



**NATIONAL ENGINEERING COLLEGE**  
**(An Autonomous Institution)**

K.R.Nagar, Kovilpatti – 628 503.

Estd.1984

## **Minutes of the 33<sup>rd</sup> Governing Board Meeting**

The Minutes of the 33<sup>rd</sup> Governing board meeting held on Saturday, 10<sup>th</sup> October 2020 at 11.00 AM in the College Conference Hall of Administrative Block, are as follows. The following members were present in the meeting

### **MEMBERS PRESENT DIRECTLY**

- |                              |                                |
|------------------------------|--------------------------------|
| 1. Tmt. Chennammal Ramasamy  | Chairman                       |
| 2. Thiru. R.Krishnamoorthy   | Member                         |
| 3. Thiru. R.Arunachalam      | Member                         |
| 4. Thiru. C.Sankaranarayanan | Member                         |
| 5. Selvi. A.Shanmathi        | Member                         |
| 6. Selvan A.Niteesh Ram      | Member                         |
| 7. Dr. S.Shanmugavel         | Director, NEC, Member          |
| 8. Dr. K.Manisekar           | Professor / Mech.Engg., Member |
| 9. Dr. D.Manimegalai         | Professor / IT, Member         |
| 10. Dr. K.Kalidasa Murugavel | Principal/ Member Secretary    |

### **MEMBERS PRESENT through ONLINE**

Due to COVID-19 Lockdown, the outstation members were present for the meeting through Google online meet Link: <https://meet.google.com/ymw-kkdk-bhs>

- |                            |                                  |
|----------------------------|----------------------------------|
| 1. Prof. M.R.Bhagwan Singh | Member, UGC Nominee              |
| 2. Prof. R.Rajendiran      | Member, State Government Nominee |
| 3. Dr. S.Selladurai        | Member, University Nominee       |
| 4. Mr. L.S.Manivannan,     | Member, Industrialist            |

The Director welcomed all the members of the Governing Board and requested the Principal to proceed with the agenda for the meeting. The Principal placed the agenda items one by one as detailed below:

### **AGENDA 33.01: TO CONFIRM THE MINUTES OF THE LAST MEETING OF THE GOVERNING BOARD HELD ON 10.12.2019**

*The Principal read the minutes of the last meeting held on 10.12.2019. It was resolved to approve the minutes of the last meeting of the Governing Board as follows.*

The development proposal of purchase of automated lecture capture tools for capturing classroom session through interactive classroom and saving into digital content.

### **AGENDA 33.02: TO REPORT THE ACTION TAKEN ON THE MINUTES OF THE MEETING OF THE GOVERNING BOARD**

*The following follow-up action taken based on the minutes of the last meeting of the Governing Board was recorded and approved.*

It is proposed to purchase Digital interactive online teaching tools at the cost of 12.5 lakhs instead of automated lecture capture tools to conduct online

classes due to the COVID-19 pandemic situation. The detailed report is given in **Annexure-I**

**AGENDA 33.03: TO REPORT ABOUT THE INITIATIVES TAKEN FOR ONLINE TEACHING LEARNING PROCESS DURING COVID-19 LOCKDOWN PERIOD**

*The Principal presented the new initiatives taken by the management and the institution. Governing Board members appreciated the efforts taken by the management and the institution, and it was recorded.*

The detailed report about the teaching-learning process and online examinations are given in the **Annexure-II**

**AGENDA 33.04: TO REPORT ABOUT THE ACADEMIC AND OTHER IMPORTANT ACTIVITIES AND EVENTS IN THE COLLEGE SINCE THE LAST MEETING OF THE GOVERNING BOARD**

*The Principal presented the report on academic and other important activities and events in the college since the last meeting of the Governing Board and it was recorded.*

**33.04.1** The 84<sup>th</sup> Birth Anniversary of Kalvithanthai Thiru.K.Ramasamy, And the Founder's Day was celebrated on 17.09.2020 in the college premises. In this connection, various competitions and webinars were conducted department wise to the students through online mode and prizes were distributed to them in their home itself. On that day, a special online lecture was rendered by Padma Bhushan, **Dr.A.Sivathanu Pillai**, Ph.D., D.Sc., Founder CEO & MD BrahMos Aerospace and Former Chief Controller (R&D), DRDO on the topic '**Emerging Technologies & Challenges.**'

**33.04.2** Academic and other important activities and events conducted in the college since the last meeting of the Governing Board are given in **Annexure – III.**

**AGENDA 33.05: TO REPORT ABOUT THE IMPORTANT COMMUNICATIONS, POLICY DECISIONS RECEIVED FROM GOVERNMENT, UNIVERSITY, DOTE, AND AICTE, etc. 2020-2021**

*The important Communications received from UGC, AICTE, and DOTE were presented by the Principal as follows.*

- National Board of Accreditation (NBA), New Delhi, has re-accredited B.E. Electronics & Communication Engineering for three years under the Tier I category up to 30.06.2023. Also, NBA has extended the accreditation of B.E. Computer Science and Engineering and B.E. Electrical and Electronics Engineering for one more year, i.e., up to 30.06.2021.
- AICTE has accorded approval for the existing courses for the academic year 2020-21.

**AGENDA 33.06: TO REPORT ABOUT THE PLACEMENT OF STUDENTS FOR THE YEAR 2019-2020**

The Principal presented the details of the students placed through campus placement for the year 2019 – 2020.

*The campus placement details of the students for the year 2019 – 2020 were recorded (Annexure-IV).*

**AGENDA 33.07: TO CONSIDER AND APPROVE THE RECOMMENDATION OF STAFF SELECTION COMMITTEE MEETING HELD ON 20.08.2020 AND 21.08.2020**

*It was resolved to approve the recommendations of the Staff Selection Committee meeting held on 20.08.2020, and 21.08.2020 for recruitment of new faculties*

**AGENDA 33.08: TO CONSIDER AND APPROVE THE FACULTY APPOINTMENT AND RELIEF SINCE THE LAST MEETING OF THE GOVERNING BOARD**

The Principal presented the report about the faculty appointed and relieved since the last meeting of the Governing Board.

*It was resolved to approve the faculty appointed and relieved since the last meeting of the Governing Board*

**AGENDA 33.09: TO CONSIDER AND APPROVE THE RECOMMENDATION OF THE TEACHING STAFF PERFORMANCE APPRAISAL COMMITTEE MEETING HELD ON 04.08.2020**

*It was resolved to approve the recommendations of the teaching staff performance appraisal committee meeting held on 04.08.2020).*

**AGENDA 33.10: TO CONSIDER AND APPROVE THE RECOMMENDATION OF THE NON-TEACHING STAFF PERFORMANCE APPRAISAL COMMITTEE MEETING HELD ON 29.09.2020**

*It was resolved to approve the recommendations of the non-teaching staff performance appraisal committee meeting held on 29.09.2020).*

**AGENDA 33.11: TO PLACE THE BUDGET FOR THE YEAR 2020-2021**

*The budget presented for the year 2020-2021 is recorded (Annexure-V).*

**AGENDA 33.12: TO PLACE INCOME AND EXPENDITURE STATEMENT OF THE INSTITUTION FOR THE YEAR 2019-2020**

*The income and expenditure statement of the institution for the year 2019-2020 is placed and recorded (Annexure-VI).*

**AGENDA 33.13: TO CONSIDER AND APPROVE THE RESOLUTIONS AND REGULATION PASSED IN 13<sup>TH</sup> MEETING OF ACADEMIC COUNCIL AND BOARD OF STUDIES**

*It was resolved to approve the resolutions and regulations passed in the thirteenth Academic Council meeting (Annexure-VII)*

**AGENDA 33.14: TO REPORT ABOUT THE AMENDMENTS MADE IN THE RETIREMENT, GRATUITY, AND RE-EMPLOYMENT NORMS FOR TEACHING AND NON-TEACHING STAFF MEMBERS**

*It was resolved to approve certain amendments made on the Retirement, Gratuity, and Re-employment norms for teaching and non-teaching staff members.*

**AGENDA 33.15: TO DISCUSS ANY OTHER MATTER**

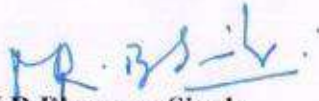
*After Principal Presentations, Members have asked for certain clarification in the agenda items 33.08 regarding faculty leaving the institution and 33.03 regarding Virtual Laboratory classes*


*The Principal and director clarified the members about these agenda items.*


**Entire course of the meeting has been video recorded. Confirmation of the minutes will be obtained through the e-mail from the outstation members.**




**Confirmation of the minutes for the Governing board meeting held on  
10.10.2020 from outstation members**

  
**1. Prof. M.R. Bhagwan Singh**  
(Member, UGC Nominee)

  
**2. Prof. R. Rajendiran**  
(Member, State Government Nominee)

  
**3. Dr. S. Selladurai**  
(Member, University Nominee)

  
**X 4. Mr. L.S. Manivannan**  
(Member, Industrialist)

## **ANNEXURE – I**

**A1.1 –DIGITAL INTERACTIVE ONLINE TEACHING TOOLS**

**A1.2 – DIGITAL PAPER-AND-PEN ONLINE TEACHING TOOLS**

**A1.3 - DIGITAL CHALK-AND-BOARD ONLINE TEACHING TOOLS**

**A1.4 -DIGITAL PRESENTATION ONLINE TEACHING TOOLS**

### **A1.1 DIGITAL INTERACTIVE ONLINE TEACHING TOOLS**

Available Facility	Desktop Personal Computer
Procurement	1. Wacom One Digital Drawing Tablet 2. Collar Microphone 3. 1080P Full HD web camera 4. Headphone
Applications	1. Annotating documents (PDF, PPT, Word) 2. Interactive writing 3. Plotting digital graphs 4. Drawing digital diagrams 5. Answer script Evaluation 6. OCR based text conversion 7. Attending online meeting
Virtual Teaching Mode	Online live streaming classes Recording sessions
Digital Hand-written content preparation	High quality digital handwritten notes, digital graphs, digital diagrams can be prepared during the lecture and shared to the students
Locations	Seminar Halls and Smart Class Room
Available Furniture Setup	Table and Chair
Number of items to be procured	12Nos. (MECH – 2, ECE-2, CSE-2, EEE-1, EIE-1, IT-1, CIVIL – 1, S&H-2) 1 no. each for single in-take department and 2 nos. each for double intake departments

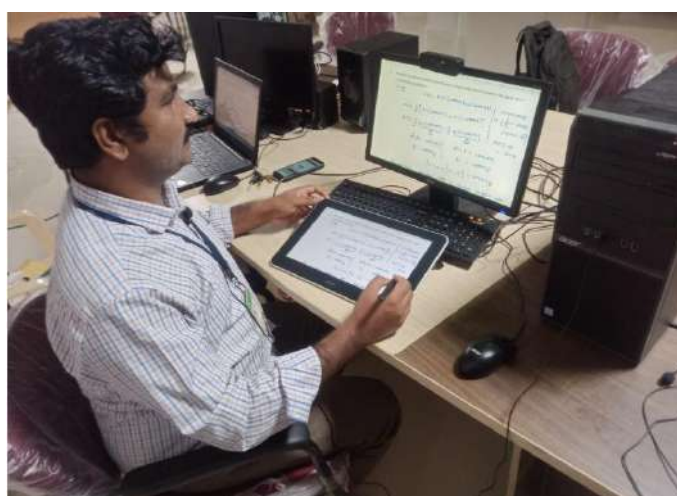


Fig : Implementation



### **A1.2 DIGITAL PAPER-AND-PEN ONLINE TEACHING TOOLS**

Available Facility	Desktop Personal Computer
Procurement	1. Document camera 2. Collar Microphone 3. 1080P Full HD web camera 4. Headphone
Applications	1. Writing/drawing on papers and projecting 2. Plotting graphs 3. OCR based text conversion 4. Attending online meeting
Virtual Teaching Mode	Online live streaming classes Recording sessions
Digital Hand-written content preparation	Notes, graphs and diagrams can be prepared using paper and pen. The paper documents are then scanned and shared to the students as soft copy.
Suitable locations	Common hall (to be allotted by the department)
Available Furniture Setup	Table and Chair
Number of items to be procured	8 Nos. (MECH – 1, ECE-1, CSE-1, EEE-1, EIE-1, IT-1, CIVIL – 1, S&H-1) 1 No. each for single in-take department and 2 nos. each for double intake departments

