47,26,803.00
9	CPWD, Goa	Construction of Temporary Shed for Workshop and Drawing Class for NIT Goa	30,27,052.00
10	CPWD, Goa	Miscellaneous repair and maintenance works in temporary campus of NIT Goa	6,80,704.00
11	CPWD, Goa	Repairs to kitchen cum dining hall for NIT Goa Hostel Mess in GEC Campus	3,25,558.00
12	CPWD, Goa	Providing sun control film on windows and minor repair in temporary campus of NIT Goa	1,53,415.00
13	CPWD, Goa	Repairs & Painting Work of Hostels of NIT Goa in GEC Campus	57,44,191.00
14	CPWD, Goa	Aluminium Partition Work in room No.N9 for sharing room between T&P & Exam-cell for NIT Goa	1,81,907.00
15	CPWD, Goa	Providing additional Power Outlets for Computers in electronics lab	1,00,000.00
16	CPWD, Goa	Construction of 14 No. Classrooms -Civil	3,39,10,000.00
17	CPWD, Goa	Miscellaneous Electrical Works for additional Lab & Office Building	10,50,000.00
18	Goa State PWD	SITC 11 KV/440 Volt AC 50 Hz, 315 KVA Substation at NIT Goa	43,90,311.00
19	Goa State PWD	Providing & supplying one coat of Dr. Fixit primer for water proofing treatment at NIT Goa	2,61,010.00
20	Goa State PWD	Vaiious repairs at Hostel 4 of NIT Goa	3,95,000.00
21	Goa State PWD	Construction of Store Room with Galvalium Sheet roof cover for mess of NIT in Boys Hostel IV in GEC Complex	2,38,317.00
22	Goa State PWD	Repairs to sewerage system including providing septic tank and soak pit to the sports Block of NIT Goa	3,27,400.00
23	Goa State PWD	Repairs to Internal wiring including additions & alterations of E type quarter (3 Nos) at NIT Farmagudi	1,65,930.00
24	Goa State PWD	Providing & Fixing Aluminium Partition in Lecture Hall 1A, 2D & 2B	4,97,542.00
25	Shri. Prashant R. Naik	Repair of D5 quarter at NIT Goa	4,97,808.00
26	S.P. Construction	Providing & fixing Aluminium partition in the lecture hall 2A,2C and providing Alluminium partition in the lecture hall 2A, 2C and providing fixing door closure at NIT Goa	4,47,946.00
27	Shri. Prashant R. Naik	Customized Electrification and other Modifications for research laboratories in D5 quarter	4,93,570.00



28	Goa State PWD	Various Repairs to mess of hostel IV of NIT Goa	14,35,146.00
29	Goa State PWD	Electrical Installation to faculty Block for NIT Goa at ITI Building	5,51,951.00
30	Shri. M. A. Doddamani	Repair & Fixing work done of compound wall beside the library block.	13,440.00
31	Goa State PWD	Internal Painting of boys hostel IV of NIT Goa	3,91,820.00
32	Goa State PWD	Various Repairs to mess of hostel IV of NIT Goa	46,056.00
33	Goa State PWD	Renovation of Old ITI building to use as faculty block of NIT Goa	25,14,661.00
34	Shri. Prashant R. Naik	Various repairs such as painting and repairs to roof of civil draftsman hall of ITI to NIT Goa	67,271.00
35	Shri. Prashant R. Naik	Providing & Fixing of Galvalium Sheet roofing over Academic Building of NIT Goa	2,58,485.00
36	Shri. M. A. Doddamani	Laying out of 2 Volleyball Courts near to Hostel D3 & D4 of NIT Goa	2,02,742.00
37	Shri. A. G. Savaiker	Supply and Installation of Tiles at New Faculty block	1,03,125.00
38	Goa State PWD	Providing and Fixing wall in EEE Lab-2 in NIT Complex of NIT Goa	1,77,030.00
39	Goa State PWD	Various Repairs and Renovation to Toilets, painting to rooms on first right wing and barbed wire fencing to boys hostel IV of NIT Goa	21,28,391.00
40	Rehan Computers	Providing Internet Connectivity to Hostels of NIT Goa	1,77,623.00
41	Digital Network Associates	Providing Internet Connectivity to new faculty block of NIT Goa	1,44,452.00
42	Shri. Deepak R. Naik	Repairs works to administrative and Teaching block for NIT Goa	4,69,591.00
43	Goa State PWD	Providing Galvalium sheet roofing & other repairs work for library building of NIT goa	15,00,000.00
44	Goa State PWD	Providing Galvalium sheet roofing & other repairs work for library building of NIT goa	8,73,000.00
45	Goa State PWD	Works of repair and painting of Quarter E/D, E/E, E/F in GEC Campus	9,53,732.00
46	Goa State PWD	Bill for repairs for C&D wings of new girls hostel in GEC complex	27,80,347.00
47	Goa State PWD	Bill for repairs and renovation of class room and toilet blocks	13,79,032.00
48	Goa State PWD	Bill for works of providing galvalium sheet roofing for D1,D2 and existing roofing of D3,D6 repairing	15,44,366.00
49	Goa State PWD	Bill for works of providing and fixing concrete pavers around faculty cabins	15,20,948.00
50	Goa State PWD	Bill for works of providing galvalium sheet roofing & other repairs works for library building of NIT Goa	9,16,890.00
51	S.P. Construction	Repairing, painting and aluminium partition work in administrative block-cabin for Deans	4,89,871.00
52	N. M. Enterprises	Repairing, painting work in Director cabin administrative building NIT Goa	4,70,413.00
53	Shri. Deepak R. Naik	Repairs & Maintenance for rehabilitation work for main building of NIT Campus	4,85,257.00
54	T. R. Construction	Repairs of roof of teaching block and false ceiling of NITGoa	4,05,040.00
Total			10,28,23,778.00



