

# AICTE Mandatory Disclosures

Updated on 25/02/2022

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|----|--|---|
| 0  | Name of the Institution  | <b>Sri Indu College of Engineering &amp; Technology</b>   |
| 1  | Address including Telephone, Mobile, E-Mail                                      | <b>Sheriguda (V), Ibrahimpatnam (M),<br/>Ranga Reddy dist. – 501 510<br/>Phone No. 08414224166 / 77<br/>Mobile No. 9347363999, 9347353999<br/>E-Mail : <a href="mailto:induprincipal@gmail.com">induprincipal@gmail.com</a></b> |
| 0  | Name and address of the Trust/   | <b>NEW LOYOLA MODEL EDUCATION SOCIETY</b>   |
| 2  | Society/ Company and the Trustees<br>Address including Telephone, Mobile, E-Mail | <b>40, HIG, Vanasthalipuram,<br/>Hyderabad – 500 070,<br/>Telephone No. : 040 – 24020175<br/>E-Mail : <a href="mailto:newloyola.MES@gmail.com">newloyola.MES@gmail.com</a></b>  |
| 0  | Name and Address of the Vice   | <b>Dr. G. Suresh</b>  |
| 3  | Chancellor/ Principal/ Director<br>Address including Telephone, Mobile, E-Mail   | <b>Principal<br/>Sheriguda (V), Ibrahimpatnam (M),<br/>Ranga Reddy dist. – 501 510<br/>Phone No. 08414224166 / 77<br/>Mobile No. 9347363999<br/><a href="mailto:geosuresh@gmail.com">geosuresh@gmail.com</a></b>                |
| 04 | Name of the affiliating University   | <b>Jawaharlal Nehru Technological University<br/>Hyderabad (JNTUH)</b>  |

## 05 Governance

### 5.1 Members of the Board and their brief background

#### **NEW LOYOLA MODEL EDUCATION SOCIETY**

*The NEW LOYOLA MODEL EDUCATION SOCIETY Established in 1979 at Vanasthalipuram, Hyderabad has proven its rich experience in the field of education for more than 40 years, with an intention and commitment to impart School and Technical Education of highest quality.*

#### **Governing Body Members**

#### **Sri. R.Venkat Rao., M.A., B.Ed.**

CHAIRMAN, NEW LOYOLA MODEL EDUCATION SOCIETY

- A dynamic and dedicated person to the cause of education since 1979.
- Pioneer in introducing novel, Scholastic methods in the institutions of the group.

- ❑ A Visionary striving to impart quality education.
- ❑ "Best Teacher" awardee by the Govt. of Andhra Pradesh in 1992.
- ❑ Recipient of "Bharath Jyothi " Award from his Excellency, the President of India, Sri. Gyani Zail Singh in 1994.
- ❑ Chairman of V. V. Info Business Service (India) Ltd., Hyderabad.
- ❑ Chairman of Loyola International School, Doha, Qatar.

### **Mr. J. Devi Prasad., M.S. (Beirut)**

**President, NEW LOYOLA MODEL EDUCATION SOCIETY**

- ❑ Member, Board of Management, A.P., Horticultural University
- ❑ Director, Phyto Technologies (a Consortium Company)
- ❑ Team Leader , Agriculture Finance Corporation – APCBTMP.
- ❑ Developed E-Governance and ICT in agriculture and E-Governance –
- ❑ Instrumental in Innovative ICT and e-government models for good governance to improve extension services delivery, ensures transparency and enhances citizen participation; Builds ICT capacity in agriculture sector. Designs Application of ICT portals for agriculture and livelihoods development.

### **Sri. R. Anup Chakravarthy., M.S. (UK).**

**SECRETARY & CORRESPONDENT, NEW LOYOLA MODEL EDUCATION SOCIETY**

- ❑ Young and energetic personality making expeditions into the field of education.
- ❑ Obtained his Masters in Electrical & Electronics Engineering from U.K.
- ❑ Learnt financial and managerial skills from his father Sri. R.Venkat Rao
- ❑ Secretary & Correspondent of Loyola International School, Doha, Qatar.

### **Mrs. R. Indumathi**

**Treasurer., NEW LOYOLA MODEL EDUCATION SOCIETY**

- ❑ The most dynamic and practical treasurer of the Society.
- ❑ She devotes her time for the upliftment of the poor and downtrodden.
- ❑ She has Three decades of experience in running the academic Institutions.

### **Dr. G. Suresh, B.E., M.E., Ph.D.**

**LMISTE, LMIETE, ISEEE, IAENG**

**Principal, Sri Indu College of Engineering & Technology**

Dr.G. Suresh, a zealous teacher and an administrator, has a 19 years of experience in teaching, research, and institutional development. He has published two patents, supervisor of two Universities, authored a textbook, and published more than 35 papers in refereed international journals and conferences. As the Principal of Sri Indu College of Engineering and Technology (SICET), he envisions the importance of engineering education wherein the students learn, apply and develop innovative solutions /products that solve

the problems of societal needy.

### EDUCATIONAL DETAILS

Ph. D : Anna University, Chennai  
 Specialization : Image and Video Compression  
 M.E : CEG, Anna University, Chennai  
 Specialization : Applied Electronics  
 B. E : PEC, University of Madras  
 Specialization : ECE

### PROFESSIONAL SOCIETIES

Memberships : LMISTE, LMIETE, ISEEE, IAENG

### RESEARCH ACTIVITIES

Journal Publications : 36  
 Conferences : 14  
 Book Chapters : 05  
 Patents Filed : 06

### EXTENSION ACTIVITIES

Short Term Courses : 12  
 FDP/STTP : 12  
 Workshops/Seminars : 35

### ADDITIONAL ACTIVITIES/ROLES PLAYED

Delivered Invited Talk : 10  
 Organizer/Convener International Conference : 01  
 National Conferences : 04  
 Coordinator : ISO, IQAC, NBA, NAAC, NIRF

## 5.2 Members of Academic Advisory Body

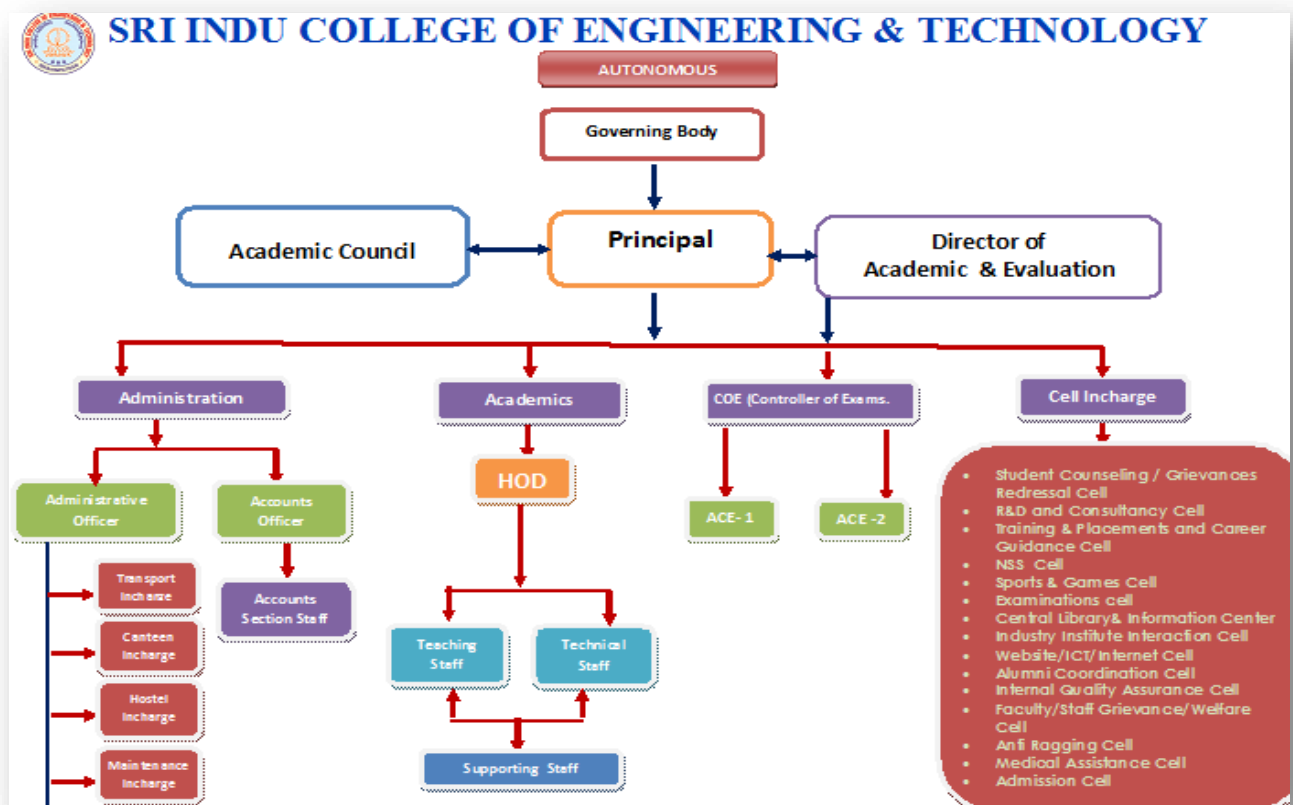
S.No.	Name of the Governing Body Member	Governing Body Member Designation	Parent Organization where working	Designation of the member where working at parent Organization
1	Sri. R. Venkat Rao	Chairman	New Loyola Model Education Society	President, New Loyola Model Education Society
2	Sri. R. Anup Chakravarthy	Member nominated by Registered Society	New Loyola Model Education Society	General Secretary, New Loyola Model Education Society
3	Smt. R. Divya	Member nominated by Registered Society	New Loyola Model Education Society	Joint Secretary, New Loyola Model Education Society
4	Smt. R. Indumathi	Member nominated by Registered Society	New Loyola Model Education Society	Treasurer, New Loyola Model Education Society
5	Sri. J. Srikar	Member nominated by Registered Society	New Loyola Model Education Society	Software Engineer, Private Sector, New Loyola Model Education Society
6	Prof. J. Devi Prasad	Eminent Professional	Agriculture, Human Development	Director - Agriculture, Human Development and Monitoring &

			and Monitoring & Evaluation Groups	Evaluation Groups
7	Dr. A. Ramakrishna Rao	Eminent Professional	Rtd. Professor JNTUH, Hyderabad	Rtd. Professor, JNTUH, Hyderabad
8	Prof. K. Ashok Babu	Academician	Sri Indu College of Engineering & Technology	Professor & HOD, ECE Dept., SICET
9	Prof. P. Appala Naidu	Academician	Sri Indu College of Engineering & Technology	Professor & HOD IT Dept., SICET
10	Prof. G.N. Srinivas	University Nominee	JNTUH	Professor & Head Dept. of EEE, JNTUH, CEH
11	Dr. G. SURESH	Member Secretary [Principal(ex-officio)]	Sri Indu College of Engineering & Technology	Principal

### 5.3 Frequently of the Board Meeting and Academic Advisory Body

Two Times per year

### 5.4 Organizational chart and processes





## 5.5 Nature and Extent of involvement of Faculty and students in academic affairs/ improvements

**Governing Body, Academic Council, College Development Committee, Internal Quality Assurance Cell, Central Discipline Committee have faculty students involvement in academic affairs /improvements.**

### **Academic Council Committee**

- To prepare the Academic Calender of the college.
- To review the academic and other related activities of the college.
- To review the students and faculty development programmes.
- To visualize and formulate perspective plans for the development and growth of the College
- To formulate Master Plan for campus development, facilitating implementation of the provisions of the perspective plan.
- To draw new schemes of development for the college.
- To review student attendance at the end of every semester / malpractices in exams and forward the approved list if any to the University
- To resolve the cases of attendance between 65 to 75% and send recommendations to the University.
- To oversee the
  - i. Internal Examination
  - ii. Evaluation of Examination System
  - iii. Analysis of results
  - iv. Performances of Students
  - v. Plan for conduct of remedial of classes

### **Internal Quality Assurance Cell:**

The Internal Quality Assurance Cell (IQAC) was Established at the Sri Indu College of Engineering & Technology, Sheriguda, Ibrahimpatnam, Hyderabad on 05-08-2016. The IQAC Committee includes all stakeholders of the Institute, i.e. students, alumni, all Department and Section Heads also including the Library, Sports, Students Hostel, Examination & Evaluation, co-curricular and extra-curricular activities, members of the Management and Administration, and members of local community and industry experts.

### **Objectives**

#### **The Primary aim of IQAC is**

To develop a system for conscious, consistent, and catalytic action to improve the academic and administrative performance of the institution.  
To create a good quality culture  
To channelize the efforts and measures of the institution towards academic excellence.

### **Strategies**

Ensuring timely, efficient and progressive performance of academic, administrative and financial tasks.

Optimization and integration of modern methods of teaching and learning. To promote measures for institutional functioning towards quality enhancement through internalization of quality culture and institutionalization of best practices.

The relevance and quality of academic and research programmes.

The credibility of evaluation procedures.

### **Functions**

#### **Some of the functions expected of the IQAC are**

Development and application of quality benchmarks/parameters for various academic and administrative activities of the institution.

Organization of workshops, seminars on quality-related themes and promotion of quality circles.

Development of Quality Culture in the institution.

Dissemination of information on the various quality parameters of higher education.

Arrangement for feedback response from students, parents and other stakeholders on quality-related institutional processes.

Acting as a nodal agency of the institution for quality-related activities.

Preparation of the Annual Quality Assurance Report (AQAR) to be submitted to NAAC based on the quality parameters.

### **Benefits**

#### **IQAC will facilitate / contribute**

Ensure heightened level of clarity and focus in institutional functioning towards quality enhancement.

Ensure enhancement and coordination among various activities of the institution and institutionalize all good practices.

To provide a sound basis for decision making to improve institutional functioning

Act as a dynamic system for quality changes in HEIs

To improve internal communication.

#### **Disciplinary Committee :**

- The college Disciplinary Committee will function under the direct control of the Principal and will have the following functions.
- All the members of the committee will function as a team and not as independent entities and they also will not take any decision which may be against the interests of either party.

- The committee will ensure disciplined behavior by all the students as well as the other staff members.
- The member secretary i.e. Mr. L. Satyanarayana, AO, SICET will take care of the disciplinary aspects of the students belonging to the 1<sup>st</sup> year B Tech course., and he will at all times be on the lookout for any happenings involving these students amongst themselves or with the other students.
- The heads of the respective Departments will be responsible for the overall discipline of the staff members.
- Cases of / any incidents of indiscipline of what so ever nature will be initially subjected to a preliminary enquiry by the committee members and immediately after that at the first opportunity be brought to the notice of the Principal and as per his advise will either be referred to the Civil police or parents of the students.
- Depending upon the gravity of the act of indiscipline, matter may be investigated by further by the committee and suggest the type of Punishment to be awarded to the students.
- As far as the staff members are concerned , immediately an incident of indiscipline comes to light , the HOD shall ask for the written explanation from the staff member concerned and with his remarks put up to the Principal.
- If the staff member's explanation is convincing and prima facie it is proved that the staff is innocent, then the committee issue with the chairman's remarks On the contrary if the staff member is trying to disown his fault, then the committee may subject the issue for further enquiry, findings and recommendations.
- Based on the findings and recommendations of the committee, the staff member may be meted out with the suggested punishment after obtaining the chairman's approval
- In respect of minor incidents of indiscipline such as non-wearing of Identity cards, coming late to the college, early departure without permission, absence from the class room, etc, the rules as applicable will be put in to effect and the staff is penalized accordingly.
- The disciplinary committee will act with discretion while enquiring in to the incidents involving girl students and female members of the staff.

#### **5.6 Mechanism/ Norms and Procedure for democratic/ good Governance**

##### **Chairman :**

- To look into the overall administration, decision making and the development of the Institute.

##### **Governing Body :**

- Frame directive principles and policies,
- Amend and approve policies from time to time
- approve budgets.

**Director :**

- To look into the overall development of the Institute
- Mobilize External Resources to strengthen the Institute
- Plan & provide for necessary facilities / equipment for development
- Instill confidence and devotion in every member of the Institute

**Principal**

- Design & define organization structure
- Delegate responsibilities of various positions in the organization
- Ensure periodic monitoring & evaluation of various processes & sub-processes
- Ensure effective purchase procedure
- Define quality policy and objectives
- Prepare annual budget
- Conduct periodic meeting of various bodies such as Governing Body, Academic Committee, and Grievances Redressal Committee etc.
- Resource Provision
- Public relations
- Resource Generation
- Execute academic Calendar
- Oversee the teaching-learning process
- Employee recruitment process
- Employee recruitment & development
- Conduct meeting with the HODs for up to date information about the department activities.
- Convene regular faculty meeting to assess and review the progress of the Institution
- Review of faculty performance
- Maintain over-all discipline in the Institute
- Resolve difficulties faced by the students, faculty, academic and non-academic and staff.

**Administrative Officer**

- Co-ordinate day to day activities of office
- Maintain up-to-date master documents with history of revision
- Oversee employee Attendance System & Maintain the monthly attendance report
- Manage accounts and finance
- Employee recruitment Process
- Employee recruitment & development
- Preparing Budget
- Office Administration
- Annual College Budget
- Faculty Personal Files
- Service Books
- Transport
- Collective Attendance of Students
- Publicity of events

### **Examination Cell**

- To conduct and monitor the Sessional (Internal) Exams
- To prepare Sessional Invigilation duties, seating arrangement etc., for sessional exams
- To collect the question papers from the faculty concerned in a sealed cover signed by them
- To form an internal sub-committee for the distribution of question papers in the examination halls and the answer scripts after the examinations to the faculty concerned
- To maintain records of the conduct of the examinations like attendance particulars, invigilation duties, supporting staff etc.,
- To prepare invigilation duties, seating arrangements etc for the External examinations
- To maintain records regarding the External examinations like attendance particulars, invigilation duties supporting staff etc.,
- Individual department examination cell in-charges will assist the controller of examination for the conducting the examinations.

### **HODs :**

- Responsible for efficient functioning of the Department with reference to its goals and objectives – conduct the department in a professional manner
- Develop and schedule the activities of the department for the academic year preparation of departmental calendar
- Ensure judicious class job allocation to the faculty members
- Ensure that all faculty members complete their role responsibilities in a timely manner
- Ensure leave management of teaching and non-teaching staff of the department, in such a way that no prescribed class hours are lost.
- Ensure harmonious working environment in the department
- Periodic independent review of faculty performance individually and suggest remedial tips
- Initiate opportunities and avenues for developing faculty knowledge and capability. Ensure that each faculty member take turn to present a recent article from a leading international journal to his fellow colleagues in the department at least once in a month.
- Encourage regular academic discussions for subject exposure among the relevant faculties in and outside the department, to facilitate knowledge sharing and updating.
- Identify and arrange specialist lectures for different subjects in consultation with the concerned faculty Inspect concerned department classes at least once in a semester.
- Maintain overall student discipline in the department as per college policy and guideline, with due coordination with the Class Teachers, with regard to attendance, uniform, attitude, conduct, assignment completion etc.
- Resolve difficulties faced by the students, academic and non-academic, in due consultation with the class teacher and referring essential cases to the Counselor, with a discrete note of reference.
- Take all efforts from the department side for enhancing employability

and placement readiness of the students in the department.

- Convene regular faculty meetings to assess and review the progress of planned activities.
- Convene class committee meeting to get students feedback on teaching.
- Conduct pre - examination and post examination reviews with the Faculty members concerned with regard
- to quality of questions, answers, rectification measures etc to improve the student performance / results.
- Finalization of the work load/allotment and timetable for the next semester immediately on completion of the current semester.
- Develop proposals for improved, teaching methods, curriculum enhancement, new academic programs of Practical significance etc.
- Prepare and monitor the time and cost budgets for the department.
- Inspect concerned classrooms at least once in a semester.
- Explore the avenues for enhancing the placement readiness of converting the department into a value centre
- Prepare and submit half yearly feedback about the staff members to Principal
- Submit teaching staff self appraisal.

#### **5.7 Student Feedback on Institutional Governance/ Faculty performance**

**Feedback analysis and corrective measures taken, if any: HOD given guidelines to improve quality of teaching and easy methods to convey the subjects.**

**Feedback collected for all courses: YES**

Specify the feedback collection process:

A standard online feedback questionnaire is collected from the students every mid semester course wise.

1. Feedback mechanism is a well organized system in the college.
2. The system of feedback collection is online
3. Collected feedback is scrutinized by the head of department.
4. The feedback is quantified
5. All the parameters mentioned in the feedback form will be analyzed.

Ability of teaching with respect to each item and comprehensive ability of the teachers will be analyzed All the comments written by the students in the online feedback system will be communicated to the respective faculty members their feedback levels to know their strengths and weaknesses and to enhance their teaching skills.

#### **5.8 Grievance Redressal mechanism for Faculty, staff and students**

The Principal, Directors and the Heads of the Department (HOD) concerned take decisions in all academic matters. The HODs conduct periodic meetings with the faculty and students and offer them suggestions. They also discuss with the Principal, Directors, and Chairman of the Board of Management on important matters related to the college functioning, and decision is taken by them through consensus. Most rules and regulations are circulated among staff, and decision is taken only after a thorough discussion with



the stakeholders. The final decisions taken are circulated among all stakeholders for adoption. The discussions normally emanate from the faculty, at the faculty meetings with the HODs and then in the HODs meeting with the Principal. Most of the information like organizing conferences, permitting a faculty to travel overseas for presenting a paper, etc. travel from bottom to top for approval by the Management. If there is a common rule governing all concerned, it comes from top to bottom, that too after initiating a talk with the faculty or HODs.

## 5.9 Establishment of Anti Ragging Committee

### Anti-Ragging Committee and Anti Ragging Squads :

Sr. No.	Name	Designation & Department	Status
1	Dr. G. Suresh	Principal	Chairman
2	Dr. A. Rama Krishna Rao	DAE, Academic Audit Cell	Member
3	Dr. N. Sendhil Kumar	HOD, ECE	Member
4	Dr. P. Mallesham	HOD, MECH	Member
5	Dr. A. Nagamalleswara Rao	HOD, EEE	Member
6	Dr. Senthil Kumar P.S.	HOD, CIVIL	Member
7	Ms B.Surekha	HOD, IT	Member
8	Mr. T. Venugopal	Asst. Professor, EEE	Member
9	Mr. P. Srinivas	Asst. Professor, ECE	Member
10	Mr. K. Krishna	Asst. Professor, CSE	Member
11	Ms. M. Sruthi	Asst. Professor, MECH	Member
12	Ms. D. Shilpa	Asst. Professor, CIVIL	Member
13	Mrs. N. Shailaja	Asst. Professor, H&S	Member

- Every college/Institution shall constitute a committee to be known as the Anti-ragging committee to be nominated and headed by the Head of the Institution, and consisting of representatives of civil and police administration, local media, Non-Governmental organizations involved in youth activities, representatives of faculty members, representatives of parents, representatives of students belonging to the fresher's category as well as senior students, Non-Teaching Staff: and shall have a diverse mix of membership in terms of level as well as gender.
- It shall be the duty of the Anti-ragging committee to ensure compliance with the provisions of these regulations as well as the provisions of any law for the time being in force concerning ragging: and also to monitor and oversee the performance of the Anti-Ragging Squad in prevention of Ragging in the institution.

### Anti Ragging Squad:

- Every college/Institution shall continue a smaller body to be known as the Anti-ragging Squad to be nominated by the Head of the Institution with such representation as may be considered necessary for maintaining vigil, oversight and patrolling functions and shall representation of various members of the campus community and shall have no outside representation.



- It shall be the duty of the Anti-ragging Squad to be called upon to make surprise raids on hostels, and other places vulnerable to incidents and having the potential for ragging and shall be empowered to inspect such places.

It shall also be the duty of the Anti-ragging Squad to conduct an on the spot enquiry into any incidents of ragging referred to it by the Head of the Institution or any member of the faculty or any member of the staff or any student or any parent or guardian or any employee of a service provider or by any other person, as the case may be, and the enquire report along with recommendations shall be submitted

#### 5.10 Establishment of Online Grievance Redressal Mechanism

<https://sriindu.ac.in/wp-content/uploads/2020/09/grievance-redressal-committee-1.pdf>

#### 5.11 Establishment of Grievance Redressal Committee in the Institution and Appointment of OMBUDSMAN by the University

##### GRIEVANCE REDRESSAL COMMITTEE

As per the rules and regulations addressed by the AICTE / UGC / JNTUH, for student or other stake holders in a Technical Institution, "Grievance Redressal Committee" of Sri Indu College of Engineering & Technology, Sheriguda(V), Ibrahimpatnam, R.R.Dist. Has been constituted with following Staff in different positions to enquire the nature and extent of grievance.

##### Committee Members

Staff Name	Designation	Department
Dr. G. Suresh	Chairman	Principal
Dr. A. Rama Krishna Rao	Member	Academic Audit Cell
Dr. P. Mallesham	Member	Mechanical Engg.
Dr. N. Sendhil Kumar	Member	ECE
Dr. P. S. Senthil Kumar	Member	Civil Engg.
Dr. S.R. Mugunthan	Member	CSE
G. Uma Maheswari	Member	CSE(AI&ML)
Dr. A. Naga Malleswar Rao	Member	EEE
Mrs. N. Shailaja	Member	H&S
Mr. L. Satyanarayana	Member	Admin.
Mr. G. Bala Krishna Reddy	Member	Admin.

##### Functions of the Committee

- To formulate the policy to investigate and review complaints or grievances of students and faculties.
- To create awareness of availability of members for students and faculties to report grievances.
- To investigate the cause of grievances.
- To ensure effectual solution depending upon the gravity of the Grievance.

### The details of the OMBUDSPERSON nominated by the University

Name : Dr. Jagannath Jetty  
Designation : Professor of Geology (Retired), Osmania University  
E-mail : ombudsperson@jntuh.ac.in

#### 5.12 Establishment of Internal Complaint Committee (ICC)

Yes

#### 5.13 Establishment of Committee for SC/ ST

Yes

#### 5.14 Internal Quality Assurance Cell

### **Internal Quality Assurance Cell (IQAC)**

The Internal Quality Assurance Cell (IQAC) was Established at the Sri Indu College of Engineering & Technology, Sheriguda, Ibrahimpatnam, Hyderabad on 05-08-2016. The IQAC Committee includes all stakeholders of the Institute, i.e. students, alumni, all Department and Section Heads also including the Library, Sports, Students Hostel, Examination & Evaluation, co-curricular and extra-curricular activities, members of the Management and Administration, and members of local community and industry experts.

#### **Objectives**

##### **The Primary aim of IQAC is**

- ✎ To develop a system for conscious, consistent, and catalytic action to improve the academic and administrative performance of the institution.
- ✎ To create a good quality culture
- ✎ To channelize the efforts and measures of the institution towards academic excellence.

#### **Strategies**

- ✎ Ensuring timely, efficient and progressive performance of academic, administrative and financial tasks.
- ✎ Optimization and integration of modern methods of teaching and learning.
- ✎ To promote measures for institutional functioning towards quality enhancement through internalization of quality culture and institutionalization of best practices.
- ✎ The relevance and quality of academic and research programmes.
- ✎ The credibility of evaluation procedures.

#### **Functions**

##### **Some of the functions expected of the IQAC are**

- ✎ Development and application of quality benchmarks/parameters for various academic and administrative activities of the institution.
- ✎ Organization of workshops, seminars on quality-related themes and promotion of quality circles.
- ✎ Development of Quality Culture in the institution.
- ✎ Dissemination of information on the various quality parameters of

higher education.

- ✎ Arrangement for feedback response from students, parents and other stakeholders on quality-related institutional processes.
- ✎ Acting as a nodal agency of the institution for quality-related activities.
- ✎ Preparation of the Annual Quality Assurance Report (AQAR) to be submitted to NAAC based on the quality parameters.

### **Benefits**

#### **IQAC will facilitate / contribute**

- ✎ Ensure heightened level of clarity and focus in institutional functioning towards quality enhancement.
- ✎ Ensure enhancement and coordination among various activities of the institution and institutionalize all good practices.
- ✎ To provide a sound basis for decision making to improve institutional functioning
- ✎ Act as a dynamic system for quality changes in HEIs
- ✎ To improve internal communication.

#### **Outcomes of IQAC Activities**

- ✎ To improve internal communication.
- ✎ Accreditation – NAAC, NBA
- ✎ National Ranking – NIRF
- ✎ International Ranking
- ✎ AICTE Approval for professional courses
- ✎ UGC Graded autonomy
- ✎ Media Rankings
- ✎ MHRD All India Survey for Higher Education
- ✎ Swachh Bharat Summer Internship Program
- ✎ Swachhta Ranking
- ✎ Feedback from stakeholders
- ✎ Curriculum for Applied Learning
- ✎ Promoting Technology Enhanced Learning – MOOC
- ✎ Annual Quality Assurance Report

### **Contact Information**

#### **Dr. N. C. Sendhil Kumar**

Coordinator, Internal Quality Assurance Cell

Sri Indu College of Engineering & Technology, Sheriguda

Ibrahimpatnam Mandal, Ranga Reddy Dist., Hyderabad, Telangana.

