

## **1.1 Curriculum Planning and Implementation:**

### **1.1.1 The institution ensures effective curriculum delivery through a well-planned and documented process:**

#### **RESPONSE:**

Our institution follows the Curriculum and Syllabi prescribed by Anna University (Affiliated Colleges). Steps that are followed by the institution to ensure curriculum delivery are:

- The institution develops an academic schedule based on the University calendar
- Allocation of the subjects to the faculty is done based on qualification, area of specialization, experience, and willingness.
- Suggesting the students to select electives based on the industrial requirement
- Course files are prepared and maintained by the faculty as per ISO requirement which includes:
  - ✦ Previous year Question Paper(5 years)
  - ✦ Learning Materials
  - ✦ Two Mark Question Bank with Answers
  - ✦ Students Name List
  - ✦ Class and Laboratory Timetable
  - ✦ Individual Faculty Timetable
  - ✦ Syllabus Copy
  - ✦ Course Objectives and Outcomes
  - ✦ Lecture, Practical and Tutorial Plan
  - ✦ Bridge Course Plan/Content Beyond Syllabus
  - ✦ Tutorial and Assignment Sheet
  - ✦ Academic Process and Academic Performance Monitoring
  - ✦ Course Progress Report and Performance Details
- Each department has a set of framed objectives for its curriculum and deployed various mechanisms to ensure that the stated objectives of the curriculum are achieved through:
  - ✦ Department Advisory Committee consists of Class Advisor, Head of the Department and the Principal do a periodical review of the portions covered by the staff members and also the student's attendance
  - ✦ Three Internal Assessment Tests, Unit Test/Assignments/Tutorials, Online Quiz and University Examination
- To enrich the knowledge of students, faculty members adopt different techniques, such as assignments, collaborative learning, NPTEL lectures, case studies, projects, surveys, quiz, field trip, etc., apart from regular/traditional chalk and talk methods with modern teaching facilities
  - ✦ Smart Classrooms (265Mbps Speed Internet Connection)
  - ✦ Video Conferencing
  - ✦ Technical Video Resources
- Final year projects are reviewed by industrial experts
- Feedback is obtained from the students twice a semester to enhance the teaching-learning process
- In addition to the curriculum, students are educated about the latest developments in their respective fields through, Guest Lectures, Industrial Visits, Workshops, Value Added Courses, Internships, Innovative Projects, Online Courses, Corresponding club activities, and technical association, etc.,
- Encouraging the students to do innovative projects and resent papers in seminars and international conferences
- Persuade the teaching faculty with the task of mentoring students on academic and personal issues thereby strengthening better learning atmosphere and sustaining their performance
- Class Committee meetings are held thrice in a semester by the chairperson to improve the teaching-learning process, academic progress of the students,

grievances if any, and suitable remedial measures are taken

- If a subject is common to more than one branch then a course coordinator conducts a course committee meeting with all faculty handling that subject and students representatives to deliberate the mode of teaching
- For each laboratory class, lab manuals are available to the students
- Faculty skill up-gradation includes Refresh Courses, FDTPs, Workshops, IPT, International Conferences, Seminars, Guest Lectures, Ph.D., etc.,



**RAMCO INSTITUTE OF TECHNOLOGY**  
**Academic Schedule for ODD Semester of Academic Year 2020-21**  
**III Semester, V Semester & VII Semester BE Courses**

| AUGUST    |                                 | SEPTEMBER |                                   | OCTOBER   |                                     | NOVEMBER  |                                     |
|-----------|---------------------------------|-----------|-----------------------------------|-----------|-------------------------------------|-----------|-------------------------------------|
| 1<br>SAT  |                                 | 1<br>TUE  |                                   | 1<br>THU  |                                     | 1<br>SUN  | Holiday                             |
| 2<br>SUN  | Holiday                         | 2<br>WED  | <b>IQAC Meeting</b>               | 2<br>FRI  | <b>IAT-2 (Ends)</b>                 | 2<br>MON  |                                     |
| 3<br>MON  |                                 | 3<br>THU  | IAT QP-1 Submission               | 3<br>SAT  | <b>PTA Meeting<br/>WED TT</b>       | 3<br>TUE  |                                     |
| 4<br>TUE  |                                 | 4<br>FRI  |                                   | 4<br>SUN  | Holiday                             | 4<br>WED  |                                     |
| 5<br>WED  |                                 | 5<br>SAT  | <b>IAT-1 (Starts)<br/>TUE TT</b>  | 5<br>MON  | <b>Completion of<br/>Unit IV</b>    | 5<br>THU  |                                     |
| 6<br>THU  |                                 | 6<br>SUN  | Holiday                           | 6<br>TUE  | Consolidated Mark<br>statement      | 6<br>FRI  |                                     |
| 7<br>FRI  |                                 | 7<br>MON  | <b>Completion of<br/>Unit II</b>  | 7<br>WED  |                                     | 7<br>SAT  |                                     |
| 8<br>SAT  |                                 | 8<br>TUE  |                                   | 8<br>THU  |                                     | 8<br>SUN  | Holiday                             |
| 9<br>SUN  | Holiday                         | 9<br>WED  |                                   | 9<br>FRI  |                                     | 9<br>MON  | <b>End Semester<br/>Examination</b> |
| 10<br>MON |                                 | 10<br>THU |                                   | 10<br>SAT | THU TT                              | 10<br>TUE |                                     |
| 11<br>TUE | Krishna Jeyanthi<br>Holiday     | 11<br>FRI | <b>IAT-1 (Ends)</b>               | 11<br>SUN | Holiday                             | 11<br>WED | <b>ISO MRM Meeting</b>              |
| 12<br>WED | <b>College Reopening</b>        | 12<br>SAT | FRI TT                            | 12<br>MON | CoCM& CCM 3<br>(starts)             | 12<br>THU |                                     |
| 13<br>THU |                                 | 13<br>SUN | Holiday                           | 13<br>TUE |                                     | 13<br>FRI |                                     |
| 14<br>FRI |                                 | 14<br>MON | CoCM& CCM 2<br>(starts)           | 14<br>WED | IAT QP-3 Submission                 | 14<br>SAT |                                     |
| 15<br>SAT | Independence Day<br>Holiday     | 15<br>TUE | Students Feedback<br>(starts)     | 15<br>THU | CoCM& CCM 3 (Ends)                  | 15<br>SUN | Holiday                             |
| 16<br>SUN | Holiday                         | 16<br>WED | Consolidated Mark<br>statement    | 16<br>FRI | <b>Completion of<br/>Unit V</b>     | 16<br>MON |                                     |
| 17<br>MON |                                 | 17<br>THU | CoCM& CCM 2<br>(Ends)             | 17<br>SAT | <b>IAT-3 (Starts)<br/>FRI TT</b>    | 17<br>TUE |                                     |
| 18<br>TUE | CoCM& CCM 1<br>(starts)         | 18<br>FRI | Students Feedback<br>(Ends)       | 18<br>SUN | Holiday                             | 18<br>WED |                                     |
| 19<br>WED |                                 | 19<br>SAT | <b>PAQIC Meeting<br/>MON TT</b>   | 19<br>MON |                                     | 19<br>THU |                                     |
| 20<br>THU |                                 | 20<br>SUN | Holiday                           | 20<br>TUE |                                     | 20<br>FRI |                                     |
| 21<br>FRI | CoCM& CCM 1<br>(Ends)           | 21<br>MON | <b>Completion of<br/>Unit III</b> | 21<br>WED |                                     | 21<br>SAT | <b>DAC Meeting</b>                  |
| 22<br>SAT | vinayagar chaturthi<br>Holiday  | 22<br>TUE |                                   | 22<br>THU |                                     | 22<br>SUN | Holiday                             |
| 23<br>SUN | Holiday                         | 23<br>WED | IAT QP-2 Submission               | 23<br>FRI | <b>IAT-3 (Ends)</b>                 | 23<br>MON |                                     |
| 24<br>MON | <b>Completion of<br/>Unit I</b> | 24<br>THU |                                   | 24<br>SAT | MON TT                              | 24<br>TUE |                                     |
| 25<br>TUE |                                 | 25<br>FRI |                                   | 25<br>SUN | Holiday                             | 25<br>WED |                                     |
| 26<br>WED |                                 | 26<br>SAT | <b>IAT-2 (Starts)<br/>TUE TT</b>  | 26<br>MON | <b>Last Working Day</b>             | 26<br>THU |                                     |
| 27<br>THU |                                 | 27<br>SUN | Holiday                           | 27<br>TUE | Consolidated Mark<br>statement      | 27<br>FRI |                                     |
| 28<br>FRI |                                 | 28<br>MON |                                   | 28<br>WED | <b>AU Practical<br/>Examination</b> | 28<br>SAT | <b>IQAC Meeting</b>                 |
| 29<br>SAT | Holiday                         | 29<br>TUE |                                   | 29<br>THU |                                     | 29<br>SUN | Holiday                             |
| 30<br>SUN | Holiday                         | 30<br>WED |                                   | 30<br>FRI | -                                   | 30<br>MON |                                     |
| 31<br>MON |                                 | -         | -                                 | 31<br>SAT | -                                   | -         | -                                   |

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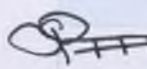
**Notes:**

- 1 Internal Assessment Test I covers the syllabus of Unit I & 50% syllabus of Unit II, Internal Assessment Test II covers the syllabus of 50% syllabus of Unit II, Unit III and Internal Assessment Test III covers syllabus of Unit IV and syllabus of Unit V.
- 2 The Faculty members should evaluate the Answer scripts on the day(s) announced by exam control office for central valuation. The mark statements of all the subjects will be prepared by exam control office and the same will be given to the respective faculty members. The evaluated answer scripts should be distributed to the students for clarification/verification of marks allotted and should be returned within 2 days after completion of central valuation. In case of any change in marks awarded must be communicated to the exam control office.
- 3 No Retest will be conducted. However, the Students who are absent for the Test due to genuine reasons with prior permission and those who scored less than 60% of marks in any subject(s) in Internal Assessment Tests shall write Retest / Improvement Test for the corresponding subject(s) to improve their marks based upon the learn-perform-score policy, by obtaining permission from faculty and Principal.
- 4 Each Student shall write atleast 2 Assignments and present 1 Seminar or submit 1 Innovative Miniproject work in addition to writing 2 Online/ Written Unit Tests, 3 Internal Assessment Tests, and one Model Test in each Theory course (if required). The Faculty member shall evaluate Students' Assignments, Innovative project, Seminars, etc., and award grades to encourage them improve their self-learning performance.
- 5 The Respective Faculty Members are requested to conduct Unit Online test using google forms on during their class hours subjected to laboratory availability.

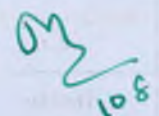
**Number Working Days : 60**

**Abbreviations:**

|   |         |  |
|---|---------|--|
| 1 | IAT -   | Internal Assessment Test                         |
| 2 | CoCM -  | Course Committee Meeting                         |
| 3 | CCM -   | Class Committee meeting                          |
| 4 | DAC -   | Department Advisory Committee Meeting            |
| 5 | ISO MRM | ISO Management Review Meeting                    |
| 6 | PAQIC - | Program Assessment Quality Improvement Committee |
| 7 | PTA -   | Parents Teachers Meeting                         |
| 8 | TT -    | Time Table                                       |

 10/8/2020

**Academic Coordinator**

 10/8/20

**Principal**



# RAMCO INSTITUTE OF TECHNOLOGY

Academic Schedule for ODD Semester of Academic Year 2020-21

III Semester, V Semester & VII Semester BE Courses (Revised as on 16.10.2020)

| AUGUST    |                                | SEPTEMBER |                                  | OCTOBER   |  | NOVEMBER  |                                     |
|-----------|--------------------------------|-----------|----------------------------------|-----------|--|-----------|-------------------------------------|
| 1<br>SAT  |                                | 1<br>TUE  |                                  | 1<br>THU  |  | 1<br>SUN  | Holiday                             |
| 2<br>SUN  | Holiday                        | 2<br>WED  | <b>IQAC Meeting</b>              | 2<br>FRI  | Gandhi Jeyanthi<br>Holiday                     | 2<br>MON  | <b>IAT-3 (Starts)</b>               |
| 3<br>MON  |                                | 3<br>THU  | IAT QP-1 Submission              | 3<br>SAT  | <b>IAT-2 (Ends)<br/>PTA Meeting<br/>WED TT</b> | 3<br>TUE  |                                     |
| 4<br>TUE  |                                | 4<br>FRI  |                                  | 4<br>SUN  | Holiday  | 4<br>WED  |                                     |
| 5<br>WED  |                                | 5<br>SAT  | <b>IAT-1 (Starts)<br/>TUE TT</b> | 5<br>MON  | Completion of Unit IV                          | 5<br>THU  |                                     |
| 6<br>THU  |                                | 6<br>SUN  | Holiday                          | 6<br>TUE  |  | 6<br>FRI  |                                     |
| 7<br>FRI  |                                | 7<br>MON  | Completion of Unit<br>II         | 7<br>WED  | Consolidated Mark<br>statement                 | 7<br>SAT  | <b>IAT-3 (Ends)<br/>MON TT</b>      |
| 8<br>SAT  |                                | 8<br>TUE  |                                  | 8<br>THU  |  | 8<br>SUN  | Holiday                             |
| 9<br>SUN  | Holiday                        | 9<br>WED  |                                  | 9<br>FRI  |  | 9<br>MON  | Model Practical<br>Starts           |
| 10<br>MON |                                | 10<br>THU |                                  | 10<br>SAT | THU TT   | 10<br>TUE | Consolidated Mark<br>statement      |
| 11<br>TUE | Krishna Jeyanthi<br>Holiday    | 11<br>FRI | <b>IAT-1 (Ends)</b>              | 11<br>SUN | Holiday  | 11<br>WED |                                     |
| 12<br>WED | College Reopening              | 12<br>SAT | FRI TT                           | 12<br>MON |  | 12<br>THU | Model Practical<br>Ends             |
| 13<br>THU |                                | 13<br>SUN | Holiday                          | 13<br>TUE |  | 13<br>FRI | Last Working Day                    |
| 14<br>FRI |                                | 14<br>MON | CoCM& CCM 2<br>(starts)          | 14<br>WED |  | 14<br>SAT | Deepavali<br>Holiday                |
| 15<br>SAT | Independence Day<br>Holiday    | 15<br>TUE | Students Feedback<br>(starts)    | 15<br>THU |  | 15<br>SUN | Holiday                             |
| 16<br>SUN | Holiday                        | 16<br>WED | Consolidated Mark<br>statement   | 16<br>FRI | Completion of Unit V                           | 16<br>MON |                                     |
| 17<br>MON |                                | 17<br>THU | CoCM& CCM 2<br>(Ends)            | 17<br>SAT | FRI TT   | 17<br>TUE | AU Practical<br>Examination         |
| 18<br>TUE | CoCM& CCM 1<br>(starts)        | 18<br>FRI | Students Feedback<br>(Ends)      | 18<br>SUN | Holiday  | 18<br>WED |                                     |
| 19<br>WED |                                | 19<br>SAT | <b>PAQIC Meeting<br/>MON TT</b>  | 19<br>MON |  | 19<br>THU |                                     |
| 20<br>THU |                                | 20<br>SUN | Holiday                          | 20<br>TUE |  | 20<br>FRI |                                     |
| 21<br>FRI | CoCM& CCM 1<br>(Ends)          | 21<br>MON | Completion of Unit<br>III        | 21<br>WED |  | 21<br>SAT | <b>DAC Meeting</b>                  |
| 22<br>SAT | vinayagar chaturthi<br>Holiday | 22<br>TUE |                                  | 22<br>THU |  | 22<br>SUN | Holiday                             |
| 23<br>SUN | Holiday                        | 23<br>WED | IAT QP-2 Submission              | 23<br>FRI | CoCM& CCM 3<br>(starts)                        | 23<br>MON |                                     |
| 24<br>MON | Completion of Unit<br>I        | 24<br>THU |                                  | 24<br>SAT | MON TT   | 24<br>TUE |                                     |
| 25<br>TUE |                                | 25<br>FRI |                                  | 25<br>SUN | Pooja Holiday                                  | 25<br>WED | <b>ISO MRM Meeting</b>              |
| 26<br>WED |                                | 26<br>SAT | <b>IAT-2 (Starts)<br/>TUE TT</b> | 26<br>MON | Pooja Holiday                                  | 26<br>THU | <b>End Semester<br/>Examination</b> |
| 27<br>THU |                                | 27<br>SUN | Holiday                          | 27<br>TUE |  | 27<br>FRI |                                     |
| 28<br>FRI |                                | 28<br>MON |                                  | 28<br>WED | IAT QP-3 Submission                            | 28<br>SAT | <b>IQAC Meeting</b>                 |
| 29<br>SAT | Holiday                        | 29<br>TUE |                                  | 29<br>THU | CoCM& CCM 3 (Ends)                             | 29<br>SUN | Holiday                             |
| 30<br>SUN | Holiday                        | 30<br>WED |                                  | 30<br>FRI | Miladi Nabi Holiday                            | 30<br>MON |                                     |
| 31<br>MON |                                | -         | -                                | 31<br>SAT | Completion of Revision<br>classes, FRI TT      | -         | -                                   |


**Notes:**

- 1 Internal Assessment Test I covers the syllabus of Unit I & 50% syllabus of Unit II, Internal Assessment Test II covers the syllabus of 50% syllabus of Unit II, Unit III and Internal Assessment Test III covers syllabus of Unit IV and syllabus of Unit V.
- 2 The Faculty members should evaluate the Answer scripts on the day(s) announced by exam control office for central valuation. The mark statements of all the subjects will be prepared by exam control office and the same will be given to the respective faculty members. The evaluated answer scripts should be distributed to the students for clarification/verification of marks allotted and should be returned within 2 days after completion of central valuation. In case of any change in marks awarded must be communicated to the exam control office.
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- 4 Each Student shall write atleast 2 Assignments and present 1 Seminar or submit 1 Innovative Miniproject work in addition to writing 2 Online/ Written Unit Tests, 3 Internal Assessment Tests, and one Model Test in each Theory course (if required). The Faculty member shall evaluate Students' Assignments, Innovative project, Seminars, etc., and award grades to encourage them improve their self-learning performance.
- 5 The Respective Faculty Members are requested to conduct Unit Online test using google forms on during their class hours subjected to laboratory availability.


**Number Working Days : 75**

**Abbreviations:**

|   |         |  |
|---|---------|--|
| 1 | IAT -   | Internal Assessment Test                         |
| 2 | CoCM -  | Course Committee Meeting                         |
| 3 | CCM -   | Class Committee meeting                          |
| 4 | DAC -   | Department Advisory Committee Meeting            |
| 5 | ISO MRM | ISO Management Review Meeting                    |
| 6 | PAQIC - | Program Assessment Quality Improvement Committee |
| 7 | PTA -   | Parents Teachers Meeting                         |
| 8 | TT -    | Time Table                                       |

 16/10/2020

**Academic Coordinator**

 16.10.20  
**Principal**



**RAMCO INSTITUTE OF TECHNOLOGY**  
Academic Schedule for ODD Semester of Academic Year 2020-21  
I Semester BE Courses

| NOVEMBER  |                                   | DECEMBER  |                             | JANUARY   |                             | FEBRUARY  |                                  | MARCH     |                          |
|-----------|-----------------------------------|-----------|-----------------------------|-----------|-----------------------------|-----------|----------------------------------|-----------|--------------------------|
| 1<br>SUN  | Holiday                           | 1<br>TUE  |                             | 1<br>FRI  | New year Holiday            | 1<br>MON  |                                  | 1<br>MON  |                          |
| 2<br>MON  |                                   | 2<br>WED  |                             | 2<br>SAT  | Holiday                     | 2<br>TUE  |                                  | 2<br>TUE  |                          |
| 3<br>TUE  |                                   | 3<br>THU  | Completion of Unit I        | 3<br>SUN  | Holiday                     | 3<br>WED  |                                  | 3<br>WED  |                          |
| 4<br>WED  | Commencement of Induction Program | 4<br>FRI  |                             | 4<br>MON  |                             | 4<br>THU  |                                  | 4<br>THU  |                          |
| 5<br>THU  |                                   | 5<br>SAT  | TUE TT                      | 5<br>TUE  |                             | 5<br>FRI  |                                  | 5<br>FRI  |                          |
| 6<br>FRI  |                                   | 6<br>SUN  | Holiday                     | 6<br>WED  |                             | 6<br>SAT  | MON TT                           | 6<br>SAT  |                          |
| 7<br>SAT  |                                   | 7<br>MON  |                             | 7<br>THU  | Completion of Unit III      | 7<br>SUN  | Holiday                          | 7<br>SUN  | Holiday                  |
| 8<br>SUN  | Holiday                           | 8<br>TUE  |                             | 8<br>FRI  |                             | 8<br>MON  |                                  | 8<br>MON  | End Semester Examination |
| 9<br>MON  |                                   | 9<br>WED  |                             | 9<br>SAT  | THU TT                      | 9<br>TUE  |                                  | 9<br>TUE  |                          |
| 10<br>TUE |                                   | 10<br>THU |                             | 10<br>SUN | Holiday                     | 10<br>WED |                                  | 10<br>WED |                          |
| 11<br>WED |                                   | 11<br>FRI | IAT QP-1 Submission         | 11<br>MON |                             | 11<br>THU | IAT QP-3 Submission              | 11<br>THU |                          |
| 12<br>THU |                                   | 12<br>SAT | WED TT                      | 12<br>TUE | IAT QP-2 Submission         | 12<br>FRI | Completion of Unit V             | 12<br>FRI |                          |
| 13<br>FRI |                                   | 13<br>SUN | Holiday                     | 13<br>WED |                             | 13<br>SAT | TUE TT                           | 13<br>SAT |                          |
| 14<br>SAT | Deepavali Holiday                 | 14<br>MON | IAT-1 (Starts)              | 14<br>THU | Pongal Holiday              | 14<br>SUN | Holiday                          | 14<br>SUN | Holiday                  |
| 15<br>SUN | Holiday                           | 15<br>TUE |                             | 15<br>FRI | Thiruvalluvar Day           | 15<br>MON | IAT-3 (Starts)                   | 15<br>MON |                          |
| 16<br>MON |                                   | 16<br>WED |                             | 16<br>SAT | Holiday                     | 16<br>TUE | CoCM& CCM 3 (starts)             | 16<br>TUE |                          |
| 17<br>TUE |                                   | 17<br>THU |                             | 17<br>SUN | Holiday                     | 17<br>WED |                                  | 17<br>WED |                          |
| 18<br>WED | Commencement of Classes           | 18<br>FRI | Completion of Unit II       | 18<br>MON |                             | 18<br>THU |                                  | 18<br>THU |                          |
| 19<br>THU |                                   | 19<br>SAT | IAT-1 (Ends) THU TT         | 19<br>TUE | IAT-2 (Starts)              | 19<br>FRI | CoCM& CCM 3 (Ends)               | 19<br>FRI |                          |
| 20<br>FRI |                                   | 20<br>SUN | Holiday                     | 20<br>WED |                             | 20<br>SAT | WED TT IAT-3 (Ends)              | 20<br>SAT |                          |
| 21<br>SAT | DAC Meeting FRI TT                | 21<br>MON | Students Feedback (starts)  | 21<br>THU |                             | 21<br>SUN | Holiday                          | 21<br>SUN | Holiday                  |
| 22<br>SUN | Holiday                           | 22<br>TUE |                             | 22<br>FRI |                             | 22<br>MON |                                  | 22<br>MON |                          |
| 23<br>MON |                                   | 23<br>WED | Consolidated Mark statement | 23<br>SAT | FRI TT                      | 23<br>TUE |                                  | 23<br>TUE |                          |
| 24<br>TUE |                                   | 24<br>THU | Students Feedback (Ends)    | 24<br>SUN | Holiday                     | 24<br>WED | Last Working Day                 | 24<br>WED |                          |
| 25<br>WED | ISO MRM Meeting                   | 25<br>FRI | Christmas                   | 25<br>MON | IAT-2 (Ends)                | 25<br>THU | Consolidated Mark statement      | 25<br>THU |                          |
| 26<br>THU | CoCM& CCM 1 (Starts)              | 26<br>SAT | FRI TT                      | 26<br>TUE | Republic Day                | 26<br>FRI | AU Practical Examination         | 26<br>FRI |                          |
| 27<br>FRI |                                   | 27<br>SUN | Holiday                     | 27<br>WED |                             | 27<br>SAT | National Science Day Celebration | 27<br>SAT |                          |
| 28<br>SAT | IQAC Meeting MON TT               | 28<br>MON | CoCM& CCM 2 (Starts)        | 28<br>THU | Completion of Unit IV       | 28<br>SUN | Holiday                          | 28<br>SUN | Holiday                  |
| 29<br>SUN | Holiday                           | 29<br>TUE |                             | 29<br>FRI | Consolidated Mark statement | -         | -                                | 29<br>MON |                          |
| 30<br>MON | CoCM& CCM 1 (Ends)                | 30<br>WED |                             | 30<br>SAT | TUE TT                      | -         | -                                | 30<br>TUE |                          |
| -         | -                                 | 31<br>THU | CoCM& CCM 2 (Ends)          | 31<br>SUN | Holiday                     | -         | -                                | 31<br>WED |                          |

02  
29/12/20

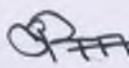
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- 1 Internal Assessment Test I covers the syllabus of Unit I & 50% syllabus of Unit II, Internal Assessment Test II covers the syllabus of 50% syllabus of Unit II, Unit III and Internal Assessment Test III covers syllabus of Unit IV and syllabus of Unit V.
- 2 The Faculty members should evaluate the Answer scripts on the day(s) announced by exam control office for central valuation. The mark statements of all the subjects will be prepared by exam control office and the same will be given to the respective faculty members. The evaluated answer scripts should be distributed to the students for clarification/verification of marks allotted and should be returned within 2 days after completion of central valuation. In case of any change in marks awarded must be communicated to the exam control office.
- 3 No Retest will be conducted. However, the Students who are absent for the Test due to genuine reasons with prior permission and those who scored less than 60% of marks in any subject(s) in Internal Assessment Tests shall write Retest / Improvement Test for the corresponding subject(s) to improve their marks based upon the learn-perform-score policy, by obtaining permission from faculty and Principal.
- 4 Each Student shall write atleast 2 Assignments and present 1 Seminar or submit 1 Innovative Mini-project work in addition to writing 2 Online/ Written Unit Tests, 3 Internal Assessment Tests, and one Model Test in each Theory course (if required). The Faculty member shall evaluate Students' Assignments, Innovative project, Seminars, etc., and award grades to encourage them improve their self-learning performance.
- 5 The Respective Faculty Members are requested to conduct Unit Online Quiz on during their class hours subjected to laboratory availability.

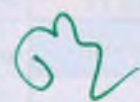
**Number Working Days : 78**

**Abbreviations:**

|   |         |  |
|---|---------|--|
| 1 | IAT -   | Internal Assessment Test                         |
| 2 | CoCM -  | Course Committee Meeting                         |
| 3 | CCM -   | Class Committee meeting                          |
| 4 | DAC -   | Department Advisory Committee Meeting            |
| 5 | ISO MRM | ISO Management Review Meeting                    |
| 6 | PAQIC - | Program Assessment Quality Improvement Committee |
| 7 | PTA -   | Parents Teachers Meeting                         |
| 8 | TT -    | Time Table                                       |

 29/10/2020

**Academic Coordinator**

 29/10/20

**Principal**



**OFFICE OF THE CONTROLLER OF EXAMINATIONS**  
**ANNA UNIVERSITY**  
CHENNAI – 600 025

Email: [coe@annauniv.edu](mailto:coe@annauniv.edu)

☎: 044-22357252, 044-22357264, 044-22357265

☎: 044-22350293

**CONTROLLER OF EXAMINATIONS (i/c)**

Letter No.13715/CoE/COVID-19/C20-C30/2020/1

01-08-2020

To

The Deans of Regional Campuses /  
The Deans of Constituent Colleges /  
The Principals of the Non-Autonomous Affiliated Colleges

Sir/Madam,

Sub: Office of CoE, Anna University – April/May 2020 Examinations –  
Attendance and Assessment Marks – Reg.

Ref: 1. G.O. (Ms) 111, Higher Education (K2) Department dated 27.07.2020.  
2. Minutes of the meeting of the Director (AC), Chairpersons of Faculty,  
CoE, ACoE(UD) and others held on 28-07-2020.

\*\*\*\*\*

Due to the outbreak of COVID-19 pandemic, the whole world, including India, is passing through unprecedented difficult times. As all universities and colleges in Tamil Nadu are closed due to lockdown from 17<sup>th</sup> March 2010, the teaching – learning process and research activities have been badly disrupted. The schedule of Terminal Semester examinations has also got disturbed.

In this regard, following the guidelines of University Grants Commission (UGC) and All India Council for Technical Education (AICTE), the Higher Education Department of Government of Tamil Nadu have issued an order, vide Ref.1, by cancelling the end-semester examinations for the Under-Graduate (UG) and Post-Graduate (PG) students of first to pre-final year and issued instructions for passing the results.

Based on the order, vide Ref.1, the University, vide Ref.2, have decided to obtain the Attendance / Internal Assessment marks as given below for further action.

**Attendance:**

During the lockdown period, the students may be deemed to have attended all the classes and the total attendance may be calculated accordingly. Hence, the attendance of the students shall be considered by summing up of the actual attendance of classes attended by the students before COVID lockdown and full attendance for the period during lockdown.

Hence, the colleges may upload the actual attendance secured by the students upto 16<sup>th</sup> March 2020 in the web portal of the office of the Controller of Examinations in the first 3 assessment periods for the higher semesters and in the first 2 assessment periods for the second semester.

### **Continuous Assessment for all UG/PG Programmes (Full-Time/Part-Time)**

As the lockdown for the students was from 17<sup>th</sup> March 2020, there is the possibility of conducting only two Assessment Tests for the higher semester UG/PG students except the second semester.

Hence, the colleges may upload

- (i) The first two assessment marks for the Theory Courses / Theory cum Studio of B.Arch. courses in the 2<sup>nd</sup> and 3<sup>rd</sup> assessment periods,
- (ii) Internal assessment marks for the Practical Courses by considering the number of experiments conducted upto 16<sup>th</sup> March 2020 in the 4<sup>th</sup> assessment period and
- (iii) Internal assessment marks for the Studio based courses of B.Arch. in the 4<sup>th</sup> assessment period.


Similarly, for the 2<sup>nd</sup> semester UG/PG courses, there is a possibility of conducting only one Internal Assessment during the 2<sup>nd</sup> assessment period and hence it is requested to upload

- (i) The first assessment mark for the Theory Courses / Theory cum Studio courses of B.Arch./M.Arch. in the 2<sup>nd</sup> assessment period,
- (ii) Internal assessment marks for the Practical Courses by considering the number of experiments conducted upto 16<sup>th</sup> March 2020 in the 4<sup>th</sup> assessment period and
- (iii) Internal assessment marks for the Studio based courses of B.Arch./M.Arch. in the 4<sup>th</sup> assessment period.

**The Principals of the Colleges are requested to complete the entry of attendance and the assessment marks in the web portal on or before 05.08.2020.**

**Also, the Principals of the Colleges are requested to send the examination fees collected from the students for the Current Semester Courses alone to the office of the Controller of Examinations on or before 07.08.2020.**

Yours sincerely,

  
01.08.2020

**CONTROLLER OF EXAMINATIONS (i/c)**

  
01/08/2020

**Copy to: The Zonal Coordinators / Zonal Officers of all Zones**



**CENTRE FOR ACADEMIC COURSES**  
ANNA UNIVERSITY  
CHENNAI – 600 025

Off: 22357077 / 73  
22357074  
Fax / Dir : 22352272

**Dr. S. HOSIMIN THILAGAR**  
**DIRECTOR**

Letter No.2407/AU/CAC/Ach Sch(Rev)/2020

16.10.2020

To  
The Deans of Regional Campuses /  
The Deans of Constituent Colleges /  
The Principals of the Non-Autonomous Affiliated Colleges.

**NOTIFICATION**

**Agenda Item: Extension of Academic Schedule (August – November 2020).**

Representations were received from various Principals of Affiliated colleges regarding the challenges / difficulties faced by both the students and faculty during the online teaching – learning process. The issues such as cramped academic schedule, poor network connectivity and insufficient time period between the conduct of three reviews for the project work were discussed.

After due deliberations, in order to address the above said issues and to facilitate the completion of syllabus and the conduct of the internal assessment, it was decided to extend the Academic schedule for the Affiliated Colleges for the current semester. The revised schedule for this session (August – November 2020) is tabulated as below:

### Affiliated Institutions

| Sl. No | Program me                                  | Commen cement of Classes | Last working day |            | Commencement of Practical Examinations |            | Commencement of End Semester Examinations |            |
|--------|---|--------------------------|------------------|------------|--|------------|---|------------|
|        |   |                          | Existing         | Revised    | Existing                               | Revised    | Existing                                  | Revised    |
| 1.     | All UG / PG Programme s (except I Semester) | 12.08.2020               | 26.10.2020       | 13.11.2020 | 28.10.2020                             | 17.11.2020 | 09.11.2020                                | 26.11.2020 |
| 2.     | B. E. / B. Tech. (Part-Time) – III, V, VII  |                          |                  |            |  |            |   |            |

**RE - OPENING DAY FOR THE NEXT SEMESTER: 28.12.2020 (Monday)**

\*\*In order to ensure minimum no. of working days, the following Saturdays are declared as working days.

| Sl. No. | Working Days (Saturdays for UG & PG ) | Time Table of the Week Day to be Followed |
|---------|---------------------------------------|---|
| 1.      | 05.09.2020                            | Tuesday                                   |
| 2.      | 12.09.2020                            | Friday                                    |
| 3.      | 19.09.2020                            | Monday                                    |
| 4.      | 26.09.2020                            | Tuesday                                   |
| 5.      | 03.10.2020                            | Wednesday                                 |

| Sl. No. | Working Days (Saturdays for UG & PG ) | Time Table of the Week Day to be Followed |
|---------|---------------------------------------|---|
| 6.      | 10.10.2020                            | Thursday                                  |
| 7.      | 17.10.2020                            | Friday                                    |
| 8.      | 24.10.2020                            | Monday                                    |
| 9.      | 31.10.2020                            | Friday                                    |
| 10.     | 07.11.2020                            | Monday                                    |

This decision is taken with the approval of the competent authority.

Thanking you,

Yours faithfully,

*[Signature]*  
16/10/2020  
**DIRECTOR**

**Copy to:**

1. PS to Vice Chancellor
2. PA to Registrar
3. The Chairpersons, Faculty of Civil / Mechanical / Electrical // ICE / Technology / Management Sciences / S&H / Architecture & Planning, AU, Ch – 25.
4. Office of the Controller of Examinations
5. Office of Additional Controller of Examinations (UDs)
6. The Stock File, CAC.

# RAMCO INSTITUTE OF TECHNOLOGY

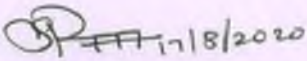
Academic Year 2020-2021 (Odd Semester)

17.08.2020

In order to ensure good academic preparation for the ensuing semester, all the faculty members are advised to prepare Lecture Plan, Tutorial Plan, Practical Plan, using ISO formats already in practice for III, V and VII Semester Theory Subjects. The complete course files as per the contents given below will be reviewed by the principal as per the following schedule. The preparation will be reviewed by HOD and Principal.

## Contents of the Theory Course file:

1. Lecture Plan
  2. Course objective and course outcomes
  3. Tutorial Plan with tutorial sheets if applicable
  4. Teaching – Learning material (Notes of lesson neatly typed/ written with good hand writing with appropriate margin on all 4 sides of the paper and any other downloaded and edited material, soft copies of NPTEL Video, Online course materials relevant to the subject.
  5. Question Bank with atleast (20 Nos. of 2 mark Question with Answers and around 10-15 important bigger questions for each unit.
  6. Question Bank with application oriented Question for each unit
  7. Syllabus Copy
  8. Individual Time Table
  9. Class Time Table
  10. Question Papers of immediate previous University examination (4-6 Nos.) for the subject concerned.
  11. Any other relevant material
- The course file for practical course can be prepared after receiving guideline as per the Anna University.
  - Due to Covid 19 Pandemic, the lecture plan can be prepared from 02.07.2020 in order to smooth conduct of classes.
  - The faculty members are requested to prepare the documents and verification process will be done after the Lockdown period.

  
Academic Coordinator  
(Dr.S.Periyayagi)

  
Vice Principal

  
PRINCIPAL

Date: 21.01.2021



**CENTRE FOR ACADEMIC COURSES**  
ANNA UNIVERSITY: : CHENNAI – 600 025

**ACADEMIC SCHEDULE FOR NON AUTONOMOUS AFFILIATED COLLEGES**

**December 2020 – May 2021 (Even Semester – Final Semester\*)**

**UG & PG Programmes**

| Sl. No. | Programme                   | Semester | Commencement of Classes | Last working day | Commencement of Practical Examinations | Commencement of End Semester Examinations |
|---------|-----------------------------|----------|-------------------------|------------------|--|---|
| 1.      | B.E. / B.Tech.(Full-Time)   | VIII     | 14.12.2020              | 12.04.2021**     | 15.04.2021                             | 26.04.2021                                |
| 2.      | B.Arch. (Full-Time)         | X        |                         |                  |  |   |
| 3.      | M.E. / M.Tech./ M.Arch.(FT) | IV       |                         |                  |  |   |
| 4.      | M.C.A. (Full-Time)          | VI       |                         |                  |  |   |
| 5.      | M.B.A. (FT)                 | IV       |                         |                  |  |   |
| 6.      | M.Sc. (5 Yrs-Integrated)    | X        |                         |                  |  |   |
| 7.      | M.B.A. (5 Yrs-Integrated)   | X        |                         |                  |  |   |

**\* Odd Semester - End Semester Examinations Holidays from 01.02.2021 to 17.02.2021.**

**NOTE:**

1. The Theory and Practical Examination schedules will be published in due course (Practical Examinations will be conducted before the theory examinations).
2. If necessary, loss of classes due to various curricular / co-curricular activities of the department / college may be compensated by conducting classes on Saturdays.

**\*\* In order to ensure minimum no. of working days, the following 8 Saturdays are declared as working days.**

| Sl. No. | Working Days (Saturdays) | Time Table of the Week Day to be Followed |
|---------|--------------------------|---|
| 1.      | 20.02.2021               | Friday                                    |
| 2.      | 27.02.2021               | Tuesday                                   |
| 3.      | 06.03.2021               | Wednesday                                 |
| 4.      | 13.03.2021               | Friday                                    |

| Sl. No. | Working Days (Saturdays) | Time Table of the Week Day to be Followed |
|---------|--------------------------|---|
| 5.      | 20.03.2021               | Monday                                    |
| 6.      | 27.03.2021               | Tuesday                                   |
| 7.      | 03.04.2021               | Wednesday                                 |
| 8.      | 10.04.2021               | Thursday                                  |

*Handwritten signature and date: 21.1.2021*

**DIRECTOR  
ACADEMIC COURSES**

Date: 21.01.2021



**CENTRE FOR ACADEMIC COURSES**  
ANNA UNIVERSITY: : CHENNAI – 600 025

**ACADEMIC SCHEDULE FOR NON AUTONOMOUS AFFILIATED COLLEGES**

**February 2021 – June 2021 (Even Semester – Except II & Final Semester)\***

**UG & PG Programmes**

| Sl. No. | Programme                 | Semester   | Commencement of Classes | Last working day | Commencement of Practical Examinations | Commencement of End Semester Examinations |
|---------|---------------------------|------------|-------------------------|------------------|--|---|
| 1.      | B.E. / B.Tech.(Full-Time) | IV,VI      | 18.02.2021              | 21.05.2021**     | 24.05.2021                             | 02.06.2021                                |
| 2.      | B.E. / B.Tech (Part-Time) | IV,VI      |                         |                  |  |   |
| 3.      | B.Arch. (Full-Time)       | IV,VI,VIII |                         |                  |  |   |
| 4.      | M.C.A. (Full-Time)        | IV         |                         |                  |  |   |
| 5.      | M.Sc. (5 Yrs-Integrated)  | IV,VI,VIII |                         |                  |  |   |
| 6.      | M.B.A. (5 Yrs-Integrated) | IV,VI,VIII |                         |                  |  |   |

\* As per the directives of the Government of Tamil Nadu, the classes will be conducted in ONLINE mode

**RE - OPENING DAY FOR THE NEXT SEMESTER: 01.07.2021 (Thursday)**

**NOTE:**

1. The Theory and Practical Examination schedules will be published in due course (Practical Examinations will be conducted before the theory examinations).
2. If necessary, loss of classes due to various curricular / co-curricular activities of the department / college may be compensated by conducting classes on Saturdays.

\*\* In order to ensure minimum no. of working days, the following 12 Saturdays are declared as working days.

| Sl. No. | Working Days (Saturdays) | Time Table of the Week Day to be Followed |
|---------|--------------------------|---|
| 1.      | 20.02.2021               | Friday                                    |
| 2.      | 27.02.2021               | Tuesday                                   |
| 3.      | 06.03.2021               | Wednesday                                 |
| 4.      | 13.03.2021               | Friday                                    |
| 5.      | 20.03.2021               | Monday                                    |
| 6.      | 27.03.2021               | Tuesday                                   |

| Sl. No. | Working Days (Saturdays) | Time Table of the Week Day to be Followed |
|---------|--------------------------|---|
| 7.      | 03.04.2021               | Wednesday                                 |
| 8.      | 10.04.2021               | Thursday                                  |
| 9.      | 17.04.2021               | Friday                                    |
| 10.     | 24.04.2021               | Monday                                    |
| 11.     | 08.05.2021               | Tuesday                                   |
| 12.     | 15.05.2021               | Wednesday                                 |

*Ug*  
*21.1.2021*

**DIRECTOR**  
**ACADEMIC COURSES**



**RAMCO INSTITUTE OF TECHNOLOGY**  
Academic Schedule for EVEN Semester of Academic Year 2020-21  
VIII Semester B.E. Courses

| DECEMBER  |                            | JANUARY   |                                   | FEBRUARY  |                                     | MARCH     |                                | APRIL     |                    |
|-----------|----------------------------|-----------|-----------------------------------|-----------|-------------------------------------|-----------|--------------------------------|-----------|--------------------|
| 1<br>TUE  |                            | 1<br>FRI  | New year<br>Holiday               | 1<br>MON  | CoCM & CCM 2<br>(Starts)            | 1<br>MON  | Completion of<br>Unit IV       | 1<br>THU  |                    |
| 2<br>WED  |                            | 2<br>SAT  | Holiday                           | 2<br>TUE  |                                     | 2<br>TUE  |                                | 2<br>FRI  | Good Friday        |
| 3<br>THU  |                            | 3<br>SUN  | Holiday                           | 3<br>WED  |                                     | 3<br>WED  |                                | 3<br>SAT  |                    |
| 4<br>FRI  |                            | 4<br>MON  |                                   | 4<br>THU  | CoCM & CCM 2<br>(Ends)              | 4<br>THU  |                                | 4<br>SUN  | Holiday            |
| 5<br>SAT  |                            | 5<br>TUE  |                                   | 5<br>FRI  |                                     | 5<br>FRI  |                                | 5<br>MON  |                    |
| 6<br>SUN  | Holiday                    | 6<br>WED  |                                   | 6<br>SAT  | MON TT                              | 6<br>SAT  |                                | 6<br>TUE  |                    |
| 7<br>MON  |                            | 7<br>THU  | IAT QP-1<br>Submission            | 7<br>SUN  | Holiday                             | 7<br>SUN  | Holiday                        | 7<br>WED  |                    |
| 8<br>TUE  |                            | 8<br>FRI  |                                   | 8<br>MON  | Completion of<br>Unit III           | 8<br>MON  |                                | 8<br>THU  |                    |
| 9<br>WED  |                            | 9<br>SAT  | THU TT                            | 9<br>TUE  |                                     | 9<br>TUE  |                                | 9<br>FRI  |                    |
| 10<br>THU |                            | 10<br>SUN | Holiday                           | 10<br>WED |                                     | 10<br>WED |                                | 10<br>SAT |                    |
| 11<br>FRI |                            | 11<br>MON | IAT-1 (Starts)                    | 11<br>THU | IAT QP-2<br>Submission              | 11<br>THU |                                | 11<br>SUN | Holiday            |
| 12<br>SAT |                            | 12<br>TUE | IAT-1 (Ends)                      | 12<br>FRI |                                     | 12<br>FRI |                                | 12<br>MON |                    |
| 13<br>SUN | Holiday                    | 13<br>WED |                                   | 13<br>SAT | TUE TT                              | 13<br>SAT |                                | 13<br>TUE | Telugu New<br>Year |
| 14<br>MON | Commencement<br>of Classes | 14<br>THU | Pongal Holiday                    | 14<br>SUN | Holiday                             | 14<br>SUN | Holiday                        | 14<br>WED | Tamil New<br>Year  |
| 15<br>TUE |                            | 15<br>FRI | Thiruvalluvar<br>Day              | 15<br>MON | IAT-2 (Starts)                      | 15<br>MON |                                | 15<br>THU |                    |
| 16<br>WED |                            | 16<br>SAT | Holiday                           | 16<br>TUE | IAT-2 (Ends)                        | 16<br>TUE | Completion of<br>Unit V        | 16<br>FRI |                    |
| 17<br>THU |                            | 17<br>SUN | Holiday                           | 17<br>WED | Project Review II<br>(Starts)       | 17<br>WED | CoCM & CCM 3<br>(Starts)       | 17<br>SAT |                    |
| 18<br>FRI |                            | 18<br>MON | Completion of<br>Unit II          | 18<br>THU |                                     | 18<br>THU | IAT QP-3<br>Submission         | 18<br>SUN | Holiday            |
| 19<br>SAT | THU TT                     | 19<br>TUE | Consolidated<br>Mark statement    | 19<br>FRI |                                     | 19<br>FRI |                                | 19<br>MON |                    |
| 20<br>SUN | Holiday                    | 20<br>WED | Project Review I<br>(Starts)      | 20<br>SAT | Project Review II<br>(Ends) WED TT  | 20<br>SAT | CoCM & CCM 3<br>(Ends)         | 20<br>TUE |                    |
| 21<br>MON | CoCM & CCM I<br>(Starts)   | 21<br>THU |                                   | 21<br>SUN | Holiday                             | 21<br>SUN | Holiday                        | 21<br>WED |                    |
| 22<br>TUE |                            | 22<br>FRI |                                   | 22<br>MON | Consolidated Mark<br>statement      | 22<br>MON | IAT-3 (Starts)                 | 22<br>THU |                    |
| 23<br>WED |                            | 23<br>SAT | Project Review I<br>(Ends) WED TT | 23<br>TUE |                                     | 23<br>TUE | IAT-3 (Ends)                   | 23<br>FRI |                    |
| 24<br>THU | CoCM & CCM I<br>(Ends)     | 24<br>SUN | Holiday                           | 24<br>WED |                                     | 24<br>WED | Project Review III<br>(Starts) | 24<br>SAT |                    |
| 25<br>FRI | Christmas                  | 25<br>MON |                                   | 25<br>THU |                                     | 25<br>THU |                                | 25<br>SUN | Mahavir<br>Javanti |
| 26<br>SAT | FRI TT                     | 26<br>TUE | Republic Day                      | 26<br>FRI |                                     | 26<br>FRI | Project Review III<br>(Ends)   | 26<br>MON |                    |
| 27<br>SUN | Holiday                    | 27<br>WED | Students Feedback<br>(starts)     | 27<br>SAT | National Science<br>Day Celebration | 27<br>SAT | Last Working<br>Day            | 27<br>TUE |                    |
| 28<br>MON | Completion of<br>Unit I    | 28<br>THU |                                   | 28<br>SUN | Holiday                             | 28<br>SUN | Holiday                        | 28<br>WED |                    |
| 29<br>TUE |                            | 29<br>FRI | Students Feedback<br>(Ends)       | -         | -                                   | 29<br>MON | Consolidated Mark<br>statement | 29<br>THU |                    |
| 30<br>WED |                            | 30<br>SAT | TUE TT                            | -         | -                                   | 30<br>TUE | AU Practical<br>Examination    | 30<br>FRI |                    |
| 31<br>THU |                            | 31<br>SUN | Holiday                           | -         | -                                   | 31<br>WED |                                | 31<br>SAT | -                  |

03  
04/12/20


**Notes:**

- 1 Internal Assessment Test I covers the syllabus of Unit I & 50% syllabus of Unit II, Internal Assessment Test II covers the syllabus of 50% syllabus of Unit II, Unit III and Internal Assessment Test III covers syllabus of Unit IV and syllabus of Unit V.
- 2 The Faculty members should evaluate the Answer scripts on the day(s) announced by exam control office for central valuation. The mark statements of all the subjects will be prepared by exam control office and the same will be given to the respective faculty members. The evaluated answer scripts should be distributed to the students for clarification/verification of marks allotted and should be returned within 2 days after completion of central valuation. In case of any change in marks awarded must be communicated to the exam control office.
- 3 No Retest will be conducted. However, the Students who are absent for the Test due to genuine reasons with prior permission and those who scored less than 60% of marks in any subject(s) in Internal Assessment Tests shall write Retest / Improvement Test for the corresponding subject(s) to improve their marks based upon the learn-perform-score policy, by obtaining permission from faculty and Principal
- 4 Each Student shall write atleast 2 Assignments and present 1 Seminar or submit 1 Innovative Miniproject work in addition to writing 2 Online/ Written Unit Tests, 3 Internal Assessment Tests, and one Model Test in each Theory course (if required). The Faculty member shall evaluate Students' Assignments, Innovative project, Seminars, etc., and award grades to encourage them improve their self-learning performance.
- 5 The Respective Faculty Members are requested to conduct Unit Online Quiz on during their class hours subjected to laboratory availability.


**Number Working Days : 73**

**Abbreviations:**

|   |         |  |
|---|---------|--|
| 1 | IAT -   | Internal Assessment Test                         |
| 2 | CoCM -  | Course Committee Meeting                         |
| 3 | CCM -   | Class Committee meeting                          |
| 4 | DAC -   | Department Advisory Committee Meeting            |
| 5 | ISO MRM | ISO Management Review Meeting                    |
| 6 | PAQIC - | Program Assessment Quality Improvement Committee |
| 7 | PTA -   | Parents Teachers Meeting                         |
| 8 | TT -    | Time Table                                       |

  
10/12/2020

**Academic Coordinator**

  
10/12/20

**Principal**



**RAMCO INSTITUTE OF TECHNOLOGY**  
**Academic Schedule for EVEN Semester of Academic Year 2020-21**  
**IV Semester & VI Semester B.E. Courses**

| FEBRUARY  |                            | MARCH     |                                | APRIL     |                                | MAY       |                                   | JUNE       |                             |
|-----------|----------------------------|-----------|--------------------------------|-----------|--------------------------------|-----------|-----------------------------------|------------|-----------------------------|
| 1<br>MON  |                            | 1<br>MON  |                                | 1<br>THU  | CoCM&CCM 2<br>(Ends)           | 1<br>SAT  | May Day                           | 1<br>TUE   |                             |
| 2<br>TUE  |                            | 2<br>TUE  |                                | 2<br>FRI  | Good Friday                    | 2<br>SUN  | Holiday                           | 2<br>WED   | End Semester<br>Examination |
| 3<br>WED  |                            | 3<br>WED  |                                | 3<br>SAT  | MON TT                         | 3<br>MON  | CoCM&CCM 3<br>(starts)            | 3<br>THU   |                             |
| 4<br>THU  |                            | 4<br>THU  | Completion of<br>Unit I        | 4<br>SUN  | Holiday                        | 4<br>TUE  |                                   | 4<br>FRI   |                             |
| 5<br>FRI  |                            | 5<br>FRI  |                                | 5<br>MON  | Students Feedback<br>(starts)  | 5<br>WED  |                                   | 5<br>SAT   |                             |
| 6<br>SAT  |                            | 6<br>SAT  | Residential<br>Assignment      | 6<br>TUE  |                                | 6<br>THU  | CoCM&CCM 3<br>(starts)            | 6<br>SUN   | Holiday                     |
| 7<br>SUN  | Holiday                    | 7<br>SUN  | Holiday                        | 7<br>WED  |                                | 7<br>FRI  |                                   | 7<br>MON   |                             |
| 8<br>MON  |                            | 8<br>MON  |                                | 8<br>THU  | Completion of<br>Unit III      | 8<br>SAT  | TUE TT                            | 8<br>TUE   |                             |
| 9<br>TUE  |                            | 9<br>TUE  |                                | 9<br>FRI  | Students Feedback<br>(Ends)    | 9<br>SUN  | Holiday                           | 9<br>WED   | ISO MRM<br>Meeting          |
| 10<br>WED |                            | 10<br>WED |                                | 10<br>SAT | PA/GA/PC/TS/ARW<br>PTA Meeting | 10<br>MON |                                   | 10<br>THU  |                             |
| 11<br>THU |                            | 11<br>THU | PAQIC Meeting                  | 11<br>SUN | Holiday                        | 11<br>TUE | IAT QP-3<br>Submission            | 11<br>FRI  |                             |
| 12<br>FRI |                            | 12<br>FRI |                                | 12<br>MON | Residential<br>Assignment      | 12<br>WED |                                   | 12<br>SAT  |                             |
| 13<br>SAT |                            | 13<br>SAT | PA/GA/PC/TS/<br>ARW            | 13<br>TUE | Telugu New Year                | 13<br>THU | FRI TT<br>Completion of Unit V    | 13<br>SUN  | Holiday                     |
| 14<br>SUN | Holiday                    | 14<br>SUN | Holiday                        | 14<br>WED | Tamil New Year                 | 14<br>FRI | Ramzan                            | 14<br>MON  |                             |
| 15<br>MON |                            | 15<br>MON | IAT QP-1<br>Submission         | 15<br>THU | IAT QP-2<br>Submission         | 15<br>SAT | IAT-3 (Starts)                    | 15<br>TUE  |                             |
| 16<br>TUE | IQAC<br>Meeting            | 16<br>TUE |                                | 16<br>FRI |                                | 16<br>SUN | Holiday                           | 16<br>WED  |                             |
| 17<br>WED |                            | 17<br>WED | IAT-1 (Starts)                 | 17<br>SAT | PA/GA/PC/TS/<br>ARW            | 17<br>MON | Model Practical<br>Exam Starts    | 17<br>THU  |                             |
| 18<br>THU | Commencement of<br>Classes | 18<br>THU |                                | 18<br>SUN | Holiday                        | 18<br>TUE |                                   | 18<br>FRI  |                             |
| 19<br>FRI |                            | 19<br>FRI | Completion of<br>Unit II       | 19<br>MON | IAT-2 (Starts)                 | 19<br>WED |                                   | 19<br>SAT  | DAC<br>Meeting              |
| 20<br>SAT | WED TT                     | 20<br>SAT | Residential<br>Assignment      | 20<br>TUE |                                | 20<br>THU | Model Practical<br>Exam Ends      | 20<br>SUN  | Holiday                     |
| 21<br>SUN | Holiday                    | 21<br>SUN | Holiday                        | 21<br>WED |                                | 21<br>FRI | IAT -3 (Ends)<br>Last Working Day | 21<br>MON  |                             |
| 22<br>MON |                            | 22<br>MON |                                | 22<br>THU |                                | 22<br>SAT | Holiday                           | 22<br>TUE. |                             |
| 23<br>TUE | CoCM&CCM 1<br>(starts)     | 23<br>TUE |                                | 23<br>FRI |                                | 23<br>SUN | Holiday                           | 23<br>WED  |                             |
| 24<br>WED |                            | 24<br>WED |                                | 24<br>SAT | PA/GA/PC/TS/<br>ARW            | 24<br>MON | Model Practical<br>Examination    | 24<br>THU  |                             |
| 25<br>THU |                            | 25<br>THU | IAT-1 (Ends)                   | 25<br>SUN | Mahaveer Jayanti               | 25<br>TUE | Consolidated Mark<br>statement    | 25<br>FRI  |                             |
| 26<br>FRI | CoCM&CCM 1<br>(Ends)       | 26<br>FRI |                                | 26<br>MON | IAT-2 (Ends)                   | 26<br>WED |                                   | 26<br>SAT  | DAC<br>Meeting              |
| 27<br>SAT | PA/GA/PC/TS/<br>ARW        | 27<br>SAT | PA/GA/PC/TS/<br>ARW            | 27<br>TUE |                                | 27<br>THU |                                   | 27<br>SUN  | Holiday                     |
| 28<br>SUN | Holiday                    | 28<br>SUN | Holiday                        | 28<br>WED | Completion of<br>Unit IV       | 28<br>FRI |                                   | 28<br>MON  |                             |
| -         | -                          | 29<br>MON | CoCM&CCM 2<br>(starts)         | 29<br>THU | Consolidated Mark<br>statement | 29<br>SAT | IQAC<br>Meeting                   | 29<br>TUE  |                             |
| -         | -                          | 30<br>TUE | Consolidated Mark<br>statement | 30<br>FRI |                                | 30<br>SUN | Holiday                           | 30<br>WED  |                             |
| -         | -                          | 31<br>WED |                                | -         | -                              | 31<br>MON |                                   | -          | -                           |

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6/12/21

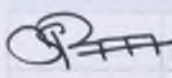
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- 3 No Retest will be conducted. However, the Students who are absent for the Test due to genuine reasons with prior permission and those who scored less than 60% of marks in any subject(s) in Internal Assessment Tests shall write Retest / Improvement Test for the corresponding subject(s) to improve their marks based upon the learn-perform-score policy, by obtaining permission from HOD and Principal.
- 4 Each Student shall write atleast 2 Assignments and present 1 Seminar or submit 1 project work in addition to 3 Internal Assessment Tests, and one Model Test in each Theory course (if required). The Faculty member shall evaluate Students' Assignments, Innovative project, Seminars, etc., and award grades to encourage them improve their self-learning performance.
- 5 Faculty Members are advised to implement project based learning and problem based learning in their courses and document the outcomes interms of knowledge and skill attainment.

**Number Working Days : 75**

**Abbreviations:**

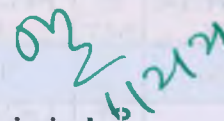
- |   |                                      |
|---|--------------------------------------|
| 1. IAT - Internal Assessment Test                           | 9. PA - Programming Aptitude         |
| 2. CoCM - Course Committee Meeting                          | 10. GA - General Aptitude            |
| 3. CCM - Class Committee meeting                            | 11. PC - Professional Communication  |
| 4. DAC - Department Advisory Committee Meeting              | 12. ARW - Advanced Reading & Writing |
| 5. ISO MRM - ISO Management Review Meeting                  | 13. TS - Technical Seminar           |
| 6. PAQIC - Program Assessment Quality Improvement Committee |                                      |
| 7. PTA -Parents Teachers Meeting                            |                                      |
| 8. TT -Time Table   |                                      |

  
6/2/2021

**Academic Coordinator**

  
6/2/21

**Vice Principal**

  
6/2/21

**Principal**



**RAMCO INSTITUTE OF TECHNOLOGY**  
**Academic Schedule for EVEN Semester of Academic Year 2020-21**  
**VIII Semester B.E. Courses (Revised as on 21.01.2021)**

| DECEMBER  |                            | JANUARY   |                                | FEBRUARY  |                                      | MARCH     |  | APRIL     |                                |
|-----------|----------------------------|-----------|--------------------------------|-----------|--------------------------------------|-----------|--|-----------|--------------------------------|
| 1<br>TUE  |                            | 1<br>FRI  | New year<br>Holiday            | 1<br>MON  | AU End Semester<br>Examination (VII) | 1<br>MON  |  | 1<br>THU  | IAT QP-3<br>Submission         |
| 2<br>WED  |                            | 2<br>SAT  | Holiday                        | 2<br>TUE  |                                      | 2<br>TUE  |  | 2<br>FRI  | Good Friday                    |
| 3<br>THU  |                            | 3<br>SUN  | Holiday                        | 3<br>WED  |                                      | 3<br>WED  |  | 3<br>SAT  | Project Review III<br>(Ends)   |
| 4<br>FRI  |                            | 4<br>MON  |                                | 4<br>THU  |                                      | 4<br>THU  |  | 4<br>SUN  | Holiday                        |
| 5<br>SAT  |                            | 5<br>TUE  |                                | 5<br>FRI  |                                      | 5<br>FRI  |  | 5<br>MON  | IAT-3 (Starts)                 |
| 6<br>SUN  | Holiday                    | 6<br>WED  |                                | 6<br>SAT  | MON TT                               | 6<br>SAT  | Residential<br>Assignment                  | 6<br>TUE  | IAT-3<br>(Ends)                |
| 7<br>MON  |                            | 7<br>THU  |                                | 7<br>SUN  | Holiday                              | 7<br>SUN  | Holiday                                    | 7<br>WED  | CoCM & CCM 3<br>(Starts)       |
| 8<br>TUE  |                            | 8<br>FRI  |                                | 8<br>MON  |                                      | 8<br>MON  |  | 8<br>THU  |                                |
| 9<br>WED  |                            | 9<br>SAT  | THU TT                         | 9<br>TUE  |                                      | 9<br>TUE  |  | 9<br>FRI  | Consolidated Mark<br>statement |
| 10<br>THU |                            | 10<br>SUN | Holiday                        | 10<br>WED |                                      | 10<br>WED |  | 10<br>SAT | CoCM & CCM 3<br>(Ends)         |
| 11<br>FRI |                            | 11<br>MON |                                | 11<br>THU |                                      | 11<br>THU | PAQIC Meeting                              | 11<br>SUN | Holiday                        |
| 12<br>SAT |                            | 12<br>TUE | IAT QP-1<br>Submission         | 12<br>FRI |                                      | 12<br>FRI | IAT QP-2<br>Submission                     | 12<br>MON | Last Working<br>Day            |
| 13<br>SUN | Holiday                    | 13<br>WED |                                | 13<br>SAT | TUE TT                               | 13<br>SAT | FRI TT                                     | 13<br>TUE | Telugu New Year                |
| 14<br>MON | Commencement<br>of Classes | 14<br>THU | Pongal Holiday                 | 14<br>SUN | Holiday                              | 14<br>SUN | Holiday                                    | 14<br>WED | Tamil New Year                 |
| 15<br>TUE |                            | 15<br>FRI | Thiruvalluvar<br>Day           | 15<br>MON |                                      | 15<br>MON | Completion of Unit<br>IV<br>IAT 2 (Starts) | 15<br>THU | AU Practical<br>Examination    |
| 16<br>WED |                            | 16<br>SAT | Holiday                        | 16<br>TUE | IQAC Meeting                         | 16<br>TUE | IAT-2 (Ends)                               | 16<br>FRI |                                |
| 17<br>THU |                            | 17<br>SUN | Holiday                        | 17<br>WED | AU End Semester<br>Examination (VII) | 17<br>WED | Project Review<br>II (Starts)              | 17<br>SAT |                                |
| 18<br>FRI |                            | 18<br>MON | Completion of<br>Unit II       | 18<br>THU |                                      | 18<br>THU |  | 18<br>SUN | Holiday                        |
| 19<br>SAT | THU TT                     | 19<br>TUE | IAT-1 (Starts)                 | 19<br>FRI |                                      | 19<br>FRI | Project Review<br>II (Ends)                | 19<br>MON |                                |
| 20<br>SUN | Holiday                    | 20<br>WED | IAT-1 (Ends)                   | 20<br>SAT | FRI TT                               | 20<br>SAT | Residential<br>Assignment                  | 20<br>TUE |                                |
| 21<br>MON | CoCM & CCM I<br>(Starts)   | 21<br>THU |                                | 21<br>SUN | Holiday                              | 21<br>SUN | Holiday                                    | 21<br>WED |                                |
| 22<br>TUE |                            | 22<br>FRI |                                | 22<br>MON | CoCM&CCM 2<br>(Starts)               | 22<br>MON | Consolidated<br>Mark statement             | 22<br>THU |                                |
| 23<br>WED |                            | 23<br>SAT | WED TT                         | 23<br>TUE | Completion of<br>Unit III            | 23<br>TUE |  | 23<br>FRI |                                |
| 24<br>THU | CoCM & CCM I<br>(Ends)     | 24<br>SUN | Holiday                        | 24<br>WED | Project Review I<br>(Starts)         | 24<br>WED |  | 24<br>SAT | AU End Semester<br>Examination |
| 25<br>FRI | Chirstmas                  | 25<br>MON | Consolidated<br>Mark statement | 25<br>THU |                                      | 25<br>THU |  | 25<br>SUN | Mahavir Jayanti                |
| 26<br>SAT | FRI TT                     | 26<br>TUE | Republic Day                   | 26<br>FRI | Project Review I<br>(Ends)           | 26<br>FRI |  | 26<br>MON |                                |
| 27<br>SUN | Holiday                    | 27<br>WED | Students Feedback<br>(starts)  | 27<br>SAT | CoCM&CCM 2<br>(Ends) TUE TT          | 27<br>SAT | TUE TT                                     | 27<br>TUE |                                |
| 28<br>MON | Completion of<br>Unit I    | 28<br>THU |                                | 28<br>SUN | Holiday                              | 28<br>SUN | Holiday                                    | 28<br>WED |                                |
| 29<br>TUE |                            | 29<br>FRI | Students Feedback<br>(Ends)    | -         | -                                    | 29<br>MON |  | 29<br>THU |                                |
| 30<br>WED |                            | 30<br>SAT | TUE TT                         | -         | -                                    | 30<br>TUE | Completion of<br>Unit V                    | 30<br>FRI |                                |
| 31<br>THU |                            | 31<br>SUN | Holiday                        | -         | -                                    | 31<br>WED | Project Review<br>III (Starts)             | 31<br>SAT | -                              |

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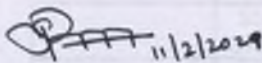
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- 3 No Retest will be conducted. However, the Students who are absent for the Test due to genuine reasons with prior permission and those who scored less than 60% of marks in any subject(s) in Internal Assessment Tests shall write Retest / Improvement Test for the corresponding subject(s) to improve their marks based upon the learn-perform-score policy, by obtaining permission from HOD and Principal.
- 4 Each Student shall write atleast 2 Assignments and present 1 Seminar or submit 1 project work in addition to 3 Internal Assessment Tests, and one Model Test in each Theory course (if required). The Faculty member shall evaluate Students' Assignments, Innovative project, Seminars, etc., and award grades to encourage them improve their self-learning performance.
- 5 Faculty Members are advised to implement project based learning and problem based learning in their courses and document the outcomes interms of knowledge and skill attainment.
- 6 All Staurdays is allotted for carrying out project work in the industry or institution.