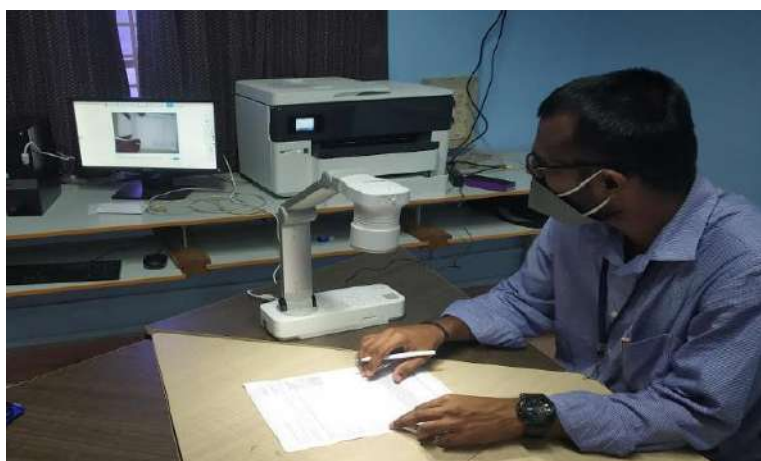


Fig: Implementation



### **A1.3 DIGITAL CHALK-AND-BOARD ONLINE TEACHING TOOLS**

Available Facility	Desktop Personal Computer
Procurement	1. Logitech c925e B2B 1080P Full HD wide angle camera 2. Collar Microphone 3. Tripod Stand 4. 2.1 Speaker with woofer
Applications	1. Presenting black-board teaching 2. Demonstrating laboratory experiments 3. Project Review 4. Attending online meeting
Virtual Teaching Mode	Online live streaming classes Recording sessions
Digital Hand-written content preparation	Black board writings can be snapshotted and shared to the students.
Suitable locations	Lecture halls and Laboratories
Available Furniture Setup	Black Board / White Board
Number of items to be procured	13 Nos. (MECH – 2, ECE-2, CSE-2, EEE-1, EIE-1, IT-1, CIVIL – 1, S&H-3) 1 No. each for single in-take department, 2 nos. each for double intake departments and 3 nos. for S&H department.



Fig : Implementation - Lecturing



Fig : Implementation –Project review

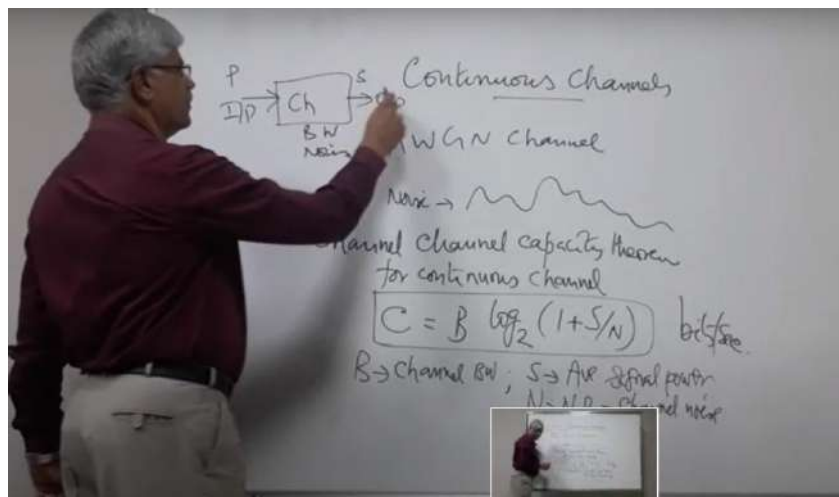


Fig : Recording of chalk and board teaching

#### **A1.4 DIGITAL PRESENTATION ONLINE TEACHING TOOLS**

Available Facility	Desktop Personal Computer
Procurement	1. 1080P Full HD web camera 2. Headphone 3. Mobile Stand
Applications	1. Explaining documents (any format) and drawings. 2. Demonstrating software simulations. 3. Attending online meetings
Virtual Teaching Mode	Online live streaming classes Recording sessions
Suitable locations	Laboratories
Available Furniture Setup	Table and Chair
Number of items to be procured	30 Nos. (MECH – 4, ECE-4, CSE-4, EEE-3, EIE-3, IT-3, CIVIL – 3, S&H-6) 3 No. each for single in-take department, 4 nos. each for double intake departments and 6 nos. for S&H department.



Fig : Implementation

## **ANNEXURE – II**

### **Online Teaching Learning Examination Processes**

## **TEACHING LEARNING PROCESS IN OUR COLLEGE (Normal)**

Departments are given the freedom to design their curriculum and syllabi in consultation with Industrial Experts, Academicians and Alumni members. The formation of Board of Studies (BoS) and Academic Council with all stake holders offer suggestions for curriculum and approve the curriculum to ensure quality. The curriculum embedded with Choice based credit system and outcome-based education enhances the quality of syllabi and thus ensures the teaching learning process.

### **Preparation of Course Plan:**

- After the subject allocation, course planning is to be finalized in course committee with course instructors well in advance before the start of semester by referring previous year documents.
- Course planning is finalized in course committee meeting with all course instructors. Based on the Bloom's taxonomy level of the course outcomes, content delivery methods are chosen.
- Course outcomes with the level of K3 and above, practice minimum any two of the active learning process, online tutorial, assignment, case studies etc. Course outcomes with the level of K2, in addition to test, any one of the other assessments may be considered to ensure the basic concepts understanding.
- For each course outcome, schedule for conducting other assessments is planned. Tutorial problems will be of think and do level and/or open ended problems type. Open book test, case studies, etc., are also preferred for higher level CO assessments. Appropriate, possible, manageable and optimum number of assessment methods should be chosen.
- The number of assessment methods for course outcomes should be proportional to the level of the course outcomes. Target and threshold should reflect the significance and hardness of course outcomes and also based on previous academic year attainments for the same CO.
- A moderation process is also implemented during the last year which ensures the appropriate quality in assessment tasks and assessment outcomes with valid and consistent judgement of students' performance in terms of standards of achievement.

### **Implementing and Monitoring Process**

- Course file is maintained for each course either in hard copy or through online learning management system (LMS) like google class room, moodle, etc.
- Immediately after the formation of LMS of the courses, each course instructor shares it with co-instructors and HOD.
- HOD will monitor the progress of academic activities periodically and ensure that the content delivery methods and assessments methods against each course outcome are correctly followed as per the plan.
- Immediately after the completion of delivery for each course outcome and before the start of next course outcome, the other assessments for the particular course outcome are completed.
- After the evaluation of internal assessment tests, evaluation of the particular course outcomes and moderation process will be completed and the marks will be declared to students along with internal marks earned. (I test – CO1, II test – CO2,3, III test – CO4,5).
- Before the last working day, evaluation of the all course outcomes will be completed and

internal marks will be declared to students.

- Within one week of the last working day, department level committee is formed to audit the LMS to verify the quality of the process and to check for all the necessary documents are in the order as per the course file check list.

## **TEACHING LEARNING PROCESS IN OUR COLLEGE (New Normal)**

### **Lock down: Phase1**

- The lock down was announced during the mid of even semester of 2019- 2020 (March 24). As we have already practiced the LMS through online partially, our teaching learning process is continued through online mode.
- In the first phase of lockdown, we are in the position to complete nearly about 2 units of all courses. Those have been completed via google class room and moodle.
- LMS monitoring report have been collected for all the COs of all courses from faculty members in the department.
- Both Moodle and Google class room are used as LMS through which all the study materials have been posted.
- 40% of the classes are conducted by live streaming through Google meet, Zoom, Youtube and Cisco Webex, etc.
- Audio narrated power point presentations are also used for delivering the contents. Those videos and PPTs, and relevant materials are posted in LMS to enable the students to access and study the course materials from anywhere and at any time.
- All the content delivery methods and assessment methods have been done as per the course plan.
- All the students are motivated and monitored properly by their LMS access and attendance is posted accordingly.
- Affective domain assessments like Viva voce, seminar presentation via video and shuffled, time bounded MCQs are conducted to confirm the learning happened
- Slow learners coaching, doubt clearance, viva voce are conducted through live web class like google meet, cisco webx, whatsapp etc.
- 80% Students have referred the material on the same day, and few of them viewed later due to network issues.
- The attainment of course outcome are also evaluated and posted in LMS. As per CO attainments, the internal marks are calculated and posted in ERP.
- Moderation process is also conducted for all the course outcomes of all courses conducted during this period. At the end of the semester online academic auditing is also conducted to ensure the quality of teaching learning process.

### **Lock down: Phase 2**

- All the departments have offered one credit courses through online mode for the students who are all willing to study. Around 50 numbers of one credit courses are offered to the students.

- Both Moodle and Google class room are used as LMS through which all the study materials have been posted.
- Content delivery through live video classes are comparatively low, it is advised to handle minimum 50% of live video web classes in the future courses. By means of which, the understandability of the students can be checked, as well as students doubts can be cleared then and there.
- Some modification in Assessment methods may be incorporated like, shuffled online MCQ, Online time bounded Tests etc. to the level of Cos requirements. Affective domain assessments like Viva voce, were conducted through whatsapp and by other more, but no proof were recorded. They should be recorded properly and must be shown to the audit committee in future.
- Attendance monitoring should also be recorded properly. In some department attendance are collected through whatsapp. Instead they can collect it through Moodle/Google forms.
- Some course instructed posted the materials for students with restricted access with few task completions, it shows that there is a correct follow-up in the course, and it is easy to monitor the progress of students. This kind of practice may be followed by all the course instructors in future.
- Slow learners coaching, doubt clearance, viva voce in some departments was made through whatsapp.
- 90% Students have referred the material on the same day, and few of them viewed later due to network issues.
- The attainment of course outcome are also evaluated and posted in LMS. As per CO attainments, the internal marks are calculated and posted in ERP.

The feedbacks are collected from the students, faculties and parents about the online teaching learning practices using google forms. Feedbacks are also collected from the class committee meetings and faculty meetings periodically. Based on the feedbacks/suggestions, the corrective measures are taken. Feedbacks and suggestions from the Academic Audit committee are also used to enhance the quality of education and to uphold excellence in all stages of teaching-learning process.

#### **Academic Planning for the academic year 2020-21:**

- The odd semester of the academic year 2020-21 has been started on 30.07.2020. All the faculty members are regularly attending the college.
- As, the moodle LMS has been customized to the higher level with adequate server facilities according to the requirements of our college, all the courses are now managed by moodle LMS only.
- To enhance the quality of online classes, facilities of document cameras, digital drawing tablets, web cameras, proper sound system are being established in all the departments.
- Live classes are conducted via Big Blue Button (BBB) which is one of best features of moodle LMS. All the college level and department level meetings are conducted via BBB.
- Now all assessments are also completed for CO1 and CO2 for all the courses. Moderation process is now going on.