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**+91 - 9443968958**

## 6 Programmes

### 6.1 Name of Programmes approved by AICTE - A.Y. 2021-22

Program	Level	Course	Intake Approved for 2021-22
ENGINEERING AND TECHNOLOGY	UG	CIVIL ENGINEERING	60
ENGINEERING AND TECHNOLOGY	UG	COMPUTER SCIENCE AND ENGINEERING	240
ENGINEERING AND TECHNOLOGY	UG	ELECTRONICS & COMMUNICATION ENGG	240
ENGINEERING AND TECHNOLOGY	UG	ELECTRICAL AND ELECTRONICS ENGINEERING	60
ENGINEERING AND TECHNOLOGY	UG	MECHANICAL ENGINEERING	60
ENGINEERING AND TECHNOLOGY	UG	INFORMATION TECHNOLOGY	60
ENGINEERING AND TECHNOLOGY	UG	COMPUTER SCIENCE & ENGINEERING (DATA SCIENCE)	60
ENGINEERING AND TECHNOLOGY	UG	COMPUTER SCIENCE AND INFORMATION TECHNOLOGY	60
ENGINEERING AND TECHNOLOGY	UG	COMPUTER SCIENCE & ENGINEERING (ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING)	60
ENGINEERING AND TECHNOLOGY	UG	COMPUTER SCIENCE & ENGINEERING (CYBER SECURITY)	60
ENGINEERING AND TECHNOLOGY	UG	COMPUTER SCIENCE & ENGINEERING (IoT)	60
ENGINEERING AND TECHNOLOGY	UG	COMPUTER SCIENCE & ENGINEERING (ARTIFICIAL INTELLIGENCE AND DATA SCIENCE)	60
ENGINEERING AND TECHNOLOGY	PG	COMPUTER SCIENCE & ENGINEERING	36
ENGINEERING AND TECHNOLOGY	PG	COMPUTER SCIENCE	36
ENGINEERING AND TECHNOLOGY	PG	EMBEDDED SYSTEMS	09

### 6.2 Name of Programmes Accredited by NBA

Sl. No.	Name of the Program(s) (UG)	Basis of Evaluation	Accreditation Status	Period of Validity
1.	Computer Science & Engineering	Tier - I	Accredited	Academic Years 2019-20 to 2021-22 (3 Years)
2.	Mechanical Engineering	Tier - I	Accredited	
3.	Electronics & Communication Engineering	Tier - I	Accredited	
<b>NAAC ACCREDITATION STATUS (2018-2023)</b>				
<b>ACCREDITED(5 Years)</b>			<b>2.81(B++)</b>	

### 6.3 Status of Accreditation of the Courses

6.3.1	Total number of Courses	03
6.3.2	No. of Courses for which applied for Accreditation	03
6.3.3	Status of Accreditation –Applied for SAR and results awaited	00

### 6.4 For each Programme the following details are to be given:

Name :	<b>Electronics &amp; Communication Engineering</b>
Number of seats :	240
Duration	04 Years
Cut off marks/rank of admission during the last three years	
Fee	93,000

#### Placement Facilities

Campus placement in last three years with minimum salary, maximum salary and average salary

Campus placement in last three years	No. of Students Placed	Min. Salary	Max. Salary	Average Salary
2018-19	155	1.8	4.5	3.1
2019-20	148	2.5	6.5	3.5
2020-21	149	1.8	10	4.1

Name :	<b>Computer Science &amp; Engineering</b>
Number of seats :	240
Duration	04 Years
Cut off marks/rank of admission during the last three years	
Fee	93,000

#### Placement Facilities

Campus placement in last three years with minimum salary, maximum salary and average salary

Campus placement in last three years	No. of Students Placed	Min. Salary	Max. Salary	Average Salary
2018-19				
2019-20				
2020-21				

Name :	<b>Information Technology</b>
Number of seats :	60
Duration	04 Years
Cut off marks/rank of admission during the last three years	
Fee	93,000

#### Placement Facilities

Campus placement in last three years with minimum salary, maximum salary and average salary

Campus placement in last three years	No. of Students Placed	Min. Salary	Max. Salary	Average Salary

2018-19	29	1.8	3.4	2.5
2019-20	15	2.8	3.6	3

Name :

Number of seats :

Duration

Cut off marks/rank of admission during the last three years

Fee

Placement Facilities

Campus placement in last three years with minimum salary, maximum salary and average salary

### Electrical & Electronics Engineering

60

04 Years

93,000

Campus placement in last three years	No. of Students Placed	Min. Salary	Max. Salary	Average Salary
2018-19	28	1.8	7	3.5
2019-20	36	2.5	12.4	3

Name :

Number of seats :

Duration

Cut off marks/rank of admission during the last three years

Fee

Placement Facilities

Campus placement in last three years with minimum salary, maximum salary and average salary

### Civil Engineering

60

04 Years

93,000

Campus placement in last three years	No. of Students Placed	Min. Salary	Max. Salary	Average Salary
2018-19	08	1.5	2.12	1.7
2019-20	05	1.5	2.5	2

Name :

Number of seats :

Duration

Cut off marks/rank of admission during the last three years

Fee

Placement Facilities

Campus placement in last three years with minimum salary, maximum salary and average salary

### Mechanical Engineering

60

04 Years

93,000

Campus placement in last three years	No. of Students Placed	Min. Salary	Max. Salary	Average Salary
2018-19	14	2.4	3.7	3
2019-20	10	2.5	12.4	3

Name :	<b>Computer Science &amp; Information Technology</b>
Number of seats :	60
Duration	04 Years
Cut off marks/rank of admission during the last three years	
Fee	
Placement Facilities	<b>New Programme Academic Year 2020-21</b>
Campus placement in last three years with minimum salary, maximum salary and average salary	
Name :	<b>CSE (Artificial Intelligence &amp; Machine Learning)</b>
Number of seats :	60
Duration	04 Years
Cut off marks/rank of admission during the last three years	
Fee	
Placement Facilities	<b>New Programme Academic Year 2020-21</b>
Campus placement in last three years with minimum salary, maximum salary and average salary	
Name :	<b>CSE (Data Science)</b>
Number of seats :	60
Duration	04 Years
Cut off marks/rank of admission during the last three years	
Fee	
Placement Facilities	<b>New Programme Academic Year 2020-21</b>
Campus placement in last three years with minimum salary, maximum salary and average salary	
Name :	<b>CSE (Internet of Things (IoT))</b>
Number of seats :	60
Duration	04 Years
Cut off marks/rank of admission during the last three years	
Fee	
Placement Facilities	<b>New Programme Academic Year 2020-21</b>
Campus placement in last three years with minimum salary, maximum salary and average salary	



Name : **CSE (Cyber Security)**

Number of seats : 60

Duration 04 Years

Cut off marks/rank of admission  
during the last three years

Fee 93000

Placement Facilities

**New Programme Academic Year 2020-21**

Campus placement in last three  
years with minimum salary, max-  
imum salary and average salary

Name :

**CSE (AI & DS)**

Number of seats : 60

Duration 04 Years

Cut off marks/rank of admission  
during the last three years

Fee 93000

Placement Facilities

**New Programme Academic Year 2020-21**

Campus placement in last  
three years with minimum salary,  
maximum salary and average salary

**6.5 Name and duration of Programme(s) having Twinning and Collaboration with Foreign University(s) and being run in the same Campus along with status of their AICTE approval. If there is Foreign Collaboration, give the following details: Details of the Foreign University**

Name of the University  
Address  
Website  
Accreditation status of the University in its Home Country  
Ranking of the University in the Home Country  
Whether the degree offered is equivalent to an Indian Degree? If yes, the name of the agency which has approved equivalence. If no, implications for students in terms of pursuit of higher studies in India and abroad and job both within and outside the country  
Nature of Collaboration  
Conditions of Collaboration  
Complete details of payment a student has to make to get the full benefit of Collaboration

**Not Applicable**

**6.6 For each Programme Collaborated provide the following:**

Programme Focus  
Number of seats  
Admission Procedure  
Fee  
Placement Facility  
Placement Records for last three years with minimum salary, maximum salary and average salary

**Not Applicable**

**6.7 Whether the Collaboration Programme is approved by AICTE? If not whether the Domestic/Foreign University has applied to AICTE for approval**

**Not Applicable**

## 7. Faculty

7.1 Name of the Branch **Electronics & Communication Engineering**

Branch wise list Faculty members :

Permanent Faculty	50
Adjunct Faculty	--
Permanent Faculty: Student Ratio	1:16

7.2 Number of Faculty employed and left during the last three years 10

7.1.1 Name of the Branch **Computer Science & Engineering**

Branch wise list Faculty members :

Permanent Faculty	51
Adjunct Faculty	--
Permanent Faculty: Student Ratio	1:15

7.2.1 Number of Faculty employed and left during the last three years 18

7.1.2 Name of the Branch **Information Technology**

Branch wise list Faculty members :

Permanent Faculty	11
Adjunct Faculty	--
Permanent Faculty: Student Ratio	1:16

7.2.2 Number of Faculty employed and left during the last three years 04

7.1.3 Name of the Branch **Electrical & Electronics Engineering**

Branch wise list Faculty members :

Permanent Faculty	15
Adjunct Faculty	---
Permanent Faculty: Student Ratio	1:20

7.2.3 Number of Faculty employed and left during the last three years 05

7.1.4 Name of the Branch **Civil Engineering**

Branch wise list Faculty members :

Permanent Faculty	15
Adjunct Faculty	--
Permanent Faculty: Student Ratio	1:16

7.2.4 Number of Faculty employed and left during the last three years 05

7.1.5 Name of the Branch **Mechanical Engineering**

Branch wise list Faculty members :

Permanent Faculty	25
Adjunct Faculty	--
Permanent Faculty: Student Ratio	1:15

7.2.5 Number of Faculty employed and left during the last three years 05

## 8. Profile of Principal



Name of the Faculty : Dr. G. Suresh  
Date of Birth : 1/6/1978  
Unique id : 1-4526683805  
Education Qualifications : B.E., M.E., Ph.D.

### Work Experience

Teaching : 19  
Research : 05  
Industry : 01  
others : ---

Area of Specialization : ECE  
Courses taught at Diploma/ Post  
Diploma/ Under Graduate/ Post  
Graduate/ Post Graduate Diploma  
Level : Under Graduate/ Post Graduate Level

### Research guidance

No. of papers published in National/ International Journals/ Conferences

- Master : Journals Publications :31  
Conferences : 12
- Ph.D. :

Projects Carried out : 20  
Patents : Patents Filled : 02  
Technology Transfer :  
Research Publications : 05  
No. of Books published with details : No. of Books Chapters : 02

## 8. Profile of Faculty

For each Faculty give a page covering with Passport size photograph

Name of the Faculty

Date of Birth

Unique id

Education Qualifications

Work Experience

Teaching

Research

Industry

others

Area of Specialization

Courses taught at Diploma/

Post Diploma/ Under Gradu-  
ate/ Post Graduate/ Post

Graduate Diploma Level

Research guidance

- No. of papers published  
in National/ International  
Journals/ Conferences
- Master
- Ph.D.

Projects Carried out

Patents

Technology Transfer

Research Publications

No. of Books published with de-  
tails

**Enclosed : Annexure - I**

## 9. Fee

9.1	Details of Fee, as approved by State Fee Committee, for the Institution	<b>B.Tech. – 93,000/-</b>
9.2	Time schedule for payment of Fee for the entire Programme	<b>July – August</b>
9.3	No. of Fee waivers granted with amount and name of students	<b>2275</b> <b>Amount – Rs. 11,03,02,000</b>
9.4	Number of scholarship offered by the Institution, duration and amount	<b>120</b> <b>Amount – Rs. 18,54,500</b>
9.5	Criteria for Fee waivers/scholarship	<b>Financially Poor on having merit</b>
9.6	Estimated cost of Boarding and Lodging in Hostels	<b>Rs. 65,000</b>

## 10 Admission

10.1	Number of seats sanctioned with the year of approval(UG&PG)	<b>1161 – A.Y. 2021-2022</b>
10.2	Number of Students admitted under various categories each year in the last three years	<b>2018 – 901/1092</b> <b>2019 – 760/1092</b> <b>2020 – 964/1056</b>
10.3	Number of applications received during last two years for admission under Management Quota and number admitted	<b>2019-370</b> <b>2020- 310</b>

## 11 Admission Procedure

Mention the admission test being followed, name and address of the Test Agency and its URL (website)

Number of seats allotted to different Test Qualified candidate separately (AIEEE/ CET (State conducted test/ University tests/ CMAT/ GPAT)/ Association conducted test)

**Following the guidelines of State Governing of Higher Education , T.S. Government**  
**EAMCET – 70% Seats**

### **Calendar for admission against Management/vacant seats:**

- Last date of request for applications  
Last date of submission of applications
  - Dates for announcing final results
  - Release of admission list (main list and waiting list shall be announced on the same day)
  - Date for acceptance by the candidate (time given shall in no case be less than 15 days)
  - Last date for closing of admission
- As per the Notification framed by State Council of Higher Education, T.S. Govt.**
- 
- 20-11-2021**
- 05-12-2021**
- 08-12-2021**



- Starting of the Academic session **29-11-2021**
- The waiting list shall be activated on- ---  
ly on the expiry of date of main list
- The policy of refund of the Fee, in case of withdrawal, shall be clearly notified **Ten Working Days  
Are given for the candidate for cancellation of admission after closure of admission date.**

## 12 Criteria and Weightages for Admission

- |      |  |   |
|------|--|---|
| 12.1 | Describe each criterion with its respective weightages i.e. Admission Test, marks in qualifying examination etc.               | <b>As per the guidelines of TSCHE 50% marks in qualifying exams<br/>i.e., 10+2 / Intermediate</b> |
| 12.2 | Mention the minimum Level of acceptance, if any  | <b>OC categories : 45% in qualifying exams<br/>All other categories : 40 in Qualifying exams</b>  |
| 12.3 | Mention the cut-off Levels of percentage and percentile score of the candidates in the admission test for the last three years | <b>Not Applicable</b>   |
| 12.4 | Display marks scored in Test etc. and in aggregate for all candidates who were admitted  | <b>Not Applicable</b>   |

## 13 List of Applicants

- |      |   |             |
|------|---|-------------|
| 13.1 | List of candidate whose applications have been received along with percentile/percentage score for each of the qualifying examination in separate categories for open seats. List of candidate who have applied along with percentage and percentile score for Management quota seats | <b>List</b> |
|------|---|-------------|

## 14 Results of Admission Under Management seats/Vacant seats

- |      |  |  |
|------|--|--|
| 14.1 | Composition of selection team for admission under Management Quota with the brief profile of members (This information be made available in the public domain after the admission process is over) | <ol style="list-style-type: none"> <li><b>1. Secretary &amp; Correspondent</b></li> <li><b>2. Principal</b></li> <li><b>3. Administrative Officer</b></li> </ol> |
| 14.2 | Score of the individual candidate admitted arranged in order or merit  | <b>List</b>  |
| 14.3 | List of candidate who have been  | <b>list</b>  |

14.4	offered admission Waiting list of the candidate in order of merit to be operative from the last date of joining of the first list candidate	Nil
14.5	List of the candidate who joined within the date, vacancy position in each category before operation of waiting list	List

## 15. Information of Infrastructure and Other Resources Available

15.1	Number of Class Rooms and size of each Number of Tutorial rooms and size of each	<b>76 Class Rooms and Av. Area each : 77 35 Tutorial Rooms Av. Area : 40</b>
	• Number of Laboratories and size of each	<b>UG : 71 PG : 06 Av. Area each : 77</b>
	• Number of Drawing Halls with capacity of each	<b>03 Nos. Av. Area each : 150</b>
	• Number of Computer Centres with capacity of each	<b>02 Nos. Av. Area each : 150</b>
	• Central Examination Facility, Number of rooms and capacity of each	<b>66 Nos. Capacity of Each :24</b>
	• Barrier Free Built Environment for disabled and elderly persons	<b>Yes</b>
	• Occupancy Certificate	<b>Yes</b>
	• Fire and Safety Certificate	<b>Yes</b>
	• Hostel Facilities	<b>Yes</b>

### 15.2 Library

Number of Library books/ Titles/ Journals available (program-wise)	<b>Yes</b> <b>No. of Titles : 7058</b> <b>No. of Volumes : 42207</b> <b>No. of Journals Published in India : 145</b> <b>No. of Journals Published in Abroad : 91</b>
List of online National/ International Journals subscribed	<b>Yes</b> <b>Name of the E-Journal Subscription : J GATE, ASME, DELNET,UGC-N-LIST</b>
E- Library facilities	<b>Yes</b> <b>No. of e-books Titles &amp; Volumes PG: 27053</b> <b>No. of e-books Titles &amp; Volumes UG :30500</b>

## 15.3 Laboratory and Workshop

### List of Major Equipment/Facilities in each Laboratory/ Workshop

#### Department of ECE Laboratories & Workshops

##### Electronic Devices & Circuit Lab

###### Major facilities/equipments:

- + Cathode Ray Oscilloscopes (CRO)
- + Function generators
- + Regulated Power Supplies (RPS)
- + General purpose Trainer Kits
- + EDC Demo Trainer Kits
- + Desktop Digital Multimeters (DMM)
- + Handheld Multimeter
- + Decade resistance boxes (DRB)
- + Decade inductance boxes (DLB)
- + Decade capacitance boxes (DCB)
- + Soldering and Reworking tools



##### Basic Simulation Laboratory

###### Major facilities/equipments:

- Computer systems with latest Configurations
- Operating system(windows XP)
- MATLAB 7 version Software
- Cathode Ray Oscilloscopes (CRO)
- Function generators
- Regulated Power Supplies (RPS)
- General purpose Trainer Kits
- Desktop Digital Multimeters (DMM)
- Handheld Multimeter
- Decade resistance boxes (DRB)
- Decade inductance boxes (DLB)
- Decade capacitance boxes (DCB)



##### Electronics Circuit Analysis Lab

###### Major facilities/equipments

- Computer systems with latest Configurations
- Operating system(windows XP)
- TINAPRO Version.8 Software
- Cathode Ray Oscilloscopes (CRO)
- Function generators
- Regulated Power Supplies (RPS)
- General purpose Trainer Kits
- Desktop Digital Multimeters (DMM)
- Handheld Multimeter
- Decade resistance boxes (DRB)
- Decade inductance boxes (DLB)
- Decade capacitance boxes (DCB)





## DLD Laboratory

### Major facilities/equipments

- Cathode Ray Oscilloscopes (CRO)
- Function generators
- Regulated Power Supplies (RPS)
- General purpose Trainer Kits
- PDC Demo Trainer Kits
- Desktop Digital Multimeters (DMM)
- Handheld Multimeter
- Decade resistance boxes (DRB)
- Decade inductance boxes (DLB)
- Decade capacitance boxes (DCB)
- Soldering and Reworking tools



## IC APPLICATIONS LABORATORY

### Major facilities/equipments

- ★ Cathode Ray Oscilloscopes (CRO)
- ★ Function generators
- ★ Regulated Power Supplies (RPS)
- ★ General purpose IC Trainer Kits
- ★ Analog & Digital IC Tester
- ★ IC Demo Trainer Kits
- ★ Desktop Digital Multimeters (DMM)
- ★ Handheld Multimeter
- ★ Decade resistance boxes (DRB)
- ★ Decade inductance boxes (DLB)
- ★ Decade capacitance boxes (DCB)
- ★ Soldering and Reworking tools



## AC / DC LABORATORY

### Major facilities/equipments

- Digital Storage Oscilloscopes (DSO)
- Cathode Ray Oscilloscopes (CRO)
- Function generators
- Regulated Power Supplies (RPS)
- 4 ½ Bench Top Digital Multimeter
- Spectrum Analyzer with TG (1Ghz)
- Amplitude Modulator and Detector
- DSB-SC Modulator and Detector
- SSB-SC Modulator and Detector
- Frequency Modulator and Detector
- Spectrum analyzer
- Pre-emphasis & De-emphasis
- Time Division Multiplexing & De-multiplexing
- Frequency Division Multiplexing & De-multiplexing
- Verification of sampling theorem
- Pulse Amplitude modulation and demodulation
- Pulse width modulation and demodulation
- Pulse position modulation and demodulation
- Frequency synthesizer
- AGC characteristics
- PLL as FM demodulator
- Squelch circuit
- Characteristics of Mixer



## Microwave and Optical Communication Lab:

### Major facilities/equipments

- Microwave Bench set up with Gunn Power Supply
- Isolators
- VSWR meter
- Frequency meter
- Variable Attenuator
- Detector Mount with Crystal Diode
- Pin Diode with mount
- Wave Guide Stands
- Directional Couplers
- Slotted Sections with Tunable Probes
- Circulators
- Magic Tee
- Matched Terminations
- Movable Shorts
- Fixed Shorts
- Horn Antennas
- S.S. Tuner
- E-bends
- H-bends
- E-plane tee
- H-plane tee
- Cross Directional Coupler
- Display Chart
- Cathode Ray Oscilloscopes
- Digital Storage Oscilloscopes
- Function Generators



## DIGITAL SIGNAL PROCESSING LABORATORY

### Major facilities/equipments

- Computer systems with latest Configurations
- Operating system(windows XP)
- MATLAB 7 version Software
- DSP Starter Kit – TMS320C6711 with DSP Processor
- Code Composer Studio (CCS)
- Generation of Sinusoidal waveform / signal based on recursive difference equations
- To find DET / MET of given DT signal
- To find frequency response of a given system given in (Transfer Function/ Differential equation form).
- Implementation of FFT of given sequence
- Determination of Power Spectrum of a given signal(s).
- Implementation of LP FIR filter for a given sequence
- Implementation of FM FIR filter for a given sequence
- Implementation of LP ER filter for a given sequence
- Implementation of BP IIR filter for a given sequence
- Generation of Sinusoidal signal through filtering
- Generation of DTMF signals
- Implementation of Decimation Process
- 13. Implementation of Interpolation Process
- Implementation of I/D sampling rate converters
- Audio application such as to plot a time and frequency display of microphone plus a cosine using DSP. Read away file and match with their respective spectrogram
- Noise removal: Add noise above 3 KHz and then remove, interference suppression using 400 Hz tone.
- Impulse response of first order and second order systems





## E-CAD AND VLSI LABORATORY

### Major facilities/equipments

- ❖ Computers with latest Configuration
- ❖ FPGAKIT – S3E - M1 (Xilinx SPARTAN 3E FPGA + CPLD Board)
- ❖ TINAPRO V.7 Educational Software
- ❖ TINA V.8 Software
- ❖ Xilinx ISE 6.2V Software for both Frontend and Backend
- ❖ Electric Tool and LT Spice Tool
- ❖ Cathode Ray Oscilloscopes (CRO)
- ❖ Function generators
- ❖ Regulated Power Supplies (RPS)
- ❖ General purpose Trainer Kits
- ❖ Decade resistance boxes (DRB)
- ❖ Decade inductance boxes (DLB)
- ❖ Decade capacitance boxes (DCB)
- ❖ Soldering and Reworking tools



## EMBEDDED SYSTEMS LABORATORY

### Major facilities/equipments

- Computers with latest Configuration
- Embedded Trainer Kits
- ARM7-KIT-2-LPC2148
- Micro Controller7-KITs
- PSOC First Touch Kits
- PSOC Development Kits
- Cathode Ray Oscilloscopes (CRO)
- Function generators
- Analog to Digital Converter
- Digital to Analog Converter
- Traffic Signal Controller
- Stepper motor interface card
- Temperature controller interface
- Key board and display interface
- 8255 Logical I/O device
- Real time clock interface
- Elevator Simulator



## R & D LABORATORY

### Major facilities/equipments

- ❖ Computers with Latest Configuration
- ❖ Operating system(windows XP)
- ❖ MATLAB 7 version Software
- ❖ TINAPRO V.7 Educational Software
- ❖ TINA V.8 Software
- ❖ Digital Storage Oscilloscopes (DSO)
- ❖ 4 ½ Bench Top Digital Multimeter
- ❖ Spectrum Analyzer with TG (1Ghz)
- ❖ Analog & Digital IC Tester
- ❖ FPGAKIT – S3E - M1 (Xilinx SPARTAN 3E FPGA + CPLD Board)
- ❖ Xilinx ISE 6.2V Software for both Frontend and Backend



- ❖ Electric Tool and LT Spice Tool
- ❖ ARM7-KIT-2-LPC2148
- ❖ Embedded Trainer Kits
- ❖ ARM7-KIT-2-LPC2148
- ❖ Micro Controller7-KITs
- ❖ PSOC First Touch Kits
- ❖ PSOC Development Kits
- ❖ Universal Programmer
- ❖ Advanced Fiber Optic Communication Trainer Module
- ❖ Fiber Optic Digital Link Model
- ❖ Laser Diode Characteristic Model
- ❖ Advanced Antenna Trainer Module(ATS)
- ❖ Advanced Micro Strip Component Trainer Module (MCT)
- ❖ System Bus and Protocol Analysis Trainer Module (SBPT)
- ❖ Doppler Radar Trainer (DRT)

## ELECTRONIC WORKSHOP





Software Engineering Lab



COMPUTER NETWORKS & WEB TECHNOLOGY LAB



Linux Programming Lab



## Data Warehousing and Data Mining LAB



## Java Programming Lab

Systems : 30,

Configuration: Windows 7 OS

Processor:INTEL CORE i3

Installed memory:2 GB(RAM),500GB(HDD)

System type: 32-bit Operating Sys-

tem,JDK1.8,Oracle 10g, MySQL, MS- Office



## Database Management Systems Lab

Systems : 30,

Configuration: Windows 7 OS

Processor:INTEL CORE i3

Installed memory:2 GB(RAM),500GB(HDD)

System type: 32-bit Operating System,My  
SQL,Oracle 10g



## Data Structures Lab/Lab-II B

Systems : 30,

Configuration: Windows 7 OS

Processor:INTEL CORE i3

Installed memory:2 GB(RAM),500GB(HDD)

System type: 32-bit Operating System, Put-  
ty,TURBO C Installed





Systems : 30,

Configuration: Windows 7 OS,Fedora OS

Processor:INTEL CORE i3

Installed memory:2 B(RAM),500GB(HDD)

System type: 32-bit Operating System,

Putty



**Professional Elective - III LAB (SOFTWARE TESTING METHODOLOGIES / SCRIPTING LANGUAGES / MOBILE APPLICATION DEVELOPMENT LAB)**

Systems : 36

Configuration: Windows 7 OS

Processor:INTEL CORE i3

Installed memory:2 GB(RAM),  
500GB(HDD)

System type:32-bit Operating System,  
JDK1.8,IBM RationalRose SOFTWARE  
TESTER ,WIRELESS TOOL KIT,J2ME



**Professional Elective - III LAB (SOFTWARE TESTING METHODOLOGIES / SCRIPTING LANGUAGES / MOBILE APPLICATION DEVELOPMENT LAB)**

Systems : 36

Configuration: Windows 7 OS

Processor:INTEL CORE i3

Installed memory:2 GB(RAM),  
500GB(HDD)

System type:32-bit Operating System,  
JDK1.8,IBM RationalRose SOFTWARE  
TESTER ,WIRELESS TOOL KIT,J2ME



ENGINEERING WORKSHOP LABORATORY

Major facilities/equipments

1. Bench Drilling Mach
2. Power Hacksaw
3. Bench Grinding Machine
4. Welding Machine
5. Air Blower
6. Surface plate
7. ineAngle plate
8. Vernier height gauge
9. Spirit level
10. Bench shear machine
11. Vernier calipers
12. Micrometer



METALURGY AND MECHANICS OF SOLIDS

Major facilities/equipments

1. Brinells Hardness Testing Machine
2. Izod Impact Test Machine
3. Deflection of Beams
4. Torsion Testing Machine
5. Moulding Machine
6. Belt Grinder
7. Disc Polishing Machine
8. Spring Deflection Test





## MECHANICS OF FLUIDS AND HYDRAULIC MACHINES LAB

### Major facilities/equipments

1. *Impact of jets*
2. *Pelton wheel.*
3. *Francis turbine.*
4. *Kaplan turbine.*
5. *Single stage centrifugal pump.*
6. *Multi stage centrifugal pump.*
7. *Reciprocating pump.*
8. *Venturimeter.*
9. *Orifice meter.*
10. *Friction factor for a given pipe line.*
11. *Bernoulli's theorem.*
12. *Loss of head due to sudden contraction in pipeline.*



## PRODUCTION TECHNOLOGY LABORATORY

### Major facilities/equipments

1. *Wood lathe*
2. *Plastic Injection Moulding Machine*
3. *Plastic Blow Moulding Machine*
4. *Spot Welding Machine*
5. *Arc Welding Machine*
6. *Sieve shaker*
7. *Resistance Butt Welding Machine*
8. *Hydraulic Press*
9. *TIG/MIG welding machines*
10. *Manually operated press*
11. *Mould hardness tester with ball Indentor*
12. *Sand Moulding rammer*
13. *Single Pan Balance (Electronic)*



## Machine Tools and Metrology Lab

### Major facilities/equipments

1. **LATHE MACHINE**
2. **SHAPER**
3. **POWER HACK SAW**
4. **BENCH GRINDER**
5. **SURFACE GRINDER**
6. **UNIVERSAL MILLING MACHINE**
7. **SLOTING MACHINE**
8. **RADIAL DRILLING MACHINE**



## THERMAL ENGINEERING LAB

### Major facilities/equipments

1. **Valve timing diagram of four stroke single cylinder diesel engine**
2. **Performance test of an I.C. engine**
3. **Morse test an I.C. engine**
4. **Retardation test of an I.C. Engine**
5. **Heat balance test of an I.C. Engine**
6. **Study of Boilers**
7. **Motoring test**
8. **Performance test on reciprocating air compressor**
9. **Variable compression ratio petrol engine test RIG (Electrical Loading)**
10. **Variable compression ratio diesel engine test RIG (Mechanical Loading)**
11. **Axial flow fan**



## HEAT TRANSFER LAB

### Major facilities/equipments

1. **PIN FIN apparatus**
2. **Insulating Powder apparatus**
3. **Critical Heat Flux apparatus**
4. **Thermal Conductivity of Metal Rod apparatus**
5. **Emissivity apparatus**
6. **Counter flow and parallel flow heat exchanger**
7. **Stefan Boltzman**



## CAD/CAM LAB

### Major facilities/equipments

1. **MTAB CNC LATHE MACHINE**
2. **COMPUTERS: 2GB RAM, 500GB HARDDISK, I3 PROCESSOR,**
3. **LCD MONITOR-20 Nos. , LED MONITOR-10 Nos.**
4. **AUTOCAD SOFTWARE**
5. **PRO-E SOFTWARE**
6. **ANSYS SOFTWARE**



### MTAB CNC LATHE MACHINE specifications:

**Model XLTURN CNC Slant Bed Bench Turning centre with standard equipment with 100 mm diameter 3 jaws self centering chuck maximum diameter of**

**Work piece to be turned : 40 mm**

**Distance between centers : 100 mm**



## PRODUCTION DRAWING PRACTICE AND INSTRUMENTATION LAB

### Major facilities/equipments

1. **Pressure Gauge**
2. **Capacitive Transducer**
3. **Photo and Magnetic Speed Pickups**
4. **Resistance Temperature Detector**
5. **LVDT Transducer**
6. **Thermocouple**





## DEPARTMENT OF EEE LABORATOIES & WORKSHOPS

### Electrical Measurements Lab

#### Major facilities/equipments

- Three phase Power measurement with 2 C.T's & 1 Wattmeter
- Schering Bridge & Anderson Bridge.
- LVDT Characteristics
- Resistance Strain Gauge
- Single phase energy meter
- Silsbee's method
- Power factor of choke coil
- Phantom loading
- Reactive power balance
- Kelvin's double bridge
- Dynamo meter
- Resistive load banks: Single phase  
440V/1.5KVA, 600V/5A, 230V/10A
- Crompton DC potentiometer.