**Number Working Days : 78**

**Abbreviations:**

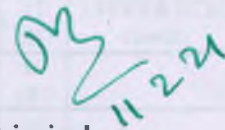
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- 3 CCM - Class Committee meeting
- 4 DAC - Department Advisory Committee Meeting
- 5 ISO MRM ISO Management Review Meeting
- 6 PAQIC - Program Assessment Quality Improvement Committee
- 7 PTA - Parents Teachers Meeting
- 8 TT - Time Table

  
11/2/2024

**Academic Coordinator**

  
11/2/24

**Vice Principal**

  
11/2/24

**Principal**



**RAMCO INSTITUTE OF TECHNOLOGY**  
**Academic Schedule for EVEN Semester of Academic Year 2020-21**  
**II Semester B.E. Courses**

| APRIL  |                            | MAY    |                                | JUNE   |                                | JULY   |                                |
|--------|----------------------------|--------|--------------------------------|--------|--------------------------------|--------|--------------------------------|
| 1 THU  |                            | 1 SAT  | May Day                        | 1 TUE  |                                | 1 THU  |                                |
| 2 FRI  | Good Friday                | 2 SUN  | Holiday                        | 2 WED  |                                | 2 FRI  |                                |
| 3 SAT  |                            | 3 MON  |                                | 3 THU  |                                | 3 SAT  | IAT 3 (Ends)<br>FRI TT         |
| 4 SUN  | Holiday                    | 4 TUE  | IAT QP-1 Submission            | 4 FRI  |                                | 4 SUN  | Holiday                        |
| 5 MON  |                            | 5 WED  |                                | 5 SAT  | IAT 2 (Ends)<br>MON TT         | 5 MON  | Model Practical<br>Exam Starts |
| 6 TUE  |                            | 6 THU  |                                | 6 SUN  | Holiday                        | 6 TUE  | CoCM&CCM 3 (Ends)              |
| 7 WED  | Commencement of<br>Classes | 7 FRI  | IAT-1 (Starts)                 | 7 MON  |                                | 7 WED  | Model Practical<br>Exam Ends   |
| 8 THU  |                            | 8 SAT  | TUE TT                         | 8 TUE  |                                | 8 THU  | Last Working Day               |
| 9 FRI  |                            | 9 SUN  | Holiday                        | 9 WED  | ISO MRM Meeting                | 9 FRI  | Consolidated Mark<br>statement |
| 10 SAT | THU TT                     | 10 MON | Completion of Unit II          | 10 THU | Completion of Unit IV          | 10 SAT | AU Practical<br>Examination    |
| 11 SUN | Holiday                    | 11 TUE |                                | 11 FRI | Consolidated Mark<br>statement | 11 SUN | Holiday                        |
| 12 MON |                            | 12 WED |                                | 12 SAT | TUE TT                         | 12 MON |                                |
| 13 TUE | Telugu New Year            | 13 THU | IAT-1 (Ends)                   | 13 SUN | Holiday                        | 13 TUE |                                |
| 14 WED | Tamil New Year             | 14 FRI | Ramzan                         | 14 MON |                                | 14 WED |                                |
| 15 THU | CoCM&CCM 1 (starts)        | 15 SAT | WED TT                         | 15 TUE |                                | 15 THU |                                |
| 16 FRI |                            | 16 SUN | Holiday                        | 16 WED |                                | 16 FRI |                                |
| 17 SAT | FRI TT                     | 17 MON | Students Feedback<br>(starts)  | 17 THU |                                | 17 SAT |                                |
| 18 SUN | Holiday                    | 18 TUE | Consolidated Mark<br>statement | 18 FRI |                                | 18 SUN | Holiday                        |
| 19 MON |                            | 19 WED |                                | 19 SAT | WED TT<br>DAC Meeting          | 19 MON |                                |
| 20 TUE | CoCM&CCM 1 (Ends)          | 20 THU |                                | 20 SUN | Holiday                        | 20 TUE |                                |
| 21 WED |                            | 21 FRI | Students Feedback<br>(Ends)    | 21 MON |                                | 21 WED | Bakrid                         |
| 22 THU |                            | 22 SAT | THU TT                         | 22 TUE |                                | 22 THU | End Semester Examination       |
| 23 FRI | Completion of Unit I       | 23 SUN | Holiday                        | 23 WED |                                | 23 FRI |                                |
| 24 SAT | MON TT                     | 24 MON | CoCM&CCM 2 (starts)            | 24 THU | IAT QP-3 Submission            | 24 SAT |                                |
| 25 SUN | Mahavcer Jayanti           | 25 TUE |                                | 25 FRI | Completion of Unit V           | 25 SUN | Holiday                        |
| 26 MON |                            | 26 WED | Completion of<br>UNIT III      | 26 SAT | TUE TT<br>DAC Meeting          | 26 MON |                                |
| 27 TUE |                            | 27 THU | CoCM&CCM 2 (Ends)              | 27 SUN | Holiday                        | 27 TUE |                                |
| 28 WED |                            | 28 FRI | IAT QP-2<br>Submission         | 28 MON | IAT 3 (Starts)                 | 28 WED |                                |
| 29 THU |                            | 29 SAT | FRI TT<br>IQAC Meeting         | 29 TUE | CoCM&CCM 3 (starts)            | 29 THU |                                |
| 30 FRI |                            | 30 SUN | Holiday                        | 30 WED |                                | 30 FRI |                                |
| -      | -                          | 31 MON | IAT 2 (Starts)                 | -      | -                              | 31 SAT | -                              |

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31/4/21

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3/4/21

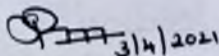
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**Number Working Days : 76**

**Abbreviations:**

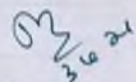
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4. DAC - Department Advisory Committee Meeting
5. ISO MRM - ISO Management Review Meeting
6. PAQIC - Program Assessment Quality Improvement Committee
7. TT -Time Table

  
3/4/2021

Academic Coordinator

  
3/4/21

Vice Principal

  
3/4/21

Principal

## RAMCO INSTITUTE OF TECHNOLOGY

### Important Dates in Academic Schedule for VIII Semester of Academic Year 2020 – 2021 (Revised as on 21.01.2021)

| Sl. No. | Activity/ Event  | Date(s)                  |
|---------|--|--------------------------|
| 1.      | College Reopening for VIII Semester<br>Giving Important dates in Academic Schedule,<br>Syllabus, Course objectives to the students | 14.12.2020               |
| 2.      | Internal Assessment Test I (Tentative)   | 19.01.2021 & 20.01.2021  |
| 3.      | Commencement of End Semester Examination for<br>VII Semester   | 01.02.2021 to 17.02.2021 |
| 4.      | Project Review I (Tentative)   | 24.02.2021 to 26.02.2021 |
| 5.      | Internal Assessment Test II (Tentative)  | 15.03.2021 & 16.03.2021  |
| 6.      | Project Review II (Tentative)  | 17.03.2021 to 19.03.2021 |
| 7.      | Internal Assessment Test III (Tentative)   | 05.04.2021 & 06.04.2021  |
| 8.      | Project Review III (Tentative)   | 31.03.2021 to 03.04.2021 |
| 9.      | Last Working Day   | 12.04.2021               |
| 10.     | Commencement of University Practical<br>Examination  | 15.04.2021               |
| 11.     | Commencement of End Semester Examination   | 24.04.2021               |

**Notes:**

1. Each Student shall write 3 Internal Assessment Tests, in each Theory course (Subject). In addition, atleast 2 Assignments /1 Seminar shall be carried out to enhance their self-learning.
2. All the Internal Assessment Test marks will be considered for Internal Assessment calculation. Absentees mark will be entered as zero.
3. Retest for Internal Assessment Test may be held based on Time duration for
  - ❖ Students who could not write the test due to any genuine reasons and recommendation of HOD.
  - ❖ Students who have earned less than 60% of Marks.
4. Students those who secured marks between 60-70% may be allowed to write retest for improving their internal marks.
5. All Saturdays is allotted for carrying out project work in the industry or institution

#### List of Holidays for EVEN Semester of Academic Year 2020 - 2021

|            |          |                   |            |           |                        |
|------------|----------|-------------------|------------|-----------|------------------------|
| 25.12.2020 | Friday   | Christmas         | 26.01.2021 | Tuesday   | Republic day           |
| 01.01.2021 | Friday   | New Year          | 27.02.2021 | Saturday  | Residential Assignment |
| 02.01.2021 | Saturday | Holiday           | 20.03.2021 | Saturday  | Residential Assignment |
| 14.01.2021 | Thursday | Pongal            | 02.04.2021 | Friday    | Good Friday            |
| 15.01.2021 | Friday   | Thiruvalluvar day | 13.04.2021 | Tuesday   | Telugu New year        |
| 16.01.2021 | Saturday | Holiday           | 14.04.2021 | Wednesday | Tamil New year         |

University Examination schedule with Time Table will be intimated once it is published by the Anna University.

  
Academic Coordinator

  
Vice Principal

  
Principal

# RAMCO INSTITUTE OF TECHNOLOGY

Academic Year 2020-2021 (Even Semester)

11.02.2021

In order to ensure good academic preparation for the ensuing semester, all the faculty members are advised to prepare Lecture Plan, Tutorial Plan, Practical Plan, using ISO formats already in practice. The complete course files as per the contents given below will be reviewed by the principal as per the following schedule. The preparation will be reviewed by HOD and Principal.

## Contents of the Theory Course file:

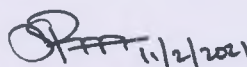
1. Lecture Plan
2. Course objective and course outcomes
3. Tutorial Plan with tutorial sheets if applicable
4. Teaching – Learning material (Notes of lesson neatly typed/ written with good hand writing with appropriate margin on all 4 sides of the paper and any other downloaded and edited material, soft copies of NPTEL Video, Online course materials relevant to the subject.
5. Question Bank with atleast (20 Nos. of 2 mark Question with Answers and around 10-15 important bigger questions for each unit.
6. Question Bank with application oriented Question for each unit
7. Syllabus Copy
8. Individual Time Table
9. Class Time Table
10. Question Papers of immediate previous University examination (4-6 Nos.) for the subject concerned.
11. Project based Learning/ Problem based learning (Based on Subject nature, if required)
12. Any other relevant material

## Contents of the Practical Course file:

1. Laboratory Manual prepared as per guideline
2. Practical Plan
3. Syllabus Copy
4. Individual Time Table
5. Class Time Table
6. Any other relevant material

## Schedule

| Sl. No. | Date       | Department                                |
|---------|------------|---|
| 1.      | 16.02.2021 | Civil Engineering                         |
| 2.      | 16.02.2021 | Computer Science and Engineering          |
| 3.      | 16.02.2021 | Electrical and Electronics Engineering    |
| 4.      | 17.02.2021 | Electronics and Communication Engineering |
| 5.      | 17.02.2021 | Mechanical Engineering                    |
| 6.      | 17.02.2021 | Science and Humanities                    |

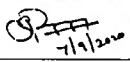
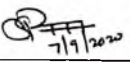



  
Academic Coordinator  
(Dr.S.Periyayagi)

  
Vice Principal

  
PRINCIPAL

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**  
**Academic Year: 2020-2021 (Odd Semester)**  
**Course-wise Academic Process Monitoring**

Name of the Faculty member: Mr.B.Kannan

| Sl.No. | Course Code & Title, Semester & Class                         | Description  | I   | II   | III  | IV   | V  |
|--------|---|--|---|--|--|--|--|
| 1.     | EC8391 Control Systems Engineering<br>III Semester B.E. ECE A | Unit completed on  | 13/08/2020  | 03/09/2020   | 18/09/2020   | 10/10/2020   | 27/10/2020   |
|        |   | Class Notes, Teaching-learning material, Question Bank of Unit issued to Students and verified on (date) | Yes<br>14/08/2020   | Yes<br>05/09/2020  | Yes<br>19/09/2020  | Yes<br>12/10/2020  | Yes<br>28/10/2020  |
|        |   | Signature of the Faculty member with date  | CA. B. Kannan<br>14/8/20  | CA. B. Kannan<br>05/9/20   | CA. B. Kannan<br>19/9/20   | CA. B. Kannan<br>12/10/20  | CA. B. Kannan<br>28/10/20  |
|        |   | HOD's Signature and Remarks  | <br>7/9/2020 | <br>7/9/2020 | <br>7/10/20 | <br>4/11/2020 | <br>4/11/2020 |
|        |   |  |   |  |  |  |  |



# RAMCO INSTITUTE OF TECHNOLOGY

## Academic Performance Monitoring

Academic Year : 2020-2021

Semester : ODD (III)

Branch : ECE A

Department : ECE

Subject : EC8391 Control Systems Engineering

Name of Faculty : Mr.B.Kannan

Details of Students' performance in Internal Assessment Tests

| Internal Assessment Test | Date of Test | Overall Pass (%)* | Deviation from Quality Policy** (Yes/No) |
|--------------------------|--------------|-------------------|--|
| I                        | 17/09/2020   | 100%              | NO                                       |
| II                       | 07/10/2020   | 95%               | NO                                       |
| III                      | 05/11/2020   | 95%               | NO                                       |
| Improvement Test if any  |              |                   |  |

\* For pass in each subject, the student has to score a minimum of 60%

\*\* Deviation from Quality policy if the overall pass percentage is < 80% in IAT I, < 85% in IAT II and < 90% in IAT III.

Date: 12/11/2020

Prepared by: B. Kannan

Corrective Action(s) planned in case of deviation and Target Date(s) for implementation

1. -

2. -

3. -

Date: 12/11/2020

Proposed by: B. Kannan

Approved by: S. Periyamayazhi

Verification of Corrective Action

Verified for Internal Assessment test - I P 7/10/2020  
 Verified for Internal Assessment test - II P 4/11/2020  
 Verified for Internal Assessment test - III P 19/11/2020

Date: 19-11-2020

Verified by: S. Periyamayazhi

# RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering

Academic Year: 2020-2021 (Odd Semester)

## Course Progress Report (Highlights of Teaching-Learning Process)

1. Degree, Semester & Branch: III Semester B.E. ECE A
2. Course Code & Title: EC8391 Control Systems Engineering
3. Name of the Faculty member: Mr.B.Kannan

| Particulars   | Unit I | Unit II | Unit III | Unit IV | Unit V |
|---|--------|---------|----------|---------|--------|
| No. of Lecture periods planned  | 10     | 10      | 10       | 10      | 10     |
| No. of Lecture periods actually conducted   | 10     | 10      | 11       | 13      | 11     |
| No. of Periods conducted using Whiteboard/ Conventional method  | -      | -       | -        | -       | -      |
| No. of Periods conducted using PPTs & LCD Projector   | 10     | 10      | 11       | 13      | 11     |
| No. of Periods conducted using PPTs & Interactive Projector   | -      | -       | -        | -       | -      |
| No. of e-Lectures delivered / No. of Periods used for NPTEL videos (briefly mention the topics covered) | -      | -       | -        | -       | -      |

|  |                       |                       |                       |                       |                       |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| No. of Tutorial periods planned  | 02                    | 02                    | 02                    | 02                    | 03                    |
| No. of Tutorial periods conducted  | 03                    | 03                    | 02                    | 02                    | 03                    |
| Pass (%) in Internal Test  |                       | 100%                  | 95%                   |                       |                       |
| Any Innovative teaching techniques followed? / How is your teaching method unique from others? | * class poll<br>* MCQ | * class poll<br>* MCQ | -                     | MCQ                   | -                     |
| Signature of the Faculty member with date  | (A. B. S. 14/08/2020) | (A. B. S. 05/09/2020) | (A. B. S. 19/09/2020) | (A. B. S. 12/10/20)   | (A. B. S. 25/10/2020) |
| HOD's Signature and Remarks  | (Signature) 7/9/2020  | (Signature) 7/9/2020  | (Signature) 7/10/2020 | (Signature) 4/11/2020 | (Signature) 4/11/2020 |

# RAMCO INSTITUTE OF TECHNOLOGY

Attendance Details for Even Semester (2020-2021)

III Semester B.E. Electronics and Communication Engineering - A

Name of the Faculty Member: Mr.B.Kannan

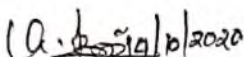
Course Code & Title: EC8391 Control Systems Engineering


Attendance Period I (12-08-2020 to 07-09-2020)

No. of Periods Conducted: 22

| Sl. No. | Reg. No.     | Name of the Student   | No. of Periods Attended |
|---------|--------------|-----------------------|-------------------------|
| 1.      | 953619106001 | ABINAYA S             | 22                      |
| 2.      | 953619106002 | ABIRAMI V             | 22                      |
| 3.      | 953619106003 | AKILANDESWARI K       | 22                      |
| 4.      | 953619106004 | AMUDHADEVI A S        | 22                      |
| 5.      | 953619106005 | ANUDHARSHINI M        | 20                      |
| 6.      | 953619106006 | ARAVIND M             | 22                      |
| 7.      | 953619106007 | ARUMUGA VISWANATH P   | 20                      |
| 8.      | 953619106008 | ASIBA MINA K R        | 22                      |
| 9.      | 953619106009 | CHIDHAMBARANATHAN R   | 22                      |
| 10.     | 953619106010 | DEEPAK CHAKRAVARTHI P | 17                      |
| 11.     | 953619106011 | DHARINI A             | 20                      |
| 12.     | 953619106012 | DHARSHINI K           | 19                      |
| 13.     | 953619106013 | DHARSHINI P           | 22                      |
| 14.     | 953619106014 | DIVYA SHREE R         | 17                      |
| 15.     | 953619106015 | DIWYA DHARSHINI R     | 22                      |
| 16.     | 953619106016 | ELAVARASI A           | 20                      |
| 17.     | 953619106017 | GAAYATRI V S          | 21                      |
| 18.     | 953619106018 | GANESH G              | 17                      |
| 19.     | 953619106019 | GANESHAMOORTHY I      | 21                      |
| 20.     | 953619106020 | GAYATHRI K            | 20                      |
| 21.     | 953619106021 | GIRITHARAN D          | 19                      |
| 22.     | 953619106022 | GOMATHI NAAYAGAM I S  | 22                      |
| 23.     | 953619106023 | HARIHARAN S           | 19                      |
| 24.     | 953619106024 | HARINI U              | 22                      |
| 25.     | 953619106025 | INDHUMATHI C          | 20                      |
| 26.     | 953619106026 | ISHWARYA R            | 22                      |
| 27.     | 953619106027 | JAYA MAHIMA M         | 22                      |
| 28.     | 953619106028 | JEYAGOMATHI S         | 22                      |
| 29.     | 953619106029 | JISHA P S             | 21                      |
| 30.     | 953619106030 | KALIDAS P             | 21                      |
| 31.     | 953619106031 | KALIMUTHU K           | 19                      |

| Sl. No. | Reg. No.     | Name of the Student      | No. of Periods Attended |
|---------|--------------|--------------------------|-------------------------|
|         |              |                          | 17                      |
| 32.     | 953619106032 | KAMALESH S               | 20                      |
| 33.     | 953619106033 | KAVIN KUMAR R            | 21                      |
| 34.     | 953619106034 | KAVIYA S                 | 22                      |
| 35.     | 953619106035 | KAVYA P                  | 20                      |
| 36.     | 953619106036 | KEERTHIKA B              | 22                      |
| 37.     | 953619106037 | KESAVANAND M             | 21                      |
| 38.     | 953619106038 | KESHAVA MUGESH KUMAR C M | 20                      |
| 39.     | 953619106039 | LINGESH S                | 22                      |
| 40.     | 953619106040 | LOGGAA SRI AGITHA K      |                         |

  
 Signature of the Faculty Member

  
 HOD 14/10/2020

**RAMCO INSTITUTE OF TECHNOLOGY**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**INTERNAL ASSESSMENT TEST - I**  
**EC8391 CONTROL SYSTEMS ENGINEERING**

Semester and Branch: III Semester B.E. ECE A & B  
 Faculty Name: Mr.B.Kannan  
 Max. Marks: 50

Date: 17.09.2020

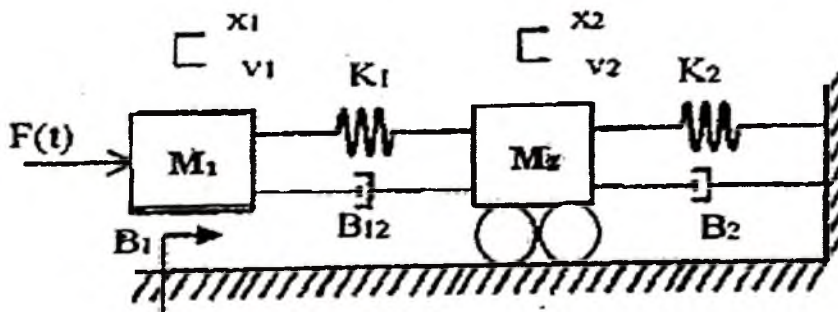
Time: 90 min

**PART-A Answer ALL Questions (5x2=10 Marks)**

1. Define open loop and closed loop control system [CO1, L2]
2. State Mason's gain formula. [CO1, L1]
3. List the characteristics of negative feedback? [CO1, L2]
4. What are the various time domain specifications? [CO2, L1]
5. The closed loop transfer function of a second order system is given by  $\frac{400}{S^2 + 2S + 400}$ . Determine the damping ratio and natural frequency of oscillation. [CO2, L3]

**PART-B Answer ALL Questions ((1x12) + (1x13) =25 Marks)**

- 6a. Draw the equivalent force voltage and force current electrical analogous circuits for the mechanical system shown below and verify by writing mesh equations. [CO1, L3] (12 Marks)



OR

- 6b. With its operating principle, derive the transfer function of AC Servomotor in Control System. [CO1, L3] (12 Marks)

- 7a. Consider a second order model  $\frac{Y(S)}{R(S)} = \frac{\omega_n^2}{S^2 + 2\delta\omega_n S + \omega_n^2}$ ;  $0 < \delta < 1$ . Find the response  $y(t)$  to a input of unit step function. [CO2, L3] (13 Marks)

OR

- 7b. (i) Determine the type and order of the system with following transfer functions.

$$1. \frac{S+4}{(S-2)(S+3)} \quad 2. \frac{10}{S^3(S^2+2S+1)} \quad [CO2, L3] (4 Marks)$$

- (ii) The closed loop transfer function of a second order system is given by

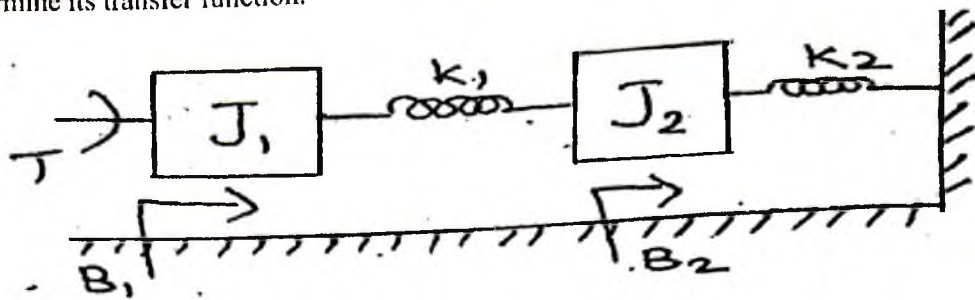
$$T(s) = \frac{100}{S^2 + 10S + 100}. \text{ Determine the damping ratio, natural frequency of oscillations,}$$

Rise time, Peak time, Settling time and Peak overshoot.

[CO2, L3] (9 Marks)

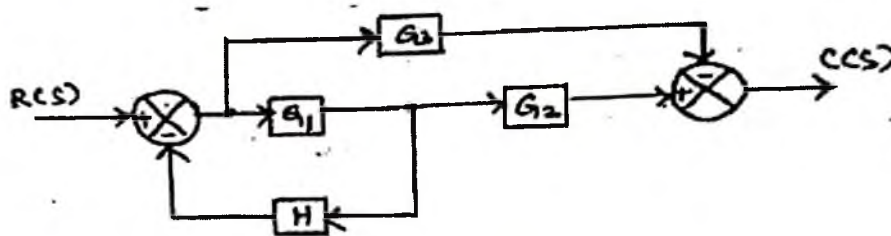
**PART-C Answer ALL Questions (1x15=15 Marks)**

8a. Write the differential equations governing the mechanical rotational system shown in figure and determine its transfer function. [CO1, L3] (15 Marks)



OR

8b. Simplify the following diagram using block diagram reduction method. Also derive the transfer function of the same using signal flow graph. [CO1, L3] (15 Marks)



CO1: The students will be able to perform modeling of control system using various techniques.  
 CO2: The students will be able to obtain the time response and steady state error of control systems.  
 L1: Remember; L2: Understand; L3: Apply

\*\*\*\*\*

**RAMCO INSTITUTE OF TECHNOLOGY**  
Department of Electronics and Communication Engineering

Academic Year: 2020-2021 (Odd Semester)

**Marks Statement for Internal Assessment Test-I**

Degree, Semester & Branch: III Semester B.E. ECE A

Course Code & Title: EC8391 Control Systems Engineering

Name of the Faculty Member: Mr.B.Kannan

Max. Marks: 100

| Sl. No. | Reg. No.     | Name of the Student   | Marks Scored |
|---------|--------------|-----------------------|--------------|
| 1.      | 953619106001 | ABINAYA S             | 96           |
| 2.      | 953619106002 | ABIRAMI V             | 80           |
| 3.      | 953619106003 | AKILANDESWARI K       | 84           |
| 4.      | 953619106004 | AMUDHADEVI A S        | 84           |
| 5.      | 953619106005 | ANUDHARSHINI M        | 82           |
| 6.      | 953619106006 | ARAVIND M             | 94           |
| 7.      | 953619106007 | ARUMUGA VISWANATH P   | 90           |
| 8.      | 953619106008 | ASIBA MINA K R        | 90           |
| 9.      | 953619106009 | CHIDHAMBARANATHAN R   | 80           |
| 10.     | 953619106010 | DEEPAK CHAKRAVARTHI P | 90           |
| 11.     | 953619106011 | DHARINI A             | 88           |
| 12.     | 953619106012 | DHARSHINI K           | 90           |
| 13.     | 953619106013 | DHARSHINI P           | 86           |
| 14.     | 953619106014 | DIVYA SHREE R         | 78           |
| 15.     | 953619106015 | DIWYA DHARSHINI R     | 90           |
| 16.     | 953619106016 | ELAVARASI A           | 78           |
| 17.     | 953619106017 | GAAAYATRI V S         | 92           |
| 18.     | 953619106018 | GANESH G              | 88           |
| 19.     | 953619106019 | GANESHAMOORTHY I      | 84           |
| 20.     | 953619106020 | GAYATHRI K            | 86           |
| 21.     | 953619106021 | GIRITHARAN D          | 82           |
| 22.     | 953619106022 | GOMATHI NAAAYAGAM I S | 96           |
| 23.     | 953619106023 | HARIHARAN S           | 70           |
| 24.     | 953619106024 | HARINI U              | 80           |
| 25.     | 953619106025 | INDHUMATHI C          | 90           |
| 26.     | 953619106026 | ISHWARYA R            | 88           |
| 27.     | 953619106027 | JAYA MAHIMA M         | 88           |
| 28.     | 953619106028 | JEYAGOMATHI S         | 88           |
| 29.     | 953619106029 | JISHA P S             | 94           |
| 30.     | 953619106030 | KALIDAS P             | 90           |
| 31.     | 953619106031 | KALIMUTHU K           | 66           |
| 32.     | 953619106032 | KAMALESH S            | 84           |
| 33.     | 953619106033 | KAVIN KUMAR R         | 84           |

|  |              |                          |                                |
|--|--------------|--------------------------|--------------------------------|
| 34.  | 953619106034 | KAVIYA S                 | 90                             |
| 35.  | 953619106035 | KAVYA P                  | 78                             |
| 36.  | 953619106036 | KEERTHIKA B              | 92                             |
| 37.  | 953619106037 | KESAVANAND M             | 94                             |
| 38.  | 953619106038 | KESHAVA MUGESH KUMAR C M | 86                             |
| 39.  | 953619106039 | LINGESH S                | 94                             |
| 40.  | 953619106040 | LOGGAA SRI AGITHA K      | 90                             |
| No. of Students appeared (n)   |              | 40                       | No. of Students absent (a) Nil |
| No. of Students Scored > 60 marks (w) / Percentage (w/n)*100   |              |                          | 40 / 100%                      |
| No. of Students Passed (scored marks $\geq$ 60 out of 100) (x) / Percentage (x/n)*100  |              |                          | 40 / 100%                      |
| No. of Students Scored marks < 60 and > 50 out of 100 (y)  |              |                          | 0                              |
| No. of Students Scored $\geq$ 50 marks (z) / Percentage (z/n)*100  |              |                          | 40 / 100%                      |
| No. of Students failed (scored marks < 50 out of 100) / Percentage   |              |                          | 0 / 0%                         |
| Lowest Marks: 66   |              | Average Marks: 86.4      | Highest Marks: 96              |
| Attainment Level*  | CO 01: 03    | CO 02: 03                | Test Attainment Level: 03      |
| Number of Students Scored Marks in Various Ranges:<br><50: 00; 50-60: 00; 61-70: 02; 71-80: 06; 81-90: 24; 91-100: 08  |              |                          |                                |
| *Attainment Level 1 : 60 % Students Scoring More than 60% of Marks; Attainment Level 2 : 70 % Students Scoring More than 60% of Marks; Attainment Level 3 : 80 % Students Scoring More than 60% of Marks |              |                          |                                |

Signature of the Valuer with date: *Q. 14/10/2020*

*Q. 14/10/2020*  
HOD

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**  
**Academic Year: 2020-2021 (Odd Semester)**  
**Splitup Marks Statement for Internal Assessment Test I**

Semester/Class/Section: III Semester B.E. ECE A

Subject Code/Name of Subject: EC8391 Control Systems Engineering

Name of Faculty member: Mr.B.Kannan

Max. Marks: 100

Date of Examination: 17.09.2020

| Sl. No. | Reg. No.     | Name of the Student   | CO       |      |            |      |      | CO       |      |      |      |      |            | Marks out of 50 | Marks out of 100 | CO1 (33) | CO2 (17) | CO1 (100) | CO2 (100) |    |     |
|---------|--------------|-----------------------|----------|------|------------|------|------|----------|------|------|------|------|------------|-----------------|------------------|----------|----------|-----------|-----------|----|-----|
|         |              |                       | CO 1     | CO 1 | CO 1       | CO 2 | CO 2 | CO 1     | CO 1 | CO 2 | CO 2 | CO 1 | CO 1       |                 |                  |          |          |           |           |    |     |
|         |              |                       | Part - A |      |            |      |      | Part - B |      |      |      |      |            |                 |                  |          |          |           |           |    |     |
| 1       | 2            | 3                     | 4        | 5    | Total (10) | 6(a) | 6(b) | 7(a)     | 7(b) |      | 8(a) | 8(b) | Total (20) |                 |                  |          |          |           |           |    |     |
|         |              |                       |          |      |            |      |      |          |      | i    | ii   |      |            |                 |                  |          |          |           |           |    |     |
| 1       | 953619106001 | ABINAYA S             | 2        | 2    | 2          | 2    | 2    | 10       | 10   |      |      | 4    | 9          | 15              | 38               | 48       | 96       | 31        | 17        | 94 | 100 |
| 2       | 953619106002 | ABIRAMI V             | 2        | 2    | 2          | 2    | 2    | 10       | 10   |      |      | 3    | 9          | 8               | 30               | 40       | 80       | 24        | 16        | 73 | 94  |
| 3       | 953619106003 | AKILANDESWARI K       | 2        | 2    | 2          | 2    | 2    | 10       | 11   |      |      | 4    | 9          | 8               | 32               | 42       | 84       | 25        | 17        | 76 | 100 |
| 4       | 953619106004 | AMUDHADEVI A S        | 2        | 2    | 2          | 2    | 2    | 10       | 9    |      |      | 3    | 9          | 11              | 32               | 42       | 84       | 26        | 16        | 79 | 94  |
| 5       | 953619106005 | ANUDHARSHINI M        | 2        | 2    | 2          | 2    | 2    | 10       | 10   |      |      | 4    | 9          | 8               | 31               | 41       | 82       | 24        | 17        | 73 | 100 |
| 6       | 953619106006 | ARAVIND M             | 2        | 2    | 2          | 2    | 2    | 10       | 11   |      |      | 3    | 9          | 14              | 37               | 47       | 94       | 31        | 16        | 94 | 94  |
| 7       | 953619106007 | ARUMUGA VISWANATH P   | 2        | 2    | 2          | 2    | 2    | 10       | 11   |      |      | 2    | 9          | 13              | 35               | 45       | 90       | 30        | 15        | 91 | 88  |
| 8       | 953619106008 | ASIBA MINA K R        | 2        | 2    | 2          | 2    | 2    | 10       | 12   |      |      | 4    | 9          | 10              | 35               | 45       | 90       | 28        | 17        | 85 | 100 |
| 9       | 953619106009 | CHIDHAMBARANATHAN R   | 2        | 2    | 2          | 2    | 2    | 10       | 6    |      |      | 3    | 9          | 12              | 30               | 40       | 80       | 24        | 16        | 73 | 94  |
| 10      | 953619106010 | DEEPAK CHAKRAVARTHI P | 2        | 2    | 2          | 2    | 2    | 10       | 11   |      |      | 3    | 9          | 12              | 35               | 45       | 90       | 29        | 16        | 88 | 94  |
| 11      | 953619106011 | DHARINI A             | 2        | 2    | 2          | 2    | 2    | 10       | 11   |      |      | 3    | 9          | 11              | 34               | 44       | 88       | 28        | 16        | 85 | 94  |
| 12      | 953619106012 | DHARSHINI K           | 2        | 2    | 2          | 2    | 2    | 10       | 11   |      |      | 3    | 9          | 12              | 35               | 45       | 90       | 29        | 16        | 88 | 94  |
| 13      | 953619106013 | DHARSHINI P           | 2        | 2    | 2          | 2    | 2    | 10       | 11   |      |      | 2    | 9          | 11              | 33               | 43       | 86       | 28        | 15        | 85 | 88  |
| 14      | 953619106014 | DIVYA SHREE R         | 1        | 2    | 2          | 2    | 2    | 9        | 10   |      |      | 3    | 9          | 8               | 30               | 39       | 78       | 23        | 16        | 70 | 94  |
| 15      | 953619106015 | DIWYA DHARSHINI R     | 2        | 2    | 2          | 2    | 2    | 10       | 10   |      |      | 4    | 9          | 12              | 35               | 45       | 90       | 28        | 17        | 85 | 100 |
| 16      | 953619106016 | ELAVARASI A           | 2        | 2    | 2          | 2    | 2    | 10       |      | 10   | 11   |      |            | 8               | 29               | 39       | 78       | 24        | 15        | 73 | 88  |
| 17      | 953619106017 | GAAYATRI V S          | 1        | 2    | 2          | 2    | 2    | 9        | 10   |      |      | 3    | 9          | 15              | 37               | 46       | 92       | 30        | 16        | 91 | 94  |
| 18      | 953619106018 | GANESH G              | 2        | 2    | 2          | 2    | 2    | 10       | 11   |      |      | 3    | 9          | 11              | 34               | 44       | 88       | 28        | 16        | 85 | 94  |
| 19      | 953619106019 | GANESHAMOORTHY I      | 2        | 2    | 2          | 2    | 2    | 10       | 11   |      |      | 3    | 9          | 9               | 32               | 42       | 84       | 26        | 16        | 79 | 94  |
| 20      | 953619106020 | GAYATHRI K            | 2        | 2    | 2          | 2    | 2    | 10       | 11   |      |      | 4    | 9          | 9               | 33               | 43       | 86       | 26        | 17        | 79 | 100 |
| 21      | 953619106021 | GIRITHARAN D          | 2        | 2    | 2          | 2    | 2    | 10       | 10   |      |      | 3    | 9          | 9               | 31               | 41       | 82       | 25        | 16        | 76 | 94  |
| 22      | 953619106022 | GOMATHI NAAYAGAM I S  | 2        | 2    | 2          | 2    | 2    | 10       | 11   |      |      | 3    | 9          | 15              | 38               | 48       | 96       | 32        | 16        | 97 | 94  |
| 23      | 953619106023 | HARIHARAN S           | 2        | 2    | 2          | 2    | 2    | 10       | 0    |      |      | 4    | 9          | 12              | 25               | 35       | 70       | 18        | 17        | 55 | 100 |
| 24      | 953619106024 | HARINI U              | 2        | 2    | 2          | 2    | 2    | 10       | 11   |      |      | 4    | 9          | 6               | 30               | 40       | 80       | 23        | 17        | 70 | 100 |
| 25      | 953619106025 | INDHUMATHI C          | 2        | 2    | 2          | 2    | 2    | 10       | 11   |      |      | 3    | 9          | 12              | 35               | 45       | 90       | 29        | 16        | 88 | 94  |
| 26      | 953619106026 | ISHWARYA R            | 2        | 2    | 2          | 2    | 2    | 10       | 10   |      |      | 3    | 9          | 12              | 34               | 44       | 88       | 28        | 16        | 85 | 94  |

|    |              |                          |   |   |   |   |   |    |    |  |    |           |    |                            |    |      |    |  |    |      |    |     |  |   |  |
|----|--------------|--------------------------|---|---|---|---|---|----|----|--|----|-----------|----|----------------------------|----|------|----|--|----|------|----|-----|--|---|--|
| 27 | 953619106027 | JAYA MAHIMA M            | 2 | 2 | 2 | 2 | 2 | 10 | 10 |  | 12 |           | 12 |                            | 34 | 44   | 88 |  | 28 | 16   | 85 | 94  |  |   |  |
| 28 | 953619106028 | JEYAGOMATHI S            | 2 | 2 | 2 | 2 | 2 | 10 | 11 |  |    | 2         | 9  | 12                         | 34 | 44   | 88 |  | 29 | 15   | 88 | 88  |  |   |  |
| 29 | 953619106029 | JISHA P S                | 2 | 2 | 2 | 2 | 2 | 10 | 12 |  |    | 3         | 9  | 13                         | 37 | 47   | 94 |  | 31 | 16   | 94 | 94  |  |   |  |
| 30 | 953619106030 | KALIDAS P                | 2 | 2 | 2 | 2 | 2 | 10 | 10 |  |    | 3         | 9  | 11                         | 35 | 45   | 90 |  | 29 | 16   | 88 | 94  |  |   |  |
| 31 | 953619106031 | KALIMUTHU K              | 2 | 2 | 2 | 2 | 2 | 10 | 0  |  |    | 3         | 9  | 11                         | 23 | 33   | 66 |  | 17 | 16   | 52 | 94  |  |   |  |
| 32 | 953619106032 | KAMALESH S               | 2 | 2 | 2 | 2 | 2 | 10 | 10 |  |    | 3         | 9  | 10                         | 32 | 42   | 84 |  | 26 | 16   | 79 | 94  |  |   |  |
| 33 | 953619106033 | KAVIN KUMAR R            | 2 | 2 | 2 | 2 | 2 | 10 | 11 |  |    | 3         | 9  | 9                          | 32 | 42   | 84 |  | 26 | 16   | 79 | 94  |  |   |  |
| 34 | 953619106034 | KAVIYA S                 | 2 | 2 | 2 | 2 | 2 | 10 | 11 |  |    | 3         | 9  | 12                         | 35 | 45   | 90 |  | 29 | 16   | 88 | 94  |  |   |  |
| 35 | 953619106035 | KAVYA P                  | 2 | 2 | 2 | 2 | 2 | 10 | 10 |  |    | 4         | 8  | 7                          | 29 | 39   | 78 |  | 23 | 16   | 70 | 94  |  |   |  |
| 36 | 953619106036 | KEERTHIKA B              | 2 | 2 | 2 | 2 | 2 | 10 | 12 |  |    | 3         | 9  | 12                         | 36 | 46   | 92 |  | 30 | 16   | 91 | 94  |  |   |  |
| 37 | 953619106037 | KESAVANAND M             | 2 | 2 | 2 | 2 | 2 | 10 | 10 |  |    | 3         | 9  | 15                         | 37 | 47   | 94 |  | 31 | 16   | 94 | 94  |  |   |  |
| 38 | 953619106038 | KESHAVA MUGESH KUMAR C M | 2 | 2 | 2 | 2 | 2 | 10 | 10 |  |    | 3         | 8  | 12                         | 33 | 43   | 86 |  | 28 | 15   | 85 | 88  |  |   |  |
| 39 | 953619106039 | LINGESH S                | 2 | 2 | 2 | 2 | 2 | 10 | 12 |  |    | 3         | 9  | 13                         | 37 | 47   | 94 |  | 31 | 16   | 94 | 94  |  |   |  |
| 40 | 953619106040 | LOGGAA SRI AGITHA K      | 2 | 2 | 2 | 2 | 2 | 10 | 10 |  |    | 4         | 9  | 12                         | 35 | 45   | 90 |  | 28 | 17   | 85 | 100 |  |   |  |
|    |              |                          |   |   |   |   |   |    |    | No. of Students appeared (n)   |    | 40        |    | No. of Students absent (a) |    | 0    |    |  |    |      |    |     |  |   |  |
|    |              |                          |   |   |   |   |   |    |    | No. of Students Scored > 60 marks (w) / Percentage (w/n)*100                     |    | 40 / 100% |    |                            |    |      |    | No. Students (> 60):                                       |    |      |    |     |  |   |  |
|    |              |                          |   |   |   |   |   |    |    | No. of Students Passed (scored marks ≥ 60 out of 100) (x) / Percentage (x/n)*100 |    | 40 / 100% |    |                            |    |      |    | 38   |    | 40   |    |     |  |   |  |
|    |              |                          |   |   |   |   |   |    |    | No. of Students Scored marks < 60 and > 50 out of 100 (y)                        |    | 0         |    |                            |    |      |    | No. Students (> 60) %:                                     |    |      |    |     |  |   |  |
|    |              |                          |   |   |   |   |   |    |    | No. of Students Scored ≥ 50 marks (z) / Percentage (z/n)*100                     |    | 40 / 100% |    |                            |    |      |    | 95%  |    | 100% |    |     |  |   |  |
|    |              |                          |   |   |   |   |   |    |    | No. of Students failed (scored marks < 50 out of 100) / Percentage               |    | 0 / 0%    |    |                            |    |      |    | Attainment   |    |      |    |     |  |   |  |
|    |              |                          |   |   |   |   |   |    |    | Lowest Marks:  |    | 66        |    | Average Marks:             |    | 86.4 |    | Highest Marks:   |    | 96   |    | 3   |  | 3 |  |
|    |              |                          |   |   |   |   |   |    |    |  |    |           |    |                            |    |      |    | Test Attainment  |    |      |    |     |  |   |  |
|    |              |                          |   |   |   |   |   |    |    |  |    |           |    |                            |    |      |    | 3  |    |      |    |     |  |   |  |
|    |              |                          |   |   |   |   |   |    |    |  |    |           |    |                            |    |      |    | <50: 0; 50-60: 0; 61-70: 2; 71-80: 6; 81-90: 24; 91-100: 8 |    |      |    |     |  |   |  |

Signature of the Valuer with date:  
14/10/2020

HOD 14/10/2020

11/9/2020

User: KANNAN B

IAT3

logout


**RAMCO INSTITUTE OF TECHNOLOGY**

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HOME SURVEY COURSE MARKS PROFILE

**IAT3 - 2020-2021/ODD SECOND YEAR-ECE A  
 EC8391-Control Systems Engineering**

 Verify the Marks that you have Entered  
 -1 Indicates Absent

| S.No. | Register No. | Name                  | Marks |
|-------|--------------|-----------------------|-------|
| 1     | 953619106001 | ABINAYA S             | 82    |
| 2     | 953619106002 | ABIRAMI V             | 80    |
| 3     | 953619106003 | AKILANDESWARI K       | 90    |
| 4     | 953619106004 | AMUDHADEVI A S        | 80    |
| 5     | 953619106005 | ANUDHARSHINI M        | 60    |
| 6     | 953619106006 | ARAVIND M             | 90    |
| 7     | 953619106007 | ARUMUGA VISWANATH P   | 74    |
| 8     | 953619106008 | ASIBA MINA K R        | 84    |
| 9     | 953619106009 | CHIDHAMBARANATHAN R   | 48    |
| 10    | 953619106010 | DEEPAK CHAKRAVARTHI P | 82    |
| 11    | 953619106011 | DHARINI A             | 80    |
| 12    | 953619106012 | DHARSHINI K           | 80    |
| 13    | 953619106013 | DHARSHINI P           | 94    |
| 14    | 953619106014 | DIVYA SHREE R         | 72    |
| 15    | 953619106015 | DIWYA DHARSHINI R     | 80    |
| 16    | 953619106016 | ELAVARASI A           | 86    |
| 17    | 953619106017 | GAAYATRI V S          | 72    |
| 18    | 953619106018 | GANESH G              | 74    |
| 19    | 953619106019 | GANESHAMOORTHY I      | 62    |
| 20    | 953619106020 | GAYATHRI K            | 70    |
| 21    | 953619106021 | GIRITHARAN D          | 82    |
| 22    | 953619106022 | GOMATHI NAAYAGAM I S  | 84    |
| 23    | 953619106023 | HARIHARAN S           | 68    |
| 24    | 953619106024 | HARINI U              | 74    |
| 25    | 953619106025 | INDHUMATHI C          | 96    |
| 26    | 953619106026 | ISHWARYA R            | 82    |
| 27    | 953619106027 | JAYA MAHIMA M         | 88    |

Form No. AC 14a

Rev.No, 03

Effective Date: 10.02.2018

11/9/2020

IAT3

| S.No.  | Register no. | NAME                     | marks                      |
|--|--------------|--------------------------|----------------------------|
| 28   | 953619106028 | JEYAGOMATHI S            | 88                         |
| 29   | 953619106029 | JISHA P S                | 72                         |
| 30   | 953619106030 | KALIDAS P                | 82                         |
| 31   | 953619106031 | KALIMUTHU K              | 46                         |
| 32   | 953619106032 | KAMALESH S               | 82                         |
| 33   | 953619106033 | KAVIN KUMAR R            | 82                         |
| 34   | 953619106034 | KAVIYA S                 | 96                         |
| 35   | 953619106035 | KAVYA P                  | 80                         |
| 36   | 953619106036 | KEERTHIKA B              | 82                         |
| 37   | 953619106037 | KESAVANAND M             | 90                         |
| 38   | 953619106038 | KESHAVA MUGESH KUMAR C M | 60                         |
| 39   | 953619106039 | LINGESH S                | 82                         |
| 40   | 953619106040 | LOGGAA SRI AGITHA K      | 88                         |
| No. of Students appeared (n)   |              | 40                       | No. of Students absent (a) |
|  |              |                          | 0                          |
| No. of Students Scored > 60 marks (w) / Percentage (w/n)*100   |              |                          | 36 / 90%                   |
| No. of Students Passed (scored marks $\geq$ 60 out of 100) (x) / Percentage (x/n)*100  |              |                          | 38 / 95%                   |
| No. of Students Scored marks < 60 and > 50 out of 100 (y)  |              |                          | 0                          |
| No. of Students Scored $\geq$ 50 marks (z) / Percentage (z/n)*100  |              |                          | 38 / 95%                   |
| No. of Students failed (scored marks < 50 out of 100) / Percentage   |              |                          | 2 / 5%                     |
| Lowest Marks: 46   |              | Average Marks: 78.6      | Highest Marks: 96          |
| Attainment Level*  |              | CO4: 3                   | CO5: 3                     |
|  |              | Test Attainment: 3       |                            |
| Number of Students Scored Marks in Various Ranges:<br><50: 2; 50-60: 2; 61-70: 3; 71-80: 12; 81-90: 18; 91-100: 3  |              |                          |                            |
| *Attainment Level 1 : 60 % Students Scoring More than 60% of Marks;<br>Attainment Level 2 : 70 % Students Scoring More than 60% of Marks;<br>Attainment Level 3 : 80 % Students Scoring More than 60% of Marks |              |                          |                            |

*U. S. 09/11/20*  
Signature of Faculty

*P. P. P. 9/11/2020*  
HoD



# RAMCO INSTITUTE OF TECHNOLOGY

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## PORTAL4 - 2020-2021/ODD SECOND YEAR-ECE A EC8391-Control Systems Engineering

Verify the Marks that you have Entered  
-1 indicates Absent

| S.No. | Reg. No.     | Name of the Student   | Marks    |         |   |            |
|-------|--------------|-----------------------|----------|---------|---|------------|
|       |              |                       | IAT(100) | IAT(80) | Tutorial/<br>Assignment/<br>Case<br>study(20) | Total(100) |
| 1     | 953619106001 | ABINAYA S             | 82       | 66      | 20  | 86         |
| 2     | 953619106002 | ABIRAMI V             | 80       | 64      | 20  | 84         |
| 3     | 953619106003 | AKILANDESWARI K       | 90       | 72      | 20  | 92         |
| 4     | 953619106004 | AMUDHADEVI A S        | 80       | 64      | 19  | 83         |
| 5     | 953619106005 | ANUDHARSHINI M        | 60       | 48      | 18  | 66         |
| 6     | 953619106006 | ARAVIND M             | 90       | 72      | 18  | 90         |
| 7     | 953619106007 | ARUMUGA VISWANATH P   | 74       | 60      | 16  | 76         |
| 8     | 953619106008 | ASIBA MINA K R        | 84       | 68      | 18  | 86         |
| 9     | 953619106009 | CHIDHAMBARANATHAN R   | 48       | 39      | 18  | 57         |
| 10    | 953619106010 | DEEPAK CHAKRAVARTHI P | 82       | 66      | 16  | 82         |
| 11    | 953619106011 | DHARINI A             | 80       | 64      | 16  | 80         |
| 12    | 953619106012 | DHARSHINI K           | 80       | 64      | 16  | 80         |
| 13    | 953619106013 | DHARSHINI P           | 94       | 76      | 20  | 96         |
| 14    | 953619106014 | DIVYA SHREE R         | 72       | 58      | 20  | 78         |
| 15    | 953619106015 | DIWYA DHARSHINI R     | 80       | 64      | 18  | 82         |
| 16    | 953619106016 | ELAVARASI A           | 86       | 69      | 13  | 82         |
| 17    | 953619106017 | GAAYATRI V S          | 72       | 58      | 20  | 78         |
| 18    | 953619106018 | GANESH G              | 74       | 60      | 20  | 80         |
| 19    | 953619106019 | GANESHAMOORTHY I      | 62       | 50      | 20  | 70         |
| 20    | 953619106020 | GAYATHRI K            | 70       | 56      | 12  | 68         |
| 21    | 953619106021 | GIRITHARAN D          | 82       | 66      | 19  | 85         |
| 22    | 953619106022 | GOMATHI NAAYAGAM I S  | 84       | 68      | 16  | 84         |
| 23    | 953619106023 | HARIHARAN S           | 68       | 55      | 14  | 69         |
| 24    | 953619106024 | HARINI U              | 74       | 60      | 20  | 80         |
| 25    | 953619106025 | INDHUMATHI C          | 96       | 77      | 20  | 97         |
| 26    | 953619106026 | ISHWARYA R            | 82       | 66      | 19  | 85         |
| 27    | 953619106027 | JAYA MAHIMA M         | 88       | 71      | 20  | 91         |

11/10/2020

Portal Marks

| S.No.  | Reg. No.     | Name of the Student      | Marks    |         |   | Total(100) |
|--|--------------|--------------------------|----------|---------|---|------------|
|  |              |                          | IAT(100) | IAT(80) | Tutorial/<br>Assignment/<br>Case<br>study(20) |            |
| 28   | 953619106028 | JEYAGOMATHI S            | 88       | 71      | 20  | 91         |
| 29   | 953619106029 | JISHA P S                | 72       | 58      | 20  | 78         |
| 30   | 953619106030 | KALIDAS P                | 82       | 66      | 20  | 86         |
| 31   | 953619106031 | KALIMUTHU K              | 46       | 37      | 8   | 45         |
| 32   | 953619106032 | KAMALESH S               | 82       | 66      | 16  | 82         |
| 33   | 953619106033 | KAVIN KUMAR R            | 82       | 66      | 20  | 86         |
| 34   | 953619106034 | KAVIYA S                 | 96       | 77      | 20  | 97         |
| 35   | 953619106035 | KAVYA P                  | 80       | 64      | 20  | 84         |
| 36   | 953619106036 | KEERTHIKA B              | 82       | 66      | 16  | 82         |
| 37   | 953619106037 | KESAVANAND M             | 90       | 72      | 18  | 90         |
| 38   | 953619106038 | KESHAVA MUGESH KUMAR C M | 60       | 48      | 20  | 68         |
| 39   | 953619106039 | LINGESH S                | 82       | 66      | 19  | 85         |
| 40   | 953619106040 | LOGGAA SRI AGITHA K      | 88       | 71      | 20  | 91         |
| No. of Students appeared (w)   |              |                          |          |         |   | 40         |
| No. of Students absent (x)   |              |                          |          |         |   | 0          |
| No. of Students Passed (Scored marks > 60 out of 100) (y) / Percentage (w/n)*100 |              |                          |          |         |   | 38         |
| Pass (%) with 60% as pass mark = (y/z)*100                                       |              |                          |          |         |   | 95%        |
| No. of Students Scored marks < 60 and >= 50 out of 100 (z)                       |              |                          |          |         |   | 1          |
| Pass (%) with 50% as pass mark = ((y+z)/w)*100                                   |              |                          |          |         |   | 39 / 97.5% |
| No. of Students failed (scored marks < 50 out of 100) / Percentage               |              |                          |          |         |   | 1 / 2.5%   |

*C. S. S. 10/11/2020*  
Signature of Faculty

*P. P. P. 10/11/2020*  
HoD

12/1/2020

User: KANNAN B

PORTAL4



## RAMCO INSTITUTE OF TECHNOLOGY

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### PORTAL4 - 2020-2021/ODD SECOND YEAR-ECE A EC8391-Control Systems Engineering

Verify the Marks that you have Entered

-1 indicates Absent

| S.No. | Reg. No.     | Name of the Student   | Attendance |          | Total(100) |
|-------|--------------|-----------------------|------------|----------|------------|
|       |              |                       | Maximum    | Attended |            |
| 1     | 953619106001 | ABINAYA S             | 28         | 28       | 86         |
| 2     | 953619106002 | ABIRAMI V             | 28         | 27       | 84         |
| 3     | 953619106003 | AKILANDESWARI K       | 28         | 28       | 92         |
| 4     | 953619106004 | AMUDHADEVI A S        | 28         | 27       | 83         |
| 5     | 953619106005 | ANUDHARSHINI M        | 28         | 25       | 66         |
| 6     | 953619106006 | ARAVIND M             | 28         | 28       | 90         |
| 7     | 953619106007 | ARUMUGA VISWANATH P   | 28         | 23       | 76         |
| 8     | 953619106008 | ASIBA MINA K R        | 28         | 28       | 86         |
| 9     | 953619106009 | CHIDHAMBARANATHAN R   | 28         | 28       | 57         |
| 10    | 953619106010 | DEEPAK CHAKRAVARTHI P | 28         | 28       | 82         |
| 11    | 953619106011 | DHARINI A             | 28         | 23       | 80         |
| 12    | 953619106012 | DHARSHINI K           | 28         | 27       | 80         |
| 13    | 953619106013 | DHARSHINI P           | 28         | 26       | 96         |
| 14    | 953619106014 | DIVYA SHREE R         | 28         | 25       | 78         |
| 15    | 953619106015 | DIWYA DHARSHINI R     | 28         | 28       | 82         |
| 16    | 953619106016 | ELAVARASI A           | 28         | 28       | 82         |
| 17    | 953619106017 | GAAYATRI V S          | 28         | 28       | 78         |
| 18    | 953619106018 | GANESH G              | 28         | 25       | 80         |
| 19    | 953619106019 | GANESHAMOORTHY I      | 28         | 28       | 70         |
| 20    | 953619106020 | GAYATHRI K            | 28         | 26       | 68         |
| 21    | 953619106021 | GIRITHARAN D          | 28         | 23       | 85         |
| 22    | 953619106022 | GOMATHI NAAYAGAM I S  | 28         | 24       | 84         |
| 23    | 953619106023 | HARIHARAN S           | 28         | 23       | 69         |
| 24    | 953619106024 | HARINI U              | 28         | 28       | 80         |
| 25    | 953619106025 | INDHUMATHI C          | 28         | 27       | 97         |
| 26    | 953619106026 | ISHWARYA R            | 28         | 27       | 85         |
| 27    | 953619106027 | JAYA MAHIMA M         | 28         | 28       | 91         |
| 28    | 953619106028 | JEYAGOMATHI S         | 28         | 26       | 91         |

12/1/2020

PORTAL4

| S.No. | Reg. No.     | Name of the Student      | Attendance |          | Total(100) |
|-------|--------------|--------------------------|------------|----------|------------|
|       |              |                          | Maximum    | Attended |            |
| 29    | 953619106029 | JISHA P S                | 28         | 28       | 78         |
| 30    | 953619106030 | KALIDAS P                | 28         | 27       | 86         |
| 31    | 953619106031 | KALIMUTHU K              | 28         | 25       | 45         |
| 32    | 953619106032 | KAMALESH S               | 28         | 25       | 82         |
| 33    | 953619106033 | KAVIN KUMAR R            | 28         | 26       | 86         |
| 34    | 953619106034 | KAVIYA S                 | 28         | 27       | 97         |
| 35    | 953619106035 | KAVYA P                  | 28         | 28       | 84         |
| 36    | 953619106036 | KEERTHIKA B              | 28         | 27       | 82         |
| 37    | 953619106037 | KESAVANAND M             | 28         | 28       | 90         |
| 38    | 953619106038 | KESHAVA MUGESH KUMAR C M | 28         | 28       | 68         |
| 39    | 953619106039 | LINGESH S                | 28         | 28       | 85         |
| 40    | 953619106040 | LOGGAA SRI AGITHA K      | 28         | 28       | 91         |

*(A. K. S. 1/12/2020)*  
Signature of Faculty

*(P. P. P. 1/12/2020)*  
HoD 1/12/2020

# Quizizz

## EC8391 CONTROL SYSTEMS ENGINEERING

Date: Mon Sep 28 2020 - 2:34 pm

86

Accuracy %  
(correct / total)

25

Number of  
Questions

79

Number of Players

### Players

| Rank | Player Name                           | Avg. Time | Score | Accuracy | Correct / Total |  |
|------|---------------------------------------|-----------|-------|----------|-----------------|--|
| 1    | ANUDHARSHINI M (ANUDHARSHINI M)       | 4 secs    | 30290 | ● 100%   | 25 / 25         |  |
| 2    | Akilandeswari k K (Akilandeswari k K) | 5 secs    | 30250 | ● 100%   | 25 / 25         |  |
| 3    | SAI VISHNU L (SAI VISHNU L)           | 17 secs   | 29430 | ● 100%   | 25 / 25         |  |
| 4    | Ravina Ravina (Ravina Ravina)         | 18 secs   | 29340 | ● 100%   | 25 / 25         |  |
| 5    | RAMESH K (RAMESH K)                   | 20 secs   | 29160 | ● 100%   | 25 / 25         |  |
| 6    | SUSHMA A (SUSHMA A)                   | 22 secs   | 29060 | ● 100%   | 25 / 25         |  |
| 7    | Mahendra Prakash (Mahendra Prakash)   | 22 secs   | 28920 | ● 100%   | 25 / 25         |  |
| 8    | GAYATHRI K (GAYATHRI K)               | 26 secs   | 28630 | ● 100%   | 25 / 25         |  |
| 9    | PRADEEP C (PRADEEP C)                 | 36 secs   | 27970 | ● 100%   | 25 / 25         |  |
|      | jisha (jisha jisha)                   | 36 secs   | 27930 | ● 100%   | 25 / 25         |  |