#### **ONLINE EXAMINATION:**



- Project viva voce Examinations was also conducted through google meet with external examiner for final year students in the last week of June 2020. All the students have presented their project and demonstrated the hardware part as video.
- We have conducted the UG/PG degree end semester examinations of April 2020 for final semester in blended mode during the 4<sup>th</sup> week of September 2020.
- In this regard, we have collected the data from the students whether they are willing to appear for the examinations in blended mode by using their desktop / laptop systems with high speed internet connectivity.
- We are having the infrastructure to conduct the examinations in blended mode (online + offline) through Moodle class room integrated with safe exam browser, Google Meet, Zoom, Big Blue Button or some other platform.
- There are two sections in the question. Section – I has multiple choice questions. Students have to answer this section only through online. Section – II has descriptive type questions. Students have to write answers by pen in A4 size paper, scan the answer paper and send it to the college. In this way we have conducted examination for our students.

# **ANNEXURE – III**

- **Funded Projects**
- **Papers published by faculty members**
- **Webinars and Workshops Organized:**
- **Conferences, Seminars, FDPs and Workshops attended by Faculty Members:**
- **Activities conducted by NEC Business Incubator**
- **List of Major Equipments purchased after last meeting of Governing Board**
- **Achievements by Students**
- **Achievements by Staff**
- **Services rendered to the Society**
- **Details of books purchased in the Library and Activities of Library**

### ANNEXRE - III

#### Report on the academic and other important activities and events in the college since last meeting of the Governing Board

(i) **Funded Projects**

Our faculty members have received funded projects from various funding agencies of central government. The details of sanctioned and ongoing projects in the current year are enclosed as **Annexure III (a)**.

(ii) **Papers published by faculty members**

Every year, our faculty members are publishing their research papers in referred international journals with high impact factor. Number of papers published by our faculty in each department is given below. The details of the papers with authors, journals and impact factor are provided in **Annexure III (b)**.

S.No.	Department	No. of Papers published in international journals	Institution
1	Mechanical Engineering	14	41
2	Electronics and Communication Engineering	10	
3	Computer Science and Engineering	6	
4	Electrical and Electronics Engineering	11	
5	Electronics and Instrumentation Department	-	
6	Information Technology	12	
7	Science and Humanities	3	
	<b>TOTAL</b>	<b>56</b>	

(iii) **Webinars and Workshops Organized:**

S.No.	Department	No. of Conferences / Seminars / Workshops organized
1	Mechanical Engineering	11
2	Electronics and Communication Engineering	16
3	Computer Science and Engineering	10
4	Electrical and Electronics Engineering	12
5	Electronics and Instrumentation Department	6
6	Information Technology	7
7	Civil Engineering	11
8	Science and Humanities	42

9	NEC Central Library	17
	<b>TOTAL</b>	<b>132</b>

**(iv) Conferences, Seminars, FDPs and Workshops attended by Faculty Members:**

Our faculty members have attended various programmes organized by various Institutions/Industries and government organizations.

**(v) Activities conducted by NEC Business Incubator**

- ✓ NEC Business incubatee M/s Ramji agro Implementations, A Startup Company's Socially relevant product -MultiCrop seed sowing equipment was launched and commercialized on 26.08.2020. So far around 40 seed sowing equipments have been sold out.
- ✓ As a part of Founders Day Celebration, Inaugural function of Startupathon 2020 – A Web Based Startup launching programme was organized on 17th September 2020. Mr. Ramachandran Gopalakrishnan, Director, Keiretsu Forum, Mumbai, Mr. R.Senthil Kumar, Senior Manager & Regional Head – NASSCOM, 200 faculty members and 150 virtual participants have participated in the programme.

A detailed report regarding NEC Startupathon is given in **Annexure III (c)**.

**(vi) List of Major Equipments purchased after last meeting of Governing Board**

S.No.	Name of the Equipment	Cost of the equipments in Rs.
<b>Mechanical Engg. Department</b>		
1	CNC Turning Centre Batliboi- Sprint 16TC Fanuc 0i TF	16,99,200/-
2	Portable Drilling Machine & Jigsaw Machine	11269/-
3	Vibration Measuring and Analysis Equipment (4 Channel Vibration Analyzer with Triaxial accelerometer )	Rs. 9,44,000/-
<b>ECE Department</b>		
1	Acer Veriton Core i5 Desktop	1,88,800/-
	Ansys Academic HF Package	9,00,000/-
<b>EEE Department</b>		
1	Field Testing Kit	25,000/-
2	Numeric Relay transformer – Protection relay Panel	2,89,100/-
3	Motor Protection relay, Bay control Unit, Distance protection	7,72,074/-

4	Regulated Power Supply (2 Nos)	61,266/-
5	Function Generator	33,630/-
6	(i) Multifunction meter Class (5Nos.) (ii) Three Phase Energy Meter	15,942/-
7	Variable dual 30V Power Supply	14,160/-
<b>IT Department</b>		
1	5KVA Online <b>Powerline</b> UPS (1)	78,750/-
2	<b>ACER</b> Desktop Systems (10)	3,77,600/-
<b>Civil Engg. Department</b>		
1	Air Quality Analyzer	Rs. 32,450/-
2	Sound Level Meter	Rs. 11,977/-
<b>S&amp;H Department</b>		
1	Audio Frequency Oscillator (AFO) - (2 Hz-200 kHz)	12900/-
2	IC Digital Trainer Kit	8800/-
3	Decade Inductance Box (5 dial 100 microH to 1H) & Decade Resistance Box (5 dial steps 0.1,1,10,100&1000 ohm)	12230/-
4	BH Curve Apparatus	10500/-
<b>Business Incubator</b>		
1	Personal Computers (i5 processor – 64 bit, 16GB DDR4, 1TB hard disk, 18.5” LED Monitor, DVD RW, ATX Cabinet with SMPS, USB Keyboard and Mouse)	3,77,600/-
2	5 kVA Online IGBT based PWM and Batteries.	93,750/-
3	Wacom One Graphical Display	34,812/-

**(vii) Achievements by Students**

- ✓ Two batches of each 6 ECE Students have participated in the smart India Hackathon2020 and submitted their projects titled 404 found and Using E-Tongue technology to test adulterations in cooking oil
- ✓ S.Sundar from III CSE secured 5th place in a coding contest on CSI annual convention at KIIT Bhubaneswar held on 18.01.2020 .
- ✓ A.Balaji and M.Venkatesh won first prize in ATOS Syntel Hackathon held on 28.02.2020 at IT Park,Gangaikondan, Tirunelveli

- ✓ Ms.E.Shyamala Bharathi (1712102) III B.E. - C.S.E., has participated in the all India level "Constitution Day - National Essay Writing Competition " conducted by the National Testing Agency in collaboration with UGC & Ministry of HRD on February 26, 2020 and secured FIRST RANK (96 out of 100 ) with Cash prize of Rs.15,000/-.
- ✓ Ten students have participated in GOOGLE HASHCODE 2020 competition of the IT industries and secured global ranks.
- ✓ Ms.Rupa sri, Ms.T.Pavithra, Mr.S.Sundar, Mr.M.Prabanjan and Mr.V.Yogesh were cleared the first round of TCS CodeVita contest and appeared for second round interview at TCS. Result awaited
- ✓ K.Anandaraj from IV year EIE has received Best Student Award at 19th ISTE Tamilnadu & Pondicherry Section Annual Convention on 18th December 2019.
- ✓ S.I.Jenefa ,J. Venkadesh raja and S.Silvesterbennys jakes of IV Year EIE have participated in EDII Tamil Nadu Student Innovators-2019 competition and have won a cash prize of Rs.10, 000/- in final for their project entitled “Smart Recliner”.
- ✓ Z.Mohamad Sameer,P.S.Abdulbasith IV Year EIE got scholarship from Coursera for successful completion of IBM Professional course.
- ✓ 52 students were awarded by ORACLE Academy Database Design and Programming with SQL
- ✓ Three of III Year Civil Engineering students were selected for Thinkathon Residential workshop conducted by IIT Madras during December 2019.
- ✓ 58 Civil Engineering students have completed Blender Training, A spoken Tutorial Project conducted IIT Bombay and funded by National Mission on Education through ICT, MHRD, Govt., of India from IIT Bombay on 22nd January 2020.
- ✓ Ms.J.Jaya durga Final Year Civil Engineering has secured third price in Gold medal contest organized by Federation of civil engineering association tamilnadu & Puducherry.
- ✓ Around 500 students have done the following experiments utilizing the virtual lab activities
  - Water analysis-Determination of Chemical parameters
  - Verification of Freundlich adsorption isotherm
  - Spectroscope verification of Beer – Lambert Law
  - Water analysis-Determination of Physical parameters
  - Flame Photometry
  - Ultrasonic interferometer
  - Compound Pendulum

(ix) *Achievements by Staff*

- ✓ Ms. S. Kalaiselvi AP (SG)/CSE and Mr. H. Muthu Mariappan, Research Scholar of our department acted as the resource persons and delivered the ML concepts along with hands on practice using python.
- ✓ Mr. K.G. Srinivasagan and S. Kalaiselvi have been recognised as Gold level partner faculty under Inspire-The Campus Connect Faculty Partnership Model.
- ✓ Mr. D. Vijayakumar got an Elite Silver Certificate for the 12 weeks course on NPTEL Course on "Programming in Java" from July to October 2019.
- ✓ Ms. S. Kalaiselvi got an Elite Silver Certificate for the 4 weeks course on NPTEL Course on "Python for Data Science" from August to September 2019.
- ✓ Ms. G. Sivakamasundari got an Elite Gold Certificate for the 12 weeks course on NPTEL Course on "The Joy of Computing using Python" from August to September 2019.
- ✓ Ms. G.R.Hemalakshmi has been recognized as Silver level partner faculty under Inspire-The Campus Connect Faculty Partnership Model.
- ✓ Ms. I. Muthuselvi and Mr.K.Rajkumar have been recognized as Bronze level partner faculty under Inspire-The Campus Connect Faculty Partnership Model.
- ✓ Mr. A. Shenbagharaman got an Elite Certificate for the 12 weeks NPTEL course on "Introduction to Internet of Things" from July to December 2019.
- ✓ Ms. A. Sathiya got an Elite Silver Certificate for the 12 weeks course on NPTEL Course on "The Joy of Computing using Python" from August to September 2019.
- ✓ Dr. V. Gomathi has acted as a resource person for the Anna University sponsored Faculty Development Training Programme on CS8602-Compiler Design and delivered "Target Code optimization" on 20.12.2019 (Afternoon).
- ✓ Ms. R. Rajakumari has acted as a resource person for the Anna University sponsored Faculty Development Training Programme on CS8602-Compiler Design during 16.12.2019 to 21.12.2019.
- ✓ Ms. S. Kalaiselvi had delivered a speech to our third year students about the InfyTQ contest, certification and its importance towards the placement at IBM lab on 21.01.2019
- ✓ Ms. S. Kalaiselvi has acted as a resource person for the Anna University sponsored Faculty Development Training Programme on CS8602-Compiler Design and delivered "Target Code optimization" on 20.12.2019 (Afternoon).
- ✓ Ms. J. Naskath got an Elite Gold Certificate for the 12 weeks NPTEL course on "Introduction to Internet of Things" from July to December 2019.
- ✓ M. Franchis David, G. Mohan Kumar, C. B. Raambalaji, S. Subaranjani, A. Muthusivashankar and J. Chandra Bose published their research article titled Experimental



investigation on bio-concrete with medical vial glass waste in Asian Journal of Civil Engineering Journal (Indexed in SCOPUS)

- ✓ Dr. C. Chella Gifta's research article accepted for the publication in Magazine of Concrete Research, Institutions of Engineers (London) Journal. (Indexed in SCIE with an Impact factor of 1.933)
- ✓ Dr. A. Cyril Thomas received an Industrial Research Project titled "Bond Characteristics of Grouted Corrugated duct-dowel Splice Connection" worth of 5.00 Lakhs from M/s. Teemage Precast In., Tuticorin
- ✓ Dr.S.Chidhabaram AP(SG)/IT Dept., Dr.V.Jackins AP(SG)/IT Dept., have obtained their Doctoral degree from Anna University Chennai .
- ✓ Mrs. D.Priyanka , Mr. G.Pandiyarajan and Mrs.S.Savitha awarded inspire faculty award from infosays for the year 2019 and received gold, silver & Bronze models respectively.
- ✓ Our faculty members have attended as a resource persons in various organizations and rendered guest lectures on topics

**(x) *Services rendered to the Society***

- Locally available 50 NCC Cadets have involved in Security work in and around Kovilpatti along with the Police personnel during first Lock down period 25<sup>th</sup> March to 14<sup>th</sup> April 2020.
- One of the blocks in Ladies hostel was handed over to local health department for making as a Covid centre.