### Electrical Circuits & Simulation Lab

#### Major facilities/equipments

- ❖ Trainer Kits
- ❖ Computer systems with latest Configurations
- ❖ Function Generator
- ❖ DC Regulated Dual power Supply
- ❖ Cathode Ray Oscilloscopes (CRO)
- ❖ Multi-meters
- ❖ Decade Resistance box
- ❖ Decade Capacitance box
- ❖ Decade Inductance box



### Control Systems & Simulation Lab

#### Major facilities/equipments

1. Cathode Ray Oscilloscopes (CRO)
2. Time Response of Second Order System
3. Characteristics of Synchro
4. PLC Trainer
5. Lead & Lag Compensation Magnitude & Phase Plot
6. Transfer Function of DC Generator, Transfer Function of DC Motor
7. Characteristics of AC Servomotor
8. PID Controller
9. Temperature Control system
10. Transfer Function of DC Motor
11. Acer Brand Computers
12. Over-Head Projector.





## Power Electronics & Simulation Lab

### Major facilities/equipments

- ☀ Static Characteristics of SCR, MOSFET & IGBT
- ☀ Gate Firing Circuit for SCR with R, RC, LC & UJT Triggering
- ☀ Single Phase AC Voltage Controller
- ☀ Parallel Inverter
- ☀ Series Inverter
- ☀ Single Phase half & Full Bridge Converter
- ☀ Forced Commutation
- ☀ Single Phase Cycloconverter
- ☀ Three Phase Half & Full Bridge Converter
- ☀ Single phase parallel inverter with R & RL load
- ☀ Single phase cyclo converter with R & RL load
- ☀ Single phase dual converter with R & RL load
- ☀ Single phase series inverter with R & RL load
- ☀ Three phase bridge converters with R & RL load
- ☀ Three phase firing circuits
- ☀ Three phase half & full controlled bridge converters
- ☀ Dual trace oscilloscope (DSO)
- ☀ Cathode Ray Oscilloscopes (CRO)
- ☀ Acer Branded Computers



## Electrical Machines Lab

### Major facilities/equipments

- Rectifier Unit
- Distribution Panel Board
- DC Shunt Motor with Brake Arrangement
- DC Compound Motor with Brake Arrangement
- DC Series Motor with Brake Arrangement
- Motor-Generator set (Shunt - Shunt)
- Motor-Generator set (Shunt - Compound)
- Motor-Generator set (Series - Series)
- Motor-Generator set (Shunt - Alternator- Cylindrical)
- Motor-Generator set (Shunt - Alternator-Salient pole)
- Squirrel Cage Induction Motor
- 1-phase Induction Motor
- Slip ring Induction Motor
- Synchronous Motor
- 1-phase Auto Transformers
- Transformer both side tapping.
- Single Phase Transformers
- 3-Phase Auto Transformers
- 1-Phase Loading Rheostats



## DEPARTMENT OF CIVIL LABORATORIES & WORKSHOPS

### ENGINEERING WORKSHOP LAB

#### Major facilities/equipments

- ✚ Bench drilling machine
- ✚ Power hacksaw
- ✚ Bench grinding machine
- ✚ Welding machine
- ✚ Air blower
- ✚ Surface plate
- ✚ Angle plate
- ✚ Vernier height gauge
- ✚ Spirit level
- ✚ Bench shear machine
- ✚ Vernier calipers
- ✚ Micrometer
- ✚ Carpentry vice
- ✚ Bench vice
- ✚ Pipe vice
- ✚ Leg vice
- ✚ Stakes
- ✚ Anvil
- ✚ Swage block
- ✚ Smith's hearth
- ✚ Wooden wiring boards
- ✚ Bulb holders
- ✚ Switch boards
- ✚ Bulbs
- ✚ Choke



### SURVEYING LAB – I & II

#### Major facilities/equipments

- Chains 8 Nos.
- Ranging Rods 20 Nos.
- Measuring Tapes 5 Nos.
- Plumb Bob 5 Nos.
- Arrows 50 Nos.
- Cross-Staff 8 Nos.
- Auto Level 1 No.
- PlaneTable With AL Stands
- Leveling Staves
- Box Sextants
- Plain Meter
- Dumpy Level
- Vernier Digital Theodolite
- Prismatic Compass
- Total Station





## STRENGTH OF MATERIALS LAB

### Major facilities/equipments

- Deflection of beams
- Torsion testing machine
- Spring deflection test
- Jomny end quench testing machine
- 5. UTM 60Tonnes



## COMPUTER AIDED DRAFTING OF BUILDINGS LAB

### Major facilities/equipments

- Computers:
  - 2GB Ram,
  - 500GB Harddisk
  - Core i3 processor,
  - LCD monitors
  - LED monitors
  - CRT Monitors
  - AutoCad software



## MECHANICS OF FLUIDS AND HYDRAULIC MACHINES LAB

### Major facilities/equipments

1. Impact of jets.
2. Pelton wheel
3. Francis turbine
4. Kaplan turbine
5. Single stage centrifugal pump
6. Multi stage centrifugal pump
7. Reciprocating pump
8. Venturimeter
9. Orifice meter
10. Friction factor for a given pipe line
11. Bernoulli's theorem
12. Loss of head due to sudden contraction in pipe line
13. Turbine flow water meter test rig
14. flow of notches



## ENGINEERING GEOLOGY LAB

### Major facilities/equipments

1. Minerals
2. Rock Specimen
3. Hardness Collection
4. Luster and Cleavage Collection
5. Fracture Collection
6. Tenacity Collection
7. Specific Gravity Odour
8. Streak Collection
9. Magnetism and Electricity
10. Plastic Specimen Trays
11. Streak Plates
12. Structural Geology



## GEOTECHNICAL ENGINEERING LAB

### Major facilities/equipments

- Sieve Shaker
- Test Sieves
- Atter Burg Liquid Limit Device
- Atter Burg plastic Limit Device
- Core Cutter With Rammer
- Sand Pouring Cylinder
- Compaction Test
- Pycnometer Bottles
- Hot Air Oven
- Electric Balance 30kgs Capacity
- C.B.R. Test Apparatus
- Unconfined Compression Test
- Electronic Weighing Balance 5kgs Capacity



## CONCRETE & HIGHWAY MATERIALS LAB

### Major facilities/equipments

- Aggregate Crushing Value
- Aggregate Impact Test Value Apparatus
- Density Basket
- Ring And Ball Apparatus
- Vicat Needle Apparatus
- Specific Gravity Bottle
- CTM 200 Tonns Capacity three guage E.O
- Slump Contest Apparatus with Tamping Rod
- Measuring Jar Plastic 1000ml
- Digital Concrete Test Hammer Model HT225V
- Losangles Abrasion Test Apparatus
- Bitumen Penetration
- Ductility Test Apparatus
- Flash and Fire Apparatus
- Compaction Factor Apparatus
- Non-Destructive Testing On Concrete



## ENVIRONMENTAL ENGG LAB

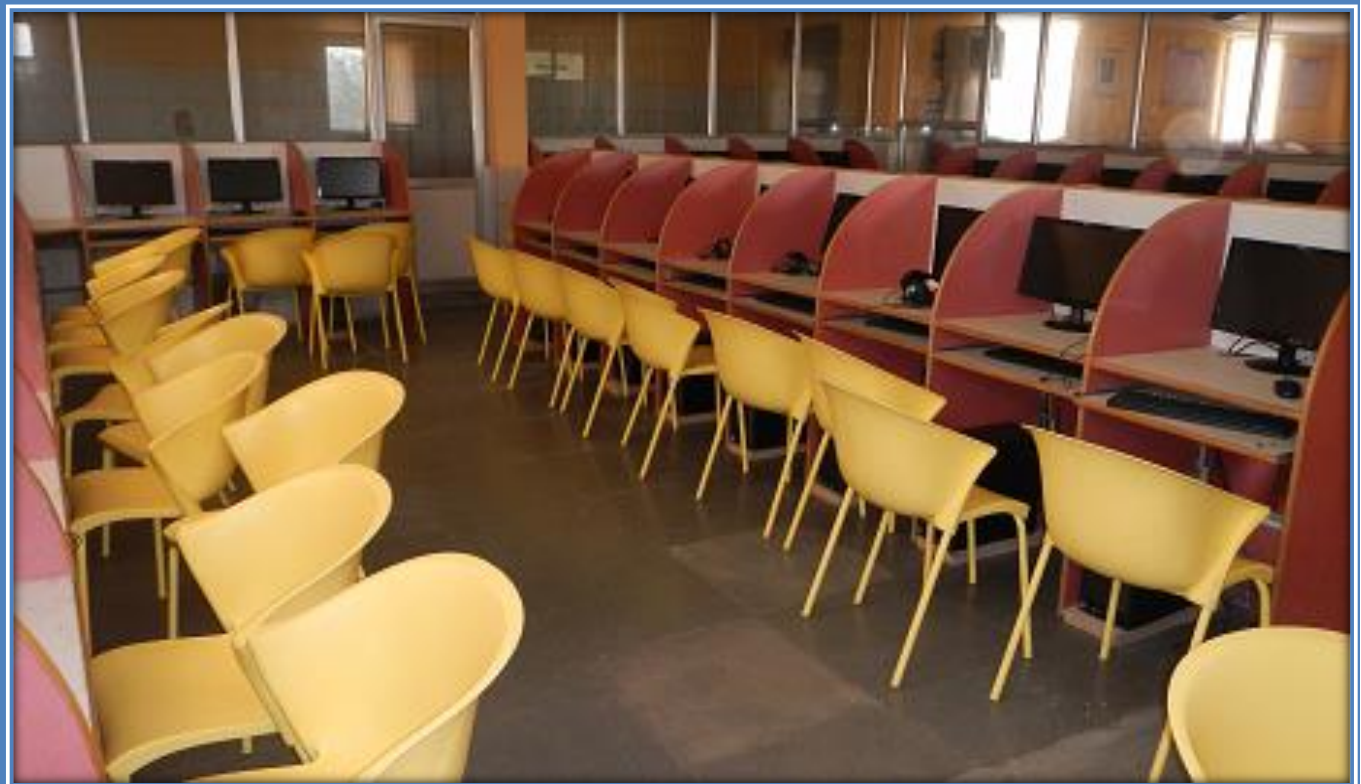
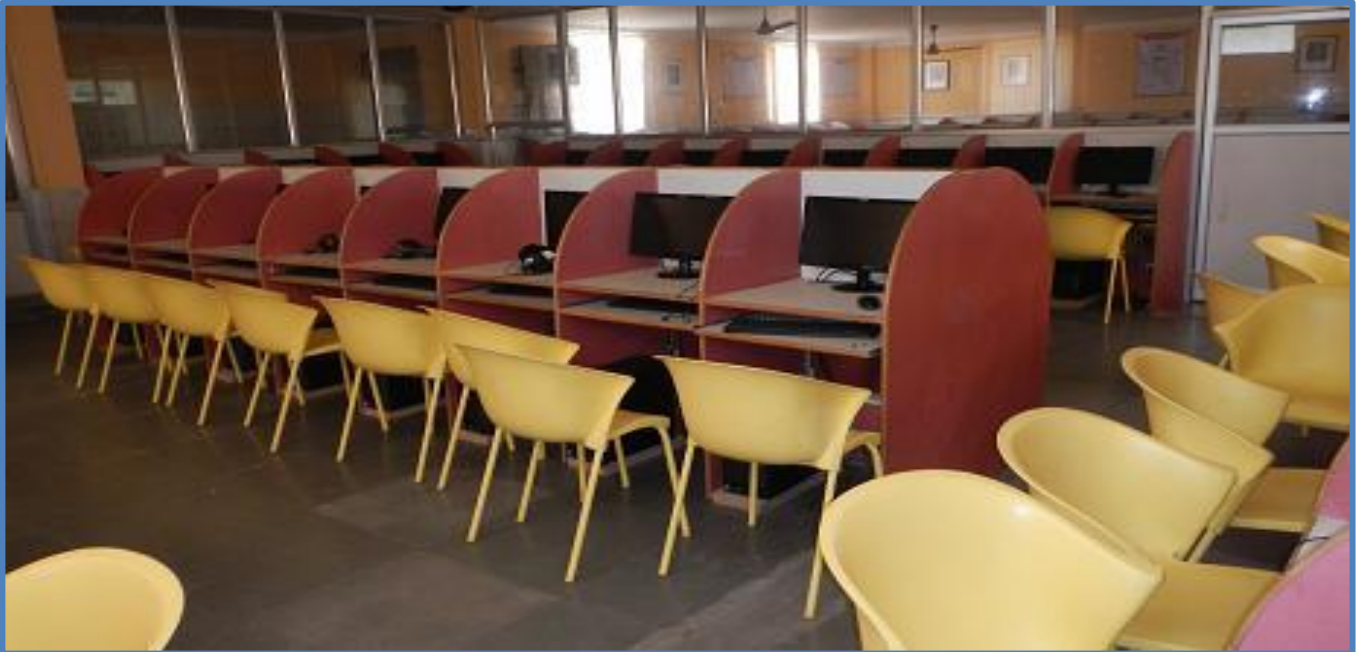
### Major facilities/equipments

- B.O.D Incubator
- Digital PH Meter
- Digital Conductivity Meter
- Digital Balance
- Distillation Unit
- NEPHLO Meter/Turbidity Meter





Department of H& S - Laboratories  
*C & DATA STRUCTURES LAB*



## PHYSICS LABORATORY

### Major facilities/equipments

- ❖ Time Constant
- ❖ LCR Circuit
- ❖ Dispersive Power of Prism
- ❖ Torsional Pendulum
- ❖ Magnetic field along the axis of the current carrying coil –Stewart and Gee's method
- ❖ Newton Rings
- ❖ Melde's Experiment
- ❖ Diffraction Grating
- ❖ Bending Losses in Optical Fibers
- ❖ Losses in Optical Fibers



## Chemistry Laboratory

### Major facilities/equipments

- ❑ Conducto Meter
- ❑ Potentiometer
- ❑ Colorimeter
- ❑ Analytical Balance
- ❑ Digital Balance
- ❑ Ostwald's Viscometer
- ❑ Stalgano meter
- ❑ Electrical Water Bath



## IT WORKSHOP



## 15.3 List of Experimental Setup in each Laboratory/ Workshop

### Department of ECE – List of Experiments

#### Electronic Devices and Circuits Lab

##### PART A: (Only for Viva-voce Examination)

##### Electronic Workshop Practice (In 3 Lab Sessions):

1. Identification, Specifications, Testing of R, L, C Components (Color Codes), Potentiometers, Switches (SPDT, DPDT, and DIP), Coils, Gang Condensers, Relays, Bread Boards, PCB's
2. Identification, Specifications and Testing of Active Devices, Diodes, BJT's, Low power JFET's, MOSFET's, Power Transistors, LED's, LCD's, SCR, UJT.
3. Study and operation of
  - i) Multimeters (Analog and Digital)
  - ii) Function Generator
  - iii) Regulated Power Supplies
  - iv) CRO.

##### PART B: (For Laboratory Examination – Minimum of 10 experiments)

1. Forward & Reverse Bias Characteristics of PN Junction Diode.
2. Zener diode characteristics and Zener as voltage Regulator.
3. Half Wave Rectifier with & without filters.
4. Full Wave Rectifier with & without filters.
5. Input & Output Characteristics of Transistor in CB Configuration and h-parameter calculations.
6. Input & Output Characteristics of Transistor in CE Configuration and h-parameter calculations.
7. FET characteristics.
8. Design of Self-bias circuit.
9. Frequency Response of CC Amplifier.
10. Frequency Response of CE Amplifier.
11. Frequency Response of Common Source FET amplifier .
12. SCR characteristics.
13. UJT Characteristics

##### PART C: Equipment required for Laboratories:

- |                                      |   |
|--------------------------------------|---|
| 1. Regulated Power supplies (RPS)    | -0-30 V   |
| 2. CRO's                             | -0-20 MHz.  |
| 3. Function Generators               | -0-1 MHz.   |
| 4. Multimeters                       |   |
| 5. Decade Resistance Boxes/Rheostats |   |
| 6. Decade Capacitance Boxes          |   |
| 7. Ammeters (Analog or Digital)      | -0-20 $\mu$ A, 0-50 $\mu$ A, 0-100 $\mu$ A, 0-200 $\mu$ A,<br>0-10 mA.  |
| 8. Voltmeters (Analog or Digital)    | -0-50V, 0-100V, 0-250V  |
| 9. Electronic Components             | -Resistors, Capacitors, BJTs,<br>LCDs, SCRs, UJTs, FETs,<br>LEDs, MOSFETs,<br>Diodes- Ge& Si type, Transistors – NPN, |

PNP type)



## Digital Logic Design Lab

### List of Experiments :

#### PART – A (Implementation using Digital ICs)

1. Design and realization of Boolean Expressions using Gates
2. Design and realization of Logic Gates using Universal Gates (NAND & NOR)
3. Design and realization of Binary-Gray & Gray-Binary Converter
4. Design and realization of 4 bit Adder
5. Design and realization of 4 bit Subtractor
6. Design and realization of 4 bit comparator
7. Design and realization of 8 X 1 MUX using 2 X 1 MUX
8. Design and realization of a Synchronous and Asynchronous counter using flip-flops

#### PART - B

1. Introduction to VHDL Programming
2. Design and Simulation of Combinational Logic Circuits Using VHDL Realization of Logic GATES
3. Half adder and Full adder circuits
4. Magnitude comparator
5. Encoder & Decoder
6. Binary to Gray and Gray to Binary converter
7. Parity Checker
8. Design and Simulation of sequential logic circuits using VHDL D and T Flip-Flops
9. SR and JK Flip-Flops

## Basic Simulation Lab

### List of Experiments:

1. Basic Operations on Matrices.
2. Generation of Various Signals and Sequences (Periodic and Aperiodic), such as Unit Impulse, Unit Step, Square, Saw tooth, Triangular, Sinusoidal, Ramp, Sinc.
3. Operations on Signals and Sequences such as Addition, Multiplication, Scaling, Shifting, Folding, Computation of Energy and Average Power.
4. Finding the Even and Odd parts of Signal/Sequence and Real and Imaginary parts of Signal.
5. Convolution between Signals and sequences.
6. Auto Correlation and Cross Correlation between Signals and Sequences.
7. Verification of Linearity and Time Invariance Properties of a given Continuous / Discrete System.
8. Computation of Unit sample, Unit step and Sinusoidal responses of the given LTI system and verifying its physical realizability and stability properties.
9. Gibbs Phenomenon
10. Finding the Fourier Transform of a given signal and plotting its magnitude and phase spectrum.
11. Waveform Synthesis using Laplace Transform.
12. Locating the Zeros and Poles and plotting the Pole-Zero maps in S-plane and ZPlane for the given transfer function.
13. Generation of Gaussian noise ( Real and Complex), Computation of its mean, M.S.Value and its Skew, Kurtosis, and PSD, Probability Distribution Function.



14. Sampling Theorem Verification.
15. Removal of noise by Autocorrelation / Cross correlation.
16. Extraction of Periodic Signal masked by noise using Correlation.
17. Verification of Weiner-Khinchine Relations.
18. Checking a Random Process for Stationarity in Wide sense.

### Analog and Digital Communications Lab

#### List of Experiments

1. Observe the Amplitude modulated wave form & measure modulation index and demodulation of AM signal.
2. Modulate a sinusoidal signal with high frequency carrier to obtain DSB-SC signal and demodulation of the DSB-SC signal.
3. To perform the experiment of generation and detection of SSB – SC signal
4. Modulate a sinusoidal signal with high frequency carrier to obtain FM signal and demodulation of the FM signal.
5. To study the analysis of AM and FM signals using spectrum analyzer
6. To plot the characteristics of Pre-emphasis & de-emphasis circuits
7. To study the AGC Characteristics
8. Verification of Sampling Theorem.
9. To perform the experiment of generation and detection PAM
10. To perform the experiment of generation and detection PWM
11. To perform the experiment of generation and detection PWM
12. To study the Frequency Division Multiplexing & De multiplexing
13. To observe the transmission of signals over a single channel using TDM-PAM method.
14. To study the PCM modulation & demodulation
15. To study the DPCM modulation & demodulation
16. To study the Delta modulation & demodulation
17. To study the Adaptive delta modulation & demodulation
18. To perform the experiment of generation and detection of ASK
19. To perform the experiment of generation and detection of FSK
20. To perform the experiment of generation and detection of PSK
21. To perform the experiment of generation and detection of DPSK

### IC Application Lab

#### Part-I: Linear IC Experiments

1. OP AMP Applications – Adder, Subtractor, Comparators.
2. Integrator Circuits using IC 741.
3. Differentiator Circuits using IC 741.
4. AC Amplifier using IC 741
5. Active Filter Applications – LPF (first order)
6. Active Filter Applications – HPF (first order)
7. IC 741 Waveform Generators – Sine, Square wave and Triangular waves.
8. IC 555 Timers – Monostable and Astable Multivibrator Circuits.
9. Schmitt Trigger Circuits – using IC 741

10. IC 565 – PLL Applications.
11. Voltage Regulator using IC 723
12. Three Terminal Voltage Regulators –7805, 7809, 7912.

**EQUIPMENT REQUIRED:**

- 1 20 MHz/ 40 MHz/60 MHz Oscilloscope.
- 2 1 MHz Function Generator (Sine, Square, Triangular and TTL) .
- 3 Regulated Power Supply.
- 4 Multimeter / Volt Meter.

**Electronic Circuit Analysis Lab**

**List of Experiments (12 experiments to be done):**

**I) Design and Simulation in Simulation Laboratory using any Simulation Software. (Any 6 Experiments):**

1. Common Emitter Amplifier
2. Common Source Amplifier
3. Two Stage RC Coupled Amplifier
4. Current shunt and Voltage Series Feedback Amplifier
5. Cascode Amplifier
6. Wien Bridge Oscillator using Transistors
7. RC Phase Shift Oscillator using Transistors
8. Class A Power Amplifier (Transformer less)
9. Class B Complementary Symmetry push pull Amplifier
10. Common Base (BJT )/ Common Gate(JFET) Amplifier

**II) Testing in the Hardware Laboratory (6 Experiments)**

- A) Any Three circuits simulated in Simulation laboratory
- B) Any Three of the following
1. Class A Power Amplifier (with transformer load)
  2. Class C Power Amplifier
  3. Single Tuned Voltage Amplifier
  4. Hartley & Colpitt's Oscillators
  5. Darlington Pair
  6. MOS Amplifier

**Microprocessors & Microcontrollers Lab**

**List of Experiments:**

- 1 Programs for 16 bit arithmetic operations for 8086 (using Various Addressing Modes).
- 2 Program for sorting an array for 8086.
- 3 Program for searching for a number or character in a string for 8086.
- 4 Program for string manipulations for 8086.
- 5 Program for digital clock design using 8086.
- 6 Interfacing ADC and DAC to 8086.
- 7 Parallel communication between two microprocessors using 8255.
- 8 Serial communication between two microprocessor kits using 8251 .
- 9 Interfacing to 8086 and programming to control stepper motor.

- 10 Programming using arithmetic, logical and bit manipulation instructions of 8051.
- 11 Program and verify Timer/ Counter in 8051.
- 12 Program and verify Interrupt handling in 8051
- 13 UART Operation in 8051.
- 14 Communication between 8051 kit and PC.
- 15 Interfacing LCD to 8051.
- 16 Interfacing Matrix/ Keyboard to 8051.
- 17 Data Transfer from Peripheral to Memory through DMA controller 8237 / 8257.

### Data Communications and Networks Lab

#### List of Experiments:

1. Study of different types of Network cables and practically implement the cross-wired cable and straight through cable using clamping tool
2. Study of Network Devices in Detail
3. Study of network IP.
4. Connect the computers in Local Area Network
5. Study of basic network command and Network configuration commands
6. Configure a Network topology using packet tracer software
7. Configure a Network using Distance Vector Routing protocol
8. Configure a Network using Link State Vector Routing protocol

### Digital Signal Processing Lab

#### List of Experiments:

- 1 Generation of Sinusoidal waveform / signal based on recursive difference equations
- 2 To find DFT / IDFT of given DT signal
- 3 To find frequency response of a given system given in (Transfer Function/ Differential equation form).
- 4 Implementation of FFT of given sequence
- 5 Determination of Power Spectrum of a given signal(s).
- 6 Implementation of LP FIR filter for a given sequence
- 7 Implementation of HP FIR filter for a given sequence
- 8 Implementation of LP IIR filter for a given sequence
- 9 Implementation of HP IIR filter for a given sequence
- 10 Generation of Sinusoidal signal through filtering
- 11 Generation of DTMF signals
- 12 Implementation of Decimation Process
- 13 Implementation of Interpolation Process
- 14 Implementation of I/D sampling rate converters
- 15 Audio application such as to plot a time and frequency display of microphone plus a cosine using DSP. Read a .wav file and match with their respective spectrograms.
- 16 Noise removal: Add noise above 3 KHz and then remove, interference suppression using 400 Hz tone.
- 17 Impulse response of first order and second order systems.

## E – CAD Lab

1. HDL code to realize all the logic gates
2. Design of 2-to-4 decoder
3. Design of 8-to-3 encoder (without and with priority)
4. Design of 8-to-1 multiplexer
5. Design of 4 bit binary to gray converter
6. Design of Multiplexer/ Demultiplexer, comparator
7. Design of Full adder using 3 modeling styles
8. Design of flip flops: SR, D, JK, T
9. Design of 4-bit binary, BCD counters ( synchronous/ asynchronous reset) or any sequence counter
10. Finite State Machine Design

## Microwave & Optical Communications Lab

### Minimum Twelve Experiments to be conducted:

#### Part – A ( Any 7 Experiments ) :

1. Reflex Klystron Characteristics.
2. Gunn Diode Characteristics.
3. Attenuation Measurement.
4. Directional Coupler Characteristics.
5. VSWR Measurement.
6. Impedance and Frequency Measurement.
7. Waveguide parameters measurement.
8. Scattering parameters of Circulator.
9. Scattering parameters of Magic Tee.

#### Part – B ( Any 5 Experiments ) :

10. Characterization of LED.
11. Characterization of Laser Diode.
12. Intensity modulation of Laser output through an optical fiber.
13. Measurement of Data rate for Digital Optical link.
14. Measurement of NA.
15. Measurement of losses for Analog Optical link.

### Equipment required for Laboratories:

1. Reflex Klystron Power Supply
2. VSWR Meter -
3. Micro Ammeter - 0 – 200  $\mu$ A
4. Multimeter
5. CRO
6. GUNN Power Supply, Pin Modulator
7. Reflex Klystron
8. Crystal Diodes
9. Micro wave components (Attenuation)
10. Frequency Meter
11. Slotted line carriage
12. Probe detector
13. wave guide shorts
14. Pyramidal Horn Antennas
15. Directional Coupler
16. E, H, Magic Tees

17. Circulators, Isolator
18. Matched Loads
19. Fiber Optic Analog Trainer based LED
20. Fiber Optic Analog Trainer based laser
21. Fiber Optic Digital Trainer
22. Fiber cables - (Plastic, Glass)

**Analog & Digital Electronics Lab**

**For Laboratory Examination – Minimum of 14 experiments need to done**

**PART A: Analog Electronics Lab**

19. Forward & Reverse Bias Characteristics of PN Junction Diode.
20. Zener diode characteristics and Zener as voltage Regulator.
21. Input & Output Characteristics of Transistor in CB Configuration and h-parameter calculations.
22. Input & Output Characteristics of Transistor in CE Configuration and h-parameter calculations.
23. Half Wave Rectifier with & without filters.
24. Full Wave Rectifier with & without filters.
25. FET characteristics.
26. Frequency Response of CC Amplifier.
27. Frequency Response of CE Amplifier.
28. Frequency Response of Common Source FET amplifier .