Help

| Rank | Player Name                               | Avg. Time | Score | Accuracy | Correct / Total |
|------|---|-----------|-------|----------|-----------------|
| 11   | HARINI U (HARINI U)                       | 21 secs   | 27780 | 96%      | 24 / 25         |
| 12   | Snekha B B.Snekha (Snekha B B.Snekha*)    | 24 secs   | 27730 | 96%      | 24 / 25         |
| 13   | Ganesh Ganesh (Ganesh Ganesh)             | 32 secs   | 27690 | 96%      | 24 / 25         |
| 14   | KALIDAS P (KALIDAS P)                     | 40 secs   | 27510 | 100%     | 25 / 25         |
| 15   | NHIDHEES B (NHIDHEES Laksh Kumar KB)      | 17 secs   | 27220 | 96%      | 24 / 25         |
| 16   | Shan Tresi (Sharon Tresha A)              | 26 secs   | 27200 | 96%      | 24 / 25         |
| 17   | Sushmitha K (SUSHMITHA K)                 | 26 secs   | 27190 | 96%      | 24 / 25         |
| 18   | SNEHA P (SNEHA P)                         | 35 secs   | 26970 | 96%      | 24 / 25         |
| 19   | VIJAYASANKARI P (VIJAYASANKARI P)         | 20 secs   | 26820 | 96%      | 24 / 25         |
| 20   | SANTHOSH I (SANTHOSH I)                   | 28 secs   | 26180 | 96%      | 24 / 25         |
| 21   | DHARINI A (DHARINI A)                     | 41 secs   | 26150 | 96%      | 24 / 25         |
| 22   | MARIKRISHNAUTHAMI S (MARIKRISHNAUTHAMI S) | 55 secs   | 26140 | 96%      | 24 / 25         |
| 23   | Mari Muthu (Mari Muthu)                   | 29 secs   | 26040 | 92%      | 23 / 25         |
| 24   | RAJESHWARAN R (RAJESHWARAN R)             | 49 secs   | 25940 | 96%      | 24 / 25         |
| 25   | SARAVANAKUMAR S (SARAVANAKUMAR S)         | 22 secs   | 25920 | 96%      | 24 / 25         |
| 26   | SHRINITHIMEENA M (SHRINITHIMEENA M)       | 34 secs   | 25720 | 92%      | 23 / 25         |

| Rank | Player Name   | Avg. Time | Score | Accuracy | Correct / Total |  |
|------|---|-----------|-------|----------|-----------------|--|
| 27   | SUJITHA K (SUJITHA K)                               | 26 secs   | 25690 | 96%      | 24 / 25         |  |
| 28   | Sabriyah Majeeth (Sabriyah)                         | 31 secs   | 25660 | 88%      | 22 / 25         |  |
| 29   | KESHAVA MUGESH KUMAR C.M (KESHAVA MUGESH KUMAR C.M) | 23 secs   | 25130 | 88%      | 22 / 25         |  |
| 30   | SEETHADEVI.M Devi (SEETHADEVI.M Devi)               | 25 secs   | 24740 | 88%      | 22 / 25         |  |
| 31   | INDHUMATHI C (INDHUMATHI C)                         | 25 secs   | 24470 | 88%      | 22 / 25         |  |
| 32   | SUBHASH S (SUBHASH S)                               | 32 secs   | 24200 | 92%      | 23 / 25         |  |
| 33   | DHARSHINI K (DHARSHINI K)                           | 45 secs   | 23980 | 88%      | 22 / 25         |  |
| 34   | MUGESH M (MUGESH M)                                 | 21 secs   | 23920 | 88%      | 22 / 25         |  |
| 35   | Monika Moni (Monika)                                | 29 secs   | 23850 | 92%      | 23 / 25         |  |
| 36   | Asiba Mina (Asiba Mina*)                            | 21 secs   | 23380 | 88%      | 22 / 25         |  |
| 37   | SAKTHI N (SAKTHI ABIRAMI N)                         | 37 secs   | 23230 | 92%      | 23 / 25         |  |
| 38   | PRAKATHI S (PRAKATHI S)                             | 54 secs   | 23080 | 92%      | 23 / 25         |  |
| 39   | KEERTHIKA B (KEERTHIKA B)                           | 45 secs   | 23020 | 88%      | 22 / 25         |  |
| 40   | MANJULA G (MANJULA G)                               | 22 secs   | 22920 | 88%      | 22 / 25         |  |
| 41   | VEERAMANIMARAN P (VEERAMANIMARAN P)                 | 35 secs   | 22810 | 88%      | 22 / 25         |  |
| 42   | VAISHNAVI M (VAISHNAVI M)                           | 24 secs   | 22750 | 88%      | 22 / 25         |  |

| Rank | Player Name                             | Avg. Time | Score | Accuracy | / Total |  |
|------|---|-----------|-------|----------|---------|--|
| 43   | NAVEEN KUMAR S (NAVEEN KUMAR S)         | 45 secs   | 22710 | 92%      | 23 / 25 |  |
| 44   | VIJAYARAMMSEN A (VIJAYARAMMSEN A)       | 41 secs   | 22500 | 92%      | 23 / 25 |  |
| 45   | KAVYA P (KAVYA P)                       | 40 secs   | 22340 | 88%      | 22 / 25 |  |
| 46   | JEYAGOMATHI S (JEYAGOMATHI S)           | 48 secs   | 22300 | 92%      | 23 / 25 |  |
| 47   | DEEPAK P (DEEPAK P)                     | 28 secs   | 22000 | 84%      | 21 / 25 |  |
| 48   | PRIYADHARSHINI R (PRIYADHARSHINI R)     | 50 secs   | 21970 | 88%      | 22 / 25 |  |
| 49   | SANGHAVI G (SANGHAVI G)                 | 31 secs   | 21920 | 88%      | 22 / 25 |  |
| 50   | VIJAYALAXMANASEN A (VIJAYALAXMANASEN A) | 45 secs   | 21880 | 92%      | 23 / 25 |  |
| 51   | ABIRAMI V (ABIRAMI V)                   | 42 secs   | 21800 | 84%      | 21 / 25 |  |
| 52   | KESAVANAND M (KESAVANAND M)             | 47 secs   | 21610 | 92%      | 23 / 25 |  |
| 53   | KAVIYA S (KAVIYA S)                     | 29 secs   | 21460 | 84%      | 21 / 25 |  |
| 54   | HARIHARAN S (HARIHARAN S)               | 13 secs   | 21230 | 84%      | 21 / 25 |  |
| 55   | Dharshini P (Dharshini P)               | 31 secs   | 21050 | 88%      | 22 / 25 |  |
| 56   | Ganeshamoorthy I (Ganeshamoorthy I)     | 6 secs    | 20770 | 80%      | 20 / 25 |  |
| 57   | Shanmuga Visal (Shanmuga Visal)         | 22 secs   | 20620 | 84%      | 21 / 25 |  |
| 58   | VINOTHINI R (VINOTHINI RAJAM.R)         | 47 secs   | 19830 | 80%      | 20 / 25 |  |

| Rank | Player Name                                   | Avg. Time | Score | Accuracy | Correct / Total |  |
|------|---|-----------|-------|----------|-----------------|--|
| 59   | Kali Muthu (Kali Muthu)                       | 15 secs   | 19510 | 76%      | 19 / 25         |  |
| 60   | Manoj Kumar (Manoj Kumar)                     | 29 secs   | 19460 | 80%      | 20 / 25         |  |
| 61   | GOMATHI NAAAYAGAM I S (GOMATHI NAAAYAGAM I S) | 29 secs   | 19370 | 80%      | 20 / 25         |  |
| 62   | Divya shree R (DIVYA R)                       | 26 secs   | 18750 | 76%      | 19 / 25         |  |
| 63   | R CHIDHAMBARA NATHAN (R CHIDHAMBARA NATHAN)   | 24 secs   | 18740 | 76%      | 19 / 25         |  |
| 64   | Arumuga Viswanath (Arumuga Viswanath)         | 17 secs   | 18060 | 72%      | 18 / 25         |  |
| 65   | ISHWARYA R (ISHWARYA R)                       | 30 secs   | 17880 | 72%      | 18 / 25         |  |
| 66   | PADMA C (PADMA PRIYA C)                       | 37 secs   | 17620 | 76%      | 19 / 25         |  |
| 67   | GIRITHARAN D (GIRITHARAN D)                   | 21 secs   | 17350 | 72%      | 18 / 25         |  |
| 68   | Kavin Kumar (Kavin Kumar R)                   | 33 secs   | 17300 | 72%      | 18 / 25         |  |
| 69   | SURENDAR V (SURENDAR V)                       | 36 secs   | 17190 | 72%      | 18 / 25         |  |
| 70   | ARAVIND M (ARAVIND M)                         | 22 secs   | 16880 | 72%      | 18 / 25         |  |
| 71   | AMUDHADEVI S (AMUDHADEVI A S)                 | 31 secs   | 16510 | 72%      | 18 / 25         |  |
| 72   | LINGESH S (LINGESH S)                         | 32 secs   | 16420 | 72%      | 18 / 25         |  |
| 73   | NAMASIVAYAM T (NAMASIVAYAM T)                 | 43 secs   | 16390 | 72%      | 18 / 25         |  |
| 74   | LOGGAA K (LOGGAA SRI AGITHA K)                | 45 secs   | 15600 | 72%      | 18 / 25         |  |

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| Rank | Player Name                 | Avg. Time | Score | Accuracy | Correct / Total |
|------|-----------------------------|-----------|-------|----------|-----------------|
| 75   | DIWYA R (DIWYA DHARSHINI R) | 41 secs   | 15570 | 68%      | 17 / 25         |
| 76   | ABINAYA S (ABINAYA S)       | 126 secs  | 14410 | 72%      | 18 / 25         |
| 77   | GAAYATRI V S (GAAYATRI V S) | 126 secs  | 12680 | 64%      | 16 / 25         |
| 78   | JAYA MAHIMA (JAYA MAHIMA)   | 22 secs   | 10340 | 44%      | 11 / 25         |
| 79   | ELAVARASI A (ELAVARASI A)   | 42 secs   | 10090 | 44%      | 11 / 25         |

02/5/2020

# QUIZIZZ

## EC8391 CONTROL SYSTEMS ENGINEERING

25 Questions

NAME : \_\_\_\_\_

CLASS : \_\_\_\_\_

DATE : \_\_\_\_\_

1. In an open loop control system

- a) output is independent of control unit       b) output is dependent on control unit  
 c) only system parameters have effect on the control output       d) none of the above

2. Three blocks with gain of 4, 6 and 8 are connected in parallel. The total gain of the arrangement is

- a) 18       b) 196  
 c) 32       d) 52

3. The transfer function is defined only for

- a) linear and time variant system       b) linear and time invariant system  
 c) non linear and time invariant system       d) non linear and time variant system

4. Signal flow graph can be used to represent

- a) only linear systems       b) only non linear systems  
 c) both linear and non linear systems       d) time invariant only

5. A node which has the outgoing branches is called

- a) input node       b) output node  
 c) mixed node       d) general node

6. Three blocks with gains of 5, 8 and 4 are connected in a cascade. The total gain of the arrangement is

- a) 17       b) 160  
 c) 18       d) 18

 Help

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7. Traffic light control system is a

- a) time invariant system  
 c) non linear system

- b) time variant system  
 d) adaptive control system

8. A signal flow graph is diagram that represents a set of

- a) differential equations  
 c) nonlinear equations

- b) linear equations  
 d) simultaneous linear algebraic equations

9. Voltage stabilizer is

- a) a closed loop control system  
 c) an adaptive control system

- b) an open loop control system  
 d) an optimal control system

10. One of the basic element of automatic control system is

- a) error detector  
 c) input devices

- b) final control element  
 d) output devices

11. Time derivative of position control system is called

- a) servo mechanism  
 c) closed loop control system

- b) time invariant system  
 d) RLC Network

12. The dashpot will offer an opposing force, which is proportional to

- a) acceleration  
 c) displacement

- b) velocity  
 d) angular displacement

13. For a type one system, the steady state error due to step input is equal to

- a) infinite  
 c) 0.25

- b) zero  
 d) 0.5

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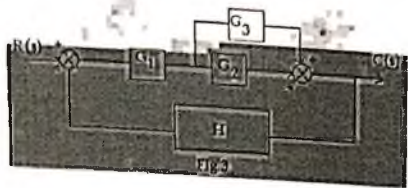
14. A system with gain margin close to unity or a phase margin close to zero is

- a) highly stable
- b) relatively stable
- c) unstable
- d) oscillatory

15. The input to a controller is

- a) sensed signal
- b) desired variable value
- c) error signal
- d) servo signal

16.



The transfer function of the block diagram shown below is

- a)  $\frac{(G1(G2 + G3))}{1 + G1G2H + G1G3H}$
- b)  $\frac{(G1(G2 + G3))}{G2H + G1G3H}$
- c)  $\frac{((G2 + G3))}{1 + G1G2H + G1G3H}$

17. In closed loop control system, with positive value of feedback gain the overall gain of the system will

- a) decrease
- b) increase
- c) be unaffected
- d) zero

18. A control system working under unknown random condition is called

- a) computer control system
- b) digital control system
- c) adaptive control system
- d) stochastic control system

19. The static error constants depend on

- a) the order of the system
- b) the type of the system
- c) both type and order of the system
- d) none of the above

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20. The order of a system is determined by
- a) the highest degree of  $s$  in the denominator polynomial
- b) the number of poles in the transfer function
- c) the number of zeros in the transfer function
- d) none of the above
21. The transient response of a system with feedback compared to that of without feedback
- a) decays more quickly compared to that of system without feedback
- b) decays slowly compared to that of system without feedback
- c) rises at a slower rate compared to that of system without feedback
- d) rises at a faster rate compared to that of system without feedback
22. The impulse response of a first order system
- a) is constant with respect to time
- b) varies linearly with respect to time
- c) is exponentially increasing with response to time
- d) is exponentially decreasing with response to time
23. The overshoot of two second order systems with same damping but different natural frequency of oscillations will be
- a) same
- b) different
- c) higher for the system with higher  $\omega_n$
- d) higher for the system with lower  $\omega_n$
24. For a control system, if the Laplace transform of error  $e(t)$  is  $\frac{8(s+3)}{s(s+10)}$  then the steady state value of the error is
- a) 3.6
- b) 1.8
- c) 3.2
- d) 2.4
25. Match the following (A) Rise time - (i) 0 to 50% (B) Delay time - (ii) 10 to 90% (C) Settling time - (iii) 2 to 5% tolerable error (D) Time constant - (iv) 63.2%
- a) (A)-(i), (B) - (ii), (C) - (iii), (D) - (iv)
- b) (A)-(iii), (B) - (i), (C) - (ii), (D) - (iv)
- c) (A)-(ii), (B) - (i), (C) - (iii), (D) - (iv)
- d) (A)-(i), (B) - (iii), (C) - (iv), (D) - (ii)

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Answer Key

- 1. a
- 2. a
- 3. b
- 4. a
- 5. a
- 6. b
- 7. b

- 8. d
- 9. d
- 10. a
- 11. a
- 12. b
- 13. b
- 14. b

- 15. c
- 16. a
- 17. a
- 18. d
- 19. c
- 20. a
- 21. a

- 22. a
- 23. b
- 24. d
- 25. c

# EC8391 Control Systems Engineering (Unit II & III MCQ)

① This is a preview of the published version of the quiz

Started: Nov 25 at 9:25am

## Quiz Instructions

|   |              |
|---|--------------|
| <b>Question 1</b>                                       | <b>1 pts</b> |
| The static error constants depend on                    |              |
| <input type="radio"/> both type and order of the system |              |
| <input type="radio"/> the order of the system           |              |
| <input type="radio"/> the type of the system            |              |
| <input type="radio"/> none of the above                 |              |

|  |              |
|--|--------------|
| <b>Question 2</b>  | <b>1 pts</b> |
| The impulse response of an LTI system is a unit step function, then the corresponding transfer function is |              |
| <input type="radio"/> 1/S  |              |

|  |
|--|
| <input type="radio"/> S                |
| <input type="radio"/> 1/S <sup>2</sup> |
| <input type="radio"/> 1                |

|   |              |
|---|--------------|
| <b>Question 3</b>   | <b>1 pts</b> |
| The order of a system is determined by                                      |              |
| <input type="radio"/> the highest degree of s in the denominator polynomial |              |
| <input type="radio"/> the number of poles in the transfer function          |              |
| <input type="radio"/> the number of zeros in the transfer function          |              |
| <input type="radio"/> none of the above                                     |              |

|  |              |
|--|--------------|
| <b>Question 4</b>  | <b>1 pts</b> |
| The Proportional + Integral controller connected in cascade with a second order system |              |
| <input type="radio"/> improves the transient response of the system                    |              |
| <input type="radio"/> improves the steady state error of the system                    |              |

# EC8391-CONTROL SYSTEMS ENGINEERING (UNIT-IV MCQ)

ⓘ This is a preview of the published version of the quiz

Started: Nov 4 at 2:40am

## Quiz Instructions

### Question 1

1 pts

1. If all the roots of the characteristic equation have negative real parts, then the system is

- Conditionally Stable
- Marginally Stable
- Unstable
- Stable

### Question 2

1 pts

2. For the application of Routh's test, all the coefficients of the characteristic equation must be

- None of the Above
- Real
- Complex
- Imaginary

# EC8391 CONTROL SYSTEMS AND ENGINEERING (UNIT-V MCQ)

① This is a preview of the published version of the quiz

Started: Nov 25 at 9:22am

## Quiz Instructions

### Question 1

1 pts

1. A system is said to be \_\_\_\_\_ if it is possible to transfer the system state from any initial state to any desired state in a finite interval of time.

- Controllable
- Observable
- Cannot be determined
- Controllable and observable

### Question 2

1 pts

<https://canvas.instructure.com/courses/2137428/quizzes/5980523/take?preview=1>

1/33

2. A system is said to be \_\_\_\_\_ if every state can be completely identified by measurements of the outputs at the finite time interval.

- Observable
- Controllable
- Cannot be determined
- Controllable and observable

### Question 3

1 pts

3. Kalman's test is for

- Observability and controllability
- Optimality
- Controllability
- Observability

<https://canvas.instructure.com/courses/2137428/quizzes/5980523/take?preview=1>

# EC8391 CONTROL SYSTEMS AND ENGINEERING (MODEL-MCQ)

Quiz: EC8391 CONTROL SYSTEMS AND ENGINEERING (MODEL-MCQ)

ⓘ This is a preview of the draft version of the quiz

Started: Nov 25 at 9:18am

## Quiz Instructions

### Question 1

1 pts

1. When a human being tries to approach an object, his brain acts as?

- a controller
- an actuator
- an amplifier
- an error measuring device

### Question 2

1 pts

2. Which of the following is an example of open-loop system?

- Washing Machine
- Respiratory system of animal
- Stabilization of air pressure entering into mask
- Execution of program

<https://canvas.instructure.com/courses/2137428/quizzes/6372669/take?preview=1>

1/32

11/25/2020

Quiz: EC8391 CONTROL SYSTEMS AND ENGINEERING (MODEL-MCQ)

### Question 3

1 pts

3. Find the value of the function  $F(s) = 5/s(s^2 + s + 2)$  is equal to \_\_\_\_\_.

- 2.5
- 3.5
- 3.6
- 4.6

### Question 4

1 pts

<https://canvas.instructure.com/courses/2137428/quizzes/6372669/take?preview=1>

2/32

**RAMCO INSTITUTE OF TECHNOLOGY**  
Department of Electronics and Communication Engineering  
Academic Year: 2020-2021 (Odd Semester)

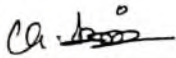
**SET TARGET VALUE**


**Course Code & Title:** EC8391 Control Systems Engineering  
**Course Index & Year of Study:** C206 & Year of Study 2020-2021  
**Degree, Semester & Branch:** III Semester B.E.ECE A & B  
**Name of the Faculty member:** Mr.B.Kannan & Dr.B.Deepa Lakshmi

**Previous Year(s) course Analysis:**

| S. No.  | Academic Year | Course code | GPA<br>(Out of 10) | GPA<br>(Out of 3) |
|---|---------------|-------------|--------------------|-------------------|
| 1.  | 2018-2019     | EC8391      | 5.28               | 1.58              |
| 2.  | 2019-2020     | EC8391      | 5.41               | 1.62              |
| <b>Target Value</b>                                 |               |             |                    | <b>1.6</b>        |
| <b>Set Target Value for Academic Year 2020-2021</b> |               |             |                    | <b>1.8</b>        |

\*(if the average target value >1.8 retain the same otherwise the target for R2017 is 1.8)

  
Signature of the Faculty Member

  
HOD 21/7/2020

**RAMCO INSTITUTE OF TECHNOLOGY**  
Department of Electronics and Communication Engineering

Academic Year: 2020-2021 (Odd Semester)

**CO-PO Matrices of the Course**

**Course Code & Title:** EC8391 Control Systems Engineering

**Course Index & Year of Study:** C206 & 2020-2021

**Degree, Semester & Branch:** III Semester B.E. ECE A & B

**Name of the Faculty member:** Mr.B.Kannan & Dr.B.Deepa Lakshmi

**Course Outcomes:**

After completion of the course, it is expected that: The students will be able to

|        |  |
|--------|--|
| C206.1 | Perform modeling of control system using various techniques.   |
| C206.2 | Obtain the time response and steady state error of control systems.                                  |
| C206.3 | Design various compensators and to analyse the frequency response of the system using various plots. |
| C206.4 | Determine the stability of control systems.  |
| C206.5 | Analyse and obtain state space model using state variables.  |

**CO-PO Matrices:**

| CO     | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|--------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| C206.1 | 3   | 3   | 1   | 1   | 1   | 1   | -   | 1   | 1   | 1    | 1    | 1    |
| C206.2 | 3   | 1   | 2   | 2   | 1   | 1   | -   | 1   | 1   | 1    | 1    | 1    |
| C206.3 | 3   | 2   | 3   | 2   | 1   | 1   | -   | 1   | 1   | 1    | 1    | 1    |
| C206.4 | 3   | 2   | 1   | 3   | 1   | 1   | -   | 1   | 1   | 1    | 1    | 1    |
| C206.5 | 3   | 3   | 2   | 1   | 1   | 1   | -   | 1   | 1   | 1    | 1    | 1    |
| C206   | 3   | 2.2 | 1.8 | 1.8 | 1   | 1   | -   | 1   | 1   | 1    | 1    | 1    |

**CO-PSO Matrices:**

| CO     | PSO1 | PSO2 | PSO3 | PSO4 |
|--------|------|------|------|------|
| C206.1 | 1    | 1    | 2    | 1    |
| C206.2 | -    | 2    | 3    | -    |
| C206.3 | -    | 1    | 3    | 1    |
| C206.4 | 1    | 1    | 3    | -    |
| C206.5 | 1    | -    | 2    | 1    |
| C206   | 1    | 1.25 | 2.6  | 1    |

*(Q.1) 02/07/20*  
**Signature of the Faculty Member**

*(Signature) 2/7/2020*  
**HOD**

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**  
**Academic Year: 2020-2021 (Odd Semester)**

**LECTURE PLAN**

**Degree, Semester & Branch:** III Semester B.E. ECE A  
**Course Code & Title:** EC8391 Control Systems Engineering  
**Name of the Faculty member:** Mr.B.Kannan

| Lecture No.  | Date       | Topic(s) to be taught  | Teaching aids |
|--|------------|--|---------------|
| <b>UNIT-I</b>                                      |            |  |               |
| <b>SYSTEMS COMPONENTS AND THEIR REPRESENTATION</b> |            |  |               |
| 1.   | 03.07.2020 | Syllabus, Course Objectives and Outcomes, Introduction about Control Systems, Terminology,               | PPT/DWP       |
| 2.   | 08.07.2020 | Control System Basic Structure, Feed forward and Feedback control theory                                 | PPT/DWP       |
| 3.   | 13.07.2020 | Electrical - Transfer Function Models  | PPT/DWP       |
| 4.   | 16.07.2020 | Mechanical - Transfer Function Models - Translational System, Problems                                   | PPT/DWP       |
| 5.   | 21.07.2020 | Mechanical - Transfer Function Models - Rotational System, Problems                                      | PPT/DWP       |
| 6.   | 24.07.2020 | Block diagram Models - Reduction procedure   | PPT/DWP       |
| 7.   | 29.07.2020 | Block Diagram - Problems   | PPT/DWP       |
| 8.   | 03.08.2020 | Signal flow graphs models, Problems  | PPT/DWP       |
| 9.   | 06.08.2020 | DC and AC servo Systems  | PPT/DWP       |
| 10.  | 13.08.2020 | Synchronous-Multivariable control system and Revision  | PPT/DWP       |
| <b>UNIT-II</b>                                     |            |  |               |
| <b>TIME RESPONSE ANALYSIS</b>                      |            |  |               |
| 11.  | 14.08.2020 | Introduction to Time Response  | PPT/DWP       |
| 12.  | 18.08.2020 | Transient response, Steady state response, Measures of performance of the standard first order system    | PPT/DWP       |
| 13.  | 20.08.2020 | Measures of performance of the standard second order system – Undamped and Underdamped                   | PPT/DWP       |
| 14.  | 21.08.2020 | Measures of performance of the standard second order system – Critically damped and Overdamped, Problems | PPT/DWP       |
| 15.  | 25.08.2020 | Effect on an additional zero and an additional pole  | PPT/DWP       |
| 16.  | 27.08.2020 | Steady error constant – static error   | PPT/DWP       |
| 17.  | 28.08.2020 | Steady error constant – dynamic error  | PPT/DWP       |
| 18.  | 01.09.2020 | Problems in static error   | PPT/DWP       |
| 19.  | 03.09.2020 | Problems in dynamic error  | PPT/DWP       |
| 20.  | 03.09.2020 | Type number, order, PID control, Analytical design for PD, PI, PID control systems and Revision          | PPT/DWP       |
| <b>UNIT-III</b>                                    |            |  |               |
| <b>FREQUENCY RESPONSE AND SYSTEM ANALYSIS</b>      |            |  |               |
| 21.  | 04.09.2020 | Introduction to Closed loop frequency response   | PPT/DWP       |
| 22.  | 05.09.2020 | Performance specification in frequency domain  | PPT/DWP       |
| 23.  | 08.09.2020 | Frequency response of standard second order system-  | PPT/DWP       |

| Lecture No.   | Date       | Topic(s) to be taught   | Teaching aids |
|---|------------|---|---------------|
|   |            | Bode Plot   | PPT/DWP       |
| 24.   | 10.09.2020 | Problems in Bode plot   | PPT/DWP       |
| 25.   | 10.09.2020 | Frequency response of standard second order system-<br>Polar Plot   | PPT/DWP       |
| 26.   | 11.09.2020 | Problems in Polar plot  | PPT/DWP       |
| 27.   | 12.09.2020 | Frequency response of standard second order system-<br>Nyquist plot   | PPT/DWP       |
| 28.   | 15.09.2020 | Design of compensators using Bode plots - Cascade lead<br>compensation, Problems                            | PPT/DWP       |
| 29.   | 17.09.2020 | Design of compensators using Bode plots - Cascade lag<br>compensation, Problems                             | PPT/DWP       |
| 30.   | 17.09.2020 | Design of compensators using Bode plots - Cascade lag-<br>lead compensation, Problems and Revision          | PPT/DWP       |
| <b>UNIT-IV</b>  |            |   |               |
| <b>CONCEPTS OF STABILITY ANALYSIS</b>                       |            |   |               |
| 31.   | 18.09.2020 | Introduction to stability analysis and Concept of<br>stability  | PPT/DWP       |
| 32.   | 22.09.2020 | Bounded - Input Bounded - Output stability  | PPT/DWP       |
| 33.   | 24.09.2020 | Introduction to Routh stability criterion   | PPT/DWP       |
| 34.   | 24.09.2020 | Problems in Routh stability criterion   | PPT/DWP       |
| 35.   | 25.09.2020 | Relative stability, Root locus concept  | PPT/DWP       |
| 36.   | 26.09.2020 | Guidelines for sketching root locus, Problems   | PPT/DWP       |
| 37.   | 29.09.2020 | Problems in root locus  | PPT/DWP       |
| 38.   | 01.10.2020 | Nyquist stability criterion, Problems   | PPT/DWP       |
| 39.   | 01.10.2020 | Problems in Nyquist stability criterion   | PPT/DWP       |
| 40.   | 02.10.2020 | Revision  | PPT/DWP       |
| <b>UNIT-V</b>   |            |   |               |
| <b>CONTROL SYSTEM ANALYSIS USING STATE VARIABLE METHODS</b> |            |   |               |
| 41.   | 06.10.2020 | Introduction to State variable representation, Conversion<br>of state variable models to transfer functions | PPT/DWP       |
| 42.   | 08.10.2020 | Problems in Conversion of state variable models to<br>transfer functions                                    | PPT/DWP       |
| 43.   | 08.10.2020 | Conversion of transfer functions to state variable<br>models, Problems                                      | PPT/DWP       |
| 44.   | 09.10.2020 | Solution of state equations, Problems   | PPT/DWP       |
| 45.   | 10.10.2020 | Concepts of Controllability and Observability   | PPT/DWP       |
| 46.   | 13.10.2020 | Problems in Controllability and Observability   | PPT/DWP       |
| 47.   | 15.10.2020 | Stability of linear systems, Equivalence between<br>transfer function and state variable representations    | PPT/DWP       |
| 48.   | 15.10.2020 | State variable analysis of digital control system   | PPT/DWP       |
| 49.   | 16.10.2020 | Digital control design using state feedback and Revision  | PPT/DWP       |

\*DWP-Digital Writing Pad

**Textbooks:**

1. M.Gopal, "Control System – Principles and Design", Tata McGraw Hill, 4<sup>th</sup> Edition, 2012.
2. A.Nagoor Kani, "Control Systems Engineering", RBA Publications, First Edition, 2013.

**References:**

1. J.Nagrath and M.Gopal, "Control System Engineering", New Age International Publishers, 5<sup>th</sup> Edition, 2007.
2. K Ogata, "Modern Control Engineering", 5<sup>th</sup> Edition, PHI, 2012.
3. S.K.Bhattacharya, Control System Engineering, 3rd Edition, Pearson, 2013.
4. Benjamin.C.Kuo, "Automatic control systems", Prentice Hall of India, 7<sup>th</sup> Edition, 1995.

Prepared by: B.Kannan  
Date: 02/07/2020

Approved by: Dr.S.Periyayagi  
Date: 2-7-2020

21/7/20

**RAMCO INSTITUTE OF TECHNOLOGY**  
Department of Electronics and Communication Engineering  
Academic Year: 2020-2021 (Odd Semester)

**TUTORIAL PLAN**

**Degree, Semester & Branch:** III Semester B.E. ECE A  
**Course Code & Title:** EC8391 Control Systems Engineering  
**Name of the Faculty member:** Mr.B.Kannan

| Tutorial No. | Date       | Topic(s)  |
|--------------|------------|---|
| T1           | 21.07.2020 | Problems in Mechanical Translational and Rotational System                      |
| T2           | 03.08.2020 | Problems in Block Diagram Reduction Techniques and Signal Flow Graph            |
| T3           | 21.08.2020 | Problems in Time response of Second Order System and Time Domain Specifications |
| T4           | 03.09.2020 | Problems in Steady State Error using Static and Dynamic Error Co-efficients     |
| T5           | 11.09.2020 | Problems in Bode Plot & Polar Plot  |
| T6           | 17.09.2020 | Problems in Lag / Lead Compensators   |
| T7           | 29.09.2020 | Problems in Routh Hurwitz Criterion   |
| T8           | 01.10.2020 | Problems in Root Locus  |
| T9           | 08.10.2020 | Problems in State Model & Transfer Function                                     |
| T10          | 13.10.2020 | Problems in Controllability and Observability                                   |
| T11          | 23.10.2020 | University Two Mark Questions   |

Prepared by: Mr. B. Kannan  
Date: 02/07/2020

Approved by: Dr. S. Priyanayagi  
Date: 2-7-2020

03  
20/10/20

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**  
**Academic Year: 2020-2021 (Odd Semester)**

**ASSIGNMENT PLAN**

**Degree, Semester & Branch:** III Semester B.E. ECE A  
**Course Code & Title:** EC8391 Control Systems Engineering  
**Name of the Faculty member:** Mr.B.Kannan

| Assignment No. | Date       | Topic(s)  | Date of Submission |
|----------------|------------|---|--------------------|
| 1.             | 06.08.2020 | Electrical and Mechanical Transfer Function Models and Block Diagram Models           | 13.08.2020         |
| 2.             | 20.08.2020 | Second Order System   | 27.08.2020         |
| 3.             | 03.09.2020 | Static Error & Dynamic Error  | 08.09.2020         |
| 4.             | 12.09.2020 | Bode and Polar plot   | 17.09.2020         |
| 5.             | 01.10.2020 | Routh Stability Criterion and Root Locus  | 06.10.2020         |
| 6.             | 13.10.2020 | Controllability and Observability & State variable analysis of digital control system | 16.10.2020         |

Prepared by: B. KANNAN  
Date: 08/07/2020

Approved by: S. Periyannayagi  
Date: 2-7-2020

03  
20/1/20

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**  
**Academic Year: 2020-2021 (Odd Semester)**

**Course Objectives and Outcomes**

**Degree, Semester & Branch:** III Semester B.E. ECE A  
**Course Code & Title:** EC8391 Control Systems Engineering  
**Name of the Faculty member:** Mr.B.Kannan

**Course Objectives:**

Enable the students:

1. To make the students to learn the basic components of control system and their modeling using various techniques.
2. To make the students to understand the analysis of time response of the system and steady state error.
3. To enable the students to design compensators and to analyse the frequency response of the system using various plots.
4. To familiarize the students about the stability analysis of control system.
5. To impart knowledge in analyzing the system using state variables.

**Course Outcomes:**

After completion of the course, it is expected that the students will be able to:

1. Perform modeling of control system using various techniques.
2. Obtain the time response and steady state error of control systems.
3. Design various compensators and to analyse the frequency response of the system using various plots.
4. Determine the stability of control systems.
5. Analyse and obtain state space model using state variables.

**Assessment Methods followed:**

1. Three Internal Assessment Tests are conducted to assess continuous learning by the students.
2. Tutorials are conducted to assess the students self-learning skills.
3. End semester examination conducted by the Anna University to assess the overall learning of the course by the students.

*A.B. 02/07/2020*  
Signature of the Faculty member

*M. S. 2/7/20*

*[Signature]*  
HOD 2/7/2020

**Proof / Verification of Accomplishment of Course Outcomes:**

1. Pass percentage in Internal Assessment Test I: 100%.
2. Pass percentage in Internal Assessment Test II: 95%.
3. Pass percentage in Internal Assessment Test III: 95%.
4. Pass percentage in University Examination: 100%.

*A. B. S. 18/1/22*  
Signature of the Faculty member

*[Signature]*  
HOD 18/1/22

**OBJECTIVES:**

- To introduce the components and their representation of control systems
- To learn various methods for analyzing the time response, frequency response and stability of the systems.
- To learn the various approach for the state variable analysis.

**UNIT I SYSTEMS COMPONENTS AND THEIR REPRESENTATION** 9

Control System: Terminology and Basic Structure-Feed forward and Feedback control theory-Electrical and Mechanical Transfer Function Models-Block diagram Models-Signal flow graphs models-DC and AC servo Systems-Synchronous -Multivariable control system

**UNIT II TIME RESPONSE ANALYSIS** 9

Transient response-steady state response-Measures of performance of the standard first order and second order system-effect on an additional zero and an additional pole-steady error constant and system- type number-PID control-Analytical design for PD, PI, PID control systems.

**UNIT III FREQUENCY RESPONSE AND SYSTEM ANALYSIS** 9

Closed loop frequency response-Performance specification in frequency domain-Frequency response of standard second order system- Bode Plot - Polar Plot- Nyquist plots-Design of compensators using Bode plots-Cascade lead compensation-Cascade lag compensation-Cascade lag-lead compensation

**UNIT IV CONCEPTS OF STABILITY ANALYSIS** 9

Concept of stability-Bounded - Input Bounded - Output stability-Routh stability criterion-Relative stability-Root locus concept-Guidelines for sketching root locus-Nyquist stability criterion.

**UNIT V CONTROL SYSTEM ANALYSIS USING STATE VARIABLE METHODS** 9

State variable representation-Conversion of state variable models to transfer functions-Conversion of transfer functions to state variable models-Solution of state equations-Concepts of Controllability and Observability-Stability of linear systems-Equivalence between transfer function and state variable representations-State variable analysis of digital control system-Digital control design using state feedback.

**TOTAL: 45 PERIODS****OUTCOMES:**

Upon completion of the course, the student should be able to:

- Identify the various control system components and their representations.
- Analyze the various time domain parameters.
- Analysis the various frequency response plots and its system.
- Apply the concepts of various system stability criterions.
- Design various transfer functions of digital control system using state variable models.

**TEXT BOOK:**

1. M.Gopal, —Control System – Principles and Designl, Tata McGraw Hill, 4th Edition, 2012.

**REFERENCES:**

1. J.Nagrath and M.Gopal, —Control System Engineeringl, New Age International Publishers, 5 th Edition, 2007.
2. K. Ogata, \_Modern Control Engineering', 5th edition, PHI, 2012.
3. S.K.Bhattacharya, Control System Engineering, 3rd Edition, Pearson, 2013.
4. Benjamin.C.Kuo, —Automatic control systemsl, Prentice Hall of India, 7th Edition, 1995.

# RAMCO INSTITUTE OF TECHNOLOGY

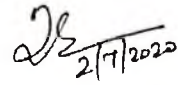
Academic Year: 2020 - 2021 (Odd Semester)

## STUDENT NAMELIST

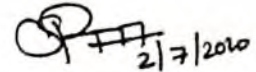
Semester/Class: III Semester B.E. Electronics and Communication Engineering A

| Sl. No. | Reg. No.     | Name of the Student   |
|---------|--------------|-----------------------|
| 1.      | 953619106001 | ABINAYA S             |
| 2.      | 953619106002 | ABIRAMI V             |
| 3.      | 953619106003 | AKILANDESWARI K       |
| 4.      | 953619106004 | AMUDHADEVI A S        |
| 5.      | 953619106005 | ANUDHARSHINI M        |
| 6.      | 953619106006 | ARAVIND M             |
| 7.      | 953619106007 | ARUMUGA VISWANATH P   |
| 8.      | 953619106008 | ASIBA MINA K R        |
| 9.      | 953619106009 | CHIDHAMBARANATHAN R   |
| 10.     | 953619106010 | DEEPAK CHAKRAVARTHI P |
| 11.     | 953619106011 | DHARINI A             |
| 12.     | 953619106012 | DHARSHINI K           |
| 13.     | 953619106013 | DHARSHINI P           |
| 14.     | 953619106014 | DIVYA SHREE R         |
| 15.     | 953619106015 | DIWYA DHARSHINI R     |
| 16.     | 953619106016 | ELAVARASI A           |
| 17.     | 953619106017 | GAAAYATRI V S         |
| 18.     | 953619106018 | GANESH G              |
| 19.     | 953619106019 | GANESHAMOORTHY I      |
| 20.     | 953619106020 | GAYATHRI K            |
| 21.     | 953619106021 | GIRITHARAN D          |
| 22.     | 953619106022 | GOMATHI NAAAYAGAM I S |
| 23.     | 953619106023 | HARIHARAN S           |
| 24.     | 953619106024 | HARINI U              |
| 25.     | 953619106025 | INDHUMATHI C          |
| 26.     | 953619106026 | ISHWARYA R            |
| 27.     | 953619106027 | JAYA MAHIMA M         |
| 28.     | 953619106028 | JEYAGOMATHI S         |
| 29.     | 953619106029 | JISHA P S             |
| 30.     | 953619106030 | KALIDAS P             |
| 31.     | 953619106031 | KALIMUTHU K           |
| 32.     | 953619106032 | KAMALESH S            |
| 33.     | 953619106033 | KAVIN KUMAR R         |
| 34.     | 953619106034 | KAVIYA S              |

| Sl. No. | Reg. No.     | Name of the Student      |
|---------|--------------|--------------------------|
| 35.     | 953619106035 | KAVYA P                  |
| 36.     | 953619106036 | KEERTHIKA B              |
| 37.     | 953619106037 | KESAVANAND M             |
| 38.     | 953619106038 | KESHAVA MUGESH KUMAR C M |
| 39.     | 953619106039 | LINGESH S                |
| 40.     | 953619106040 | LOGGAA SRI AGITHA K      |

  
2/7/2022

Signature of the Class Adviser

  
2/7/2022  
HOD

**RAMCO INSTITUTE OF TECHNOLOGY**  
 Department of Electronics and Communication Engineering  
 Academic Year: 2020 – 2021 (Odd Semester)

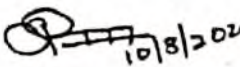
**CLASS TIME TABLE**  
 (with effect from: 12.08.2020)

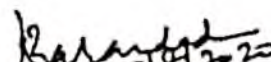
Semester/Class: III Semester B.E. ECE A

| Period & Time / Day | I                        | 10.30-10.45 | II              | 11.45-12.00 | III             | 1.00 - 2.15 | IV            |
|---------------------|--------------------------|-------------|-----------------|-------------|-----------------|-------------|---------------|
|                     | 9.30 – 10.30             |             | 10.45- 11.45    |             | 12.00 – 1.00    |             | 2.15 - 3.15   |
| Monday              | EC8393<br>PJT            | Tea Break   | EC8392<br>DG    | Tea Break   | EC8351<br>VSN   | Lunch Break | MA8352<br>KSM |
| Tuesday             | EC8352<br>RC/MS          |             | EC8393<br>PJT   |             | EC8391<br>BK    |             | EC8392<br>DG  |
| Wednesday           | EC8392<br>DG             |             | EC8352<br>RC/MS |             | MA8352<br>KSM   |             | EC8351<br>VSN |
| Thursday            | EC8351<br>VSN            |             | MA8352<br>KSM   |             | EC8352<br>RC/MS |             | EC8391<br>BK  |
| Friday              | MA8352<br>KSM            |             | EC8352<br>RC/MS |             | EC8391<br>BK    |             | EC8393<br>PJT |
| Saturday            | As per Academic Schedule |             |                 |             |                 |             |               |

|    | <u>Course Code &amp; Title</u>                           | <u>Name of the Faculty member</u> | <u>No. of periods</u> |
|----|--|-----------------------------------|-----------------------|
| 1. | MA8352 Linear Algebra and Partial Differential Equations | Mr.K.Subramanian (KSM)            | 4                     |
| 2. | EC8393 Fundamentals of Data Structures in C              | Ms.P.Jothi Thilaga (PJT)          | 3                     |
| 3. | EC8351 Electronic Circuits I                             | Mrs.V.SrirengeNachiyar (VSN)      | 3                     |
| 4. | EC8352 Signals and Systems                               | Mrs.R.Chitra (RC)                 | 4                     |
|    |  | Mrs.M.Sangeetha (MS)              |                       |
| 5. | EC8392 Digital Electronics                               | Mr.D.Gopinath (DG)                | 3                     |
| 6. | EC8391 Control Systems Engineering                       | Mr.B.Kannan (BK)                  | 3                     |

for  10/8/20  
 Class Adviser

 10/8/2020  
 HOD

 12/8/2020  
 Timetable Coordinator

 13/8/20  
 Principal

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**  
**Academic Year: 2020-2021 (Odd Semester)**  
**MCQ Marks Statement**

**Semester/Class/Section: III Semester B.E. ECE A**

**Subject Code/Name of Subject: EC8391 Control Systems Engineering**

**Name of Faculty member: Mr.B.Kannan**

| Sl. No. | Reg. No.     | Name of the Student   | MCQ-I<br>(UNIT-I)<br>(30) | MCQ-II<br>(UNIT-II&III)<br>(60) | MCQ-III<br>(UNIT-IV)<br>(30) | MCQ-IV<br>(UNIT-V)<br>(60) | MCQ-V<br>(MODEL)<br>(60) |
|---------|--------------|-----------------------|---------------------------|---------------------------------|------------------------------|----------------------------|--------------------------|
| 1       | 953619106001 | ABINAYA S             | 22                        | 46                              | 30                           | 44                         | 49                       |
| 2       | 953619106002 | ABIRAMI V             | 26                        | 45                              | 30                           | 53                         | 39                       |
| 3       | 953619106003 | AKILANDESWARI K       | 30                        | 47                              | 30                           | 51                         | 51                       |
| 4       | 953619106004 | AMUDHADEVI A S        | 20                        | 46                              | 28                           | 53                         | 47                       |
| 5       | 953619106005 | ANUDHARSHINI M        | 30                        | 45                              | 26                           | 53                         | 37                       |
| 6       | 953619106006 | ARAVIND M             | 23                        | 46                              | 27                           | 46                         | 44                       |
| 7       | 953619106007 | ARUMUGA VISWANATH P   | 20                        | 41                              | 24                           | 26                         | 39                       |
| 8       | 953619106008 | ASIBA MINA K R        | 26                        | 47                              | 26                           | 57                         | 45                       |
| 9       | 953619106009 | CHIDHAMBARANATHAN R   | 24                        | 43                              | 26                           | 29                         | 37                       |
| 10      | 953619106010 | DEEPAK CHAKRAVARTHI P | 25                        | 0                               | 24                           | 9                          | 42                       |
| 11      | 953619106011 | DHARINI A             | 28                        | 44                              | 23                           | 55                         | 42                       |
| 12      | 953619106012 | DHARSHINI K           | 27                        | 45                              | 23                           | 54                         | 42                       |
| 13      | 953619106013 | DHARSHINI P           | 26                        | 48                              | 30                           | 53                         | 51                       |
| 14      | 953619106014 | DIVYA SHREE R         | 22                        | 46                              | 30                           | 53                         | 42                       |
| 15      | 953619106015 | DIWYA DHARSHINI R     | 20                        | 46                              | 27                           | 51                         | 47                       |
| 16      | 953619106016 | ELAVARASI A           | 14                        | 36                              | 19                           | 27                         | 32                       |
| 17      | 953619106017 | GAAYATRI V S          | 21                        | 48                              | 30                           | 53                         | 51                       |
| 18      | 953619106018 | GANESH G              | 29                        | 44                              | 29                           | 16                         | 47                       |
| 19      | 953619106019 | GANESHAMOORTHY I      | 25                        | 45                              | 29                           | 42                         | 39                       |
| 20      | 953619106020 | GAYATHRI K            | 30                        | 40                              | 18                           | 51                         | 26                       |
| 21      | 953619106021 | GIRITHARAN D          | 22                        | 36                              | 28                           | 28                         | 33                       |
| 22      | 953619106022 | GOMATHI NAAYAGAM I S  | 24                        | 49                              | 23                           | 47                         | 47                       |

|    |              |                          |    |    |    |    |    |
|----|--------------|--------------------------|----|----|----|----|----|
| 23 | 953619106023 | HARIHARAN S              | 25 | 47 | 21 | 53 | 43 |
| 24 | 953619106024 | HARINI U                 | 29 | 44 | 30 | 49 | 45 |
| 25 | 953619106025 | INDHUMATHI C             | 26 | 48 | 30 | 53 | 50 |
| 26 | 953619106026 | ISHWARYA R               | 21 | 48 | 28 | 53 | 47 |
| 27 | 953619106027 | JAYA MAHIMA M            | 15 | 48 | 30 | 53 | 51 |
| 28 | 953619106028 | JEYAGOMATHI S            | 28 | 49 | 30 | 54 | 49 |
| 29 | 953619106029 | JISHA P S                | 30 | 44 | 30 | 53 | 43 |
| 30 | 953619106030 | KALIDAS P                | 30 | 46 | 29 | 53 | 50 |
| 31 | 953619106031 | KALIMUTHU K              | 21 | 34 | 12 | 29 | 34 |
| 32 | 953619106032 | KAMALESH S               | 30 | 47 | 23 | 26 | 37 |
| 33 | 953619106033 | KAVIN KUMAR R            | 23 | 47 | 29 | 53 | 50 |
| 34 | 953619106034 | KAVIYA S                 | 25 | 48 | 30 | 51 | 51 |
| 35 | 953619106035 | KAVYA P                  | 27 | 49 | 30 | 54 | 48 |
| 36 | 953619106036 | KEERTHIKA B              | 27 | 45 | 23 | 54 | 42 |
| 37 | 953619106037 | KESAVANAND M             | 27 | 43 | 26 | 50 | 47 |
| 38 | 953619106038 | KESHAVA MUGESH KUMAR C M | 26 | 51 | 29 | 51 | 49 |
| 39 | 953619106039 | LINGESH S                | 21 | 46 | 28 | 52 | 48 |
| 40 | 953619106040 | LOGGAA SRI AGITHA K      | 21 | 46 | 29 | 53 | 47 |

Signature of the Valuer with date:

*(Signature)* 12/11/2020

*(Signature)*  
HOD 12/11/2020

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**

**Academic Year: 2020-2021 (Odd Semester)**

**Marks Statement for Unit-I Tutorials**

**Degree, Semester & Branch: III Semester B.E. ECE A**

**Course Code & Title: EC8391 Control Systems Engineering**

**Name of the Faculty member: Mr.B.Kannan**

| Sl. No. | Reg. No.     | Name of the Student   | Tutorial I        | Tutorial II       | Tutorial III      |
|---------|--------------|-----------------------|-------------------|-------------------|-------------------|
|         |              |                       | Marks Scored (20) | Marks Scored (20) | Marks Scored (10) |
| 1.      | 953619106001 | ABINAYA S             | 20                | 20                | 10                |
| 2.      | 953619106002 | ABIRAMI V             | 20                | 20                | 10                |
| 3.      | 953619106003 | AKILANDESWARI K       | 20                | 19                | 10                |
| 4.      | 953619106004 | AMUDHADEVI A S        | 20                | 19                | 10                |
| 5.      | 953619106005 | ANUDHARSHINI M        | 20                | 19                | 9                 |
| 6.      | 953619106006 | ARAVIND M             | 20                | 20                | 9                 |
| 7.      | 953619106007 | ARUMUGA VISWANATH P   | 19                | 18                | 10                |
| 8.      | 953619106008 | ASIBA MINA K R        | 20                | 20                | 10                |
| 9.      | 953619106009 | CHIDHAMBARANATHAN R   | 18                | 17                | 9                 |
| 10.     | 953619106010 | DEEPAK CHAKRAVARTHI P | 15                | 14                | 7                 |
| 11.     | 953619106011 | DHARINI A             | 20                | 20                | 10                |
| 12.     | 953619106012 | DHARSHINI K           | 20                | 20                | 10                |
| 13.     | 953619106013 | DHARSHINI P           | 20                | 20                | 10                |
| 14.     | 953619106014 | DIVYA SHREE R         | 19                | 20                | 10                |
| 15.     | 953619106015 | DIWYA DHARSHINI R     | 20                | 20                | 10                |
| 16.     | 953619106016 | ELAVARASI A           | 20                | 20                | 10                |
| 17.     | 953619106017 | GAAYATRI V S          | 20                | 20                | 10                |
| 18.     | 953619106018 | GANESH G              | 18                | 17                | 9                 |
| 19.     | 953619106019 | GANESHAMOORTHY I      | 18                | 18                | 9                 |
| 20.     | 953619106020 | GAYATHRI K            | 19                | 20                | 10                |
| 21.     | 953619106021 | GIRITHARAN D          | 18                | 16                | 8                 |
| 22.     | 953619106022 | GOMATHI NAAAYAGAM I S | 18                | 20                | 9                 |
| 23.     | 953619106023 | HARIHARAN S           | 18                | 19                | 9                 |
| 24.     | 953619106024 | HARINI U              | 20                | 20                | 10                |
| 25.     | 953619106025 | INDHUMATHI C          | 20                | 20                | 10                |
| 26.     | 953619106026 | ISHWARYA R            | 20                | 20                | 10                |
| 27.     | 953619106027 | JAYA MAHIMA M         | 20                | 20                | 10                |
| 28.     | 953619106028 | JEYAGOMATHI S         | 20                | 20                | 10                |
| 29.     | 953619106029 | JISHA P S             | 20                | 20                | 10                |
| 30.     | 953619106030 | KALIDAS P             | 18                | 19                | 9                 |
| 31.     | 953619106031 | KALIMUTHU K           | 17                | 16                | 7                 |

| Sl. No. | Reg. No.     | Name of the Student       | Tutorial I        | Tutorial II       | Tutorial III      |
|---------|--------------|---------------------------|-------------------|-------------------|-------------------|
|         |              |                           | Marks Scored (20) | Marks Scored (20) | Marks Scored (10) |
| 32.     | 953619106032 | KAMALESH S                | 18                | 19                | 8                 |
| 33.     | 953619106033 | KAVIN KUMAR R             | 19                | 19                | 9                 |
| 34.     | 953619106034 | KAVIYA S                  | 20                | 20                | 10                |
| 35.     | 953619106035 | KAVYA P                   | 20                | 20                | 10                |
| 36.     | 953619106036 | KEERTHIKA B               | 20                | 20                | 10                |
| 37.     | 953619106037 | KESAVANAND M              | 20                | 18                | 10                |
| 38.     | 953619106038 | KESHA VA MUGESH KUMAR C M | 20                | 19                | 10                |
| 39.     | 953619106039 | LINGESH S                 | 20                | 18                | 10                |
| 40.     | 953619106040 | LOGGAA SRI AGITHA K       | 20                | 19                | 10                |

Signature of the Valuer with date:

*(A. S. 12/11/20)*

*(P. M. 12/11/20)*  
HOD

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**

**Academic Year: 2020-2021 (Odd Semester)**

**Marks Statement for Unit-II Tutorials**

**Degree, Semester & Branch: III Semester B.E. ECE A**  
**Course Code & Title: EC8391 Control Systems Engineering**  
**Name of the Faculty member: Mr.B.Kannan**

| Sl. No. | Reg. No.     | Name of the Student   | Tutorial IV       | Tutorial V        |
|---------|--------------|-----------------------|-------------------|-------------------|
|         |              |                       | Marks Scored (20) | Marks Scored (20) |
| 1.      | 953619106001 | ABINAYA S             | 19                | 19                |
| 2.      | 953619106002 | ABIRAMI V             | 19                | 19                |
| 3.      | 953619106003 | AKILANDESWARI K       | 20                | 20                |
| 4.      | 953619106004 | AMUDHADEVI A S        | 20                | 20                |
| 5.      | 953619106005 | ANUDHARSHINI M        | 18                | 18                |
| 6.      | 953619106006 | ARAVIND M             | 20                | 20                |
| 7.      | 953619106007 | ARUMUGA VISWANATH P   | 18                | 18                |
| 8.      | 953619106008 | ASIBA MINA K R        | 20                | 20                |
| 9.      | 953619106009 | CHIDHAMBARANATHAN R   | 18                | 18                |
| 10.     | 953619106010 | DEEPAK CHAKRAVARTHI P | 19                | 19                |
| 11.     | 953619106011 | DHARINI A             | 20                | 20                |
| 12.     | 953619106012 | DHARSHINI K           | 20                | 20                |
| 13.     | 953619106013 | DHARSHINI P           | 20                | 20                |
| 14.     | 953619106014 | DIVYA SHREE R         | 18                | 18                |
| 15.     | 953619106015 | DIWYA DHARSHINI R     | 20                | 20                |
| 16.     | 953619106016 | ELAVARASI A           | 20                | 20                |
| 17.     | 953619106017 | GAAYATRI V S          | 20                | 20                |
| 18.     | 953619106018 | GANESH G              | 18                | 18                |
| 19.     | 953619106019 | GANESHAMOORTHY I      | 19                | 18                |
| 20.     | 953619106020 | GAYATHRI K            | 20                | 20                |
| 21.     | 953619106021 | GIRITHARAN D          | 18                | 18                |
| 22.     | 953619106022 | GOMATHI NAAYAGAM I S  | 20                | 20                |
| 23.     | 953619106023 | HARIHARAN S           | 17                | 18                |
| 24.     | 953619106024 | HARINI U              | 19                | 20                |
| 25.     | 953619106025 | INDHUMATHI C          | 20                | 20                |
| 26.     | 953619106026 | ISHWARYA R            | 20                | 19                |
| 27.     | 953619106027 | JAYA MAHIMA M         | 20                | 20                |
| 28.     | 953619106028 | JEYAGOMATHI S         | 19                | 20                |
| 29.     | 953619106029 | JISHA P S             | 20                | 20                |
| 30.     | 953619106030 | KALIDAS P             | 17                | 18                |
| 31.     | 953619106031 | KALIMUTHU K           | 18                | 17                |

| Sl. No. | Reg. No.     | Name of the Student      | Tutorial IV       | Tutorial V        |
|---------|--------------|--------------------------|-------------------|-------------------|
|         |              |                          | Marks Scored (20) | Marks Scored (20) |
| 32.     | 953619106032 | KAMALESH S               | 17                | 18                |
| 33.     | 953619106033 | KAVIN KUMAR R            | 18                | 18                |
| 34.     | 953619106034 | KAVIYA S                 | 19                | 19                |
| 35.     | 953619106035 | KAVYA P                  | 19                | 20                |
| 36.     | 953619106036 | KEERTHIKA B              | 19                | 20                |
| 37.     | 953619106037 | KESAVANAND M             | 19                | 19                |
| 38.     | 953619106038 | KESHAVA MUGESH KUMAR C M | 19                | 18                |
| 39.     | 953619106039 | LINGESH S                | 20                | 19                |
| 40.     | 953619106040 | LOGGAA SRI AGITHA K      | 20                | 19                |

*A. S. 12/11/20*  
**Signature of the Valuer with date:**

*[Signature]*  
**HOD**

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**

**Academic Year: 2020-2021 (Odd Semester)**

**Marks Statement for Unit-III Tutorials**

**Degree, Semester & Branch:** III Semester B.E. ECE A  
**Course Code & Title:** EC8391 Control Systems Engineering  
**Name of the Faculty member:** Mr.B.Kannan

| Sl. No | Reg. No.     | Name of the Student   | Tutorial VI       | Tutorial VII      |
|--------|--------------|-----------------------|-------------------|-------------------|
|        |              |                       | Marks Scored (20) | Marks Scored (10) |
| 1.     | 953619106001 | ABINAYA S             | 20                | 10                |
| 2.     | 953619106002 | ABIRAMI V             | 20                | 10                |
| 3.     | 953619106003 | AKILANDESWARI K       | 20                | 9                 |
| 4.     | 953619106004 | AMUDHADEVI A S        | 19                | 10                |
| 5.     | 953619106005 | ANUDHARSHINI M        | 19                | 8                 |
| 6.     | 953619106006 | ARAVIND M             | 20                | 9                 |
| 7.     | 953619106007 | ARUMUGA VISWANATH P   | 19                | 9                 |
| 8.     | 953619106008 | ASIBA MINA K R        | 20                | 9                 |
| 9.     | 953619106009 | CHIDHAMBARANATHAN R   | 17                | 8                 |
| 10.    | 953619106010 | DEEPAK CHAKRAVARTHI P | 18                | 9                 |
| 11.    | 953619106011 | DHARINI A             | 19                | 10                |
| 12.    | 953619106012 | DHARSHINI K           | 19                | 10                |
| 13.    | 953619106013 | DHARSHINI P           | 19                | 10                |
| 14.    | 953619106014 | DIVYA SHREE R         | 19                | 10                |
| 15.    | 953619106015 | DIWYA DHARSHINI R     | 19                | 10                |
| 16.    | 953619106016 | ELAVARASI A           | 20                | 10                |
| 17.    | 953619106017 | GAAYATRI V S          | 20                | 10                |
| 18.    | 953619106018 | GANESH G              | 19                | 9                 |
| 19.    | 953619106019 | GANESHAMOORTHY I      | 19                | 9                 |
| 20.    | 953619106020 | GAYATHRI K            | 19                | 9                 |
| 21.    | 953619106021 | GIRITHARAN D          | 17                | 9                 |
| 22.    | 953619106022 | GOMATHI NAAYAGAM I S  | 19                | 9                 |
| 23.    | 953619106023 | HARIHARAN S           | 17                | 9                 |
| 24.    | 953619106024 | HARINI U              | 20                | 9                 |
| 25.    | 953619106025 | INDHUMATHI C          | 20                | 10                |
| 26.    | 953619106026 | ISHWARYA R            | 20                | 9                 |
| 27.    | 953619106027 | JAYA MAHIMA M         | 19                | 10                |
| 28.    | 953619106028 | JEYAGOMATHI S         | 20                | 10                |
| 29.    | 953619106029 | JISHA P S             | 20                | 10                |
| 30.    | 953619106030 | KALIDAS P             | 17                | 8                 |
| 31.    | 953619106031 | KALIMUTHU K           | 18                | 8                 |

| Sl. No | Reg. No.     | Name of the Student      | Tutorial VI       | Tutorial VII      |
|--------|--------------|--------------------------|-------------------|-------------------|
|        |              |                          | Marks Scored (20) | Marks Scored (10) |
| 32.    | 953619106032 | KAMALESH S               | 19                | 9                 |
| 33.    | 953619106033 | KAVIN KUMAR R            | 19                | 8                 |
| 34.    | 953619106034 | KAVIYA S                 | 20                | 10                |
| 35.    | 953619106035 | KAVYA P                  | 20                | 10                |
| 36.    | 953619106036 | KEERTHIKA B              | 20                | 10                |
| 37.    | 953619106037 | KESAVANAND M             | 20                | 10                |
| 38.    | 953619106038 | KESHAVA MUGESH KUMAR C M | 19                | 9                 |
| 39.    | 953619106039 | LINGESH S                | 19                | 9                 |
| 40.    | 953619106040 | LOGGAA SRI AGITHA K      | 20                | 10                |

*12/11/20*  
Signature of the Valuer with date:

*12/11/20*  
HOD

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**

**Academic Year: 2020-2021 (Odd Semester)**

**Marks Statement for Unit-IV Tutorials**

**Degree, Semester & Branch: III Semester B.E. ECE A**

**Course Code & Title: EC8391 Control Systems Engineering**

**Name of the Faculty member: Mr.B.Kannan**

| Sl. No. | Reg. No.     | Name of the Student   | Tutorial VIII     | Tutorial IX       |
|---------|--------------|-----------------------|-------------------|-------------------|
|         |              |                       | Marks Scored (15) | Marks Scored (15) |
| 1.      | 953619106001 | ABINAYA S             | 15                | 15                |
| 2.      | 953619106002 | ABIRAMI V             | 15                | 15                |
| 3.      | 953619106003 | AKILANDESWARI K       | 14                | 15                |
| 4.      | 953619106004 | AMUDHADEVI A S        | 14                | 15                |
| 5.      | 953619106005 | ANUDHARSHINI M        | 15                | 15                |
| 6.      | 953619106006 | ARAVIND M             | 15                | 15                |
| 7.      | 953619106007 | ARUMUGA VISWANATH P   | 14                | 15                |
| 8.      | 953619106008 | ASIBA MINA K R        | 15                | 15                |
| 9.      | 953619106009 | CHIDHAMBARANATHAN R   | 0                 | 10                |
| 10.     | 953619106010 | DEEPAK CHAKRAVARTHI P | 11                | 15                |
| 11.     | 953619106011 | DHARINI A             | 15                | 15                |
| 12.     | 953619106012 | DHARSHINI K           | 15                | 15                |
| 13.     | 953619106013 | DHARSHINI P           | 15                | 14                |
| 14.     | 953619106014 | DIVYA SHREE R         | 15                | 15                |
| 15.     | 953619106015 | DIWYA DHARSHINI R     | 15                | 14                |
| 16.     | 953619106016 | ELAVARASI A           | 15                | 15                |
| 17.     | 953619106017 | GAAYATRI V S          | 15                | 15                |
| 18.     | 953619106018 | GANESH G              | 14                | 14                |
| 19.     | 953619106019 | GANESHAMOORTHY I      | 14                | 15                |
| 20.     | 953619106020 | GAYATHRI K            | 15                | 15                |
| 21.     | 953619106021 | GIRITHARAN D          | 14                | 15                |
| 22.     | 953619106022 | GOMATHI NAAYAGAM I S  | 12                | 14                |
| 23.     | 953619106023 | HARIHARAN S           | 12                | 15                |
| 24.     | 953619106024 | HARINI U              | 15                | 15                |
| 25.     | 953619106025 | INDHUMATHI C          | 15                | 14                |
| 26.     | 953619106026 | ISHWARYA R            | 15                | 15                |
| 27.     | 953619106027 | JAYA MAHIMA M         | 14                | 15                |
| 28.     | 953619106028 | JEYAGOMATHI S         | 14                | 14                |
| 29.     | 953619106029 | JISHA P S             | 14                | 15                |
| 30.     | 953619106030 | KALIDAS P             | 12                | 15                |
| 31.     | 953619106031 | KALIMUTHU K           | 12                | 0                 |

| Sl. No. | Reg. No.     | Name of the Student      | Tutorial VIII     | Tutorial IX       |
|---------|--------------|--------------------------|-------------------|-------------------|
|         |              |                          | Marks Scored (15) | Marks Scored (15) |
| 32.     | 953619106032 | KAMALESH S               | 15                | 15                |
| 33.     | 953619106033 | KAVIN KUMAR R            | 13                | 15                |
| 34.     | 953619106034 | KAVIYA S                 | 15                | 15                |
| 35.     | 953619106035 | KAVYA P                  | 15                | 15                |
| 36.     | 953619106036 | KEERTHIKA B              | 15                | 14                |
| 37.     | 953619106037 | KESAVANAND M             | 13                | 15                |
| 38.     | 953619106038 | KESHAVA MUGESH KUMAR C M | 14                | 15                |
| 39.     | 953619106039 | LINGESH S                | 13                | 13                |
| 40.     | 953619106040 | LOGGAA SRI AGITHA K      | 15                | 14                |

*(Signature)*  
12/11/2022

Signature of the Valuer with date:

*(Signature)*  
12/11/2022  
HOD

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**

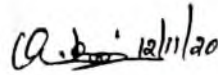
**Academic Year: 2020-2021 (Odd Semester)**

**Marks Statement for Unit-V Tutorials**

**Degree, Semester & Branch: III Semester B.E. ECE A**  
**Course Code & Title: EC8391 Control Systems Engineering**  
**Name of the Faculty member: Mr.B.Kannan**

| Sl. No. | Reg. No.     | Name of the Student   | Tutorial X        | Tutorial XI       |
|---------|--------------|-----------------------|-------------------|-------------------|
|         |              |                       | Marks Scored (10) | Marks Scored (10) |
| 1.      | 953619106001 | ABINAYA S             | 10                | 10                |
| 2.      | 953619106002 | ABIRAMI V             | 10                | 9                 |
| 3.      | 953619106003 | AKILANDESWARI K       | 10                | 9                 |
| 4.      | 953619106004 | AMUDHADEVI A S        | 10                | 9                 |
| 5.      | 953619106005 | ANUDHARSHINI M        | 10                | 8                 |
| 6.      | 953619106006 | ARAVIND M             | 10                | 9                 |
| 7.      | 953619106007 | ARUMUGA VISWANATH P   | 10                | 9                 |
| 8.      | 953619106008 | ASIBA MINA K R        | 10                | 9                 |
| 9.      | 953619106009 | CHIDHAMBARANATHAN R   | 7                 | 8                 |
| 10.     | 953619106010 | DEEPAK CHAKRAVARTHI P | 7                 | 9                 |
| 11.     | 953619106011 | DHARINI A             | 9                 | 9                 |
| 12.     | 953619106012 | DHARSHINI K           | 9                 | 8                 |
| 13.     | 953619106013 | DHARSHINI P           | 9                 | 9                 |
| 14.     | 953619106014 | DIVYA SHREE R         | 9                 | 10                |
| 15.     | 953619106015 | DIWYA DHARSHINI R     | 9                 | 10                |
| 16.     | 953619106016 | ELAVARASI A           | 10                | 10                |
| 17.     | 953619106017 | GAAYATRI V S          | 10                | 10                |
| 18.     | 953619106018 | GANESH G              | 9                 | 8                 |
| 19.     | 953619106019 | GANESHAMOORTHY I      | 9                 | 8                 |
| 20.     | 953619106020 | GAYATHRI K            | 9                 | 10                |
| 21.     | 953619106021 | GIRITHARAN D          | 9                 | 10                |
| 22.     | 953619106022 | GOMATHI NAAYAGAM I S  | 10                | 9                 |
| 23.     | 953619106023 | HARIHARAN S           | 10                | 9                 |
| 24.     | 953619106024 | HARINI U              | 10                | 10                |
| 25.     | 953619106025 | INDHUMATHI C          | 10                | 9                 |
| 26.     | 953619106026 | ISHWARYA R            | 9                 | 9                 |
| 27.     | 953619106027 | JAYA MAHIMA M         | 9                 | 10                |
| 28.     | 953619106028 | JEYAGOMATHI S         | 10                | 9                 |
| 29.     | 953619106029 | JISHA P S             | 8                 | 9                 |
| 30.     | 953619106030 | KALIDAS P             | 9                 | 8                 |
| 31.     | 953619106031 | KALIMUTHU K           | 0                 | 9                 |

| Sl. No. | Reg. No.     | Name of the Student      | Tutorial X        | Tutorial XI       |
|---------|--------------|--------------------------|-------------------|-------------------|
|         |              |                          | Marks Scored (10) | Marks Scored (10) |
| 32.     | 953619106032 | KAMALESH S               | 8                 | 9                 |
| 33.     | 953619106033 | KAVIN KUMAR R            | 9                 | 9                 |
| 34.     | 953619106034 | KAVIYA S                 | 10                | 10                |
| 35.     | 953619106035 | KAVYA P.                 | 9                 | 10                |
| 36.     | 953619106036 | KEERTHIKA B              | 10                | 10                |
| 37.     | 953619106037 | KESAVANAND M             | 9                 | 10                |
| 38.     | 953619106038 | KESHAVA MUGESH KUMAR C M | 9                 | 8                 |
| 39.     | 953619106039 | LINGESH S                | 9                 | 9                 |
| 40.     | 953619106040 | LOGGAA SRI AGITHA K      | 10                | 9                 |

  
Signature of the Valuer with date:

  
HOD

**RAMCO INSTITUTE OF TECHNOLOGY**  
 Department of Electronics and Communication Engineering

Academic Year: 2020-2021 (Odd Semester)

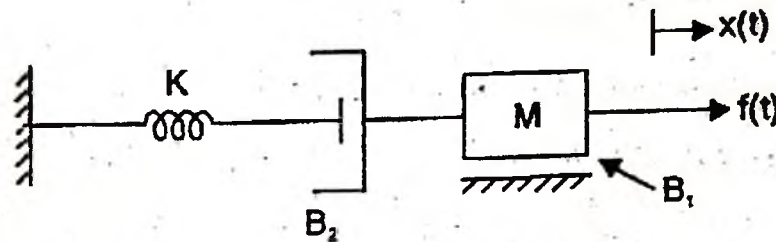
**TUTORIAL SHEET**

**Degree, Semester & Branch:** IV Semester B.E. ECE A  
**Course Code & Title:** EC8391 Control Systems Engineering  
**Name of the Faculty member:** Mr.B.Kannan  
**Tutorial No.:** 01

Date: 21.07.2020

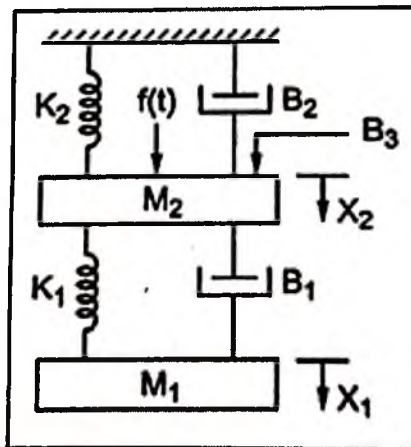
**Questions:**

- Write the equation of motion in S-domain for the system shown in figure 1. Determine the transfer function of the system. [CO1,L2]

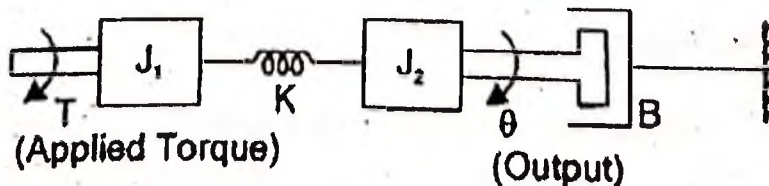


**Fig 1.**

- Write differential equations governing the mechanical rotational system shown in figure 1. Obtain the transfer function of the system. [CO1, L2]



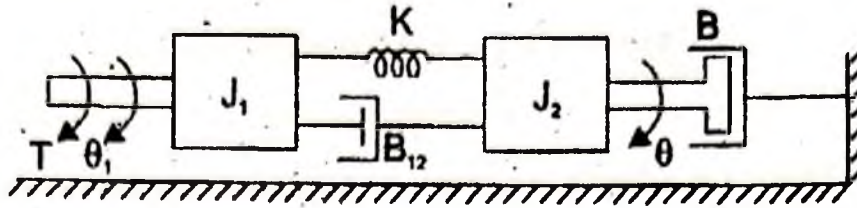
- Write differential equations governing the mechanical rotational system shown in figure 1. Obtain the transfer function of the system. [CO1, L2]



**Fig 1.**




4. Write differential equations governing the mechanical rotational system shown in figure 1. Obtain the transfer function  $\theta(S)/T(S)$  of the system. [CO1, L2]



**Fig 1.**

CO1: The students will be able to perform modeling of control system using various techniques.

L1: Remember; L2: Understand; L3: Apply

  
Signature of the Faculty member

  
HOD 21/7/2020

**RAMCO INSTITUTE OF TECHNOLOGY**  
 Department of Electronics and Communication Engineering  
 Academic Year: 2020-2021 (Odd Semester)  
**TUTORIAL SHEET**

**Degree, Semester & Branch:** IV Semester B.E. ECE A  
**Course Code & Title:** EC8391 Control Systems Engineering  
**Name of the Faculty member:** Mr.B.Kannan  
**Tutorial No.:** 02

**Date:** 24.07.2020

**Questions:**

1. Find the transfer function of the network given in Figure 1. [CO1, L2]

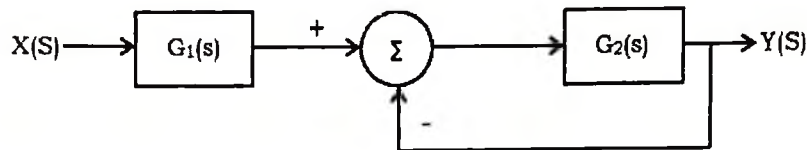
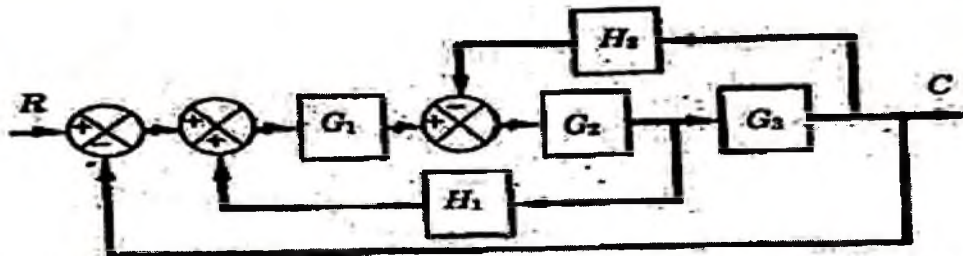
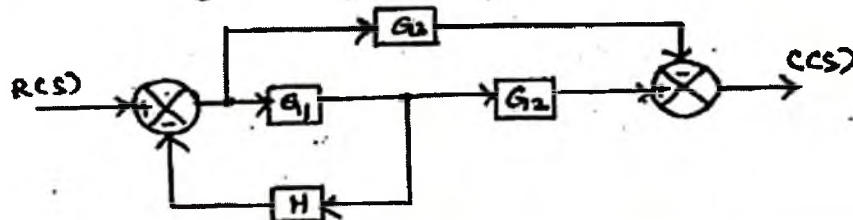


Figure: 1.

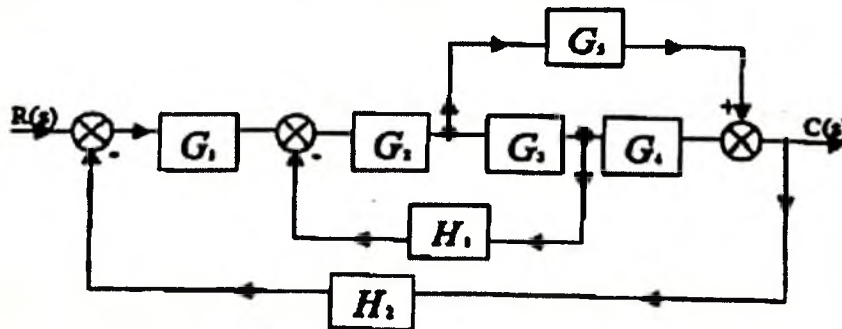
2. Simplify the following diagram using block diagram reduction method. [CO1, L2]



3. Simplify the following diagram using block diagram reduction method. [CO1, L2]



4. Simplify the block diagram and determine the transfer function. [CO1, L2]



CO1: The students will be able to perform modeling of control system using various techniques.

L1: Remember; L2: Understand; L3: Apply

*(Signature)*  
 Signature of the Faculty member

*(Signature)* 24/7/2020  
 HOD

**RAMCO INSTITUTE OF TECHNOLOGY**  
 Department of Electronics and Communication Engineering

Academic Year: 2020-2021 (Odd Semester)

**TUTORIAL SHEET**

**Degree, Semester & Branch:** III Semester B.E. ECE A

**Course Code & Title:** EC8391 Control Systems Engineering

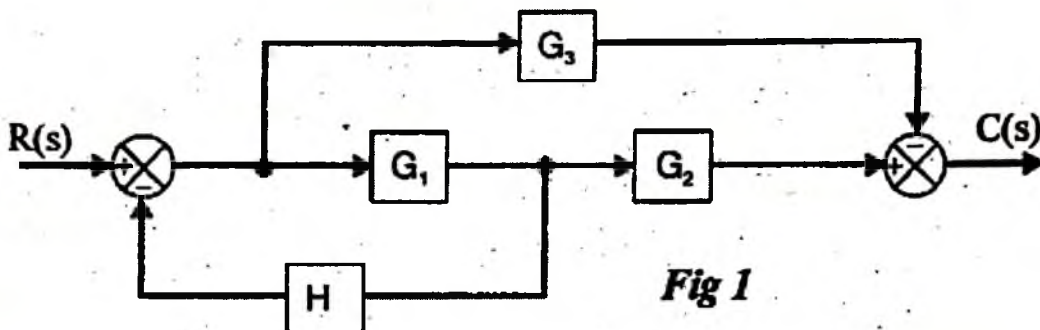
**Name of the Faculty member:** Mr.B.Kannan

**Tutorial No.:** 03

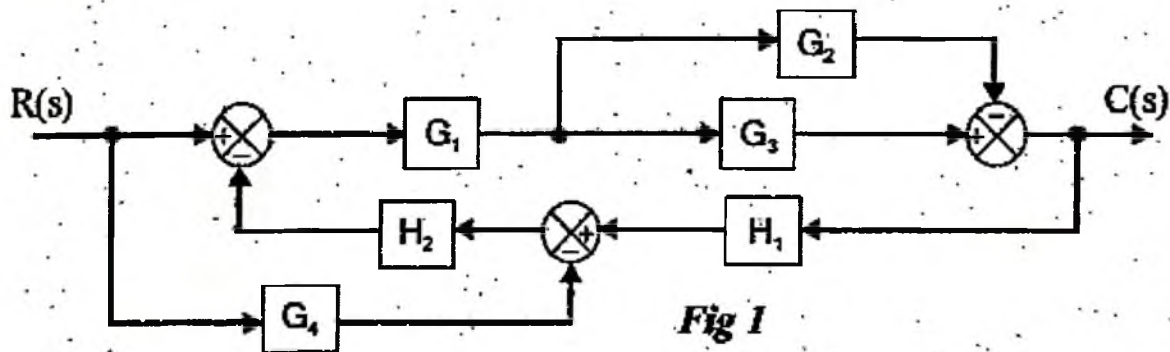
**Date:** 03.08.2020

**Questions:**

1. Convert the given block diagram to signal flow graph and determine  $C(S)/R(S)$ . [CO1, L2]



2. Draw a signal flow graph and evaluate the closed loop transfer function of a system whose block diagram is shown in figure 1. [CO1, L2]



CO1: The students will be able to perform modeling of control system using various techniques.

L1: Remember; L2: Understand; L3: Apply

*(Signature)*  
 Signature of the Faculty member

*(Signature)*  
 HOD 3/8/2020

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**  
**Academic Year: 2020-2021 (Odd Semester)**

**TUTORIAL SHEET**

**Degree, Semester & Branch:** III Semester B.E. ECE A

**Course Code & Title:** EC8391 Control Systems Engineering

**Name of the Faculty member:** Mr.B.Kannan

**Tutorial No.:** 04

**Date:** 20.08.2020


**Questions:**

1. Measures of performance of the standard second order system with unit step input and consider the damping ratio  $\zeta < 1$ . [CO2, L2]
2. The unity feedback system is characterized by an open loop transfer function  $G(S) = \frac{K}{S(S+10)}$ . Determine the gain K, so that the system will have a damping ratio of 0.5 for this value of K. Determine settling time, peak overshoot and peak time for a unit step input. [CO2, L2]
3. The closed loop transfer function of a second order system is given by  $T(s) = \frac{100}{s^2 + 10s + 100}$ . Determine the damping ratio, natural frequency of oscillations, Rise time, Settling time and Peak overshoot. [CO2, L2]
4. Calculate the following parameters for the system whose natural frequency of oscillations is 10 rad/sec and damping factor is 0.707. [CO2, L2]
  1. Delay time
  2. Rise time
  3. Peak Overshoot
  4. Settling time

*CO2: The students will be able to obtain the time response and steady state error of control systems.*

*L1: Remember; L2: Understand; L3: Apply*

  
Signature of the Faculty member

  
HOD 20/8/2020

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**  
**Academic Year: 2020-2021 (Odd Semester)**

**TUTORIAL SHEET**

**Degree, Semester & Branch:** III Semester B.E. ECE A

**Course Code & Title:** EC8391 Control Systems Engineering

**Name of the Faculty member:** Mr.B.Kannan

**Tutorial No.:** 5

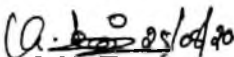
**Date:** 25.08.2020

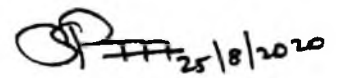
**Questions:**

1. Obtain the response unity feedback system open loop transfer function is  $G(S) = \frac{4}{S(S+5)}$   
and when input is unit step. [CO2, L2]
  
2. The open loop transfer function of a unity feedback system is given by  $G(S) = \frac{K}{S(ST+1)}$ .  
Where K and t are Positive constant. By what factor should the amplifier gain K be reduced,  
so that the peak overshoot of unit step response of the system is reduced from 75% to 25%.  
[CO2, L2]

*CO2: The students will be able to obtain the time response and steady state error of control systems.*

*L1: Remember; L2: Understand; L3: Apply*

  
**Signature of the Faculty member**

  
**HOD**

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**  
**Academic Year: 2020-2021 (Odd Semester)**

**TUTORIAL SHEET**

**Degree, Semester & Branch:** III Semester B.E. ECE A

**Course Code & Title:** EC8391 Control Systems Engineering

**Name of the Faculty member:** Mr.B.Kannan

**Tutorial No.:** 06

**Date:** 15.09.2020

**Questions:**

1. For the function  $G(S) = \frac{5(1+2S)}{(1+4S)(1+0.25S)}$ , Draw the Bode Plot and find. [CO3, L2]

- (i) Gain Cross Over Frequency
- (ii) Phase Cross Over Frequency
- (iii) Phase at Gain Cross Over Frequency ( $\phi_{gc}$ )
- (iv) Gain Margin ( $G_m$ )
- (v) Phase Margin ( $\gamma$ )

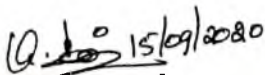
2. The open loop transfer function of unity feedback system is given by

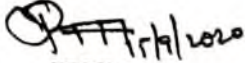
$$G(S) = \frac{(1+0.2S)(1+0.025S)}{S^3(1+0.005S)(1+0.001S)} \quad [\text{CO3, L2}]$$

- (i) Sketch the polar plot
- (ii) Determine the phase margin and gain margin.

*CO3: The students will be able to design various compensators and to analyse the frequency response of the system using various plots.*

*L1: Remember; L2: Understand; L3: Apply*

  
**Signature of the Faculty member**

  
**HOD**

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**  
**Academic Year: 2020 - 2021 (Odd Semester)**

**TUTORIAL SHEET**

**Degree, Semester & Branch:** III Semester B.E. ECE A

**Course Code & Title:** EC8391 Control Systems Engineering

**Name of the Faculty member:** Mr.B.Kannan

**Tutorial No.:** 7

**Date:** 24.09.2020

**Questions:**

1. The open loop transfer function of a unity feedback control system is given by  $G(S) = \frac{K}{S(S+4)(S+8)}$ . It is desired to have the phase margin to be atleast  $33^\circ$  and the velocity error constant  $K_v = 30 \text{ Sec}^{-1}$ . Design a phase lag series compensator. [CO3, L3]

*CO3: The students will be able to design various compensators and to analyse the frequency response of the system using various plots.*

*L1: Remember; L2: Understand; L3: Apply*

*(A. Kannan 24/09/2020)*  
Signature of the Faculty member

*(A. Kannan 24/9/2020)*  
HOD

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**  
**Academic Year: 2020 - 2021 (Odd Semester)**

**TUTORIAL SHEET**

**Degree, Semester & Branch:** III Semester B.E. ECE A

**Course Code & Title:** EC8391 Control Systems Engineering

**Name of the Faculty member:** Mr.B.Kannan

**Tutorial No.:** 8

**Date:** 01.10.2020

**Questions:**

1. The open loop transfer function of a unity feedback system is given by,

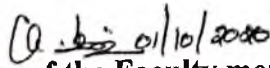
$$G(S) = \frac{K(S+9)}{S(S^2+4S+11)} \quad [\text{CO4, L2}]$$

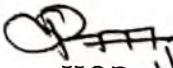
Sketch the root locus of the system using following values.

- (i) Determine poles and zeros
- (ii) Find root locus on real axis
- (iii) Find the angle of asymptotes and centroid
- (iv) Find the Break-away and Break-in point
- (v) Find the angle of departure
- (vi) Find the crossing point of imaginary axis.

*CO4: The students will be able to determine the stability of control systems.*

*L1: Remember; L2: Understand; L3: Apply*

  
Signature of the Faculty member

  
HOD 01/10/2020

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**  
**Academic Year: 2020 - 2021 (Odd Semester)**

**TUTORIAL SHEET**

**Degree, Semester & Branch:** III Semester B.E. ECE A

**Course Code & Title:** EC8391 Control Systems Engineering

**Name of the Faculty member:** Mr.B.Kannan

**Tutorial No.:** 9

**Date:** 10.10.2020

**Questions:**

1. Construct the Nyquist plot for the a system whose open loop transfer function is given by

$$G(S)H(S) = \frac{K(1+S)^2}{S^3}. \text{ Find the range of K for stability.} \quad [\text{CO4, L2}]$$

*CO4: The students will be able to determine the stability of control systems.  
L1: Remember; L2: Understand; L3: Apply*

*A. B. Kannan* 10/10/2020  
**Signature of the Faculty member**

*[Signature]* 10/10/2020  
**HOD**

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**  
**Academic Year: 2020 - 2021 (Odd Semester)**

**TUTORIAL SHEET**

**Degree, Semester & Branch:** III Semester B.E. ECE A

**Course Code & Title:** EC8391 Control Systems Engineering

**Name of the Faculty member:** Mr.B.Kannan

**Tutorial No.:** 10

**Date:** 28.10.2020

**Questions:**

1. Obtain the state model of the system described by the following transfer function.


[CO5, L2]

$$\frac{Y(S)}{U(S)} = \frac{5}{S^3 + 6S + 7}$$

*CO5: The students will be able to analyse and obtain state space model using state variables.*

*L1: Remember; L2: Understand; L3: Apply*

  
Signature of the Faculty member

  
HOD

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**  
**Academic Year: 2020-2021 (Odd Semester)**

**TUTORIAL SHEET**

**Degree, Semester & Branch:** III Semester B.E. ECE A

**Course Code & Title:** EC8391 Control Systems Engineering

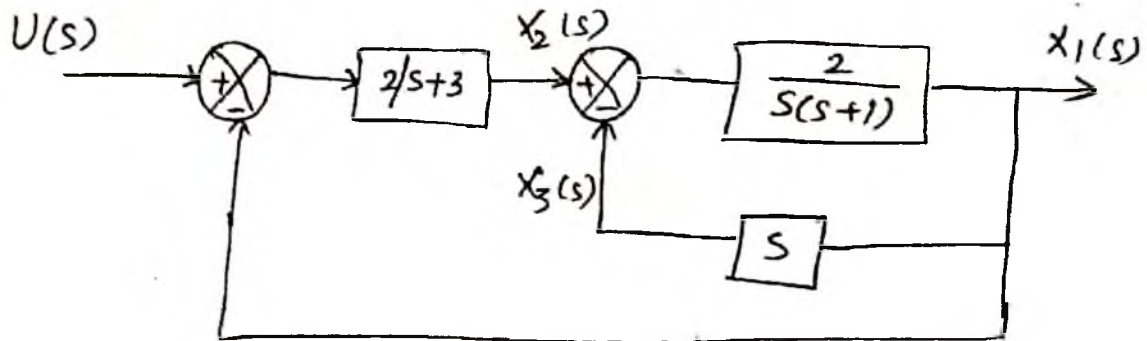
**Name of the Faculty member:** Mr.B.Kannan

**Tutorial No.:** 11

**Date:** 28.10.2020

**Questions:**

1. Find the state and output equation in matrix form for the given system and also test the controllability and observability of the system. [CO5, L2]



*CO5: The students will be able to analyse and obtain state space model using state variables.  
L1: Remember; L2: Understand; L3: Apply*

*(A. Kannan) 28/10/2020*  
**Signature of the Faculty member**

*(P. Kannan) 28/10/2020*  
**HOD**

**RAMCO INSTITUTE OF TECHNOLOGY**  
 Department of Electronics and Communication Engineering  
 Academic Year: 2020-2021 (Odd Semester)

ASSIGNMENT SHEET

**Degree, Semester & Branch:** III Semester B.E. ECE A

**Course Code & Title:** EC8391 Control Systems Engineering

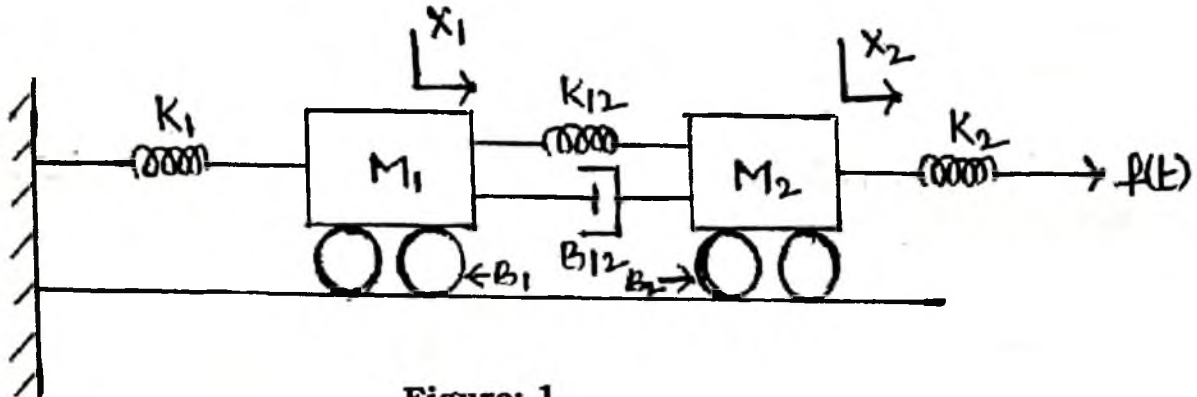
**Name of the Faculty member:** Mr.B.Kannan

**Assignment No.:** 1

**Date:** 06.08.2020

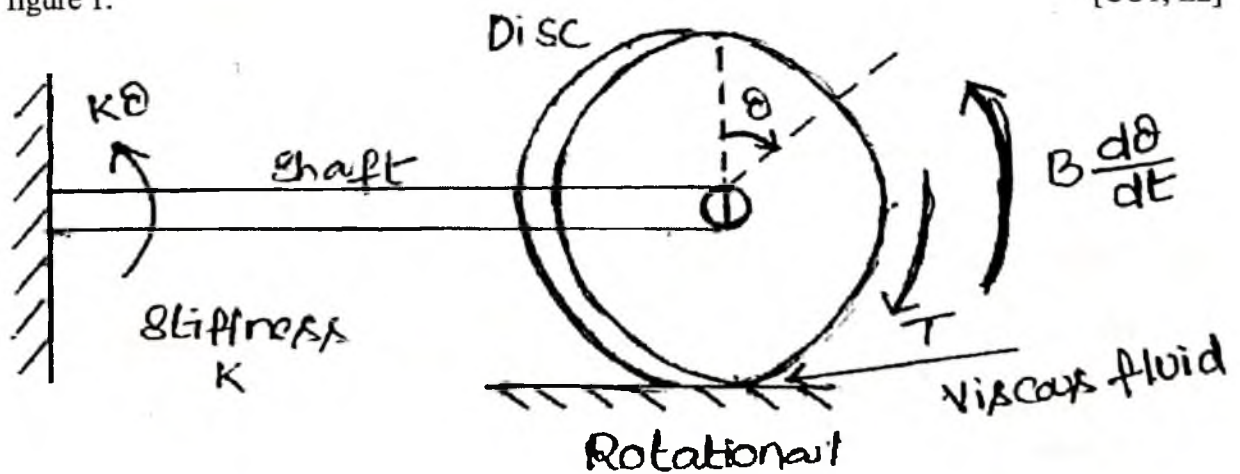
Questions:

1. For the mechanical system given in the figure 1, determine the following, [CO1, L2]
  - a. Mathematical Model
  - b. Obtain the transfer function  $X_1(S)/F(S)$  and  $X_2(S)/F(S)$



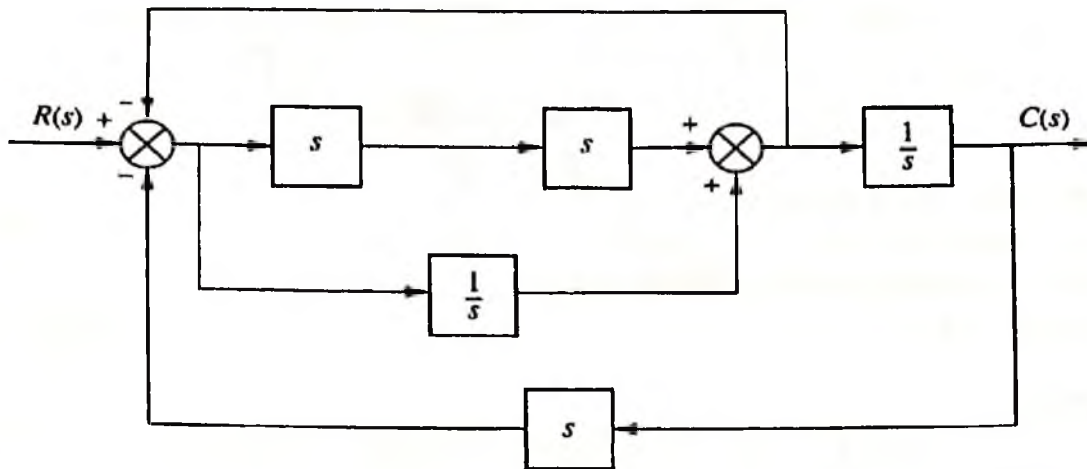
**Figure: 1**

2. Derive the transfer function for the following rotational mechanical system shown in the figure 1. [CO1, L2]



**Figure: 1**

3. Figure the equivalent transfer function,  $T(s)=C(s)/R(s)$ , for the system shown in the figure. [CO1, L2]



CO1: The students will be able to perform modeling of control system using various techniques  
L1: Remember; L2: Understand; L3: Apply

*Q. b. 06/08/2020*  
Signature of the Faculty member

*[Signature]*  
HOD 6/8/2020

| Rubrics for Assignment-I   |  |   |  |           |
|--|--|---|--|-----------|
| Criteria   | Ratings  |   |  | Points    |
| <b>Timely Submission</b>   | <b>5 pts</b><br>Excellent<br>(Submitted on time)                         | <b>3 pts</b><br>Good<br>(Submitted after one day) | <b>1 pts</b><br>Satisfactory<br>(Submitted after 2 days from the deadline) | 5 pts     |
| <b>Q1: Correct solution for the problem (Design steps with final solution)</b> | <b>5 pts</b><br>Excellent<br>(Correct solution with proper design steps) | <b>3 pts</b><br>Good<br>(Partially correct)       | <b>2 pts</b><br>Satisfactory<br>(Proper intermediate steps)                | 5 pts     |
| <b>Q2: Correct solution for the problem (Design steps with final solution)</b> | <b>5 pts</b><br>Excellent<br>(Correct solution with proper design steps) | <b>3 pts</b><br>Good<br>(Partially correct)       | <b>2 pts</b><br>Satisfactory<br>(Proper intermediate steps)                | 5 pts     |
| <b>Q3: Correct solution for the problem (Design steps with final solution)</b> | <b>5 pts</b><br>Excellent<br>(Correct solution with proper design steps) | <b>3 pts</b><br>Good<br>(Partially correct)       | <b>2 pts</b><br>Satisfactory<br>(Proper intermediate steps)                | 5 pts     |
| <b>Total Points:</b>   |  |   |  | <b>20</b> |

**RAMCO INSTITUTE OF TECHNOLOGY**  
 Department of Electronics and Communication Engineering  
 Academic Year: 2020-2021 (Odd Semester)

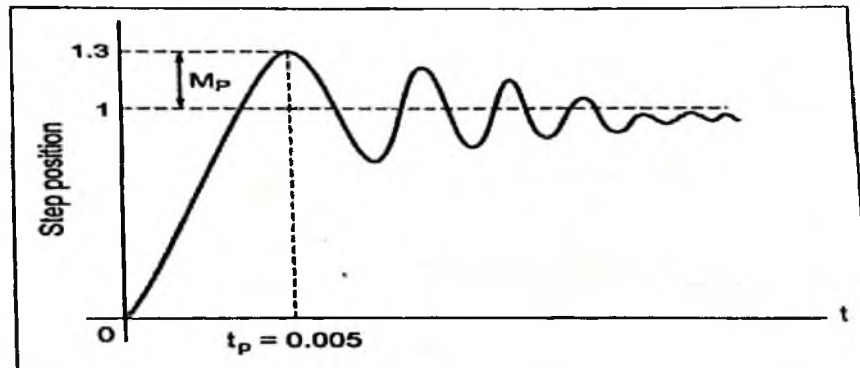
**ASSIGNMENT SHEET**

**Degree, Semester & Branch:** III Semester B.E. ECE A  
**Course Code & Title:** EC8391 Control Systems Engineering  
**Name of the Faculty member:** Mr.B.Kannan  
**Assignment No.:** 2

**Date:** 20.08.2020

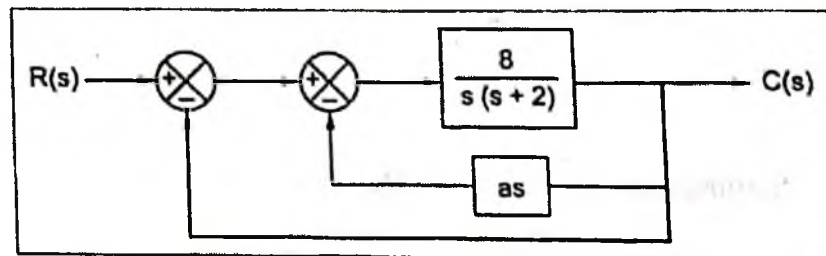
**Questions:**

1. A stepper motor gives unit step response as shown in figure 1. Find a linear second transfer function  $C(S)/R(S)$ . [CO2, L2]



**Fig. 1**

2. A system is shown in figure 2, find [CO2, L2]  
 (i) Find 'a' to increase Zeta to 0.7  
 (ii) Find  $M_p$  in both cases  
 (iii) In absence of derivative feedback ( $a=0$ ), find zeta and  $\omega_n$



**Fig. 2**

3. The damping ratio of the system is 0.6 and the natural frequency of oscillation is 8 rad/sec. Determine the rise time, and draw the response of under damped second order system. [CO2, L2]

*CO2: The students will be able to obtain the time response and steady state error of control systems.*

*L1: Remember; L2: Understand; L3: Apply*

*A. Kannan 20/08/2020*  
 Signature of the Faculty member

*[Signature]*  
 20/08/2020  
 HOD

**RAMCO INSTITUTE OF TECHNOLOGY**  
 Department of Electronics and Communication Engineering  
 Academic Year: 2019-2020 (Odd Semester)

**ASSIGNMENT SHEET**

Degree, Semester & Branch: III Semester B.E. ECE A  
 Course Code & Title: EC8391 Control Systems Engineering  
 Name of the Faculty member: Mr. B. Kannan  
 Assignment No.: 3

Date: 03.09.2020

**Questions:**

1. A unity feedback system has a open loop transfer function of  $G(s) = \frac{10}{(S+1)(S+2)}$ . Determine the steady state error for unit step input. [CO2, L2]

2. For the system with following transfer function, determine type and order of the system. [CO2, L2]

(i)  $G(s) H(s) = \frac{K}{s(s+1)(s^2+6s+8)}$

(ii)  $G(s) H(s) = \frac{20(s+2)}{s^2(s+3)(s+0.5)}$

(iii)  $G(s) H(s) = \frac{(s+4)}{(s-2)(s+0.25)}$

(iv)  $G(s) H(s) = \frac{10}{s^3(s^2+2s+1)}$

3. A unity feedback system has an open loop transfer function of  $G(s) = \frac{25(S+5)}{S(S+1)(S+2)}$ . Determine the steady state error for parabolic input. [CO2, L2]

| Rubrics for Assignment-III   |  |  |  |           |
|--|--|--|--|-----------|
| Criteria   | Ratings  |  |  | Points    |
| Q1: Correct solution for the problem<br>(Design steps with final solution) | 10 to >8 pts<br>Excellent<br>(Correct solution with proper design steps) | 8 to >5 pts<br>Good<br>(Partially correct) | 5 to >0 pts<br>Satisfactory<br>(Proper intermediate steps) | 10 pts    |
| Q2: Correct solution for the problem<br>(Design steps with final solution) | 5 pts<br>Excellent<br>(Correct solution with proper design steps)        | 3 pts<br>Good<br>(Partially correct)       | 2 pts<br>Satisfactory<br>(Proper intermediate steps)       | 05 pts    |
| Q3: Correct solution for the problem<br>(Design steps with final solution) | 10 to >8 pts<br>Excellent<br>(Correct solution with proper design steps) | 8 to >5 pts<br>Good<br>(Partially correct) | 5 to >0 pts<br>Satisfactory<br>(Proper intermediate steps) | 10 pts    |
| <b>Total Points:</b>   |  |  |  | <b>25</b> |

CO2: The students will be able to perform modeling of control system using various techniques

L1: Remember; L2: Understand; L3: Apply

Signature of the Faculty member

Signature of HOD  
 HOD 3/9/2020

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**  
**Academic Year: 2020-2021 (Odd Semester)**

**ASSIGNMENT SHEET**

**Degree, Semester & Branch:** III Semester B.E. ECE A  
**Course Code & Title:** EC8391 Control Systems Engineering  
**Name of the Faculty member:** Mr.B.Kannan  
**Assignment No.:** 4

**Date:** 17.09.2020

**Questions:**

1. Sketch the polar plot of unity feedback system with open loop transfer function

$$G(S) = \frac{1}{S(1+S)^2} \text{ . Develop frequency at which } G(j\omega) = 1. \quad [\text{CO3, L2}]$$

2. Plot the bode diagram for the following transfer function and obtain the gain and phase cross

over frequency  $G(S) = \frac{KS^2}{S(1+0.2S)(1+0.02S)}$  . Predict the value of K for a gain cross over frequency to be 5 rad/sec. [CO3, L2]

| <b>Rubrics for Assignment-IV</b>   |  |  |  |               |
|--|--|--|--|---------------|
| <b>Criteria</b>  | <b>Ratings</b>   |  |  | <b>Points</b> |
| <b>Timely Submission</b>   | <b>5 pts</b><br>Excellent<br>(Submitted on time)                                   | <b>3 pts</b><br>Good<br>(Submitted after one day)    | <b>1 pts</b><br>Satisfactory<br>(Submitted after 2 days from the deadline) | 5 pts         |
| <b>Q1: Correct solution for the problem<br/>(Design steps with final solution)</b> | <b>10 to &gt;8 pts</b><br>Excellent<br>(Correct solution with proper design steps) | <b>8 to &gt;5 pts</b><br>Good<br>(Partially correct) | <b>5 to &gt;0 pts</b><br>Satisfactory<br>(Proper intermediate steps)       | 10 pts        |
| <b>Q2: Correct solution for the problem<br/>(Design steps with final solution)</b> | <b>10 to &gt;8 pts</b><br>Excellent<br>(Correct solution with proper design steps) | <b>8 to &gt;5 pts</b><br>Good<br>(Partially correct) | <b>5 to &gt;0 pts</b><br>Satisfactory<br>(Proper intermediate steps)       | 10 pts        |
| <b>Total Points:</b>   |  |  |  | <b>25</b>     |

*CO3: The students will be able to design various compensators and to analyse the frequency response of the system using various plots.*

*L1: Remember; L2: Understand; L3: Apply*

*CA. B. Kannan 17/09/2020*  
**Signature of the Faculty member**

*[Signature]*  
**HOD** 17/9/2020

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**  
**Academic Year: 2020-2021 (Odd Semester)**

**ASSIGNMENT SHEET**

**Degree, Semester & Branch:** III Semester B.E. ECE A

**Course Code & Title:** EC8391 Control Systems Engineering

**Name of the Faculty member:** Mr.B.Kannan

**Assignment No.:** 5

**Date:** 12.10.2020

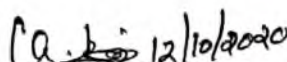
**Questions:**

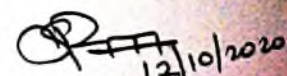
1. Find the range of K for closed loop stable behavior of system with characteristic equation  $2S^4+12S^3+22S^2+12S+K=0$  using Routh Hurwitz stability criterion. [CO4, L2]
2. Construct Nyquist plot for a feedback control system whose open loop transfer function is given by,  $G(s)H(s) = 5/s(1-s)$ . Comment on the stability of open-loop and closed loop system. [CO4, L2]

| <b>Rubrics for Assignment-IV</b>   |  |  |  |               |
|--|--|--|--|---------------|
| <b>Criteria</b>  | <b>Ratings</b>   |  |  | <b>Points</b> |
| <b>Timely Submission</b>   | <b>5 pts</b><br>Excellent<br>(Submitted on time)                                   | <b>3 pts</b><br>Good<br>(Submitted after one day)    | <b>1 pts</b><br>Satisfactory<br>(Submitted after 2 days from the deadline) | 5 pts         |
| <b>Q1: Correct solution for the problem<br/>(Design steps with final solution)</b> | <b>10 to &gt;8 pts</b><br>Excellent<br>(Correct solution with proper design steps) | <b>8 to &gt;5 pts</b><br>Good<br>(Partially correct) | <b>5 to &gt;0 pts</b><br>Satisfactory<br>(Proper intermediate steps)       | 10 pts        |
| <b>Q2: Correct solution for the problem<br/>(Design steps with final solution)</b> | <b>10 to &gt;8 pts</b><br>Excellent<br>(Correct solution with proper design steps) | <b>8 to &gt;5 pts</b><br>Good<br>(Partially correct) | <b>5 to &gt;0 pts</b><br>Satisfactory<br>(Proper intermediate steps)       | 10 pts        |
| <b>Total Points:</b>   |  |  |  | <b>25</b>     |

*CO4: The students will be able to determine the stability of control systems.*

*L1: Remember; L2: Understand; L3: Apply*

  
 Signature of the Faculty member

  
 HOD 12/10/2020

**RAMCO INSTITUTE OF TECHNOLOGY**  
 Department of Electronics and Communication Engineering  
 Academic Year: 2020-2021 (Odd Semester)

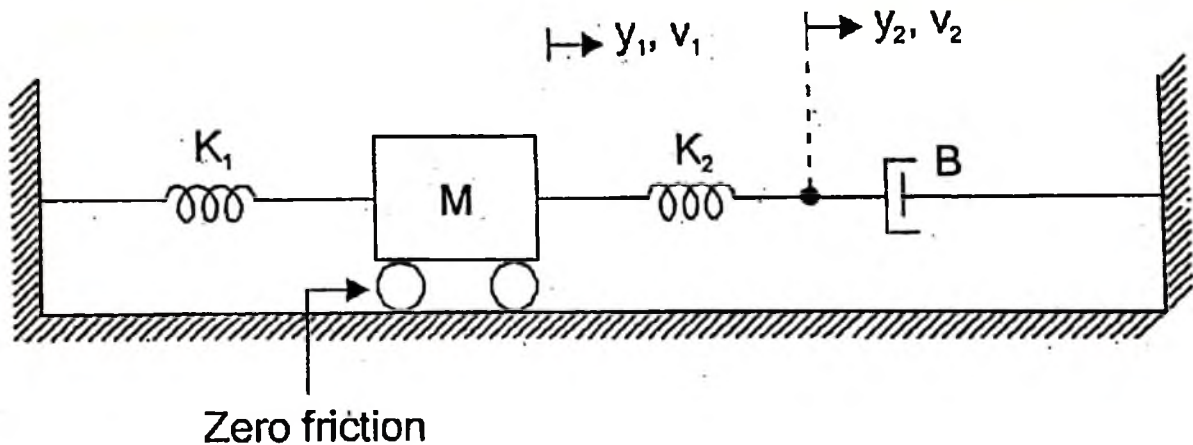
**ASSIGNMENT SHEET**

**Degree, Semester & Branch:** III Semester B.E. ECE A  
**Course Code & Title:** EC8391 Control Systems Engineering  
**Name of the Faculty member:** Mr.B.Kannan  
**Assignment No.:** 6

**Date:** 28.10.2020

**Questions:**

1. Obtain the state model of the mechanical system shown in the figure by choosing a minimum of three state variables. [CO5, L2]



2. Check the controllability and observability of the system by Kalman's test whose state model is given as, [CO5, L2]

$$\begin{bmatrix} \dot{x}_1 \\ \dot{x}_2 \\ \dot{x}_3 \end{bmatrix} = \begin{bmatrix} 0 & 0 & 1 \\ -2 & -3 & 0 \\ 0 & +2 & -3 \end{bmatrix} \begin{bmatrix} x_1 \\ x_2 \\ x_3 \end{bmatrix} + \begin{bmatrix} 0 \\ 2 \\ 0 \end{bmatrix} u; \quad y = \begin{bmatrix} 1 & 0 & 0 \end{bmatrix} \begin{bmatrix} x_1 \\ x_2 \\ x_3 \end{bmatrix}$$

CO5: The students will be able to analyse and obtain state space model using state variables.  
 L1: Remember; L2: Understand; L3: Apply

*(Handwritten Signature)*  
 Signature of the Faculty member

*(Handwritten Signature)*  
 28/10/2020  
 HOD

**UNIT-I**  
**SYSTEMS COMPONENTS AND THEIR REPRESENTATION**

1. Fig. shows a thermometer plugged into a bath of temperature  $\theta_i$ . Obtain the transfer function  $\theta(s)/\theta_i(s)$  of the thermometer and its electrical analogue. (The thermometer may be considered to have a thermal capacitance  $C$  which stores heat and a thermal resistance  $R$  which limits the heat flow). How the temperature indication of the thermometer will vary with time after the thermometer is suddenly plugged in ?

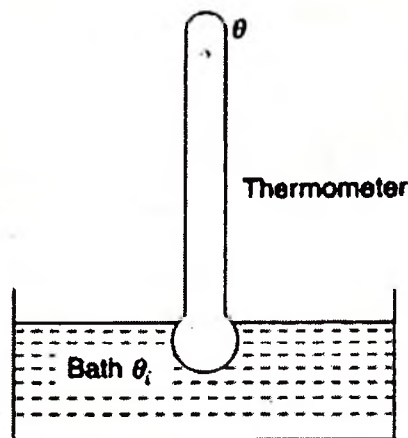
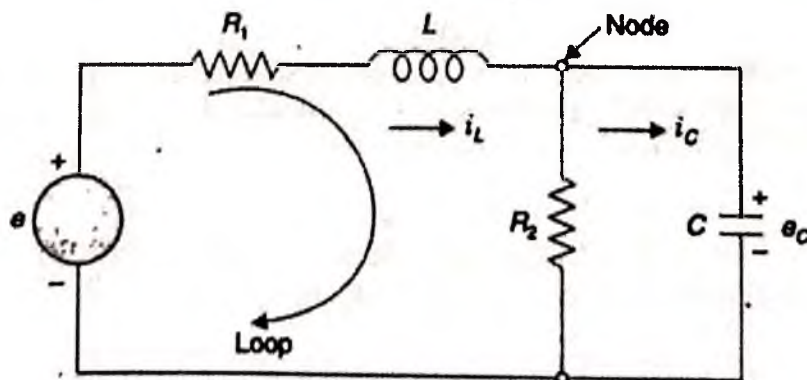


Fig.

2. Consider the circuit (electrical) of Fig.

- (a) Identify a set of state variables (physical variables).
- (b) Draw the signal flow graph of the circuit in terms of the state variables identified in part (a).
- (c) From the signal flow graph, write the state variable equations of the circuit.
- (d) From the signal flow graph, determine the transfer function  $E_C(s)/E(s)$ .





Reg. No. :

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**Question Paper Code : 90177**

**B.E./B.Tech. DEGREE EXAMINATIONS, NOVEMBER/DECEMBER 2019**  
Third/Fourth/Fifth Semester  
Electronics and Communication Engineering  
EC8391 – CONTROL SYSTEMS ENGINEERING  
(Common to Medical Electronics/ Electronics and Telecommunication  
Engineering/ Mechatronics Engineering)  
(Regulations 2017)

Time : Three Hours

Maximum : 100 Marks

Answer ALL questions

PART – A

(10×2=20 Marks)

1. Distinguish between feed forward control system and feedback control systems.
2. Specify the usefulness of AC servomotors in motion control systems.
3. Write the performance measures in transient response analysis of second order system.
4. For the given transfer function, find the type and order of the system  
$$\frac{C(s)}{R(s)} = \frac{10(s+2)}{s(s^2+3s+5)}$$
5. In minimum phase system, how the starting and end point of polar plot are identified ?
6. Why compensators are necessary in feedback control systems ?
7. Comment on the stability of the system, when the roots of characteristic equation are lying on imaginary axis.
8. How do you define relative stability ?
9. Write the canonical form of state model for  $n^{\text{th}}$  order system.
10. Justify how digital Control System is superior to conventional control theory.

**EC8681 Microprocessor and Microcontroller  
Laboratory**

**B.E. Electronics and Communication Engineering**

**III Year / VI Semester B.E. ECE A**

**Regulation - 2017**

**Prepared By**

**Mr.B.Kannan**

**Assistant Professor (Sr. Gr.)**



**Department of Electronics and Communication Engineering**

**RAMCO INSTITUTE OF TECHNOLOGY**

**Rajapalayam – 626 117**

**EC8681 Microprocessor and Microcontroller  
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**B.E. Electronics and Communication Engineering**

**III Year / VI Semester B.E. ECE A**

**Regulation - 2017**

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**Assistant Professor (Sr. Gr.)**



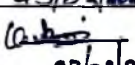
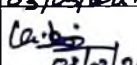
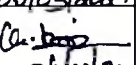
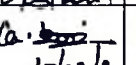
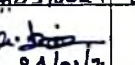
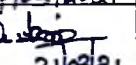
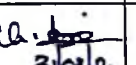



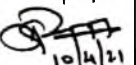
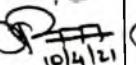
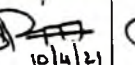
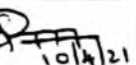


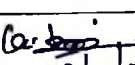
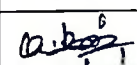
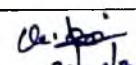
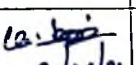
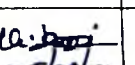
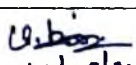
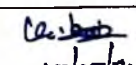
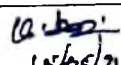
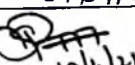
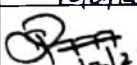


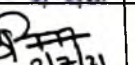
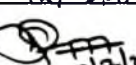
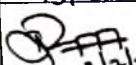
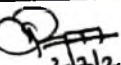
**Department of Electronics and Communication Engineering**

**RAMCO INSTITUTE OF TECHNOLOGY**

**Rajapalayam – 626 117**

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**  
**Academic Year: 2020-2021 (Even Semester)**  
**Course-Wise Academic Process Monitoring**

Name(s) of Faculty Member(s): Mr.B.Kannan & Mr.P.Gunasekaran

| Sl. No. | Name of Practical, Semester & Class   | Description                              | Cycle I Experiments (Exercises)  |   |   |   |   |   |   |   |
|---------|---|--|--|---|---|---|---|---|---|---|
|         |   |  | 1  | 2   | 3   | 4   | 5   | 6   | 7   | 8   |
| 1.      | EC8681 Microprocessor and Microcontroller Laboratory, VI Semester B.E ECE A | Experiment/ Exercise Completed On (Date) | 20/02/2021   | 24/02/2021  | 03/03/2021  | 06/03/2021  | 10/03/2021  | 24/03/2021  | 31/03/2021  | 31/03/2021  |
|         |   | Observation Note Verified On (Date)      | 20/02/2021   | 24/02/2021  | 03/03/2021  | 06/03/2021  | 10/03/2021  | 24/03/2021  | 31/03/2021  | 31/03/2021  |
|         |   | Viva-Voce Conducted on (Date)            | 20/02/2021   | 24/02/2021  | 06/03/2021  | 06/03/2021  | 10/03/2021  | 24/03/2021  | 31/03/2021  | 31/03/2021  |
|         |   | Record Note Valued On (Date)             | 23/03/2021   | 03/03/2021  | 06/03/2021  | 10/03/2021  | 24/03/2021  | 24/03/2021  | -   | -   |
|         |   | Signature of Faculty Member              | <br>03/03/21   | <br>03/03/21   | <br>06/03/21   | <br>10/03/21   | <br>24/03/21   | <br>31/03/21   | <br>31/03/21   | <br>31/03/21   |
|         |   | HOD's Signature and Remarks              | <br>10/4/21    | <br>10/4/21    | <br>10/4/21    | <br>10/4/21    | <br>10/4/21    | <br>10/4/21    | <br>10/4/21    | <br>10/4/21    |
|         |   | Description                              | Cycle II Experiments (Exercises)   |   |   |   |   |   |   |   |
|         |   |  | 9  | 10  | 11  | 12  | 13  | 14  | 15  | 16  |
|         |   | Experiment/ Exercise Completed On (Date) | 07/04/2021   | 10/04/2021  | 21/04/21  | 29/04/21  | 05/05/21  | 12/05/21  | 15/05/21  | 15/05/21  |
|         |   | Observation Note Verified On (Date)      | 07/04/2021   | 10/04/2021  | 21/04/21  | 29/04/21  | 05/05/21  | 12/05/21  | 15/05/21  | 15/05/21  |
|         |   | Viva-Voce Conducted On (Date)            | 07/04/2021   | 10/04/2021  | 21/04/21  | 29/04/21  | 05/05/21  | 12/05/21  | 15/05/21  | 15/05/21  |
|         |   | Record Note Valued On (Date)             | -  | -   | -   | -   | -   | -   | -   | -   |
|         |   | Signature of Faculty Member              | <br>07/04/21 | <br>10/04/21 | <br>21/04/21 | <br>29/04/21 | <br>05/05/21 | <br>12/05/21 | <br>15/05/21 | <br>15/05/21 |
|         |   | HOD's Signature and Remarks              | <br>10/4/21  | <br>21/7/21  | <br>21/7/21  | <br>21/7/21  | <br>21/7/21  | <br>21/7/21  | <br>21/7/21  | <br>21/7/21  |

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**  
**Academic Year: 2020-2021 (Even Semester)**

**PRACTICAL PLAN**

**Degree, Semester & Branch:** VI Semester B.E. ECE A

**Course Code & Name:** EC8681 Microprocessor and Microcontroller Laboratory

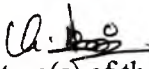
**Name(s) of Faculty Member(s):** Mr.B.Kannan & Mr.P.Gunasekaran

**Batch:** (Reg. No. 953618106001 to 953618106009, 953618106011 to 953618106035, 953618106046 & 953618106301)

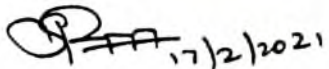
**Cycle 1**

| Sl. No. | Name of the Experiment                                 | Batch                |                      |                      |                      |                      |                      |                      |
|---------|--|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|         |  | Week 1<br>(20.02.21) | Week 2<br>(24.02.21) | Week 3<br>(03.03.21) | Week 4<br>(10.03.21) | Week 5<br>(17.03.21) | Week 6<br>(20.03.21) | Week 7<br>(24.03.21) |
| 1.      | Introduction & Basic Arithmetic and Logical Operations | B                    |                      |                      |                      |                      |                      |                      |
| 2.      | Move a Data Block Without Overlap & Code Conversion    |                      | B                    |                      |                      |                      |                      |                      |
| 3.      | Decimal Arithmetic and Matrix Operations               |                      |                      | B                    |                      |                      |                      |                      |
| 4.      | Floating point operations & Password checking          |                      |                      |                      | B                    |                      |                      |                      |
| 5.      | String Manipulations & Print RAM size                  |                      |                      |                      |                      | B                    |                      |                      |
| 6.      | Sorting & Searching and System Date                    |                      |                      |                      |                      |                      | B                    |                      |
| 7.      | Counters & Time Delay                                  |                      |                      |                      |                      |                      |                      | B                    |
| 8.      | Traffic Light Control                                  |                      |                      |                      |                      |                      |                      | B                    |

| Cycle 2 |   | Batch                |                      |                       |                       |                       |                       |                       |
|---------|---|----------------------|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
|         |   | Week 8<br>(31.03.21) | Week 9<br>(07.04.21) | Week 10<br>(12.04.21) | Week 11<br>(21.04.21) | Week 12<br>(28.04.21) | Week 13<br>(05.05.21) | Week 14<br>(12.05.21) |
| 9.      | Stepper Motor Control   | B                    |                      |                       |                       |                       |                       |                       |
| 10.     | Digital Clock & Printer Status                                      |                      | B                    |                       |                       |                       |                       |                       |
| 11.     | Key Board and Display   |                      |                      | B                     |                       |                       |                       |                       |
| 12.     | Serial Interface and Parallel Interface                             |                      |                      |                       | B                     |                       |                       |                       |
| 13.     | A/D and D/A Interface and Waveform Generation                       |                      |                      |                       |                       | B                     |                       |                       |
| 14.     | Basic Arithmetic and Logical Operations using 8051.                 |                      |                      |                       |                       |                       | B                     |                       |
| 15.     | Square and Cube program, Find 2's Complement of a Number using 8051 |                      |                      |                       |                       |                       |                       | B                     |
| 16.     | Unpacked BCD to ASCII   |                      |                      |                       |                       |                       |                       | B                     |

  
 Signature(s) of the faculty member(s):  
 Date: 17/02/2021

  
 17/2

  
 Signature of HOD: S. Periyannayagi  
 Date: 17-2-2021

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**  
**Academic Year: 2020-2021 (Even Semester)**  
**Student Groups with Presentation Topics**