**(xi) *Details of books purchased in the Library and Activities of Library***

- Additional books of 510 nos. in the various disciplines were purchased in the academic year 2019 - 20 in addition to National & International print and e-journals at the cost of Rs. 17.58 lakhs.
- FOSS Courses, Spoken Tutorial, IIT Bombay: FOSS (Free and Open Source Software) Courses funded by the NMEICT, Ministry of HRD, Government of India was arranged by Spoken Tutorial, IIT Bombay. 301 students have successfully completed (91.2%) the various FOSS Courses (PHP & MySQL, Blender, Arduino, Advanced C++, Python and QCAD) through remotely conducted the online exam and 358 students have successfully have completed training conducted by Spoken Tutorial, IIT Bombay through online.

**Annexure – III (a)**

**Funded Research Projects in the year 2020– 2021**

**Funded Research Project (Ongoing)**

<b>S. No.</b>	<b>Name of the Principal Investigator / Co - Investigator</b>	<b>Title of the Project</b>	<b>Funding Agency</b>	<b>Period</b>	<b>Amount (Rs.)</b>	<b>Status</b>
1.	<b>PI :</b> Dr. S.Thalamuthu, Asst.Prof.(SG)/ Chemistry)  <b>Co-I:</b> Dr.M.A.Neelakantan Prof. & Head / S&H	Designing of novel benzothiazole derivatives and their Cu(II), Fe(II/III) and Al(III) complexes: Synthesis, structural characterization and biological exploration against distinct pathological factors in Alzheimer's disease.	DST (SERB)	2017-2020	26,19,320	Ongoing
2.	Dr.S.Shanmugavel, Principal, NEC Dr.M.A.Neelakantan Dean, (R&D)	Fund for improvement of S&T Infrastructure in Universities and Higher Educational Institutions (FIST)	DST-FIST	2018-2023	43,00,000	Ongoing
<b>Total Amount</b>					<b>69,19,320</b>	

**Sanctioned Project – Department of Computer Science Engineering**

<b>Title of the Project</b>	<b>Principal Investigator</b>	<b>Funding Agency</b>	<b>Amount</b>	<b>Period</b>	<b>Status</b>
Development and Analysis of Finite Automata based Public Key Cryptographic Schemes	<b>PI :</b> Dr. K.Mohaideen Pitchai, Asso.Prof (SG) / CSE, <b>Co-PI:</b> Dr. M.Bhuvaneswari, Asst.Prof (SG) / CSE	DRDO – CARS	09,78,835/-	18 Month	Sanction letter received on 11.08.2020, Amount is not released.

### Annexure – III (b)

#### Publication Details of Faculty Members

**Dept: Department of Mechanical Engineering**

**Publication Details:**

S.No	Name of the Authors (including all Co-authors)	Title of the Paper	Name of the Journal	Name of the Publisher
1.	Shivdev Singh, Ajay Gupta, Vishal S Sharma and <b>Dr.R.Harichandran</b>	Production and high temperature wear characterization of AA 7075/Al <sub>2</sub> O <sub>3</sub> /Graphite hybrid nanocomposites by enhanced stir and ultrasound assisted casting method	Materials Research Express <b>IF:1.449</b>	IOP
2.	A.Karthick, <b>Dr.K.Kalidasa Murugavel</b> ,Aritra Ghosh,K.Sudhakar, <b>Mr.P. Ramanan</b>	Investigation of a binary eutectic mixture of phase change material for building integrated photovoltaic (BIPV)system	Solar Energy Materials and Solar Cells <b>IF:6.019</b>	Elsevier
3.	<b>Mr.S.R. Sundara Baharathi, Dr.D.Ravindaran, Mr.A.Arul Marcel Moshi</b>	Multi Response Optimization of CNC Turning Parameters on Austenitic Stainless Steel 303 using Taguchi Based Grey Relational Analysis	Transactions of the Canadian Society for Mechanical Engineering <b>IF : 0.243</b>	Canadian Science Publishing
4.	<b>Dr.P.Hariharasakthisudan</b> , B.Surya Rajan,and K.Sathickbasha	Inspiration of reinforcements, manufacturing methods, and microstructural changes on wear behavior of metal matrix composites-a recent review	Materials Research Express <b>IF:1.449</b>	IOP
5.	<b>Mr.A. Arul Marcel Moshi, Dr.D. Ravindran, Mr.S.R. Sundara Bharathi</b> , S. Indran , G. Suganya Priyadharshini	Characterization of surface-modified natural cellulosic fiber extracted from the root of Ficus religiosa tree	International Journal of Biological Macromolecules <b>IF:4.784</b>	Elsevier

6.	A.Karthick, <b>Mr.P.Ramanan</b> , Aritra Ghosh,B.Stalin, and <b>Mr.R.Vignesh Kumar</b> , I.Baranilingesan	Performance enhancement of Copper indium diselenide photovoltaic module using inorganic phase change material	Asia-Pacific Journal of Chemical Engineering <b>IF: 1.396</b>	WILEY
7.	<b>Dr.M.Kathiresan</b>	Influence of shape, size and location of cutouts on crashworthiness performance of aluminium conical frusta under quasi-static axial compression	Thin –Walled Structures <b>IF:3.488</b>	Elsevier
8.	<b>Dr.P Hariharasakthisudhan</b> , Logesh Kamaraj, Surya Rajan Balachandran, and Sathickbasha Kathar Basha	Reusing exhausted alkaline battery powder as reinforcement in AA6061 composites and mechanical characterization	Energy sources Part A – Recovery, Utilization and Environmental effects <b>IF: 1.184</b>	Taylor&Francis
9.	<b>Mr.A. Arul Marcel Moshi</b> , <b>Dr.D. Ravindran</b> , <b>Mr.S.R. Sundara Bharathi</b> , S.R.Padma, S. Indran , D.Divya	Characterization of natural cellulosic fiber extracted from <i>Grewia damine</i> flowering plant's stem	International Journal of Biological Macromolecules <b>IF:5.162</b>	Elsevier
10.	<b>Mr. C.Veera Ajay</b>	Parameter Optimization in Incremental Forming of Titanium Alloy Material	Transactions of the Indian Institute of Metals <b>IF:1.205</b>	Springer
11.	K. Logesh, <b>P.Hariharasakthisudhan</b> , B.Surya Rajan, <b>A. Arul Marcel Moshi</b> , V. Khalkar	Effect of multi-walled carbon nano-tube on mechanical behavior of glass laminate aluminum reinforced epoxy composites	Polymer Composites <b>IF:2.265</b>	Wiley
12.	P.Paulraj, <b>Dr.R.Harichandran</b>	The tribological behavior of hybrid aluminum alloy nanocomposites at High temperature: Role of nanoparticles	Journal of Materials Research and Technology <b>IF: 5.289</b>	Elsevier

13.	<b>Mr.P.Ramanan, Dr.K Kalidasa Murugavel,</b> A.Karthick, D.Hari Kishan, G.Suriyanarayanan	Performance enhancement of photovoltaic module by integrating eutectic inorganic phase change material	Energy Sources Part A-Recovery Utilization and Environmental Effects <b>IF:1.184</b>	Taylor&Francis
14.	<b>Dr. F.Michael Thomas Rex, Mr.A.Andrews,</b> A.Krishnakumari, <b>Dr.P.Hariharasakthisudhan</b>	A Hybrid Approach For Fault Diagnosis Of Spur Gears Using Hu Invariant Moments And Artificial Neural Networks	Metrology And Measurement Systems <b>IF:1.093</b>	PAN

**Dept: Department of Electronics and Communication Engineering**

**Publication Details:**

<b>S.No</b>	<b>Name of the Authors (including all Co-authors)</b>	<b>Title of the Paper</b>	<b>Name of the Journal</b>	<b>Name of the Publisher</b>
1.	<b>Mr.C.Balamurugan,</b> P.Marichamy, <b>Dr.R.Harichandran</b>	Effect of h-BN nanoceramic substrate on the performance of microstrip patch antenna in S-band applications	International Journal of RF AND MICROWAVE Computer-Aided Engineering <b>IF 1.472.</b>	Wiley
2.	D.Jeba Derwin, <b>Dr.S.Tamil Selvi,</b> O.Jeba Singh, B.Priestly Shan	A novel automated system of discriminating Microaneurysms in fundus images	Biomedical Signal Processing and Control <b>IF:2.943</b>	Elsevier
3.	S.Darwin, <b>Dr.T.S.Arun Samuel,</b> P.Vimala	Impact of two gate oxide with no junction metal oxide semiconductor field effect transistor- an analytical model	Physica E – Low –dimensional systems and Nanostructures <b>IF:3.176</b>	Elsevier
4.	C. Usha, P.Vimala, <b>Dr.T. S. Arun Samuel,</b> M. Karthigai Pandian	A novel 2-D analytical model for the electrical characteristics of a gate-all-around heterojunction tunnel field-effect transistor including depletion regions	Journal of Computational Electronics <b>IF:1.637</b>	Springer
5.	P. Vimala, and <b>Dr.T. S. Arun Samuel</b>	TCAD Simulation Study of Single-, Double-, and Triple-Material Gate Engineered Trigate FinFETs	Physics of Semiconductors Devices <b>IF: 0.691</b>	Springer

S.No	Name of the Authors (including all Co-authors)	Title of the Paper	Name of the Journal	Name of the Publisher
6.	P. Vimala, and <b>Dr.T. S. Arun Samuel</b>	Effect of Gate Engineering and Channel Length Variation in Surrounding Gate MOSFETs	Journal of Nano Research IF:0.589	Trans Tech
7.	<b>Mrs.R.Manjula Devi, Dr.V.Seenivasagam</b>	Automatic Segmentation and Classification of Liver Tumor From CT Image Using Feature Difference and SVM Based Classifier-Soft Computing Technique	Soft Computing <b>IF:2.784</b>	Springer
8.	P.Suveetha Dhanaselvam, P. Vimala, and <b>Dr.T. S. Arun Samuel</b>	A 2D Analytical Modeling and Simulation of Double Halo Triple Material Surrounding Gate (DH-TMSG) MOSFET	Silicon <b>IF:1.499</b>	Springer
9.	<b>I. Vivek Anand, T. S. Arun Samuel</b> & P. Vimala	Modeling and simulation of a dualmaterial asymmetric heterodielectric-gate TFET	Journal of Computational Electronics <b>IF:1.532</b>	Springer
10.	P.Vimala, <b>Dr.T.S.Arun Samuel</b>	Investigation of Cylindrical Channel Gate All Around InGaAs/InP Heterojunction Heterodielectric Tunnel FETs	Silicon <b>IF:1.499</b>	Springer