**PART B: Digital Electronics Lab (For Laboratory Examination – Minimum of 06 experiments)**

1. Verification of Gates
2. Half / Full Adder / Subtractor
3. Parallel Adder / Subtractor
4. Excess-3 to BCD & Vice Versa
5. Binary-Gray & Gray-Binary Converter
6. MUX/DEMUX
7. MUX/DEMUX using only NAND Gates
8. Comparators
9. Encoder / decoder
10. Flip-flops

## Operating Systems Lab

### List of Programs:

1. Simulate the following CPU scheduling algorithms
  - a) Round Robin
  - b) SJF
  - c) FCFS
  - d) Priority
2. Simulate all page replacement algorithms
  - a) FIFO
  - b) LRU
  - c) LFU
  - d) OPT
3. Simulate Paging Technique of memory management.
4. Simulate all file allocation strategies
  - a) Sequential
  - b) Indexed
  - c) Linked
5. Simulate all File Organization Techniques
  - a) Single level directory
  - b) Two level
  - c) Hierarchical
  - d) DAG
6. Simulate Bankers Algorithm for Dead Lock Avoidance
7. Simulate Bankers Algorithm for Dead Lock Detection

## IT Workshop Lab

### Week - 1

**Introduction to Computers:** Identify the Peripherals of Computer - Components in CPU Assembling and Disassembling - Hardware trouble shooting;

### Week - 2

**Software Installation:** Introduction to Operating System- Installation of DOS- Windows and Unix/Linux Installation - Configuring and Trouble Shooting;

### Week - 3

**Drivers and Utilities:** Threats- Virus- Worms - anti, Virus- Firewall and Device Driver's Configuration;

**Office Automation:** Introduction- Need of Automation- Windowing- Toolbars- Menu Application;

### Week - 4

**Word Processing:** Formatting Styles - Applying Text Effects - Paragraphs- Borders- Backgrounds - Header and Footer - Tables – Images - Hyper linking – Mail Merge;

### Week - 5

**Spreadsheets:** Creating Tabulated Information - Overview of Toolbars - Formatting Cells - Creation of Graphs and Charts - Learning Functions and Formulas;

### Week - 6

**Presentations:** Orientation and Layouts of Presentation - Types of Views - Inserting

Styles - Design and Custom Animation - Setup and Slide Show;

## Week - 7

**Browsing:** Introduction to Internet- LAN- Connecting Computers through LAN- Accessing Computers through LAN - Access to Websites and Emails - Search Engines like Google and MSN.

### Object Oriented Programming using C++ Lab

1. Write a C++ program illustrating Variable Scope.
2. Write a C++ program illustrating Swap integer values by reference.
3. Write a C++ program illustrating Checking whether the number is even or odd using Ternary operator.
4. Write a C++ program illustrating a program to find the roots of a quadratic equation .Use switch statements to handle different values of the discriminant ( $b^2 - 4*a*c$ ).
5. Write a C++ program illustrating interactive program to multiply 2 variables after checking the compatibility.
6. Write a C++ program illustrating interactive program for computing the roots of a quadratic equation by handling all possible cases. Use streams to perform I/O operations.
7. Write a C++ program illustrating to sort integer numbers.
8. Write a C++ program illustrating factorial using recursion.
9. Write a C++ program illustrating pass by value, pass by reference, pass by address.
10. Write a C++ program illustrating Function overloading.
11. Write a C++ program illustrating an interactive program for swapping integer, real, and character type variables without using function overloading .Write the same program by using function overloading features and compare the same with its C counterpart.
12. Write a C++ program illustrating inline functions.
13. Write a C++ program illustrating Friend function.
14. Write a C++ program illustrating Exception handling.
15. Write a C++ program illustrating Function template.
16. Write a C++ program illustrating Overloading increment, decrement, binary+&<< operator.
17. Write a C++ program illustrating Virtual function.
18. Write a C++ program illustrating an interactive program to process complex numbers .It has to Perform addition, subtraction, multiplication, and division of complex numbers. print results in x+iy form. Create a class for the complex number representation.
19. Write a C++ program illustrating user defined string processing functions using pointers (string length, string copy, string concatenation)
20. Write a C++ program illustrating Constructor overloading (Both parameterised and default).
21. Write a C++ program illustrating Copy constructor.
22. Write a C++ program illustrating access data members & member functions using 'THIS' pointer.
23. Write a C++ program illustrating for overloading ++ operator to increment data.
24. Write a C++ program illustrating overloading of new and delete operator.
25. Write a C++ program illustrating Abstract classes.



26. Write a C++ program illustrating Inheritance (Multiple, Multilevel, Hybrid).
27. Write a C++ program illustrating Virtual classes & virtual functions.
28. Write a C++ program illustrating overloading function template.
29. Write a C++ program illustrating Class template.

### Linux programming Lab

1. Write a shell script that accepts a file name, starting and ending line numbers as arguments and displays all the lines between the given line numbers.
2. Write a shell script that deletes all lines containing a specified word in one or more files supplied as arguments to it.
3. Write a shell script that displays a list of all the files in the current directory to which the user has read, write and execute permissions.
4. Write a shell script that receives any number of file names as arguments checks if every argument supplied is a file or a directory and reports accordingly. Whenever the argument is a file, the number of lines on it is also reported.
5. Write a shell script that accepts a list of file names as its arguments, counts and reports the occurrence of each word that is present in the first argument file on other argument files.
6. Write a shell script to list all of the directory files in a directory.
7. Write a shell script to find factorial of a given integer.
8. Write an awk script to count the number of lines in a file that do not contain vowels.
9. Write an awk script to find the number of characters, words and lines in a file.
10. Write a C program that makes a copy of a file using standard I/O and system calls.
11. Implement in C the following Linux commands using System calls  
a). cat b) my
12. Write a C program to list files in a directory.
13. Write a C program to emulate the Unix ls -l command.
14. Write a C program to list for every file in a directory, its mode number and file name.
15. Write a C program that redirects standard output to a file. Ex: ls > f 1.
16. Write a C program to create a child process and allow the parent to display "parent" and the child to display "child" on the screen.
17. Write a C program to create a Zombie process.
18. Write a C program that illustrates how an orphan is created.

19. Write a C program that illustrates how to execute two commands concurrently with a command pipe. Ex:- ls —| sort
20. Write C programs that illustrate communication between two unrelated processes using named pipe(FIFO FUs).
21. Write a C program in which a parent writes a message to a pipe and the child reads the message.
22. Write a C program (sender.c) to create a message queue with read and write permissions to write 3 messages to it with different priority numbers.
23. Write a C program (receiver.c) that receives the messages (from the above message queue as specified in (22)) and displays them.
24. Write a C program that illustrates suspending and resuming processes using signals.
25. Write Client and Server programs in C for connection oriented communication between Server and Client processes using Unix Domain sockets to perform the following: Client process sends a message to the Server Process.The Server receives the message,reverse S it and sends it back to the Client.The Client will then display the message to the standard output device.
26. Write Client and Server programs in C for connection oriented communication between Server and Client processes using Internet Domain sockets to perform the following: Client process sends a message to the Server Process.The Server receives the message,reverse S it and sends it back to the Client.The Client will then display the message to the standard output device.
27. Write C programs to perform the following: One process creates a shared memory segment and writes a message("Hello") into it.Another process opens the shared memory segment and reads the message. "Hello").It will then display the message("Hello") to standard output device.

## Database Management Systems Lab

### Roadway Travels

"Roadway Travels" is in business since 1997 with several buses connecting different places in india. Its main office is located in Hydearabd.

The company wants to computerize its operations in the following areas:

- Reservation and Ticketing
- Cancellations

## **Reservation & Cancellation:**

Reservations are directly handled by booking office. Reservations can be made 30 days in advance and tickets issued to passenger. One Passenger/person can book many tickets (to his/her family).

Cancellations are also directly handed at the booking office.

In the process of computerization of Roadway Travels you have to design and develop a Database which consists the data of Buses, Passengers, Tickets, and Reservation and cancellation details. You should also develop query's using SQL to retrieve the data from database.

The above process involves many steps like 1. Analyzing the problem and identifying the Entities and Relationships, 2. E-R Model 3. Relational Model 4. Normalization 5. Creating the database 6. Querying. Students are supposed to work on these steps week wise and finally create a complete "Database System" for Roadway Travels. Examples are given at every experiment for guidance to students.

### **Experiment 1: E-R Model**

Analyze the carefully and come up with the entities in it. Identify what data has to be persisted in the database. This contains the entities, attributes etc.

Identify the primary keys for all the entities. Identify the other keys like candidate keys, partial keys, if any.

#### **Example: Entities:**

1. BUS
2. Ticket
3. Passenger

#### **Relationships:**

1. Reservation
2. Cancellation

#### **PRIMARY KEY ATTRIBUTES:**

1. Ticket ID (Ticket Entity)
2. Passport ID (Passenger Entity)
3. Bus\_No (Bus Entity)

Apart from the above mentioned entities you can identify more. The above mentioned are few.

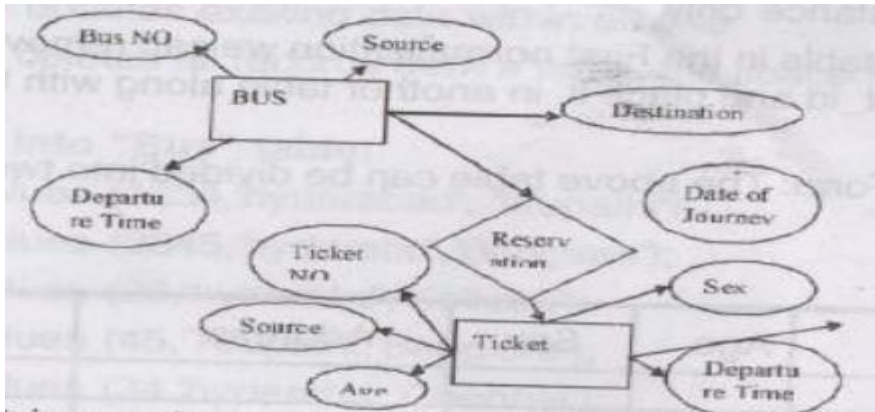
Note: The student is required to submit a document by writing the Entities and keys to the lab teacher.

### **Experiment 2: Concept design with E-R Model**

Relate the entities appropriately. Apply cardinalities for each relationship. Identify strong entities and weak entities (if any). Indicate the type of relationships (total /

partial). Try to incorporate generalization, aggregation, specialization etc wherever required.

**Example: E-R diagram for bus**



Note: The student is required to submit a document by drawing the E-R Diagram to the lab teacher.

**Experiment 3: Relational Model**

Represent all the entities (Strong, Weak) in tabular fashion. Represent relationships in a tabular fashion. There are different ways of representing relationships as tables based on the requirement. Different types of attributes (Composite, Multi-valued, and Derived) have different way of representation.

Example: The passenger tables look as below. This is an example. You can add more attributes based on E-R model. This is not a normalized table.

**Passenger**

Name	Age	Sex	Address	Ticket_id	Passport ID

Note: The student is required to submit a document by Represent relationships in a tabular fashion to the lab teacher.

**Experiment 4: Normalization**

Database normalization is a technique for designing relational database tables to minimize duplication of information and, in so doing, to safeguard the database against certain types of logical or structural problems, namely data anomalies. For example, when multiple instances of a given piece of information occur in a table, the possibility exists that these instances will not be kept consistent when the data within the table is updated, leading to a loss of data integrity. A table that is sufficiently normalized is less vulnerable to problems of this kind, because its structure reflects the basic assumptions for when multiple instances of the same information should be represented by a single instance only.

For the above table in the First normalization we can remove the multiple valued attribute Ticket\_id and place it in another table along with the primary key of passenger.

First Normal Form: The above table can be divided into two tables as shown below.

Passenger

Name	Age	Sex	Address	Passport ID

Passport ID	Ticket_id

You can do the second and third normal forms if required. Any how Normalized tables are given at the end.

### Experiment 5: Installation of MySQL and practice DDL commands

Installation of MySQL. In this week you will learn Creating databases, How to create tables, altering the database, dropping tables and databases if not required. You will also try truncate, rename commands etc.

Example for creation of a normalized "Passenger" table.

```
CREATE TABLE Passenger(
    Passport_id INTEGER PRIMARY KEY,
    Name VARCHAR(50) NOT NULL,
    Age INTEGER NOT NULL,
    Sex CHAR,
    Address VARCHAR(50) NOT NULL
);
```

Similarly create all other tables.

**Note: Detailed creation of tables is given at the end.**

### Experiment 6: Practicing DML commands

DML commands are used for managing data within schema objects. Some examples:

- SELECT - retrieve data from the database
- INSERT - insert data into a table
- UPDATE - updates existing data within a table
- DELETE - deletes all records from a table, the space for the records remain

#### **insert values into "Bus" table:**

```
insert into Bus values (1234, 'hyderabad', 'tirupathi');
```

```
insert into Bus values(2345, 'hyderabad', 'banglore');
```

```
insert into Bus values(23, 'hyderabad', 'kolkata');
```

```
insert into Bus values(45, 'tirupathi', 'bangalore');
```

```
insert into Bus values(34, 'hyderabad', 'chennai');
```

#### **insert values into "Passenger" table:**

```
insert into Passenger values(1, 45, 'ramesh', 45, 'M', 'abc123');
```

```
insert into Passenger values(2, 78, 'geetha', 36, 'F', 'abc124');
```

```
insert into Passenger values(45, 90, 'ram', 30, 'M', 'abc12');
```

```
insert into Passenger values(67, 89, 'ravi', 50, 'M', 'abc14');
```

```
insert into Passenger values(56, 22, 'seetha', 32, 'F', 'abc55');
```

#### **Few more Examples of DML commands:**

```
SELECT * FROM Bus; (selects all the attributes and displays)
```

```
UPDATE Bus SET Bus_No = 1 WHERE Bus_No = 2;
```

#### **Experiment 7: Querying**

In this week you are going to practice queries(along with sub queries) using ANY, ALL, IN, EXISTS, NOT EXIST, UNION, INTERSECT, Constraints etc.

#### **Practice the following Queries:**

1. Display unique PNR\_No of all passengers.
2. Display all the names of male passengers.
3. Display the ticket numbers and names of all the passengers.
4. Find the ticket numbers of the passengers whose name start with 'r' and ends with 'h'.
5. Find the names of passengers whose age is between 30 and 45.
6. Display all the passengers names beginning with 'A'
7. Display the sorted list of passengers names.



### **Experiment 8 and Experiment 9: Querying (continued...)**

You are going to practice queries using Aggregate functions (COUNT, SUM, AVG, MAX, and MIN), GROUP BY, HAVING and Creation and dropping of VIEWS.

1. Write a Query to display the information present in the Passenger and cancellation tables. Hint: Use UNION Operator.
2. Display the number of days in a week on which the 9W01 bus is available.
3. Find number of tickets booked for each PNR\_No using GROUP BY CLAUSE. Hint: Use GROUP BY on PNR\_No.
4. Find the distinct PNR numbers that are present.
5. Find the number of tickets booked by a passenger where the number of seats is greater than 1. Hint: Use GROUP BY, WHERE and HAVING CLAUSES.
6. Find the total number of cancelled sets.

### **Experiment 10: Triggers**

In this week you are going to work on Triggers. Creation of insert trigger, delete trigger, update trigger. Practice triggers using the above database.

**E.g:**

```
CREATE TRIGGER update check BEFORE UPDATE ON passenger FOR EACH ROW
BEGIN
  IF NEW.TickentNO > 60 THEN
    SET NEW.TickentNO = Ticket No;
  ELSE
    SET NEW.TickentNO = 0;
  END IF;
END
```

### **Experiment 11: Procedures**

In this session you are going to learn Creation of stored procedure, Execution of procedure and modification of procedure. Practice procedures using the database.

**E.g:**

```
CREATE PROCEDURE myproc()
BEGIN
  SELECT COUNT(Tickets)
  FROM Ticket
  WHERE age >= 40;
END;
```

### **Experiment 12: Cursors**

In this week you need to do the following: Declare a cursor that defines a result set.

Open the cursor to establish the result set. Fetch the data into local variables as needed from the cursor, one row at a time. Close the cursor when done

```
CREATE PROCEDURE myproc(in_customer_id INT)
BEGIN
```

```
DECLARE v_id INT;
DECLARE v_name VARCHAR(30);

DECLARE c1 CURSOR FOR
SELECT stdid, stdFirstname FROM students WHERE stdid = in_customer_id;

OPEN c1;
FETCH c1 INTO v_id, v_name;
CLOSE c1;
END;
```

### **Tables:**

#### **BUS**

Bus No: VARCHAR : PK (primary key)  
Source: VARCHAR  
Destination: VARCHAR

#### **Passenger**

PPNO: VARCHAR(15) : PK  
Name: VARCHAR(15)  
Age: INT(4)  
Sex: CHAR(10) : Male/Female  
Address: VARCHAR(20)

#### **Passenger\_Tickets**

PPNO: VARCHAR(15) : PK  
Ticket\_No: NUMERIC(9)

#### **Reservation**

PNR\_No: NUMERIC(9) : FK  
Journey\_date: DATETIME(8)  
No\_of\_seats: INT(8)  
Address: VARCHAR(50)  
Contact\_No: NUMERIC(9) --> Should not less than 9 and Should not accept any other character other than interger  
STATUS: CHAR(2) : Yes/No

#### **Cancellation**

PNR\_No: NUMERIC(9) : FK  
Journey\_date: DATETIME(8)  
No\_of\_seats: INT(8)  
Address: VARCHAR(50)  
Contact\_No: NUMERIC(9) --> Should not less than 9 and Should not accept any other character other than interger  
STATUS: CHAR(2) : Yes/No

#### **Ticket**

Ticket\_No: NUMERIC(9) : FK  
Journey\_date: DATETIME(8)  
Age: INT(4)  
Sex: CHAR(10) : Male/Female  
Source: VARCHAR  
Destination: VARCHAR  
Dep\_time: VARCHAR

## Java Programming Lab

1. Use Eclipse or Netbean platform and acquaint with the various menus. Create a test project, add a test class and run it. See how you can use auto suggestions, auto fill. Try code formatter and code refactoring like renaming variables, methods and classes. Try debug step by step with a small program of about 10 to 15 lines which contains at least one if else condition and a for loop.
2. Write a Java program that works as a simple calculator. Use a grid layout to arrange buttons for the digits and for the +, -, \*, % operations. Add a text field to display the result. Handle any possible exceptions like divided by zero.
3.
  - a. Develop an applet in Java that displays a simple message.
  - b. Develop an applet in Java that receives an integer in one text field, and computes its factorial Value and returns it in another text field, when the button named "Compute" is clicked.
4. Write a Java program that creates a user interface to perform integer divisions. The user enters two numbers in the text fields, Num1 and Num2. The division of Num1 and Num2 is displayed in the Result field when the Divide button is clicked. If Num1 or Num2 were not an integer, the program would throw a Number Format Exception. If Num2 were Zero, the program would throw an Arithmetic Exception. Display the exception in a message dialog box.
5. Write a Java program that implements a multi-thread application that has three threads. First thread generates random integer every 1 second and if the value is even, second thread computes the square of the number and prints. If the value is odd, the third thread will print the value of cube of the number.
6. Write a Java program that connects to a database using JDBC and does add, delete, modify and retrieve operations.
7. Write a Java program that simulates a traffic light. The program lets the user select one of three lights: red, yellow, or green with radio buttons. On selecting a button, an appropriate message with "Stop" or "Ready" or "Go" should appear above the buttons in selected color. Initially there is no message shown.
8. Write a Java program to create an abstract class named Shape that contains two integers and an empty method named printArea(). Provide three classes named Rectangle, Triangle and Circle such that each one of the classes extends the class Shape. Each one of the classes contains only the method printArea() that prints the area of the given shape.
9. Suppose that a table named Table.txt is stored in a text file. The first line in the file is the header, and the remaining lines correspond to rows in the table. The elements are separated by commas. Write a java program to display the table using Labels in Grid Layout.
10. Write a Java program that handles all mouse events and shows the event name at the center of the window when a mouse event is fired (Use Adapter classes).
11. Write a Java program that loads names and phone numbers from a text file where the data is organized as one line per record and each field in a record are separated by a tab ( ). It takes a name or phone number as input and prints the corresponding other value from the hash table (hint: use hash tables).
12. Implement the above program with database instead of a text file.

13. Write a Java program that takes tab separated data (one record per line) from a text file and inserts them into a database.
14. Write a java program that prints the meta-data of a given table.

### Software Engineering Lab

**Prepare the following documents and develop the software project startup, prototype model, using software engineering methodology for at least two real time scenarios or for the sample experiments.**

- Problem Analysis and Project Planning -Thorough study of the problem – Identify Project scope, Objectives and Infrastructure.
- Software Requirement Analysis – Describe the individual Phases/modules of the project and Identify deliverables. Identify functional and non-functional requirements.
- Data Modeling – Use work products – data dictionary.
- Software Designing – Develop use case diagrams and activity diagrams, build and test class diagrams, sequence diagrams and add interface to class diagrams.
- Prototype model – Develop the prototype of the product.
- The SRS and prototype model should be submitted for end semester examination.

#### **List of Sample Experiments:**

Course management system (CMS)

A course management system (CMS) is a collection of software tools providing an online environment for course interactions. A CMS typically includes a variety of online tools and environments, such as:

1. An area for faculty posting of class materials such as course syllabus and handouts
2. An area for student posting of papers and other assignments
3. A grade book where faculty can record grades and each student can view his or her grades
4. An integrated email tool allowing participants to send announcement email messages to the entire class or to a subset of the entire class
5. A chat tool allowing synchronous communication among class participants
6. A threaded discussion board allowing asynchronous communication among participants

In addition, a CMS is typically integrated with other databases in the university so that students enrolled in a particular course are automatically registered in the CMS as participants in that course.

The Course Management System (CMS) is a web application for department personnel, Academic Senate, and Registrar staff to view, enter, and manage course information formerly submitted via paper. Departments can use CMS to create new course proposals, submit changes for existing courses, and track the progress of proposals as they move through the stages of online approval.

## Easy Leave

This project is aimed at developing a web based Leave Management Tool, which is of importance to either an organization or a college.

The Easy Leave is an Intranet based application that can be accessed throughout the organization or a specified group/Dept. This system can be used to automate the workflow of leave applications and their approvals. The periodic crediting of leave is also automated. There are features like notifications, cancellation of leave, automatic approval of leave, report generators etc in this Tool.

## Functional components of the project:

There are registered people in the system. Some are approvers. An approver can also be a requestor. In an organization, the hierarchy could be Engineers/Managers/Business Managers/Managing Director etc. In a college, it could be Lecturer/Professor/Head of the Department/Dean/Principal etc.

## Computer Networks & Web Technologies Lab

### Part – A : Computer Networks Lab:

1. Implement the data link layer framing methods such as character, character stuffing and bit stuffing.
2. Implement on a data set of characters the three CRC polynomials – CRC 12, CRC 16 and CRC CCIP .
3. Implement Dijkstra's algorithm to compute the Shortest path thru a graph.
4. Take an example subnet graph with weights indicating delay between nodes. Now obtain Routing table at each node using distance vector routing algorithm
5. Take an example subnet of hosts. Obtain broadcast tree for it.
6. Take a 64 bit playing text and encrypt the same using DES algorithm.
7. Write a program to break the above DES coding
8. Using RSA algorithm Encrypt a text data and Decrypt the same.

### • System/ Software Requirement

Intel based desktop PCs LAN CONNECTED with minimum of 166 MHZ or faster processor with atleast 64 MB RAM and 100 MB free disk space

### Outcomes:

- Ability to understand the encryption and decryption concepts in Linux environment
- Ability to apply appropriate algorithm for the finding of shortest route.
- Ability to configure the routing table.

### Part – B : WEB TECHNOLOGIES LAB

1. Install the following on the local machine Apache Web Server (if not installed)
  - Tomcat Application Server locally
  - Install MySQL (if not installed)
  - Install PHP and configure it to work with Apache web server and
  - MySQL (if not already configured)
2. Write an HTML page including any required Javascript that takes a number from one text field in the range of 0 to 999 and shows it in another text field in words. If the number is out of range, it should show "out of range" and if it is not a number, it should show "not a number" message in the result box.
3. Write an HTML page that has one input, which can take multi-line text and a submit button. Once the user clicks the submit button, it should show the number of

characters, words and lines in the text entered using an alert message. Words are separated with white space and lines are separated with new line character.

4. Write an HTML page that contains a selection box with a list of 5 countries. When the user selects a country, its capital should be printed next to the list. Add CSS to customize the properties of the font of the capital (color, bold and font size).
5. Create an XML document that contains 10 users information. Write a Java program, which takes User Id as input and returns the user details by taking the user information from the XML document using
  - (a) DOM Parser and
  - (b) SAX parser
6. Implement the following web applications using
  - (a) PHP,
  - (b) Servlets and
  - (c) JSP:
    - i. A user validation web application, where the user submits the login name and password to the server. The name and password are checked against the data already available in Database and if the data matches, a successful login page is returned. Otherwise a failure message is shown to the user.
    - ii. Modify the above program to use an xml file instead of database.
    - iii. Modify the above program to use AJAX to show the result on the same page below the submit button.
    - iv. A simple calculator web application that takes two numbers and an operator (+, -, /, \* and %) from an HTML page and returns the result page with the operation performed on the operands.
    - v. Modify the above program such that it stores each query in a database and checks the database first for the result. If the query is already available in the DB, it returns the value that was previously computed (from DB) or it computes the result and returns it after storing the new query and result in DB.
    - vi. A web application takes a name as input and on submit it shows a hello page where is taken from the request. It shows the start time at the right top corner of the page and provides a logout button. On clicking this button, it should show a logout page with Thank You message with the duration of usage (hint: Use session to store name and time).
    - vii. A web application that takes name and age from an HTML page. If the age is less than 18, it should send a page with "Hello , you are not authorized to visit this site" message, where should be replaced with the entered name. Otherwise it should send "Welcome to this site" message.
    - viii. A web application for implementation:

The user is first served a login page which takes user's name and password. After submitting the details the server checks these values against the data from a database and takes the following decisions.

If name and password matches, serves a welcome page with user's full name. If name matches and password doesn't match, then serves "password mismatch" page If name is not found in the database, serves a registration page, where user's full name is asked and on submitting the full name, it stores, the login name, password and full name in the database (hint: use session for storing the submitted login name and password)
    - ix. A web application that lists all cookies stored in the browser on clicking "List Cookies" button. Add cookies if necessary



## Automata & Compiler Design Lab

### EXPERMENTS

1. This program is to find out whether a given string is an identifier or not.
2. Write a program to simulate a machine known as the Deterministic Finite Automata (DFA).
3. To write a program for dividing the given input program into lexemes.
4. How do you write a program to check the string of a given grammar?
5. Write a program to remove left-recursion from a context-free grammar.
6. Write a program on recursive descent parsing.

Input a grammar from the user. Identify the input Terminals, and Non-terminal

- a) Write a C++ Code to compute the FIRST, FOLLOW of all terminal.
  - b) Write a C++ Code to Compute the LL(1) Parsing Table for the given grammar.
7. Write a program to show the implementation of Shift-Reduce Parser.
  8. Write a program to generate the intermediate code in the form of Polish notation.
  9. Write a program for generating for various intermediate code forms:
    - Three address code
    - Quadruple.

## Python Programming Lab

### Exercise 1 - Basics

- a) Running instructions in Interactive interpreter and a Python Script
- b) Write a program to purposefully raise Indentation Error and Correct it

### Exercise 2 - Operations

- a) Write a program to compute distance between two points taking input from the user (Pythagorean Theorem)
- b) Write a program add.py that takes 2 numbers as command line arguments and prints its sum.

### Exercise 3 - Control Flow

- a) Write a program for checking whether the given number is a even number or not.
- b) Using a for loop, write a program that prints out the decimal equivalents of  $1/2$ ,  $1/3$ ,  $1/4$ ,..... $1/10$
- c) Write a program using a for loop that loops over a sequence.
- d) Write a program using a while loop that asks the user for a number, and prints a countdown from that number to zero.e
- e) Find the sum of all primes below two million.

Each new term in the Fibonacci sequence is generated by adding the previous two terms.By starting with 1 and 2,the first 10 terms will be.

1,2,3,5,8,13,21,34,55,89,....

- f) By considering the terms in the Fibonacci sequence whose values do not exceed four million, find the sum of the even valued terms.

#### **Exercise 4 – DS**

- Write a program to count the numbers of characters in the string and store them in a dictionary data structures.
- Write a program to use split and join methods in the string and trace a birthday with a dictionary data structure.
- Write a program combine lists that combines these lists into a dictionary.
- Write a program to count frequency of characters in a given file. Can you use character frequency to tell whether the given file is a Python program file C, C program file or text file.

#### **Exercise 5- FILES**

- Write a program to print each line of a file in reverse order
- Write a program to compute the number of characters words lines in a file.

#### **Exercise 6-FUNCTIONS**

- Write a function `ball_collide` that takes two balls as parameters and compute if they are colliding. Your function should return a Boolean representing whether or not the balls are colliding.

Hint: Represent a ball on a plane as a tuple of  $(x,y,r)$ ,  $r$  being the radius  
If  $(\text{distance between two balls centers}) \leq (\text{sum of their radii})$  then (they are colliding)

- Find mean, median, mode for the given set of numbers in a list.
- Write a function `nearly_equal` to test whether two strings are nearly equal. Two strings  $a$  and  $b$  are nearly equal when  $a$  can be generated by a single mutation on  $b$ .
- Write a function `dups` to find all duplicates in the list.
- Write a function `unique` to find all the unique elements of a list.

#### **Exercise 7-Multi-D Lists**

- Write a program that defines a matrix and prints.
- Write a program to perform addition of two square matrices
- Write a program to perform multiplication of two square matrices

#### **Exercise 8- Modules**

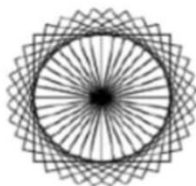
- Install packages requests, flask and explore them using (pip)
- Write a script that imports requests and fetch content from the page. Eg. (Wiki)
- Write a simple script that serves a simple HTTPResponse and a simple HTML Page.