**Degree, Semester & Branch:** VI Semester B.E. ECE A  
**Course Code & Name:** EC8681 Microprocessor and Microcontroller Laboratory  
**Name(s) of Faculty Member(s):** Mr.B.Kannan & Mr.P.Gunasekaran  
**Batch:** (Reg. No. 953618106001 to 953618106009, 953618106011 to 953618106035, 953618106046 & 953618106301)

| Sl. No. | Group Number | Register Number | Name of the Student | Presentation Topic                                  |
|---------|--------------|-----------------|---------------------|---|
| 1.      | G1           | 953618106001    | AARTHI K            | Basic Arithmetic and Logical Operations             |
| 2.      |              | 953618106004    | ALPHINA CHRISTY V   |   |
| 3.      |              | 953618106005    | ANITHA RAM R        |   |
| 4.      | G2           | 953618106006    | ANU LAKSHMI K S     | Move a Data Block Without Overlap & Code Conversion |
| 5.      |              | 953618106007    | ANUSUYA R           |   |
| 6.      |              | 953618106008    | APINEYA SRI M       |   |
| 7.      | G3           | 953618106012    | BALA KIRUTHIKA A    | Decimal Arithmetic and Matrix Operations            |
| 8.      |              | 953618106013    | DEEPIKA A           |   |
| 9.      |              | 953618106014    | DHITCHANAA R        |   |
| 10.     | G4           | 953618106016    | GAYATHRI R          | Floating point operations & Password checking       |
| 11.     |              | 953618106018    | HARSHETHAA N        |   |
| 12.     |              | 953618106019    | HELANMARY M         |   |
| 13.     | G5           | 953618106020    | JAYALAKSHMI S       | String Manipulations & Print RAM size               |
| 14.     |              | 953618106026    | KEERTHANA S         |   |
| 15.     |              | 953618106027    | KIRUTHIKA P         |   |
| 16.     | G6           | 953618106028    | KIRUTHIKA T         | Sorting & Searching and System Date                 |
| 17.     |              | 953618106030    | KOHILAPRIYA N       |   |
| 18.     |              | 953618106031    | KRISHNA VENI S      |   |
| 19.     | G7           | 953618106032    | MAHADEVI G          | Counters & Time Delay                               |
| 20.     |              | 953618106033    | MANIMALA N          |   |
| 21.     | G8           | 953618106034    | MIRRA S             | Traffic Light Control                               |
| 22.     |              | 953618106301    | HARINIDURGA I       |   |
| 23.     | G9           | 953618106003    | ACHUTHAN R          | Stepper Motor Control                               |
| 24.     |              | 953618106002    | ABUBACKER SIDDIQ A  |   |
| 25.     |              | 953618106009    | ARUN K              |   |
| 26.     | G10          | 953618106011    | BALAJI RAJA K       | Digital Clock & Printer Status                      |
| 27.     |              | 953618106015    | DINESH R            |   |
| 28.     |              | 953618106017    | GOKUL S             |   |
| 29.     | G11          | 953618106021    | JAYAMADAN K         | Serial Interface and Parallel Interface             |
| 30.     |              | 953618106022    | JEBISH ROBIN R      |   |
| 31.     |              | 953618106023    | KALIPRAKASH M       |   |

|     |     |              |                   |  |
|-----|-----|--------------|-------------------|--|
| 32. | G12 | 953618106024 | KARTHIK R         | A/D and D/A Interface and<br>Waveform Generation       |
| 33. |     | 953618106025 | KATHIR K          |  |
| 34. |     | 953618106029 | K J HARISH KALYAN |  |
| 35. | G13 | 953618106035 | MOHANASUDHAN M    | Basic Arithmetic and Logical<br>Operations using 8051. |
| 36. |     | 953618106046 | P MADHAV          |  |

*B.K.*  
Prepared by: B.Kannan  
Date: 17/02/2021

*S.P.*  
Approved by: Dr.S.Periyayagi  
Date: 17-2-2021

*S.P.*  
17/2

**RAMCO INSTITUTE OF TECHNOLOGY, RAJAPALAYAM.**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

**MODEL PRACTICAL EXAMINATION QUESTION**

**EC8681 MICROPROCESSOR AND MICROCONTROLLER LABORATORY**

Degree, Semester & Branch: VI Semester B.E. ECE A

Date & Session: 17/05/2021

Duration: 3 hours

**Max.Marks:100**

| Mark Allocation |           |                           |        |           |       |
|-----------------|-----------|---------------------------|--------|-----------|-------|
| Aim & Apparatus | Procedure | Program/Model Graph/Graph | Result | Viva-Voce | Total |
| 15              | 25        | 40                        | 10     | 10        | 100   |

|     |   |  |       |
|-----|---|--|-------|
| 1.  | a) Write and execute an assembly language program to perform addition of two 8-bit numbers with indirect addressing mode using 8086 Microprocessor. |  | (50)  |
|     | b) Perform division of 32/16 bit data using 8086 Microprocessor.  |  | (50)  |
| 2.  | a) Write and execute an 8086 ALP to perform subtraction of two 16-bit numbers.  |  | (50)  |
|     | b) Perform addition of two BCD numbers using 8086 microprocessor.   |  | (50)  |
| 3.  | a) Write and execute an 8086 assembly language program to find smallest number in an array.   |  | (50)  |
|     | b) Perform addition of two arrays using 8086 microprocessor.  |  | (50)  |
| 4.  | Write and execute an assembly language program to perform the following arithmetic operations for 8086 processor                                    |  |       |
|     | (a) Multiplication of two 16-bit numbers.   |  | (50)  |
|     | (b) Division of 16/8 bit number.  |  | (50)  |
| 5.  | a) Write and execute an assembly language program to perform Logical 'XOR' of two 8-bit numbers using 8086.   |  | (50)  |
|     | b) Write and execute an 8086 assembly language program to find largest number in an array.  |  | (50)  |
| 6.  | Write and execute an assembly language program to find the largest and smallest number in an array using 8086 microprocessor.                       |  | (100) |
| 7.  | Write and execute an assembly language program to sort an array in ascending and descending order using 8086 microprocessor.                        |  | (100) |
| 8.  | Write and execute an assembly language program to perform code conversions from HEX to ASCII using 8086.  |  | (100) |
| 9.  | Write and execute an assembly language program to perform code conversions from Binary to BCD and vice versa using 8086.                            |  | (100) |
| 10. | Write and execute an assembly language program for addition and subtraction of two matrices using 8086 microprocessor.                              |  | (100) |
| 11. | a) Write and execute an assembly language program to move a block of data without overlapping using 8086 Microprocessor.                            |  | (50)  |
|     | b) Perform addition of two arrays using 8086 microprocessor.  |  | (50)  |
| 12. | Write and execute an assembly language program using 8086 to rotate the stepper motor in clockwise and anticlockwise directions.                    |  | (100) |
| 13. | Write and execute an assembly language program using 8086 for Traffic Light Control system.   |  | (100) |

|     |   |               |
|-----|---|---------------|
| 14. | Write and execute an assembly language program using 8086 for interfacing 8279 interface kit and to display the message "HELLO" in display.   | (100)         |
| 15. | Write and execute an 8086 assembly language program to establish parallel communication in Mode 0 and Mode 1 using 8255.  | (100)         |
| 16. | Write and execute an 8086 assembly language program for interfacing DAC kit and to generate saw tooth and square waveforms.   | (100)         |
| 17. | a) Write and execute an 8051 assembly language program to add two 8-bit numbers.<br>b) Write and execute an assembly language program to perform unpacked BCD to ASCII code conversion using 8051 Microcontroller.  | (50)<br>(50)  |
| 18. | Write and execute an 8051 assembly language program for performing Subtraction and 'XOR' operation of two 8 bit numbers.  | Logical (100) |
| 19. | Write and execute an assembly language program for performing multiplication and division of two 8 bit numbers using 8051 and store the result in memory.   | (100)         |
| 20. | a) Write and execute an assembly language program to obtain the 2's complement of a number using 8051 Microprocessor.<br>b) Write and execute an assembly language program to obtain the logical AND and OR output of two 8 bit numbers using 8051 Microcontroller. | (50)<br>(50)  |
| 21. | a) Write and execute an assembly language program to find the square of a number using 8051 Microcontroller.<br>b) Write and execute an assembly language program to obtain the logical 'AND' output of two 8-bit numbers using 8051 Microcontroller.               | (50)<br>(50)  |
| 22. | Write and execute an assembly language program to find the square and cube of a number using 8051 Microcontroller.  | (100)         |
| 23. | a) Write and execute an ALP to perform the subtraction of two matrices using 8086.<br>b) Write and execute an ALP to perform 8-bit multiplication using MASM software.  | (50)<br>(50)  |
| 24. | a) Write and execute an ALP to sort an array in descending order using 8086.<br>b) Write and execute an ALP to perform 8-bit addition using MASM software.  | (50)<br>(50)  |
| 25. | a) Perform subtraction of two 16-bit numbers with 'Direct addressing mode' using 8086.<br>b) Write and execute an ALP to find the largest element in an array using 8086.   | (50)<br>(50)  |
| 26. | a) Write and execute an ALP to perform 16-bit addition in 'Indirect addressing mode' using 8086.<br>b) Find the smallest element from an array using 8086.  | (50)<br>(50)  |
| 27. | a) Write and execute an ALP to perform 16-bit multiplication using 8086.<br>b) Sort the given array in descending order using 8086.   | (50)<br>(50)  |
| 28. | a) Write and execute an ALP to perform 16-bit division in 'Direct addressing mode' using 8086.<br>b) Sort the given array in ascending order using 8086.  | (50)<br>(50)  |
| 29. | a) Write and execute an ALP to perform addition two arrays of data using 8086.<br>b) Write and execute an ALP to move a block of data from one memory location to another location without overlapping using 8086.  | (50)<br>(50)  |
| 30. | a) Write and execute an ALP to perform BCD subtraction using 8086.<br>b) Perform addition of two matrices using 8086 assembly language program.   | (50)<br>(50)  |
| 31. | a) Write and execute an ALP to perform BCD addition using 8086.<br>b) Perform logical 'OR' and 'AND' operations for an 8-bit data using 8086 assembly language.   | (50)<br>(50)  |

|     |  |       |
|-----|--|-------|
| 32. | a) Write and execute an ALP to perform code conversion from Binary to BCD using 8086.                      | (50)  |
|     | b) Convert the ASCII number to its corresponding Hexadecimal number using 8086.                            | (50)  |
| 33. | Write and execute an ALP to find the largest and smallest number in an array using 8086.                   | (100) |
| 34. | a) Write and execute an ALP to obtain the 2's complement of a number using 8086.                           | (50)  |
|     | b) Write and execute an ALP to perform BCD addition using 8086.  | (100) |
| 35. | Write and execute an 8086 ALP for Traffic Light Control system   |       |
| 36. | Write and execute an ALP to rotate the stepper motor in clockwise and anti-clockwise direction using 8086. | (100) |

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**


**Academic Year: 2020-2021 (Even Semester)**  
**Attendance for Model Practical Examination Mark Statement**

**Degree, Semester & Branch:** VI Semester B.E. ECE A  
**Course Code & Title:** EC8681 Microprocessor and Microcontroller Laboratory  
**Name of the Faculty member:** Mr.B.Kannan & Mr.P.Gunasekaran  
**Date & Session:** 17.05.2021

| Sl. No. | Reg. No.     | Name of the Student | Question No. | Aim & Apparatus (15) | Procedure (25) | Program/ Model Graph/ Graph (40) | Result (10) | Viva-Voce (10) | Presentation (10) | Total (100) |
|---------|--------------|---------------------|--------------|----------------------|----------------|----------------------------------|-------------|----------------|-------------------|-------------|
| 1.      | 953618106001 | AARTHI K            | 23           | 15                   | 25             | 39                               | 9           | 7              | 9                 | 95          |
| 2.      | 953618106002 | ABUBACKER SIDDIQ A  | 11           | 14                   | 22             | 33                               | 7           | 6              | 8                 | 82          |
| 3.      | 953618106003 | ACHUTHAN R          | 05           | 15                   | 24             | 37                               | 8           | 6              | 8                 | 89          |
| 4.      | 953618106004 | ALPHINA CHRISTY V   | 30           | 15                   | 25             | 39                               | 10          | 7              | 10                | 96          |
| 5.      | 953618106005 | ANITHA RAM R        | 35           | 15                   | 24             | 39                               | 9           | 7              | 9                 | 94          |
| 6.      | 953618106006 | ANU LAKSHMI K S     | 06           | 15                   | 23             | 37                               | 8           | 7              | 9                 | 90          |
| 7.      | 953618106007 | ANUSUYA R           | 01           | 15                   | 25             | 39                               | 9           | 6              | 9                 | 94          |
| 8.      | 953618106008 | APINEYA SRI M       | 26           | 15                   | 24             | 38                               | 9           | 10             | 9                 | 95          |
| 9.      | 953618106009 | ARUN K              | 14           | 15                   | 20             | 30                               | 8           | 6              | 8                 | 81          |
| 10.     | 953618106011 | BALAJI RAJA K       | 19           | 15                   | 23             | 35                               | 9           | 7              | 7                 | 87          |
| 11.     | 953618106012 | BALA KIRUTHIKA A    | 04           | 15                   | 23             | 37                               | 9           | 9              | 9                 | 93          |
| 12.     | 953618106013 | DEEPIKA A           | 17           | 15                   | 23             | 38                               | 9           | 10             | 10                | 95          |
| 13.     | 953618106014 | DHITCHANAA R        | 32           | 15                   | 25             | 40                               | 10          | 6              | 9                 | 95          |
| 14.     | 953618106015 | DINESH R            | 13           | 15                   | 20             | 30                               | 8           | 6              | 8                 | 80          |
| 15.     | 953618106016 | GAYATHRI R          | 08           | 15                   | 25             | 39                               | 10          | 10             | 9                 | 98          |
| 16.     | 953618106017 | GOKUL S             | 22           | 15                   | 23             | 36                               | 8           | 7              | 8                 | 88          |
| 17.     | 953618106018 | HARSHETHAA N        | 34           | 15                   | 25             | 39                               | 10          | 9              | 9                 | 97          |

| Sl. No. | Reg. No.     | Name of the Student | Question No. | Aim & Apparatus (15) | Procedure (25) | Program/ Model Graph/ Graph (40) | Result (10) | Viva-Voce (10) | Presentation (10) | Total (100) |
|---------|--------------|---------------------|--------------|----------------------|----------------|----------------------------------|-------------|----------------|-------------------|-------------|
| 18.     | 953618106019 | HELANMARY M         | 20           | 15                   | 25             | 39                               | 10          | 9              | 9                 | 97          |
| 19.     | 953618106020 | JAYALAKSHMI S       | 12           | 15                   | 25             | 39                               | 10          | 6              | 9                 | 95          |
| 20.     | 953618106021 | JAYAMADAN K         | 36           | 15                   | 24             | 37                               | 9           | 9              | 9                 | 94          |
| 21.     | 953618106022 | JEBISH ROBIN R      | 06           | 15                   | 23             | 36                               | 8           | 6              | 8                 | 87          |
| 22.     | 953618106023 | KALIPRAKASH M       | 24           | 15                   | 22             | 33                               | 7           | 8              | 7                 | 84          |
| 23.     | 953618106024 | KARTHIK R           | 15           | 15                   | 18             | 30                               | 7           | 9              | 8                 | 80          |
| 24.     | 953618106025 | KATHIR K            | 16           | 15                   | 24             | 38                               | 9           | 5              | 7                 | 89          |
| 25.     | 953618106026 | KEERTHANA S         | 03           | 15                   | 23             | 38                               | 9           | 9              | 9                 | 94          |
| 26.     | 953618106027 | KIRUTHIKA P         | 29           | 15                   | 23             | 36                               | 9           | 8              | 9                 | 91          |
| 27.     | 953618106028 | KIRUTHIKA T         | 31           | 15                   | 22             | 34                               | 8           | 7              | 8                 | 85          |
| 28.     | 953618106029 | K J HARISH KALYAN   | 33           | 15                   | 20             | 32                               | 7           | 8              | 8                 | 82          |
| 29.     | 953618106030 | KOHILAPRIYA N       | 28           | 15                   | 25             | 39                               | 10          | 5              | 9                 | 94          |
| 30.     | 953618106031 | KRISHNA VENI S      | 02           | 15                   | 25             | 39                               | 9           | 10             | 9                 | 97          |
| 31.     | 953618106032 | MAHADEVI G          | 07           | 15                   | 25             | 40                               | 10          | 6              | 8                 | 95          |
| 32.     | 953618106033 | MANIMALA N          | 27           | 15                   | 23             | 38                               | 9           | 5              | 7                 | 88          |
| 33.     | 953618106034 | MIRRA S             | 25           | 15                   | 23             | 36                               | 9           | 6              | 8                 | 88          |
| 34.     | 953618106035 | MOHANASUDHAN M      | 21           | 15                   | 20             | 33                               | 7           | 5              | 8                 | 81          |
| 35.     | 953618106046 | P MADHAV            | 10           | 15                   | 23             | 37                               | 9           | 10             | 10                | 95          |
| 36.     | 953618106301 | HARINIDURGA I       | 18           | 15                   | 23             | 36                               | 9           | 7              | 9                 | 90          |

(A. S. S. 25/07/21)  
Signature of the Faculty member(s)

  
HOD 7/7/21

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**  
**Academic Year: 2020 - 2021 (Even Semester)**

**PORTAL ENTRY**

**Attendance & Mark Statement**

**VI Semester B.E. Electronics and Communication Engineering A**

**Name of the Faculty member:** Mr.B.Kannan & Mr.P.Gunasekaran

**Course Code & Title:** EC8681 Microprocessors and Microcontrollers Laboratory

**Attendance Period IV (18.02.2021 to 21.05.2021)**

**No. of Periods Conducted:** 60

| Sl. No. | Reg. No.     | Name of the Student | No. of Periods Attended | Marks Scored in IM |
|---------|--------------|---------------------|-------------------------|--------------------|
| 1.      | 953618106001 | AARTHI K            | 60                      | 95                 |
| 2.      | 953618106002 | ABUBACKER SIDDIQ A  | 56                      | 90                 |
| 3.      | 953618106003 | ACHUTHAN R          | 60                      | 93                 |
| 4.      | 953618106004 | ALPHINA CHRISTY V   | 56                      | 96                 |
| 5.      | 953618106005 | ANITHA RAM R        | 60                      | 96                 |
| 6.      | 953618106006 | ANU LAKSHMI K S     | 60                      | 94                 |
| 7.      | 953618106007 | ANUSUYA R           | 60                      | 96                 |
| 8.      | 953618106008 | APINEYA SRI M       | 60                      | 94                 |
| 9.      | 953618106009 | ARUN K              | 60                      | 90                 |
| 10.     | 953618106011 | BALAJI RAJA K       | 56                      | 91                 |
| 11.     | 953618106012 | BALA KIRUTHIKA A    | 60                      | 95                 |
| 12.     | 953618106013 | DEEPIKA A           | 60                      | 96                 |
| 13.     | 953618106014 | DHITCHANAA R        | 60                      | 96                 |
| 14.     | 953618106015 | DINESH R            | 60                      | 90                 |
| 15.     | 953618106016 | GAYATHRI R          | 60                      | 96                 |
| 16.     | 953618106017 | GOKUL S             | 56                      | 93                 |
| 17.     | 953618106018 | HARSHETHAA N        | 60                      | 96                 |
| 18.     | 953618106019 | HELANMARY M         | 60                      | 95                 |
| 19.     | 953618106020 | JAYALAKSHMI S       | 60                      | 94                 |
| 20.     | 953618106021 | JAYAMADAN K         | 60                      | 92                 |
| 21.     | 953618106022 | JEBISH ROBIN R      | 60                      | 91                 |
| 22.     | 953618106023 | KALIPRAKASH M       | 56                      | 90                 |
| 23.     | 953618106024 | KARTHIK R           | 60                      | 90                 |
| 24.     | 953618106025 | KATHIR K            | 60                      | 91                 |
| 25.     | 953618106026 | KEERTHANA S         | 60                      | 95                 |
| 26.     | 953618106027 | KIRUTHIKA P         | 60                      | 95                 |
| 27.     | 953618106028 | KIRUTHIKA T         | 56                      | 90                 |

| Sl. No. | Reg. No.     | Name of the Student | No. of Periods Attended | Marks Scored in IM |
|---------|--------------|---------------------|-------------------------|--------------------|
| 28.     | 953618106029 | K J HARISH KALYAN   | 56                      | 90                 |
| 29.     | 953618106030 | KOHILAPRIYA N       | 60                      | 95                 |
| 30.     | 953618106031 | KRISHNA VENI S      | 56                      | 96                 |
| 31.     | 953618106032 | MAHADEVI G          | 60                      | 94                 |
| 32.     | 953618106033 | MANIMALA N          | 56                      | 90                 |
| 33.     | 953618106034 | MIRRA S             | 60                      | 93                 |
| 34.     | 953618106035 | MOHANASUDHAN M      | 60                      | 90                 |
| 35.     | 953618106046 | P MADHAV            | 56                      | 96                 |
| 36.     | 953618106301 | HARINIDURGA I       | 56                      | 94                 |

\* IM –Internal Marks for Laboratory courses

*Q. 5/7/21*  
Signature of the Faculty member

*Q. 5/7/21*  
HOD

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**  
**Academic Year: 2020-2021 (Even Semester)**  
**Presentation in Laboratory**

**Degree, Semester & Branch:** VI Semester B.E. ECE A

**Course Code & Name:** EC8681 Microprocessor and Microcontroller Laboratory

**Name(s) of Faculty Member(s):** Mr.B.Kannan & Mr.P.Gunasekaran

**Batch:** (Reg. No. 953618106001 to 953618106009, 953618106011 to 953618106035, 953618106046 & 953618106301)

| Sl. No. | Group No. | Register Number | Name of the Student | Date     | Name of the Experiment                              | Rubrics                     |                  |                         | Total Marks (10) |
|---------|-----------|-----------------|---------------------|----------|---|-----------------------------|------------------|-------------------------|------------------|
|         |           |                 |                     |          |   | Content of Presentation (4) | Applications (3) | Communication Skill (3) |                  |
| 1       | G1        | 953618106001    | AARTHI K            | 20/02/21 | Basic Arithmetic and Logical Operations             | 3                           | 3                | 2                       | 9                |
| 2       |           | 953618106004    | ALPHINA CHRISTY V   |          |   | 4                           | 3                | 2                       | 10               |
| 3       |           | 953618106005    | ANITHA RAM R        |          |   | 3                           | 3                | 3                       | 9                |
| 4       | G2        | 953618106006    | ANU LAKSHMI K S     | 24/02/21 | Move a Data Block Without Overlap & Code Conversion | 3                           | 3                | 3                       | 9                |
| 5       |           | 953618106007    | ANUSUYA R           |          |   | 3                           | 3                | 3                       | 9                |
| 6       |           | 953618106008    | APINEYA SRI M       |          |   | 3                           | 3                | 3                       | 9                |
| 7       | G3        | 953618106012    | BALA KIRUTHIKA A    | 03/03/21 | Decimal Arithmetic and Matrix Operations            | 3                           | 3                | 3                       | 9                |
| 8       |           | 953618106013    | DEEPIKA A           |          |   | 4                           | 3                | 3                       | 10               |
| 9       |           | 953618106014    | DHITCHANAA R        |          |   | 3                           | 3                | 3                       | 9                |
| 10      | G4        | 953618106016    | GAYATHRI R          | 06/03/21 | Floating point operations & Password checking       | 3                           | 3                | 3                       | 9                |
| 11      |           | 953618106018    | HARSHETHAAN         |          |   | 3                           | 3                | 3                       | 9                |
| 12      |           | 953618106019    | HELANMARY M         |          |   | 3                           | 3                | 3                       | 9                |
| 13      | G5        | 953618106020    | JAYALAKSHMI S       | 10/03/21 | String Manipulations & Print RAM size               | 3                           | 3                | 3                       | 9                |
| 14      |           | 953618106026    | KEERTHANA S         |          |   | 3                           | 3                | 3                       | 9                |
| 15      |           | 953618106027    | KIRUTHIKA P         |          |   | 3                           | 3                | 3                       | 9                |
| 16      | G6        | 953618106028    | KIRUTHIKA T         | 24/03/21 | Sorting & Searching and System Date                 | 3                           | 3                | 3                       | 9                |
| 17      |           | 953618106030    | KOHILAPRIYA N       |          |   | 3                           | 3                | 3                       | 9                |
| 18      |           | 953618106031    | KRISHNA VENI S      |          |   | 3                           | 3                | 3                       | 9                |
| 19      | G7        | 953618106032    | MAHADEVI G          | 31/03/21 | Counters & Time Delay and                           | 3                           | 3                | 3                       | 9                |
| 20      |           | 953618106033    | MANIMALA N          |          |   | 3                           | 3                | 3                       | 9                |
| 21      | G8        | 953618106034    | MIRRA S             | 31/03/21 | Traffic Light Control                               | 3                           | 3                | 3                       | 9                |
| 22      |           | 953618106301    | HARINIDURGA I       |          |   | 3                           | 3                | 3                       | 9                |
| 23      | G9        | 953618106003    | ACHUTHAN R          | 07/04/21 | Stepper Motor Control                               | 3                           | 3                | 3                       | 9                |
| 24      |           | 953618106002    | ABUBACKER SIDDIQ A  |          |   | 3                           | 3                | 3                       | 9                |
| 25      |           | 953618106009    | ARUN K              |          |   | 3                           | 3                | 3                       | 9                |

|    |     |              |                   |          |  |   |   |   |    |
|----|-----|--------------|-------------------|----------|--|---|---|---|----|
| 26 | G10 | 953618106011 | BALAJI RAJA K     | 10/09/21 | Digital Clock & Printer Status                     | 3 | 2 | 2 | 7  |
| 27 |     | 953618106015 | DINESH R          |          |  | 3 | 3 | 2 | 8  |
| 28 |     | 953618106017 | GOKUL S           |          |  | 3 | 2 | 3 | 8  |
| 29 | G11 | 953618106021 | JAYAMADAN K       | 28/09/21 | Serial Interface and Parallel Interface            | 2 | 2 | 2 | 9  |
| 30 |     | 953618106022 | JEBISH ROBIN R    |          |  | 3 | 2 | 2 | 8  |
| 31 |     | 953618106023 | KALIPRAKASH M     |          |  | 3 | 2 | 6 | 7  |
| 32 | G12 | 953618106024 | KARTHIK R         | 05/05/21 | A/D and D/A Interface and Waveform Generation      | 3 | 3 | 2 | 8  |
| 33 |     | 953618106025 | KATHIR K          |          |  | 3 | 2 | 2 | 7  |
| 34 |     | 953618106029 | K J HARISH KALYAN |          |  | 2 | 2 | 3 | 8  |
| 35 | G13 | 953618106035 | MOHANASUDHAN M    | 12/05/21 | Basic Arithmetic and Logical Operations using 8051 | 3 | 3 | 2 | 8  |
| 36 |     | 953618106046 | P MADHAV          |          |  | 4 | 3 | 2 | 10 |

*(A. b. s. 5/7/21)*

Signature of the Faculty Member

*(S. P. 7/7/21)*

Signature of HOD

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**  
**Academic Year: 2020-2021 (Even Semester)**

**Course Objectives and Outcomes**

**Degree, Semester & Branch:** VI Semester B.E. ECE A  
**Course Code & Title:** EC8681 Microprocessor and Microcontroller Laboratory  
**Name(s) of the Faculty Member(s):** Mr.B.Kannan & Mr.P.Gunasekaran

**Course Objectives:**

1. To make the student to verify basic arithmetic operation, logical operations and data movement using 8086 microprocessor ALP.
2. To enable the students to implement code conversion, decimal arithmetic and matrix operations.
3. To make the student to implement floating point operations, string manipulations, sorting, Searching, Password checking, Print RAM size, System Date, Counters and Time Delay using 8086 microprocessor and MASM software.
4. To illustrate the student to implement 8086 based system using peripherals and interfaces.
5. To familiarize the student to implement arithmetic, logical operations, square and cube program using 8051 microcontroller/MASAM software.

**Course Outcomes:**

After completion of the course, it is expected that the students will be able to:

1. Write ALP programmes for arithmetic operation, logical operations and data movement using 8086 microprocessor instructions.
2. Implement ALP programmes for code conversion, decimal arithmetic and matrix operations using 8086 instructions.
3. Generate result for floating point operations, string manipulations, sorting, Searching, Password checking, Print RAM size, System Date, Counters and Time Delay using 8086 microprocessor and MASM software.
4. Design 8086/8051 based systems using peripherals and interfaces.
5. Calculate outputs for arithmetic operation, logical operation, square of a number and cube of a number using 8051 microcontroller/MASAM software.

**Assessment Methods followed:**

1. Model Practical Examination is conducted to assess continuous learning by the students.
2. End semester examination conducted by the Anna University to assess the overall learning of the course by the students.

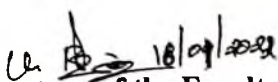
*(Q. ~~Signature~~ 16/02/21*  
**Signature of the Faculty member**


*M  
17/2*

*(Signature) 17/2/2021*  
**HOD**

**Proof / Verification of Accomplishment of Course Outcomes:**

1. Pass Percentage in Model Practical Test: 100 %
2. Pass Percentage in University Practical Examination: 100 %

  
Signature of the Faculty member

  
HOD 18/1/22

**OBJECTIVES:**

The student should be made to:

- To Introduce ALP concepts, features and Coding methods Write ALP for arithmetic and logical operations in 8086 and 8051
- Write ALP for arithmetic and logical operations in 8086 and 8051 Interface different I/Os with Microprocessors
- Differentiate Serial and Parallel Interface
- Interface different I/Os with Microprocessors
- Be familiar with MASM

**LIST OF EXPERIMENTS:****8086 Programs using kits and MASM**

1. Basic arithmetic and Logical operations
2. Move a data block without overlap
3. Code conversion, decimal arithmetic and Matrix operations.
4. Floating point operations, string manipulations, sorting and searching
5. Password checking, Print RAM size and system date
6. Counters and Time Delay

**Peripherals and Interfacing Experiments**

7. Traffic light control
8. Stepper motor control
9. Digital clock
10. Key board and Display
11. Printer status
12. Serial interface and Parallel interface
13. A/D and D/A interface and Waveform Generation

**8051 Experiments using kits and MASM**

14. Basic arithmetic and logical operations
15. Square and cube program, Find 2's complement of a number
16. Unpacked BCD to ASCII

**TOTAL: 60 PERIODS****OUTCOMES:**

At the end of the course, the student should be able to:

- Write ALP Programmes for fixed and Floating Point and Arithmetic operations
- Interface different I/Os with processor
- Generate waveforms using Microprocessors
- Execute Programs in 8051
- Explain the difference between simulator and Emulator

**RAMCO INSTITUTE OF TECHNOLOGY**  
 Department of Electronics and Communication Engineering  
 Academic Year: 2020-2021(Even Semester)

**CO-PO Matrices of the Course**

**Course Code & Title:** EC8681 Microprocessor and Microcontroller Laboratory

**Course Index & Year of Study:** C323 & Year of Study 2020-2021

**Degree, Semester & Branch:** VI Semester B.E. ECE A

**Name of the Faculty member:** Mr.B.Kannan & Mr.P.Gunasekaran

**Course Outcomes:**

|        |  |
|--------|--|
| C323.1 | The students will be able to write ALP programmes for arithmetic operation, logical operations and data movement using 8086 microprocessor instructions.   |
| C323.2 | The students will be able to implement ALP programmes for code conversion, decimal arithmetic and matrix operations using 8086 instructions.   |
| C323.3 | The students will be able to generate result for floating point operations, string manipulations, sorting, Searching, Password checking, Print RAM size, System Date, Counters and Time Delay using 8086 microprocessor and MASM software. |
| C323.4 | The students will be able to design 8086/8051 based systems using peripherals and interfaces.  |
| C323.5 | The students will be able to calculate outputs for arithmetic operation, logical operation, square of a number and cube of a number using 8051 microcontroller/ MASM software.   |

**CO-PO Matrices:**

| CO          | PO 1     | PO 2     | PO 3       | PO 4     | PO 5     | PO 6     | PO 7     | PO 8     | PO 9     | PO1 0    | PO1 1    | PO1 2    |
|-------------|----------|----------|------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| C323.1      | 3        | 2        | 1          | 1        | 3        | -        | -        | 2        | 1        | 1        | -        | 1        |
| C323.2      | 3        | 2        | 2          | 1        | 3        | -        | -        | 2        | 1        | 1        | -        | 1        |
| C323.3      | 3        | 2        | 1          | 1        | 3        | -        | -        | 2        | 1        | 1        | -        | 1        |
| C323.4      | 3        | 2        | 3          | 1        | 3        | -        | -        | 2        | 1        | 1        | -        | 1        |
| C323.5      | 3        | 2        | 2          | 1        | 3        | -        | -        | 2        | 1        | 1        | -        | 1        |
| <b>C323</b> | <b>3</b> | <b>2</b> | <b>1.8</b> | <b>1</b> | <b>3</b> | <b>-</b> | <b>-</b> | <b>2</b> | <b>1</b> | <b>1</b> | <b>-</b> | <b>1</b> |

**CO-PSO Matrices:**

| CO          | PSO1     | PSO2     | PSO3     | PSO4     |
|-------------|----------|----------|----------|----------|
| C323.1      | 3        | 2        | -        | 1        |
| C323.2      | 3        | 2        | -        | 1        |
| C323.3      | 3        | 2        | -        | 1        |
| C323.4      | 3        | 2        | 1        | 1        |
| C323.5      | 3        | 2        | -        | 1        |
| <b>C323</b> | <b>3</b> | <b>2</b> | <b>1</b> | <b>1</b> |

*A. S. 16/02/2021*

**Signature of the Faculty Member(s)**

*[Signature]*  
17/12/2021  
**HOD**

*62/12/21*

**RAMCO INSTITUTE OF TECHNOLOGY**  
 Department of Electronics and Communication Engineering  
 Academic Year: 2020-2021 (Even Semester)

**INDIVIDUAL FACULTY TIME TABLE**  
 (with effect from: 18.02.2021)

Name of Faculty Member: Mr.B.Kannan

| Period/<br>Day | I               | II              | III             | IV                 | V           | VI                 | VII |
|----------------|-----------------|-----------------|-----------------|--------------------|-------------|--------------------|-----|
| Monday         | EC8691<br>XXXII |                 |                 |                    |             |                    |     |
| Tuesday        |                 |                 |                 |                    |             | EC8691<br>XXXII    |     |
| Wednesday      |                 |                 | Tea Break       | EC8681<br>MPMC Lab | Lunch Break | EC8681<br>MPMC Lab |     |
| Thursday       |                 | EC8691<br>XXXII |                 | GE8261<br>EP Lab   |             | GE8261<br>EP Lab   |     |
| Friday         |                 |                 | EC8691<br>XXXII |                    |             |                    |     |

**Course Code & Title**

**No. of Periods**

- |   |   |
|---|---|
| 1. EC8691 Microprocessors and Microcontrollers            | 4 |
| 2. EC8681 Microprocessors and Microcontrollers Laboratory | 4 |
| 3. GE8261 Engineering Practices Laboratory                | 4 |

*(Q. 16/02/2021)*  
 Signature of Faculty Member

*(17/2/2021)*  
 HOD

*M  
17/2*

**RAMCO INSTITUTE OF TECHNOLOGY**  
Department of Electronics and Communication Engineering  
Academic Year: 2020 - 2021 (Even Semester)

**CLASS TIME TABLE**

(with effect from: 18.02.2021)

| Semester/Class: VI Semester B.E. ECE A | CLASS ROOM - XXXII                |                                   |             |                                   |                |             |                                   |             |             |
|--|-----------------------------------|-----------------------------------|-------------|-----------------------------------|----------------|-------------|-----------------------------------|-------------|-------------|
|  | I                                 | II                                | 10:40-11:00 | III                               | IV             | 12:40-01:20 | V                                 | VI          | VII         |
| Period & Time / Day                    | 09.00-09.50                       | 09.50-10.40                       |             | 11.00-11.50                       | 11.50-12.40    |             | 01.20-02.10                       | 02.10-03.00 | 03.00-03.50 |
| Monday                                 | EC8691 BK                         | CS8792/ EC8001/ EC8004 ARB/RD/PGS | Tea Break   | EC8652 GGP                        | EC8651 PV      | Lunch Break | EC8095 RC                         | HS8581 GGB  |             |
| Tuesday                                | EC8095 RC                         | EC8652 GGP                        |             | MG8591 VSN                        | Library SVK    |             | CS8792/ EC8001/ EC8004 ARB/RD/PGS | EC8691 BK   | EC8652 GGP  |
| Wednesday                              | EC8651 PV                         | MG8591 VSN                        |             | CS8792/ EC8001/ EC8004 ARB/RD/PGS | EC8681 BK&PGS  |             | EC8681 BK & PGS                   |             |             |
| Thursday                               | MG8591 VSN                        | EC8095 RC                         |             | EC8691 BK                         | MG8591 VSN     |             | EC8652 GGP                        | EC8651 PV   | EC8095 RC   |
| Friday                                 | CS8792/ EC8001/ EC8004 ARB/RD/PGS | EC8651 PV                         |             | EC8691 BK                         | EC8661 PV & RC |             | EC8661 PV & RC                    |             |             |
| Saturday                               | PA SAR,SHS&PGS                    |                                   |             | PA SAR,SHS&PGS                    | GA UK          |             | VA GGB                            | EC8611 RC   | EC8611 LKB  |

| <u>Course Code &amp; Title</u>                            | <u>Name of the Faculty member</u>  | <u>No. of Periods</u> |
|---|--|-----------------------|
| 1. EC8691 Microprocessors and Microcontrollers            | Mr.B.Kannan (BK)   | 4                     |
| 2. EC8095 VLSI Design                                     | Mrs.R.Chitra (RC)  | 4                     |
| 3. EC8652 Wireless Communications                         | Mrs.G.Gnana Priya (GGP)  | 4                     |
| 4. MG8591 Principles of Management                        | Mrs.V.SrirengaNachiyar (VSN)   | 4                     |
| 5. EC8651 Transmission lines and RF Systems               | Mr.P.Venkatesh (PV)  | 4                     |
| 6. CS8792 Cryptography and Network Security               | Mr.A.Ramesh Babu (ARB)   | 4                     |
| EC8001 MEMS and NEMS                                      | Mrs.R.Divya (RD)   |                       |
| EC8004 Wireless Networks                                  | Mr.P.Gunasekaran (PGS)   |                       |
| 7. EC8681 Microprocessors and Microcontrollers Laboratory | Mr.B.Kannan (BK) & Mr.P.Gunasekaran (PGS)                                | 4                     |
| 8. EC8661 VLSI Design Laboratory                          | Mr.P.Venkatesh (PV) & Mrs.R.Chitra (RC)                                  | 4                     |
| 9. EC8611 Technical Seminar (TS)                          | Mrs.R.Chitra (RC) & Mr.L.K.Balaji Vignesh (LKB)                          | 2                     |
| 10. HS8581 Professional Communication (PC)                | Dr.G.Godson Bedeiah (GGB)  | 2                     |
| 11. Programming Aptitude (PA)                             | Ms.S.A.Radhika (SAR), Ms.S.Harini Shriram (SHS) & Mr.P.Gunasekaran (PGS) | 3                     |
| 12. General Aptitude (GA)                                 | Dr.U.Kumaran (UK)  | 1                     |
| 13. Verbal Aptitude (VA)                                  | Dr.G.Godson Bedeiah (GGB)  | 1                     |
| 14. Library   | Mr.S.Vijayakumar (SVK)   | 1                     |

*Class Adviser*

*HOD*

*Time Table Coordinator*

*Principal*

RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering

Academic Year: 2020-2021 (Even Semester)


STUDENTS NAME LIST

Semester / Class: VI Semester B.E. ECE A

| Sl. No. | Reg. No.     | Name of the Student |
|---------|--------------|---------------------|
| 1.      | 953618106001 | AARTHI K            |
| 2.      | 953618106002 | ABUBACKER SIDDIQ A  |
| 3.      | 953618106003 | ACHUTHAN R          |
| 4.      | 953618106004 | ALPHINA CHRISTY V   |
| 5.      | 953618106005 | ANITHA RAM R        |
| 6.      | 953618106006 | ANU LAKSHMI K S     |
| 7.      | 953618106007 | ANUSUYA R           |
| 8.      | 953618106008 | APINEYA SRI M       |
| 9.      | 953618106009 | ARUN K              |
| 10.     | 953618106011 | BALAJI RAJA K       |
| 11.     | 953618106012 | BALA KIRUTHIKA A    |
| 12.     | 953618106013 | DEEPIKA A           |
| 13.     | 953618106014 | DHITCHANAA R        |
| 14.     | 953618106015 | DINESH R            |
| 15.     | 953618106016 | GAYATHRI R          |
| 16.     | 953618106017 | GOKUL S             |
| 17.     | 953618106018 | HARSHETHAA N        |
| 18.     | 953618106019 | HELANMARY M         |
| 19.     | 953618106020 | JAYALAKSHIMI S      |
| 20.     | 953618106021 | JAYAMADAN K         |
| 21.     | 953618106022 | JEBISH ROBIN R      |
| 22.     | 953618106023 | KALIPRAKASH M       |
| 23.     | 953618106024 | KARTHIK R           |
| 24.     | 953618106025 | KATHIR K            |
| 25.     | 953618106026 | KEERTHANA S         |
| 26.     | 953618106027 | KIRUTHIKA P         |
| 27.     | 953618106028 | KIRUTHIKA T         |
| 28.     | 953618106029 | K J HARISH KALYAN   |
| 29.     | 953618106030 | KOHILAPRIYA N       |
| 30.     | 953618106031 | KRISHNA VENI S      |
| 31.     | 953618106032 | MAHADEVI G          |

| Sl. No. | Reg. No.     | Name of the Student |
|---------|--------------|---------------------|
| 32.     | 953618106033 | MANIMALA N          |
| 33.     | 953618106034 | MIRRA S             |
| 34.     | 953618106035 | MOHANASUDHAN M      |
| 35.     | 953618106046 | P MADHAV            |
| 36.     | 953618106301 | HARINIDURGA I       |

  
Class Adviser 15/02/2021

  
HOD 15/2/2021

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**  
**Academic Year: 2020- 2021 (Odd Semester)**

**Innovative Practices Description**

**Degree, Semester& Branch: V Semester B.E. ECE B**

**Course Code & Title: EC8552 Computer Architecture and Organization**

**Name of the Faculty member: Mrs.V.SrirengaNachiyar**

**Name of the Topic: Memory**

**Name of the Innovative Practice: Crossword puzzle**

**Date & Time: 13.10.2020 & 20 Minutes**

**Description:**

**Crossword Puzzle:**

A **crossword** is a word puzzle that usually takes the form of a square or a rectangular grid of white- and black-shaded squares. The game's goal is to fill the white squares with letters, forming words or phrases, by solving clues, which lead to the answers. In languages that are written left-to-right, the answer words and phrases are placed in the grid from left to right and from top to bottom.

**Learning Outcomes:**

1. The students will be able to remember the important terms easily.

**Use of appropriate method:**

**Justification for choosing the Crossword puzzle Activity:**

Crossword puzzle activity gives the clear ideas of the particular topic. It differentiates the important terms clearly which will be helpful for understanding the concepts to the students.

**Effective presentation:**

I have planned the activity for 20 minutes but students could not able to remember the terms. So, I recall some of the important points to the students to do this activity for the particular topic and also the benefits of this during examination. I encouraged the students which it takes another 5 minutes for completing the activity.


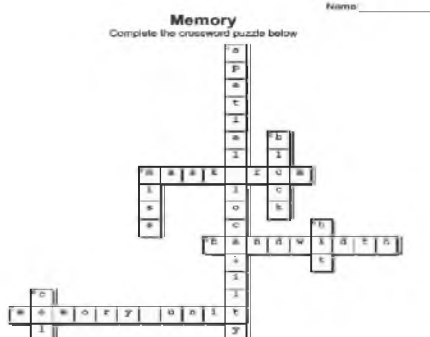
**Reflective Critique:**

**Challenges:**

The students confused about the points and important definitions which was explained in the class room. After that, I have chosen Crossword puzzle as an Innovative practice method for better understanding about the Memory and I/O

**Benefits:**

The Students eagerly participated in that activity and then they can easily remember the concept and definitions. Due to this activity, the students were able to recall the topic and remember the important terms easily.

| <b>Innovative Teaching Method Execution</b>   |  |
|---|--|
| <b>Memory</b>   |  |
| <p style="text-align: right;">Name: _____</p> <p style="text-align: center;"><b>Memory</b><br/>Complete the crossword puzzle below</p>  <p style="text-align: center; font-size: small;">Created using the Crossword Maker on TheTeachersCorner.net</p> <p><b>Across</b></p> <ol style="list-style-type: none"> <li>3. data is burnt in by the manufacturer</li> <li>5. data transfer rate</li> <li>7. enables us to store data inside the computer</li> </ol> <p><b>Down</b></p> <ol style="list-style-type: none"> <li>1. data locations with nearby addresses will tend to be referenced soon</li> <li>2. unit of information</li> <li>3. data is not found</li> <li>4. block in the upper level</li> <li>6. basic element of the semiconductor memory</li> </ol> | <p style="text-align: right;">Name: _____</p> <p style="text-align: center;"><b>Memory</b><br/>Complete the crossword puzzle below</p>  <p style="text-align: center; font-size: small;">Created using the Crossword Maker on TheTeachersCorner.net</p> <p><b>Across</b></p> <ol style="list-style-type: none"> <li>3. data is burnt in by the manufacturer (mask rom)</li> <li>5. data transfer rate (bandwidth)</li> <li>7. enables us to store data inside the computer (memory unit)</li> </ol> <p><b>Down</b></p> <ol style="list-style-type: none"> <li>1. data locations with nearby addresses will tend to be referenced soon (spatial locality)</li> <li>2. unit of information (block)</li> <li>3. data is not found (miss)</li> <li>4. block in the upper level (hit)</li> <li>6. basic element of the semiconductor memory (cell)</li> </ol> |

| Course Outcome | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO5            | 2   | 2   | 2   | 2   | -   | 2   | 1   | 3   | 3   | 2    | -    | 2    |

*CO5: The students will be able to discuss parallel processing technique and unconventional architectures*

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**  
**Academic Year: 2020 – 2021 (Odd Semester)**

**INNOVATIVE PRACTICE – Unit I**

**Degree, Semester & Branch: VII Semester B.E. ECE B**

**Course Code & Title: EC8702 Adhoc and wireless Sensor Networks**

**Name of the Faculty member: Dr.S.Periyanayagi**

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**ACTIVITY**

**Topic: Unit I Issues in Designing Routing protocol for Adhoc wireless Networks**

**Learning Outcome:**

- The students will be able to explain the issues related to designing routing protocol.
- The students will be able to find the nodes suffering from Hidden terminal problem.

**Activity Chosen: Think Pair and share**

**Justification:**

After explaining the concept of Hidden terminal problem in adhoc wireless networks, to understand the learning level of the student about finding the nodes suffering from hidden terminal problem this activity was given. Since the classes were taken in online mode this technique was used.

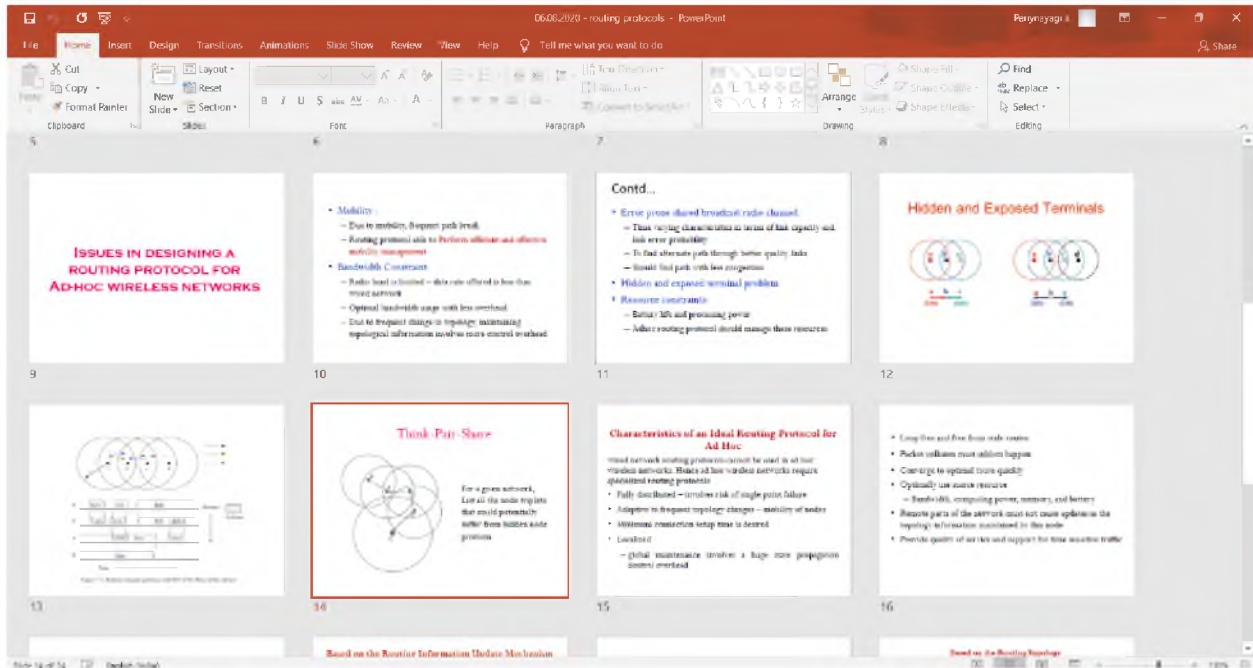
**Time Allotted for the Activity: 5 Minutes**

**Details of the Implementation:**

- Displayed the presentation slide with a case study and asked them to find the nodes after by the hidden terminal problem.
- Identified 10 pair of students and asked them to think for one minute about hidden terminal problem.
- After that, the students were asked to chat in whatsapp among themselves about hidden terminal problem.
- Finally, asked them to enter the answer in chat box.

**Assessment of Effectiveness/Success of the Activity:**

- ✓ This activity was effective for online mode of delivery. It helped to find the active participation of the students.
- ✓ The success of the activity is measured by the performance in the internal Assessment test and Online Quiz.



## Reflective Critique:

### Benefits of conducting this activity:

- Most of the students gave the right answer for the question and it helped to break the monotony during the online class.
- Interaction with the faculty member and their class mates during the online mode was effective.
- The fear of students was less compare when asking question in the online mode.

### Challenges:

- Due to time constrain, 10 pair of students were made to do the activity by a random call.

| Course Outcomes | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO2             | 3   | 1   | 1   | -   | -   | -   | -   | 2   | -   | 3    | -    | -    |

CO1: The students will be able to explain the Basics of Adhoc networks and Wireless Sensor Networks

### References:

1. C. Siva Ram Murthy and B. S. Manoj, —Ad Hoc Wireless Networks Architectures and Protocols, Prentice Hall, PTR, 2004.
2. An article - ‘Active Learning Strategies in Face-to-Face Courses’, Barbara J. Millis, The University of Texas at San Antonio Idea Paper #53, page 1-8.

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**  
**Academic Year: 2020 – 2021 (Odd Semester)**

**INNOVATIVE PRACTICE – Unit II**

**Degree, Semester & Branch: VII Semester B.E. ECE B**

**Course Code & Title: EC8702 Adhoc and wireless Sensor Networks**

**Name of the Faculty member: Dr.S.Periyanayagi**

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**ACTIVITY**

**Topic: Applications of WSN**

**Learning Outcome:**

- The students will be able to list the applications of wireless sensor networks.

**Activity Chosen: One-minute paper**

**Justification:**

The applications of Adhoc wireless networks were dealt in unit I. After explaining the concept of wireless sensor network and its architecture in order to know few applications which are familiar to the students based on real time application this activity was chosen.

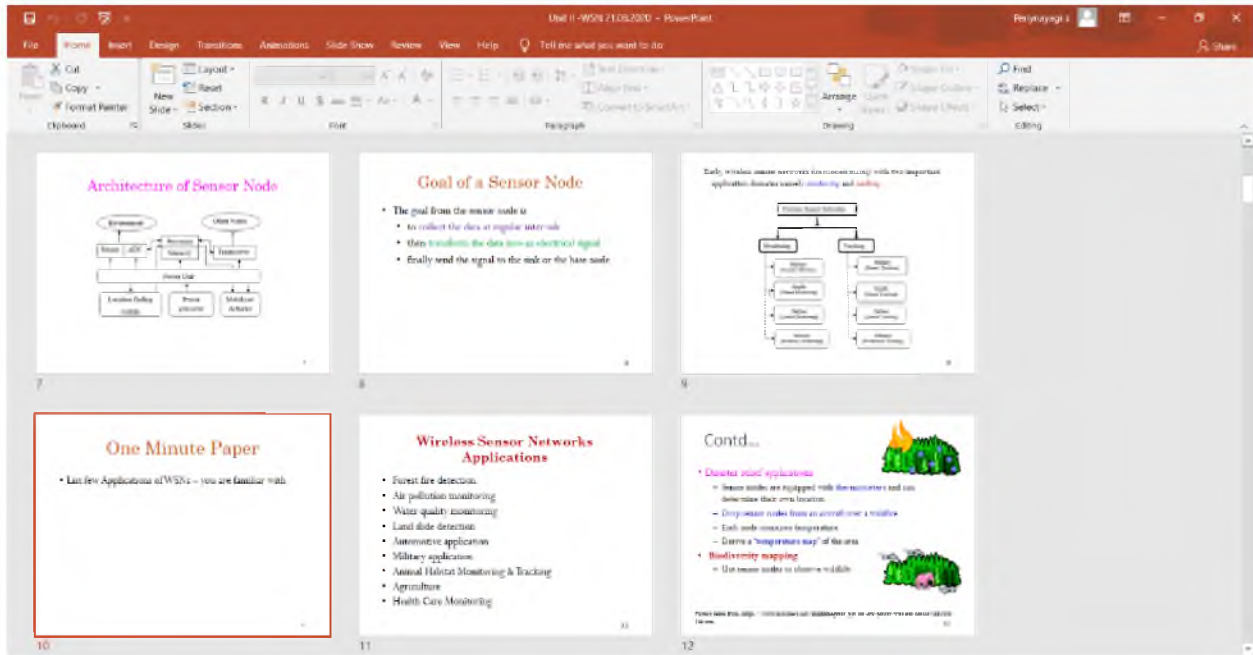
**Time Allotted for the Activity: 3 Minutes**

**Details of the Implementation:**

- The students were asked to take a paper and pen.
- They were asked to list few applications of wireless sensor networks.
- The classes were in the online mode they were asked to scan and submit the paper through LMS or email for getting attendance of that class.
- After completing the task, students uploaded the one-minute paper.

**Assessment of Effectiveness/Success of the Activity:**

- ✓ The assessment of effectiveness of the activity was felt based on the performance of the assignment related to application of WSN.
- ✓ After completing the activity, details of application of WSN were taught to the students based on the answers given by them.



**Reflective Critique:**

**Benefits of conducting this activity:**

- The activity helped to know the involvement of the students in listening to the online class.
- It helps to avoid unwanted distractions during the online class, since the activity is time bounded.

**Challenges:**

- 100 % involving the students in online class were a big challenge.

| Course Outcomes | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO2             | 3   | 2   | -   | -   | -   | -   | 1   | 2   | -   | 2    | -    | 2    |

CO2: The students will be able to Apply suitable routing algorithm based on network and user requirement

**References:**

1. Holger Karl , Andreas willig, —Protocol and Architecture for Wireless Sensor Networks, John wiley publication, Jan 2006
2. An article - ‘Active Learning Strategies in Face-to-Face Courses’, Barbara J. Millis, The University of Texas at San Antonio Idea Paper #53, page 1-8.

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**  
**Academic Year: 2020 – 2021 (Odd Semester)**

**INNOVATIVE PRACTICE – Unit III**

**Degree, Semester & Branch: VII Semester B.E. ECE B**

**Course Code & Title: EC8702 Adhoc and wireless Sensor Networks**

**Name of the Faculty member: Dr.S.Periyanayagi**

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**ACTIVITY**

**Topic: MAC Protocol of WSN**

**Learning Outcome:**

- The students will be able to explain the importance of MAC protocol in wireless sensor networks.

**Activity Chosen: One-minute paper**

**Justification:**

The concept related to MAC protocol in WSN is important. In order to make the students more attentive one-minute paper activity was planned.

**Time Allotted for the Activity: 3 Minutes**

**Details of the Implementation:**

- The students were asked to take a paper and pen.
- They were asked write the objective of MAC design of wireless sensor networks.
- The classes were in the online mode they were asked to scan and submit the paper through LMS or email for getting attendance of that class.
- After completing the task, students uploaded the one-minute paper.

**Assessment of Effectiveness/Success of the Activity:**

- ✓ The assessment of effectiveness of the activity was felt based on the performance of internal Assessment Test 2 (Part A -3 Question and Part B 6a.) related to MAC protocol.

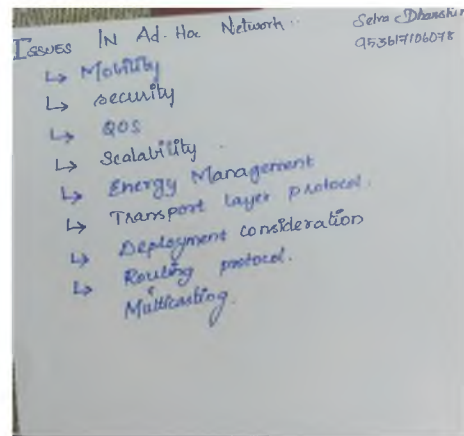
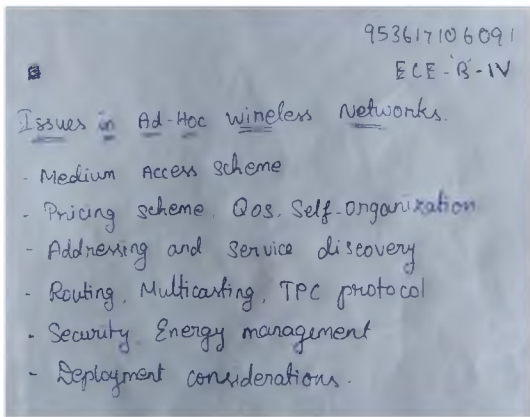
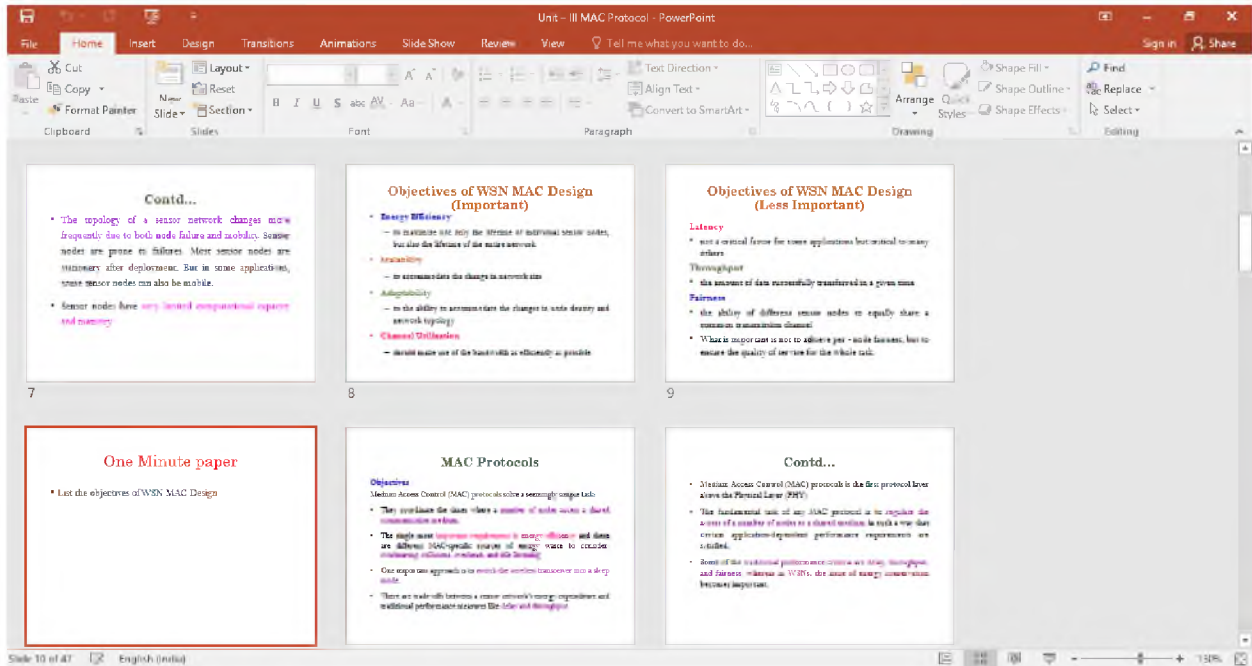
**Reflective Critique:**

**Benefits of conducting this activity:**

- The activity helped to know the involvement of the students in listening to the online class.
- It helps to avoid unwanted distractions during the online class, since the activity is time bounded.

**Challenges:**

- Recapping the concept in the online class was a challenging task.



| Course Outcomes | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 |
|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|
| CO3             | 3   | 1   | -   | -   | -   | -   | -   | 2   | -   | 2    | -    | 2    |

CO3: The students will be able to apply suitable routing algorithm based on network and user requirement


References:

1. Holger Karl , Andreas willig, —Protocol and Architecture for Wireless Sensor Networks, John wiley publication, Jan 2006
2. An article - ‘ Active Learning Strategies in Face-to-Face Courses’, Barbara J. Millis, The University of Texas at San Antonio Idea Paper #53, page 1-8.