**Dept: Department of Computer Science and Engineering**

**Publication Details:**

S.No	Name of the Authors (including all Co-authors)	Title of the Paper	Name of the Journal	Name of the Publisher
1.	<b>Mrs.M.Jayalakshmi, Dr.V.Gomathi</b>	Sensor-Cloud based Precision Agriculture Approach for Intelligent Water Management	International Journal of Plant Production <b>IF:0.961</b>	Springer
2.	<b>Dr.K.Mohaideen Pitchai</b>	Energy Efficient Routing in Wireless Sensor Network Using Artificial Bee Colony Optimization	Sylwan <b>IF: 0.691</b>	Poland

S.No	Name of the Authors (including all Co-authors)	Title of the Paper	Name of the Journal	Name of the Publisher
3.	<b>Dr.S.Maheswari,</b> Dr.A.Bhuvaneswari, Dr.G.R.Karpagam	Ontology based web service discovery for Eshopping applications	Sylwan <b>IF: 0.691</b>	Poland
4.	A. Anjalin Sweatha and <b>Dr.K. Mohaideen Pitchai</b>	Construction of Cryptographically Secure AES S-Box using Second-order Reversible Cellular Automata	Journal of Intelligent & Fuzzy Systems <b>IF: 1.637</b>	IOS Press
5.	<b>Mrs.S.Kalaiselvi,</b> <b>Dr.V.Gomathi</b>	a-cut induced Fuzzy Deep Neural Network for change detection of SAR images	Applied Soft Computing <b>IF:4.873</b>	Elsevier
6.	<b>Mr.S.Deenathayalan,</b> <b>Dr.B.Paramasivan</b>	A Comprehensive Approach to Avoid Node Selfishness and Data Redundancy	Journal of Intelligent & Fuzzy Systems <b>IF: 1.851</b>	IOS Press

**Dept: Department of Electrical and Electronics Engineering**

**Publication Details:**

S. No	Name of the Authors (including all Co-authors)	Title of the Paper	Name of the Journal	Name of the Publisher
1.	<b>Dr.M.P.E.Rajamani,</b> <b>Dr.M.Willjuice</b> <b>Iruthayarajan,</b> <b>Mr.S.Sankara Kumar</b>	Design of Nsga Based Controller for Non-Inverting Buck-Boost Converter	Sylwan <b>IF: 0.691</b>	Poland
2.	<b>Dr.M.P.E.Rajamani,</b> <b>Dr.M.Willjuice</b> <b>Iruthayarajan,</b> <b>Mr.S.Sankara Kumar</b>	Design of NSGA Based Controller for Boost Converter	Sylwan <b>IF: 0.691</b>	Poland



3.	<b>Mr.K.Karthik Kumar,</b> S.Kamaraja, <b>Dr.S.Senthil Kumar, Mr.P.Nirmal Kumar,</b> R.Saiyyappa	Stability Analysis of Solar Assisted DC-DC Y-Source Boosting Topology Using State Space Model	Sylwan <b>IF: 0.691</b>	Poland
4.	<b>Dr.M.Ravindran,</b> <b>Dr.S.Senthil Kumar,</b> N.Karupiah and M.Asoken	Experimental Investigation on Room Temperature Vulcanised Silicone rubber and Epoxy resin coated porcelain outdoor insulators located at highly polluted environment	Journal of Ceramic Processing Research <b>IF:0.386</b>	Hanyang University
5.	<b>Dr.S.Sankara Kumar,</b> <b>Dr.M.Willjuice</b> <b>Iruthayarajan,</b> <b>Mr.T.Sivakumar</b>	Evolutionary algorithm based selective harmonic elimination for three-phase cascaded H-bridge multilevel inverters with optimized input sources	Journal of power Electronics <b>IF:0.901</b>	Springer
6.	R.Arun, <b>Dr.R.Muniraj,</b> <b>Dr.M. Willjuice</b> <b>Iruthayarajan</b>	A New Controller Design Method for Single Loop Internal Model Control Systems	Studies in Informatics and Control <b>IF: 2.102</b>	ICI Bucharest
7.	Mohamed Yacin Sikkandar, T.Jayasankar, K.R.Kavitha, <b>Dr.N.B.Prakash,</b> M.Natteri, Sudharsan and <b>Mrs. G.R.Hemalakshmi.</b>	Three factor nonnegative matrix factorization based HE stain unmixing in histopathological images	Journal of Ambient Intelligence and Humanized Computing <b>IF: 4.594</b>	Springer
8.	<b>Dr.G.Kannayeram ,</b> <b>Dr.N.B.Prakash, R.Munuraj.</b>	Intelligent hybrid controller for power flow management of PV/battery/FC/SC system in smart grid applications	International Journal of Hydrogen Energy <b>IF:4.939</b>	Elsevier
9.	M.Karthikeyan, K.Sharmilee, P.M.Balasubramaniam, <b>Dr.N.B.Prakash,</b> M.Rajesh Babu, V.Subramaniaswamy, S.Sudhakar	Design and implementation of ANN-based SAPF approach for current harmonics mitigation in industrial power systems	Microprocessors and Microsystems Journal <b>IF: 1.161</b>	Elsevier

10.	Mohamed Yacin Sikkandara, S. Sabarunisha Begum, N.M. Sudharsan, <b>Dr.N.B. Prakash.</b>	Study of flow dynamic behavior of electrochemical reactor for treating liquid biomedical wastewater	Desalination and Water Treatment <b>IF:0.854</b>	Springer
11.	E. Punarselvam, T. Kalavathi Devi, A. Sagai Francis Britto, <b>Dr.N. B. Prakash,</b> and P. Suresh	Segmentation Analysis Techniques and Identifying Stress Ratio of Human Lumbar Spine Using ANSYS	Journal of Medical Imaging and Health Informatics <b>IF: 0.659</b>	American Scientific Publishers

**Dept: Department of Information Technology**

**Publication Details:**

S. No	Name of the Authors (including all Co-authors)	Title of the Paper	Name of the Journal	Name of the Publisher
1.	I.Gethzi Ahila Poornima, <b>Dr.B.Paramasivan</b>	Anomaly detection in wireless sensor network using machine learning algorithm	Computer Communications <b>IF:2.766</b>	Elsevier
2.	<b>Dr.S.Vimal,</b> Manju Khari, Nilanjan Dey, Ruben Gonzalez Crespo, Y.Harold Robinson	Enhanced resource allocation in mobile edge computing using reinforcement learning based MOACO algorithm for IIOT	Computer Communications <b>IF:2.766</b>	Elsevier
3.	<b>Dr.S.Vimal,</b> Manju Khari, Ruben Gonzalez Crespo, <b>Dr.L.Kalaivani,</b> Nilanjan Dey, M.Kaliappan	Energy enhancement using Multiobjective Ant colony optimization with Double Q learning algorithm for IoT based cognitive radio networks	Computer Communications <b>IF:2.766</b>	Elsevier
4.	M.Sivaram, M.Kaliappan, S.Jeya Shobana, M.Viju Prakash, V.Porkodi, K.Vijayalakshmi, <b>Dr. S. Vimal,</b> A. Suresh.	Secure storage allocation scheme using fuzzy based heuristic algorithm for cloud	Journal of Ambient Intelligence and Humanized Computing <b>IF: 1.910</b>	Springer

5.	<b>Mrs.R.Sujitha</b> <b>,Dr.V.Seenivasagam</b>	Classification of lung cancer stages with machine learning over big data healthcare framework	Journal of Ambient Intelligence and Humanized Computing <b>IF:1.910</b>	Springer
6.	S.Pradeepa, K.R.Manjula, <b>Dr.S.Vimal</b> , Mohammad S. Khan, Naveen Chilamkurti, Ashish Kr.Luhach	DRFS:Detecting Risk Factor of Stroke Disease from Social Media Using Machine Learning Techniques	Neural Processing Letters <b>IF:2.591</b>	Springer
7.	S.Pasupathi, <b>Dr.S.Vimal</b> , Y.Harold-Robinson, Manju Khari & Elena Verdú & Rubén González Crespo	Energy efficiency maximization algorithm for underwater Mobile sensor networks	Earth Science Informatics <b>IF: 1.450</b>	Springer
8.	<b>Dr.R.Muthu kumar</b> , <b>Dr.D.Manimegalai.</b>	Secured transmission using trust strategy-based dynamic Bayesian game in underwater acoustic sensor networks	Journal of Ambient Intelligence and Humanized Computing <b>IF:4.594</b>	Springer
9.	J. Joshana Athanesious, , Vasuhi, S.Vaidehi, V. Shiny Christobel, <b>Mr.I.Jerart Julus</b>	Adaptive density based data mining technique for detection of abnormalities in traffic video surveillance	Journal of Intelligent & Fuzzy Systems <b>IF:1.851</b>	IOS Press
10.	Madhumitha Ramamurthy, Lango Krishnamurthi, <b>Dr.S.Vimal</b> , Suresh Annamalai	Analysis of obstructive sleep apnea disorder with accuracy prediction using svm for smart environment	ACM Transactions on Multimedia Computing, Communications, and Applications <b>IF:3.275</b>	Association for Computing Machinery
11.	Y.Harold Robinson, <b>Dr.S.Vimal</b> , Manju Khari, Fernando Carlos Lopez Hernandez, and Ruben Gonzalez Crespo.	Tree-based convolutional neural networks for object classification in segmented satellite images	The International Journal of High Performance Computing Applications <b>IF:2.365</b>	SAGE

12.	Pradeepa.S, Gayathiri.P, Nishmitha.P, <b>Dr.S.Vimal</b> , Oh- Young Song, Usman Tariq, and Raheel Nawaz	IoT Based Health—Related Topic Recognition from Emerging Online Health Community (Med Help) Using Machine Learning Technique	Electronics <b>IF:2.412</b>	MDPI
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**Dept: Department of Science & Humanities**

**Publication Details:**

S. No	Name of the Authors (including all Co-authors)	Title of the Paper	Name of the Journal	Name of the Publisher
1.	Durai Ganesh, G.Senthilkumar, Laith Ahmed Najam, V.Raja, <b>Dr.M.A.Neelakatan and R.Ravisankar</b>	Uranium quantification in groundwater and health risk from its ingestion in and around Tiruvannamalai, Tamilnadu, India	Radiation Protection Dosimetry <b>IF: 0.831</b>	OXFORD Academic
2.	K. Karuppasamy, Dhanasekaran Vikramana, Jong-Hyeok Choi, Ranjith Bose, <b>Dr.A. Nicholson</b> , T. Maiyalagan, Hyun-Seok Kima,	Hybrid lithium-ion capacitors based on novel 1-butyl-3- methylimidazolium bis(nonafluorobutanesulfonyl imide) (BMImBNFSI) ionic liquid electrolytes: a detailed investigation of electrochemical and cycling behaviors	Journal of Materials Research and Technology <b>IF:3.327</b>	Elsevier
3.	<b>Dr.E.Ramachandran</b> , Valentina Gandin, Roberta Bertani, Paolo Sgarbossa, K. Natarajan, Nattamai S.P. Bhuvanesh, Alfonso Venzo, Alfonso Zoleo, Mirto Mozzon, Alessandro Dolmella, Alberto Albinati, Carlo Castellano , Nuno Reis Conceição, M. Fátima, C. Guedes da Silva, and Cristina Marzano	Synthesis, Characterization and Biological Activity of Novel Cu(II) Complexes of 6-Methyl-2-Oxo-1,2- Dihydroquinoline -3-Carbaldehyde-4n-Substituted thiosemicarbazones	Molecules <b>IF:3.060</b>	Article

**Annexure – III (C)**

**STARTUPATHON -A WEB BASED STARTUP LAUNCHING**  
**VIRTUAL INCUBATION PROGRAM**

“Startupathon”, a web based startup launching program is organized from 17.09.2020 to 31.12.2020 to offer virtual incubation program to students, alumnae, faculty and external entrepreneurs under NEC Business Incubator, K.R. Incubation Centre (KRIC). In this regard, it is planned to support 10 incubatees with an amount of Rs.88,000/- each through this virtual incubation program as per the following schedule.