#### **Exercise 9-OOP**

- Class variable and instance variable and illustration of the self variable
  - Robot
  - ATM Machine

#### **Exercise 10-GUI, GRAPHICS**

- Write a GUI for an Expression calculator using tk
- Write a program to implement the following figures using turtle



### Exercise 11-Testing

- a) Write a test case to check the function even numbers which return True on passing a list of even numbers.
- b) Write a test case to check the function reverse\_string which returns the reversed string.

### Exercise 12- Advanced

- a) Build any one classical data structure.
- b) Write a program to solve knapsack problem.

## Scripting Languages Lab

### Week-1

1. Write a script that counts from 1 to 10 in steps of 1. For each number, display whether that number is an odd or even number, and also display a message if the number is a prime number. Display this information within an HTML table.
2. Write a program that displays a different message based on the time of day. For example, have the site display "Good Morning!" if it is accessed in the morning.
3. Write a program that formats a block of text (to be input by the user) based on preferences chosen by the user. Give your user options for color of text, font choice, and size. Display the output on a new page.

### Week-2

1. Write a function that takes an array argument, and returns a string containing XHTML markup for a definition list where each key of the array is a term, and each corresponding value is a definition. (Hint: An XHTML definition list element consists of `<dl> ... </dl>` tags. Inside these tags, terms are marked up using `<dt> ... </dt>` tags, and definitions using `<dd> ... </dd>` tags.)
2. Write a Calculator class that can store two values, then add them, subtract them, multiply them together, or divide them on request. Create another class, CalcAdvanced, that extends (inherits from) the Calculator class. CalcAdvanced should be capable of storing either one or two values. CalcAdvanced should also have the methods: `pow()`, `sqrt()`, and `exp()`.

### Week-3

1. Create an Interactive Form with PHP script which does the following things:
  - a) It displays a registration form for the user to fill out. Certain fields are required to be filled in and these are labelled with asterisks in the form. The remaining fields are optional
  - b) When the form is sent, the script checks that the required fields have been filled in, if all required fields are filled, the script displays a thank-you message.
  - c) If one or more required fields are missing, the script redisplay the form with an error message, and highlights the fields that still need to be filled in. The script remembers which fields the user already filled in, and pre-fills those fields in the new form

### Week-4

1. Create a multi-step form for registration and upload the image and signature with restricted size option upon successful submission displays the information filled

by the user.

### **Week-5**

1. Create a user login system upon login, a simple shopping cart for online store application is displayed where there are three products to choose from, and user can add any or all of the products to his cart, remove products from the cart, and view the contents of the cart.
2. Write a script that uses cookies to remember how long ago a visitor first visited the page. Display this value in the page, in minutes and seconds.

### **Week-6**

1. Print every number from 9 through 19 in base 16.11. Create a Python dictionary with [key, value] as [person, phone\_number] and work with various dictionary functions.

### **Week -7**

1. Write a Python script to create a dictionary with [word, count] where count is the number of occurrences of the word in a given list of string.
2. Write a Python script using a function which returns a list containing Fibonacci series of n terms.

### **Week-8**

1. Implement Queue data structure in Python by defining a class Queue.
2. Write a program that reads a file and writes out a new file with the lines in reversed order (i.e. the first line in the old file becomes the last one in the new file.)
3. Write a program to perform matrix multiplication by reading the matrices from the file and write the resultant matrix to the file.

### **Week-9**

1. Write a program to experiment with different layouts using different pack orders.

### **Week-10**

1. Write a GUI to enter the employee details into the database and allows us to perform update and remove employee information.

### **Week-11**

1. Create a template that shows a menu from a restaurant and have Django create the database.

### **Week-12**

1. Create a single page application using AngularJS and NodeJS.

## **Mobile Application Development Lab**

### **Mobile Application Development (Through J2ME) LABORATORY**

#### **Week - 1: Installation of Java Wireless Toolkit (J2ME)**

- 1) If the Java Development Kit (JDK) is not there or only having the Java Runtime Environment (JRE) installed, install the latest JDK from <http://java.sun.com/javase/downloads/index.jsp>. Current stable release of Java is JDK 6 Update 7 but check the web page in case there are newer non-

beta releases available.

- 2) Next, download the **Java Wireless Toolkit** (formerly called J2ME Wireless Toolkit) from: <http://java.sun.com/products/sjwtoolkit/download.html>.
- 3) Run the installer (for example, for Windows it is: sun\_java\_wireless\_toolkit-2\_5\_2-windows.exe). The installer checks whether a compatible Java environment has been pre-installed. If not, it is necessary to uninstall old versions of Java and perform Step 1 again.

Once after successful installation of Java and the tool kit compile this program and run the following program in the toolkit.

Steps to run this program in toolkit:

1. Start -> All Programs -> Sun Java Tool Kit -> Wireless Tool Kit
2. Click New Project – Enter Project Name -> Enter Class Name -> Click on Create Project.
3. Choose appropriate API Selection and Configurations.
4. Place Java Source file in WTK2.1 / WTK2.2\ apps\ projectname\ src
5. Build the Project.
6. Run the Project.

```
import javax.microedition.lcdui.*;
import javax.microedition.midlet.*;
public class HelloWorld extends MIDlet{
private Form form;
private Display display;
public HelloWorld(){
super();
}
public void startApp(){
form = new Form("Hello World");
String msg = "Hello World!!!!!!";
form.append(msg);
display = Display.getDisplay(this);
display.setCurrent(form);
}
public void pauseApp(){}
public void destroyApp(boolean unconditional){
notifyDestroyed();
}
}
```

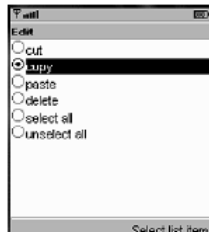
### **Week - 2 Working with J2ME Features:**

Working with J2ME Features: Say, creating a Hello World program Experiment with the most basic features and mobile application interaction concepts (lists, text box-

es, buttons, radio boxes, soft buttons, graphics, etc)

### 2.1 Create a program which creates to following kind of menu.

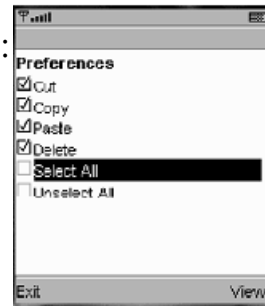
- \* cut
- \* copy
- \* past
- \* delete
- \* select all
- \* unselect all



### 2.2 Event Handling.

Create a menu which has the following options:

- \* cut - can be on/off
- \* copy - can be on/off
- \* paste - can be on/off
- \* delete - can be on/off
- \* select all - put all 4 options on
- \* unselect all - put all 4 options off



### 2.3. Input checking

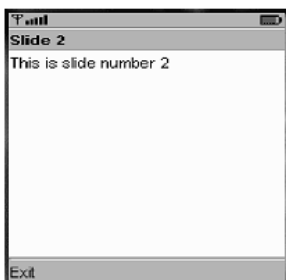
Create an MIDP application which examine, that a phone number, which a user has entered is in the given format.

- \* Area code should be one of the following: 040, 041, 050, 0400, 044
- \* There should 6-8 numbers in telephone number (+ area code)



### Week - 3 Threads & High Level UI:

3.1. Create a slide show which has three slides, which includes only text. Program should change to the new slide after 5 seconds. After the third slide program returns to the first slide.



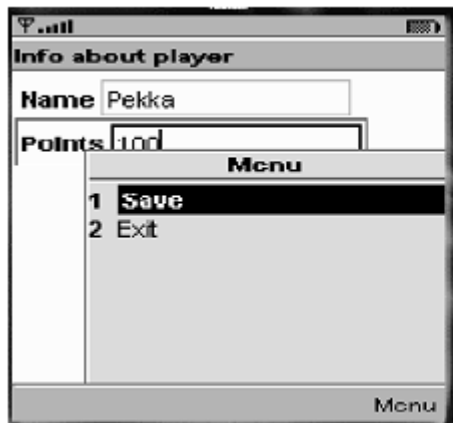


### 3.2 High-level UI

Create a MIDP application, which show to the user 5-10 quiz questions. All questions have 4 possible options and one right option exactly. Application counts and shows to the user how many right answers were right and shows them to user.



3.3 Create a MIDP application, where the user can enter player name and points. The program saves the information to the record using RMS at MIDP device. Program should also print out the top 10 player list to the end user. You can use this class in your game if you made own class for saving and reading record sets.

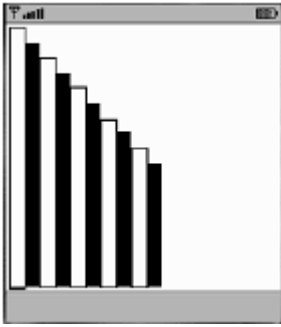


### Week - 4 Working on Drawing and Images

4.1 Create a slide show which has three slides, which includes pictures at PNG format. Program should change to the new slide other 5 seconds.



4.2 Create a MIDP application, which draws a bar graph to the display. Data values can be given at int[] array.



4.3 Create a MIDP application, which draws a bar graph to the display. Data values can be given at int[] array. You can enter four data (integer) values to the input text field.



## Week - 5 Developing Networked Applications using the Wireless Toolkit

### Creating a Simple Client-Server Application

Create, compile and run a basic UDP-based client-server application.

#### Creating the Datagram Server project

1) Click on Wireless Toolkit 2.5.2 under the group: **All Programs?Sun Java (TM)**

#### Wireless Toolkit 2.5.2.

2) Click on '**New Project...**' button.

3) Enter project name as '**DatagramServer**'. Enter MIDlet name as '**DatagramServer**'. Note that the Midlet name is the same as the name of the class in the source code, which extends the MIDlet class, otherwise the application won't run.

4) Another window pops up where it is required to select a target platform. Select '**MIDP 1.0**' from the drop down list.

5) After clicking OK, the project is created; and the Wireless Toolkit tells that the name of the folder where source code files are created. The path of the source code folder is displayed in the debug output window.

#### Creating and Compiling the DatagramServer source files

The Wireless Toolkit does not come with an IDE by default so Use any IDE or a text editor like Notepad.

- 1) Create a new text file called **DatagramServer.java** in the source folder of the project. The exact path of this folder is displayed in the Wireless Toolkit window.
- 2) Paste contents **DatagramServer.java** from into the source file.

### **Running your Server application on the Phone simulator**

- 1) After compiling the project successfully, click on the Run button in the Wireless Toolkit window.
- 2) A graphical window depicting a phone handset will appear with the name of your application highlighted on its screen as shown below.
- 3) To start the application, click on the right soft-key (marked with a dot) below the '**Launch**' command.
- 4) The phone simulator might ask if it is OK to run the network application. Select '**Yes**' by clicking on the appropriate soft-key. The server is now up and running.
- 5) Keep the server running during the creation, compilation and running of the Datagram Client application.

### **Creating the DatagramClient project**

- 1) Use the same instance of the Wireless Toolkit that is used for creating and compiling the Datagram Server project.
- 2) Click on '**New Project...**' button.

A new window pops up. Enter project name as '**DatagramClient**'. Enter MIDlet name as '**DatagramClient**'. Note that the Midlet name is the same as the name of the class in the source code, which extends the MIDlet class.

- 4) Another window pops up where one has to select a target platform. Select '**MIDP 1.0**' from the drop down list.
- 5) After clicking OK, the project is created and the Wireless Toolkit tells where to place the source code files. The path of the source code folder is displayed in the debug output window as explained before.

### **Creating and Compiling the DatagramClient source files**

- 1) Create a new text file called **DatagramClient.java** in the source folder of the project.
- 2) Paste contents **DatagramClient.java** into the source file.
- 3) Then click on the Build button in the Wireless Toolkit window. If the compilation is OK, it will say Build Complete in the window's debug output window, otherwise it will show the errors. Note: In the source code, use the System.out.println() statement to output debug information to this window.

### **Running your Client application on the Phone simulator**

- 1) After compiling the project successfully, click on the Run button in the Wireless Toolkit window.
- 2) A graphical window depicting a phone handset will appear with the name of the application highlighted on its screen.
- 3) To start the application, click on the right soft-key (marked with a dot) below the '**Launch**' command.

- 4) The phone simulator might ask if it is OK to run the network application. Select 'Yes' by clicking on the appropriate soft-key. The client is now up and running.
- 5) When the client executes on the phone simulator, one should see a text box with the caption 'Message'. Enter any message and press the right soft-key (corresponding to Send). If the client-server application is working properly, the screen of the server phone will display the message sent by the client and the client screen will now display a message sent by the server in response. The response message from the server is the original client message in reverse.
- 6) Try various features of the phone simulator including the different look-and feel options.

## **Week - 6 Authentication with a Web Server**

### **6.1 Write a sample program to show how to make a SOCKET Connection from j2me phone.**

This J2ME sample program shows how to how to make a SOCKET Connection from a J2ME Phone. Many a times there is a need to connect backend HTTP server from the J2ME application. shows how to make a SOCKET connection from the phone to port 80.

### **6.2 Login to HTTP Server from a J2ME Program**

This J2ME sample program shows how to display a simple LOGIN SCREEN on the J2ME phone and how to authenticate to a HTTP server.

Many J2ME applications for security reasons require the authentication of the user. This free J2ME sample program, shows how a J2ME application can do authentication to the backend server.

Note: Use Apache Tomcat Server as Web Server and Mysql as Database Server.

## **Week - 7 & 8 Web Application using J2ME**

The following should be carried out with respect to the given set of application domains: (Assume that the Server is connected to the well-maintained database of the given domain. Mobile Client is to be connected to the Server and fetch the required data value/information)

- Students Marks Enquiry
- Town/City Movie Enquiry
- Railway/Road/Air (For example PNR) Enquiry/Status
- Sports (say, Cricket) Update
- Town/City Weather Update
- Public Exams (say Intermediate or SSC)/ Entrance (Say EAMCET) Results Enquiry
- Divide Students into Batches and suggest them to design database according to their domains and render information according to their requests.

## **Cryptography & Network Security Lab**

1. Write a program that contains a string (char pointer) with a value 'Hello world' and the program should XOR each character in this string with 0 and displays the result.
2. Write a program that contains a string (char pointer) with a value 'Hello

world' and the program should AND or and XOR each character in this string with 127 and display the result.

3. Find out the corresponding Caesar cipher of a plaintext. And then find the original text from the cipher text.
4. Write a program to implement the DES algorithm to perform data encryption.
5. Write a program to implement the Blowfish algorithm.
6. Write the RC4 logic to encrypt the text "Hello world" using Blowfish.
7. Implement RSA algorithm to encrypt the given text.
8. Implement the Diffie-Hellman Key Exchange mechanism .
9. Calculate the message digest of a text using the SHA-1 algorithm.



## Department EEE Lab Experiments

### Electrical Machines Lab-I

**The following experiments are required to be conducted compulsory experiments**

1. Magnetization characteristics of DC shunt generator.
2. Load test on DC shunt generator.
3. Load test on DC series generator.
4. Load test on DC compound generator.
5. Hopkinson's test on DC shunt machines.
6. Fields test on DC series machines.
7. Swinburne's test and speed control of DC shunt motor..
8. Brake test on DC compound motor.

**In addition to the above eight Experiments, at least any two of the experiments from the following list are required to be conducted:**

9. Brake test on DC shunt motor.
10. Retardation test on DC shunt motor.
11. Separation of losses in DC shunt motor.

### Analog Electronics Lab

**PART A: (Only for Viva-voce Examination)**

**Electronic Workshop Practice (In 3 Lab Sessions):**

4. Identification, Specifications, Testing of R, L, C Components (Color Codes), Potentiometers, Switches (SPDT, DPDT, and DIP), Coils, Gang Condensers, Relays, Bread Boards, PCB's
5. Identification, Specifications and Testing of Active Devices, Diodes, BJT's, Low power JFET's, MOSFET's, Power Transistors, LED's, LCD's, SCR, UJT.
6. Study and operation of
  - i) Multimeters (Analog and Digital)
  - ii) Function Generator
  - iii) Regulated Power Supplies
  - iv) CRO.

**PART B: (For Laboratory Examination – Minimum of 10 experiments)**

29. Forward & Reverse Bias Characteristics of PN Junction Diode.
30. Zener diode characteristics and Zener as voltage Regulator.
31. Half Wave Rectifier with & without filters.
32. Full Wave Rectifier with & without filters.
33. Input & Output Characteristics of Transistor in CB Configuration and h-parameter calculations.
34. Input & Output Characteristics of Transistor in CE Configuration and h-parameter calculations.
35. FET characteristics.
36. Design of Self-bias circuit.
37. Frequency Response of CC Amplifier.
38. Frequency Response of CE Amplifier.
39. Frequency Response of Common Source FET amplifier .
40. SCR characteristics.

## 41. UJT Characteristics

### **PART C: Equipment required for Laboratories:**

- |     |                                   |   |
|-----|-----------------------------------|---|
| 10. | Regulated Power supplies (RPS)    | -0-30 V   |
| 11. | CRO's                             | -0-20 MHz.  |
| 12. | Function Generators               | -0-1 MHz.   |
| 13. | Multimeters                       |   |
| 14. | Decade Resistance Boxes/Rheostats |   |
| 15. | Decade Capacitance Boxes          |   |
| 16. | Ammeters (Analog or Digital)      | -0-20 $\mu$ A, 0-50 $\mu$ A, 0-100 $\mu$ A,<br>0-200 $\mu$ A, 0-10 mA.  |
| 17. | Voltmeters (Analog or Digital)    | -0-50V, 0-100V, 0-250V  |
| 18. | Electronic Components             | -Resistors, Capacitors,<br>BJTs,<br>LCDs, SCRs, UJTs, FETs,<br>LEDs, MOSFETs,<br>Diodes- Ge& Si type, Transistors – NPN,<br>PNP type) |

### **Electrical Circuits Lab**

#### List of Experiments

1. Verification of Thevenin's, and Norton's Theorems
2. Verification of Superposition and Maximum Power Transfer Theorems
3. Verification of RMS value of complex wave
4. Verification of Compensation Theorem
5. Verification of Reciprocity , Millmann's Theorems
6. Locus Diagrams of RL and RC Series Circuits
7. Series and Parallel Resonance
8. Determination of Self, Mutual Inductances and Coefficient of coupling
9. Determination of Z and Y Parameters
10. Determination of Transmission line and hybrid parameters
11. Measurement of Active Power for Star and Delta connected balanced loads
12. Measurement of Reactive Power for Star and Delta connected balanced loads
13. Measurement of 3-phase Power by two - Wattmeter Method for unbalanced loads

## Digital Logic Design Lab

### List of Experiments :

#### PART – A

1. Design and realization of Not Gate
2. Design and realization of AND Gate
3. Design and realization of OR Gate
4. Design and realization of NAND Gate
5. Design and realization of NOR Gate
6. Design of Half Adder and Full Adder
7. Design of Half Subtractor and Full Subtractor

#### PART – B

8. Introduction to VHDL Programming
9. XILINX ISE QUICK Start Tutorial
10. Design and Simulation of Combinational Logic Circuits Using VHDL Realization of Logic GATES
11. Half adder and Full adder circuits
12. Magnitude comparator
13. Encoder & Decoder
14. Binary to Gray and Gray to Binary converter
15. Parity Checker
16. Design and Simulation of sequential logic circuits using VHDL D and T Flip-Flops
17. SR and JK Flip-Flops

## Electrical Machines Lab-II

**The following experiments are required to be conducted as compulsory experiments:**

1. O.C. & S.C. Tests on Single phase Transformer
2. Sumpner's test on a pair of single phase transformers
3. Break test on three-phase Induction Motor.
4. No-load & Blocked rotor tests on three - phase Induction motor
5. Regulation of a three - phase alternator by synchronous impedance & m.m.f. methods
6. **V** and **Inverted V** curves of a three - phase synchronous motor.
7. Equivalent Circuit of a single phase induction motor
8. Determination of **X<sub>d</sub>** and **X<sub>q</sub>** of a salient pole synchronous machine

**In addition to the above eight experiments, atleast any two of the following experiments are required to be conducted from the following list:**

1. Parallel operation of Single phase Transformers

2. Separation of core losses of a single phase transformer
3. Scott connection of transformers
4. Regulation of three-phase alternator by Z.P.F. and A.S.A methods
5. Efficiency of a three-phase alternator
6. Heat run test on a bank of 3 Nos. of single phase Delta connected transformers
7. Measurement of sequence impedance of a three-phase alternator.

### Control Systems Lab

#### List of Experiments

1. Time response of Second order system
2. Characteristics of Synchronos.
3. Programmable logic controller - Study and verification of truth tables of logic gates, simple Boolean expression and application of speed control of motor.
4. Effect of feedback on DC servo motor
5. Transfer function of DC motor
6. Effect of P, PD, PI, PID Controller on a second order systems
7. Lag and lead compensation— Magnitude and phase plot
8. Transfer function of DC generator
9. Temperature controller using PID
10. Characteristics of magnetic amplifiers
11. Characteristics of AC servo motor

### Power System Simulation Lab

#### List of Experiments

1. Develop Program for YBUS formation.
2. Develop Program for G-S Load Flow Analysis.
3. Develop Program for N-R Load Flow Analysis.
4. Develop Program for FDLF Analysis.
5. Develop Program for Short Circuit Analysis.
6. Develop Program for Transient Stability Analysis for Single Machine connected to Infinite Bus by Point by Point Method.
7. Develop Program for Generation System Reliability Analysis.
8. Develop Program for Distribution System Reliability Analysis.
9. Develop Simulation of RLC Circuit
10. Develop Simulation of Single Phase Full Converter with RLE Load
11. Develop Program model for Closed Loop Speed Control of Separately Excited D.C Motor.
12. Develop Program model for Sinusoidal Pulse Width Modulation.

### Power Electronics Lab

#### Any Ten of the Experiments in Power Electronics Lab

1. Study of Characteristics of SCR, MOSFET & IGBT.

2. Gate firing circuits for SCR's.
3. Single Phase AC Voltage Controller with R and RL Loads.
4. Single Phase fully controlled bridge converter with R and RL loads.
5. Forced Commutation circuits (Class A, Class B, Class C, Class D and Class E).
6. DC Jones chopper with R and RL Loads.
7. Single Phase Parallel, inverter with R and RL loads.
8. Single Phase Cyclo-converter with R and RL loads.
9. Single Phase half controlled converter with R load.
10. Three Phase half controlled bridge converter with R-load.
11. Single Phase series inverter with R and RL loads.
12. Single Phase Bridge converter with R and RL loads.
13. Single Phase dual converter with RL loads.
14. Operation of MOSFET based chopper.



## Measurements and Instrumentation Lab

The following experiments are required to be conducted as compulsory experiments:

1. Calibration and Testing of single phase energy Meter
2. Calibration of dynamometer power factor meter
3. Crompton D.C. Potentiometer – Calibration of PMMC ammeter and PMMC voltmeter
4. Kelvin's double Bridge – Measurement of resistance – Determination of Tolerance.
5. Dielectric oil testing using H.T. testing Kit
6. Schering bridge & Anderson bridge.
7. Measurement of 3-phase reactive power with single-phase wattmeter.
8. Measurement of parameters of a choke coil using 3 voltmeter and 3 ammeter methods.

In addition to the above eight experiments, at-least any two of the experiments from the following list are required to be conducted:

9. Calibration LPF wattmeter – by Phantom testing
10. Measurement of 3 phase power with single watt meter and 2 No's of C.T.
11. C.T. testing using mutual Inductor – Measurement of % ratio error and phase angle of given C.T. by Null method.
12. P.T. testing by comparison – V.G. as Null detector – Measurement of % ratio error and phase angle of the given P.T.
13. LVDT and capacitance pickup – characteristics and Calibration
14. Resistance strain gauge – strain measurements and Calibration
15. Transformer turns ratio measurement using a.c. bridge
16. Measurement of % ratio error and phase angle of given C.T. by comparison.

## Power System Lab

The following experiments are required to be conducted as compulsory experiments:

### Part - A

1. Characteristics of IDMT Over Current Relay.
2. Differential protection of 1- $\Phi$  transformer.
3. Characteristics of Micro Processor based Over Voltage/Under Voltage relay.
4. Testing of CT, PT's and Insulator strings.
5. Finding the sequence impedances of 3- $\Phi$  synchronous machine.
6. Finding the sequence impedances of 3- $\Phi$  Transformer. In addition to the above six experiments, at least any four of the experiments from the following list are required to be conducted.

### Part - B

1. Formation of YBUS.
2. Load Flow Analysis using Gauss Seidal (GS) Method.

3. Load Flow Analysis using Fast Decoupled (FD) Method.
4. Formation of ZBUS.
5. LG, LL and 3- $\Phi$  fault analysis of 3- $\Phi$  synchronous machine.
6. Power circle diagrams of a 3- $\Phi$  transmission line model.
7. ABCD constants and Regulation of a 3- $\Phi$  transmission line model.
8. Transient Stability Analysis for Single Machine connected to Infinite Bus by Point by Point method.

### Microprocessors & Microcontrollers Lab

#### **List of Experiments:**

- 1 Programs for 16 bit arithmetic operations for 8086 (using Various Addressing Modes).
- 2 Program for sorting an array for 8086.
- 3 Program for searching for a number or character in a string for 8086.
- 4 Program for string manipulations for 8086.
- 5 Program for digital clock design using 8086.
- 6 Interfacing ADC and DAC to 8086.
- 7 Parallel communication between two microprocessors using 8255.
- 8 Serial communication between two microprocessor kits using 8251.
- 9 Interfacing to 8086 and programming to control stepper motor.
- 10 Programming using arithmetic, logical and bit manipulation instructions of 8051.
- 11 Program and verify Timer/ Counter in 8051.
- 12 Program and verify Interrupt handling in 8051
- 13 UART Operation in 8051.
- 14 Communication between 8051 kit and PC.
- 15 Interfacing LCD to 8051.
- 16 Interfacing Matrix/ Keyboard to 8051.
- 17 Data Transfer from Peripheral to Memory through DMA controller 8237 / 8257.

### Signals and Systems Lab

#### **List of Experiments:**

1. Basic Operations on Matrices.
2. Generation of Various Signals and Sequences (Periodic and Aperiodic), such as  
Unit Impulse, Unit Step, Square, Saw tooth, Triangular, Sinusoidal, Ramp, Sinc.
3. Operations on Signals and Sequences such as Addition, Multiplication, Scaling, Shifting, Folding, Computation of Energy and Average Power.
4. Finding the Even and Odd parts of Signal/Sequence and Real and Imaginary parts of Signal.
5. Convolution between Signals and sequences.
6. Auto Correlation and Cross Correlation between Signals and Sequences.
7. Verification of Linearity and Time Invariance Properties of a given Continuous / Discrete System.
8. Computation of Unit sample, Unit step and Sinusoidal responses of the given LTI system and verifying its physical realizability and stability properties.
9. Gibbs Phenomenon
10. Finding the Fourier Transform of a given signal and plotting its magnitude and phase spectrum.

11. Waveform Synthesis using Laplace Transform.
12. Locating the Zeros and Poles and plotting the Pole-Zero maps in S-plane and ZPlane for the given transfer function.
13. Generation of Gaussian noise ( Real and Complex), Computation of its mean, M.S.Value and its Skew, Kurtosis, and PSD, Probability Distribution Function.
14. Sampling Theorem Verification.
15. Removal of noise by Autocorrelation / Cross correlation.
16. Extraction of Periodic Signal masked by noise using Correlation.
17. Verification of Weiner-Khinchine Relations.
18. Checking a Random Process for Stationarity in Wide sense.

### **Electrical & Electronics Design Lab**

1. Basic concepts on measurements;
2. Noise in electronic systems;
3. Sensors and signal conditioning circuits;
4. Introduction to electronic instrumentation and PC based data acquisition;
5. Electronic system design, Analog system design,
6. Interfacing of analog and digital systems,
7. Embedded systems, Electronic system design employing microcontrollers,
8. CPLDs, and FPGAs, PCB design and layout;
9. System assembly considerations.
10. Group projects involving electronic hardware (Analog, Digital, mixed signal) leading to implementation of an application.

**SURVEYING LAB**

**LIST OF EXERCISES:**

1. Survey of an area by chain survey (closed traverse) & Plotting Chaining across obstacles
2. Determination of distance between two inaccessible points with compass. Surveying of a given area by prismatic compass (closed traverse) and plotting after adjustment.
3. Radiation method, intersection methods by plane Table survey. Two point and three point problems in plane table survey
4. Traversing by plane table survey. Fly leveling (differential leveling)
5. An exercise of L.S and C.S and plotting. Two exercises on contouring.
6. Study of theodolite in detail - practice for measurement of horizontal and vertical angles. Measurement of horizontal angles by method of repetition and reiteration.
7. Trigonometric Leveling - Heights and distance problem (Two Exercises). Heights and distance using Principles of tachometric surveying (Two Exercises)
8. Curve setting - different methods. (Two Exercises). Setting out works for buildings & pipe lines.
9. Determine of area using total station. Traversing using total station.
10. Contouring using total station. Determination of remote height using total station.
11. State-out using total station. Distance, gradient, Diff, height between tow inaccessible points using total stations

**STRENGTH OF MATERIALS LAB**

**List of Experiments**

1. Tension test
2. Bending test on (Steel / Wood) Cantilever beam.
3. Bending test on simple support beam.
4. Torsion test
5. Hardness test
6. Spring test
7. Compression test on wood or concrete
8. Impact test
9. Shear test
10. Verification of Maxwell's Reciprocal theorem on beams.
11. Use of electrical resistance strain gauges
12. Continuous beam – deflection test.

**HYDRAULICS & HYDRAULIC MACHINERY LAB**

**List of Experiments**

1. Impact of jet on vanes
2. Study of Hydraulic jump in Open Channel.
3. Performance test on Pelton wheel turbine.
4. Performance test on Francis turbine.
5. Performance test on Kaplan turbine.
6. Performance characteristics of a single stage centrifugal pump.
7. Performance characteristics of a multi-stage centrifugal pump.