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**  
**Department Advisory Committee Meeting-III**  
**List of DAC Members (Revised)**

Date: 24.11.2020

| Sl. No. | Name of the DAC Members        | Affiliation  | Position        |
|---------|--------------------------------|--|-----------------|
| 1.      | Mr.Solaikutty Dhanabal         | Business Development Manager-Academic Programs,<br>National Instruments India, Chennai.  | R&D Member      |
| 2.      | Mr.K.Moorthi                   | Director-Business Development,<br>Enthu Technology Solutions India Pvt Ltd,<br>Coimbatore.   | Industry Member |
| 3.      | Dr.A.Rajeswari                 | Professor & Head,<br>Department of Electronics and Communication Engineering,<br>Coimbatore Institute of Technology, Coimbatore.         | Academic Member |
| 4.      | Dr.S.Periyanyagi               | Professor & Head.<br>Department of Electronics and Communication Engineering,<br>Ramco Institute of Technology, Rajapalayam.             | Convener        |
| 5.      | Dr.B.Deepalakshmi              | Associate Professor,<br>Department of Electronics and Communication Engineering,<br>Ramco Institute of Technology, Rajapalayam.          | Co-Convener     |
| 6.      | Dr.K.Basarikodi                | Professor,<br>Department of Mathematics,<br>Ramco Institute of Technology, Rajapalayam.  | Internal Member |
| 7.      | Dr.M.Kaliappan                 | Associate Professor,<br>Department of Computer Science and Engineering,<br>Ramco Institute of Technology, Rajapalayam.                   | Internal Member |
| 8.      | Mrs.T.Vigneswari               | Assistant Professor (Sr.Gr.),<br>Department of Physics,<br>Ramco Institute of Technology, Rajapalayam.                                   | Internal Member |
| 9.      | Mr.B.Kannan                    | Assistant Professor (Sr.Gr.),<br>Department of Electronics and Communication Engineering,<br>Ramco Institute of Technology, Rajapalayam. | Internal Member |
| 10.     | Mr.B.Veeramani<br>Viswanathan, | Hardware Design Engineer,<br>VVDN Technologies, Chennai.   | Alumni Member   |
| 11.     | Mrs.S.Mareeswari               | Engineer,<br>Mobeveil Technologies India Private Limited,<br>Chennai.  | Alumni Member   |

  
 24/11/2020  
 HOD/ECE

  
 24/11/20  
 Principal

**RAMCO INSTITUTE OF TECHNOLOGY**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**ACADEMIC YEAR 2020 - 2021**


Ref.: RIT/ECE/DAC/03

Date: 24.11.2020

**Circular**

The third Department Advisory Committee meeting is scheduled on 28.11.2020 (Saturday) from 10.00 AM to 11.30 AM through Google meet. All DAC members and faculty members are invited to attend the meeting. The agenda are given below.

| S.No. | Topics to present  | Faculty In charge                                |
|-------|--|--|
| 1.    | Welcome Address  | Dr.S.Periyamayagi                                |
| 2.    | Dissemination of Vision, Mission, PEOs and PSOs  | Mr.S.Vijayakumar                                 |
| 3.    | Review of previous meeting (2 <sup>nd</sup> DAC) and Review of Quality Objectives  | Dr.B.Deepa Lakshmi                               |
| 4.    | Teaching and Learning Process <ul style="list-style-type: none"> <li>• Innovative Practices / Curriculum Gap and Content Beyond Syllabus</li> </ul>  | Mr.K.Ragavan<br>Mrs.R.Chitra                     |
| 5.    | Laboratory <ul style="list-style-type: none"> <li>• Additional lab experiments and Virtual Lab</li> </ul>  | Mr.B.Kannan<br>Ms.R.Divya                        |
| 6.    | Course Outcomes and Program Outcomes <ul style="list-style-type: none"> <li>• Assessment Methods,</li> <li>• Attainment of COs, POs, PSOs with program effectiveness</li> <li>• Action taken for outcome attainment</li> <li>• Correctiveness and preventiveness</li> </ul>  | Mr.A.Azhagu Jaisudhan Pazhani<br>Mr.A.Rameshbabu |
| 7.    | Students Performance <ul style="list-style-type: none"> <li>• Result analysis</li> <li>• Internship and Inplant Training</li> <li>• Student participation co-curricular and extra-curricular</li> <li>• Student project</li> <li>• Student achievements</li> </ul>   | Mrs.V.SrirenaNachiyar<br>Mr.R.Deiva Nayagam      |
| 8.    | Department and Industry Interaction <ul style="list-style-type: none"> <li>• Industry projects</li> <li>• Publication with industry</li> <li>• MoUs</li> </ul>   | Mr.G.Sivakumar                                   |
| 9.    | Students feedback related to teaching and learning <ul style="list-style-type: none"> <li>• Training and Placement Progress</li> <li>• Feedback from Recruiters and Employers</li> </ul> Alumni Interaction and Contribution <ul style="list-style-type: none"> <li>• Feedback received from the Alumni</li> </ul> | Mr.P.Gunasekaran                                 |
| 10.   | Faculty contribution <ul style="list-style-type: none"> <li>• Participation</li> <li>• Publication – Conference / Journal / Book Chapter</li> <li>• Patent &amp; Copy rights</li> <li>• Research Proposals</li> </ul>  | Mrs.S.Jeeva<br>Mr.D.Gopinath                     |
| 11.   | Activity leads to Quality improvements   | Mr.P.Venkatesh                                   |
|       | Any other matters  |  |
| 12.   | Vote of Thanks   | Mr.B.Kannan                                      |

  
HOD(ECE)  
24/11/2020

  
Vice Principal

  
Principal

Copy to

- 1) All DAC members and faculty members through email
- 2) File

**RAMCO INSTITUTE OF TECHNOLOGY, RAJAPALAYAM.****(Approved by AICTE, Affiliated to Anna University, Chennai)****DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

Ref.: RIT/Academic/ECE/DAC/2020-2021/01

Date: 14.12.2020

**MINUTES OF THIRD DEPARTMENT ADVISORY COMMITTEE MEETING**

The Third Department Advisory Committee Meeting was held on 28.11.2020 through an online platform (Google Meet) with the following Agenda.

- Dissemination of Vision, Mission, PEOs, and PSOs
- Review of the previous meeting (2<sup>nd</sup> DAC) and Review of Quality Objectives
- Teaching and Learning Process
  - Innovative Practices / Curriculum Gap and Content Beyond Syllabus
- Laboratory (Additional lab experiments and Virtual Lab)
- Course Outcomes and Program Outcomes
  - Assessment Methods,
  - Attainment of COs, POs, PSOs with program effectiveness
  - Action is taken for outcome attainment
  - Correctiveness and preventiveness
- Students Performance
  - Result analysis
  - Internship and Inplant Training
  - Student participation in co-curricular and extra-curricular
  - Student project
  - Student achievements
- Department and Industry Interaction
  - Industry projects
  - Publication with industry
  - MoUs
- Students feedback related to teaching and learning
  - Training and Placement Progress
  - Feedback from Recruiters and Employers
- Alumni Interaction and Contribution
  - Feedback received from the Alumni
- Faculty contribution



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- Participation
- Publication – Conference / Journal / Book Chapter
- Patent & Copy rights
- Research Proposals
- Activity leads to Quality improvements
- Any other matters

**1. Welcome Address****(by Dr.S.Periyanayagi, HOD/ECE)**

Dr.S.Periyanayagi, HOD/ECE, welcome and introduced the distinguished R&D, Industry, Academic, Convener, Co-Convener, Internal, and Alumni DAC members:

|                                    |  |
|------------------------------------|--|
| Mr.Solaikutty Dhanabal, R&D Member | Business Development Manager-Academic Programs, National Instruments India, Chennai.   |
| Mr.K.Moorthi, Industry Member      | Director-Business Development, Entho Technology Solutions India Pvt Ltd, Coimbatore.   |
| Dr.A.Rajeswari, Academic Member    | Professor & Head, Department of Electronics and Communication Engineering, Coimbatore Institute of Technology, Coimbatore.         |
| Dr.S.Periyanayagi, Convener        | Professor & Head. Department of Electronics and Communication Engineering, Ramco Institute of Technology, Rajapalayam.             |
| Dr.B.Deepalakshmi, Co-Convener     | Associate Professor, Department of Electronics and Communication Engineering, Ramco Institute of Technology, Rajapalayam.          |
| Dr.K.Basarikodi, Internal Member   | Professor, Department of Mathematics, Ramco Institute of Technology, Rajapalayam.  |
| Dr.M.Kaliappan, Internal Member    | Associate Professor, Department of Computer Science and Engineering, Ramco Institute of Technology, Rajapalayam.                   |
| Mrs.T.Vigneswari, Internal Member  | Assistant Professor (Sr.Gr.), Department of Physics, Ramco Institute of Technology, Rajapalayam.                                   |
| Mr.B.Kannan, Internal Member       | Assistant Professor (Sr.Gr.), Department of Electronics and Communication Engineering, Ramco Institute of Technology, Rajapalayam. |
| Mrs.S.Mareeswari, Alumni Member    | Engineer, Mobiveil Technologies India Private Limited, Chennai.  |

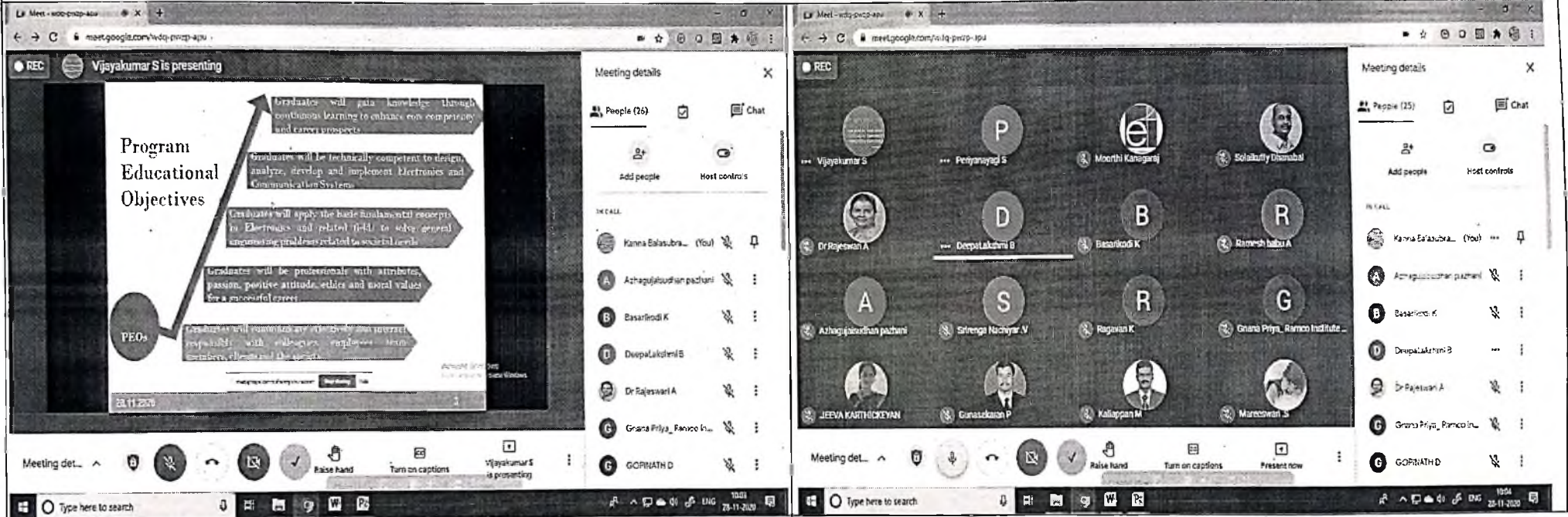
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**2. Dissemination of Vision, Mission, PEOs, and PSOs**

(by Mr.S.Vijayakumar, AP/ECE)

| Points Delivered   | Suggestions given by DAC Members | Remarks with Target Date and Responsibility |
|--|----------------------------------|---|
| <ul style="list-style-type: none"> <li>Explained about the department's Vision, Mission, Program Educational Objectives (PEOs), and Program Specific Outcomes (PSOs).</li> </ul> | <p>Nil</p>                       | <p>NIL</p>                                  |

**Screenshot**



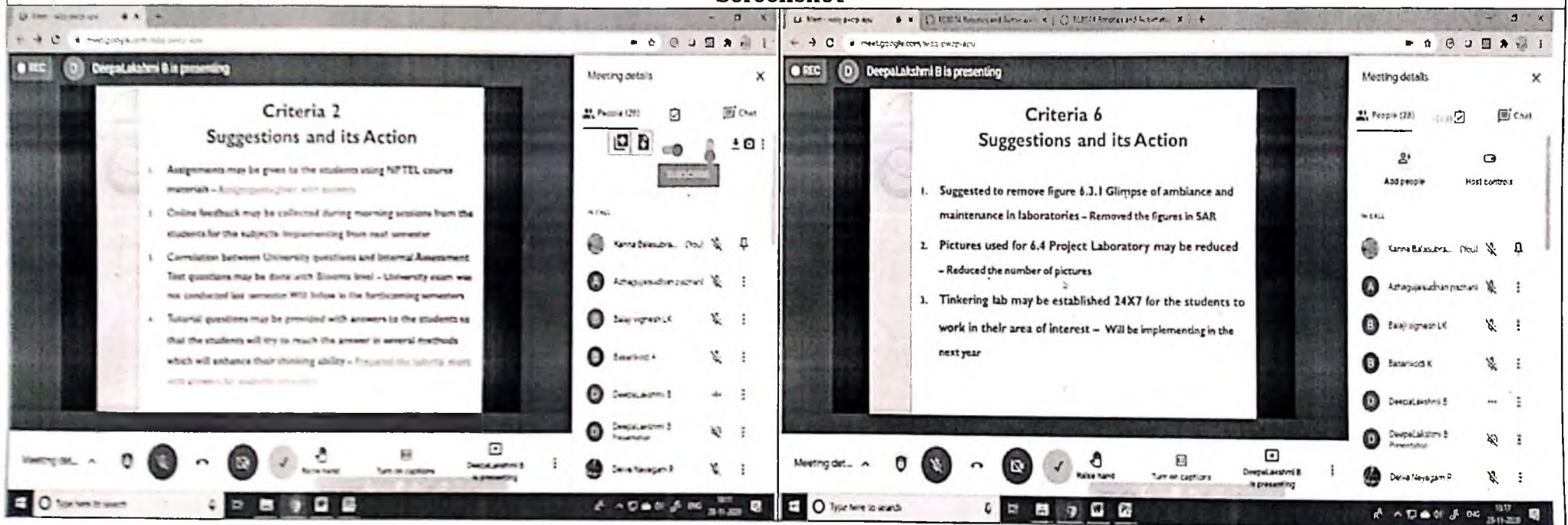
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3. Review of previous meeting (2<sup>nd</sup> DAC) and Review of Quality Objectives

(by Dr.B.Deepa Lakshmi, Asso. Prof/ECE)

| Points Delivered  | Suggestions given by DAC Members  | Remarks with Target Date and Responsibility   |
|---|---|---|
| <ul style="list-style-type: none"> <li>Presented the review of the previous DAC II meeting and the quality objectives status report for the Academic year 2019-2020.</li> <li>Presented the implementations as per the suggestions given by the DAC members during the previous meeting.</li> </ul> | <ul style="list-style-type: none"> <li>Project 3<sup>rd</sup> review marks may be awarded by considering internship, implant training, paper presentation &amp; hackathon.</li> <li>Faculty performance appraisal may be revised by considering TLP and R&amp;D separately.</li> <li>Tinkering lab may be established 24x7 for the students.</li> </ul> | <p><b>Remarks:</b></p> <ul style="list-style-type: none"> <li>For Suggestion 1: Planned to implement in the upcoming semester (Batch 2017-2021).</li> <li>For Suggestion 2: Included in the faculty performance appraisal for the Academic Year 2019-2020 Even Semester.</li> <li>For Suggestion 3: Separate tinkering laboratory will create for the students to access the laboratory at any time.</li> </ul> <p><b>Target Date:</b> Januray 2021<br/> <b>Responsibility:</b> Project Co-ordinators, FacultyIn-charge</p> |

## Screenshot



15/12/20

#### 4. Teaching and Learning Process

(by Mr.K.Ragavan, AP(Sr. Gr.)/ECE & Mrs.R.Chitra, AP/ECE)

- Innovative Practices/Curriculum Gap and Content Beyond Syllabus

| Points Delivered   | Suggestions given by DAC Members   | Remarks with Target Date and Responsibility  |
|--|--|--|
| <ul style="list-style-type: none"> <li>Enlightened about the process of identifying the curricular gap from Anna University's curriculum.</li> <li>Shared the Steps taken to get identified gaps included in the curriculum based on the feedback/suggestions received from internal and external stakeholders for the Academic year 2019-20 &amp; 2020-21.</li> <li>Explained innovative practices used by our faculty members for the Academic year 2019-20 &amp; 2020-21 for improving Teaching-Learning Process.</li> <li>Shared the features and utilization of the Learning Management System(LMS) through the canvas.</li> <li>Elaborated about new methods are incorporated for the teaching-learning process based on discussion done in a department meeting and Chairman meeting.</li> <li>Explained the analysis of student satisfaction survey from NAAC and taken the actions based on the student's suggestions.</li> <li>Expounded the process involved in an effective and transparent assessment.</li> </ul> | <ul style="list-style-type: none"> <li>The DAC members suggested to incorporate the GATE Exam questions in Internal Assessment Test and Assignments to improve the higher-order skill of the students.</li> <li>Train the students in open-source software and make them do projects.</li> </ul> | <p><b>Remarks:</b></p> <ul style="list-style-type: none"> <li>For Suggestion 1: GATE questions were included in Tutorials and Assignments</li> <li>For Suggestion 2: Identify available open-source software related to our department and training will be given in the upcoming semester.</li> </ul> <p><b>Target Date:</b> May 2021<br/> <b>Responsibility:</b> Faculty Members</p> |

#### Screenshot

|       | Planned | Conducted | Odd Sem | Even Sem        |
|-------|---------|-----------|---------|-----------------|
| IE(I) | 19      | 17        | 13      | Yet to Complete |
| IETE  | 08      | 06        | 05      | Yet to Complete |
| ISTE  | 13      | 10        | 05      | Yet to Complete |

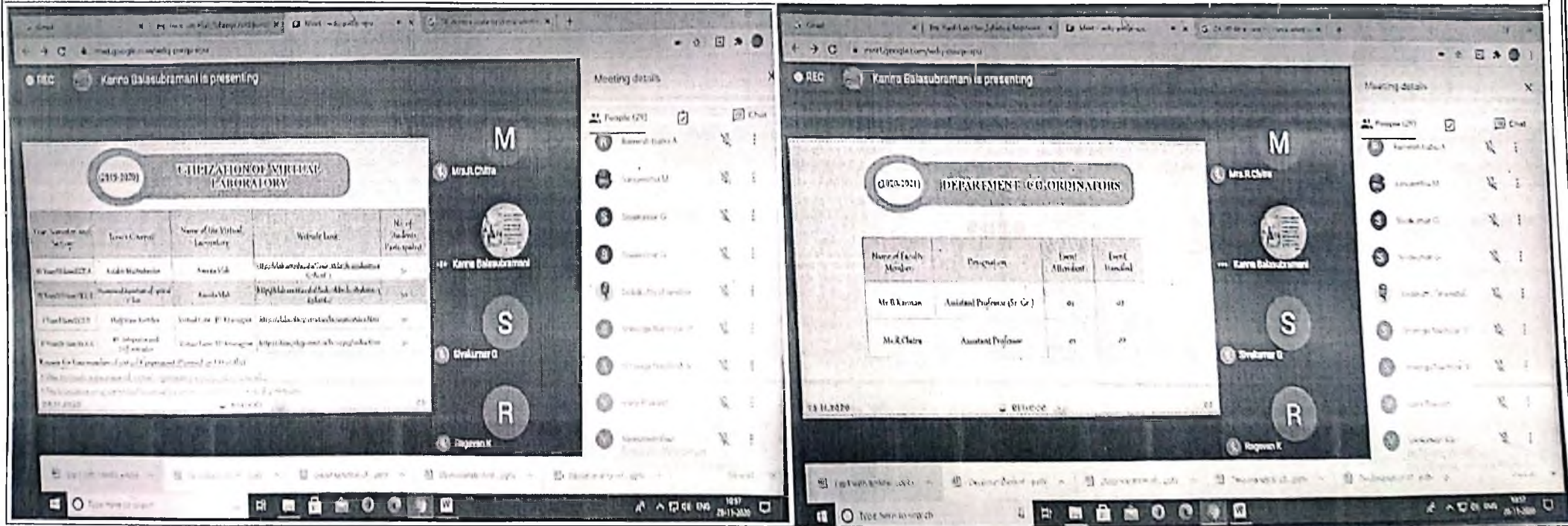
**5. Laboratory**

(by Mr.B.Kannan, AP(Sr. Gr.)/ECE & Ms.R.Divya, AP/ECE)

- Virtual Lab
- Additional lab experiments

| Points Delivered  | Suggestions given by DAC Members   | Remarks with Target Date and Responsibility   |
|---|--|---|
| <ul style="list-style-type: none"> <li>• Explained the various events attended and handled by the department Virtual Laboratory co-ordinators related to access/explore various Virtual Laboratories.</li> <li>• Shared the utilization of the virtual laboratory for the academic year 2019-2020.</li> <li>• Shared the utilization of the Additional lab experiments for the academic year 2019-2020.</li> <li>• Expounded the possible Virtual Laboratories for the academic year 2020-2021 (III, V &amp; VII semester) theory and laboratory subjects.</li> </ul> | <ul style="list-style-type: none"> <li>• The DAC members enquired about the utilization of virtual laboratory by all the students.</li> <li>• Asked to confirm whether all the students can access the virtual labs with their specified login.</li> <li>• Documentation regarding completed virtual experiments.</li> </ul> | <p><b>Remarks:</b></p> <ul style="list-style-type: none"> <li>• For Suggestion 1: All Virtual labs are open access.</li> <li>• For Suggestions 2 &amp; 3: Individual students will submit their observations as PDF documents to the corresponding faculty member.</li> </ul> <p><b>Target Date:</b> January 2021.<br/> <b>Responsibility:</b> Co-ordinators and Faculty Members.</p> |

Screenshot



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**6. Assessment Methods, Attainment of COs, POs, PSOs with program Effectiveness,**

**(by Mr.A.Azhagu Jaisudhan Pazhani, AP(Sr. Gr)/ECE)**

- Assessment Methods
- Attainment of COs, POs, PSOs with program effectiveness
- Action is taken for outcome attainment
- Correctness and preventiveness

| Points Delivered  | Suggestions given by DAC Members   | Remarks with Target Date and Responsibility  |
|---|--|--|
| <p>Presented the attainment of COs, POs &amp; PSOs for the academic year 2019-2020. The presentation covers the following points:</p> <ul style="list-style-type: none"> <li>• The overview of assessment methods is presented for the 2013 regulation and 2017 regulations.</li> <li>• CO attainment targets for regulation 2013 and 2017 are discussed.</li> <li>• CO attainment for 2016-20 batch (VII Semester), 2017-21batch (V &amp;VI Semester), 2018-22 batch (III&amp;IV Semester) are discussed and are compared with the previous three batches.</li> <li>• Course Exit Survey scale value (10%) of 2016-2020 batch, 2017-21 batch, and 2018-22 batch are added with CO attainment (90%) for the overall CO calculations</li> <li>• For CO not attained subject, improvement action has been presented to attain the target.</li> <li>• Every year PO attainment target has increased. For the batch 2016-2020, it is decided as 1.8</li> <li>• PES &amp; Alumni Survey are collected by online mode and five-point scale value was calculated and displayed.</li> </ul> | <ul style="list-style-type: none"> <li>• Committee members suggested to collect course exit survey after the arrival of University Examination results for the corresponding course.</li> <li>• Members suggested to verify course outcome attainment of the course during an internal audit.</li> <li>• Revise the assessment methods for CO calculations.</li> </ul> | <p><b>Remarks:</b></p> <ul style="list-style-type: none"> <li>• For Suggestion 1: In Future CES (course exit survey) will be collected after university examination results.</li> <li>• For Suggestion 2: As per suggestion CO attainment value will verify during the next internal audit.</li> <li>• As per suggestion, more assessment methods will include in the next CO attainment calculations.</li> </ul> <p><b>Target Date:</b> February 2021<br/> <b>Responsibility:</b> Co-ordinators and Faculty Members</p> |

**Screenshot**

**Overview of Assessment Methods**

- For Academic year 2019-20 ODD Semester,
  - IAT I, II, III
  - Assignments and Tutorials.
  - University Assessment (60%)
  - Internal Assessment (40%)
  - Indirect Assessment – Course Exit Survey (10%)
- For Academic year 2019-20 Even Semester,
  - IAT I, II
  - Assignments and Tutorials.
  - University Assessment (60%)
  - Internal Assessment (40%)
  - Indirect Assessment – Course Exit Survey (10%)

**CO Attainment Target (Regulation 2013)**

| Batch                          | Target Attainment  |
|--------------------------------|--|
| 2013-2017 (AGPA <sub>1</sub> ) | 1.5 for Theory Courses & 2 for Laboratory Courses/Projects   |
| 2014-2018 (AGPA <sub>2</sub> ) | AGPA <sub>1</sub> × 0.3                                      |
| 2015-2019 (AGPA <sub>3</sub> ) | $\left(\frac{AGPA_1 + AGPA_2}{2}\right) \times 0.3$          |
| 2016-2020                      | $\left(\frac{AGPA_1 + AGPA_2 + AGPA_3}{3}\right) \times 0.3$ |

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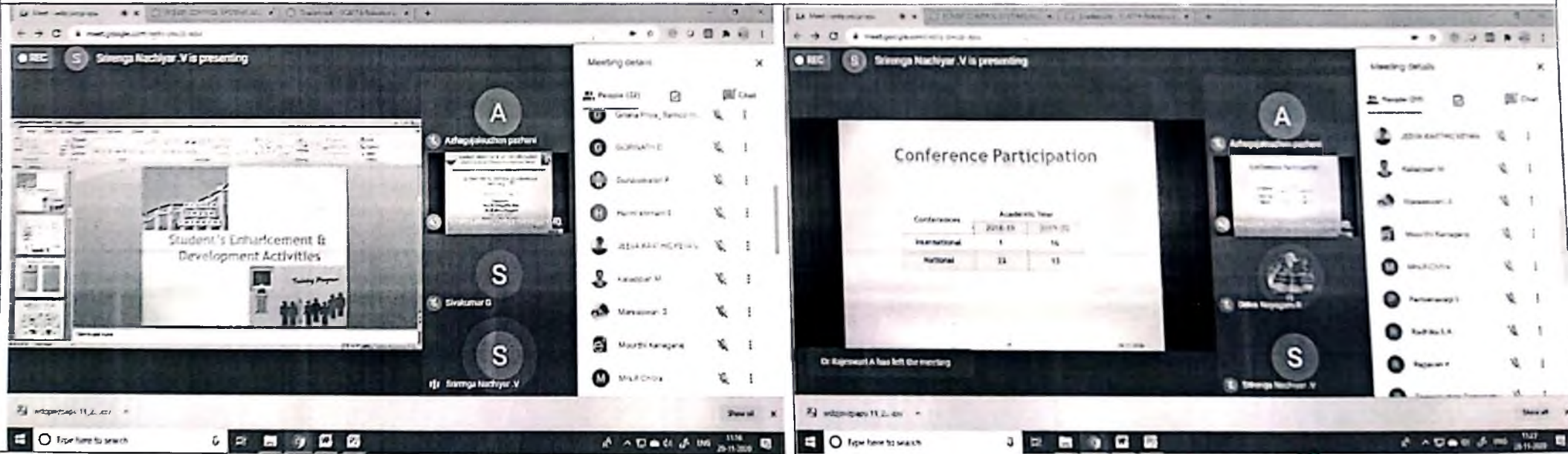
**7. Students Performance**

(by Mrs.V.SrirengaNachiyar, AP(Sr. Gr.)/ECE & Mr.R.Deiva Nayagam, AP/ECE)

- Result analysis.
- Internship and In-plant Training.
- Student participation in co-curricular and extra-curricular.
- Student project.
- Student achievements.

| Points Delivered   | Suggestions given by DAC Members  | Remarks with Target Date and Responsibility  |
|--|---|--|
| <ul style="list-style-type: none"> <li>• Explained the Result analysis of the students in the Anna University exam.</li> <li>• Explained the various events participated by the students in various institutions and outside of the state.</li> <li>• Explained the achievements of the students in extra and Co-curricular activities in various other institutions and outside of the state.</li> <li>• Shared the participation of the students in Internship and in-plant training in industries</li> <li>• Shared the details of the student's project and publications in journals, National and International conferences.</li> </ul> | <ul style="list-style-type: none"> <li>• The DAC members suggested to keep the documentation with proof well for all activities performed by students.</li> </ul> | <p><b>Remarks:</b></p> <ul style="list-style-type: none"> <li>• For Suggestion: Participation and Achievement Proofs need to be collected.</li> </ul> <p><b>Target Date:</b> January 2021 (Once Students entered into college for missing documents).</p> <p><b>Responsibility:</b> Co-ordinators and Faculty Members.</p> |

**Screenshot**



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**8. Department and Industry Interaction**

(by Mr.G.Sivakumar, AP/ECE)

- Industry projects
- Publication with industry
- MoUs

| Points Delivered   | Suggestions given by DAC Members  | Remarks with Target Date and Responsibility  |
|--|---|--|
| <ul style="list-style-type: none"> <li>• Explained the industry projects and details of industry projects in the academic year (2019-2020).</li> <li>• Shared the details of MOUs signed in the academic year 2019-2020 with various industries.</li> <li>• Explained the impact of MoUs.</li> </ul> | <ul style="list-style-type: none"> <li>• To improve the department and industry interaction, the DAC members suggested to get at least one problem statement per industry.</li> </ul> | <p><b>Remarks:</b></p> <ul style="list-style-type: none"> <li>• For Suggestion: Faculty in-charge asked to get industry-related problem statement form allotted Industry.</li> </ul> <p><b>Target Date:</b> January 2021<br/> <b>Responsibility:</b> Co-ordinators and Faculty Members</p> |

Screenshot



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**9. Students feedback related to teaching and learning**

(by Mr.P.Gunasekaran, AP/ECE)

**Training and Placement Progress**

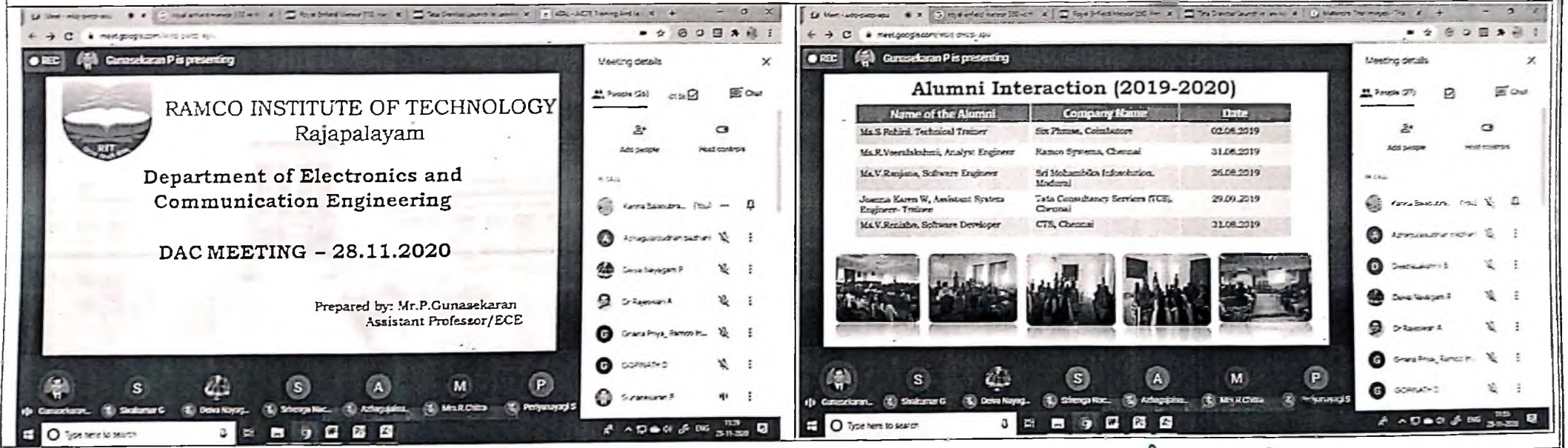
- Feedback from Recruiters and Employers

**Alumni Interaction and Contribution**

- Feedback received from the Alumni

| Points Delivered  | Suggestions given by DAC Members   | Remarks with Target Date and Responsibility   |
|---|--|---|
| <ul style="list-style-type: none"> <li>• Explained student's feedback related to the teaching-learning process and action taken.</li> <li>• Discussed the placed student details with their salary packages and list of companies invited for on-campus and off-campus during the academic year 2019-2020.</li> <li>• Presented the training provided for the 2016-2020 batch for placement and action taken from the Recruiter and Employer feedback.</li> <li>• Presented the feedback analysis of Parents and Alumni.</li> </ul> | <ul style="list-style-type: none"> <li>• The DAC members suggested to provide GATE coaching for students</li> <li>• GATE questions can also be part of the Internal Assessment test and Tutorials which help to get placed in core industries.</li> <li>• Train the students in the basics of Core languages and awareness for the core to get placed in core industries.</li> <li>• Train the students for basic programming languages like C, Python, Java, SQL, etc.</li> </ul> | <p><b>Remarks:</b></p> <ul style="list-style-type: none"> <li>• For Suggestion 1: In connection with GATE Forum GATE coaching is provided to the interested students</li> <li>• For Suggestion 2: GATE questions are asked in Assignments.</li> <li>• For Suggestion 3: Value-added courses on latest technologies IC test Engineering, IoT and LabVIEW</li> <li>• For Programming languages training from companies and by Internal faculty member</li> </ul> <p><b>Target Date:</b> April 2021<br/> <b>Responsibility:</b> Respective Co-ordinators and Faculty Members</p> |

**Screenshot**



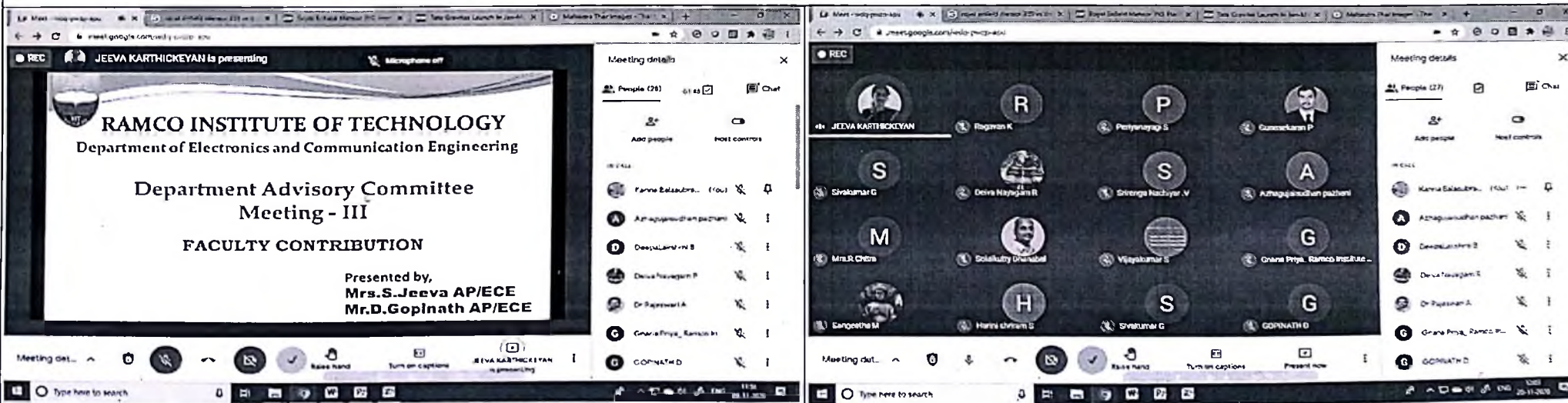
**10. Faculty Contribution**

(by Mrs.S.Jeeva, AP/ECE & Mr.D.Gopinath, AP/ECE)

- Participation
- Publication – Conference / Journal / Book Chapter
- Patent & Copyrights
- Research Proposals

| Points Delivered   | Suggestions given by DAC Members  | Remarks with Target Date and Responsibility  |
|--|---|--|
| <ul style="list-style-type: none"> <li>• Presented Faculty Cadre Ratio for academic Year 2019-2020 &amp; 2020-2021.</li> <li>• Presented the statistics about faculty participation in FDP / STTP / Webinar (State / National / International Level).</li> <li>• Briefed faculty publication details along with Citations, H-index, i-10 Index.</li> <li>• Presented Online Course (EdX, Coursera) completed by faculty members.</li> <li>• Provided the detail about additional Sabbatical training, IUCEE, NI LabVIEW training completed by the faculty member.</li> <li>• Elaborated the various sanctioned funded projects like MODOROB, TNSCST &amp; FAER.</li> <li>• Presented the Patent filed details.</li> <li>• Presented the submitted research project proposals.</li> </ul> | <ul style="list-style-type: none"> <li>• The DAC members suggested to improve more number of referred journal Publications.</li> <li>• Funding Project proposals are done by consultation with Industry Experts.</li> </ul> | <p><b>Remarks:</b></p> <ul style="list-style-type: none"> <li>• For Suggestion 1: Enrich their Knowledge in Research &amp; Development activities</li> <li>• For Suggestion 2: Faculty members are assigned in-charge for each MoU signed Industry. They are insisted to provide the action for funded Project proposal and other R&amp;D activities.</li> </ul> <p><b>Target Date:</b> Continuous<br/> <b>Responsibility:</b> All the Faculty Members</p> |

**Screenshot**

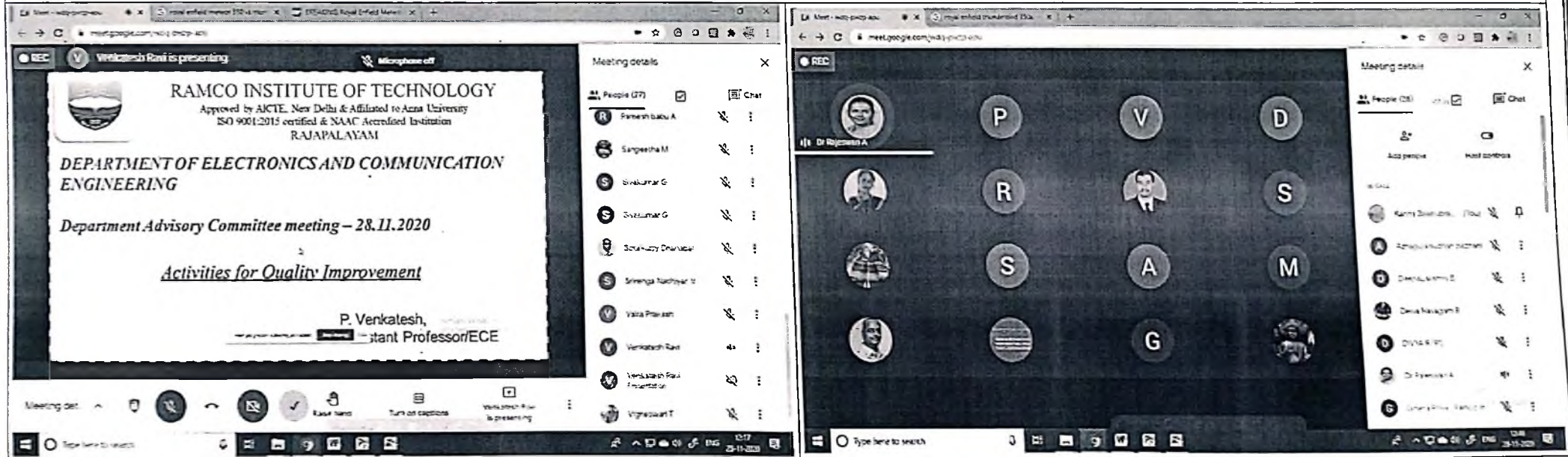


**11. Activity leads to Quality Improvement**

(by Mr.P.Venkatesh, AP/ECE)

| Points Delivered   | Suggestions given by DAC Members  | Remarks with Target Date and Responsibility  |
|--|---|--|
| <ul style="list-style-type: none"> <li>• Explained the various project-related events and activities conducted and attended for transforming the projects into proposals, patents, product, etc.,</li> <li>• Explained about various online courses, value-added courses, department level, college level, and national level courses conducted and attended by faculty members and students along with their outcomes.</li> <li>• Explained about research-oriented impacts and outcomes such as publications and conferences, the establishment of modernized communication laboratory under AICTE-MODROB scheme, International Web Conference on Smart Engineering Technologies (IWCSET-2020).</li> <li>• Explained various programs organized under IITM-PALS, RIT-IQAC for quality improvement in educational practices, the publication of patents, virtual labs, and placement.</li> <li>• Explained about POs, PSOs, and their attainments along with the actions taken for attainment.</li> <li>• Academic audit process in RIT.</li> </ul> | <ul style="list-style-type: none"> <li>• The DAC members suggested that CO attainment shall be included in the Academic audit.</li> </ul> | <p><b>Remarks:</b></p> <ul style="list-style-type: none"> <li>• CO attainment shall be included in forthcoming audits</li> </ul> <p><b>Target Date:</b> Upcoming academic audits</p> |

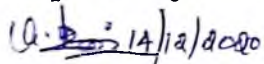
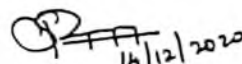
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**Suggestions provided by the DAC members a summary.**

- More students may be encouraged to write the GATE exam which will enhance the number of placements in core companies.
- GATE questions which have higher-order thinking may be incorporated in Internal Assessment Tests.
- Students may be encouraged to undergo online internships since industries started providing online internships due to the pandemic situation.
- Students may be given training using the available open-source software like 'Scilab', 'C' and encourage them to do projects and collect feedback from the students
- For CO-attainment, once the result is received, a course exit survey may be collected from the students.
- Target CO in cognitive level
- Assessment patterns may be changed by the horizontal approach instead of the top-down approach as written mode to open book test or Theory paper with the project.
- Higher-order thinking of the students may be assessed as 20% for the analytical level and 40% for the applying level.
- Co attainment score may be included in the performance appraisal of the faculty members.
- Stress management and health may be concentrated for students by providing running for half an hour in the playground.
- Value-added courses may be organized on topics such as Ethics, Stress Management, and health management.
- Problems may be collected from the MOU industries and can be solved by the students
- The software may be available in multiple places. Laptop, Mobile Phone, etc.
- Entrepreneurship skills may be enhanced by providing video by young start-ups. 10 to 30 students may be initiated in the college. MSME is offering funds for start-ups too.
- Students must be trained with basic embedded C, Verilog software
- Awareness to be given to the students about Information and Technology - Engineering) 'C', 'C++', 'Java', Python, etc.,
- Skill improvement is important and assessment may be done with credits.

**Prepared by:**  
14/12/2020**Verified by:**  
14/12/2020**Approved by:**  
15/12/20

**Copy to: 1) Circulate among all members for needful action.  
2) File**

# RAMCO INSTITUTE OF TECHNOLOGY

## CONSOLIDATED DETAILS OF STUDENTS FEEDBACK

Academic Year: 2020-2021(odd Semester)

Department of ECE

Year/Semester:III / V - ECE A Section

| Sl.No | Name of the subject                            | Faculty handled     | Teaching Effectiveness(40)  |  |   |   | Maturity Level (30)  |   |  |   | Total (100) |
|-------|--|---------------------|---|--|---|---|--|---|--|---|-------------|
|       |  |                     | Level of preparedness (whether adequately prepared for class or not) (10) | Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10) | Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10) | Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10) | Ease of maintenance of order/ Class control (without threatening or punishment) (10) | Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10) | Intellectual stature (commands respect of students by intellectual and maturity levels) (10) | Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10) |             |
| 1     | ORO551 - RENEWABLE ENERGY SOURCES              | THANGAM E           | 10  | 10   | 10  | 10  | 10   | 10  | 10   | 9.97  | 99.9        |
| 2     | OCH551 - Industrial Nanotechnology             | SENTHILKUMAR O      | 9.56  | 9.33   | 9.56  | 9.33  | 9.44   | 9.33  | 9.44   | 9.52  | 94.55       |
| 3     | OCE551 - Air Pollution and Control Engineering | KANTHIMATHI G       | 9.3   | 9.3  | 9.2   | 9   | 9.2  | 9.1   | 9.2  | 9.57  | 93          |
| 4     | OIT551 - DATABASE MANAGEMENT SYSTEMS           | VIGNESH SARAVANAN K | 9.71  | 10   |   | 9.86  | 10   | 9.71  | 9.71   | 9.81  | 98.28       |

|    |   |                            |      |      |      |      |      |      |      |       |
|----|---|----------------------------|------|------|------|------|------|------|------|-------|
| 5  | EC8501 - Digital Communication                  | GNANA PRIYA G              | 9.44 | 9.61 | 9.42 | 9.56 | 9.47 | 9.53 | 9.51 | 95.25 |
| 6  | EC8553 - Discrete Time Signal Processing        | JEEVA S                    | 9.17 | 8.78 | 8.72 | 8.83 | 9    | 8.94 | 9.11 | 89.61 |
| 7  | EC8552 - Computer Architecture and Organization | AZHAGU JAISUDHAN PAZHANI A | 9.39 | 9.31 | 9.33 | 9.39 | 9.42 | 9.42 | 9.47 | 94.34 |
| 8  | EC8551 - Communication Networks                 | GUNASEKARAN P              | 9.72 | 9.67 | 9.64 | 9.58 | 9.58 | 9.67 | 9.64 | 96.5  |
| 9  | EC8073 - Medical Electronics                    | CHITRA R                   | 9.54 | 9.42 | 9.38 | 9.42 | 9.33 | 9.46 | 9.58 | 94.34 |
| 10 | EC8074 - Robotics and Automation                | KANNAN B                   | 10   | 10   | 10   | 10   | 10   | 10   | 10   | 100   |
| 11 | GE8077 - Total Quality Management               | VENKATESH P                | 10   | 10   | 9.91 | 10   | 9.91 | 10   | 10   | 99.64 |

*Class Adviser*  
Class Adviser 2/12/2020

*HoD*  
HoD 2/12/2020

*Principal*  
Principal 2/12

# RAMCO INSTITUTE OF TECHNOLOGY

## CONSOLIDATED DETAILS OF STUDENTS FEEDBACK

Academic Year: 2020-2021(even Semester)

Department of ECE

Year/Semester:III / VI - ECE A Section

| Sl.No | Name of the subject                           | Faculty handled    | Teaching Effectiveness(40)  |  |   |   | Maturity Level (30)  |   |  |   | Total (100) |
|-------|---|--------------------|---|--|---|---|--|---|--|---|-------------|
|       |   |                    | Level of preparedness (whether adequately prepared for class or not) (10) | Classroom delivery - whether by reading or interactive communication (use of analogies, examples) (10) | Use of training aids like models, charts, video, animated computer graphics, presentations, effective board work, etc. (10) | Syllabus coverage, teaching content beyond syllabus, guiding students in curricular and co-curricular activities (10) | Ease of maintenance of order/ Class control (without threatening or punishment) (10) | Involvement in Internal Assessment (fair/partial, whether casual or involved fully in marking with corrective remarks) (10) | Intellectual stature (commands respect of students by intellectual and maturity levels) (10) | Integrity (honesty) and Impartiality (10) Fairness and just (10) Time Management (10) |             |
| 1     | EC8691 - Microprocessors and Microcontrollers | KANNAN B           | 9.89  | 9.78   | 9.78  | 9.72  | 9.81   | 9.72  | 9.72   | 9.71  | 97.56       |
| 2     | EC8095 - VLSI Design                          | CHITRA R           | 9.64  | 9.61   | 9.56  | 9.47  | 9.61   | 9.67  | 9.56   | 9.64  | 96.04       |
| 3     | EC8652 - Wireless Communications              | GNANA PRIYA G      | 9.47  | 9.44   | 9.61  | 9.42  | 9.56   | 9.5   | 9.72   | 9.5   | 95.22       |
| 4     | MG8591 - Principles of Management             | SRIRENGANACHIYAR V | 9.64  | 9.67   | 9.5   | 9.75  | 9.5  | 9.58  | 9.58   | 9.57  | 95.94       |
| 5     | EC8651 - Transmission lines and RF Systems    | VENKATESH P        | 9.81  | 9.72   | 9.53  | 9.69  | 9.67   | 9.72  | 9.72   | 9.63  | 96.75       |
| 6     | CS8792 - Cryptography and Network Security    | RAMESH BABU A      | 9.96  | 9.88   | 9.96  | 9.96  | 9.96   | 9.96  | 10   | 9.9   | 99.39       |

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M  
92

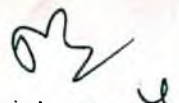
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|---|----------------------------------|-----------------|------|--|
| 7 | EC8001 -<br>MEMS and<br>NEMS     | DIVYA (1991) R  | 9.83 |  |
| 8 | EC8004 -<br>Wireless<br>Networks | GUNASEKARAN P , | NAN  |  |

*P. Li*  
9/4/21

Class Adviser

|      |      |      |      |      |      |      |       |
|------|------|------|------|------|------|------|-------|
| 9.75 | 9.75 | 9.58 | 9.83 | 9.83 | 9.75 | 9.67 | 97.32 |
| NAN  | NAN  | NAN  | NAN  | NAN  | NAN  | NAN  | NAN   |

  
HoD 9/4/21

  
Principal 9/4

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**  
**Academic Year 2020 – 2021 (Even Semester)**  
**ONLINE COURSE CERTIFICATION DETAILS- STUDENTS**

| Sl. No | Name of the Student | Year & Class | Edx/<br>Coursera /<br>Skillrack/<br>GUVI/<br>INFYTQ | Name of the Course Registered                            | Name of the University | Date of Completion |
|--------|---------------------|--------------|---|--|------------------------|--------------------|
| 1.     | S.Balaji            | II ECE A     | Eduruka   | Full stack web development                               | -                      | 10.05.2021         |
| 2.     |                     |              | Itronix solution                                    | Ethical hacking and advanced java                        | -                      | 13.5.2021          |
| 3.     |                     |              | SKILL RACK  | Python 3x programming course                             | Skill rack             | 25.04.2021         |
| 4.     | Shrinithimeena      | II ECE B     | Skill Rack  | C-Programming Course (Hands on)                          | Skill rack             | 30.03.2021         |
| 5.     |                     |              | Skill Rack  | Sql-basic (standard)                                     | Skill rack             | 02.04.2021         |
| 6.     |                     |              | Skill Rack  | Python 3.x - Programming course (Hands-on)               | Skill rack             | 11.04.2021         |
| 7.     |                     |              | Skill Rack  | Python 3.x very easy challenges                          | Skill rack             | 07.04.2021         |
| 8.     |                     |              | Skill Rack  | C - very easy challenges                                 | Skill rack             | 28.04.2021         |
| 9.     |                     |              | Skill Rack  | Kickstart(Code solutions)                                | Skill rack             | 27.04.2021         |
| 10.    |                     |              | Skill Rack  | Java Very easy challenges                                | Skill rack             | 01.05.2021         |
| 11.    |                     |              | Entuple Technologies                                | Electronic circuit design and simulation - digital focus |                        | 27.02.2021         |
| 12.    |                     |              | Itronix Solutions                                   | Machine learning: unsupervised learning                  |                        | 10.05.2021         |
| 13.    |                     |              | Skill Rack  | C - nested if else (video explanation)                   | Skill rack             | 11.05.2021         |
| 14.    |                     |              | Skill Rack  | C - if else (video explanation)                          | Skill rack             | 11.05.2021         |
| 15.    |                     |              | Skill Rack  | Data structure - c - course (hands-on)                   | Skill rack             | 16.05.2021         |
| 16.    |                     |              | Skill Rack  | C - intro (code solution)                                | Skill rack             | 02.06.2021         |
| 17.    |                     |              | Skill Rack  | C - programming course (hands-on)                        | Skill rack             | 30.03.2021         |

|     |                      |           |                   |  |                       |            |
|-----|----------------------|-----------|-------------------|--|-----------------------|------------|
| 18. |                      |           | Mathworks         | Machine Learning with Matlab                             |                       | 29.07.2021 |
| 19. |                      |           | Mathworks         | Machine learning onramp                                  |                       | 30.07.2021 |
| 20. | Gomathi Naayagam I S | II ECE A  | Guvi              | Build a Face recognition application using Python        | Guvi                  | 01.05.2021 |
| 21. |                      |           | Skill Rack        | Sql-basics   | Skill rack            | 28.04.2021 |
| 22. |                      |           | Solo Learn        | Html course  |                       | 09.05.2021 |
| 23. |                      |           | Itronix solution  | 5g technology  |                       | 12.05.2021 |
| 24. | Jeyagomathi S        | II ECE A  | Itronix solution  | Recommendation Engine in Python using Apriori Algorithm. |                       | 12.05.2021 |
| 25. |                      |           | Europe Academy    | Database management                                      |                       | 19.05.2021 |
| 26. |                      |           | Coursara          | Introduction to Machine learning                         | Duke                  | 22.05.2021 |
| 27. |                      |           | SHAPEAI           | Python and deep learning                                 |                       | 22.05.2021 |
| 28. |                      |           | Skillrack         | C-programming course                                     | Skill rack            | 13.04.2021 |
| 29. | Kavya P              | II ECE A  | Sololearn         | Html   |                       | 09.05.2021 |
| 30. |                      |           | Itronix solution  | Python using Apriori Algorithm                           |                       | 12.05.2021 |
| 31. |                      |           | Skillrack         | Python 3.x programming course                            | Skillrack             | 29.04.2021 |
| 32. |                      |           | Skillrack         | Sql basics   | Skillrack             | 26.04.2021 |
| 33. |                      |           | Skillrack         | C-programming course                                     | Skillrack             | 18.04.2021 |
| 34. |                      |           | Trainindia        | Basics of managing money – A orientation                 |                       |            |
| 35. | Vaishnavi M          | II ECE B  | Itronix Solutions | Ethical hacking  |                       | 09.05.2021 |
| 36. |                      |           | Coursera          | Hiring and Onboarding Employees with Clickup             | Coursera Project work | 15.07.2021 |
| 37. |                      |           | Mathworks         | Matlab onramp  |                       | 29.07.2021 |
| 38. | Seethadevi M         | II ECE-B  | Skillrack         | C-programming course                                     | Skillrack             | 14.04.2021 |
| 39. |                      |           | Skillrack         | Sql basics   | Skillrack             | 25.04.2021 |
| 40. |                      |           | Skillrack         | Python 3.x programming course                            | Skillrack             | 19.04.2021 |
| 41. | Monika.R             | II ECE B  | Skillrack         | Sql  | Skillrack             | 26.04.2021 |
| 42. | Alphina christy V    | III ECE A | Cisco( NASSCOM    | Introduction to cyber security                           | NASSCOM future skills | 19.022021  |

|     |              |           |   |  |                             |            |
|-----|--------------|-----------|---|--|-----------------------------|------------|
|     |              |           | future skills)                          |  | prime                       |            |
| 43. |              |           | Cisco( NASSCOM future skills)           | Introduction to packet tracer                | NASSCOM future skills prime | 16.03.2021 |
| 44. |              |           | Great Learning                          | Excel intermediate level                     | Great learning              | 25.04.2021 |
| 45. | N.Harshethaa | III ECE A | Cisco( NASSCOM future skills)           | Introduction to cyber security               | NASSCOM future skills prime | 02.03.2021 |
| 46. |              |           | Cisco( NASSCOM future skills)           | Cyber security essentials                    | NASSCOM future skills prime | 03.03.2021 |
| 47. |              |           | Cisco( NASSCOM future skills)           | Introduction to packet tracer                | NASSCOM future skills prime | 25.03.2021 |
| 48. |              |           | ICT ACADEMY ( women empowerment course) | Soft skills for career                       | Ict academy                 | 20.04.2021 |
| 49. |              |           |   | Foundation skills in IT                      | Ict academy                 | 25.04.2021 |
| 50. | G.Mahadevi   | III ECE A | Cisco( NASSCOM future skills)           | Introduction to cyber security               | NASSCOM future skills prime | 02.03.2021 |
| 51. |              |           | Cisco( NASSCOM future skills)           | Cyber security essentials                    | NASSCOM future skills prime | 17.03.2021 |
| 52. |              |           | Coursera                                | Problem solving using computational thinking | University of Michigan      | 07.04.2021 |
| 53. |              |           | Skillrack                               | C - programming course (hands-on)            | Skillrack                   | 01.01.2021 |
| 54. |              |           | Skillrack                               | Datastructure - c - course (hands-on)        | Skillrack                   | 03.01.2021 |
| 55. |              |           | Skillrack                               | Kick start ( code solution )                 | Skillrack                   | 06.01.2021 |

|     |             |           |                               |  |                             |            |
|-----|-------------|-----------|-------------------------------|--|-----------------------------|------------|
| 56. | Kiruthika P | III ECE A | Skillrack                     | Python 3.x - programming course (hands-on)                       | Skillrack                   | 06.01.2021 |
| 57. |             |           | Skillrack                     | Sql - basics (standard)  | Skillrack                   | 07.01.2021 |
| 58. |             |           | Skillrack                     | C - intro ( code solution )                                      | Skillrack                   | 10.01.2021 |
| 59. |             |           | Skillrack                     | Python - starter   | Skillrack                   | 13.01.2021 |
| 60. |             |           | Skillrack                     | Python 3.x - 50 very easy challenges                             | Skillrack                   | 13.01.2021 |
| 61. |             |           | Skillrack                     | C - 50 very easy challenges                                      | Skillrack                   | 14.01.2021 |
| 62. |             |           | Skillrack                     | C - starter  | Skillrack                   | 15.01.2021 |
| 63. |             |           | Skillrack                     | C - input . Output (video explanation)                           | Skillrack                   | 17.01.2021 |
| 64. |             |           | Skillrack                     | C - arithmetic operators (video explanation)                     | Skillrack                   | 17.01.2021 |
| 65. |             |           | Skillrack                     | C - if else (video explanation)                                  | Skillrack                   | 17.01.2021 |
| 66. |             |           | Skillrack                     | C - nested if else (video explanation)                           | Skillrack                   | 18.01.2021 |
| 67. |             |           | Skillrack                     | C - loops (video explanation)                                    | Skillrack                   | 18.01.2021 |
| 68. |             |           | Skillrack                     | C - nested loops and patterns (video explanation)                | Skillrack                   | 19.01.2021 |
| 69. |             |           | Skillrack                     | C - array (video explanation)                                    | Skillrack                   | 19.01.2021 |
| 70. |             |           | Skillrack                     | C - string (video explanation)                                   | Skillrack                   | 19.01.2021 |
| 71. |             |           | Skillrack                     | C - matrix (video explanation)                                   | Skillrack                   | 20.01.2021 |
| 72. |             |           | Skillrack                     | C - relational , logical operators and if else practice programs | Skillrack                   | 22.01.2021 |
| 73. |             |           | Skillrack                     | C++ - 50 very easy challenges                                    | Skillrack                   | 24.01.2021 |
| 74. |             |           | Cisco( NASSCOM future skills) | Introduction to cybersecurity                                    | NASSCOM future skills prime | 17.03.2021 |
| 75. |             |           | Cisco( NASSCOM future skills) | Cybersecurity essentials   | NASSCOM future skills prime | 22.03.2021 |
| 76. |             |           | Skillrack                     | Java basics - programming course (hands-on)                      | Skillrack                   | 24.03.2021 |
| 77. |             |           | Skillrack                     | Java - starter   | Skillrack                   | 28.03.2021 |
| 78. |             |           | Skillrack                     | C - functions practice programs                                  | Skillrack                   | 11.04.2021 |
| 79. |             |           | Cisco( NASSCOM future skills) | Introduction to packet tracer                                    | NASSCOM future skills prime | 29.04.2021 |
| 80. |             |           | Great                         | Python for machine learning                                      | Great learning              | 05.05.2021 |

|     |                 |           | Learning Academy                       |                                | academy                      |            |
|-----|-----------------|-----------|--|--------------------------------|------------------------------|------------|
| 81. |                 |           | ICT ACADEMY (Women Empowerment Course) | Soft skills for career         | ICT academy                  | 05.05.2021 |
| 82. | Gayathri.R      | III ECE A | Cisco(NASSCOM future skills)           | Introduction to cyber security | NASSCOM future skills prime  | 11.04.2021 |
| 83. |                 |           | MAVEN Silicon                          | VLSI System on Chip Design     | MAVEN silicon                | 26.04.2021 |
| 84. | Anu lakshmi K S | III ECE A | Cisco(NASSCOM future skills)           | Introduction to cyber security | NASSCOM future skills prime  | 02.03.2021 |
| 85. |                 |           | Cisco(NASSCOM future skills)           | Cyber security essentials      | NASSCOM future skills prime  | 08.03.2021 |
| 86. | Anitha Ram. R   | III ECE-A | Cisco (NASSCOM future skills)          | Introduction to cyber security | NASSCOM future skills prime  | 02.03.2021 |
| 87. |                 |           | Cisco (NASSCOM future skills)          | Introduction to packet tracer  | NASSCOM future skills prime  | 05.03.2021 |
| 88. |                 |           | Cisco(NASSCOM future skills)           | Cyber security essentials      | NASSCOM future skills prime  | 25.03.2021 |
| 89. |                 |           | MAVEN SILICON                          | Vlsi system on chip design     | -                            | 26.04.2021 |
| 90. | Manimala N      | III ECE A | Cisco(NASSCOM future skills)           | Introduction to cyber security | Cisco(NASSCOM future skills) | 07.04.2021 |

|     |                |           |                               |  |                               |            |
|-----|----------------|-----------|-------------------------------|--|-------------------------------|------------|
| 91. |                |           | Cisco( NASSCOM future skills) | Cyber security essentials                            | Cisco( NASSCOM future skills) | 08.04.2021 |
| 92. |                |           | Cisco( NASSCOM future skills) | Introduction to packet tracer                        | Cisco( NASSCOM future skills) | 08.04.2021 |
| 93. |                |           | Cisco( NASSCOM future skills) | Introduction of IOT                                  | Cisco( NASSCOM future skills) | 06.04.2021 |
| 94. | Sukuna K       | III ECE   | Skillrack                     | Python-starter                                       | Skillrack                     | 18.04.2021 |
| 95. | Krishna Veni S | III ECE A | Great learning                | IOT  | Great learning                | 28.04.2021 |
| 96. |                |           | Skill Rack                    | C programming course                                 | Skill rack                    | 19.04.2021 |
| 97. |                |           | IBM                           | Machine Learning and Artificial Intelligence         | IBM                           | 18.04.2021 |
| 98. |                |           | Coursera                      | Introduction to Basic Game Development using Scratch | Coursera project Work         | 21.06.2021 |

~~Signature of the faculty~~

  
27/10/21  
HOD

# RAMCO INSTITUTE OF TECHNOLOGY

## Department of Electronics and Communication Engineering

### List of Technical Events

| Academic Year: 2020-2021 |                          |   |   |         |                      |
|--------------------------|--------------------------|---|---|---------|----------------------|
| Sl. No.                  | Date                     | Name of the Event                             | Resource person   | Level   | Professional Society |
| 1.                       | 19.08.2020               | The best Tactics and Tips to achieve it       | Internal Faculty members & Students of ECE, RIT   | College | IETE                 |
| 2.                       | 10.09.2020               | Talent Hunt                                   | Internal Faculty members & Students of ECE, RIT   | College | IETE                 |
| 3.                       | 01.10.2020               | MINDSCAPES                                    | Internal Faculty members & Students of ECE, RIT   | College | IETE                 |
| 4.                       | 17.10.2020               | Technical Fest                                | Internal Faculty members & Students of ECE, RIT   | College | IETE                 |
| 5.                       | 24.10.2020               | ICE BREAKERS                                  | Internal Faculty members & Students of ECE, RIT   | College | IETE                 |
| 6.                       | 02.11.2020               | How to tackle the Data Pattern interview      | Mr.Veerendra Kumar, RIT Alumni (2016-2020), RF Board Design Engineer, Data Patterns Ltd., Chennai | College | Electronica          |
| 7.                       | 07.11.2020               | Technical Connection game                     | Internal Faculty members & Students of ECE, RIT   | College | IETE                 |
| 8.                       | 07.11.2020               | Quiz on Basic Electronics                     | Internal Faculty member of ECE, RIT   | College |                      |
| 9.                       | 27.11.2020               | Connect with ECE                              | Internal Faculty members & Students of ECE, RIT   | College | IETE                 |
| 10.                      | 10.12.2020               | Comapany specific Programming Aptitude        | Ms.A.Piruthiba, Soft Skill Trainer, Alumni of RIT (2015-2019)                                     | College | Electronica          |
| 11.                      | 14.12.2020               | Wipro Elite NTH 2021                          | Ms.V.Gobiya, Customer Success Manager, FACE Alumni of RIT (2014-2018)                             | College | Electronica          |
| 12.                      | 20.12.2020<br>08.01.2021 | Train your Brain- Technical Aptitude question | Internal Faculty members of ECE, RIT  | College | IETE                 |
| 13.                      | 08.08.2020               | RIT Buds Meet RIT Glowing Alumni              | Ms.Geethanjali T, Mrs.Anubala B, RIT-ECE Alumni   | College | IE(I)                |
| 14.                      | 10.08.2020               | e-Yantra - an Introduction to Firebird Robot  | Internal Faculty members of ECE, RIT  | College | IE(I)                |
| 15.                      | 12.08.2020               | Think and Tell - Technical Connection Game    | Internal Faculty members of ECE, RIT  | College | IE(I)                |

|                                 |                                |  |  |          |               |
|---------------------------------|--------------------------------|--|--|----------|---------------|
| 16.                             | 19.08.2020                     | RIT Buds Meet RIT<br>Glowing Alumni                              | Mr.S.Saravana Kumar,<br>Mr.B.Lakshmana Kumar<br>RIT-ECE-Alumini  | College  | IE(I)         |
| 17.                             | 22.08.2020                     | Technical Quiz-<br>Grade up                                      | Student of ECE, RIT  | College  | IE(I)         |
| 18.                             | 25.08.2020                     | Career Path for<br>Electronics and<br>Communication<br>Engineers | Ms.N.Subhashini,<br>Mr.Harriram,<br>Ms.G.Aishwarya<br>RIT-ECE Alumini  | College  | IE(I)         |
| 19.                             | 19.09.2020                     | Circuit Debugging  | Students of ECE, RIT   | College  | IE(I)         |
| 20.                             | 11.10.2020                     | Poster Competition   | Internal Faculty of ECE, RIT   | College  | IE(I)         |
| 21.                             | 18.10.2020                     | Technical Film Show  | Students of ECE, RIT   | College  | IE(I)         |
| 22.                             | 7.11.2020                      | Quiz on "Basic<br>Electronics"                                   | Internal Faculty of ECE, RIT   | College  | IE(I)         |
| 23.                             | 5.12.2020                      | A video based Quiz<br>"Back to the History<br>of Invention"      | Internal Faculty of ECE, RIT   | College  | IE(I)         |
| 24.                             | 11.01.2021                     | Technical Quiz   | Internal Faculty of ECE, RIT   | College  | IE(I)         |
| 25.                             | 05.06.2020<br>to<br>08.06.2020 | Webathon   | Mr.TNGK Ranganath,<br>Consultant, Schenker, USA,<br>Mr.A.M.Shriram, Global IT<br>Architect, Denmark,<br>Mr.M.Chidambaram, Senior<br>Solution Architect,<br>Singapore,<br>Dr.J.Jennifer Ranjani, AP,<br>BITS Pilani | National | ISTE          |
| 26.                             | 30.05.2020                     | Hardware<br>Development Life<br>Cycle                            | Mr.K.S.Prabhu, Senior<br>Design Engineer,<br>Chelmsford, UK  | National | ISTE          |
| 27.                             | 01.06.2020<br>to<br>04.06.2020 | Webathon on Soft<br>Skill Training                               | Ms.A.Piruthiba, Ms.K.Muthu<br>Priya Dharshini,<br>Ms.M.Sumathi Priya,<br>Mr.R.Muthu Vijayakumar,<br>Soft Skill Trainer, Ethunus,<br>Bangalore  | College  | ISTE          |
| 28.                             | 03.08.2020<br>to<br>08.08.2020 | STTP: Hands on<br>Training on Virtual<br>Laboratory              | Internal Faculty of RIT  | National | ISTE          |
| <b>Academic Year: 2019-2020</b> |                                |  |  |          |               |
| 29.                             | 10.09.2019                     | Circuitrix   | Internal Faculty<br>members of ECE, RIT  | College  | IETE          |
| 30.                             | 31.08.2019                     | ELEC-FREAKZ  | Internal Faculty<br>members of ECE &<br>Mechanical<br>Engineering, RIT   | State    | ISTE &<br>IEI |

|                                 |                                |   |   |          |             |
|---------------------------------|--------------------------------|---|---|----------|-------------|
| 31.                             | 14.09.2019                     | Tech Fest-Engineers day   | Internal Faculty members of ECE, RIT  | College  | IETE        |
| 32.                             | 31.08.2019                     | TECHYUGA '19  | Internal Faculty members of ECE, RIT  | State    | ISTE & IEI  |
| 33.                             | 19.08.2019                     | Thematic Presentation   | Internal Faculty members of ECE, RIT  | College  | ISTE        |
| 34.                             | 20.08.2019                     | Fun On  | Internal Faculty members of ECE, RIT  | College  | ISTE        |
| 35.                             | 12.07.2019                     | Dumb Charades   | Internal Faculty members & Students of ECE, RIT                                     | College  | Electronica |
| 36.                             | 26.07.2019                     | Connections   | Internal Faculty members & Students of ECE, RIT                                     | College  | Electronica |
| 37.                             | 13.09.2019                     | Circuitrikz   | Internal Faculty members & Students of ECE, RIT                                     | College  | Electronica |
| 38.                             | 10.01.2020                     | Tech Logo   | Internal Faculty members & Students of ECE, RIT                                     | College  | Electronica |
| 39.                             | 07.02.2020                     | Tech Connect  | Internal Faculty members & Students of ECE, RIT                                     | College  | Electronica |
| 40.                             | 14.02.2020                     | Electronic Quiz   | Internal Faculty members & Students of ECE, RIT                                     | College  | Electronica |
| 41.                             | 16.08.2019                     | Jumbled Word  | Internal Faculty members & Students of ECE, RIT                                     | College  | Electronica |
| 42.                             | 27.09.2019                     | Techno Quiz   | Internal Faculty members of ECE, RIT  | College  | IETE        |
| 43.                             | 21.02.2020                     | Tech Today  | Internal Faculty members & Students of ECE, RIT                                     | College  | Electronica |
| 44.                             | 28.02.2020                     | National Science Day  | Mr.N.Pothirasan,<br>Director, Hasan Medicare,<br>Sankarankovil road,<br>Rajapalayam | National | Electronica |
| 45.                             | 28.02.2020                     | Mindspark 2020  | Internal Faculty members & Students of ECE, RIT                                     | College  | Electronica |
| 46.                             | 01.02.2020                     | Technical event on Ex-Quiz                                      | Internal Faculty members of ECE, RIT  | College  | IETE        |
| 47.                             | 14.05.2020                     | Online quiz on semiconductor physics                            | Internal Faculty members of ECE, RIT  | College  | IETE        |
| 48.                             | 14.05.2020<br>to<br>15.05.2020 | Online course on Internet of Things                             | Internal Faculty members of ECE, RIT  | College  | IETE        |
| 49.                             | 20.05.2020<br>to<br>22.05.2020 | Techfest Event On Life Ahead Covid-19 with Blessful Electronics | Internal Faculty members of ECE, RIT  | College  | IETE        |
| <b>Academic Year: 2018-2019</b> |                                |   |   |          |             |
| 50.                             | 31.08.2018                     | Technical Symposium TECHYUGA-2018                               | Internal Faculty members of ECE, RIT  | State    | IETE        |



# RAMCO INSTITUTE OF TECHNOLOGY

Approved by AICTE, New Delhi & Affiliated to Anna University  
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NAAC Accredited Institution

Department of Electronics and Communication Engineering  
Academic Year 2020 – 2021 (Odd Semester)

## Details of Programme Organized

| Sl. No. | Contents                     | Details   |
|---------|------------------------------|---|
| 01.     | Title of the programme       | The best Tactics and Tips to achieve it   |
| 02.     | Programme Theme              | Students identify the future of ECE   |
| 03.     | Programme Type               | Webinar   |
| 04.     | Details of resource person   | Ms.M.Nivetha, IV Year ECE<br>Ms.A.Adishree Tri Netra, III Year ECE  |
| 05.     | Mode & Venue / Platform      | Online & Google meet  |
| 06.     | Date & Duration              | 19.08.2020 & 1 hour   |
| 07.     | No. of Student Participants  | 38  |
| 08.     | No. of Faculty Participants  | Nil   |
| 09.     | No. of External Participants | 38  |
| 10.     | Expenditure amount (if any)  | Nil   |
| 11.     | Social Media URL             | Nil   |
| 12.     | Video URL (if any)           | <a href="https://drive.google.com/file/d/1uWiFn7dA1ZtEdZfrvmeZ1sWUExYHYp4K/view">https://drive.google.com/file/d/1uWiFn7dA1ZtEdZfrvmeZ1sWUExYHYp4K/view</a> |

### 13. Objective of the Programme:

The students will be able to know the Electronics and Communication Engineering.