S. No.	Incubation Support per Incubate	Approximate amount(Rs.)
1	Company registration expenses	14,000.00
2	Expenses to acquire web hosting space with SSL certificate and e-commerce facility	20,000.00
3	Expenses to procure application software, software licenses, software subscriptions, software application program interfaces (API) and software plugins related to web application development	45,000.00
4	Registration of trademark (IPR)	6,000.00
5	Animation and demo video	3,000.00
Total		88,000.00

Moreover, it has been also planned to support 2 IoT prototype development with Rs.1,20,000/-. A total budget of **Rs.10,00,000/-** (Rupees Ten Lakhs) has been approved for the above said 10 web based startup and 2 IoT product developments.

The following are the list of incubates benefited under this scheme.

S. No.	Founder and Co-founder Name	Incubatee Category	Project Name
1	Dr.S.A.Pasupathy, Professor & Head(ECE) Kumaraguru College of Technology,Coimbatore	Alumni	Zeckers
2	Mr.V.Manimaran,Assistant Professor/IT, National Engineering College	Faculty	Vetan
3	Dr.S.TamilSelvi, Professor(ECE) & Dean Academic,National Engineering College Mr.B.Ganapathy Ram, Assistant Professor(ECE), National Engineering College	Faculty	Cohemass
4	Dr.J.Amutharaj, Professor & Head, Information Science and Engineering, Raja Rajeswari Engineering College, Bangalore	Alumni	AZZ Rental

S. No.	Founder and Co-founder Name	Incubatee Category	Project Name
5	Mr.P.Lakshmanan Mr.P.Ramu	Entrepreneur	Token Advance
6	Ms.S.KalaiPriyaa, Final Year Student, RVS College of Technology, Coimbatore G.Sharmila, Final Year Student, Raja Rajeswari Engineering College, Bangalore	External Student	Love 2 farm
7	Mr.R.Dinesh	Entrepreneur	Mass mama
8	Mr.M.Valluvan, Vyasaka Technologies pvtltd,Chennai	Entrepreneur	Cirppi
9	Mr.V.ArunVenkatesh, Final year Student, RVS College of Technology, Coimbatore	External Student	Parts 2 Product
10	Mr.S.Bharat, Graduate, RVS College of Technology, Coimbatore Mr.R.Jeeva Pandian, Final year Student, RVS College of Technology, Coimbatore	IOT Product Development	Roboat
11	Mr.R.Yuvaraj, Final Year Student, Raja Rajeswari Engineering College, Bangalore	IOT Product Development	E Delviery Box

## **ANNEXURE – IV**

### **Placement Details (2019-20)**



Sl. No.	Company Name	Date	CSE	IT	ECE	EEE	EIE	Mech	Civil	Total	Salary
1	M/s.ZOHO CORPORATION,CHENNAI	28.06.2019	5	6	1	1	1	1		15	658000
2	M/s.TESSOLVE SEMICONDUCTOR Pvt.Ltd,BENGALURU.	27.06.2019			8	5				13	336564
3	M/s.CENTIZEN INC.TIRUNELVELI	06.07.2019	11	4						15	300000
4	M/s.VVDN TECHNOLOGIES PRIVATE LIMITED,CHENNAI	06.07.2019	6	1	9	4				20	320000
5	M/s.MISTRAL SOLUTIONS PVT.LTD.,BENGALURU	12.07.2019	1		1		1			3	500000
6	M/s.CADENCE DESIGN SYSTEMS,BENGALURU	13.07.2019				1				1	700000
7	M/s.E-CON SYSTEMS INDIA PRIVATE LIMITED,CHENNAI	22.07.2019				1				1	420000
8	M/s.KAAR TECHNOLOGIES,CHENNAI	27.07.2019	1							1	460000
9	M/s.ASTRAZENECA INDIA PRIVATE LIMITED,CHENNAI	31.07.2019	2							2	500000
10	M/S.VURAM TECHNOLOGY SOLUTIONS PVT.LTD.,CHENNAI	05.08.2019	1							1	460000
11	M/s.SOLARTIS TECHNOLOGY SERVICES PVT.LTD.,MADURAI	07.08.2019	2	2		1				5	310000
12	M/s.MAVEL TECHNOLOGIES PVT. LTD,MADURAI	12.09.2019	1	4						5	300000
13	M/s.DATA PATTERNS (INDIA )PVT. LTD,CHENNAI	14.09.2019			8	11	3			22	210000
14	M/S.HEXAWARE TECHNOLOGIES LIMITED,CHENNAI	17.09.2019		2	3	1				6	300000
15	M/s.TATA CONSULTANCY SERVICES,CHENNAI	19.09.2019	16	8	12	8	3	7	1	55	335000
16	M/s.APPRANIX,COIMBATORE	23.09.2019	1							1	420000
17	M/s.COMCAST INDIA ENGINEERING CENTER,CHENNAI	26.09.2019	4	5	7	3				19	600000

Sl. No.	Company Name	Date	CSE	IT	ECE	EEE	EI E	Me ch	Civ il	Tot al	Salary
18	M/S.IVTL INFOVIEW TECHNOLOGIES,CHENNAI	27.09.2019	1							1	500000
19	M/S.HI-TECH CALIBRATION SERVICES,CHENNAI	01.10.2019			3	1	9	1		14	180000
20	M/s.CHAIN-SYS INDIA PVT.LTD.,CHENNAI	11.10.2019	4	3		2				9	280000
21	M/s.ATOS SYNTEL,CHENNAI	14.10.2019	7	8						15	300000
22	M/s.JUST DIAL LTD,CHENNAI	17.10.2019	2			1	1			4	300000
23	M/s.COGNIZANT TECHNOLOGY SOLUTIONS,CHENNAI	19.10.2019	5	3	4	4	2	6		24	360000
24	M/s.AUDITPLUS TECHNOLOGIES, THOOTHUKUDI	30.10.2019	3							3	180000
25	M/s.WIPRO,CHENNAI	21.11.2019	1	3	2					6	420048
26	M/s.INFINITI SOFTWARE SOLUTIONS PVT.LTD,CHENNAI	06.12.2019			2					2	192000
27	M/s.PERFECT DETAILING PRIVATE LIMITED,CHENNAI	07.12.2019							1	1	180000
28	M/s.RENAULT NISSAN AUTOMOTIVE INDIA PRIVATE LIMITED,CHENNAI	18.12.2019						13		13	180000
29	M/s.ABIBA SYSTEMS,BANGALORE	18.12.2019	1							1	240000
30	M/s.INFOSYS,CHENNAI	20.12.2019	3	1		1		2		7	360000
31	M/S.ELITE ENGINEERING & CONSTRUCTION(HYD) PVT.LTD,HYDERABAD	20.12.2019							5	5	216000
32	M/S.VENUS SURGICALS PVT. LTD.,CHENNAI	24.12.2019					6			6	180000
33	M/S.KAARVENS STRUCTURAL CONSULTANCY,COIMBATORE	26.12.2019							4	4	120000
34	M/s.LMES ACADEMY PVT.LTD,CHENNAI	26.12.2019		1						1	120000
35	M/s.REGIONAL DESIGN WORK,MADURAI	03.01.2020							1	1	100000
36	M/s. TVM SIGNALLING AND TRANSPORTATION SYSTEMS PVT. LTD.,BANGALORE	07.01.2020				2				2	275000

Sl. No.	Company Name	Date	CSE	IT	ECE	EEE	EIE	Mech	Civil	Total	Salary
37	M/s.JILABA SOFTWARE SERVICE PRIVATE LIMITED,CHENNAI	07.01.2020	2	3	1	5	2			13	210000
38	M/s.SAKTHI AUTO COMPONENT LIMITED,COIMBATORE	07.01.2020			9	1				10	140000
39	M/s.RENAULT NISSAN TECHNOLOGY & BUSINESS CENTER INDIA,CHENNAI	08.01.2020			1					1	350000
40	M/s.IBM,CHENNAI	08.01.2020	1							1	425000
41	M/s.CETAS INFORMATION TECHNOLOGY,CHENNAI	09.01.2020	3							3	250000
42	M/s. RMR BUILDERS,TIRUNELVELI	22.01.2020							3	3	100000
43	M/s.REHOBOTH'S WINSLY ASSOCIATES, TIRUNELVELI	22.01.2020							1	1	100000
44	M/s. V BUILDERS,COIMBATORE	22.01.2020							1	1	120000
45	M/s.VIABLE TECHNOLOGIES,CHENNAI	23.01.2020	2							2	210000
46	M/s.JEHOVAH NISSI BUILDERS, TIRUNELVELI	24.01.2020							2	2	100000
47	M/s.R&D INSTRUMENT SERVICES,CHENNAI	29.01.2020					3			3	100000
48	M/s.SHREE ABIRAMI ENGGINEERING WORKS,CHENNAI	30.01.2020				15				15	146000
49	M/s.JMAN GROUP,CHENNAI	01.02.2020	1		1					2	300000
50	M/s.HCL TECHNOLOGIES,CHENNAI	03.02.2020	3		1					4	350000
51	M/s.DATALOGICS INDIA PVT.LTD.CHENNAI	04.02.2020				5	2			7	100000
52	M/s.CLUSTREX DATA PRIVATE LIMITED,CHENNAI	06.02.2020		1						1	258000
53	M/s.CALIBER INTERCONNECT SOLUTIONS PVT LTD,COIMBATORE	06.02.2020			2	4				6	240000
54	M/s.INTECH SYSTEMS CHENNAI PVT.LTD.,CHENNAI	07.02.2020					2			2	204000
55	M/s.SCHNEIDER ELECTRIC INDIA PRIVATE LIMITED,CHENNAI	10.02.2020			18	16				34	144000

Sl. No.	Company Name	Date	CSE	IT	ECE	EEE	EIE	Mech	Civil	Total	Salary
56	M/s.RISHON COMMUNICATION TECHNOLOGIES PVT LTD., TIRUNEVELI	10.02.2020	1	1						2	225000
57	M/s.EXCELACOM TECHNOLOGIES,CHENNAI	10.02.2020	1							1	300000
58	M/s.NSEIT LIMITED,CHENNAI	13.02.2020	2	1						3	325000
59	M/s.APPTIVO SOFTWARE PRIVATE LIMITED,MADURAI	17.02.2020	2	4	2					8	120000
60	M/s.VINSINFO PRIVATE LIMITED,CHENNAI	17.02.2020	2	3						5	240000
61	M/S.MYDBOPS,BANGALORE	18.02.2020	1		2					3	300000
62	M/s.SURESOFT SYSTEMS PVT.LTD.,PONDICERRY	22.02.2020	1	1	1					3	210000
63	M/s.SOFT SQUARE,CHENNAI	24.02.2020		1						1	240000
64	M/s.GEO INFO MEDIA,CHENNAI	25.02.2020							1	1	120000
65	M/s.ABUNDU INTERIORS & CONSTRUCTION, CHENNAI	25.02.2020							1	1	120000
66	M/s.SHAPOORJI PALLONJI PVT LTD.,COCHIN	28.02.2020							2	2	120000
67	M/s.D4t4 SOLUTIONS PLC,CHENNAI	03.03.2020					1			1	190000
68	M/s.EMERSON AUTOMATION SOLUTIONS,CHENNAI	06.03.2020						1		1	380000
69	M/s.R.R.ELECTRONICS,CHENNAI	07.03.2020					1			1	120000
70	M/s.GEORGE BUILDERS,NAGERCOIL	07.03.2020							1	1	120000
71	M/s.SHRI VENKADESHWARA BUILDERS,KOVILPATTI	07.03.2020							1	1	120000
72	M/s.TARGET SOFT SYSTEMS,CHENNAI	11.03.2020				6	1			7	120000
73	M/s.INDIA JAPAN LIGHTING PVT.LTD.,CHENNAI	11.03.2020						2		2	300000
74	M/s.ROBOTEX INVENTING SOLUTIONS,COIMBATORE	14.03.2020						1		1	120000