- 3.1 Additions in the year to Fixed Assets in Schedule 5 include Assets purchased out of Plan Funds (Rs. 399747202/-), Non-Plan Funds (Rs. NIL), Sponsored Projects (Rs.3052209/-), HEFA Loan (Rs.426585763/-) and Library Books and other assets of the value of(Rs. NIL) gifted to the Institution.
- 3.2 Fixed assets as set out in Schedule 5 do not include assets purchased out of funds of sponsored projects, held and used by the Institution, as project contracts include stipulations that all such assets purchased out of projects funds will remain the property of the sponsors.

The Details of Such Assets are :

Assets	Original Cost as on 01.04.2021	Additions during the year	Total (Rs.)	Notional Depreciation Opening Bal.	Notional Depreciation for the year	Total Notional Depreciation	Total Book Value as on 31.03.2022
Laboratory Equipment	23,66,250.00	-	23,66,250.00	6,88,636.00	1,89,300.00	8,77,936.00	14,88,314.00
Computers & Peripherals	6,75,600.00	-	6,75,600.00	5,01,019.00	1,19,738.00	6,20,757.00	54,843.00
Office equipment	-	-	-	-	-	-	-
Furniture, Fixtures & Fittings	-	-	-	-	-	-	-
Total	30,41,850.00	-	30,41,850.00	11,89,655.00	3,09,038.00	14,98,693.00	15,43,157.00

4) LEASE OBLIGATIONS

Future obligations for rentals under finance lease agreements for plant and machinery amounts to Rs. NIL (As at 31.03.2021 - Rs. NIL)

5) FOREIGN CURRENCY TRANSACTIONS

(Amount)

2020-2021

2021-2022

5.1 Value of Imports calculated on C.I.F. basis:			
- Purchase of finished Goods	NIL	NIL	NIL
- Raw Materials & Components (Including in transit)	NIL	NIL	NIL
- Capital Goods	NIL	-	27,09,785.00
- Stores, Spares and Consumables	NIL	NIL	NIL
5.2 Expenditure in foreign currency:			
a) Travel			
b) Remittances and Interest payment to financial Institutions/Banks in Foreign Currency			
c) Other expenditure:			
- Online Subscription		40,64,741.00	5,00,965.00
- License Fee for Software/Web Edition		NIL	NIL
- Miscellaneous Expenses (Honorarium to Foreign Experts)		4,48,441.00	NIL
5.3 Earnings:			
- Value of Exports on FOB basis		NIL	NIL



5.4 Remunerations to auditors:

- As Auditors:
 - Taxation matters
 - For Management Services
 - For Certification

NIL
 NIL
 NIL

Others (Internal Audit/C&AG Audit)

3,61,950.00

4,07,475.00

6) CURRENT ASSETS, LOANS AND ADVANCES AND DEPOSITS

In the opinion of the management, the current assets, loans and advances have a value on realization in the ordinary course of business, equal at least to the aggregate amount shown in the Balance Sheet.