### 14. Detail description of the activity:

It is to inform that "The best Tactics and Tips to achieve it" is planned to organized by IETE Students Forum, in which the External participants can ask their questions related to future of Electronics and Communication Engineering. E-Certificates will be provided for all the participants.

38 students were participated in this event. Ms.M.Nivetha, IV Year ECE & Ms.A.Adishree Tri Netra, III Year ECE, Ramco Institute of Technology acted as resource persons. They conveyed lot of information regarding future of Electronics and Communication Engineering to the students, who participated in this webinar.

### 15. Banner / flyer of the programme:

Admissions open for 2020-2021 Counselling code 4679  
**RAMCO INSTITUTE OF TECHNOLOGY**  
Kuppam - 625 117, Virudhunagar District, Tamil Nadu  
(Approved by AICTE and Affiliated to Anna University, Chennai) An ISO 9001:2015 Certified and NAAC Accredited Institution  
Department of Electronics and Communication Engineering  
IETE Students Forum organizing  
"The Best Tactics & Tips to achieve it"  
[19.09.2020]-Wednesday 6 pm to 7 pm  
Ms. M. Nivetha  
IV Year ECE  
Ms. A. ADISHREE TRINETRA  
III Year ECE  
CHIEF PATRON  
Dr. L. Ganesan  
Principal  
PATRON  
Dr. S. Rajakumaraswari  
Vice Principal  
CONVENER  
Dr. S. Periyasamy  
Professor & Head/ECE  
FOR MORE DETAILS  
9110910482  
9870125798  
REGISTRATION LINK  
<https://tinyurl.com/yxpb7fq>  
E-Certificates will be provided to all participants

### 16. Programme Photographs: (Two Photographs)

**RAMCO INSTITUTE OF TECHNOLOGY**  
(Approved by AICTE and Affiliated to Anna University, Chennai) An ISO 9001:2015 Certified and NAAC Accredited Institution  
Kuppam - 625 117, Virudhunagar District, Tamil Nadu  
Certificate of Participation  
This is to certify that Mr./Ms.  
**GOWDHAM M**  
has attended program on "The Best Tactics and tips to achieve it" organized by the Department of Electronics and Communication Engineering in association with IETE of Ramco Institute of Technology on 21.08.2020.  
Coordinators Convener Principal  
**RAMCO INSTITUTE OF TECHNOLOGY**  
(Approved by AICTE and Affiliated to Anna University, Chennai) An ISO 9001:2015 Certified and NAAC Accredited Institution  
Kuppam - 625 117, Virudhunagar District, Tamil Nadu  
Certificate of Participation  
This is to certify that Mr./Ms.  
**K.M.Kaantha Vishnu**  
has attended program on "The Best Tactics and tips to achieve it" organized by the Department of Electronics and Communication Engineering in association with IETE of Ramco Institute of Technology on 21.08.2020.  
Coordinators Convener Principal

Prepared by:

Approved by



# RAMCO INSTITUTE OF TECHNOLOGY

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NAAC Accredited Institution

Department of Electronics and Communication Engineering  
Academic Year 2020– 2021 (Odd Semester)

## Details of Programme Organized

| Sl. No. | Contents                     | Details   |
|---------|------------------------------|---|
| 01.     | Title of the programme       | Talent Hunt   |
| 02.     | Programme Theme              | Technical Assessment  |
| 03.     | Programme Type               | Webinar   |
| 04.     | Details of resource person   | Nil   |
| 05.     | Mode & Venue / Platform      | Online & Google Meet  |
| 06.     | Date & Duration              | 10.09.2020 & 6.00PM -7:00PM   |
| 07.     | No. of Student Participants  | Nil   |
| 08.     | No. of Faculty Participants  | Nil   |
| 09.     | No. of External Participants | 40  |
| 10.     | Expenditure amount (if any)  | Nil   |
| 11.     | Social Media URL             | <a href="https://www.facebook.com/RITRajapalayam/photos/a.576716826078369/1098843500532363/?type=3&amp;theater">www.facebook.com/RITRajapalayam/photos/a.576716826078369/1098843500532363/?type=3&amp;theater</a> |
| 12.     | Video URL (if any)           | <a href="https://drive.google.com/file/d/16e3Ka-S3mA3M2P3GNZWtIOgbPLo5h5k/view">https://drive.google.com/file/d/16e3Ka-S3mA3M2P3GNZWtIOgbPLo5h5k/view</a>   |

**13. Objective of the Programme:**

To Motivate and enriching students' technical skills through conducting Talent Hunt event.

**14. Detail description of the activity:**

The Department of Electronics and Communication in association with IETE organize Technical Event for RIT Buds on "Talent Hunt" for I ECE Students who are about to join in Rajapalayam on 10.09.2020. A total of 44 students attended the program. The program was coordinated by Mr.A.Azhagu Jaisudan Pazhani, AP(SG)/ECE and Mr.G.Sivakumar, AP/ECE under the guidelines of convenor Dr.S.Periyannayagi, Professor & Head/ECE.

**15. Banner / flyer of the programme:**

**RAMCO INSTITUTE OF TECHNOLOGY**  
(Approved by AICTE and Affiliated to Anna University, Accredited by NAAC, AN ISO 9001:2015 Certified)  
Rajapalayam-626 117, Virudhunagar District, Tamil Nadu.

**Department of Electronics and Communication Engineering**

Scan for Registration

**RIT-IETE**  
Organizing a Technical Event for RIT Buds on  
"Talent Hunt"

Date: 10.09.2020  
@  
Time: 6.00 pm

<https://tinyurl.com/RITBUDSMOS>

**Chief Patron:**  
Dr.L.Ganesan, Principal

**Patron:**  
Dr.S.Rajakannakaran, Vice-Principal

**Convenor:**  
Dr.S.Periyannayagi, Professor & Head/ECE

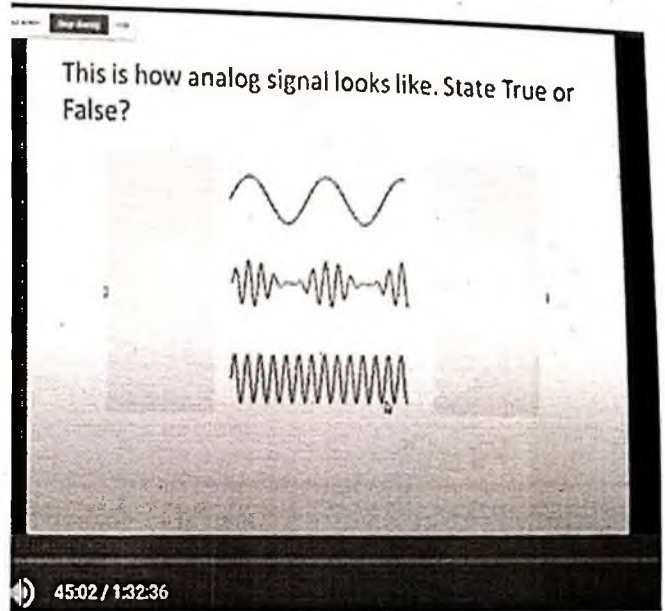
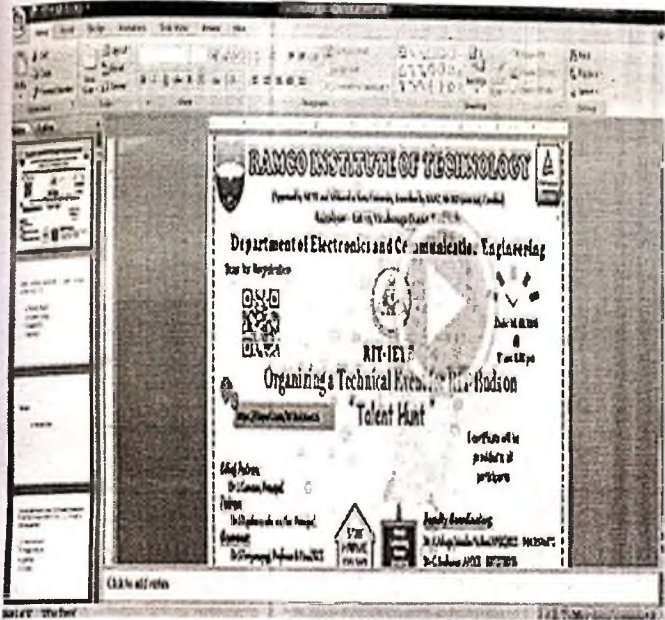
**Faculty Coordinators:**  
Mr.A.Azhagu Jaisudan Pazhani AP(SG)/ECE - 9443696072  
Mr.G.Sivakumar, AP/ECE - 8072731036

E-certificate will be provided to all participants

STAY HOME STAY SAFE

Keep Learning Keep Growing

16. Programme Photographs: (Two Photographs)



|    |    |    |    |    |    |    |    |
|----|----|----|----|----|----|----|----|
| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  |
| 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 |

4-77  
Prepared by:

25/1/2021  
Approved by



# RAMCO INSTITUTE OF TECHNOLOGY

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NAAC Accredited Institution

Department of Electronics and Communication Engineering  
Academic Year 2020 – 2021 (Even Semester)

2020

## Details of Programme Organized

| Sl. No. | Contents                     | Details   |
|---------|------------------------------|---|
| 01.     | Title of the programme       | Spring Tech Fun-2021  |
| 02.     | Programme Theme              | Students identify the future of ECE   |
| 03.     | Programme Type               | Webinar   |
| 04.     | Details of resource person   | Ms.A.S.Uma Dhevi, IV Year ECE<br>Ms.A.Adishree Tri Netra, III Year ECE<br>Mrs.R.Ramalakshmi, AP/ECE   |
| 05.     | Mode & Venue / Platform      | Online & Google meet  |
| 06.     | Date & Duration              | 28.06.2021 to 30.06.2021 & 1½ hour  |
| 07.     | No. of Student Participants  | 50  |
| 08.     | No. of Faculty Participants  | Nil   |
| 09.     | No. of External Participants | 50  |
| 10.     | Expenditure amount (if any)  | Nil   |
| 11.     | Social Media URL             | <a href="https://m.facebook.com/story.php?story_fbid=121268890152712&amp;id=110565081223093">https://m.facebook.com/story.php?story_fbid=121268890152712&amp;id=110565081223093</a> |
| 12.     | Video URL (if any)           | <a href="https://drive.google.com/file/d/1A56m4-1ZNmfi06OckD069rws6kd8K7O9/view?usp=sharing">https://drive.google.com/file/d/1A56m4-1ZNmfi06OckD069rws6kd8K7O9/view?usp=sharing</a> |

### 13. Objective of the Programme:

The students will be able to know the Electronics and Communication Engineering.

### 14. Detail description of the activity:

It is to inform that "Spring Tech Fun-2021" is planned to organized by ISIE India in association with Department of ECE, in which the External participants can actively participated in the technical event and Career Guidance session conducted for 3 days from 28.06.2021 to 30.06.2021 and also students ask their questions related to future of Electronics and Communication Engineering. E-Certificates will be provided for all the participants.

50 students were participated in this event. Ms.A.S.Uma Dhevi, Alumni of Ramco Institute of Technology & Ms.A.Adishree Tri Netra, IV Year ECE, Ramco Institute of Technology acted as resource persons on 29.06.2021. Mrs.R.Ramalakshmi, AP/ECE, acted as a resource person on 30.06.2021 and delivered the lecture about future of ECE. They conveyed lot of information regarding future of Electronics and Communication Engineering to the students, who participated in this webinar.

### 15. Banner / flyer of the programme:



### 16. Programme Photographs: (Two Photographs)



6-27/7/21  
Prepared by: *[Signature]*

*[Signature]*  
Approved by

2020 -

**RAMCO INSTITUTE OF TECHNOLOGY**  
Department of Electronics and Communication Engineering  
Academic Year: 2020 - 2021 (Even Semester)

Minutes of Class Committee Meeting III

Class: II Semester B.E. ECE A

Date & Time: 30.06.2021 & 04.30 PM

Chair Person: Mr.K.Ragavan

Class Adviser: Dr.N.Revathi

Faculty members:

1. Dr.M.Anish Alfred Vaz
2. Dr.K.Basari Kodi
3. Dr.T.Vigneswari
4. Dr.N.Revathi
5. Dr.B.Deepalakshmi
6. Mr.G.Sivakumar
7. Mr.S.Vijayakumar

Student Representatives:

1. S. Bagavathi gayathri
2. A. Bharathi Lakshmi
3. B. Divya sri
4. N. Hariprasad
5. E. Jackson
6. L.Jeya Selva Karthikeyan

| Points discussed   | Target Date | Responsibility                     | Remarks |
|--|-------------|------------------------------------|---------|
| 1. Chair Person welcomed the faculty members and student representatives and he enquired about the syllabus coverage for all the subjects.   | Continuous  | All the students                   | -       |
| 2. Chair Person reviewed the Internal Test-II performance and the students were produced above 90% results in all subjects.  | Continuous  | Faculty members & All the students | -       |
| 3. The students were advised to take the tutorial hours and assignments seriously since their tutorial marks and assignment marks will be considered for evaluation of Internal Assessment Test marks. | Continuous  | All the students                   | -       |

|  |            |                  |   |
|--|------------|------------------|---|
| 4. The students were informed about the Lab model exam and university lab and were asked to prepare well for the Lab exams.  | Continuous | All the students | - |
| 5. Chairperson and the faculty members insisted the importance of internal marks more than 15 for all the subjects so that they can score higher grades in the university examination.   | Continuous | All the students | - |
| 6. Chairperson advised the students with CGPA more than 9 to work hard and try to secure university ranks and gold medal.  | Continuous | All the students | - |
| 7. Chairperson insisted the students about the new regulation and rules of Anna University R2017 and he advised the students to clear all the subjects in the current semester itself.   | Continuous | All the students | - |
| 8. Chairperson discussed about the strictness in valuation of End semester Examination papers and advised the students to write answers relevant to question with proper key words.  | Continuous | All the students | - |
| 9. Since the students are writing the Internal test by descriptive type and sending the scanned copy of test papers, it is advised by the chairperson and the faculty members to use better scanner app to properly scan the documents and then send | Continuous | All the students | - |
| 10. The students were enquired about the laboratory sessions and they were instructed to complete their record and submit through Canvas/Email before July first week.   | Continuous | All the students | - |
| 11. The Chairperson and Class adviser advised the students to be safe during this pandemic, and advised all the students to maintain a healthy body and peaceful mind.   | -          | All the students | - |

*Am*  
5/7/2021  
Chair Person

Copy circulated among all members of Class Committee  
Copy submitted to the Principal office  
Copy to File

*[Signature]*  
7/7/21  
HOD

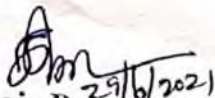
**RAMCO INSTITUTE OF TECHNOLOGY**  
 Department of Electronics and Communication Engineering  
 Academic Year: 2020 - 2021 (Even Semester)

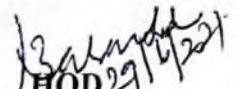
RIT/ECE/CCM/2020-2021/03

Date: 29.06.2021

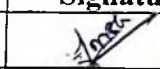
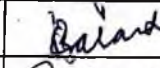
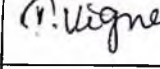
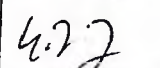

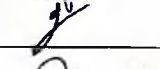

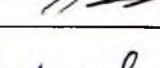
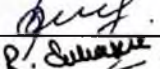
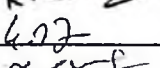
**CIRCULAR**

The Third class committee meeting for the First Year Electronics and Communication Engineering 'A' section will be held on 30<sup>th</sup> June, 2021. All the faculty members handling the theory and laboratory courses for the above class and student representatives are requested to attend the meeting through Google meet at 04.10 PM without fail.

  
 29/6/2021  
 Chair Person

  
 HOD 29/6/2021

**Class Committee Members:**  
**Class Adviser:** Dr.N.Revathi  
**Mentor:** Mr.G.Sivakumar

| S.No. | Faculty Members                                 | Course Code & Title                                       | Signature   |
|-------|---|---|---|
| 1.    | Dr.M.Anish Alfred Vaz                           | HS8251 - Communicative English                            |  |
| 2.    | Dr.K.Basari Kodi                                | MA8251 - Engineering Mathematics - II                     |  |
| 3.    | Dr.T.Vigneswari                                 | PH8253 - Physics for Electronics Engineering              |  |
| 4.    | Mr.G.Sivakumar                                  | BE8254 - Basic Electrical and Instrumentation Engineering |  |
| 5.    | Dr.B.Deepalakshmi                               | EC8251 - Circuit Analysis                                 |  |
| 6.    | Mr.S.Vijayakumar                                | EC8252 - Electronic Devices                               |  |
| 7.    | Mr.R.Arunkumar<br>Mr.B.Kannan<br>Ms.S.A.Radhika | GE8261 - Engineering Practices Laboratory                 |  |
| 8.    | Dr.B.Deepalakshmi<br>Dr.S.Vaira Prakash         | EC8261 - Circuits and Devices Laboratory                  |  |
| 9.    | Dr.R.Subasree<br>Mr.G.Sivakumar                 | Maths Aptitude  |  |
| 10.   | Ms.P.Jothi Thilaga<br>Dr.N.Revathi              | Programming Aptitude                                      |  |

| S.No. | Student Members           | Signature |
|-------|---------------------------|-----------|
| 1.    | S. Bagavathi gayathri     |           |
| 2.    | A. Bharathi Lakshmi       |           |
| 3.    | B. Divya sri              |           |
| 4.    | N. Hariprasad             |           |
| 5.    | E. Jackson                |           |
| 6.    | L. Jeya Selva Karthikeyan |           |

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**  
**Academic Year: 2020 - 2021 (Even Semester)**

**Class Committee**

Class: II Semester B.E. ECE - A

Date: 19.04.2021

Chair Person: Mr. K. Ragavan

Class Adviser: Dr. N. Revathi

Mentors: Mr. G. Sivakumar & Mr. B. Kannan

Faculty members:

1. Dr. M. Anish Alfred Vaz
2. Dr. K. Basari Kodi
3. Dr. T. Vigneswari
4. Dr. B. Deepalakshmi
5. Mr. S. Vijayakumar
6. Mr. R. Arun Kumar
7. Ms. S. Rathika
8. Ms. P. Jothi Thilaga
9. Dr. R. Subasree

Student Representatives:

1. S. Bagavathi gayathri
2. A. Bharathi Lakshmi
3. B. Divya sri
4. N. Hariprasad
5. E. Jackson
6. L.Jeya Selva Karthikeyan

  
Class Adviser

  
HOD

  
Principal




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Accredited by NAAC & An ISO 9001:2015 Certified Institution  
NBA Accredited UG Programs: CSE, EEE, ECE and MECH

Department of Electronics and Communication Engineering


Guest Lecture on "AI and Deep Learning Models"-05.08.2021

The department of Electronics and Communication Engineering conducted an Association Valedictory function of "RIT-ELECTRONICA" in Association with IETE and Organizes a Guest Lecture on "AI and Deep Learning Models" through Google Meet online platform on August 05, 2021 for all ECE Students. RIT ECE Alumna (2015-2019 Batch) Ms.K.Padmajaya Rekha, Machine Learning Engineer, Optisol Business Solutions Limited, Chennai was the chief guest and acted as a resource person for this function. Around 60 students participated in the Guest lecture. She gave Overview about AI and Deep Learning Models and how to do projects using Deep Learning models. The valedictory function and Guest Lecture was coordinated by Association Incharge Mr. K.Ragavan, AP(SG)/ECE, and Guest Lecture Incharge Mrs.G.Gnana Priya, AP(SG)/ECE under the guidance of convenor Dr.S.Periyannayagi, Prof. & Head/ECE.





## RAMCO INSTITUTE OF TECHNOLOGY

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Rajapalayam - 626 117; Virudhunagar District, Tamil Nadu.





### Valedictory Function of RIT-ELECTRONICA

In Association with IETE Organizes a  
Guest Lecture on  
"AI and Deep Learning Models"

**Ms.K.Padmajaya Rekha**  
Machine Learning Engineer,  
Optisol Business Solutions (P) Ltd.,  
Chennai.


**05.08.2021**  
@  
**03.00 PM**

Coordinators  
**Mr.K.Ragavan,**  
AP(SG)/ECE  
**Mrs.G.Gnana Priya,**  
AP(SG)/ECE

Convenor  
**Dr.S.Perivanavagi**  
HOD/ECE

Patron  
**Dr.S.Rajakarumakaran**  
Vice Principal

Chief Patron  
**Dr.L.Ganesan**  
Principal

 [meet.google.com/ksk-vzxf-bri](https://meet.google.com/ksk-vzxf-bri)  
Activate Windows

Association Valedictory function of "RIT-ELECTRONICA" in Association with IETE organized Guest Lecture on "AI and Deep Learning Models"-  
05<sup>th</sup> August 2021.

# Sample Google meet images of the Guest Lecture:

**Machine Learning**

- Supervised**
  - Regression
    - Linear
    - Polynomial
  - Decision Tree
  - Random forest
  - Classification
    - KNN
    - Trees
    - Logistic Regression
    - Naive-Bayes
    - SVM
- Unsupervised**
  - Clustering
    - SVD
    - PCA
    - K-means
  - Association analysis
    - Apriori
    - FP-Growth
    - Hidden Markov Model
- Reinforcement**

Continuous

Categorical

3:28 PM | kwk-vzxf-brl

**Stages of Deep Learning Neural Network**

**SINGLE PERCEPTRON MODEL**  
It cannot classify non-linear separable set of vectors (XOR)  
It can take either 0 or 1

**MULTILAYER PERCEPTRON MODEL**  
It causes redundancy and inefficiency  
It disregards spatial information

**CONVOLUTIONAL NEURAL NETWORK**  
Can handle spatial data

**RECURRENT NEURAL NETWORK**  
Can handle temporal data with arbitrary inputs  
Vanishing Gradient Problem

**DIFFERENTIAL NEURAL NETWORK MODELS**  
GENERATIVE ADVERSARIAL NETWORK (GAN)  
AUTOENCODER

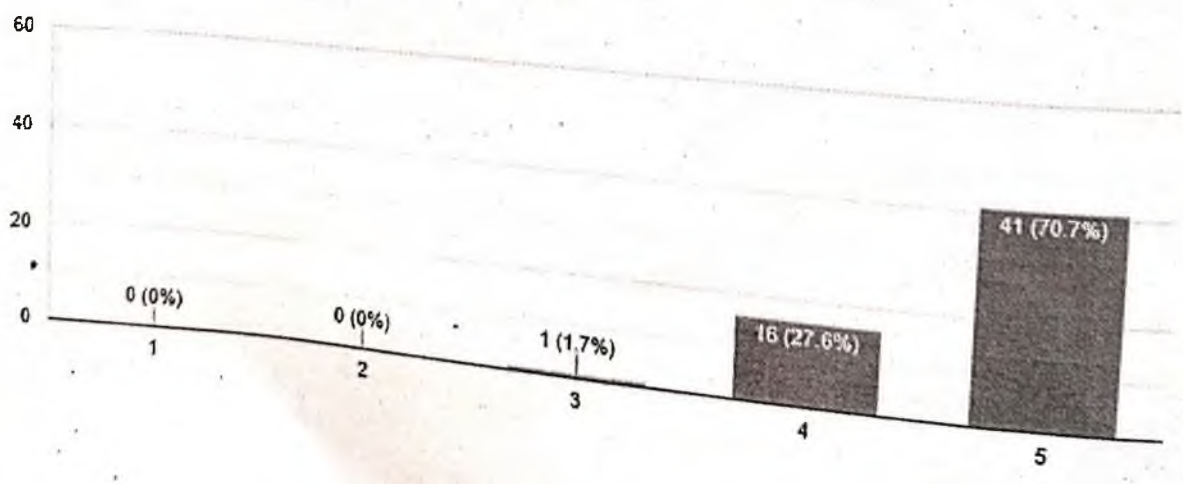
More complex and more memory

**LSTM AND GRU** → Less complex and memory  
(Large dataset) (Small dataset)

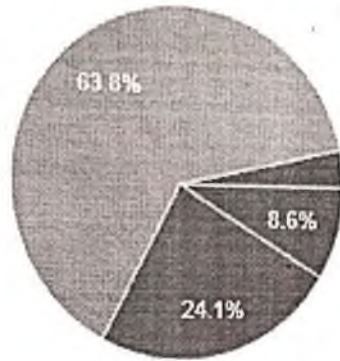
3:35 PM | kwk-vzxf-brl

## Feedback of the Guest Lecture:

How do you rate the Guest Lecture  
58 responses



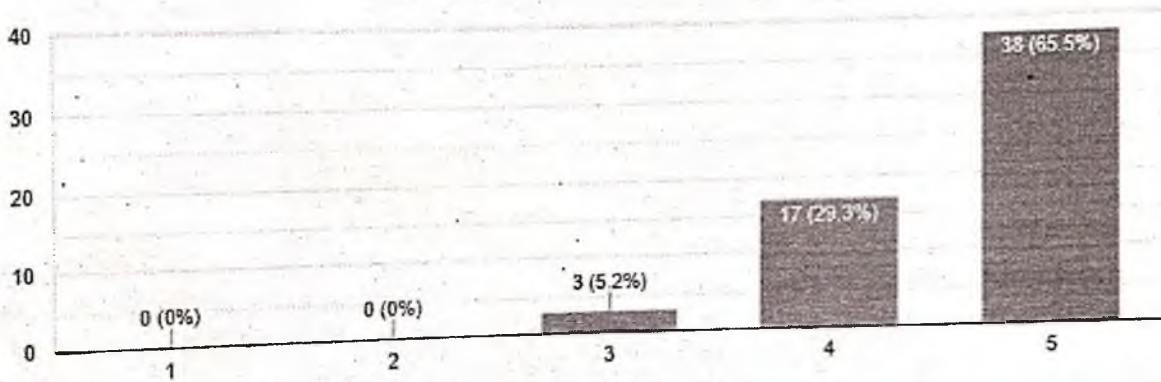
### Year of Study



- I Year
- II Year
- III Year
- IV Year

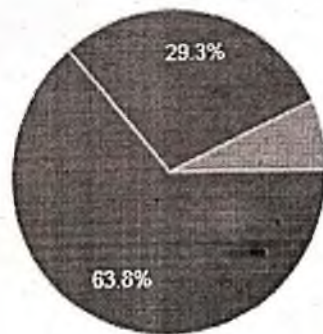
### How do you rate the interaction during Guest Lecture

58 responses



### How do you rate the usefulness of programme in improving your skills?

58 responses



- Very Good
- Good
- Satisfactory
- Poor

To what extent you have improved your knowledge / skills after attending the programme?

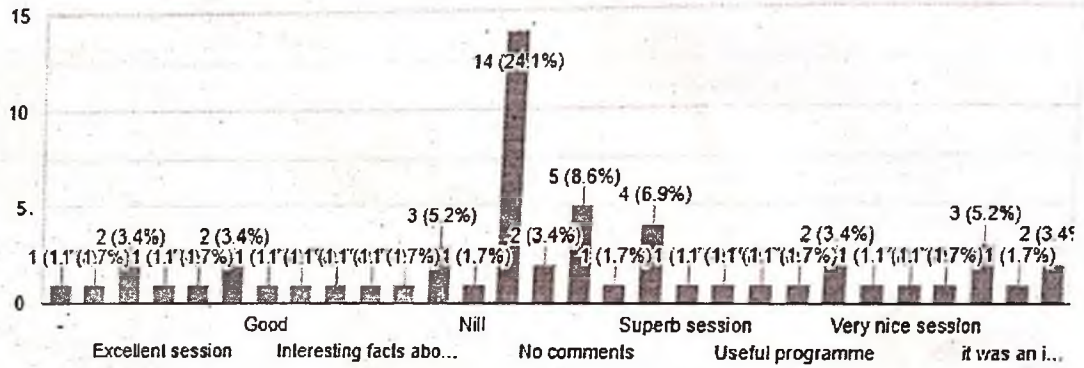
58 responses



- 85-95%
- 75-85%
- 50-75%
- 25-50%

Any Specific Feedback/Comments

58 responses



*[Handwritten Signature]*  
18/08/2021

Signature of the Faculty member

*[Handwritten Signature]*  
18/8/21

HOD



# RAMCO INSTITUTE OF TECHNOLOGY

Approved by AICTE, New Delhi & Affiliated to Anna University  
Accredited by NAAC & An ISO 9001:2015 Certified Institution  
NBA Accredited UG Programs: CSE, EEE, ECE and MECH

Department of Electronics and Communication Engineering

## Webinar on "Scope of Job Opportunities in Latest Technologies"-24.01.2021

The Department of Electronics and Communication Engineering and the Department of Electrical and Electronics Engineering in association with Alumni Association organized a Webinar on "Scope of Job Opportunities in Latest Technologies" on 24.01.2021 for the unplaced ECE and EEE students of Ramco Institute of Technology. Around 60 students participated in the Webinar. Ms.K.Padmajaya Rekha, Software Engineer, AI Design Private Limited was the resource person. During the session, the resource person shared her interview experience. She guided the students about how to plan and prepare for the placement. She also suggested various useful links to practice aptitude and coding which helped the students to prepare for the upcoming placement drive. The webinar was co-ordinated by Dr.K.Karthikeyan, Associate Professor/EEE and Mrs.G.Gnana Priya, AP(SG)/ECE under the guidelines of convenors Dr.S.Kannan, Professor & Head/EEE and Dr.S.Periyanyagi, Professor & Head/ECE.



## RAMCO INSTITUTE OF TECHNOLOGY

Rajapalayam – 626 117, Virudhunagar District, Tamil Nadu.  
(Approved by AICTE and Affiliated to Anna University, Accredited by NAAC, an ISO 9001:2015 Certified)

### Department of ECE and EEE

in association with Alumni Association  
Jointly Organizing a webinar on


# "Scope of Job Opportunities in Latest Technologies"

Resource Person  
**Ms.K.Padmajaya Rekha**  
Software Engineer  
AI Design Private Limited

**Chief Patron:**  
Dr.L.Ganesan, Principal

**Patron:**  
Dr.S.Rajakarunakaran, Vice-Principal

**Convenors:**  
Dr.S.Kannan, Professor & Head/EEE  
Dr.S.Periyanyagi, Professor & Head/ECE



**Date:** 24.01.2021 (Sunday)  
**Time:** 05.00 pm to 06.00 pm  
**Online Platform:** Google Meet  
[meet.google.com/vsm-sctc-xjc](https://meet.google.com/vsm-sctc-xjc)

**Faculty Coordinators:**  
Dr.K.Karthikeyan, Assoc.Prof./ EEE  
Mrs.G.Gnana Priya, AP (Sr.Gr)/ ECE

Webinar on "Scope of Job Opportunities in Latest Technologies"-24.01.2021

Sample Google meet images of the Webinar:

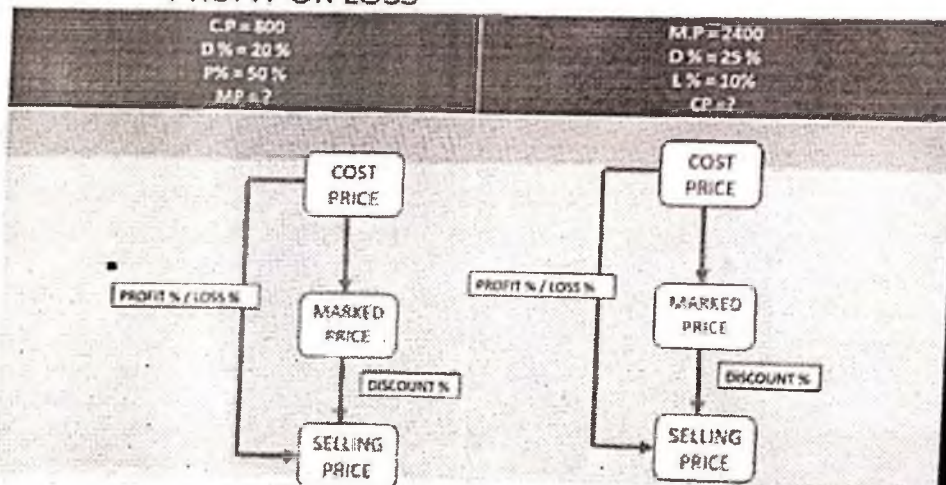
A number when divided by 18 and 24 leaves respective remainders of 14 and 20. What is the remainder when such a number is divided by 36?

$$\begin{aligned} \text{N} &\rightarrow 14 \\ d_1 = 18 \\ \text{N} &\rightarrow 20 \\ d_2 = 24 \\ \frac{\text{N}}{36} &\rightarrow ? \end{aligned}$$

$$\begin{aligned} \text{LCM} \\ \text{N} &= 9d_1 + r \\ \text{N} &= \text{LCM}(d_1, d_2)q + r \end{aligned}$$

$$\begin{aligned} \text{LCM} \\ \frac{\text{N}}{D} &\rightarrow \text{HCF} \\ 20 &= 6 \times 3 + 2 \\ \text{Net LCM} \\ \frac{10}{7} \end{aligned}$$

### PROFIT OR LOSS



In a certain code language, '13' means 'stop smoking' and '59' means 'injurious habit'. What is the meaning of '9' and '5' respectively in that code?

- I. '157' means 'stop bad habit'
- II. '839' means 'smoking is injurious'.



**PROBLEM 3:**

In a certain case GIGANTIC is written as GIGTANCI.  
How is MIRACLES written in that code?

- A. MIRLACES
- B. MIRSECAR
- C. MIRLACSE
- D. MIRLCSEA



*G. G. G. G.*  
18/8/2021  
Signature of the Faculty member

*[Signature]*  
18/8/21  
HOD

**RAMCO INSTITUTE OF TECHNOLOGY**  
**Department of Electronics and Communication Engineering**  
**Industrial Visit Details**

| Sl. No.                        | Name of the Industry   | Date of visit                  | Year of the students | No. of Students Visited |
|--------------------------------|--|--------------------------------|----------------------|-------------------------|
| <b>Academic Year 2019-2020</b> |  |                                |                      |                         |
| 1.                             | Sri Vishnu Shankar Mill Ltd., Rajapalayam  | 04.01.2020                     | I/II/A&B             | 40                      |
| 2.                             | ELCIA Cluster, Bangalore   | 24.08.2019                     | III/V/B              | 43                      |
| 3.                             | Kaynes Technology India Pvt.Ltd., Mysore   | 10.08.2019                     | III/V/A              | 44                      |
| 4.                             | Vikram Sarabhai Space Centre- ISRO, Thiruvananthapuram   | 14.06.2019                     | II/III/A&B           | 52                      |
| 5.                             | Vikram Sarabhai Space Centre-ISRO, Thiruvananthapuram, Kerala.<br>Traco Cables Limited, Cochin | 06.06.2019                     | IV/VII/B             | 43                      |
| <b>Academic Year 2018-2019</b> |  |                                |                      |                         |
| 1.                             | RAMCO Group Textile Division, Rajapalayam  | 11.01.2019                     | II/III/A & B         | 73                      |
| 2.                             | Enthu Technology Solutions Private Limited, Bangalore  | 19.06.2018<br>to<br>21.06.2018 | IV/VII/B             | 44                      |
| 3.                             | Krish Tec, Coimbatore  | 25.08.2018<br>to<br>26.08.2018 | II/III/A             | 100                     |
| 4.                             | Enthu Technology Solutions India Private Limited, Bangalore                                    | 25.08.2018<br>to<br>26.08.2018 | III/V/A              | 84                      |
| <b>Academic Year 2017-2018</b> |  |                                |                      |                         |
| 1.                             | RAMCO Group Textile Division, Rajapalayam  | 31.05.2018                     | I/II/A               | 50                      |
| 2.                             | RAMCO Group Textile Division, Rajapalayam  | 31.05.2018                     | I/II/B               | 51                      |
| <b>Academic Year 2016-2017</b> |  |                                |                      |                         |
| 1.                             | Vikram Sarabhai Space Centre-ISRO, Thiruvananthapuram  | 05.06.2017                     | II/IV/A&B            | 99                      |
| 2.                             | Entuple Technologies Pvt. Ltd., Bangalore  | 16.06.2017<br>to<br>7.06.2017  | III/VI/A             | 88                      |

|                                |   |             |            |     |
|--------------------------------|---|-------------|------------|-----|
| 3.                             | RAMCO Group Textile Division, Rajapalayam             | 04.03.2017  | I/II/A&B   | 102 |
| 4.                             | City Electyronice Pvt. Ltd, Madurai.                  | 15.07.2016  | III/V/A&B  | 114 |
| 5.                             | RAMCO Group Textile Division, Rajapalayam             | 01.07.2016  | II/III/A&B | 96  |
| <b>Academic Year 2014-2015</b> |   |             |            |     |
| 1.                             | Rajapalayam Mills Ltd,Rajapalayam                     | 22.02.2014  | I/II       | 67  |
| 2.                             | Vikram Sarabhai Space Centre-ISRO, Thiruvananthapuram | 06.02.2015  | II/IV      | 67  |
| 3.                             | RAMCO Spinners,Rajapalayam                            | 07.02.20158 | I/IIA&B    | 105 |

RAMCO INSTITUTE OF TECHNOLOGY, RAJAPALAYAM

REQUESTING PERMISSION FOR ORGANIZING  
INDUSTRIAL VISIT/INDUSTRIAL TRAINING

Sri  
Mill  
Raj

Date: 02.01.2020

Submitted to the Principal:

Department : Electronics and Communication Engineering

Year/Semester/Section : I/II/B

Class strength : 40

Proposed industries for visit :

1. Sri Vishnu Shankar Mill Ltd, Rajapalayam.

Proposed period of Industrial visit : 04.01.2020

Reason/Justification for organizing Industrial visit (IV)/Industrial Training (IT):

- Visiting various industries/R&D organizations will enrich and upgrade the knowledge about the latest technological advancements practiced in their premises and enhance the skills of the students.
- Accomplishing the outcomes such as
  1. Recognizing the various process units
  2. Identifying input and output of the process
  3. Observing the importance of safety and quality
  4. Explaining the concepts and principles
  5. Exposing to the real-time applications
  6. Exploring Industry-Institute Interaction for student internships, student career opportunities, curriculum development of special courses to fill the curricular gap, arranging expert lecture and funded research and consultancy projects.

Note:

- Faculty Coordinator (IV/IT) and Class Advisor are informed to follow the general guidelines for organising Industrial Visit/Industrial Training.
- Students and Accompanying faculty members are instructed to observe the *IV/IT RULES AND REGULATIONS FOR STUDENTS/ACCOMPANYING FACULTY*

MEMBER

*DS*  
21/12/20  
Faculty Coordinator (IV/IT)

*R. Sankar*  
03/01/2020  
Class Advisor

*K. Sankar*  
31/1/2020  
HOD

✓  
Permission granted/~~not granted~~

*[Signature]*  
PRINCIPAL  
31/20

## GENERAL GUIDELINES FOR ORGANISING INDUSTRIAL VISIT(IV)/INDUSTRIAL TRAINING (IT):

- IV/IT shall be organized only during the vacation period or on non-instructional days, during the semester. No instructional days shall be lost because of the IV/IT. IV should not go beyond 3 days (including journey). IT can spread over a period of 2-3 weeks.
- Signing of the letter of Consent-cum-Undertaking is mandatory for all the students going on IV/IT. A medical fitness certificate from a recognized medical practitioner is also to be submitted along with the Undertaking for all the students going on IV/IT outside Tamilnadu. Duly executed Undertaking should be submitted to the Principal/Department office at least 2 days prior to the visit/training, without which the accompanying staff coordinator shall not permit the student to participate.
- The minimum strength of students going for any IV/IT should be greater than 90% of the respective class. The final list of students participating in an IV/IT must be countersigned by the accompanying faculty. The undertaking along with the specified form (**LIST OF STUDENTS PARTICIPATING IN INDUSTRIAL VISIT/INDUSTRIAL TRAINING**) shall be handed over to the department office after getting the approval from the Principal.
- For IV, local tour/travel operators can be identified by the Faculty Coordinator/Class Advisor in coordination with the HOD/In-charge. A quotation from minimum three tour/travel operators shall be obtained and rates shall be finalized with the approval of Principal.
- Students need to be accompanied by the Faculty members of the Institution (minimum 2 faculty members per class). Further, a Lady Faculty member should accompany if there are girl students participating in the IV/IT.
- A report of the IV has to be submitted by the IV student co-ordinator (signed by the student coordinator and accompanying faculty in-charges) to the Class Advisor within 15 days after returning from IV. Other documents such as copy of the Industry permission letter, students' attendance sheet, acknowledgement from the industry, student's feedback, and photograph have to be submitted along with the report.

## RULES AND REGULATIONS FOR STUDENTS/ACCOMPANYING FACULTY MEMBERS:

- Student Coordinator and accompanying Faculty members need to ensure that all the students and Faculty members carry the college identity cards during their visit.
- Student Coordinator should strictly follow the IV/IT schedule approved by the Principal. If there is any deviation due to any unavoidable circumstances, inform to the Principal/HoD immediately.
- Student Coordinator has to carry railway concession counter foils/tickets of all the students and faculty members going for IV/IT with permission letter received from the industries.
- During IV/IT, the students need to be divided into smaller groups and the Group Leader has to be decided amongst them. He/She will be responsible for taking care of

all the group members. The Group Leader will be in touch with the accompanying Faculty members for any issues.

- Going to restricted areas and not following the instructions of the Group Leaders/Student Coordinator/Faculty member will be treated as a serious disobedience and severe punishments will be given after conducting the enquiry.
- Meetings with relatives and accompanying relatives or friends are not allowed during the course of the IV/IT. All students need to be in the group at all times during the IV/IT till they return to the Institution.
- The accompanying Faculty member should also arrange for medical assistance for any sick student by assisting him/her in consulting a Medical Doctor immediately. In case of critical illness during the IV, students can be sent back to Institution/their home immediately with prior information to the Principal/HoD.
- The accompanying Faculty member must take note of the weather forecasts and news broadcasts of the place of visit. The accompanying Faculty should also bring along with them the necessary safety equipment such as First Aid kit, emergency phone numbers, torches, contact details of local hospital(s), etc.
- The accompanying Faculty should be aware of the health condition of each student in order to decide whether a student should or should not be allowed to take part in any particular activity based on his/her health condition.
- HoD shall conduct a briefing session before the visit to inform the students and the accompanying faculty about the details of the visit schedule, rules and regulation to be followed during the visit.
- Students should also be informed about the need to follow instructions and safety guidelines given by the accompanying faculty members during the visit.
- As the goodwill of the Institution is attached with the students, good behaviour by students and accompanying Faculty members throughout the IV/IT is expected.

**IV RULES AND GUIDELINES FOR TOUR OPERATORS. IF APPLICABLE:**

- Arrangement for the Students and Faculty members accompanying the students should be made as per the discussion/quotation. Alternate arrangements should be made properly in case of unavoidable circumstances.
- Stay for all the Students and Faculty has to be arranged in the same hotel or the hotels very close to each other. All the stay details and contacts need to be informed to the Students as well as the accompanying faculty members with proper schedule.
- The Tour Operator should not combine the students' IV with any other private tour.

# RAMCO INSTITUTE OF TECHNOLOGY, RAJAPALAYAM

## LIST OF STUDENTS PARTICIPATING IN INDUSTRIAL VISIT

Department: Electronics and Communication Engineering

Branch/Year/Semester/Section: B.E/I/II/B

Date of Industrial visit: 04.01.2020

Details of Industries to be visited (attach industry permission letter):

1. Sri Vishnu Shankar Mill Ltd, Rajapalayam.

Accompanying Faculty members:

1. Dr.R.Subasree
2. Mrs.S.Jeeva

List of participating students:

| Sl. No. | Reg. No.     | Name of the Student  | Contact Number | Signature of the student |
|---------|--------------|----------------------|----------------|--------------------------|
| 1.      | 953619106041 | MAHENDRA PRAKASH R   | 8056713487     | R.M.Pouly                |
| 2.      | 953619106042 | MANJULA G            | 97903 99120    | Manju                    |
| 3.      | 953619106043 | MANOJKUMAR R         | 9655445649     | R. Manoj Kumar           |
| 4.      | 953619106044 | MARIKRISHNAUTHAMI S  | 9942779675     | M. Marikrishnauthami     |
| 5.      | 953619106045 | MARIMUTHU B          | 9360431742     | B. Marimuthu             |
| 6.      | 953619106046 | MONIKA R             | 8148983165     | R. Monika                |
| 7.      | 953619106047 | MUGESH M             |                |                          |
| 8.      | 953619106048 | NAMASIVAYAM T        | 8903626705     | T. Jiva*                 |
| 9.      | 953619106049 | NAVEEN KUMAR S       | 9790063981     | S. Naveen Kumar          |
| 10.     | 953619106050 | NHIDHEES LAKSH KUMAR | 8903944276     | K.R. Nalaka              |
| 11.     | 953619106051 | PADMA PRIYA C        | 9443078759     | Padma                    |
| 12.     | 953619106052 | PRADEEP C            | 2870744937     | C. Pradeep               |
| 13.     | 953619106053 | PRAKATHI S           | 9677779172     | Prakathi                 |
| 14.     | 953619106054 | PRIYADHARSHINI R     | 8940512055     | R. Priya                 |
| 15.     | 953619106055 | RAJESHWARAN R        | 9443423422     | R. Rajeshwaran           |
| 16.     | 953619106056 | RAMESH KUMAR K       |                |                          |
| 17.     | 953619106057 | SABRIYAH M           | 9442615007     | M. Sabriyah              |
| 18.     | 953619106058 | SAI VISHNU L         |                |                          |
| 19.     | 953619106059 | SAKTHI ABIRAMI N     | 9842590028     | N. Sakthi Abirami        |
| 20.     | 953619106060 | SALIHA PARVEEN S     |                |                          |
| 21.     | 953619106061 | SANGHAVI G           | 9944260175     | G. Sangavi               |
| 22.     | 953619106062 | SANTHOSHI I          | 9944735135     | I. Santhoshi             |
| 23.     | 953619106063 | SARAVANAKUMAR S      | 9791944343     | S. Saravanan Kumar       |
| 24.     | 953619106064 | SEETHA DEVI M        | 9986696848     | M. Seethadevi            |
| 25.     | 953619106065 | SHANMUGAVISAL S.V    | 9080573933     | S.V. Shanmugavisal       |

| Sl. No. | Reg. No.     | Name of the Student | Contact Number | Signature of the student |
|---------|--------------|---------------------|----------------|--------------------------|
| 26.     | 953619106066 | SHARON TRESHA A     | 9686963071     | A. Sharon Tresha         |
| 27.     | 953619106067 | SHRINITHIMEENA M    | 9688192064     | Shrinithimeena M         |
| 28.     | 953619106068 | SNEHA P             | 9655714826     | P. Sneha                 |
| 29.     | 953619106069 | SNEKHA B            | 9585331531     | B. snekha                |
| 30.     | 953619106070 | SUBHASH S           | 9360323714     | S. Subhash               |
| 31.     | 953619106071 | SUJITHA K           | 8939807450     | K. Sujitha               |
| 32.     | 953619106072 | SURENDAR V          | 6393716545     | V. Surendar              |
| 33.     | 953619106073 | SUSHMA A            | 7448673850     | A. Sushma                |
| 34.     | 953619106074 | SUSHMITHA K         | 8098426635     | K. Sushmitha             |
| 35.     | 953619106075 | VAISHNAVI M         | 9842912920     | M. Vaishnavi             |
| 36.     | 953619106076 | VEERAMANIMARAN P    | 9585512174     | P. Veeranimaran          |
| 37.     | 953619106077 | VIJAYALAXMANASEN A  |                |                          |
| 38.     | 953619106078 | VIJAYARAMMSEN A     |                |                          |
| 39.     | 953619106079 | VIJAYASANKARI P     | 9486656282     | P. Vijayasankari         |
| 40.     | 953619106080 | VINOTHINI RAJAM R   | 9487986757     | R. Vinothini             |

#### UNDERTAKING OF ACCOMPANYING FACULTY MEMBERS:

- We hereby undertake that the IV/IT will be purely related to academics.
- We shall undertake full responsibility of the students' actions and behaviour at all times during the period of IV/IT.
- We will take care of the students participating in the Industrial visit.
- We would ensure that the students abide by the rules and regulations of the Institution/Organization/Company/Industry or the local authority of the place to which such visit is being undertaken and
- We would be liable for disciplinary action if it is found that the safety of the students is compromised in any manner during the visit.

G. SELVARAJ, 31/1/2020

S. JEEVA, AP/CE, 31/1/2020

Signature of the accompanying Faculty Member with Name and Date

2/1/20  
Faculty Coordinator (IV/IT)

R. Subasu  
03/01/2020  
Class Advisor

R. Subasu  
31/1/2020  
HOD

PRINCIPAL  
31/2020



# RAMCO INSTITUTE OF TECHNOLOGY

(Approved by AICTE - New Delhi and Affiliated to Anna University - Chennai)

An ISO 9001:2015 certified institution



Date: 31/12/2019

To

The Chief Operating officer,  
RAMCO Group Textile Division,  
Rajapalayam – 626 117.

Dear Sir,

**Sub: Permission for Industrial Visit – I Year ECE – 80 students – Reg.**

I wish to inform you that, as a part of the curriculum, all students are required to undertake Industrial Visits to a few industries of repute. We feel it will be fruitful if the students with academic background have a glimpse of the industry in order to have a better appreciation of practical applications of theory.

In this context, we would like to send a batch of about 80 students of I year B.E. Electronics and Communication Engineering accompanied by two faculty members to visit your esteemed industry preferably on 04.01.2020 (Saturday) from 2.00 PM to 5.00 PM.

I request you to kindly accord the necessary permission for the above visit and arrange for guiding the students.


We assure you that our students will observe the rules and regulations that are prescribed by your industry for the visitors and will in no way disturb the functioning of the industry during their visit.

We shall be grateful to you for a favorable response. Herewith we have furnished the list of students and accompanying faculty.

Thanking you,

Yours faithfully

  
31/12/19  
f HOD/ECE

  
31/12/19  
PRINCIPAL

---

## Fwd: Request Letter for Industrial Visit

1 message

---

Periyamayagi S <periyamayagi@ritrjpm.ac.in>  
To: GOPINATH D <gopinath@ritrjpm.ac.in>

Thu, Jan 2, 2020 at 10:19 AM

----- Forwarded message -----

From: **Selvaraj K.S** <dgmadmin@ritrjpm.ac.in>  
Date: Thu, Jan 2, 2020 at 9:30 AM  
Subject: Fwd: Request Letter for Industrial Visit  
To: Periyamayagi S <periyamayagi@ritrjpm.ac.in>

----- Forwarded message -----

From: **Murugan\_t RML (Dy. Manager - L & D – Corporate)** <murugan\_t@ramcotex.com>  
Date: Tue, Dec 31, 2019 at 5:52 PM  
Subject: Request Letter for Industrial Visit  
To: Selvaraj K.S <dgmadmin@ritrjpm.ac.in>  
Cc: Nagarajan\_n RML (Associate Vice President - HR) <nn@ramcotex.com>, Mohanarengan\_n RML (Chief Operating Officer) <mohana@ramcotex.com>, Raviraja SVSM (Cheif General Manager - Works) <raviraja@ramcotex.com>, Rajkumar\_m SVSM (Manager - HR) <svsm\_rajkumar\_m@ramcotex.com>, Balasubramanian\_k SVSM (Officer - HR) <svsm\_balasubramanian\_k@ramcotex.com>, Gate SVSM <svsm\_gate@ramcotex.com>

**From:** Murugan\_t RML (Dy. Manager - L & D – Corporate)  
**Sent:** Tuesday, December 31, 2019 2:27 PM  
**To:** Selvaraj K.S  
**Cc:** Nagarajan\_n RML (Associate Vice President - HR); Mohanarengan\_n RML (Chief Operating Officer)  
**Subject:** Request Letter for Industrial Visit to Ramco Group Textile

Sub: Permission for Industrial Visit – ECE – 80 Students – reg:

With reference to your e-mail dated 31.12.2019, we are glad to inform you that permission is granted for a visit to our Mills consisting of 80 Nos. of First year ECE accompanied by two faculty members from your College on 04.01.2020 from 02.30 PM to 04.30 PM at Sri Vishnu Shankar Mill Ltd.

With warm regards,

N. Nagarajan

Associate Vice President – HR

Ramco Group Textile Division

RAMCO INSTITUTE OF TECHNOLOGY, RAJAPALAYAM

REQUESTING PERMISSION FOR ORGANIZING  
INDUSTRIAL VISIT/INDUSTRIAL TRAINING

Date: 02.01.2020

Submitted to the Principal:

Department : Electronics and Communication Engineering

Year/Semester/Section : I/II/A

Class strength : 40

Proposed industries for visit :

1. Sri Vishnu Shankar Mill Ltd, Rajapalayam.

Proposed period of Industrial visit : 04.01.2020

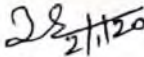
Reason/Justification for organizing Industrial visit (IV)/Industrial Training (IT):

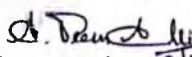
- Visiting various industries/R&D organizations will enrich and upgrade the knowledge about the latest technological advancements practiced in their premises and enhance the skills of the students.
- Accomplishing the outcomes such as
  1. Recognizing the various process units
  2. Identifying input and output of the process
  3. Observing the importance of safety and quality
  4. Explaining the concepts and principles
  5. Exposing to the real-time applications
  6. Exploring Industry-Institute Interaction for student internships, student career opportunities, curriculum development of special courses to fill the curricular gap, arranging expert lecture and funded research and consultancy projects.