Sl. No.	Company Name	Date	CSE	IT	ECE	EEE	EIE	Me ch	Civ il	Tota l	Salary
75	M/s.AMNET SYSTEMS TIRUNELVELI					1				1	100000
76	M/s.SEVEN STARS DEVELOPERS AND BUILDERS								1	1	120000
77	M/s.COIMBATORE CAD SOLUTIONS PVT.LTD.,COIMBATORE	27.02.2019						3		3	120000
78	M/s.CONNECT,TIRUNELVELI							1		1	340000
79	M/s.UCAL FUEL SYSTEMS,CHENNAI						4			4	120000
80	M/s.RLT INSTRUMENTS PRIVATE LIMITED,CHENNAI						2			2	144000
81	M/s.ADROIT SOFT INDIA PRIVATE LIMITED,CHENNAI		2							2	120000
82	M/s.STRADEGI SOLUTIONS,CHENNAI	25.06.2020	1							1	300000
83	M/s.PRISM ENTERPRISE SOLUGIONS,CHENNAI	29.06.2020	5							5	120000
84	M/s.E R P ROOTS,COIMBATORE	13.07.2020						1		1	325000
85	M/s.BOSCH LIMITED,GANGAIKONDAN	18.07.2020			1	1		3		5	180535
86	M/s.ERPES POWER SOLUTIONS PVT.LTD.,HOSUR	18.07.2020						1		1	100000
87	M/s.EMS & YOUNG LLP,CHENNAI	07.08.2020			2					2	254400
88	M/s.BYJU'S,BENGALORU	14.08.2020	1					1		2	1000000
89	M/s.BRAKES INDIA PRIVATE LIMITED,CHENNAI	18.08.2020						21		21	165000
90	M/s.AB TECHNOLOGIS,TIRUNELVE LI				1					1	120000
91	M/s.YUKON INTERNATIONAL CONTRACTING L.L.C.,DUBAI				1					1	300000
92	M/s.DENODO TEHNOLOGIES INDIA PRIVATE LIMITED,CHANNAI	30.9.2020	1							1	425000
			<b>110</b>	<b>66</b>	<b>104</b>	<b>100</b>	<b>44</b>	<b>65</b>	<b>26</b>	<b>515</b>	

## **Annexure-V**

***PROVISIONAL BUDGET for 2020-2021***

National Engineering college, K.R.Nagar, Kovilpatti			
Provisional Budget 2020 - 2021			
INCOME			
Sl.No.	Particulars	Budget	2020 - 2021
1	Students Fees Collection		193,208,000
2	Bus Fare Collection		10,000,000
3	Exam Fees		9,000,000
4	Registration Fees for Seminars		200,000
5	CSR Fund Contribution from Kayaar Exports P Ltd		1,000,000
			213,408,000
6	Other Receipts		9,860,000
	<b>Total</b>		<b>223,268,000</b>
RECURRING :			
STAFF - Salary & welfare			
7	Salary		147,500,000
8	Travelling		400,000
9	Staff Development		1,000,000
STUDENTS - Skill Development & Welfare			
10	Placement & Training		2,500,000
11	College day/ Graduation day		800,000
12	Sports & Games		800,000
13	Insurance		500,000
14	BEC Course		300,000
15	Professional societies & Membership fees		750,000
16	Scholarship		200,000
17	NCC/YRC/RRC		450,000
18	Leadership (Student) Development		300,000
19	Outreach Programme (NSS)		150,000
ACADEMICS			
20	Exam		3,500,000
21	Seminar/ Workshop/ Technical course		500,000
22	Special Course		1,000,000
R & D			
23	Contribution to K R Innovation Centre		2,000,000
24	Product Development		500,000
25	Software		1,000,000
LIBRARY			
26	Periodicals		1,000,000
FEES to Regulatory Authorities for student approval			
27	University Inspection Approval		1,100,000
28	AICTE Inspection Approval		500,000
29	NBA / NAAC Accrediation		300,000
ADMINISTRATION			
30	Academic council & Board of Studies Meeting		700,000
31	Staff Selection Committee		300,000
32	Hospitality		200,000
33	Governing Council Meeting		150,000
34	Parents Teachers Meeting		100,000
35	Miscellaneous		1,418,000
REPAIRS & MAINTENANCE - ELECTRICAL/INTERNET/LABORATORY/BUILDING/VEHICLE & OTHERS			
Smart Class Room			
36	Bus Maintenance		8,000,000
37	Power charges		7,000,000
38	Internet Bandwidth		2,500,000
39	Repairs & Maintenance - Building		400,000
40	Lab Maintenance		1,500,000
41	Repairs & Maintenance - Others		2,000,000
42	Other Vehicles Fuel & Maintenance		1,700,000
PUBLISHING / Documentation / Telecom			
43	Advertisement		3,000,000
44	Printing & Stationery		750,000
45	Postage Telephone & Telegrams		500,000
	<b>Total</b>		<b>197,268,000</b>
NON - RECURRING :			
46	Building		12,000,000
47	Landscaping		2,000,000
48	Ground Beautification & Modification		1,000,000
49	Equipments, Furniture, Bus ..		10,000,000
50	Books		1,000,000
	<b>Total</b>		<b>26,000,000</b>
	<b>Grand Total</b>		<b>223,268,000</b>

PRINCIPAL

DIRECTOR

## **Annexure-VI**

### ***INCOME AND EXPENDITURE STATEMENT***



## Annexure - I

NATIONAL ENGINEERING COLLEGE,  
NALATTINPUTHUR, K.R.NAGAR, KOVILPATTI.  
INCOME AND EXPENDITURE AS ON 31.03.20

31.03.2019	EXPENDITURE	31.03.2020	31.03.2019	INCOME	31.03.2020
<b>TO SALARY:</b>			<b>STUDENT FEES:</b>		
14,43,13,973.00	Salary	13,70,64,941.00	16,52,15,000.00	Tution Fees	17,23,10,000.00
2,20,89,877.00	E.P.F Paid	1,97,97,174.00	4,94,80,000.00	Other Fees	2,98,03,000.00
12,59,742.00	ESI Paid	9,03,130.00	1,99,500.00	Academic Society Fee	3,31,800.00
7,19,737.00	Graduity Expenses	29,14,948.00	10,39,550.00	BEC Course Fee	3,41,950.00
6,99,847.00	Staff Welfare	7,91,761.00	1,99,150.00	Exam Stationary Fee	3,32,150.00
<b>16,90,83,176.00</b>		16,14,71,954.00	6,79,996.00	Fine Collection	3,84,100.00
<b>To Administrative Expenses:</b>			87,200.00	CSI Students Chapter Fee	85,950.00
12,46,329.00	Academic Council & Board of Studies Meet	12,20,067.00	16,125.00	ISOI- Student Chapter	16,375.00
3,00,000.00	Affiliation Fees	4,05,000.00	24,500.00	ISTE - Students Chapter	33,925.00
1,50,000.00	AICTE Approval Fee	90,000.00	16,707.00	IEEE - Students Chapter	41,064.00
3,24,797.00	Autonomous Extension Expenses	-	-	IETE Student Chapter	5,885.00
-	Alumini Meet Expenses	32,125.00	1,12,000.00	NSS/YRC/Flagday/Marksheet	1,37,600.00
3,68,942.00	Accreditation Expenses	2,44,258.00	500.00	Readmission Fees	2,000.00
19,79,407.00	Advertisement	32,68,667.00	<b>21,70,70,228.00</b>		20,38,25,799.00
1,51,404.00	College Day Expenses.	4,03,588.00	<b>By Other Collection:</b>		
9,45,200.00	Grant to DST	-	17,950.00	Application Fees	15,200.00
34,26,347.00	Exam Expenses	34,07,910.00	2,57,75,506.00	Busfare Collection	2,52,78,165.00
57,420.00	Governing Council Meet Expenses	1,23,981.00	4,97,000.00	Consultancy Charges	1,43,500.00
10,76,403.00	Graduation day expenses	4,07,679.00	3,92,650.00	Computer Special Course	3,00,452.00
24,99,296.00	Internet Charges	21,27,803.00	49,36,699.00	EB Charges Collection	47,22,827.00
9,765.00	Mark Statement Verification Expenses	59,200.00	1,44,60,989.00	EPF Collection	1,39,90,907.00
8,97,360.00	Member Ship Fees	7,53,376.00	4,85,416.00	ESI Collection	3,35,078.00
1,11,809.00	Parents Teachers Meeting	1,75,211.00	2,85,500.00	Insurance Premium	3,73,950.00
48,37,625.00	Placement & Training Expenses	33,66,656.00	58,822.00	Insurance Claim Received	20,050.00
80,555.00	Pooja Expenses	56,831.00	69,76,922.00	Interest Received	1,14,79,202.00
71,995.00	Postal Expenses	1,10,689.00	2,72,506.00	Ph.D Tution Fee	2,25,000.00
14,36,642.00	Printing & Stationary	9,94,439.00	12,317.00	Photo copy collection	11,024.00
1,68,802.00	Scholarship	1,50,000.00	5,03,070.00	Registration Fees for Seminars	4,57,340.00
37,600.00	Rates & Taxes	15,000.00	49,550.00	Registration Fees for Chess Competition	62,150.00
-	R&D Expenses Chemistry	50,000.00	26,16,445.78	Sundry Income	25,93,283.21
2,04,000.00	R & D Expenses - CSE Dept	50,000.00	1,00,43,434.00	Exam Fees	93,97,430.80
2,08,000.00	R & D Expenses - ECE Dept	50,000.00	80,900.00	Overhead charges	56,960.00
2,19,000.00	R & D Expenses - EEE Dept	-	<b>6,74,65,676.78</b>		6,94,62,519.01
2,00,000.00	R & D Expenses - EIE Dept	-	1,75,62,480.00		
<b>Balance B/F</b>		<b>17,90,34,434.00</b>	<b>28,45,35,904.78</b>	<b>Balance B/F</b>	<b>27,32,88,318.01</b>