7) SECURED LOANS

The MHRD, Govt. of India has approved the proposal of establishment of permanent campus for National Institute of Technology Goa at the estimate cost of Rs.496.63 crores (Rs.362.63 crores towards Capital, Rs.134.00 crores towards recurring) on the basis of the recommendations of the Standing Finance Committee (SFC) on 01.03.2019. A built up area of 63,764 sqm at the estimated cost of Rs.304.33 crore has been proposed for the construction of permanent campus of NIT Goa for the 1260 students by 2021-2022 having construction cost/sqm as Rs.47727.56 per sqm and Sq Mt per student worked out to be 50.61. Initially keeping in view the very minimal IRG of NIT Goa, the appropriate window of financing the loan under HEFA was proposed under Window IV (grant would be provided for complete servicing of loan through OH 31 for funding construction of permanent campuses) subject to concurrence of Department of Expenditure. But Ministry of education vide their letter No.F.No.23-4/2018.TS-III dtd. 07/04/2021 has approved to place NIT Goa under Window II for availing HEFA loan in accordance with HEFA guidelines. The project should be completed by 2021-22 and there will be no other phases of the project till 2021-22. HEFA has sanctioned term Loan of Rs.282.39 crores vide their letter Ref. SAN/NITG/250/2019-20 dtd 12.09.2019 towards construction of the new campus at Cuncolim. The construction of the New Campus at Cuncolim is handed to CPWD, Goa. The Construction of the boundary wall of the New Campus at Cuncolim is handed over to the State PWD.

NIT Goa has availed Rs.70 crores of HEFA Loan from Canara Bank till 31.03.2022 for the Construction of New Campus at Cuncolim. NIT Goa is placed under Window II mode of Financing where NIT Goa has to bear 25% of repayment of Principal amount and 75% of principal repayment is borne by Ministry of Education. The entire interest on HEFA Loan is borne by Ministry of Education.

Internal Auditors Note:

The NIT Goa has taken HEFA Loan for the construction of new campus at Cuncolim. As per the Accounting Standard - 16 if any loan has been taken for creation of Capital Assets and utilised for that purpose, interest paid on that specified loan has to be capitalised as capital expenditure till the date of completion and should be added with the cost of assets. As per the financial statement prepared by the management we have noticed that the construction work of New campus building are still in progress and the management has claimed the interest paid on HEFA loan as revenue expenditure during the year considered as current year expense.

8) NIT Goa has refunded the interest on Grants refunded to MOE from the F.Y-2017-18 to F.Y-2020-21 of Rs.16,10,85,783.18/- to MOE on 07.02.2022. Also Grants lapsed under TSA for the F.Y-2021-22 as on 31.03.2022 is Rs.7,57,38,540/- under Salaries OH-36.



- 9) NIT Goa has added back the provision of retirement benefits of previous years of Rs.4,66,22,732/- to the balance of Grants from MOE in Schedule 4c as per the audit objections raised by C&AG Office. Also the current year provisions of Retirement Benefits of Rs.2,06,48,879/- is not considered as expenditure under Salaries Head -36 as Grants to the extent utilised for the F.Y.-2021-22.
- 10) The details of balances in Saving Bank Accounts, Current Accounts and Fixed Deposit Accounts with Banks are enclosed as annexure 'A' to the Schedule of Current Assets.
- 11) In absence of employees whose subscriptions and matching contributions have been retained and managed by the Institute(pending allotment of PRA numbers) , Balancesheet, Income & Expenditure A/c and Receipt and Payment A/c of NPS Tier-I have not been prepared.
- 12) The Institute had collected in earlier years Hostel Development fund from students towards the development of hostels. However the institute is currently utilising the hostels infrastructure of Goa Engineering College as such it has not utilised the said fund. The balance in the fund will be utilised once the institute setup its own premises.
- 13) The Institute has collected Institute Development fund from students towards the development of Institute Premises. However the institute is currently running in the temporary premises of ITI as such it has not utilised the said fund. The balance in the fund will be utilised once the institute setup its own premises.