8. Performance characteristics of a reciprocating pump.
9. Study of Flow in Open Channel (Applying Chezy's and Manning's equations).
10. Determination of Coefficient of discharge for the given Weir (Sharp crested /Broad crested / Cippoletti weir).

### COMPUTER AIDED CIVIL ENGINEERING DRAWING

#### List of Experiments

1. Introduction to computer aided drafting
2. Software for CAD - Introduction to different software's
3. Practice exercises on CAD software
4. Drawing of plans of buildings using software
  - a. single storied buildings
  - b. multi storied buildings
5. Developing sections and elevations for
  - a. single storied buildings
  - b. multi storied buildings
6. Detailing of building components like Doors, Windows, Roof Trusses etc. using CAD software's
7. Exercises on development of working of buildings

### ENGINEERING GEOLOGY LAB

#### List of Experiments

1. Study of physical properties and identification of minerals referred under theory.
2. Megascopic and microscopic description and identification of rocks referred under theory.
3. Megascopic and microscopic identification of rocks & minerals.
4. Interpretation and drawing of sections for geological maps showing tilted beds, faults, uniformities etc.
5. Simple Structural Geology problems.

### ELECTRICAL & ELECTRONICS LAB

#### PART – A

1. Verification of Superposition and Reciprocity theorems.
2. Verification of Maximum power transfer theorem.
3. Verification of Thevenin's and Norton's theorems.
4. Magnetization characteristics of D.C. Shunt generator.
5. Swinburne's Test on DC shunt machine.
6. Brake test on DC shunt motor.
7. OC and SC tests on Single-phase transformer.
8. Brake test on 3-phase Induction motor.

#### PART - B

1. PN Junction Diode Characteristics (Forward bias, Reverse bias).
2. Zener Diode Characteristics.
3. Transistor CE Characteristics (Input and Output).
4. Rectifier without Filters (Full wave & Half wave).
5. Rectifier with Filters (Full wave & Half wave).



## HIGHWAY ENGINEERING AND CONCRETE TECHNOLOGY LAB

### LIST OF EXPERIMENTS

#### I. Test on Cement

1. Normal Consistency and fineness of cement.
2. Initial setting time and final setting time of cement.
3. Specific gravity of cement
4. Soundness of cement
5. Compressive strength of cement
6. Workability test on concrete by compaction factor, slump and Vee-bee.

#### II. TEST ON AGGREGATES (COARSE AND FINE)

1. Specific gravity (Pycnometer and wire basket), water absorption
2. Shape (Flakiness and elongation indices)
3. Impact and abrasion value tests
4. Crushing resistance and durability tests
5. Sieve Analysis and gradation charts (Job mix formula using Rothfuch's charts)
6. Bulking of sand, Bulk and compact densities of fine and coarse aggregates

#### III. TEST ON FRESH CONCRETE

1. Slump test
2. CF (compact factor stress)
3. Vee-bee Test
4. Flow Table Test

#### IV. TEST ON HARDENED CONCRETE

1. Compression test on cubes & Cylinders
2. Flexure test
3. Split Tension Test
4. Modulus of Elasticity

#### V. TESTS ON BITUMEN AND BITUMINOUS CONCRETE

1. Penetration, softening point and spot test
2. Ductility, Elastic recovery and viscosity
3. Flash and fire points and specific gravity
4. Marshall's Stability (sample preparation and testing for stability and flow values)

## GEOTECHNICAL ENGINEERING LAB

### LIST OF EXPERIMENTS

1. Atterberg's Limits (LL & PL)
2. Field density-core cutter and sand replacement method
3. Grain size analysis
4. Permeability of soil, constant and variable head test
5. Compaction test
6. CBR Test
7. Consolidation test
8. Unconfined compression test
9. Tri-axial Compression test
10. Direct shear test.
11. Vane shear test

## ENVIRONMENTAL ENGINEERING LAB

### LIST OF EXPERIMENTS

1. Determination of pH and Turbidity
2. Determination of Conductivity and Total dissolved solids (Organic and Inorganic)
3. Determination of Alkalinity/Acidity.
4. Determination of Chlorides.
5. Determination of iron.
6. Determination of Dissolved Oxygen.
7. Determination of Nitrates.
8. Determination of Optimum dose of coagulant
9. Determination of Chlorine demand
10. Determination of total Phosphorous.
11. Determination of B.O.D
12. Determination of C.O.D
13. Determination of Optimum coagulant dose.
14. Determination of Chlorine demand.
15. Presumptive coliform test.

## COMPUTER AIDED DESIGN LAB

### LIST OF EXPERIMENTS

1. Analysis & Design determinate structures using a software
2. Analysis & Design of fixed & continuous beams using a software
3. Footings, Columns, Beams, Slabs & all structural members to be drawn in AUTOCAD
4. Analysis & Design of Plane Frames
5. Analysis & Design of space frames subjected to DL & LL
6. Analysis & Design of residential building subjected to all loads (DL,LL,WL,EQL)
7. Analysis & Design of Roof Trusses
8. Design and detailing of built up steel beam
9. Developing a design programme for foundation using EXCEL Spread Sheet
10. Detailing of RCC beam and RCC slab
11. Detailing of Steel built up compression member

**I. METAL CASTING LAB:**

1. Pattern design and making – for one casting drawing
2. Sand properties testing – Exercise – for strengths, and permeability – 1
3. Moulding Melting and Casting – 1 Exercise

**II. WELDING LAB:**

1. ARC Welding Lap & Butt Joint – 2 Exercises
2. Spot Welding – 1 Exercise
3. TIG Welding – 1 Exercise
4. Plasma Welding and Brazing – 2 Exercises (Water Plasma Device)

**III MECHANICAL PRESS WORKING**

1. Blanking & Piercing operation and study of simple, compound and progressive press tool.
2. Hydraulic Press: Deep drawing and extrusion operation.
3. Bending and other operations

**IV. PROCESSING OF PLASTICS**

1. Injection Moulding
2. Blow Moulding

Machine Drawing Practice

**PART – A Machine Drawing Convention:**

Need for drawing conventions – introduction to IS conventions – Conventional representation of materials, common machine elements such as screws, nuts, bolts, keys, gears, webs, ribs. Methods of dimensioning, general rules for sizes and placement of dimension for holes, centers, curved and tapered features. Title boxes, their size, location and details – common abbreviations & their liberal usage. Types of Drawings – working drawings for machine parts.

**Drawing of Machine Element**

Simple Parts - Selection of Views, additional views for the following machine elements and parts with every drawing proportion. Popular forms of Screw threads, bolts, nuts, stud bolts, tap bolts, set screws. Keys, cotttered joints and knuckle joint. Rivetted joints for plates. Shaft coupling, spigot and socket pipe joint. Journal, pivot and collar and foot step bearings.

**PART – B ASSEMBLY DRAWINGS:**

Drawings of assembled views for the part drawings of the following using conventions and easy drawing proportions. Engine parts – stuffing boxes, cross heads, Eccentrics - connecting rod, piston assembly. Machine tool parts: Tail stock, Tool Post, Machine Vices – Screws Jacks – Plummer Block.

**VALVES:** Spring loaded safety valve, feed check valve and air cock.

**Note:** First angle projection to be adopted. The student should be able to provide working drawings of actual parts.

## Material Science & Mechanics of Solids Lab

### (A) METALLURGY LAB :

1. Preparation and study of the Micro Structure of pure metals like Iron, Cu and Al.
2. Preparation and study of the Microstructure of Mild steels, low carbon steels, high – C steels.
3. Study of the Micro Structures of Cast Irons.
4. Study of the Micro Structures of Non-Ferrous alloys.
5. Study of the Micro structures of Heat treated steels.
6. Hardenability of steels by Jominy End Quench Test.
7. To find out the hardness of various treated and untreated steels.

### (B) MECHANICS OF SOLIDS LAB :

1. Direct tension test
2. Torsion test
3. Hardness test
  - a) Brinells hardness test
  - b) Rockwell hardness test
4. Test on springs
5. Compression test on cube
6. Impact test
7. Punch shear test

## Fluid Mechanics & Hydraulic Machines Lab

1. Impact of jet on vanes
2. Performance test on Pelton wheel
3. Performance test on Francis turbine.
4. Performance test on Kaplan turbine.
5. Performance test on single stage centrifugal pump.
6. Performance test on multi-stage centrifugal pump.
7. Performance test on reciprocating pump.
8. Calibration of Venturimeter
9. Calibration of Orifice meter
10. Determination of friction factor for a given pipe line.
11. Determination of loss of head due to sudden contraction in a pipeline
12. Verification of Bernoulli's equation.

## Instrumentation & Control Systems Lab

### Instrumentation & Control Systems Experiments

1. Calibration of Pressure Gauges
2. Calibration of transducer for temperature measurement.
3. Study and calibration of LVDT transducer for displacement measurement.
4. Calibration of strain gauge for temperature measurement.
5. Calibration of thermocouple for temperature measurement.
6. Calibration of capacitive transducer for angular displacement.
7. Study and calibration of photo and magnetic speed pickups for the measurement of speed.
8. Calibration of resistance temperature detector for temperature measurement.
9. Study and calibration of a rotameter for flow measurement.

10. Study and use of a Seismic pickup for the measurement of vibration amplitude of an engine bed at various loads.
11. Study and calibration of Mcleod gauge for low pressure.
12. Time response of Second order system
13. Characteristics of Synchros
14. Effect of P, PD, PI, PID Controller on a second order systems
15. Lag and lead compensation— Magnitude and phase plot
16. Temperature controller using PID



## Thermal Engineering Lab

### PERFORM ANY 10 OUT OF THE 12 EXERCISES

1. I.C. Engines Valve / Port Timing Diagrams
2. I.C. Engines Performance Test for 4 Stroke SI engines
3. I.C. Engines Performance Test for 2 Stroke SI engines
4. I.C. Engines Morse, Retardation, Motoring Tests
5. I.C. Engine Heat Balance - CI/SI Engines
6. I.C. Engines Economical speed Test on a SI engine
7. I.C. Engines effect of A/F Ratio in a SI engine
8. Performance Test on Variable Compression Ratio Engine
9. IC engine Performance Test on a 4S CI Engine at constant speed
10. Volumetric efficiency of Air - Compressor Unit
11. Dis-assembly / Assembly of Engines
12. Study of Boilers
13. Wind tunnel testing.
14. Axial Flow Fan
15. Performance Test on blower

## Metrology & Machine Tools Lab

### Section - A:

1. Use of gear teeth vernier calipers for checking the chordal addendum and chordal height of the spur gear.
2. Machine tool alignment of test on the lathe.
3. Tool makers microscope and its application
4. Angle and taper measurements by bevel protractor and sine bars.
5. Use of spirit level and optical flats in finding the flatness of surface plate.
6. Thread measurement by 2-wire and 3-wire methods.

### Section - B:

1. Introduction of general purpose machine - Lathe, Drilling machine, Milling machine, Shaper.
2. Planning machine, slotting machine, Cylindrical Grinder, surface grinder and tool and cutter grinder.
3. Step turning and taper turning on lathe machine.
4. Thread cutting and knurling on -lathe machine.
5. Drilling and Tapping
6. Shaping and Planning
7. Slotting
8. Milling
9. Cylindrical Surface Grinding

Grinding of Tool angles.

## Kinematics & Dynamics Lab

### Experiments: (A Minimum of 10 experiments are to be conducted)

1. To determine the state of balance of machines for primary and secondary forces
1. To determine the frequency of torsional vibration of a given rod
2. Determine the effect of varying mass on the centre of sleeve in porter and proell governor
3. Find the motion of the follower if the given profile of the cam
4. The balance masses statically and dynamically for single rotating mass systems
5. Determine the critical speed of a given shaft for different n-conditions
6. For a simple pendulum determine time period and its natural frequency
7. For a compound pendulum determine time period and its natural frequency
8. Determine the effect of gyroscope for different motions
9. Determine time period, amplitude and frequency of un-damped free longitudinal vibration of single degree spring mass systems.
10. Determine the pressure distribution of lubricating oil at various load and speed of a Journal bearing.
11. Determine time period, amplitude and frequency of damped free longitudinal vibration of single
12. degree spring mass systems

## Heat Transfer Lab

1. Composite Slab Apparatus – Overall heat transfer co-efficient.
2. Heat transfer through lagged pipe.
3. Heat Transfer through a Concentric Sphere (Insulating Powder)
4. Thermal Conductivity of given metal rod.
5. Heat transfer in pin-fin
6. Experiment on Transient Heat Conduction (Unsteady State Heat Conduction)
7. Heat transfer in forced convection apparatus.
8. Heat transfer in natural convection
9. Parallel and counter flow heat exchanger.
10. Emissivity apparatus.
11. Stefan Boltzman Apparatus.
12. Critical Heat flux apparatus.
13. Study of heat pipe and its demonstration.
14. Film and Drop wise condensation apparatus

## CAD & CAM Lab

1. Drafting: Development of part drawings for various components in the form of orthographic and isometric. Representation of dimensioning and tolerances.
2. Part Modeling: Generation of various 3D Models through Protrusion, revolve, sweep. Creation of various features. Study of parent child relation. Feature based and Boolean based modeling and Assembly Modeling. Study of various standard Translators. Design of simple components.
3. Determination of deflection and stresses in 2D and 3D trusses and beams.
4. Determination of deflections, principal and Von-mises stresses in plane stress, plane strain and Axi-symmetric components.
5. Determination of stresses in 3D and shell structures (at least one example in each case)
6. Estimation of natural frequencies and mode shapes, Harmonic response of 2D

beam.

7. Study state heat transfer analysis of plane and axi-symmetric components.
8. Development of process sheets for various components based on Tooling and Machines.
9. Development of manufacturing defects and tool management systems.
10. Study of various post processors used in NC Machines.
11. Development of NC code for free form and sculptured surfaces using CAM software.
12. Machining of simple components on NC lathe and Mill by transferring NC Code / from CAM software.
13. Quality Control and inspection.

#### 15.4 Computing Facilities

Internet Bandwidth	Number and configuration of System	Internet Bandwidth : 800 Mbps No. of Computers : 1250 950
• Total number of system connected by LAN		300
• Total number of system connected by WAN		
• Major software packages available		No. of Legal System Software's : 15 No. of Application Software's : 31
• Special purpose facilities available		

#### 15.5 Innovation Cell

Yes

#### 15.6 Social Media Cell

YES

#### 15.7 Compliance of the National Academic Depository (NAD), applicable to PGCM/ PGDM Institutions and University Departments

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#### 15.8 List of facilities available

• Games and Sports Facilities	Yes
• Extra-Curricular Activities	Yes
• Soft Skill Development Facilities	Yes

#### 15.9 Teaching Learning Process

• Curricula and syllabus for each of the Programmes as approved by the University	Yes
• Academic Calendar of the University	Yes
• Academic Time Table with the name of the Faculty members handling the Course	Yes
• Teaching Load of each Faculty	Yes
• Internal Continuous Evaluation System and place	Yes
• Student's assessment of Faculty, System in place	Yes

#### 15.10 For each Post Graduate Courses give the following:

• Title of the Course	<b>M.Tech – Computer Science &amp; Engineering</b>
• Curricula and Syllabi	Yes
• Laboratory facilities exclu-	Yes

sive to the Post Graduate Course Laboratory Facility PG : 02

- Title of the Course **M.Tech – Computer Science**
- Curricula and Syllabi Yes
- Laboratory facilities exclusive to the Post Graduate Course Yes  
Laboratory Facility PG : 02

- Title of the Course **M.Tech – Embedded Systems**
- Curricula and Syllabi Yes
- Laboratory facilities exclusive to the Post Graduate Course Yes  
Laboratory Facility PG : 02

#### 15.11 Special Purpose

- Software, all design tools in case Yes
- Academic Calendar and frame work Yes

#### 16 Enrollment of students in the last 3 years

Total Students in the last 03 Years

#### 17 List of Research Projects/ Consultancy Works

##### 17.1 Number of Projects carried out, funding agency, Grant received

Name of Consultancy project	Consulting/Sponsoring Agency	Revenue generated (amount in rupees)
IOT Based Error Detection And Automatic Correction For CNC Component Testing	VDL Auto Products	4,50,000
Virtual Machine Training, Machine Handling And Virtual Component Testing	JERS Industries	6,00,000
Website and App Development "Aarogya"	Sathya Diagnosis Center, Sathyamangalam	1,25,000
Software development	Void main Technologies Pvt. Ltd., Hyderabad	95,000
Web portal Design & Development	Manac InfoTech Pvt. Ltd.	80,000



Software & Hardware Design & Development	Wine Yard Technologies	1,10,000
Hardware Assembling	Techno System	1,30,000
FPGA BASED KEY LESS CODED HOME LOCK SYSTEM	SICET	20,000
HOME SECURITY SYSTEM USING RASPBERRY	SICET	25,000
FIRE FIGHTING ROBOT	SICET	17,000
AN IOT APPROACH FOR MOTION DETECTION USING RASPBERRY PI	SICET	23,000
INDUSTRIAL ARM	SICET	20,000

<b>Nature of the Project</b>	<b>Name of the funding Agency</b>	<b>Total grant Sanctioned</b>	<b>Amount received during the year</b>
Interdisciplinary Projects	VeEe Technologies	50000	50000
Industry sponsored Projects	VDL Auto Pvt. Ltd	100000	1,00,000
Projects sponsored by the University/ College	Self	75000	75000
MODROBS	AICTE-MODROBS	14,00,000	11,20,000
REFRESHER COURSE	AICTE-ISTE	3,00,000	2,93,000
SPICE	AICTE	1,00,000	1,00,000
IMPACT LECTURE	AICTE-MOE	12,000	12,000

**17.2 Publications (if any) out of research in last three years out of masters projects**

List of Patents published			
Patent Details	Patent status	Patent Number	Date
PATENT ON AN IOT BASED SMART POWER SPRAYER FOR AGRICULTURAL APPLICATIONS	Published	202141003191	29.01.2021
A COMMON FIXED POINT THEOREM FOR COMPATIBLE MAPPING OF TYPE (C)	Published	20214006283	19/02/2021
A COMMON FIXED POINT THEOREM FOR COMPATIBLE MAPPING OF TYPE (C)	Published	202141006283	19/02/2021
A common Fixed Point Theorem For Compatible Mappings Of Type (c)	Published	202141006283	19/02/2021
MACHINE PARAMETERS OF NATURAL FIBER PARTICLE REINFORCED POLYMER COMPOSITE MATERIAL USING ANOVA	Published	202141012146A	26.03.2021
MAGNESIUM CHLORIDE HEXAHYDRATE AS PHASE CHANGE THERMAL ENERGY STORAGE MATERIAL IN SOLAR PARABOLIC	Published	202141010837A	26/03/2021
INDIAN PATENT-TITLE OF INVENTION: RECHARGEABLE WIRELESS SENSOR NETWORKS WITH MULTIPLE SINKS	Published	202141015900A	16.04.2021
AN ARTIFICIAL INTELLIGENCE BASED HEART RATE MONITORING SYSTEM FOR SPORTS TRAINING	Granted	2021101272	21/04/2021
AN AUTOMATED FRAMEWORK FOR SOFTWARE REDESIGN OF COMPONENT BASED SERIAL CODE TO PARALLEL CODE FOR GPU PROCESSOR	Published	202141005860	19/02/2021
DESIGN OF CRYPTO-BASED PSEUDO RANDOM NUMBER GENERATOR	Published	202141010069	19/03/2021
A NEUROMORPHIC SYSTEM FOR INTEGRATING A MODULAR PIECES OF AN ASSEMBLY	Filed	202121019690	29-04-2021
RECHARGEABLE WIRELESS SENSOR NETWORKS WITH MULTIPLE SINKS	Published	202141015900A	16/04/2021
CUINSE TERNARY MATERIAL THIN FILM PHYSICAL PROPERTIES UNDER THE EFFECT OF	Published	202141019655A	07/05/2021
A NOVEL METHOD AND SYSTEM FOR DESIGNING VLSI CIRCUITRY TO OPTIMIZE THE INTEGRATED CIRCUIT OPERATION.	Published	202141020084	7/05/2021
“A NEUROMORPHIC SYSTEM FOR INTEGRATING A MODULAR PIECES OF AN ASSEMBLY”	Published	202121019690A	29/04/2021
Low Power VLSI Implementation of Multi-Layer Neural Networks	Published	202141031941	23/07/2021
ADVANCED MICROCONTROLLER BUS ARCHITECTURE(AMBA)s VLSI DESIGN FOR THE AHB2APB BRIDGE	Published	202141033469A	06/08/2021
ADVANCED MICROCONTROLLER BUS	Published	202141033469A	06/08/2021

ARCHITECTURE (AMBA)'S VLSI DESIGN FOR THE AHB2APB BRIDGE			
Low power VLSI Implementation of Multi-layer Neural Networks	Published	202141031941A	23/07/2021
Low Power VLSI Implementation of Multi-layer Neural Networks	Published	202141031941A	23/07/2021
BWO STRATEGY FOR POWER QUALITY IMPROVEMENT IN HRES GRID - CONNECTED DPFC SYSTEM	Published	202141033891A	13/08/2021
BWO Strategy for Power Quality Improvement in HRES Grid-Connected DPFC System	Published	202141033891A	13/08/2021
BWO Strategy for Power Quality Improvement in HRES Grid-Connected DPFC System	Published	202141033891A	13/08/2021
Structural and Fluid Dynamics Boundary Value Limitations Approximated Solution in Engineering	Published	202141035934A	13/08/2021
1) Implementation of Real Time Multi Object Detection (MOT) by speed K210 AI Processor	Published	202141042668	21/09/2021
A System and A Method for Real time Dynamic Traffic Management by the utilization of GPS and IOT	Published	202141061430A	4/1/2022
A SMART AND EFFICIENT WASTE MANAGEMENT SYSTEM TO SAFELY DISPOSE THE WASTES TO AVOID PANDEMICS SUCH AS COVID 19	Published	2020102818	2020
Rail Track Area Cleaning Robot for Railway Station	Published	202041039071	2020
IOT-DRONE: Through IOT Auto Security Smart CAM Drone and Station	Published	315894-001	2019
IPM-System: IOT Based Patient Monitoring System using BEAGLEBONE BLACK Wireless	Published	201941037638	2019
An Energy Incentives Resource Allocation Scheme for a Cooperative Communication System	Published	201941019144	2019
IDCC – Device: Intelligent Detect and Control Cybercrime Device	Published	201941020775	2019
Vision Based Safety Seat Belt Monitoring System	Filed	201941003139A	2019
APPARATUS AND METHOD FOR PARAMETERIZING AND UPDATING AN ADAS AND REGULATION THEREOF	Published	201841003300	2019
IDUC-Door Device: Intelligent Device for Unlocking Car Door	Filed	201941054689	2019
AA-Predictive: AIRCRAFT ACCIDENTS PREDICTIVE USING MACHINE LEARNING	Filed	202041000353	2020
High Speed Train Speed Predictive Control using ANFIS Modeling and Machine Learning, Deep Learning	Published	20194105128	2019

### LIST OF RESEARCH ARTICLE PUBLICATIONS

Title of the paper	Name of the author	Title of the journal	Year of publication
An Evaluation of Effective Intrusion DoS Detection and Prevention System Based on SVM Classifier for WSN	Prabakaran K, Kumaratharan N, Suresh Gand Epsiba P	IOP Conf. Series: Materials Science and Engineering	925 (2020)
Evaluating Packet Detection Attack for Improving the Delivery Ratio Using Cyclic Frame Redundancy Bit Analysis in Manet	Raja Krishnamoorthi, G.Suresh, P. Epsiba, N.C.Sendhilkumar	International Journal of Grid and Distributed Computing	Vol. 13, No. 2, (2020)
A Comprehensive study on optimal energy efficient routing protocols for life time conservation of wireless sensor networks	Prabakaran.K, Suresh.G, Kumaratharan.N, Sendhilkumar.N.C	International Journal of Psychosocial Rehabilitation	Vol.24, Issue 8, 2020
Multi object and dynamic query based CBIR system using DCT incorporated with HOG and HTF	G.Suresh	International Journal of Innovative Technology and Exploring Engineering	2019
A novel discrete CURVELET transform and modified WHOOG for video surveillance services	G.Suresh	Concurrency Computation	2020
A comprehensive study on optimal energy efficient routing protocols for life time conservation of wireless sensor networks	G.Suresh	International Journal of Psychosocial Rehabilitation	2020
Edge detection-based depth analysis using TD-WHOG scheme	G.Suresh	Advances in Intelligent Systems and Computing	2020
Multi object and dynamic query based CBIR system using DCT incorporated with HOG and HTF	Sendhilkumar. N.C	International Journal of Innovative Technology and Exploring Engineering	2019
A comprehensive study on optimal energy efficient routing protocols for life time conservation of wireless sensor networks	Sendhilkumar. N.C	International Journal of Psychosocial Rehabilitation	2020
Analysis of Digital FIR Filter Using RLS and FT-RLS	Sendhilkumar. N.C	Advances in Intelligent Systems and Computing	2020
Automated brain tumor detection and segmentation from MRI images using adaptive connected component pixel segmentation	Subash. N	International journal of Innovative Technology and Exploring Engineering	2019

Email Image Spam Detection Using Fast Support Vector Machine and Fast Convergence Particle Swarm Optimization	Kumaresan. T	International Journal of Recent Technology and Engineering	2019
Counterfeit Currency Detection Based on Fluorescence in HSV Color Space	Kumaresan. T	International Journal of Recent Technology and Engineering	2019
Visual and textual features based email spam classification using S-Cuckoo search and hybrid kernel support vector machine	Kumaresan. T	Cluster Computing (Springer)	2019
Evaluation of Mining High Speed Data Streams with Various Advanced Decision Tree Algorithms	Kumaresan. T	Journal of Xi'an University of Architecture & Technology	2020
Analysing Quality of Neural Machine Translation Outputs Classification Using NB and SVM: Case Study English To Telugu Translation	Kumaresan. T	Journal of Xi'an University of Architecture & Technology	2020
Email Image Spam Detection Using Fast Support Vector Machine and Fast Convergence Particle Swarm Optimization	Subramanian. P	International Journal of Recent Technology and Engineering	2019
Counterfeit Currency Detection Based on Fluorescence in HSV Color Space	Subramanian. P	International Journal of Recent Technology and Engineering	2019
A Hybrid Grey Wolf and Crow Search Optimization Algorithm-based Optimal Cluster Head Selection Scheme for Wireless Sensor Networks	Subramanian. P	Wireless Personal Communication	2020
Elliptic Curve Cryptography based Secure Data Communication and Enhance Sensor Reliability in wireless Sensor Network	Subramanian. P	International Journal of Recent Technology and Engineering	2020
A Subspace similarly based data clustering by delaying triangulation	Subramanian. P	LNNS Springer Journals	2020
Performance Examination of OFDM Modulation Techniques in LTE 4G	Subramanian. P	International Journal of Engineering and Technology	2019
Computer Aided Lung Parenchyma Segmentation using Supervised Learning	Subramanian. P	LNNS Springer Journals	2019

Evaluation of Mining High Speed Data Streams with Various Advanced Decision Tree Algorithms	Gurunadha Gupta	Journal of Xi'an University of Architecture & Technology	2020
Analysing Quality of Neural Machine Translation Outputs Classification Using NB and SVM: Case Study English To Telugu Translation	Chandhar.K	Journal of Xi'an University of Architecture & Technology	2020
MMSE Partially Connected Hybrid Beam forming with MMSE in MIMO-OFDM Systems	Tamilarasan.N	Journal of telecommunications system and Management	2019
Automated Brain tumor detection and segmentation from MRI images using adaptive connected component pixel segmentation	Tamilarasan.N	International Journal of Innovative Technology and Exploring Engineering	2019
Hybrid Adaptive Channel Estimation Technique in Time and Frequency Domain for MIMO-OFDM Systems	Tamilarasan.N	International Journal of Recent Technology and Engineering	2019
Performance Improvement of MIMO MC- CDMA System Using Relay and ITBF	Tamilarasan.N	Indian Journal of Science and Technology	2019
Enhanced Particle Swarm Optimization for Scientific Workflow Scheduling in Cloud Environments	Sadhasivam.N	Journal of Computational and Theoretical Nanoscience	2019
	Veeramani.C		
	Mukunthan.S.R		
Multi object and dynamic query based CBIR system using DCT incorporated with HOG and HTF	Mukunthan.P	International Journal of Innovative Technology and Exploring Engineering	2019
A Hybrid Grey Wolf and Crow Search Optimization Algorithm-Based Optimal Cluster Head Selection Scheme for Wireless Sensor Networks	J.Martin Sahyaraj	Wireless Personal Communications	2020
Artificial neural network based prediction of responses on eglin steel using electrical discharge machining process	J.Martin Sahyaraj	Materials Today: Proceedings	2020
A Novel Design of Microstrip Antenna for Wireless Applications	J.Martin Sahyaraj	JSTAR Volume	2020
A Novel Design of Microstrip Antenna for Wireless Applications	J.Martin Sahyaraj	Journal of Science Technology and Research	2020