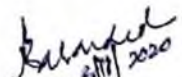
Note:

- Faculty Coordinator (IV/IT) and Class Advisor are informed to follow the general guidelines for organising Industrial Visit/Industrial Training.
- Students and Accompanying faculty members are instructed to observe the *IV/IT RULES AND REGULATIONS FOR STUDENTS/ACCOMPANYING FACULTY*

MEMBER

  
Faculty Coordinator (IV/IT)

  
Class Advisor 3/1/2020

  
HOD 3/1/2020

✓  
Permission granted/~~not granted~~

  
PRINCIPAL 3/1/20

**AFFILIATED INSTITUTIONS  
FACULTY OF INFORMATION AND COMMUNICATION ENGINEERING  
LIST OF VALUE ADDED COURSES**

| S. NO | CODE ALLOTTED | COURSE TITLE   | CREDITS |   |   |   |
|-------|---------------|--|---------|---|---|---|
|       |               |  | L       | T | P | C |
| 1.    | IVA001        | Design Thinking  | 1       | 0 | 1 | 2 |
| 2.    | IVA002        | PCB Design, Embedded System Interfacing with Arduino & Robotics              | 1       | 0 | 1 | 2 |
| 3.    | IVA003        | Interactive Web Designing and Progressive Java                               | 1       | 0 | 1 | 2 |
| 4.    | IVA004        | Robotics and its Applications  | 1       | 0 | 1 | 2 |
| 5.    | IVA005        | VB.NET   | 1       | 0 | 2 | 2 |
| 6.    | IVA006        | Enterprise Application Development and Deployment on Cloud using IBM Bluemix | 0       | 0 | 2 | 1 |
| 7.    | IVA007        | Predictive Modeling using IBM SPSS Modeler                                   | 0       | 0 | 2 | 1 |
| 8.    | IVA008        | Enterprise Mobile Application Development using IBM Worklight                | 0       | 0 | 2 | 1 |
| 9.    | IVA009        | iOS App Development  | 0       | 0 | 2 | 1 |
| 10.   | IVA010        | Transfer Learning Frameworks   | 0       | 0 | 2 | 1 |
| 11.   | IVA011        | Data Science with Python   | 1       | 0 | 1 | 2 |
| 12.   | IVA012        | Internet of Things with Node MCU   | 0       | 0 | 2 | 1 |
| 13.   | IVA013        | Virtual Instrumentation  | 1       | 0 | 1 | 2 |
| 14.   | IVA014        | IC Test Engineering  | 1       | 0 | 1 | 2 |
| 15.   | IVA015        | Learning C   | 1       | 0 | 1 | 2 |
| 16.   | IVA016        | Internet of Things Using Broadcom BCM2837                                    | 1       | 0 | 1 | 2 |
| 17.   | IVA017        | PHP and MYSQL  | 0       | 0 | 2 | 1 |
| 18.   | IVA018        | Advanced Python and Introduction to Machine Learning                         | 0       | 0 | 2 | 1 |
| 19.   | IVA019        | Real Time Electronics System Design  | 1       | 0 | 1 | 2 |
| 20.   | IVA020        | Case Study – Operating System Design   | 0       | 0 | 2 | 1 |
| 21.   | IVA021        | Case Study – Network Design  | 0       | 0 | 2 | 1 |
| 22.   | IVA022        | Electronic Circuits Making and PCB Design                                    | 0       | 0 | 2 | 1 |
| 23.   | IVA023        | Data Mining Laboratory   | 0       | 0 | 2 | 1 |
| 24.   | IVA024        | Multimedia Laboratory  | 0       | 0 | 2 | 1 |
| 25.   | IVA025        | Visual Basic Laboratory  | 0       | 0 | 2 | 1 |
| 26.   | IVA026        | Advanced Java Programming  | 1       | 0 | 1 | 2 |
| 27.   | IVA027        | Website Blog Design  | 0       | 0 | 2 | 1 |
| 28.   | IVA028        | Virtual Instrumentation Using Lab View                                       | 1       | 0 | 1 | 2 |
| 29.   | IVA029        | Angular J S  | 0       | 0 | 2 | 1 |
| 30.   | IVA030        | Simulation and Analysis of Networks Using Software (NS-2)                    | 0       | 0 | 2 | 1 |
| 31.   | IVA031        | The Ruby Programming Language  | 0       | 0 | 2 | 1 |
| 32.   | IVA032        | VB.Net Programming   | 0       | 0 | 2 | 1 |

|     |        |   |         |
|-----|--------|---|---------|
| 33. | IVA033 | Networking Design and Security                                  | 0 0 2 1 |
| 34. | IVA034 | Radio Frequency Circuit Design                                  | 1 0 2 2 |
| 35. | IVA035 | Internet of things (IOT) Application Development                | 1 0 2 2 |
| 36. | IVA036 | Advanced Graphical System Design and DAS Design                 | 1 0 2 2 |
| 37. | IVA037 | Lab VIEW Programming  | 0 0 2 1 |
| 38. | IVA038 | Smart Home – Theory and Practices                               | 1 0 2 2 |
| 39. | IVA039 | Ethical Hacking   | 1 0 2 2 |
| 40. | IVA040 | System Design Using Micro Controllers                           | 1 0 2 2 |
| 41. | IVA041 | Robotic Process Automation Using Automation Anywhere            | 1 0 2 2 |
| 42. | IVA042 | Blockchains and Cryptocurrencies                                | 1 0 2 2 |
| 43. | IVA043 | Non Linear Electronics and Modelling                            | 1 0 2 2 |
| 44. | IVA044 | Intrusion and Anomaly Detection Systems                         | 1 0 2 2 |
| 45. | IVA045 | React Framework   | 0 0 2 1 |
| 46. | IVA046 | Advanced Graphical System Design DAS Design using NI technology | 0 0 2 1 |
| 47. | IVA047 | Embedded Systems Design using PIC Controller                    | 1 0 2 2 |
| 48. | IVA048 | PCB Designing   | 0 0 2 1 |
| 49. | IVA049 | Verilog and System Verilog                                      | 1 0 2 2 |
| 50. | IVA050 | Hands-on training on LabVIEW Core1                              | 1 0 2 2 |
| 51. | IVA051 | Administrative Essentials for New Admins in Lighting Experience | 1 0 2 2 |
| 52. | IVA052 | Data Visualization and Machine Learning using Python            | 0 0 2 1 |
| 53. | IVA053 | Robotics Programming  | 0 0 2 1 |
| 54. | IVA054 | Troubleshooting and Maintenance of Home Appliances              | 0 0 2 1 |
| 55. | IVA055 | Communication and Image Processing Using MATLAB                 | 1 0 2 2 |
| 56. | IVA056 | Big Data Statistical Analysis Using R Programming               | 1 0 2 2 |
| 57. | IVA057 | Network Engineering – Routing and Switching                     | 1 0 2 2 |
| 58. | IVA058 | Web Application Development using ASP.NET                       | 0 0 2 1 |
| 59. | IVA059 | AWS and Azure Cloud Management                                  | 1 0 2 2 |
| 60. | IVA060 | Full Stack Web Development                                      | 1 0 2 2 |
| 61. | IVA061 | Embedded using Raspberry Pi                                     | 1 0 2 2 |
| 62. | IVA062 | Data Science in R and Python                                    | 1 0 2 2 |
| 63. | IVA063 | Mobile Phone Technology   | 1 0 2 2 |
| 64. | IVA064 | Arduino Programming   | 0 0 2 1 |
| 65. | IVA065 | Ethical Hacking and Network Security                            | 1 0 2 2 |
| 66. | IVA066 | Machine learning Techniques                                     | 0 0 2 1 |
| 67. | IVA067 | IOT using Arduino   | 1 0 2 2 |

*Ug*  
26/9/2022

DIRECTOR  
CENTRE FOR ACADEMIC COURSES

*T. He*  
21/5/19

**RAMCO INSTITUTE OF TECHNOLOGY, RAJAPALAYAM**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**ANNA UNIVERSITY VALUE ADDED COURSE DETAILS 2020-21**

Dear Faculty members,

The Below said three value added courses have been approved by Anna University for the academic year 2020-2021.

| Sl.No | Code   | Title                                     | Venue          |
|-------|--------|---|----------------|
| 1.    | IVA013 | Virtual Instrumentation                   | NI LabVIEW Lab |
| 2.    | IVA014 | IC Test Engineering                       | DSP Lab        |
| 3.    | IVA016 | Internet of Things Using Broadcom BCM2837 | Embedded Lab   |

In this regard, the following are the dates to handle the value added course in their respective venue.

| Sl.No | Date (4 hours per day) |
|-------|------------------------|
| 1.    | 30.11.2020             |
| 2.    | 01.12.2020             |
| 3.    | 02.12.2020             |
| 4.    | 03.12.2020             |
| 5.    | 04.12.2020             |
| 6.    | 05.12.2020             |
| 7.    | 07.12.2020             |
| 8.    | 08.12.2020             |
| 9.    | 09.12.2020             |
| 10.   | 10.12.2020             |

**Faculty Incharge**

**IVA013 Virtual Instrumentation**

1. Dr.B.Deepa Lakshmi, Associate Professor/ECE, Ramco Institute of Technology, Rajapalayam.
2. Mrs. G. Gnana priya, AP(SG)/ECE, Ramco Institute of Technology, Rajapalayam.
3. Mr.P.Gunasekaran., AP/ECE, Ramco Institute of Technology, Rajapalayam.
4. Mrs. M.Sangeetha, AP/ECE, Ramco Institute of Technology, Rajapalayam.
5. Mrs. R. Ramalakshmi, AP/ECE, Ramco Institute of Technology, Rajapalayam
6. Mr. L.K. Balaji Vignesh, AP/ECE, Ramco Institute of Technology, Rajapalayam
7. Ms. S. Harini Shriram, AP/ECE, Ramco Institute of Technology, Rajapalayam
8. Ms. S. A. Radhika, AP/ECE, Ramco Institute of Technology, Rajapalayam

### IVA014 IC Test Engineering

1. Mr.A.Azhagujaisudhan, Assistant Professor(S.G.)/Ramco Institute of Technology
2. Mr.K.Ragavan,Assistant Professor(S.G.)/Ramco Institute of Technology
3. Mrs.V.SrirengaNachiyar, Assistant Professor(S.G.)/Ramco Institute of Technology
4. Mrs.R.Chitra, Assistant Professor/Ramco Institute of Technology
5. Mr.S.Vijayakumar, Assistant Professor/Ramco Institute of Technology
6. Mr.R.DeivaNayagam, Assistant Professor/Ramco Institute of Technology

### IVA016 Internet of Things using Broadcom BCM2837

1. Mr. B. Kannan, Assistant Professor(S.G.)/Ramco Institute of Technology
2. Mr. D.Gopinath, Assistant Professor/Ramco Institute of Technology
3. Mr. A.Rameshbabu, Assistant Professor/Ramco Institute of Technology
4. Mr. G.Sivakumar, Assistant Professor/Ramco Institute of Technology
5. Mr.P.Venkatesh, Assistant Professor/Ramco Institute of Technology
6. Dr. S. Vairaprakash, Assistant Professor/Ramco Institute of Technology
7. Mrs. S. Jeeva, Assistant Professor/Ramco Institute of Technology
8. Mrs. R. Divya, Assistant Professor/Ramco Institute of Technology

#### Note:

1. Kindly record the videos and take photos while conducting the value added courses to prepare the report and submit as a proof to Anna University
2. The Faculty Incharge shall call external experts for their corresponding Value Added course any of the scheduled date, if needed.
3. Two assessment tests will be conducted during mid and end of the course
4. Grades will be awarded to the students as per university norms
5. Attendance is compulsory for all the students.

Sy 28/11/2020  
Faculty Coordinator

HOD 28/11/2020

03  
28/11/20

**RAMCO INSTITUTE OF TECHNOLOGY**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**Academic Year: 2020-21(Odd Semester)**

**STUDENTS NAMELIST FOR ANNA UNIVERSITY VALUE ADDED COURSE**

**IVA014-IC Test Engineering**

**Semester and Branch: V Semester B.E. Electronics and Communication Engineering – A &B**

| Sl.No | Register Number | Name of the Student      |
|-------|-----------------|--------------------------|
| 1.    | 953618106004    | ALPHINA CHRISTY V        |
| 2.    | 953618106038    | M SATHIS KANNAN          |
| 3.    | 953618106054    | SAKTHI PRAKASH ADITHYA B |
| 4.    | 953618106067    | UVASRI S                 |
| 5.    | 953618106302    | RAM KISHORE R            |
| 6.    | 953618106303    | VENKATRAMANAN M          |

*Sy 6/11/20*  
**Faculty Coordinator**

*PAA 6/11/2020*  
**HOD**

**RAMCO INSTITUTE OF TECHNOLOGY**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**Academic Year: 2020-21(Odd Semester)**

**STUDENTS NAMELIST FOR ANNA UNIVERSITY VALUE ADDED COURSE**  
**IVA013-VIRTUAL INSTRUMENTATION**

**Semester and Branch: V Semester B.E. Electronics and Communication Engineering – A &B**

| Sl.No | Register Number | Name of the Student         |
|-------|-----------------|-----------------------------|
| 1.    | 953618106003    | ACHUTHAN R                  |
| 2.    | 953618106005    | ANITHA RAM R                |
| 3.    | 953618106006    | ANU LAKSHMI K S             |
| 4.    | 953618106007    | ANUSUYA R                   |
| 5.    | 953618106008    | APINEYA SRI M               |
| 6.    | 953618106012    | BALA KIRUTHIKA A            |
| 7.    | 953618106013    | DEEPIKA A                   |
| 8.    | 953618106014    | DHITCHANAA R                |
| 9.    | 953618106016    | GAYATHRI R                  |
| 10.   | 953618106017    | GOKUL S                     |
| 11.   | 953618106019    | HELANMARY M                 |
| 12.   | 953618106021    | JAYAMADAN K                 |
| 13.   | 953618106025    | KATHIR K                    |
| 14.   | 953618106026    | KEERTHANA S                 |
| 15.   | 953618106027    | KIRUTHIKA P                 |
| 16.   | 953618106028    | KIRUTHIKA T                 |
| 17.   | 953618106029    | K J HARISH KALYAN           |
| 18.   | 953618106030    | KOHILAPRIYA N               |
| 19.   | 953618106037    | MONISHA A                   |
| 20.   | 953618106039    | NARMADHADEVI M              |
| 21.   | 953618106041    | NIRMALA L                   |
| 22.   | 953618106042    | NISHA P                     |
| 23.   | 953618106045    | PAVITHRA P                  |
| 24.   | 953618106059    | SHUNMUGA SIVA CHIDAMBARAM S |
| 25.   | 953618106060    | SIVARAMAN P                 |
| 26.   | 953618106061    | SOPNA S                     |
| 27.   | 953618106063    | SUKUNA K                    |
| 28.   | 953618106066    | SWETHA K                    |
| 29.   | 953618106068    | VENKATASUBBU N              |
| 30.   | 953618106069    | VETRIRANJANI G              |
| 31.   | 953618106070    | VIDHULA T                   |
| 32.   | 953618106071    | VISHALINI K                 |
| 33.   | 953618106073    | VISHNUPRIYA K               |

*S/6/11/20*  
Faculty Coordinators

*[Signature]*  
HOD 6/11/2020

**RAMCO INSTITUTE OF TECHNOLOGY**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**Academic Year: 2020-21(Odd Semester)**

**STUDENTS NAMELIST FOR ANNA UNIVERSITY VALUE ADDED COURSE**

**IVA016-Internet of Things using Broadcom BCM2837**

**Semester and Branch: V Semester B.E. Electronics and Communication Engineering – A & B**

| Sl.No | Register Number | Name of the Student      |
|-------|-----------------|--------------------------|
| 1.    | 953618106001    | AARTHI K                 |
| 2.    | 953618106002    | ABUBACKER SIDDIQ A       |
| 3.    | 953618106009    | ARUN K                   |
| 4.    | 953618106011    | BALAJI RAJA K            |
| 5.    | 953618106015    | DINESH R                 |
| 6.    | 953618106018    | HARSHETHAA N             |
| 7.    | 953618106020    | JAYALAKSHMI S            |
| 8.    | 953618106022    | JEBISH ROBIN R           |
| 9.    | 953618106023    | KALIPRAKASH M            |
| 10.   | 953618106024    | KARTHIK R                |
| 11.   | 953618106031    | KRISHNA VENI S           |
| 12.   | 953618106032    | MAHADEVI G               |
| 13.   | 953618106033    | MANIMALA N               |
| 14.   | 953618106034    | MIRRA S                  |
| 15.   | 953618106035    | MOHANASUDHAN M           |
| 16.   | 953618106046    | P MADHAV                 |
| 17.   | 953618106301    | HARINIDURGA I            |
| 18.   | 953618106040    | NINEL BERT COSTA J       |
| 19.   | 953618106043    | NITHISH BALAJI A         |
| 20.   | 953618106044    | NUNAGOPPULA SHAMBHIREDDY |
| 21.   | 953618106047    | PRAVEENKUMAR P           |
| 22.   | 953618106050    | RAAJASEKAR M             |
| 23.   | 953618106051    | RAMASURESH M             |
| 24.   | 953618106053    | SAI SIDDARTH R           |
| 25.   | 953618106055    | SANTHOSH R               |
| 26.   | 953618106056    | SANTHOSHRAJ M            |
| 27.   | 953618106057    | SARATH K                 |
| 28.   | 953618106058    | SHRIRAM V                |
| 29.   | 953618106062    | SRIDHAR G                |
| 30.   | 953618106064    | SUNDHAR S                |
| 31.   | 953618106065    | SURYAKALA A              |
| 32.   | 953618106072    | VISHNU T                 |
| 33.   | 953618106074    | YASHWANTH K              |

*S/6/11/20*  
**Faculty Coordinator**

*[Signature]*  
**HOD** 6/11/2020



# RAMCO INSTITUTE OF TECHNOLOGY

(Approved by AICTE - New Delhi and Affiliated to Anna University - Chennai)

NAAC Accredited and An ISO 9001:2015 certified institution



08.12.2020

To

Mr. B.Lakshmanakumar,  
Technical Engineer,  
Enthu Technology Solutions India Pvt Ltd,  
Coimbatore.

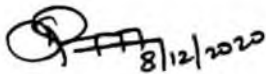
Respected Sir,

Greeting!

We would like to convey our thanks for spending your valuable time with us for in delivering a lecture on "LoRaWAN Technology" in the Anna University Approved Value Added Course IVA016-Internet of Things using Broadcom BCM2837 on 05.12.2020. As Alumni of our Institute, your lecture was highly inspiring and interesting to the students. We profusely thank you for your support. We wish to have further interactions with the students to know the present Industrial practices, in the future.

Thank you for your contribution.

Yours faithfully,

  
8/12/2020  
HOD/ECE



  
8/12/20

Principal  
PRINCIPAL  
Ramco Institute of Technology  
Rajapalayam - 626 117.

North Venganallur, Ayyanarkovil Road, Rajapalayam - 626 117.  
Virudhunagar District, Tamil Nadu. Tel : 04563 233400  
E-mail : rit@ritrjpm.ac.in Web : www.ritrjpm.ac.in



# RAMCO INSTITUTE OF TECHNOLOGY

(Approved by AICTE - New Delhi and Affiliated to Anna University - Chennai)

NAAC Accredited and An ISO 9001:2015 certified institution



08.12.2020

To

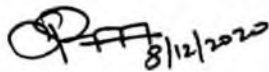
Mr. P. Siva Chidambaram,  
Test Engineer,  
Tessolve Semiconductor Pvt Ltd,  
Bangalore.

Respected Sir,  
Greeting!

We would like to convey our thanks for spending your valuable time with us for in delivering a lecture on "Introduction to STE" in the Anna University Approved Value Added Course IVA014 – IC Test Engineering on 05.12.2020. As Alumni of our Institute, your lecture was highly inspiring and interesting to the students. We profusely thank you for your support. We wish to have further interactions with the students to know the present Industrial practices, in the future.

Thank you for your contribution.

Yours faithfully,

  
8/12/2020

HOD/ECE



  
8/12/20

Principal

PRINCIPAL  
Ramco Institute of Technology  
Rajapalayam - 626 117.

North Venganallur, Ayyanarkovil Road, Rajapalayam - 626 117.

Virudhunagar District, Tamil Nadu. Tel : 04563 233400

E-mail : rit@ritrjpm.ac.in Web : www.ritrjpm.ac.in

**RAMCO INSTITUTE OF TECHNOLOGY, RAJAPALAYAM**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**

**VALUE ADDED COURSE DETAILS 2020-2021**

Title of the Course : IVA013 - Virtual Instrumentation

Year / Branch / Semester : III / ECE / V

Course Handling Faculty :

**Eminent Academicians from other institutions:**

1. Mr.E.Muralikrishnan, Manager, Optithought, Chennai.
2. Mr.B.Veeramani Viswanathan, Engineer Trainee, VVDN Technologies, Chennai.
3. Mr.M.Hariram, Engineer Trainee, MBit Wireless, Chennai.

**Internal Faculty Members:**

1. Dr.B.Deepa Lakshmi, Associate Professor/ECE, Ramco Institute of Technology, Rajapalayam.
2. Mrs. G. Gnana priya, AP(SG)/ECE, Ramco Institute of Technology, Rajapalayam.
3. Mr.P.Gunasekaran.,AP/ECE, Ramco Institute of Technology, Rajapalayam.
4. Mrs. M.Sangeetha,AP/ECE, Ramco Institute of Technology, Rajapalayam.
5. Mrs. R. Ramalakshmi, AP/ECE, Ramco Institute of Technology, Rajapalayam
6. Mr. L.K. Balaji Vignesh, AP/ECE, Ramco Institute of Technology, Rajapalayam
7. Ms. S. Harini Shriram, AP/ECE, Ramco Institute of Technology, Rajapalayam
8. Ms. S. A. Radhika, AP/ECE, Ramco Institute of Technology, Rajapalayam

| Session | Date /Day                 | Theory/Practical         | Topics   |
|---------|---------------------------|--------------------------|--|
| I       | 30.11.2020<br>(Monday)    | Theory<br>(4 Periods)    | Introduction, History of Virtual Instrumentation, LabVIEW and VI, Conventional and Graphical Programming, Future Perspective. Components of LabVIEW, Owned and Free Labels, Tools and Other Palettes, Arranging Objects, Pop-up menus, Color Coding, Code Debugging, Context Sensitive Help, |
| II      | 01.12.2020<br>(Tuesday)   | Practical<br>(2 Periods) | <ul style="list-style-type: none"> <li>• Installing LabVIEW software</li> <li>• Basic Arithmetic operation</li> <li>• Creating Virtual Instrumentation for simple applications</li> </ul>  |
|         |                           | Theory<br>(2 Period)     | Types of VI's, Creating Sub-VI's, Modular programming  |
| III     | 02.12.2020<br>(Wednesday) | Practical<br>(2 Periods) | <ul style="list-style-type: none"> <li>• Creating sub-VI's</li> <li>• Fahrenheit to Celsius conversion</li> </ul>  |
| IV      |                           | Theory<br>(2 Periods)    | Controlling Program execution with structures, Composite data-arrays and clusters  |

| Session       | Date /Day                 | Theory  | Practical | Topics   |
|---------------|---------------------------|---|-----------|--|
| V             | 03.12.2020<br>(Thursday)  | Theory<br>(4 Periods)   |           | Visual displays types- graphs and charts-analog and digital, Shift registers and Feedback nodes  |
| VI            | 04.12.2020<br>(Friday)    | Practical<br>(4 Periods)  |           | <ul style="list-style-type: none"> <li>• Programming exercises for loops and charts</li> <li>• Programming exercises for arrays and graphs.</li> <li>• Programming exercises for clusters and graphs.</li> </ul> |
| VII           | 05.12.2020<br>(Saturday)  | Practical<br>(2 Periods)  |           | <ul style="list-style-type: none"> <li>• Programming exercises for shift registers and feedback node with structures.</li> </ul>   |
| Assessment I  |                           | The students are asked to Create a VI to perform user login Account |           |  |
| VIII          | 07.12.2020<br>(Monday)    | Theory<br>(4 Period)  |           | Local and Global variables, Exploring string and File input and output operations, Introduction, PC based data acquisition-Typical on board DAQ card-Resolution and sampling frequency                           |
| IX            | 08.12.2020<br>(Tuesday)   | Theory<br>(4 Periods)   |           | Multiplexing of analog inputs-Single-ended and differential inputs, Different strategies for sampling of multi-channel analog inputs.  |
| X             | 09.12.2020<br>(Wednesday) | Theory<br>(3 period)  |           | Concept of universal DAQ card - Signal analysis (DFT and FFT), Power Spectrum, Signal Processing Functions   |
| XI            |                           | Practical<br>(2 periods)  |           | <ul style="list-style-type: none"> <li>• Programming exercises on Local and Global variables</li> <li>• Programming exercises on file Input / Output.</li> </ul>   |
| XII           | 10.12.2020<br>(Thursday)  | Practical<br>(2 Periods)  |           | <ul style="list-style-type: none"> <li>• Developing voltmeter using DAQ cards.</li> <li>• Developing signal generator using DAQ cards.</li> <li>• AM/FM Modulation and demodulation</li> </ul>                   |
| Assessment II |                           | The students are asked to develop an Audio Equalizer using myDAQ.   |           |  |

Note: The assessment for the above course will be conducted by considering all the criteria of rubrics method and will be assessed by Head of the department and senior faculty members.

28/11/20  
Course Designer & Coordinator

28/11/2020  
HOD/ECE

28/11/20  
Vice - Principal

28/11/20  
Principal

Evaluation Team Members: 1. Head of the Department 2. Two senior Faculty Members Nominated from Head of the Institution

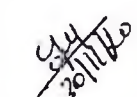
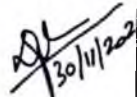
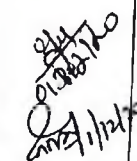
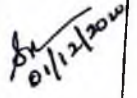
**RAMCO INSTITUTE OF TECHNOLOGY, RAJAPALAYAM**  
**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**VALUE ADDED COURSE DETAILS 2020-2021**

Title of the Course : Virtual Instrumentation  
 Year / Branch / Semester : III / ECE / V  
 Course Handling Faculty :

**Topic Allocation**

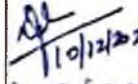

**Internal Faculty Members:**

1. Dr.B.Deepa Lakshmi, Associate Professor/ECE, Ramco Institute of Technology, Rajapalayam.
2. Mrs. G. Gnanapriya, AP(SG)/ECE, Ramco Institute of Technology, Rajapalayam.
3. Mr.P.Gunasekaran.,AP/ECE, Ramco Institute of Technology, Rajapalayam.
4. Mrs. M.Sangeetha,AP/ECE, Ramco Institute of Technology, Rajapalayam.
5. Mrs. R. Ramalakshmi, AP/ECE, Ramco Institute of Technology, Rajapalayam
6. Mr. L.K. BalajiVignesh, AP/ECE, Ramco Institute of Technology, Rajapalayam
7. Ms. S. HariniShriram, AP/ECE, Ramco Institute of Technology, Rajapalayam
8. Ms. S. A. Radhika, AP/ECE, Ramco Institute of Technology, Rajapalayam

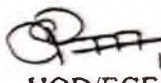
| Session | Date /Day               | Time                    | Theory/<br>Practical     | Topics  | Signature of the faculty member         |   |
|---------|-------------------------|-------------------------|--------------------------|---|---|---|
| I       | 30.11.2020<br>(Monday)  | 10.00 am to<br>12.00 pm | Theory<br>(4 Periods)    | Introduction, History of Virtual Instrumentation, LabVIEW and VI, Conventional and Graphical Programming, Future Perspective. -   | Mr.P.Gunasekaran                        |    |
|         |                         | 2.00 pm to<br>4.00 pm   |                          | Components of LabVIEW, Owned and Free Labels, Tools and Other Palettes, Arranging Objects, Pop-up menus, Color Coding, Code Debugging, Context Sensitive Help                             | Dr.B.Deepa Lakshmi                      |  |
| II      | 01.12.2020<br>(Tuesday) | 10.00 am to<br>12.00 pm | Practical<br>(2 Periods) | <ul style="list-style-type: none"> <li>• Installing LabVIEW software</li> <li>• Basic Arithmetic operation</li> <li>• Creating Virtual Instrumentation for simple applications</li> </ul> | Mr.P.Gunasekaran<br>Mrs. R. Ramalakshmi |  |
|         |                         | 2.00 pm to<br>4.00 pm   | Theory<br>(2 Period)     | Types of VI's, Creating Sub-VI's, Modular programming   | Mrs. M.Sangeetha                        |  |

| Session         | Date /Day                 | Time                    | Theory/<br>Practical  | Topics  | Signature of the faculty member             |
|-----------------|---------------------------|-------------------------|---|---|---|
| III             | 02.12.2020<br>(Wednesday) | 10.00 am to<br>12.00 pm | Practical<br>(2 Periods)  | <ul style="list-style-type: none"> <li>• Creating sub-VI's</li> <li>• Fahrenheit to Celsius conversion</li> </ul>   | Mrs. G. Gnanapriya<br>Ms. S. A. Radhika     |
|                 |                           | 2.00 pm to<br>4.00 pm   | Theory<br>(2 Periods)   | Controlling Program execution with structures, Composite data-arrays and clusters   | Ms. S. HariniShriram                        |
| IV              | 03.12.2020<br>(Thursday)  | 10.00 am to<br>12.00 pm | Theory<br>(4 Periods)   | Visual displays types- graphs and charts-analog and digital,  | Dr.B.Deepa Lakshmi                          |
|                 |                           | 2.00 pm to<br>4.00 pm   |   | Shift registers and Feedback nodes-   | Mr. L.K.<br>BalajiVignesh                   |
| V               | 04.12.2020<br>(Friday)    | 10.00 am to<br>12.00 pm | Practical<br>(4 Periods)  | <ul style="list-style-type: none"> <li>• Programming exercises for loops and charts</li> <li>• Programming exercises for arrays and graphs.</li> <li>• Programming exercises for clusters and graphs</li> </ul> | Mr.P.Gunasekaran<br>Mrs. M.Sangeetha        |
|                 |                           | 2.00 pm to<br>4.00 pm   |   |   | Mrs. R. Ramalakshmi<br>Ms. S. HariniShriram |
| VI              | 05.12.2020<br>(Saturday)  | 10.00 am to<br>12.00 pm | Practical<br>(2 Periods)  | <ul style="list-style-type: none"> <li>• Programming exercises for shift registers and feedback node with structures</li> </ul>   | Mrs. G. Gnanapriya<br>Ms. S. HariniShriram  |
| Assessment<br>I |                           | 2.00 pm to<br>4.00 pm   | The students are asked to Create a VI to perform user login Account |   | Mr.P.Gunasekaran                            |
| VII             | 07.12.2020<br>(Monday)    | 10.00 am to<br>12.00 pm | Theory<br>(4 Period)  | Local and Global variables, Exploring string and File input and output operations   | Mr. L.K.<br>BalajiVignesh                   |
|                 |                           | 2.00 pm to<br>4.00 pm   |   | Introduction, PC based data acquisition- Typical on board DAQ card-Resolution and sampling frequency  | Ms. S. A. Radhika                           |
| VIII            | 08.12.2020<br>(Tuesday)   | 10.00 am to<br>12.00 pm | Theory<br>(4 Periods)   | Multiplexing of analog inputs-Single-ended and differential inputs  | Mr.P.Gunasekaran                            |
|                 |                           | 2.00 pm to<br>4.00 pm   |   | Different strategies for sampling of multi-channel analog inputs  | Mrs. G. Gnanapriya                          |
| X               | 09.12.2020<br>(Wednesday) | 10.00 am to<br>01.00 pm | Theory<br>(3 period)  | Concept of universal DAQ card - Signal analysis (DFT and FFT), Power Spectrum, Signal Processing Functions,   | Mrs. M.Sangeetha<br>Mrs. R. Ramalakshmi     |
|                 |                           | 2.00 pm to<br>4.00 pm   | Practical<br>(2 periods)  | <ul style="list-style-type: none"> <li>• Programming exercises on Local and Global variables</li> </ul>   | Mr.P.Gunasekaran<br>Ms. S. A. Radhika       |

Signature of the faculty member

| Session          | Date /Day                | Time                    | Theory/<br>Practical  | Topics   | Signature of the faculty member   |  |
|------------------|--------------------------|-------------------------|---|--|---|--|
|                  |                          |                         |   | <ul style="list-style-type: none"><li>Programming exercises on file Input / Output.</li></ul>  |   |  |
| XII              | 10.12.2020<br>(Thursday) | 10.00 am to<br>12.00 pm | Practical<br>(2 Periods)  | <ul style="list-style-type: none"><li>Developing voltmeter using DAQ cards.</li><li>Developing signal generator using DAQ cards.</li><li>AM/FM Modulation and demodulation</li></ul> | Dr.B.Deepa Lakshmi<br>Mr. L.K.<br>Balaji Vignesh  | <br>10/12/2020<br>L.K. Balaji Vignesh<br>20/12/2020 |
| Assessment<br>II |                          | 2.00 pm to<br>4.00 pm   | The students are asked to develop an Audio Equalizer using myDAQ. | Mr.P.Gunasekaran   | <br>10/12/2020 |  |

  
Course Designer & Coordinator

  
HOD/ECE 15/12/2020

# RAMCO INSTITUTE OF TECHNOLOGY

Academic year: 2020 – 2021

Department of Electronics and Communication Engineering

Ref.: Department Review Meeting/Even/ 12

Date: 09.05.2021

## Minutes of Department Review Meeting with Faculty members

The HOD conducted a meeting with the Department faculty members on 08.05.2021 at 04.00 PM through Google Meet and discussed the following points:

### **Agenda:**

1. Academic Activity
2. Exam cell Activity
3. Project Work
4. Training and Placement Activity
5. TERV and skillrack Performance analysis
6. Faculty Online Course, Skill development course
7. Students Online Course, IIC, EDC, MSME
8. Value Added Course and other training Courses
9. Internship and Industrial Activity
10. Association / Professional Society Activity, Alumni Activity
11. Research and Development
12. Student Participation
13. Faculty Participation, ICTACT, IUCEE Activity
14. IITM PALS
15. RIT – AI
16. Admission Promotional Activity
17. Budget Allocation
18. Parents meeting for passed out students and alumni meet for 2020 passed out batch - dates to be finalized
19. Roles and responsibility for the academic year 2021-2022
20. Annual day, GC data , NAAC etc date to be finalized
21. Any other matter

**Members present:**

1. Dr. B. Deepa Lakshmi
2. Mr. K. Ragavan
3. Mr. A. Azhagu Jaisudhan Pazhani
4. Mr. B. Kannan
5. Mrs. G. Gnana Priya
6. Mrs. R. Ramalakshmi
7. Mrs. V. Sreenga Nachiyar
8. Mrs. S. Jeeva
9. Mrs. R. Divya
10. Mr. D. Gopinath
11. Mr. P. Gunasekaran
12. Mr. R. Deivanayagam
13. Mr. A. Ramesh Babu
14. Mr. G. Sivakumar
15. Mr. P. Venkatesh
16. Ms. S. Harini Shriram
17. Dr. S. Vairaprakash
18. Mr. L. K. Balaji Vignesh
19. Ms. S. A. Radhika

| Sl.No. | Points discussed   | Target Date         | Current Status | Responsibility          |
|--------|--|---------------------|----------------|-------------------------|
| 1.     | HOD welcomed all the faculty members and reviewed the points discussed in the previous meeting.  | -                   | -              | All the Faculty Members |
| 2.     | <b>Academic Activity</b> <ul style="list-style-type: none"><li>• HOD reviewed the syllabus completion</li></ul> Mrs. G. Gnana Priya AP(SG) presented the following points: <ul style="list-style-type: none"><li>✓ Result analysis of III Semester, V Semester and VII Semester were discussed</li><li>✓ As per Principal's instructions HOD asked the faculty members to get letter from the students who consistently maintaining CGPA and got arrear for the first time due to technical issues during the exam. The letters will be consolidated by the exam cell and the same will be sent to the controller of examination, Anna University, Chennai for further action.</li><li>✓ HOD informed the faculty members the last date for submission of Internal</li></ul> | II Week of May 2021 |                | All the Faculty Members |

|  |  |  |  |
|--|--|--|--|
| <p>Assessment III question paper is 12.05.2021. The question paper pattern is Part-A consisting of 5 two marks with 3 questions from Unit 4 and 2 questions from Unit 5. Part B with 2½ questions from Unit 4 and 2½ questions from Unit 5. The faculty members were instructed to set the question paper in a standard manner by referring various university websites.</p> <ul style="list-style-type: none"> <li>✓ HOD insisted the faculty members to give awareness to the students about answering the open book tests.</li> <li>✓ Rough draft of the agenda for Class Committee Meeting &amp; Course Committee Meeting and Students feedback were discussed and the faculty members were requested to give their inputs and feedback through mail.</li> </ul> <p><b>Suggestions given by the faculty members:</b></p> <ul style="list-style-type: none"> <li>• Mr.S.Vijayakumar suggested some university websites to refer for open book test: California University, Harvard University, Purdue University, Berkeley University.</li> <li>✓ Dr.B.Deepalakshmi told that guidelines should be given to the students for answering the descriptive questions elaborately.</li> <li>✓ Mr.B.Kannan and Mr.D.Gopinath suggested to refer NPTEL lectures and videos.</li> </ul> |  |  |  |
|--|--|--|--|

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|    | <p><b>Outcomes:</b></p> <ul style="list-style-type: none"> <li>• Most of the students got arrear due to login and network issues</li> <li>• To avoid such network issues in the future it is advisable to make the students use laptop with good network connectivity.</li> <li>• Anna University question papers will be set by IIT and NIT professors, faculty members were insisted to refer these websites for standard questions.</li> </ul>  |                     |             |                         |
| 3. | <p><b>Exam cell Activity:</b><br/>Mr.A.Rameshbabu AP/ECE presented the following points:</p> <ul style="list-style-type: none"> <li>• Course Outcomes Calculations for 2019-2020 odd and even semesters</li> <li>• Exam Cell - Risk Analysis &amp; Risk mitigation</li> </ul> <p><b>Suggestions given by the faculty members:</b></p> <ul style="list-style-type: none"> <li>• Want to give awareness about Mobile Scanning Apps for our I Year students</li> <li>• Mentors want to conduct Mentor – Mentees meeting and explain about various Mobile Scanning Apps and their scanning procedures.</li> <li>• All Mentors want to ensure about their mentees fibre Network Connection and Laptop facilities.</li> </ul> <p><b>Outcomes:</b></p> <ul style="list-style-type: none"> <li>• Planned to conduct Mentor – Mentees meeting in next week</li> </ul> | IV Week of May 2021 | In-progress | All the Faculty Members |

|    |  |            |   |   |
|----|--|------------|---|---|
| 4. | <p><b>Project Work:</b></p> <p>Mr.G.Sivakumar AP/ECE presented the following Points:</p> <ul style="list-style-type: none"> <li>Batches for 3 and 2 year, project review for IV year, conference updates, industry projects updates with progress</li> </ul> <p><b>Suggestions given by the faculty members:</b></p> <ul style="list-style-type: none"> <li>Want to conduct meeting for II Year students to discuss and create awareness about project area selection and Industry project details</li> <li>Plan to conduct third review for IV year students</li> </ul>   |            |   |   |
| 5. | <p><b>Training and Placement Activity</b></p> <p>Dr.A.Azhagu Jaisudhan Pazhani AP(SG) presents the following points:</p> <ul style="list-style-type: none"> <li>Placement Analysis of the year 2020-2021</li> <li>Company Visited details for the academic year 2020-2021</li> <li>Placement statistics for 2017,2018,2019,2020,2021 batches</li> <li>Training Details for the batch 2017-2021 and 2018-2022</li> <li>Recruiter and Employer feedback analysis for the batch 2017-2021</li> <li>2021-2022 plan of activities</li> <li>Risk to be addressed, issues faced and measures to be addressed</li> </ul> <p><b>Suggestions given by the faculty members:</b></p> <ul style="list-style-type: none"> <li>Dr.S.Periyayagi, HOD/ECE, inquired about the statistics for the 2017-2021 batch of placed students. She insisted on conducting an</li> </ul> | Continuous | - | IV Year students, Class advisors, Mentors |

|    |   |            |   |                               |
|----|---|------------|---|-------------------------------|
|    | <p>analysis to determine the minimum number of students involved in the placement, which turned out to be 64 out of 101.</p> <ul style="list-style-type: none"> <li>Mrs.S.Jeeva AP/ECE suggested that a technical training platform be provided, similar to Skill Rack and TERV.</li> </ul> <p><b>Outcomes:</b></p> <ul style="list-style-type: none"> <li>Planned to arrange Mock Interview and Technical Training for the batch 2018-2022</li> </ul>  |            |   |                               |
| 6. | <p><b>TERV and Skillrack Performance analysis:</b></p> <p>Ms.S.A.Radhika AP/ECE presented the following Points:</p> <ul style="list-style-type: none"> <li>The performance of II year and III year students in skillrack and TERV platform.</li> <li>She initially presented the details of Company specific Aptitude Test taken by Pre-final year students in TERV Platform.</li> <li>Then she presented the skillrack performance of II year and III year students.</li> <li>She added that around 50% of the students are effectively utilizing skillrack and scoring well.</li> <li>She concluded that still some students need to attend the test regularly. So that overall improvement can be attained.</li> </ul> | Continuous | 50% of students regularly utilizing TERV and Skill Platform | III year and II year students |

|    |  |            |          |   |
|----|--|------------|----------|---|
|    | <p><b>Suggestions given by the faculty members:</b></p> <ul style="list-style-type: none"> <li>Name of the test has to be added in presentation.</li> <li>Number of students attended the test must be clearly highlighted.</li> <li>Name of the students who are not taking the test regularly should also be added.</li> </ul> <p><b>Outcomes:</b></p> <ul style="list-style-type: none"> <li>Effective utilization of skillrack and TERV platforms to improve the coding skills and Problem solving ability of Pre-final year and II year students to get placed in Top Core and IT companies.</li> </ul>                                     |            |          |   |
| 7. | <p><b>Faculty Online Course, Skill development course:</b></p> <p>Mrs.R.Divya AP/ECE presented the following Points:</p> <ul style="list-style-type: none"> <li>Discussed about the various work done of her roles and responsibilities.</li> <li>She discussed about number of faculty members completed various online courses during the academic year 2020-21 odd semester and also she presented pursuing faculty members online courses during this academic year 2020-21 Even Semester.</li> <li>She discussed about the completion of skill Development program courses. She explained about the schedules of Module 1 and 2,</li> </ul> | Continuous | On going | II,III,IV Year students & All the Faculty Members |

Submission of Assignments,  
Certificate received by the students.

**Suggestions given by the faculty members:**

- Dr.S.Periyanayagi, HOD/ECE instruct the faculty members to do the online courses for the even semester which enhance the knowledge of the students and also she insist the new faculty members to do the online course which related to their handling subjects for this semester.
- Dr.S.Periyanayagi, HOD/ECE advised the Faculty coordinators of three domains in skill development program courses to monitoring and addressing the students for the completion of assignments with in dead line after completion of Assignments only the students will receive their certificates.

**Outcomes:**

**Skill Development program courses:**

- ✓ Exclusive Industry standard Tool Access for individual candidates.
- ✓ Students Received Certificates for each module with grade.

**Faculty online courses:**

- As faculty members learn about alternatives to the transmission model of teaching, which is the passing of knowledge or information from faculty to students .They able to shift their instructional roles to place

|    |   |                     |             |                         |
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|    | a greater amount of responsibility for learning on their students due to the possibilities for increased student participation in the online environment  |                     |             |                         |
| 8. | <p><b>Students Online Course, IIC, EDC, MSME</b></p> <p>Mr.P.Gunasekaran presented the Students Online Course,IIC,EDC,MSME details. In his presentation, he goes through the following points in great detail.</p> <p><b>Points Delivered by the faculty members:</b></p> <p>Student online course 2020-21 odd semester</p> <p>Student online course 2020-21 Even semester</p> <p>EDC Activities</p> <p>IIC Activities</p> <p>MSME Activities</p> <p><b>Suggestions given by the faculty members:</b></p> <ul style="list-style-type: none"> <li>• Dr.S.Periyanyagi, HOD/ECE, inquired about the online courses done by the students in even semester. She insisted to increase the number of courses done by the students.</li> <li>• Dr.S.Periyanyagi, HOD/ECE, inquired about IIC uploaded events. She insisted to increase the number of events to be conduct in Q3 &amp; Q4.</li> <li>• Dr.S.Periyanyagi, HOD/ECE, inquired about MSME. She insisted to identify the five potential ideas to submit in the MSME portal.</li> </ul> | I week of June 2021 | In progress | All the Faculty Members |

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|    | <p><b>Outcomes:</b><br/>Planned to collect five potential ideas to submit in MSME Portal as soon as possible.</p>  |            |          |   |
| 9. | <p><b>Value Added Course and other training Courses</b><br/>Mr.S.Vijayakumar Presented the following Points:<br/><b><u>GATE COACHING</u></b><br/>GATE willingness collected from II and III year students</p> <p>II year - 33<br/>III year - 05<br/>Total - 38</p> <ul style="list-style-type: none"> <li>• GATE 22/23 Whatsapp Group has been created</li> <li>• Technical subjects in progress <ul style="list-style-type: none"> <li>i) Network Theory - S.Vijayakumar</li> <li>ii) Digital Circuits - P.Venkatesh</li> </ul> </li> <li>• 6 classes have been handled so far without affecting regular academic classes</li> <li>• Problems are given to the students in GATE group or as a short exercise during class hours</li> <li>• References – Only standard Text books, Materials from academies like ACE, Made Easy and GATE Forum</li> </ul> <p><b>Tessolve STE-SDC Training</b></p> <ul style="list-style-type: none"> <li>• Willingness collected from II and III year Students</li> </ul> <p>II year - 28<br/>III year - 43<br/>Total - 71</p> | Continuous | On going | II,III,IV Year students & All the Faculty Members |

- Prelims test conducted for III year students to shortlist 20 students from ECE and 10 students from EEE
- Question paper for prelims test prepared and test conducted on 02.05.21
- 39 students from ECE and 20 students from EEE attended the test Answer sheet was evaluated and based on the marks secured, students were shortlisted
- Marks was disseminated to both ECE and EEE students.

Suggestions given by the faculty members:

As the students get low marks in prelims test, second attempt has been planned to conduct for students

**Outcomes:**

The students problem solving skills has improved

**Internship and Industrial Activity**

10.

- Mr.D.Gopinath AP/ECE presented IPT/Internship progress details in the Department Review Meeting (DRM)
- He informed that, Industrial training/ Internship Review status of III Year ECE A & B section and IV year ECE A & B section students
- He told that, the list of Students who have not undergone Internship in III Year ECE A & B section

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|     |  |                     |   |
|-----|--|---------------------|---|
| 11. | <p><b>Association / Professional Society Activity, Alumni Activity</b></p> <p>Mr.K.Ragavan , Association In charge delivered the professional society activities in IETE, IE(I) and ISTE.</p> <ul style="list-style-type: none"> <li>• Total number of activities planned in IETE-13, IE(I)-26 &amp; ISTE-25.</li> <li>• Total number of activities conducted in IETE-9, IE(I)-20 &amp; ISTE-15.</li> <li>• Number of activities yet to complete in IETE-4, IE(I)-6, ISTE-10.</li> </ul> <p>The alumni incharge delivered the following points.</p> <ul style="list-style-type: none"> <li>• Created RIT-ECE-Family Group in Telegram</li> <li>• Sent all the details related to admission, Department brochure, Event brochure for school students through Email, Telegram, WhatsApp</li> <li>• Alumni students are invited for Professional Society activities, Interaction with School students, Placement related activities.</li> </ul> <p><b>Suggestions given by the faculty members:</b></p> <ul style="list-style-type: none"> <li>• The HOD and faculty members suggested to complete the professional activities and to arrange valediction function or before 30.5.2021</li> <li>• Faculty members suggested to arrange more alumni students for various technical programs to currently studying ECE students and school events conducted by ECE faculties.</li> </ul> <p><b>Outcomes:</b></p> <ul style="list-style-type: none"> <li>• More number of students benefitted through professional society activities and they improved their technical and organizing skills</li> <li>• Alumni students are very much helpful to know the industry expectation from students and improving the students technical knowledge through which our students getting good placements</li> </ul> | IV week of May 2021 | II,III,IV Year students & All the Faculty Members |
|-----|--|---------------------|---|

|            |   |                   |                 |  |
|------------|---|-------------------|-----------------|--|
| <p>12.</p> | <p><b>Research and development:</b><br/>Dr.A.Azhagu Jaisudhan Pazhani AP(SG) presents the following points:</p> <ul style="list-style-type: none"> <li>• Research Cell 13 quality objective discussed in detail.</li> <li>• Project proposal submission details</li> <li>• Book chapters, patent status and patents for this academic year</li> <li>• Journal Publication- Scopus and WOS</li> </ul> <p><b>Suggestions given by the faculty members:</b></p> <ul style="list-style-type: none"> <li>• Dr.S.Periyanayagi Prof &amp; Head / ECE advised Ph.D holders to submit project proposals.</li> <li>• She also suggested some faculty seminar presentation will be considered as a resource person.</li> </ul> <p><b>Outcomes:</b></p> <ul style="list-style-type: none"> <li>• Faculty members are requested to publish one paper in Scopus or WOS is mandatory.</li> </ul> | <p>Continuous</p> | <p>On going</p> | <p>All the Faculty Members</p>   |
| <p>13.</p> | <p><b>Student Participation:</b><br/>Mrs.R.Ramalakshmi presented the following points</p> <p><b>Points Delivered by the faculty member:</b></p> <ul style="list-style-type: none"> <li>• The faculty member greeted HOD and all other faculty members</li> <li>• She presented the students participation of all the years in various events like workshop, online quiz, two weeks online Intel FPGA program, conference etc..</li> <li>• She briefed about the participation of the students year wise starting from</li> </ul>  | <p>Continuous</p> | <p>-</p>        | <p>Students, Student Participation In charge of all years, Mentors and the Class Adviser</p> |

- ❖ **I Year :** No participation
- ❖ **II Year:** Workshop – 5  
Online Quiz – 1  
NGO Activity - 1
- ❖ **III Year:** Workshop – 6  
Two week online FDP on  
Intel FPGA – 5
- ❖ **IV Year:** National Conference Count  
– 26 Team  
International Conference  
Count - 7 Team

- She informed that two papers presented in the conference has received the “Best Paper Award”
- The faculty member then showed the progress in her academic work, department and college level responsibilities

**Suggestions given by the faculty members:**

- The faculty members suggested to increase the participation of the students in various events in order to enhance their skills

**Outcomes:**

- The respective faculty in charge of all the year will ensure in future regarding the student participation in all the events and make them to participate in more number of events

**Faculty Participation, ICTACT,IUCEE Activity:**

**Mrs.S.Jeeva presented the following points**

14. • Faculty members are informed to attend ATAL courses in emerging technologies like IoT, Cyber Security, AI,ML,DL,Robotics etc.,

**ICTACT Women Empowerment Program**

22 Girls - III Year ECE A section

15 Girls - III Year ECE B section

Total - 37 girls registered for the course

- Out of 37 girls, 3 students yet to receive the login credentials.
- Totally 200 hours - First 100 hours self learning by the students. Then next 100 hours the experts from external will teach. Now the students are doing self learning modules (Soft skill, Foundation skill, Technical skill).

2021

AM

**IITM PALS**

15.

- Dr.B.Deepa Lakshmi presented about the performance of the students and their prizes in the events organized by IITM PALS. Many students performed well and received sparkling star award in the events conducted during 2020-2021.

**RIT AI**

**Points Delivered by the faculty members:**

Mr.R.Deiva Nayagam- Discussed about the various work done of his roles and responsibilities.

As a NAAC Criteria V In-charge, he has shown the details submitted to the coordinator- Dr.K.Basari Kodi for the IQAC meeting.

16.

As a Dept. weekly Newsletter Incharge, he has maintained every week activities and shown the documents related to weekly newsletter.

As a RIT-AI Research Dept. coordinator, he has shown the final year students project related to AI. Totally 6 projects were in the

Continuous

In progress

All the Faculty Members

area of AI and all the 6 projects were presented in the National/International Conferences. Also he maintained the faculty journal/book chapter publications, FDP Participation, Lecture Delivered related to AI.

He discussed about the programme organized by the ECE Dept.,- 2 day workshop on Machine Learning on Jan., 2021 and it was coordinated by Dr.B.Deepa Lakshmi, ASCP/ECE and Mrs.M.Sangeetha, AP/ECE. The faculty members delivered a lecture on the topic related to AI field was discussed.

Finally the Students Achievements related to AI activities like Innowah Virtual Exhibition Contest, IUCEE Course, Students FDP/Workshop participation, Online course and other various activities was discussed.


**Suggestions given by the faculty members:**

Dr.S.Periyamayagi, HOD/ECE suggested to give the faculty lecture delivered details to RC coordinator for updating the Resource Person details in the RC data. Also suggested to mention the Value Added Course details in the NAAC V criteria.

**Outcomes:**

Identified the Department AI related activities from faculty members and Students Regularly updated the Dept. event organized, Faculty & Student participation/ achievements, co curricular/extracurricular activities details, etc. in the weekly

|     |   |                     |         |                         |
|-----|---|---------------------|---------|-------------------------|
|     | newsletter and College magazine annually  |                     |         |                         |
| 17  | <p><b>Admission Promotional Activity</b><br/>Mr.B.Kannan presented the following points</p> <ul style="list-style-type: none"> <li>• Admission Promotional Activities - School Programs</li> <li>• ATAL Tinkering Laboratory Manual</li> <li>• ATAL Tinkering Lab establishment Procedure</li> <li>• Admission Status</li> <li>• Registration Status</li> <li>• Virtual Laboratory</li> </ul> <p><b>Suggestions given by the faculty members:</b></p> <ul style="list-style-type: none"> <li>• Speed up the circulation of brochure among the school students</li> <li>• Need to give VLAB as assignment</li> </ul> <p><b>Outcomes:</b></p> <ul style="list-style-type: none"> <li>• Admission Promotional Activities (School Programs): Able to increase the department admission.</li> <li>• ATAL Tinkering Laboratory: Able to reach the school easily for admission.</li> <li>• Virtual Laboratory: Helps to learn laboratory experiments virtually in the pandemic situation.</li> </ul> | IV Week of May 2021 | Ongoing | All the Faculty Members |
| 18. | <p><b>Budget Allocation</b><br/>Mr.B.Kannan presented the following points</p> <p><b>Points Delivered by the faculty members:</b><br/>Budget Allocation (Recurring and Non-Recurring)</p> <p><b>Suggestions given by the faculty members:</b><br/>Requested the incharge/staffs to utilize the allotted budget for the academic year 2021-2022.</p>   | IV Week of May 2021 | Ongoing | All the Faculty Members |

|  |   |   |         |                               |
|--|---|---|---------|-------------------------------|
|  | <b>Outcomes:</b><br>Budget Allocation: Guides to utilize the allowed budget effectively with result of above 85% utilization at the end.  |   |         |                               |
| 19.  | <b>Duties and Responsibilities:</b><br>The Duties and responsibilities like laboratory in charges, class advisers, class committee chair persons and other additional responsibilities were finalized for the Academic year 2021-22 based on their willingness.   | IV Week of May 2021   | Ongoing | HOD & All the Faculty Members |
| 20.  | <b>Annual day, GC data , NAAC</b><br>• NAAC AQAR documents are need to be submitted. So concerned Criteria coordinators are informed to collect the details and supporting documents on time.   | II week of June 2021  | -       | All the Faculty Members       |
| 21.  | All the faculty members are requested to give the details of participation (Faculty & Students), Research & Development activities, Online Course (Faculty & Students), Students In plant & Internship details, co-curricular activities conducted through professional societies (IETE,IE(I) and RIT Electronica) to Newsletter In charge. | Continuous  | -       | All the faculty in charges    |
| <b>Plan for Next Meeting / Follow-up in the Next Meeting</b> |   |   |         |                               |
| 1.   | Value Added Course and other training Courses   |   |         |                               |
| 2.   | Project Work  |   |         |                               |
| 3.   | Parents meeting for passed out students and alumni meet (2020 Batch)  |   |         |                               |
| <b>Prepared by:</b><br>Mrs.S.Jeeva                           |   | <b>Approved by:</b><br><br>Dr.S.Periyayagi 17/6/21 |         |                               |

Copy to:

- 1) Circulate among the faculty members of Electronics and Communication Engineering department through email for information and necessary action
- 2) File

2020

# RAMCO INSTITUTE OF TECHNOLOGY

Department of Electronics and Communication Engineering

Ref.: Faculty Meeting/2021/09

Date: 21.01.2021


## Circular

All the Faculty members are requested to attend the Department meeting on 21.01.2021 at 10.00 A.M with the following agenda.

### Agenda:

1. Academic Activity
2. Mentor Work
3. Project Work
4. Online Course
5. Faculty Participation
6. Training and Placement
7. Fees collection
8. ISO audit
9. Newsletter/Magazine
10. Any other matter

Venue: Microprocessor and Microcontroller Laboratory

  
HOD 21/1/2021

Copy to: 1. All Faculty Members for needful action  
2. File

# RAMCO INSTITUTE OF TECHNOLOGY

Academic year: 2020 – 2021

Department of Electronics and Communication Engineering

Ref.: Department Review Meeting/Odd/ 09

Date: 23.01.2021

## Minutes of Department Review Meeting with Faculty members

The HOD conducted a meeting with the Department faculty members on 21.01.2021 at 10.00 AM in the Microprocessor & Microcontroller Laboratory and discussed the following points:

### Agenda:

1. Academic Activity
2. Mentor Work
3. Project Work
4. Online Course
5. Faculty Participation
6. Training and Placement
7. Fees collection
8. ISO audit
9. Newsletter/Magazine
10. Any other matter

### Members present:

- |                                    |                              |
|------------------------------------|------------------------------|
| 1. Dr. B. Deepa Lakshmi            | 12. Mr. S. Vijayakumar       |
| 2. Mr. K. Ragavan                  | 13. Mr. P. Gunasekaran       |
| 3. Mr. A. Azhagu Jaisudhan Pazhani | 14. Mr. R. Deivanayagam      |
| 4. Mrs. R. Chitra                  | 15. Mr. A. Ramesh Babu       |
| 5. Mrs. G. Gnana Priya             | 16. Mr. G. Sivakumar         |
| 6. Mrs. R. Ramalakshmi             | 17. Mr. P. Venkatesh         |
| 7. Mrs. V. Sirenga Nachiyar        | 18. Ms. S. Harini Shriram    |
| 8. Mrs. M. Sangeetha               | 19. Dr. S. Vairaprakash      |
| 9. Mrs. S. Jeeva                   | 20. Mr. L. K. Balaji Vignesh |
| 10. Mrs. R. Divya                  | 21. Ms. S. A. Radhika        |
| 11. Mr. D. Gopinath                |                              |

| Sl.No. | Points discussed  | Target Date | Current Status | Responsibility    |
|--------|---|-------------|----------------|-------------------|
| 1.     | HOD welcomed all the faculty members and reviewed the points discussed in the previous meeting. | -           | -              | All the Faculties |

|    |   |                                  |          |                         |
|----|---|----------------------------------|----------|-------------------------|
| 2. | <p><b>Academic Activity</b><br/>HOD reviewed the following academic activities:</p> <ul style="list-style-type: none"> <li>• Revision classes has to be planned for II<sup>nd</sup> and III<sup>rd</sup> year students from 22.01.2021 to 29.01.2021 to give practice on MCQs.</li> <li>• All the class advisors are informed to prepare revision class time table with four hours per day during the above mentioned period.</li> <li>• Final year students those who are having arrears in the previous semester has to be identified and advised by the mentors to approach the concerned subject handling faculty and to seek help in order to clear their arrears.</li> <li>• Discussed about the change in college timing (i.e from 09.00 AM to 04.00 PM for students and 09.00 AM to 05.00 PM for faculties) and the approved circular regarding change in college timing will be released shortly.</li> </ul> | Continuous                       | On going | All the Faculty Members |
| 3. | <p><b>Mentor Work</b></p> <ul style="list-style-type: none"> <li>• A meeting regarding Anna university Examination has to be planned and the guidelines received from the university and RIT-Exam Cell has to be disseminated among the students through online mode within this week.</li> <li>• Students has to be advised to have proper network connection and devices to face the online examination.</li> <li>• A detailed plan which includes all the necessary skills required by a student to acquire good placement has to be prepared and presented by all the mentors on 23.01.2021(Saturday).</li> <li>• It is the duty of mentors to analyse the students of their wards and to identify their skill set so that they can be properly trained based on their interest and they can be made to do courses in great</li> </ul>  | IV <sup>th</sup> week of January | On going | All the mentors         |

|    |   |                         |          |   |
|----|---|-------------------------|----------|---|
|    | <p>learning, NASSCOM, IBM etc.</p> <ul style="list-style-type: none"> <li>• Performance and utilization of all the students has to be constantly monitored and reported to the HOD every Saturday by the mentors.</li> <li>• Students of second and third has to give awareness about AMCAT.</li> </ul>   |                         |          |   |
| 4. | <p><b>Project Work</b></p> <ul style="list-style-type: none"> <li>• Project review shall be planned after the completion of University Examination.</li> </ul>  | Continuous              | On going | Project Incharge & Project coordinators |
| 5. | <p><b>Online Course</b></p> <ul style="list-style-type: none"> <li>• HOD reviewed the progress of the online courses which is being pursued by faculties.</li> </ul>  | Continuous              | On going | All the Faculty Members                 |
| 6. | <p><b>Faculty Participation</b></p> <ul style="list-style-type: none"> <li>• Faculty has to participate in FDPs, Webinars, Workshops etc effectively and has to gain additional knowledge and to be disseminated to the students.</li> <li>• The ISO form CO 10 post event report has to be filled by the faculties after finishing their participation.</li> </ul>   | Continuous              | On going | All the Faculty Members                 |
| 7. | <p><b>Training &amp; Placement Activity</b></p> <ul style="list-style-type: none"> <li>• TCS NQT Test is scheduled on 18.02.2021 and students must register in NQT portal.</li> <li>• One student cleared HR interview in Accenture and waiting for results.</li> <li>• Mr.S.Vijayakumar, AP/ECE explained about the interview questions asked in Tessolve and also given feedback about the student's performance in the interview.</li> </ul> | Continuous              | On going | Placement Coordinators                  |
| 8. | <p><b>Fees Collection</b></p> <ul style="list-style-type: none"> <li>• Mentors are instructed to inform their wards about the fees payment and it has to be completed within this month.</li> <li>• No dues has to be collected through mail.</li> <li>• All the mentors updated their ward's fees payment details in the google sheet.</li> </ul>  | IV week of January 2021 | On going | All the mentors                         |
| 9. | <p><b>ISO Audit</b></p> <ul style="list-style-type: none"> <li>• ISO audit is scheduled during 28.01.2021 and 29.01.2021.</li> </ul>  | 25.01.2021              | On going | All the faculties                       |

|   |   |   |          |                                  |
|---|---|---|----------|----------------------------------|
|   | <ul style="list-style-type: none"> <li>ISO coordinators are instructed to check all the department files.</li> <li>Course files and other department files has to be completed and submitted by all the faculties.</li> </ul>   |   |          |                                  |
| 10.   | <b>Newsletter / Magazine</b> <ul style="list-style-type: none"> <li>The Newsletter/Magazine incharges requested the faculty members to give details about Programme Organized, Participation, Online course completion &amp; student participation for newsletter, magazine and website updation.</li> </ul>  | Continuous                                  | On going | Newsletter & Magazine In charges |
| 11.   | <b>Any other matter:</b> <ul style="list-style-type: none"> <li>Feedback has to be filled by the final year students within this week.</li> <li>Governing Council Details has to submitted within this week.</li> <li>A webinar is going to be hosted by KG IT services tentatively on 27.01.2021.</li> </ul> | IV week of January 2021                     | On going | Final year class advisors        |
| <b>Plan for Next Meeting / Follow-up in the Next Meeting</b>        |   |   |          |                                  |
| 1.  | ISO Audit outcomes  |   |          |                                  |
| 2.  | NBA work  |   |          |                                  |
| 3.  | Governing council meeting   |   |          |                                  |
| <b>Prepared by:</b>   |   | <b>Approved by:</b>                         |          |                                  |
| Mrs. S.Jeeva <i>S. Jeeva</i><br>Mrs.M.Sangeetha <i>M. Sangeetha</i> |   | Dr. S. Periyanyagi<br><i>S. Periyanyagi</i> |          |                                  |

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