14) Additional Information for Stakeholders :

i) Details of No. of Students

Sr. no.	Stream	I year	IInd Year	IIIrd Year	IVth Year	Vth Year	2021-22	2020-21
1	B Tech	176	173	153	134	-	636	435
2	B.Tech DASA	3	6	8	5	-	22	26
3	M.Tech	54	57	-	-	-	111	92
4	Ph. D	41	19	19	17	9	105	85
5	Ph. D (Visvesvaraya)	-	-	-	-	0	-	3
	Total	274	255	180	156	9	874	641

ii) No. of Professors (including Contract Faculty)

Sr. no.	Stream	2021-22	2020-21
1	CSE	9	9
2	H&S	12	11
3	ECE	12	10
4	EEE	8	8
5	CIVIL	9	5
6	ME	9	7
	Total	59	50



iii) Collection on account of Building fund and expenditure thereof - NIL

Sr. no.	Particulars	Amount (Rs.)
1	Collection for Sports Activities	
a	Sponsorship	-
	Total Collection towards Sports Activities	-
2	Expenditure for Sport Activities	
a	Expenses for participating	-
	Total Expenditure towards Sports Activities	-

v) Collection for co-curricular activities and expenditure thereof

Sr. no.	Particulars	Amount (Rs.)
1	Collection for Co-curricular activities	
a	Sponsorship Received	-
	Total Collection towards Co-curricular activities	-
2	Expenditure for Co-curricular activities	
a	Expenses towards Saavyas	67,740.00
b	Expenses towards TESLA	28,000.00
c	Expenses towards Independence Day Celebration	1,905.00
d	Expenses towards Hindi Saptah 2021	18,128.00
e	Expenses towards 152nd Birth Anniversary of Mahatma Gandhi Ji	12,650.00
f	Expenses towards Utkranti 21	10,060.00
	Total Expenditure towards Co-curricular activities	1,38,483.00

vi) Collection on account of development charges and expenditure thereon - NIL

vii) Collection for medical expenses and expenditure thereon - NIL

viii) Salary structure of teachers

Sl. No.	Name of the Employees	Designation	EC	Pay Level	7 CPC Pay
1	Dr. Gopal Mugeraya	Director	1170001	210000 [Fixed]	225000
2	Dr. Saidi Reddy Parme	Associate Professor	1130009	13A2- Cell5	157100
3	Dr. Damodar Reddy Edla	Associate Professor	1130011	13A2 Cell-3	148100
4	Dr. Suresh Mikkili	Associate Professor	1130012	13A2 Cell-3	148100
5	Dr. Velavan Kathirvelu	Associate Professor	1130013	13A2- Cell5	157100
6	Dr. B. Venugopal Reddy	Associate Professor	1130014	13A2- Cell5	157100



Separate Audit Report 2021-22



National Institute of Technology Goa

ANNUAL REPORT 2021-2022



सत्यमेव जयते

DIRECTOR GENERAL OF AUDIT (CENTRAL), MUMBAI
लेखापरीक्षा महानिदेशालय (केन्द्रीय), मुंबई
C-25, Audit Bhavan, Bandra-Kurla Complex,
Bandra (east),



लोकहितार्थं सत्यनिष्ठा
Dedicated to Truth in Public Interest

Date: 14 Nov 2022

To,

- 1 To, The Director, NIT, Goa
- 2 To, The Registrar, NIT, Goa

Subject: Final SAR of NIT, Goa for the F.Y. 2021-22

Sir/Madam,

I am to forward herewith the Separate Audit Report of NIT, Goa for the F.Y. 2021-22. The hard copy of the same was sent through speed post vide No.693 dtd.14.11.2022.

The receipt of the Separate Audit Report may kindly be acknowledged.

Yours faithfully,

Encls: As above

SURENDAR SUPPIAH
Sr. Audit Officer

Copy to:-

- 1 To, The Dy. Director, C&AB
- 2 To, The Sr. AO, SAR/C&AB





क्र. म.नि.ले.प.(के.)/ना.एवं.स्वा.नि./एस.आर.ए./21-22/NITGoa/
सेवा में,
सचिव, भारत सरकार
मानव संसाधन विकास मंत्रालय,
उच्च शिक्षा विभाग, शास्त्री भवन,
नई दिल्ली - 110001.