Evolution of Lifetime Performance of a LEACH Protocol for WSN	J.Martin Sa-hyaraj	Journal of Applied Science and Compu-tation	2019
SOFT COMPUTING BASED AUTON-OMOUS LOW RATE DDOS ATTACK DETECTION AND SECURITY FOR CLOUD COMPUTING	Mugunthan. S.R	Journal of Soft Com-puting Paradigm	2020
A Sensitive model for aggregation of Significant WhatsApp messages in Social Networking	Mugunthan. S.R	International Journal of Scientific & Tech-nology Research	2019
REVIEW ON IOT BASED SMART GRID ARCHITECTUREIMPLEMENTATIONS	Mugunthan. S.R	Journal of Electrical Engineering and Au-tomation	2019
Renewable energy scenario in Telangana	Veeramani.C	International Journal of Ambient Energy	2020
Enhanced Optimal Control Scheme for Attaining Improved Efficiency and Dynamic Response of WECS Using SVC	Veeramani.C	Lecture Notes in Elec-trical Engineering	2020
Renewable energy scenario in Telangana	Mallesham.P	International Journal of Ambient Energy	2020
Processing of functionally graded aluminum composite brake disc and machining parameters opti-mization	Madan.D	Materials Today: Pro-ceedings	2020
Ultrasonic machining and fretting wear of synthesized duplex brass metal matrix	Madan.D	Materials Today: Pro-ceedings	2020
Investigation of mechanical be-haviour on sponge/ridge gourd (Luffaaegyptiaca) natural fiber using epoxy and polyester resin	Madan.D	Materials Today: Pro-ceedings	2020
AWJM parametric investigation on hybrid composite produced through two step stir casting pro-cess	Madan.D	Materials Today: Pro-ceedings	2019
ENHANCEMENTS OF THERMAL PER-FORMANCE FACTOR IN TURBULENT FLOW THROUGH A TUBE FITTED WITH HELICAL SCREW LOUVERED ROD INSERTS	Madan.D	International Journal of Innovative Research in Advanced Engi-neering	2019

DESIGN OF TREE BASED MULTIPLIER (TBM) FOR HIGH SPEED APPLICATIONS	Madan.D	Journal of Emerging Technologies and Innovative Research	2019
LOW POWER ARCHITECTURE OF RADIX-8 SDC FFT FOR OFDM WIRELESS COMMUNICATION SYSTEMS	Joseph Prabhakar Williams H	Journal of Emerging Technologies and Innovative Research	2019
Counterfeit Currency Detection Based on Fluorescence in HSV Color Space	Subramanian.P	International Journal of Recent Technology and Engineering	2019
Evolution of Lifetime Performance of a LEACH Protocol for WSN	J.Martin Sahyraj	Journal of Applied Science and Computation	2019
DESIGN OF TREE BASED MULTIPLIER (TBM) FOR HIGH SPEED APPLICATIONS	Madan.D	Journal of Emerging Technologies and Innovative Research	2019
LOW POWER ARCHITECTURE OF RADIX-8 SDC FFT FOR OFDM WIRELESS COMMUNICATION SYSTEMS	Joseph Prabhakar Williams H	Journal of Emerging Technologies and Innovative Research	2019
Optimization of Abrasive Water Jet Machining Parameters for $\alpha$ - $\beta$ brass using Taguchi Methodology	Dr.S. Marichamy	FME Transactions	2019

### 17.3 Industry Linkage

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab
Training	Industrial Training	Learning Curve
Training & Placement	Industrial Training and Recruitment	TASK
Internship	Internship	BSNL
Internship	Internship	BSNL
Internship	Internship	DRDL
Internship	Internship	NSIC
Training	IPT	PANTECH PROED PVT LTD
In-plant Training	IPT	DRDL
In-plant Training	IPT	BSNL
In-plant Training	IPT	ORDANCE FACTORY
In-plant Training	IPT	RCI
In-plant Training	IPT	DRDL
In-plant Training	IPT	SAP
In-plant Training	IPT	BSNL
In-plant Training	IPT	DRDL

In-plant Training	IPT	NSIC
In-plant Training	IPT	DRDL

#### 17.4 MoUs with Industries (minimum 3)

1. UNISTRING TECH SOLUTIONS PVT LTD (UTS)
2. VERTILINK TECHNOLOGIES
3. VOID MAIN START PROGRAMMING
4. TASK&INFOSYS
5. SAP EDUCATION PARTNER
6. ROBOINSCI TECHNOLOGIES PVT LTD
7. PANTECH PROED PVT LTD
8. STORM INTERNATIONAL GROUP PTY LTD
9. WINEYARD TECHNOLOGIES
10. MIC TECH CENTER
11. IDEALABS
12. WILEY
13. VOIDMAIN TECHNOLOGIES
14. RAMTECH MANUFACTURING INDUSTRIES

#### 18. LoA and subsequent EoA till the current Academic Year

AICTE Extension of Approval (EOA) : 2021-22

AICTE F.No. South-Central/1-7003654204/2020/EOA/ Corrigendum-3

Date: 02-07-2021

#### 19 Accounted audited statement for the last three years

	2020-21	2019-20	2018-19
<b>Income</b>			
Income From Central Govt.	0	0	0
Income From State Govt.	0	0	0
Income From Student Fees	377,413,208	372,052,326	270,762,036
Income From Donations	0	0	0
Income From UGC	0	0	0
Income From Other Bodies/Sources	2515090	0	0
Total Income	379,928,298	372,052,326	270,762,036
<b>Expenditure</b>			
Salary Teaching Staff	200,029,990	202,676,668	149,903,740
Salary Non-teaching Staff	24,254,960	21,468,986	18,698,880
Library	2,466,480	1,456,480	698,360
Equipment	1,840,990	8,056,841	864,920
Building Maintenance	11,825,950	38,458,982	18,622,890
Other Expenditure	128,827,941	94,658,942	79,245,686
Total Expenditure	369,246,311	366,776,899	268,034,476

#### 20 Best Practices adopted, if any

## TWO INSTITUTIONAL BEST PRACTICES

### VIRTUAL CLASSROOM SUPPORTS AND VIDEO CONFERENCING USING ZOOM MEETING

#### **Objective:**

- ❑ The main objective is to increase the quality of Teaching – Learning Processing by incorporating ICT modes like, online classes and webinars.
- ❑ Zoom Meeting and Google Classroom that aims to simplify creating virtual classroom, interacting and distributing the materials in a paperless way.
- ❑ This practice is to share needy resources between teachers and students.

#### **The Context:**

- ❑ VirtualClassroom supports and video conferencing using zoom meeting impacts to increase the students learning.
- ❑ Teachers can schedule the task dynamically and have the option to attach files to the assignment which students can view, edit, or get an individual copy.
- ❑ Students can create their own study materials, Assignment reports and their innovations effectively.
- ❑ Teachers have the option to monitor the progress of each student
- ❑ It allow the students to review the classes, assignments and other tasks for detailed understanding.
- ❑ Time Management, Evaluation, Assessment Report generation and remedial process become very easy with these types of ICT modes.

#### **Evidence of Success:**

- ❑ The method helped all students for referring of syllabus, topics covered, important questions in the theory exam, previous year's question papers etc.
- ❑ Students can access it from their home or where ever and whenever they are free.
- ❑ Progress will be monitored timely.

#### **Challenging Issues:**

- ❑ Uploading resources are the main challenges
- ❑ Lack of adequate ICT Support
- ❑ Internet connectivity

www.easyclass.com/sections/232630/updates

**easyclass** Home Courses Groups MyFiles Inbox

SURESH GEORGE

**Digital Image Processing: III ECE**

Write an Update

Upload MyFiles Link Post

Epsiba P.  
QUIZZ CHAPTER 1

MCQ.doc  
30 KB

Thursday, March 26, 2020 15:16 Comment Like Report

Courses

**Upcoming**

No upcoming assignments, quizzes or events

- Class Wall
- Discussions
- Assignments
- Quizzes
- Gradebook
- Members
- Class Library

MATLAB 7.5.0 (R2007b)

File Edit Debug Distributed Desktop Window Help

Current Directory: D:\D Drive on 2.2.20\digital image processing\programs

Shortcuts: How to Add What's New

Current Directory

All Files

Name	Type
slidv_output	File folder
1.jpg	JPG File
banana.jpg	JPG File
boat.jpg	JPG File
dog.jpg	JPG File
example1.m	M-file
example10.m	M-file
example11.m	M-file
example12.m	M-file
example13.m	M-file
example14.m	M-file
example15.m	M-file
avamnlr16.m	M-file

Command History

```

>> clc
>> clear all
>> close all
>> clc
>> x=imread('1.jpg');
  
```

Image Tool 1 - (MATLAB Expression)

Pixel info: (265, 171) [255 223 38]

Warning: imread is obsolete and may be removed in the future. Calling IMTOOL instead.

Pixel Region (Image Tool 1)

R:155	G:158	G:147	G:	G:	G:
R: 86	B: 92	B:105	B:	B:	B:
R:140	R:152	R:152	R:	R:	R:
R:178	G:179	G:168	G:	G:	G:
R:106	B:108	B: 97	B:	B:	B:
R:231	R:229	R:241	R:	R:	R:
R:208	G:207	G:213	G:210	G:209	G:207
R:154	B:150	B:150	B:145	B:143	B:142
R:255	R:250	R:246	R:237	R:255	R:255
R:146	G:145	G:149	G:141	G:151	G:156
R:129	B:123	B:114	B:101	B:116	B:126
R:255	R:250	R:237	R:232	R:230	R:238
R: 88	G: 90	G: 88	G: 84	G: 72	G: 65

Pixel info: (223, 160) [255 88 95]

## **2. DIGITAL POSTER PRESENTATION BY STUDENTS**

### **Objective:**

- ❖ To cultivate out of box thinking, such as inter-disciplinary thinking, synthesizing knowledge of different disciplines and to cope with complexity among students.
- ❖ To ensure the knowledge acquiring among the students community.
- ❖ To make them understand the emerging concepts from known concepts.
- ❖ To stimulate in-depth learning of the concepts and understanding of various topics.

### **The Context:**

- ❖ This event is to provide an opportunity for the students to share their knowledge with the peer group members.
- ❖ The digital poster is prepared in advance with desired technical framework to share the knowledge on inter-disciplinary fields.
- ❖ This activity will lead to encourage the students to participate in symposia, technical presentation.

### **The Practice:**

- ❖ The schedule is prepared and given to the faculty members to prepare and present the acquired
- ❖ This presentation is recorded for review and template for the other participants.

### **Evidence of Success:**



- ❖ Outcome of this practice enables the students to
  - ✓ Participate in technical presentation
  - ✓ Conferences
  - ✓ Project Expo
  - ✓ Participate in skill oriented competitions

### Challenging Issues:


Resources are the main challenges for participation in the competition.

- ❖ For success of such practices require attitude and willingness without which it is difficult to motivate students which is the target audience of the Institute.
- ❖ Degree of motivation required in the minds of the students can result in success of such practices.


# ELECTRONICS

We are surrounded by devices that rely on electronics.  
We rely on electronics for communication, to light and heat our homes.


### EXAMPLES OF ELECTRONICS



**Mobile Phone**




**Calculator**



**Computer**


### CIRCUITS

In electronics, circuit diagrams are used to show how a circuit works.  
Symbols are used to represent the components.




**Circuit**

➔



**Circuit Diagram**


### PCB (PRINTED CIRCUIT BOARDS)



**Surface Mounting**  
On modern PCBs, the copper tracks and components are surface mounted onto the same side of the board. The components are miniaturized.

Circuits are made on a Printed Circuit Board (PCB). This is a board with thin copper tracks that link the components together.

Traditional PCBs have the components on one side and the soldering on the other.





# Satellite Mobile Communication



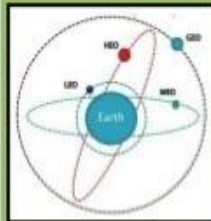
## Introduction:-

- A satellite is an object that orbits another large object like planet.
- A communication Satellite is a station in space that is used for telecommunication, radio and television signals.
- In Simplest form, a satellite communication can be thought of as microwave repeater in the sky.



## Types:-

- Geostationary or geosynchronous earth orbit (GEO).
- Quasi-Zenith Satellite.
- Low Earth Orbit (LEO).
- Medium Earth Orbit (MEO).
- Highly Elliptical Orbit (HEO).



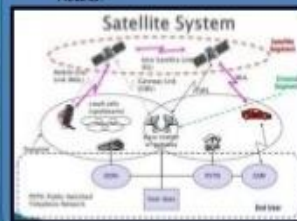
## Working:-

### Modulation:

1. Amplitude Shift Keying
2. Frequency Shift Keying
3. Phase Shift Keying

### Multiple Access Technique:

1. Frequency division Multiple Access (FDMA).
2. Time Division Multiple Access (TDMA).
3. Code Division Multiple Access (CDMA).
4. Wideband Code Division Multiple Access.



## Application:-

1. Weather Forecasting.
  2. Radio and TV Broadcasting.
  3. Military Application.
  4. Navigation Application.
  5. Connecting Remote Areas.
  6. Global Mobile communication.
- And Much More.....

## References:-

1. [Satellite Communication System](#)  
 2. [Satellite Communication System](#)  
 3. [Satellite Communication System](#)



**Department of Civil Engineering – Faculty List**

Sl. No.	Name of the Faculty	Date of Birth	AICTE Unique ID	Educational Qualification	Work Experience	Area of Specialization	Courses taught at UG / PG
1	Dr.P.S.SENTHIL KUMAR	27/05/1969	1-4494104250	Ph.D.	21	HYDRALOGY	UG
2	D. RAJENDRA BABU	21/10/1967	1-2185275274	M.TECH.	25	SE	UG
3	D.SWAPNA	4/6/1992	1-3544076311	M.TECH.	03	SE	UG
4	D.SHILPA	16/06/1992	1-3628862948	M.TECH.	03	SE	UG
5	K.RAHUL REDDY	28/01/1991	1-3767528524	M.TECH.	02	SE	UG
6	N.RAVINDER	13/06/1992	1-3767723527	M.TECH.	02	SE	UG
7	SK. AYESH	15/01/1993	1-3778600989	M.TECH.	02	SE	UG
8	B.SOUMYA REDDY	29/08/1992	1-7917906719	M.TECH.	01	SE	UG
9	S.VISHAWAJA	21/07/1993	1-4253731128	M.TECH.	05	TE	UG
10	M.SWATHI	20/07/1991	1-4253731218	M.TECH.	01	SE	UG
11	S.SAI PADMAJA	29/06/1991	1-4253730788	M.TECH.	02	SE	UG
12	M.JOSHNA	9/9/1992	1-4253730908	M.TECH.	02	SE	UG

13	M.SUKRUTHI	15/01/1993	1-7918021505	M.TECH.	03	SE	UG
14	L.KRISHNA	8/8/1994	1-4253730818	M.TECH.	01	SE	UG
15	MD.ASRA JABEEN	23/02/1991	1-4494104150	M.TECH.	04	SE	UG
16	MEGHAVATH NARA-SIMHA	24/05/1991	1-4294114120	M.TECH.	01	SE	UG
17	JETTI KONDAIAH	10/6/1991	1-4253731248	M.TECH.	03	SE	UG
18	BONAGIRI LALITHA	25/07/1993	1-7357249267	M.TECH.	01	SE	UG
19	SHAIK RAHIMAN	6/2/1995	1-7550221376	M.TECH.	01	SE	UG
20	REVATHI SANDHA	16/12/1993	1-4253730778	M.TECH.	01	SE	UG

## Department of ECE – Faculty List

S.No.	Name	PANNo.	Qualification	Area of Specialization	Designation	Date of Joining	Date on which Designated as Professor/Associate Professor	Currently Associated (Y/N)	Nature of Association (Regular/Contract/Adjuvant)	If contractual mention Fulltime or Parttime	Date of Leaving (In case Currently Associated is "No")
1	Dr. G. SURESH	BGMPS6215G	PHD	Image & Video Compression	Professor	03-Jul-2017	03-Jul-2017	Yes	Regular	--	--
2	Dr. N C SENDHILKUMAR	BTYPS3410G	PHD	Communication Engineering	Professor	05-May-2016	05-May-2016	Yes	Regular	--	--
3	Dr. P MUKUNTHAN	AKIPM2003P	PHD	Electronics & Communication Engineering	Professor	05-May-2016	05-May-2016	Yes	Regular	--	--
4	Dr. H JOSEPH P WILLIAMS	AAOPW9009R	PHD	I C E	Professor	05-May-2016	05-May-2016	Yes	Regular	--	--
5	Dr. N TAMILARASAN	AKBPT5564D	PHD	Communication Engineering	Professor	01-Jun-2018	01-Jun-2018	Yes	Regular	--	--
6	Dr. N SUBASH	DULPS2335N	PHD	Electronics & Communication Engineering	Professor	05-Jun-2017	05-Jun-2017	Yes	Regular	--	--
7	Dr. MARTIN SAHAYARAJ	AVJPM0113G	PHD	Electronics & Communication Engineering	Professor	01-Aug-2017	01-Jun-2018	Yes	Regular	--	--
8	Dr. P. RAMESH	BMMPR3700H	PHD	Embedded Systems	Associate Professor	01-Jun-2019	01-Jun-2019	Yes	Regular	--	--

9	Dr. P.EPSIBA	ABHPE9332M	PHD	Image & Video Compression	Associate Professor	01-Jun-2019	01-Jun-2019	Yes	Regular	--	--
10	Dr. K. PRABAKARAN	AQAPP6395F	PHD	I C E	Associate Professor	01-Jul-2019	01-Jul-2019	Yes	Regular	--	--
11	K ASHOK BABU	AUVPK0693C	M.E/M.TECH	Digital Electronics & Communication Systems	Associate Professor	25-Nov-2002	01-Jun-2009	Yes	Regular	--	--
12	SURESH H B	BEVPB5220D	M.E/M.TECH	Digital Electronics & Communication Systems	Associate Professor	07-Aug-2003	01-Jun-2011	Yes	Regular	--	--
13	K RAM MOHAN RAO	AXKPK7063L	M.E/M.TECH	Digital Electronics & Communication Systems	Associate Professor	12-Dec-2005	01-Jun-2013	Yes	Regular	--	--
14	B DEEPIKA RATHOD	AWKPB6583D	M.E/M.TECH	Digital Electronics & Communication Systems	Associate Professor	09-Jun-2008	01-Jun-2013	Yes	Regular	--	--
15	B NEERAJA	BDIPB4146A	M.E/M.TECH	Communication Engineering	Associate Professor	01-Dec-2010	02-Jun-2014	Yes	Regular	--	--
16	B SANDHYA	ATQPB6530R	M.E/M.TECH	Embedded Systems	Associate Professor	25-Jun-2011	02-Jun-2014	Yes	Regular	--	--
17	V PRATHYUSHA	AIRPV6152F	M.E/M.TECH	Embedded Systems	Associate Professor	01-Jun-2012	02-Jun-2014	Yes	Regular	--	--
18	B SRINIVAS	BFXPB2240E	M.E/M.TECH	Communication Engineering	Assistant Professor	01-Jun-2012	--	Yes	Regular	--	--
19	T NAGAVENI	ATPPT3182Q	M.E/M.TECH	Electronics & Communication Engineering	Assistant Professor	01-Jun-2012	--	Yes	Regular	--	--
20	S NARSIMULU	AMEPN4775D	M.E/M.TECH	Systems & Signal Processing	Assistant Professor	01-Jun-2012	--	Yes	Regular	--	--
21	P PRASHANT	ASEPP1170A	M.E/M.TECH	VLSI System Design	Assistant	01-Jun-2013	--	Yes	Regular	--	--



					Professor							
22	E. PARUSHA RAMU	AAUPE3154H	M.E/M.TECH	VLSI System Design	Assistant Professor	01-Jun-2009	--	Yes	Regular	--	--	
23	ABDUL KHAJA PASHA	BTDPP4584P	M.E/M.TECH	VLSI	Assistant Professor	01-Jun-2013	--	Yes	Regular	--	--	
24	P UDAYA SRI	BOXPP8783B	M.E/M.TECH	VLSI	Assistant Professor	01-Jun-2013	--	Yes	Regular	--	--	
25	D THIRUMALA REDDY	BHBPD5430L	M.E/M.TECH	Electronics & Communication Engineering	Assistant Professor	03-Jun-2013	--	Yes	Regular	--	--	
26	G RAJ KUMAR	ASUPG5530F	M.E/M.TECH	Embedded Systems	Assistant Professor	03-Jun-2013	--	Yes	Regular	--	--	
27	V SUNITHA	AGKPV6910A	M.E/M.TECH	Digital Electronics & Communication Systems	Assistant Professor	01-Jul-2013	--	Yes	Regular	--	--	
28	A VENUGOPAL	ANKPA2494D	M.E/M.TECH	Communication Systems	Assistant Professor	01-Jul-2013	--	Yes	Regular	--	--	
29	D SANDHYA RANI	BRBPD5801M	M.E/M.TECH	Embedded Systems	Assistant Professor	02-Jun-2014	--	Yes	Regular	--	--	
30	P SRINIVAS	CFRPP2977P	M.E/M.TECH	VLSI System Design	Assistant Professor	02-Jun-2014	--	Yes	Regular	--	--	
31	K SRAVANI	DWRPK8396F	M.E/M.TECH	VLSI	Assistant Professor	02-Jun-2014	--	Yes	Regular	--	--	
32	R SARADA	BFFPR5645D	M.E/M.TECH	Communication Engineering	Assistant Professor	02-Jun-2014	--	Yes	Regular	--	--	
33	G SRAVANTHI	AQZPT8134B	M.E/M.TECH	Embedded Systems	Assistant Professor	01-Dec-2014	--	Yes	Regular	--	--	

34	ARUKONDA VENU	AESPA6103N	M.E/M.TECH	Digital Electronics & Communication Systems	Assistant Professor	01-Jun-2016	--	Yes	Regular	--	--
35	B HEMAVATHI	ANMPL4216E	M.E/M.TECH	Embedded Systems & VLSI Design	Assistant Professor	01-Jun-2016	--	Yes	Regular	--	--
36	MAMATHA	CDXPP9564N	M.E/M.TECH	VLSI & Embedded System	Assistant Professor	01-Jun-2016	--	Yes	Regular	--	--
37	R LIKHITHA	AIPL7952N	M.E/M.TECH	Digital Electronics & Communication Systems	Assistant Professor	01-Jun-2019	--	Yes	Regular	--	--
38	D BHARATHI	CGOPD3734N	M.E/M.TECH	VLSI & Embedded System	Assistant Professor	01-Jun-2019	--	Yes	Regular	--	--
39	SK AZEERA	BSLPA1128D	M.E/M.TECH	VLSI System Design	Assistant Professor	01-Jun-2019	--	Yes	Regular	--	--
40	R KALPANA	AUGPR0629A	M.E/M.TECH	Digital Systems & Computer Electronics	Assistant Professor	01-Jun-2019	--	Yes	Regular	--	--
41	P SWETHA	FIMPS1074R	M.E/M.TECH	Digital Systems	Assistant Professor	01-Jun-2019	--	Yes	Regular	--	--
42	D Jyothi	AVBPD4462B	M.E/M.TECH	Embedded Systems	Assistant Professor	01-Jun-2019	--	Yes	Regular	--	--
43	M SWATHI	CPFPM3675H	M.E/M.TECH	VLSI System Design	Assistant Professor	01-Jun-2019	--	Yes	Regular	--	--
44	K.JAIL SINGH	CXQPK7143H	M.E/M.TECH	Telecommunications	Assistant Professor	01-Jun-2019	--	Yes	Regular	--	--
45	M SHIVAKUMAR	AREPM2577M	M.E/M.TECH	Electronics & Communication Engineering	Assistant Professor	01-Jun-2019	--	Yes	Regular	--	--
46	M REVATHI	CEEPM8376M	M.E/M.TECH	Embedded Systems	Assistant	01-Jun-2019	--	Yes	Regular	--	--

					Professor						
47	S SWATHI	DQMPS8208H	M.E/M.TECH	Electronics & Communication Engineering	Assistant Professor	01-Jun-2020	--	Yes	Regular	--	--
48	M. SUDHAKAR	APWPM1968G	M.E/M.TECH	VLSI System Design	Assistant Professor	01-Jun-2021	--	Yes	Regular	--	--
49	S.UPENDAR	EJXPS8706R	M.E/M.TECH	Embedded Systems	Assistant Professor	01-Jun-2021	--	Yes	Regular	--	--
50	K.THRIVENI	CWKPK5699D	M.E/M.TECH	Digital Communications	Assistant Professor	01-Jun-2021	--	Yes	Regular	--	--

## Department of CSE – Faculty List

S.No.	Name	PANNo.	Qualification	Area of Specialization	Designation	Date of Joining	Date on which Designated as Professor/Associate Professor	Currently Associated (Y/N)	Nature of Association (Regular/Contract/Adjunct)	If contractualment - Fulltime or Parttime	Date of Leaving (In case Currently Associated "No")
1	Dr.S.R. MUGUNTHAN	BGZPS2476N	Ph.D	Computer Science & Engineering	Prof.HOD	2/6/2017	2/6/2017	YES	Regular	-	YES
2	Dr.N.SADHASIVAM	CMIPS9730B	Ph.D	Computer Science & Engineering	Professor	8/2/2018	2/8/2018	YES	Regular	-	YES
3	Dr.T.KUMARESAN	AZRPK6683M	Ph.D	Computer Science & Engineering	Professor	8/2/2018	8/2/2018	YES	Regular	-	YES
4	Dr.S.VIJAYARANGAM	AJUPV3752D	Ph.D	Computer Science & Engineering	Professor	15/06/2020	15/06/2020	YES	Regular	-	YES
5	Dr.ADELINE JOHANSANA JS	AOUPA5366H	Ph.D	Computer Science & Engineering	Professor	11/09/2019	11/09/2019	YES	Regular	-	YES
6	Dr.L.KARTHEESAN	AOVPK7021A	Ph.D	Computer Science & Engineering	Professor	03/06/2021	03/06/2021	YES	Regular		YES

7	Dr.T.CHARAN SINGH	AGQPT5892H	Ph.D	Software Engineering	As-soc.Professor	11/5/2013	3/7/2017	YES	Regular	-	YES
8	Dr.K.SAMPATH	AVLPK8141J	Ph.D	Computer Science&Engineering	As-soc.Professor	5/2/21	5/2/21	YES	Regular	-	YES
9	Dr.K.GUNASEKARAN	AUGPG7953G	Ph.D	Computer Science&Engineering	As-soc.Professor	15/06/2020	15/06/2020	YES	Regular	-	YES
10	Dr.C.KOTTEESWARAN	BKMPK8455L	Ph.D	Computer Science&Engineering	As-soc.Professor	5/04/2021	5/04/2021	YES	Regular	-	YES
11	Dr.KISHORE VERMA S	AYUPK3598H	Ph.D	Computer Science&Engineering	As-soc.Professor	19/05/2021	19/05/2021	YES	Regular	-	YES
12	Dr.CH.NARASHIMA CHARY	AMDPC8092M	Ph.D	Computer Science&Engineering	Assoc.Professor	7/7/2011	11/6/2015	YES	Regular	-	YES
13	A.CHITTY	AZPPA0151J	M.Tech	Computer Science&Engineering	Assoc.Professor	1/6/2016	6/6/2018	YES	Regular	-	YES
14	K.KRISHNA	DICPK8486B	M.Tech	Computer Science	Assoc.Professor	1/10/2014	20/06/2017	YES	Regular	-	YES
15	K. RAJU	DYMPK7958G	M.Tech	Software Engineering	Assoc.Professor	1/7/2016	6/6/2020	YES	Regular	-	YES
16	A.SANDEEP	AVBPA8132F	M.Tech	Computer Science&Engineering	Assoc.Professor	1/6/2016	5/04/2021	YES	Regular	-	YES
17	E.PAVITHRA	ACGPE1373A	M.Tech	Computer Science&Engineering	Assoc.Professor	1/10/2016	5/04/2021	YES	Regular	-	YES
18	V.KIRANMAI	ASTPB9235B	M.Tech	Computer Science&Engineering	Assoc.Professor	31/3/21	5/04/2021	YES	Regular	-	YES
19	A.RANGAMMA	ARLPA0134F	MTech	Computer Science&Engineering	Asst.prof	9/10/2013		YES	Regular	-	YES
20	G.UMAMAHESHWARI	BJRPG6269C	M.Tech	Computer Science&Engineering	Asst.prof	12/09/2014		YES	Regular	-	YES
21	Y.RAJU	BFNPR3464Q	M.Tech	Computer Sci-	Asst.prof	2/3/2015	-	YES	Regular	-	

				ence&Engineering							YES
22	M.SAMPOORNA	CTKPM8291A	M.Tech	Computer Science&Engineering	Asst.prof	28/2/2015	-	YES	Regular	-	YES
23	R.SOWMYA	ETWPS9411Q	M.Tech	Computer Science&Engineering	Asst.prof	15/12/2015	-	YES	Regular	-	YES
24	A.SUDHEER	AVEPA3449C	M.Tech	Computer Science&Engineering	Asst.prof	1/8/2016	-	YES	Regular	-	YES
25	SNVASRK PRASAD	FFGPS8810J	M.Tech	Software Engineering	Asst.prof	2/5/2016	-	YES	Regular	-	YES
26	B.SURESH	CEVPS5640M	M.Tech	Computer Science&Engineering	Asst.prof	16/12/2015	-	YES	Regular	-	YES
27	A.SAI PRASANNA	BRLPA7462B	M.Tech	Computer Science	Asst.prof	26/02/2015	-	YES	Regular	-	YES
28	K.PRAVEENA	DFHPP9573N	M.Tech	Computer Science&Engineering	Asst.prof	30/7/2018	-	YES	Regular	-	YES
29	K.MAHESH KUMAR	CBPPM2414N	M.Tech	Computer Science&Engineering	Asst.prof	2/01/2019	-	YES	Regular	-	YES
30	K.SANDYA	ECSPS7971C	M.Tech	Computer Science	Asst.prof	20/8/2018	-	YES	Regular	-	YES
31	K.VIJAYA LAKSHMI	HGWPK1937F	M.Tech	Computer Science&Engineering	Asst.prof	10/6/2019	-	YES	Regular	-	YES
32	C.DIVYA	DABPK8675P	M.Tech	Computer Science&Engineering	Asst.prof	21/06/2019	-	YES	Regular	-	YES