Balance C/F		17,90,34,434.00	28,45,35,904.78	Balance C/F	27,32,88,318.01		
2,01,000.00	R & D Expenses - IT Dept	-	-	<b>Grant Income</b>			
2,07,000.00	R & D Expenses - Mechanical Dept	50,000.00	-	CSR Fund Received From Kayar Exports	10,00,000.00		
2,17,832.00	Special Course Expenses	9,80,609.00	42,000.00	Grant From Anna University Chennai	1,12,000.00		
17,64,712.00	Sports and Development Expenses	15,10,308.00	-	Grant From CSIR	25,000.00		
1,26,398.00	Staff Selection Committee Expenses	2,65,725.00	1,00,000.00	Grant From DST	-		
13,570.00	Subscription	-	3,77,000.00	Grant From EDI of India	2,90,000.00		
10,82,631.00	Sundry Expenses	9,20,128.02	-	Grant From ICT Academy	10,000.00		
11,30,100.00	Seminar Expenses	10,84,924.00	-	Grant From IEEE USA	41,019.79		
3,43,706.00	Telephone Charges	3,50,621.00	-	Grant From IEI Kolkatha	20,000.00		
10,51,414.00	Travelling Expenses	10,51,335.38	-	Grant From ISOI	4,093.00		
7,67,000.00	Website Expenses	19,575.00	18,720.00	Grant From Others			
3,36,102.00	Way to Success programme expenses	-	62,33,225.40	Grant from TNSCST Chennai	20,000.00		
<b>2,82,50,163.00</b>				1,10,196.00	Grant From AICTE Seminar	-	
1,40,58,461.00	E.B Charges	1,37,79,163.00		45,000.00	Grant From ISTE	-	
2,59,210.87	Electricity Charges - Diesel Consumption	3,53,466.00		50,000.00	Grant From MHRD	-	
-	Solar Power Charges	2,10,119.00	1,43,42,748.00	1,52,800.00	NSS Grant from Anna University	89,000.00	16,11,112.79
<b>1,43,17,671.87</b>				<b>9,10,716.00</b>			
	<b>To Misc Expenses:</b>			<b>University Fees Collection:</b>			
53,673.00	Association Expenses	37,438.00	3,43,200.00	University Adminstration Fee	5,04,150.00		
15,644.93	Bank Charges	17,240.45	1,18,000.00	University Reco.Fee	1,98,500.00		
13,15,500.00	BEC Course Expenses	3,28,100.00	2,25,200.00	University Registration Fee	3,36,100.00		
16,34,537.00	Books & Periodicals	16,98,639.00	1,13,800.00	University Regu. Curriculum Fee	1,37,600.00		
21,50,000.00	Contribution to Funded Project	-	2,73,300.00	University Sports Fee	3,30,900.00	15,07,250.00	
1,56,693.00	Entertainment Expenses	1,88,121.00	<b>10,73,500.00</b>				
2,810.00	Identity Card Expenses	-	1,95,618.00	Remission of Liability		8,93,482.00	
4,89,274.00	Insurance Premium (Students and Staffs)	4,26,189.00	40,00,000.00	Amount received from NEC Trust		-	
1,05,000.00	Legal Fees	37,000.00					
89,195.00	Lorry Freight	42,739.00					
4,07,925.00	NCC Expenses	4,26,594.00					
1,09,096.00	NSS Expenses	1,12,317.00					
32,550.00	Patent Expenses	1,30,050.00					
2,60,831.00	Ph D Fellowship Scholar Expenses	3,19,832.00					
4,48,666.00	NEET Training Expenses	3,87,900.00					
8,62,344.00	Product Development Expenses	3,12,009.00					
3,54,377.00	Project Expenses	4,06,052.00					
1,25,000.00	Research & Development Centre Approval Fee	-					
19,81,914.66	Software Expenses						
21,25,076.00	Staff Development Expenses	18,21,960.00					
-	University /DTE Certificate Verification Fees	34,275.00					
3,270.00	YRC/RRC Expenses	5,052.00	67,31,507.45				
<b>1,27,23,376.59</b>							
	<b>To Repairs &amp; Maintenance:</b>						
2,48,916.89	Generator Maintenance	1,58,748.00					
2,63,528.00	Furniture Maintenance	3,00,568.00					
1,79,051.00	Garden Maintenance	1,84,586.02					
1,83,522.00	Ground Maintenance	33,120.00	6,77,022.02				
<b>8,75,017.89</b>							
<b>Balance B/F</b>		<b>20,70,18,936.87</b>	<b>29,07,15,738.78</b>	<b>Balance B/F</b>	<b>27,73,00,162.80</b>		

CA. P. BALASUBRAMANIAN


M.M.No  
200597

CHARTERED ACCOUNTANT



Balance C/F		20,70,18,936.87	29,07,15,738.78	Balance C/F	27,73,00,162.80
<b>Lab Consumables and Maintenance:</b>					
67,466.00	Chemistry Lab Consumables and Maintenance	84,031.00			
12,954.00	Civil Lab Consumables and Maintenance	1,44,718.00			
2,23,899.00	CSE Lab Consumables and Maintenance	1,90,004.00			
59,192.00	ECE Lab Consumables and Maintenance	1,32,244.00			
1,11,358.00	EEE Lab Consumables and Maintenance	1,13,966.00			
59,651.00	EIE Lab Consumables and Maintenance	86,478.00			
1,898.00	Electrical Lab Consumables and Maintenance	1,945.00			
4,71,169.00	Electrical Maintenance	71,652.00			
-	English Lab Maintenance	39,422.00			
-	IT Lab Maintenance	1,01,158.00			
2,976.38	Lab Consumables and Maintenance	1,906.40			
3,63,600.00	Mech Lab Consumables and Maintenance	4,12,417.00			
9,722.00	Physics Lab Consumables and Maintenance	3,310.00			
30,57,495.00	Repair & Maintenance - Building	3,81,533.00			
23,45,384.00	Repair & Maintenance - Others	24,64,277.50	42,29,061.90		
<b>67,86,764.38</b>					
<b>Vehicle Fuel &amp; Maintenance</b>					
1,55,19,832.35	Bus fuel and Maintenance	1,58,22,758.31			
11,25,039.31	Car fuel and Maintenance	8,31,657.66			
12,72,165.58	Other Vehicle fuel and Maintenance	12,96,662.20	1,79,51,078.17		
<b>1,79,17,037.24</b>					
<b>University Fees Paid</b>					
1,33,200.00	University Reco Fee Paid	1,86,300.00			
2,60,400.00	University Registration Fee Paid	3,07,500.00			
1,30,200.00	University Sports Fee Paid	1,23,000.00			
3,90,600.00	Universtiy Adminstration Fee Paid	4,61,250.00	10,78,050.00		
<b>9,14,400.00</b>					
31,10,796.00	Building Expenses - Ayakudi				
-	Contribution to Business Incubaror	10,00,000.00	10,00,000.00		
3,67,37,335.81	Excess of Income over Expenditure		4,60,23,035.86		
<b>29,07,15,738.78</b>	<b>Total</b>	<b>27,73,00,162.80</b>	<b>29,07,15,738.78</b>	<b>Total</b>	<b>27,73,00,162.80</b>

Place:  
Date:

  
**CA. P. BALASUBRAMANIAN, B.Sc., F.C.A.**  
**M.M.No. 200597**  
**CHARTERED ACCOUNTANT,**  
**182/1. A.K.S. Theatre Road,**  
**KOVILPATTI.- 628 502.**



DEPRECIATION SCHEDULE AS ON 31.03.20					
ASSETS DETAILS	W.D.V.AS ON 01.04.2019	Total Addition	Total Deduction	Total Amount	W.D.V.AS ON 31.03.2020
<b>Building Work-in-Progress:</b>					
Guest house	1,46,23,372.00	21,25,612.00		1,67,48,984.00	1,67,48,984.00
Land Scaping work	71,63,202.47	31,63,463.00		1,03,26,665.47	1,03,26,665.47
Ground Gallery		3,04,560.00		3,04,560.00	3,04,560.00
<b>Buildings</b>					
Building	20,38,41,783.93	1,16,15,587.10		21,54,57,371.03	21,54,57,371.03
<b>LAB EQUIPMENTS:</b>					
Chemistry Lab Equipments	76,363.89			76,363.89	76,363.89
Civil Lab Equipments	35,71,661.39	3,27,891.00		38,99,552.39	38,99,552.39
CSE Lab Equipments	24,76,153.69	2,52,298.00		27,28,451.69	27,28,451.69
Dept- Equipment /Others	2,244.03			2,244.03	2,244.03
ECE Lab Equipments	37,49,895.98	8,86,652.00		46,36,547.98	46,36,547.98
EEE Lab Equipments	54,90,385.09	7,77,531.00		62,67,916.09	62,67,916.09
EIE Lab Equipments	21,46,205.88			21,46,205.88	21,46,205.88
E&I Lab Equipments	12,042.36			12,042.36	12,042.36
English Lab Equipments	75,200.61			75,200.61	75,200.61
Equipments -C.O.E	7,71,410.24	90,777.00		8,62,187.24	8,62,187.24
Equipments - S&H	23,384.94	3,42,586.00		3,65,970.94	3,65,970.94
IT Lab Equipments	5,37,029.67	97,077.00		6,34,106.67	6,34,106.67
Lab Equipments	98,444.24			98,444.24	98,444.24
Library & Equipments	4,35,861.21			4,35,861.21	4,35,861.21
Mechanical Lab Equipments	72,70,264.05	42,77,019.00		1,15,47,283.05	1,15,47,283.05
Physics Lab Equipments	2,74,760.20	1,43,864.00		4,18,624.20	4,18,624.20
Placement Equipments	1,25,022.73	1,33,897.00		2,58,919.73	2,58,919.73
Smart Class room Equipments	14,38,650.00			14,38,650.00	14,38,650.00
Air Conditions	33,43,428.60	8,79,460.00		42,22,888.60	42,22,888.60
Books	14,77,748.30	5,78,905.00		20,56,653.30	20,56,653.30
Borwell		50,875.00		50,875.00	50,875.00
Wifi Connectivity Devices	6,20,842.37			6,20,842.37	6,20,842.37
Bus Purchases	1,98,50,690.13			1,98,50,690.13	1,98,50,690.13
Computers	86,95,070.47	31,08,580.00		1,18,03,650.47	1,18,03,650.47
Electrical Equipments	28,40,457.30	57,790.00		28,98,247.30	28,98,247.30
Electrical Installation	39,57,810.12	15,71,134.00		55,28,944.12	55,28,944.12
Fine Arts club music instruments	90,060.00			90,060.00	90,060.00
Fire Extensheier	1,11,557.87	1,19,770.00		2,31,327.87	2,31,327.87
Furniture & Fittings	1,45,53,885.59	8,39,620.00		1,53,93,505.59	1,53,93,505.59
Fire & Safety Equipments	60,592.84			60,592.84	60,592.84
Lands	19,00,130.00			19,00,130.00	19,00,130.00
NSS Unit I Equipments	320.57			320.57	320.57
NSS Unit II Equipments	320.57			320.57	320.57
Office Equipments	9,30,940.27	1,17,229.00		10,48,169.27	10,48,169.27
Plant & Machinery	1,33,84,967.62	2,64,486.00		1,36,49,453.62	1,36,49,453.62
Solar Power Systems	14,16,298.32			14,16,298.32	14,16,298.32
Sports Equipment		1,92,000.00		1,92,000.00	1,92,000.00
Software		30,36,767.00		30,36,767.00	30,36,767.00
Television	97,073.28			97,073.28	97,073.28
Tools & Equipments	5,76,625.60	39,300.00		6,15,925.60	6,15,925.60
Vehicle	55,63,975.23	12,45,028.00	3,99,250.00	64,09,753.23	64,09,753.23
<b>Total</b>	<b>33,36,76,133.65</b>	<b>3,66,39,758.10</b>	<b>3,99,250.00</b>	<b>36,99,16,641.75</b>	<b>36,99,16,641.75</b>



Place : Kovilpatti

Date :

## **Annexure-VII**

**Please visit this link:**

<https://nec.edu.in/wp-content/uploads/2020/08/13th-Academic-Council-Minutes.pdf>