भारतीय लेखा परीक्षा और लेखा विभाग
महानिदेशक लेखा परीक्षा (केंद्रीय) का कार्यालय
सी-25, लेखा परीक्षा भवन, आयकर भवन के पीछे,
बांद्रा कुर्ला कॉम्प्लेक्स, बांद्रा (पूर्व), मुंबई - 400051.
टेली/ : (EPBX) (022)-26572907फैक्स/ :26572451
दिनांक: 14/11/2022

विषय - वर्ष 2021-22 के लिए राष्ट्रीय प्रौद्योगिकी संस्थान, गोवा के लेखों पर प्रथक लेखापरीक्षा प्रतिवेदन।

महोदय,

31 मार्च 2022 को समाप्त वर्ष के लिए राष्ट्रीय प्रौद्योगिकी संस्थान, गोवा के लेखों पर प्रथक लेखापरीक्षा प्रतिवेदन निम्नलिखित दस्तावेजों के साथ संसद के दोनों सदनों की पटल पर प्रस्तुत करने हेतु अग्रेषित किया जा रहा है।

- वर्ष 2021-22 के लिए वार्षिक लेखे
- अनुबंधक सहित लेखापरीक्षा प्रतिवेदन-सह-लेखापरीक्षा प्रमाण पत्र

कृपया संसद में प्रस्तुत दस्तावेजों की प्रतियां एवं सदनों में उनकी प्रस्तुति की तिथि के सम्बन्ध में सूचना इस कार्यालय को अग्रेषित की जाए। कृपया पत्र की प्राप्ति की सूचना दे।

यह पत्र महानिदेशक ऑडिट (केंद्रीय) मुंबई के अनुमोदन के साथ जारी किया जा रहा है।

संलग्नक: यथोपरि

भवदीय

हस्ता/-

उपनिदेशक/ना.एवं.स्वा.नि.

दिनांक:-14/11/2022

✓ क्र.म.नि.ले.प.(के.)/ना.एवं.स्वा.नि./एस.ए.आर./2021-22/NIT Goa / 693

सेवा में,
निदेशक,
राष्ट्रीय प्रौद्योगिकी संस्थान गोवा (NIT Goa)
गोवा कॉलेज ऑफ इंजीनियरिंग कैंपस,
फार्मगुडी, पांडा,
गोवा - 403401

अनुबंधक के साथ प्रथक लेखापरीक्षा प्रतिवेदन की एक प्रति जानकारी एवं आवश्यक कार्यवाही हेतु अग्रेषित की जा रही है। संसद में दस्तावेजों की प्रस्तुति की तिथि एवं उनकी प्रतिलिपि इस कार्यालय को प्रस्तुत की जाए।

उपनिदेशक/ना.एवं.स्वा.नि.



Separate Audit Report of the Comptroller and Auditor General of India on the Accounts of the National Institute of Technology (NIT), Goa for the year ended 31 March 2022.

We have audited the attached Balance Sheet of the National Institute of Technology Goa, ('the Institute') as at 31st March 2022 and the Income & Expenditure Account, Receipt & Payment Account for the year ended on that date under section 19(2) of Comptroller and Auditor General's (Duties, Powers and Conditions of Service) Act, 1971 read with Section 22(2) of National Institute of Technology Act, 2007 (as amended in June 2012). These financial statements are the responsibility of the Institute's management. Our responsibility is to express an opinion on these financial statements based on our audit.

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

3. We have conducted our audit in accordance with auditing standards generally accepted in India. These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement. 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, the Income & Expenditure Account and the Receipt & Payment Account dealt with by this report have been drawn up in the format prescribed by the Ministry of Human Resource Development, Government of India vide order No 29-7/2012-IFD dated 17 April 2015.
- iii. In our opinion, proper books of accounts and other relevant records have been maintained by the Institute as required of the NIT statutes in so far it appears from our examination of such books.
- iv. We further report that:

A Income & Expenditure

A.1 Expenditure

A.1.1 Schedule 21 – Finance Costs- Interest on HEFA loan - ₹1.12 crore

Non-treating the interest amount as Capital Expenditure

Schedule 21 – Finance Costs of Annual Accounts for the year 2021-22 reflected ₹1.12 crore as Interest on HEFA loan.