											YES
33	A.KRISHNA	AROPA2010P	M.Tech	Computer Science&Engineering	Asst.prof	4/08/2019	-	YES	Regular	-	YES
34	B.NAVYA	BNCPB8631C	M.Tech	Computer Science&Engineering	Asst.prof	22/08/2019	-	YES	Regular	-	YES
35	R.VINOD KUMAR	AQZPV0798B	M.Tech	Software Engineering	Asst.prof	8/11/2019	-	YES	Regular	-	YES
36	G.AKHILA	BZSPG1144B	M.Tech	Computer Science&Engineering	Asst.prof	1/03/2021	-	YES	Regular	-	YES
37	D.PRASHANTH	CCDPD1855R	M.Tech	Computer Science&Engineering	Asst.prof	10/03/2021	-	YES	Regular	-	YES
38	P.CHAITHANYA	DHPPP4760P	M.Tech	Computer Science&Engineering	Asst.prof	31/3/2021	-	YES	Regular	-	YES
39	B.SAI SREE	FAQPB1975J	M.Tech	Computer Science&Engineering	Asst.prof	07/4/2021	-	YES	Regular	-	YES
40	G.SWARNALATHA	BRUPG5393J	M.Tech	Computer Science&Engineering	Asst.prof	1/07/21	-	YES	Regular	-	YES
41	K.NAVEEN CHAKRAVARTHY	DRZPK8896P	M.Tech	Computer Science&Engineering	Asst.prof	1/07/21	-	YES	Regular	-	YES
42	P.SNEHA	CLHPP5344J	M.Tech	Computer Science&Engineering	Asst.prof	10/03/2021	-	YES	Regular	-	YES
43	P.HYMAVATHI	DIRPP5764E	M.Tech	Computer Science&Engineering	Asst.prof	10/03/2021	-	YES	Regular	-	YES

44	K.NAGU	CIDPK1982N	M.Tech	Computer Science&Engineering	Asst.prof	6/04/21	-	YES	Regular	-	YES
45	M.ASHOK	DOHPM7711G	M.Tech	Computer Science&Engineering	Asst.prof	1/4/21		YES	Regular	-	YES
46	M.SWATHI REDDY	ASWPM3332M	M.Tech	Computer Science&Engineering	Asst.prof	26/03/21	-	YES	Regular	-	YES
47	SD.ANUSHNA	DBYPS5502PS	M.Tech	Computer Science&Engineering	Asst.prof	3/3/21		YES	Regular	-	YES
48	M.RAJKUMAR	BNQPM8169E	M.Tech	Computer Science&Engineering	Asst.prof	26/3/21		YES	Regular	-	YES
49	A.SRUTHI	GHDPS5188H	M.Tech	Computer Science&Engineering	Asst.prof	7/7/21		YES	Regular	-	YES
50	E.RAJENDRA	ABNPE5967E	MTech	Software Engineering	Asst.prof	8/8/2016		YES	Regular	-	YES
51	K.APARNA	BLAPA653H	MTech	Computer Science&Engineering	Asst.prof	15/12/2016		YES	Regular	-	YES

## Department of EEE – Faculty List

Sl. No.	Name of the Faculty	Date of Birth	AICTE Unique ID	Educational Qualification	Work Ex-perience	Area of Spe-cialization	Courses taught at UG / PG
1	Dr.A.NAGA MALLESWAR RAO	4/2/1973	1-4150612204	PHD	19	EPS	UG
2	Dr.VEERAMANI.C	2/6/1981	1-3377026081	PHD	05	PS	UG
3	J.RAKESH SHARAN	28/07/1986	1-1361983042	M.TECH	08	EPE	UG
4	CH.SAI RAM	2/1/1980	1-2638415160	M.TECH	09	EPS	UG
5	E.VENKATESH	14/02/1989	1-2183501497	M.TECH	05	EPS	UG
6	J.SRINIVAS	31/01/1985	1-2367088781	M.TECH	04	EPS	UG
7	B.KRISHNA	23/08/1988	1-2367088703	M.TECH	06	EPS	UG
8	B.SRINATH	15/07/1988	1-2642716013	M.TECH	05	EPE	UG
9	N.CHATRU	14/02/1989	1-2642654003	M.TECH	05	PE	UG
10	T.SRINIVAS	10/4/1986	1-2920184042	M.TECH	07	PE	UG
11	T.VENU GOPAL	22/08/1987	1-4715563554	M.TECH	06	EPE	UG
12	K. SHIRISHA	26/03/1988	1-2654578883	M.TECH	05	PE	UG
13	V. SRINIVASA CHARY	10/8/1989	1-7361220271	M.TECH	01	PE	UG
14	CH. RAMAKRISHNA	12/6/1989	1-7354519669	M.TECH	01	EPE	UG

15	P. MALLIKARJUN	6/10/1992	1-7360463679	M.TECH	01	PE	UG
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### **Department of IT – Faculty List**

Sl. No.	Name of the Faculty	Date of Birth	AICTE Unique ID	Educational Qualification	Work Ex-perience	Area of Spe-cialization	Courses taught at UG / PG
1	K. CHANDHAR	10/5/1989	1-3549291853	M.TECH.	06	CS	UG
2	G. SUREKHA	12/1/1985	1-2918795667	M.TECH.	05	CSE	UG
3	CH. PAVANI	27/06/1990	1-3634030418	M.TECH.	04	CS	UG
4	R.J. RADHIKA	6/2/1985	1-2919017061	M.TECH.	05	SE	UG
5	V. RAMESH	26/06/1989	1-3290506267	M.TECH.	05	CSE	UG
6	M. MANASA	13/03/1989	1-7357249385	M.TECH.	04	CS	UG
7	M. MAHESH	30/08/1990	1-3392034333	M.TECH.	03	CSE	UG
8	GUNGI ANUSHA	5/5/1993	1-4527504766	M.TECH.	03	CSE	UG
9	K. ANOOPAMA	17/09/1993	1-4253738974	M.TECH.	02	CSE	UG
10	K. PRIYANKA	14/07/1991	1-7357249319	M.TECH.	01	CSE	UG
11	A. NARESH KRISHNA	03/08/1989		M.TECH.	02	CSE	UG

## Department of MECHANICAL – Faculty List

S.No.	Name	PANNo.	Qualification	Area of Specialization	Designation	Date of Joining	Date on which Designated as Professor/Associate Professor	Currently Associated (Y/N)	Nature of Association (Regular/Contract/Adjunct)	If contractual mention Fulltime or Parttime	Date of Leaving (In case Currently Associated is "No")
1	Dr.P.Mallesham	AEVPP2709L	PhD	MECH - Experimental analysis and characterization of clad and brazed Al-Li Alloy plates	Professor	07/05/2008	07/05/2008	Yes	Regular	--	--
2	M.Srinivasa Rao	BBDPM8275L	M.E	CAD/CAM	Associate Professor	20/09/2006	16/11/2012	Yes	Regular	--	--
3	Y.Rajkumar	AFIPY4208F	M.E	Turbo Machinery	Assistant Professor	01/09/2012	--	Yes	Regular	--	--
4	A.Pramodh Reddy	BNEPA5089B	M.Tech	Machine Design	Assistant Professor	06/01/2015	--	Yes	Regular	--	--
5	AC Raghu Kishore Yadav	AOVPA3662H	M.Tech	R & AC	Assistant Professor	21.12.2015	--	Yes	Regular	--	--
6	Sruthi Bikumalla	BIXPB7742L	M.Tech	CAD/CAM	Assistant Professor	29.07.2016	--	Yes	Regular	--	--
7	Attukuri Bharathi	BYVPA8397N	M.E	CAD/CAM	Assistant Professor	19.01.2017	--	Yes	Regular	--	--
8	Kurtukoti Prabhu	DMPPK1804N	M.Tech	Product Design & Manufacturing	Assistant Professor	28.06.2017	--	Yes	Regular	--	--

9	K.Vijaya Kumar	BOBPK5195N	M.Tech	Thermal Engineering	Assistant Professor	03/07/2017	--	Yes	Regular	--	--
10	B.Tharu Kumar	BZRPB8341N	M.Tech	Design Engineering	Assistant Professor	01/06/2017	--	Yes	Regular	--	--
11	T.Aravind	AUSPA4879M	M.Tech	Thermal Engineering	Assistant Professor	15/06/2017	--	Yes	Regular	--	--
12	NagarajuBadayi	BUAPB2677K	M.Tech	Machine Design	Assistant Professor	21/06/2017	--	Yes	Regular	--	--
13	B.Vineeth	CABPB2771A	M.Tech	CAD/CAM	Assistant Professor	02/02/2018	--	Yes	Regular	--	--
14	L.Ravi	ACGTL3920N	M.Tech	CAD/CAM	Assistant Professor	10/08/2018	--	Yes	Regular	--	--
15	V.S.P.Vamshi	DHBPS5804M	M.S	IE	Assistant Professor	16/11/2018	--	Yes	Regular	--	--
16	Y.Suresh	AIQPY9986R	M.Tech	Machine Design	Assistant Professor	01.06.2019	--	Yes	Regular	--	--
17	M.Swathi	DHYPM3662 Q	M.Tech	CAD/CAM	Assistant Professor	27.6.2019	--	Yes	Regular	--	--
18	G.Phaneendrakumar	CCNPK9898P	M.Tech	Production Engineering	Assistant Professor	24/07/2019	--	Yes	Regular	--	--
19	A.Praveenkumar	BMHPA3008C	M.Tech	Design	Assistant Professor	25/07/2019	--	Yes	Regular	--	--
20	P.Ashokkumar	DHHPP5077D	M.Tech	CAD CAM	Assistant Professor	04/11/2019	--	Yes	Regular	--	--
21	Md.Amzad	BNXPA5104J	M.Tech	Turbo Machinery	Assistant Professor	07/11/2019	--	Yes	Regular	--	--
22	V.Veeranagulu	AMBPV0031H	M.Tech	Advanced Manufacturing System	Assistant Professor	08/11/2019	--	Yes	Regular	--	--



23	M.Saikiran	CRJPM0737Q	M.Tech	Advanced Manufacturing System	Assistant Professor	08/11/2019	--	Yes	Regular	--	--
24	V.Sirisha	BBOPV2609G	M.E	CAD CAM	Assistant Professor	21/06/2017	--	Yes	Regular	--	--
25	B.Venkataiah	CNMPB0271P	M.Tech	TE	Assistant Professor	24/02/2020	--	Yes	Regular	--	--
26	K.Anjaneyulu	DXQPK3133L	M.Tech	Thermal Engineering	Assistant Professor	05/08/2021	--	Yes	Regular	--	--
27	B.Ramesh	CAFPB1247P	M.Tech	Thermal Engineering	Assistant Professor	05/08/2021	--	Yes	Regular	--	--
28	D.Dharma	BWMPD8322F	M.Tech	Heat power - Refrigeration and Air condn	Assistant Professor	17/09/2021	--	Yes	Regular	--	--

## Department of H&S – Faculty List

Sl. No.	Name of the Faculty	Date of Birth	Educational Qualification	Work Experience	AICTE Unique ID	Courses taught at UG / PG
1	MANJULA PONNEBOYINA	21/02/1988	M.Sc	8	1-2188323127	UG
2	SAHITYA UMMAREDDY	24/12/1984	M.Sc.	10	1-2377774813	UG
3	SADANANDAM MORE	20/02/1977	M.Sc.	10	1-2641224103	UG
4	UMA GALI	21/01/1982	M.TECH	10	1-2644103019	UG
5	SRUTHI MADUGULA	16/01/1987	M.TECH	5	1-2650513336	UG
6	Dr. SREENIVASA BHANU PRASAD APPANA	13/04/1965	Ph.D	20	1-2653651330	UG
7	ANURADHA VUDUTHANENI	5/5/1981	M.Sc.	12	1-2659756393	UG
8	RAJENDRA ERAMALLA	11/3/1985	M.Sc.	6	1-3187506730	UG
9	ASHOK CHINTHADA	16/03/1985	M.Sc.	14	1-3188788090	UG
10	MANGALAGIRI AMBICA	6/5/1984	M.Sc.	10	1-3188864452	UG

11	LEELA MANTRI	22/04/1981	M.Sc.	11	1-3227741922	UG
12	SRINIVAS YELALA	5/4/1989	M.Sc.	7	1-3364107313	UG
13	JAIL KETHAVATH	10/1/1985	MTECH	10	1-3539354134	UG
14	NIMMANAGOTI SHEKAR	1/8/1990	M.Sc.	6	1-3543672823	UG
15	SHARMILEE NIMMAGADDA	20/12/1973	MA	10	1-3543672881	UG
16	GOLDAMEIR SINDALA	15/06/1975	MA	10	1-3543675163	UG
17	SAIKUMAR KOTHAGATTU	11/5/1991	MA	5	1-3545246743	UG
18	VIJAYAKUMAR KOLLAPURAM	26/09/1985	M.TECH	7	1-3547095306	UG
19	BEULAH JONNALAGADDA DAVID	25/11/1976	MA	7	1-3550458993	UG
20	RANGAMMA ADURI	12/6/1977	M.Sc	8	1-3636694653	UG
21	VINEETH BANOTH	4/6/1993	M.Sc	7	1-3768413594	UG
22	SATHELA SRAVANTHI	26/03/1985	M.Sc	5	1-3779960714	UG

23	KRISHNA TATAVARTHY	5/8/1979	M.Sc	5	1-4477538244	UG
24	SANJIAH BURJUMIDI	5/4/1982	M.A.	8	1-4562052771	UG
25	ANUSHA NEELI	10/4/1993	M.Sc	2	1-4563426252	UG
26	ASHOK PENDYALA	6/6/1984	M.Sc	3	1-4563426259	UG
27	MOUNIKA DUGYALA	11/6/1990	M.Sc	5	1-4642172289	UG
28	JYOTHI KODELA	23/05/1987	M.Sc.	7	1-4729916971	UG
29	BLESSI MEDAY	26/03/1993	MA	9	1-7360463601	UG
30	PRODHUTURU ANITHA	8/10/1990	M.Sc.	5	1-7360463607	UG
31	JYOTHI EDAM	31/08/1985	M.Sc.	2	1-7360744207	UG
32	SWETHA NARAMUNI	26/05/1993	M.Sc.	5	1-7360744333	UG
33	SHIRISHA BALAGONI	3/6/1994	MBA	5	1-7360744339	UG
34	KANAKA MAHA LAKSHMI ISSAKU	9/9/1981	MBA.	7	1-7360744605	UG

35	SATYAM MEDABALIMI	5/2/1983	MBA	11	1-7361097277	UG
36	BALAKRISHNA REDDY GUNREDDY	31/08/1971	MBA	11	1-7361453768	UG
37	AMARAVATHI GUDDAM	5/6/1988	MSC	2	1-7361566044	UG
38	VIJAYA LAKSHMI DEVATADE	9/10/1989	MSC	2	1-7419852898	UG
39	DHANAVATH DHARMA	11/8/1978	M.TECH.	3	1-7430228422	UG
40	NAGA SAMOHINIVISU	9/6/1990	M.TECH.	3	1-7448063064	UG
41	PRIYANKA MUDUSU	10/9/1990	M.TECH.	2	1-7448063070	UG
42	KOTASUNIL KUMAR	13/07/1981	M.TECH.	2	1-7462639198	UG
43	RAMU SUDHAVENI	30/06/1994	M.TECH.	2	1-7478705741	UG
44	MAHADEVUDU PALLAMONI	10/8/1986	M.A	6	1-7742122441	UG
45	DAYAKAR PADURI	4/4/1978	MSC	10	1-7746138581	UG
46	KAMALA KANNAN GOBALA KRISHNAN	5/1/1988	Ph.D.	10	1-7882558156	UG

47	SHARADHA GUJJULA	3/4/1990	M.TECH.	5	1-9324767979	UG
48	SUCHITRA NIMMA	2/8/1994	MSC	5	1-9431292102	UG
49	EMMIDI SRI	10/1/1998	MSC	3	1-9431365957	UG
50	LAVANYA NAGILLA	21/02/1994	M.TECH	5	1-9431366121	UG
51	RAJU SAMALA	5/4/1989	MSC	4	1-9431366295	UG
52	SWAPNA VARALA	17/05/1993	MSC	5	1-9431571069	UG
53	NARAHARI PIROJI	16/04/1997	MSC	3	1-9587967882	UG
54	RAMANA MANNAM	20/08/1980	MSC	6	1-9597413093	UG
55	SWAPNA GUNDIGA	2/1/1983	MSC	5	1-10967783415	UG
56	SUDHA UTTAM	7/11/1982	MSC	8	1-10967783471	UG
57	KAKINADA HARITHA	24/06/1990	MSC	7	1-11001357067	UG
58	LAXMIKANTH AKUNURI	4/8/1969	M..Tech	10	1-422755569	UG



59	CHINA VENKATA REDDY BAIREDDY	13/06/1978	M..Tech.	12	1-429826979	UG
60	THOFEEQ MOHAMMED	10/5/1983	M..Tech	10	1-430194185	UG
61	SHAILAJA NAINI	15/07/1972	M.Sc.	14	1-435672889	UG
62	CHALAPATHI MUNUGALA	10/2/1983	M.Sc.	14	1-435805279	UG
63	RANJIT MOTAKARI	22/01/1985	M.Sc.	12	1-435805353	UG
64	PRAVEEN SANGALA	27/05/1982	M.Sc.	10	1-436243181	UG
65	BATTULA NAVEENA	9/6/1990	MBA	7	1-709484654	UG
66	SHIVA KUMAR ANTHATI	10/6/1983	M.Sc.	9	1-716028362	UG
67	SHIVAKUMAR MATHAD	7/6/1962	M.Tech	20	1-1364650913	UG
68	SARITHA VADDINENI	20/12/1989	M.Sc.	10	1-1441343603	UG
69	SWATHI KONTHAM	6/5/1986	M.Sc.	7	1-1441574844	UG
70	UDATHALA ARUNA GOUD	5/1/1989	MBA	10	1-1443161748	UG

71	RAMAKRISHNA AKKAPEDDI	4/4/1951	Ph.D.	<b>40</b>	1-1445975093	<b>UG</b>
72	DR P BALASUBRAHMANYAM	19/01/1974	Ph.D.	<b>16</b>	1-1519608898	<b>UG</b>

**INSTITUTIONAL SCHOLARSHIP / CONCESSION UNDER NEW LOYOLA MODEL EDUCATION SOCIETY**

**Academic year 2020 - 2021**


S.No	Roll Number	Name of the Student	Father Name	Course	Institutional Scholarship / Amount	Institutional / Concession
1	20D45A0241	A.Jaya sai	A.sathaiah	B.Tech	0	4000
2	20D45A0202	A. Ganesh	A. Venkataiah	B.Tech	0	4000
3	20D45A0203	A. Raghavender	A. Krishna	B.Tech	0	4000
4	20D45A0208	B.Sathwika	B. Niranjan	B.Tech	0	4500
5	20D45A0209	B. Akshanth	B. Shiva	B.Tech	0	4500
6	20D45A0210	C. Nuthan sagar	C. Srinivasulu	B.Tech	0	9000
7	20D45A0211	C. Saivarun	C. Venkataiah	B.Tech	0	4500
8	20D45A0213	D, Venkat Ramana	d. Bagya	B.Tech	0	5000
9	20D45A0214	G. Ravi	G. Krishnamurthi	B.Tech	0	4000
10	20D45A0215	G. Girish Kumar	G. Ramesh	B.Tech	0	7000
11	20D45A0216	G. Umesh	G. Appa Rao	B.Tech	0	12000
12	20D45A0221	k. Sai Kumar	K.Upender Rao	B.Tech	0	6000
13	20D45A0222	K. Ganesh	K. Sreenaiah	B.Tech	0	6000
14	20D45A0224	K. Madhu	K. Arilaiah	B.Tech	0	12000
15	20D45A0225	K. Akhila	K. Jaipal Reddy	B.Tech	0	7000
16	20D45A0227	L. Sai Tarun	L. Hanumantha Rao	B.Tech	0	6500
17	20D45A0228	M. Adithya	M. Krishna	B.Tech	0	5500
18	20D45A0230	M. Ravi Kiran	M.Sailoo	B.Tech	0	9000
19	20D45A0232	M. Ramu	M/ Venkatesh	B.Tech	0	9000
20	20D45A0235	N. Siddeshwar	N. Kiran	B.Tech	0	9000
21	20D45A0238	P. Sai Vamshi	P. Shankar Naik	B.Tech	0	4000
22	20D45A0242	T. Sai Kumar	T. Sdubba Rao	B.Tech	0	4000
23	20D45A0243	T. Indu	T. Dharma	B.Tech	0	4000
24	20D45A0244	V. Venkat Reddy	V. Nagarjuna	B.Tech	0	12000
25	20D45A0246	K. Sakrth Rama	K. Janakiramulu	B.Tech	0	5500
26	20D45A0247	M. Srujan	M. Vijay	B.Tech	0	6500
27	20D45A0249	K. Umesh Chandra	K. Balaraju	B.Tech	0	4500
28	20D45A0251	N. Manatha	N. Shankaraiah	B.Tech	0	4000
29	20D45A0252	G. Nithin	G. Srinivasulu	B.Tech	0	4000
30	20D45A0254	P. Manasa	P. Malla reddy	B.Tech	0	2500
31	20D45A0256	A. Rajkumar	A, Satyanarayana	B.Tech	0	9000
32	20D45A0257	A. Akhil	A. Ramesh	B.Tech	0	9000
33	20D45A0401	A. Saiteja	A. Sreedhar	B.Tech	0	7000
34	20D45A0402	A. Vaishnavi	A. Mahesh Kumar	B.Tech	0	4500
35	20D45A0403	A, Venkata Ramana	A. Srinice	B.Tech	0	4000
36	20D45A0405	A. Rohith Raj	A. Vishwanatham	B.Tech	0	5500
37	20D45A0411	D. Nagaraju	D. Yadaiah	B.Tech	0	9500
38	20D45A0412	E. Shavan Kumar	E. Vijaya Kumar	B.Tech	0	3000
39	20D45A0413	J. Spandan Acharya	Ramakrishna	B.Tech	0	6500
40	20D45A0416	K. Krishna Vamshi	K. Kumaiah	B.Tech	0	4500
41	20D45A0418	M. Prathyusha	M. Venkateshwar Reddy	B.Tech	0	9000
42	20D45A0429	P.G.Thirumalesh	P.G. Venkatesh	B.Tech	0	4500
43	20D45A0433	S. Manikanta	S. Nagaraju	B.Tech	0	9500

44	20D45A0439	K. Chitra	K. Kumar	B.Tech	0	15000
45	20D45A0440	G. Homnath	G. Saida	B.Tech	0	500
46	20D45A0441	Sai Chakrarathy	M. Venkateshwar Rao	B.Tech	0	4000
47	20D45A0415	B. Hemanth	B. Ramesh	B.Tech	0	9000
48	20D45A0316	V. Nagendra Babu		B.Tech	93000	0
49	20D41A0316	M. Venkatesh		B.Tech	93000	0
50	20D41A0203	A. Pavan Kalyan	A, Mallesh	B.Tech	36000	0
51	20D41A0227	G. Shiva kumar	G. Janardhan	B.Tech	0	4000
52	20D41A0232	J. srikanth	J. Linga Reddy	B.Tech	0	4000
53	20D41A0237	K. Suryavardhan	K. Venkat Reddy	B.Tech	0	4000
54	20D41A0495	K. Saisudha	K. Bhasker	B.Tech	36000	0
55	20D41A04E6	P. Sridhar	P. Narasimha0	B.Tech	0	4000
56	20D41D5803	G. Lakshmi Priya	G. Santosh Kumar	M.Tech	0	5000
57	20D41D5806	J. Swathi	J. Murali	M.Tech	0	5000
58	21D45A0205	B.saisudha	K. Bhasker	B.Tech	42000	0
59	21D45A0206	B.sandeep	B. Dharma Reddy	B.Tech	0	4000
			<b>Total</b>		<b>300000</b>	<b>327500</b>

<b>INSTITUTIONAL SCHOLARSHIP / CONCESSION UNDER NEW LOYOLA MODEL EDUCATION SOCIETY</b>						
<b>Academic year 2020 - 2021</b>						
<b>S.No</b>	<b>Roll Number</b>	<b>Name of the Student</b>	<b>Father Name</b>	<b>Course</b>	<b>Institutional Scholarship / Amount</b>	<b>Institutional / Concession</b>
1	18D41A0289	B. Mothilaa	B. Ramjan	B.Tech	32500	0
2	18D41A0513	A. Sanjay	A. Laxam	B.Tech	0	4000
3	18D41D5810	GP. Jithender (M.Tech)	GP Sreeramulee	M.Tech	28000	0
4	18D41E0001	K. Pavan Kalyan	K. Krishna Reddy	MBA	0	7000
5	18D41E0002	D. Chandana	D. Madhusudhan	MBA	0	7000
6	18D41E0003	N. Ramya	N. Yadaiah	MBA	0	7000
7	18D41E0004	M. Rohith	M. Srinivas Reddy	MBA	54000	0
8	18D41E0005	V. Vinay Kumar	V. Pochireddy	MBA	0	7000
9	18D41E0007	J. Anusha	J. Narsi Reddy	MBA	0	7000
10	18D41E0009	K. Pallavi	Venkatramaiah	MBA	0	7000
11	18D41E0011	T. Tharun Teja	T. Sampathaiiah	MBA	0	7000
12	18D41E0013	A. Vineetha	A. Harishiva	MBA	0	7000
13	18D41E0015	B. Radhika	B. Jagadeesh	MBA	0	7000
14	18D41E0016	G. Tejaswini	G. Yadagiri	MBA	0	7000
15	18D41E0017	S. Rajashekar	S. yadagiri	MBA	0	7000
16	18D41E0018	G. Mahesh	G. Shoomaiah	MBA	0	7000
17	18D41E0019	CH. Ramyasree	CH. Srinivasachary	MBA	0	7000
18	18D41E0020	K. Ajay Kumar	K. Yadaiah	MBA	0	7000
19	18D41E0022	M.Chalapathi Rao	M. Venkateshwarlu	MBA	0	7000
20	18D41A05G1	R. Vineetha	R. Srinivasa Rao	B.Tech	88000	0
21	18D41A04J0	R. Aparna	R. Ravi	B.Tech	88000	0
22	18D41A05E9	B.PAVAN Kumar	Samuel	B.Tech	88000	0
23	18D41A05C1	M. Sravya	M. Bhaskar	B.Tech	88000	0
24	19D45A0327	K. Madhu	K. Krishna	B.Tech	88000	0
			<b>Total</b>		<b>554500</b>	<b>109000</b>

INSTITUTIONAL SCHOLARSHIP / CONCESSION UNDER NEW LOYOLA MODEL EDUCATION SOCIETY						
Academic year 2020 - 2021						
S.No	Roll Number	Name of the Student	Father Name	Course	Institutional Scholarship / Amount	Institutional / Concession
1	17D41A0260	P. Ramesh	P. Devla	B.Tech	0	5500
2	17D41A0283	V.Sai Venkatesh	V. Prasad	B.Tech	0	6000
3	18D45A0219	M. Ravinder	M. Satlu	B.Tech	0	7500
4	18D45A0220	K.V. Naveen	Akkaiah	B.Tech	0	7500
5	18D45A0221	M. Naresh	M. Laxmaiah	B.Tech	0	7500
6	18D45A0225	A. Rohith Kumar	A. Murali Mohan	B.Tech	0	3500
7	18D45A0229	V. Sairam	V. Kumar	B.Tech	0	5500
8	18D45A0230	M. Abhilash	Narender Reddy	B.Tech	0	5500
9	18D45A0232	M. Anil	Barraiah	B.Tech	0	5500
10	18D45A0253	G. Rathnakar	G. Shivaji	B.Tech	0	4500
11	18D45A0411	K. Venkateshwarlu	K. Sriniasulu	B.Tech	0	8500
12	18D45A0424	V. Naveen	V. Sudhakar	B.Tech	0	8500
13	18D45A0425	CH Srinivas	Srisailam	B.Tech	0	8500
14	18D45A0428	V. praveen Kumar	V. lingaiah	B.Tech	0	8500
15	18D45A0504	M. Naveen	M. Srinivas	B.Tech	0	8500
16	17D41D5812	Asha	Kashappa	M.Tech	0	8000
17	17D41D5813	K. Mounika	K. Muralidhar	M.Tech	0	4500
18	17D41E0003	P. Maheshwari	P. Narsimha	MBA	0	7000
19	17D41E0004	P. Vinay Raj	P. Yadaiah	MBA	0	7000
20	17D41E0006	K. Divya Sri	K. Srinivas Chary	MBA	0	7000
21	17D41E0010	K. Sudha	K. Pandu ranga Chary	MBA	0	7000
22	17D41E0011	S. Sharan	S. Parvathalu	MBA	0	7000
23	17D41E0013	K. Thirupathi	K. Narayana	MBA	0	7000
24	17D41E0014	Afrin	MD. Moulana	MBA	0	7000
25	17D41E0016	P. Nagaendra Babu	P. Venkata Ramana	MBA	0	7000
26	17D41E0018	V. Mahesh	V. Eedaiah	MBA	0	7000
27	17D41E0021	R. Meghana	R, Prasad	MBA	0	7000
28	17D41E0022	K. Indhee	K. Mohan	MBA	0	7000
29	17D41E0023	G. Thanuja	G. Madhava	MBA	0	7000
30	17D41E0024	G. Nagaraju	G. Srinivas	MBA	0	7000
31	17D41E0025	E. Naveen	E. Pandari	MBA	0	1000
32	17D41E0026	A. Navateja	A. Srinivas	MBA	0	7000
33	17D41E0027	Philip Rosary	philip	MBA	0	7000
34	17D41A0592	SPJ Rama Rao	Srinivas Rao	B.Tech	84000	0
35	17D45A0136	Karthikaya	Chinna Ramulu	B.Tech	88000	0
36	18D45A04P5	M. Sriram	M. Narendar Rao	B.Tech	88000	0
			<b>Total</b>		<b>260000</b>	<b>219500</b>



  
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