NIT Goa had taken HEFA Loan for the construction of new campus. However, the Institute had treated the interest paid on the said loan amounting to ₹1.12 crore as revenue expenditure instead of Capital expenditure.

Moreover, according to AS-16, if any loan is obtained for creation of Capital Assets and utilized for that purpose, interest paid on the same must be capitalized as capital expenditure till the date of completion and added to the cost of asset. Although, this deficiency was pointed out by the internal auditor below serial no. 7 (Secured Loans) of the Schedule 25 – Contingent liabilities and Notes on Accounts, no remedial action was taken by the Institute.



This resulted in understatement of Capital Fund and Fixed Assets to extent of ₹1.12 crore.

B. General comments

1. Schedule 4(4)- Deposit Others (including EMD, Security Deposits) (Sub-schedule 3) was shown as ₹27.55 lakh. However, the details of EMD/PG/SD furnished by the Institute indicated that Performance Guarantee/Security Deposit money amounting to ₹7.36 lakh had been pending for settlement for more than 3 years. The EMD/PG/SD may be reviewed and accounted for in the books of accounts as per the policy of the Institute in this regard.

2. Schedule 18 of the Annual Accounts for the year 2021-22 reflected Administrative Expenses which included 'GST Paid' amounting to ₹7,11,487. Scrutiny of the ledger relating to GST expenses, however, revealed that Schedule 18 included GST paid for the FY 2018-19 (₹2,31,340) and FY 2019-20 (₹2,91,724) amounting to ₹5,23,064.

As these expenses pertain to previous years, these amounts should have been shown as outstanding liability for that year in Schedule 4 -Current Liabilities. This was not done by the Institute. If not so, these payments pertaining to previous years should have been shown under Schedule 23 – Prior period expenses, which reflect Nil amount.

This resulted in overstatement of Schedule 18 by ₹5.23 lakh and understatement of Schedule 23 -Prior Period expenses to that extent.

3. Schedule 25- Contingent Liabilities and Notes on Accounts forming part of Accounts for the year 2021-22 reflects Foreign Currency Transactions at serial no.5 of Notes to Accounts. Other expenses on Audit amounting to ₹4,07,475 is shown under foreign currency transaction.

4. As per the approved format pertaining to Financial Statements by MHRD, the amount of loan should be mentioned in the Schedule -3,



Current Liabilities & Provision of Balance Sheet. However, the Institute had shown HEFA loan amounting to ₹70.76 crore till the end of March 2022 in Schedule -3- 'Secured Loans' by changing the nomenclature of the schedule instead of Current Liabilities & Provisions in the Schedule-4 in contravention of the approved format.

5. As per Schedule-10 of the Annual Accounts for the year 2021-2022, Academic Receipts for the year 2021-22 (July 2021 to June 2022) for 12 months was ₹5.29 crore (₹4.94 crore + ₹0.35 crore), which included Tuition Fees plus other fees such as Admission Fees, Application Fees, Registration Fees, Other Fees, Hostel Fees and Miscellaneous Fees.

The tuition fees for the month of April 2022 to June 2022 pertaining to the subsequent year 2022-23 should have been shown as received as advance under Schedule 4 - Current Liabilities & Provisions as per its revenue recognition policy disclosed in Schedule 24 .

6. Schedule 16 – Staff Payments & Benefits (Establishment Expenses) of the Annual Accounts for the year 2021-22 reflected an amount of ₹10.50 lakh as 'Others (Lien contribution)', which is shown as outstanding Liabilities in sub-schedule 5 of Schedule 4(A)(6)(g) – Current Liabilities.

However, scrutiny of the ledger in tally software revealed that the above expense/ liability was regarding amount payable towards pension and leave salary contribution of Director of the Institute for the period from 1-04-2021 to 31-05-2022.

Thus, the Institute had booked the contribution payable pertaining to 1-4-2022 to 31-05-2022 in Schedule 16 and had also shown the same as liability in Schedule 4 in the Annual Accounts 2021-22, which is not correct.

This resulted in overstatement of Current liability and understatement of Corpus Fund and excess liability has been charged for the months of April and May 2022.



C. Grant In Aid

The Institute received GOI grants of ₹43.09 crore {₹23.47 crore under OH-31 (General ₹1.93 crore + HEFA loan Principal ₹21.18 crore + HEFA Loan Interest ₹0.36 crore)} from MoE, no grant under OH-35 Capital and ₹19.62 crore under OH-36 Salary during the year 2021-22. The Interest earned on grants by the Institute was ₹2.00 crore.

Out of the total available funds of ₹117.62 crore {Opening balance ₹72.53 crore, Grant received ₹43.09 crore and interest on grant ₹2.00 crore} during the year 2021-22, provision for Retirement Benefits of previous years added back in FY 21-22 is ₹4.66 crore. The Institute utilized ₹85.42 crore [Capital expenditure ₹39.97 crore(OH-35), Revenue expenditure ₹8.38 crore (OH-31) (General ₹7.26 crore + HEFA loan Principal Nil + HEFA loan Interest ₹1.12 crore), Revenue expenditure (OH-36) Salaries ₹13.39 crore, Refund of grant to MoE ₹7.57 crore due to lapse of OH-36 Salaries grant and Refund to MoE of accumulated Interest on Grant amounting to ₹16.11 crore {Revenue General (OH-31) ₹1.97 crore + Revenue Salaries (OH-36) ₹1.25 crore + Capital ₹12.88 crore}]. Thus, leaving an unspent/ unutilized balance of ₹36.86 crore.

D. Management Letter

Deficiencies which have not been included in the Audit report have been brought to the notice of the Institute's management 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, the Income & Expenditure Account and Receipt & Payment 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



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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 Technology, Goa as at 31st March 2022; and
- (b) In so far as it relates to the Income & Expenditure Account, of the surplus for the year ended on that date.

For and on behalf of the
Comptroller & Auditor General of India

Director General of Audit (Central), Mumbai

Mumbai
14.11.2022



National Institute of Technology Goa
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सत्यमेव जयते

K. P. YADAW

Director General of Audit (Central)

INDIAN AUDIT & ACCOUNTS DEPARTMENT

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D.O.No.DGA(C)/C & AB/SAR/NIT Goa/2021-
22/2022-23/694

Date: November 14, 2022


Dear

I have audited the annual accounts of the National Institute of Technology, Goa, for the year 2021-22 and have issued the Audit Report on 14.11.2022. During the course of audit, the following deficiency which has not been included in the Audit Report, is brought to your notice for corrective and remedial action:

2. As per the Format of Accounts for Central Higher Educational Institutions, the Institute is required to prepare the Annual Accounts for each year as prescribed in the Uniform Format of Accounts. On scrutiny of Schedule 4(6) – Current Liabilities & Provisions (Other Current Liabilities), it is noticed that the nomenclature of the schedules forming the Sponsored projects and Scholarships are incorrectly quoted in Schedule 4(6)(b) to (d) as against the correct Schedule number, which are stated below:

Particulars	Schedule number as per Accounts 2021-22	Correct Schedule Number 2021-22
Schedule 4(6)(b)	3a	4a
Schedule 4(6)(c)	3b	4b
Schedule 4(6)(d)	3c	4c

Yours sincerely,


(K.P. Yadaw)

Shri Gopal Mugeraya,
Director,
National Institute of Technology, Goa
At Goa College of Engineering Campus,
Farmagudi, Ponda-Goa, 403401.



Annexure

1	Adequacy of Internal Audit System The National Institute of Technology, Goa has neither established internal audit wing nor prepared internal audit manual. However, Internal Audit was conducted by Chartered Accountant's firm during the year 2021-22.
2	Adequacy of Internal Control System Internal control system does not commensurate with the size of the Institute. Audit observed the following: <ul style="list-style-type: none">• The Institute did not conduct sufficient number of prescribed BOG meetings in the F.Y.2021-22.• Non depiction of Corpus Fund in a distinct Bank Account.• Performance Guarantee/Security Deposit pending for settlement for more than 3 years.
3	Physical verification of Assets Physical verification of assets has been conducted by the Institute during the year by the Chartered Accountant. As per report, assets worth ₹1,18,830 could not be verified.
4	System of Physical verification of Inventory The Institute does not have any Inventory.
5	Regularity in payment of statutory dues. The Institute is regular in payment of Statutory dues.

Director General of Audit (Central)