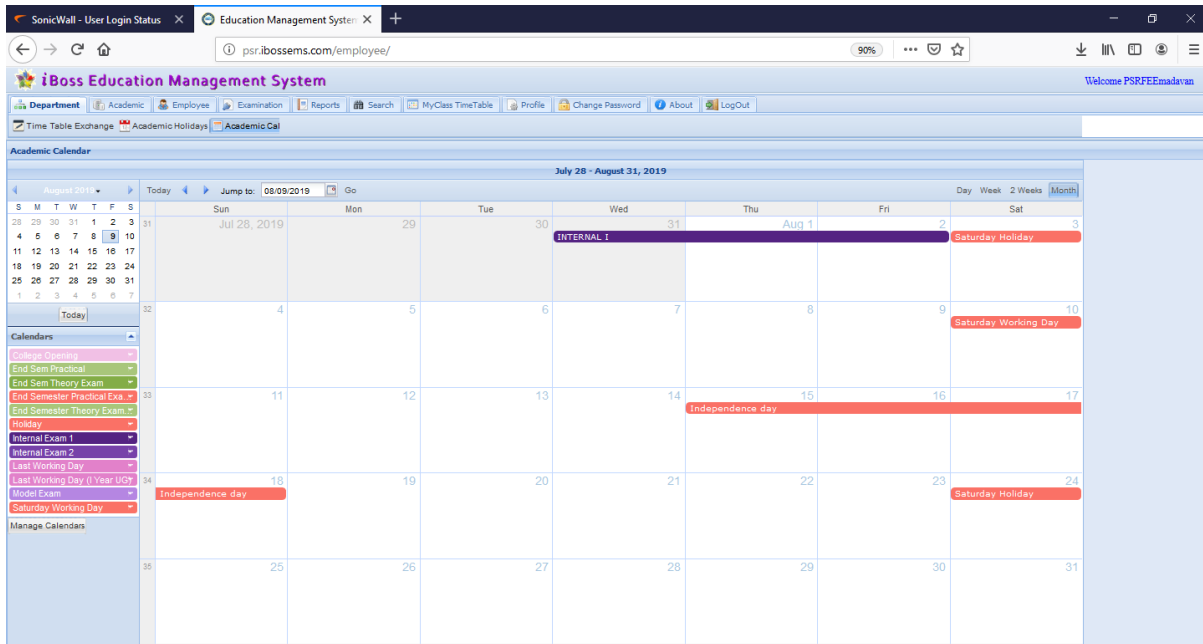


# Digitalization Initiative in Academic and Administrative Activities

(For Paperless work)

## PLANNING AND DEVELOPMENT Academic Calendar



**Holiday allotment**

**iBoss Education Management System** Welcome admin

[Masters](#) [Admission](#) [Finance](#) [Department](#) [Academic](#) [Student](#) [Employee](#) [Examination](#) [Reports](#) [Search](#) [About](#) [Change Password](#) [Logout](#)

[Main departments](#) [Department Master](#) [Subject Policy](#) [Regulation](#) [Batch Master](#) [Subject Allocation](#) [Student Elective](#) [Add Saturday Working Day](#)

[Academic Holidays](#) [Time Table Master](#) [Academic Calendar](#) [MOD Evaluation](#)

**Holiday List** [Add Holiday](#) [Help](#)

| HolidayType   | From Date  | To Date    | Holiday | Departments   | Edit |
|---|------------|------------|---------|---|------|
| <input checked="" type="checkbox"/> Sep-2019 (1 Holiday)<br>Saturday Holiday        | 07-09-2019 | 07-09-2019 | 1 Day   | UG-2016 Batch , UG-2017 Batch , UG-2018 Batch , ... |      |
| <input checked="" type="checkbox"/> Apr-2019 (4 Holidays)<br>Good Friday            | 19-04-2019 |            |         | G.2018 Batch , MBA-2018 Batch                       |      |
| <input checked="" type="checkbox"/> Sep-2019 (1 Holiday)<br>Lok Sabha Election 2019 | 18-04-2019 |            |         | G.2018 Batch , MBA-2018 Batch                       |      |
| <input checked="" type="checkbox"/> Aug-2019 (3 Holidays)<br>Saturday Holiday       | 13-04-2019 |            |         | G.2018 Batch , MBA-2018 Batch                       |      |
| <input checked="" type="checkbox"/> Aug-2019 (3 Holidays)<br>Saturday Holiday       | 06-04-2019 |            |         | G.2018 Batch , MBA-2018 Batch                       |      |
| <input checked="" type="checkbox"/> Aug-2019 (3 Holidays)<br>Independence day       | 24-08-2019 |            |         | G.2017 Batch , UG-2018 Batch , ...                  |      |
| <input checked="" type="checkbox"/> Aug-2019 (3 Holidays)<br>Saturday Holiday       | 15-08-2019 |            |         | G.2017 Batch , UG-2018 Batch , ...                  |      |
| <input checked="" type="checkbox"/> Aug-2019 (3 Holidays)<br>Saturday Holiday       | 03-08-2019 |            |         | G.2017 Batch , UG-2018 Batch , ...                  |      |
| <input checked="" type="checkbox"/> Feb-2019 (3 Holidays)<br>Mid-Semester Holidays  | 25-02-2019 |            |         | G.2017 Batch , PG-2017 Batch , ...                  |      |
| <input checked="" type="checkbox"/> Feb-2019 (3 Holidays)<br>Saturday Holiday       | 23-02-2019 |            |         | G.2018 Batch , MBA-2018 Batch                       |      |
| <input checked="" type="checkbox"/> Feb-2019 (3 Holidays)<br>Mid-Semester Holidays  | 21-02-2019 |            |         | G.2017 Batch , PG-2017 Batch , ...                  |      |
| <input checked="" type="checkbox"/> Jul-2019 (1 Holiday)<br>Saturday Holiday        | 13-07-2019 | 13-07-2019 |         | P.16 Batch , UG-2017 Batch , UG-2018 Batch , ...    |      |
| <input checked="" type="checkbox"/> Jun-2019 (2 Holidays)<br>Saturday Holiday       | 29-06-2019 | 29-06-2019 | 1 Day   | UG-2016 Batch , UG-2017 Batch , UG-2018 Batch , ... |      |
| <input checked="" type="checkbox"/> Jun-2019 (2 Holidays)<br>Mid-Semester Holidays  | 12-06-2019 | 23-06-2019 | 12 Days | UG-2016 Batch , UG-2017 Batch , UG-2018 Batch , ... |      |
| <input checked="" type="checkbox"/> Mar-2019 (1 Holiday)<br>Saturday Holiday        | 16-03-2019 | 16-03-2019 | 1 Day   | PG-2017 Batch , MBA-2017 Batch , PG-2018 Batch      |      |

Page 1 of 2 | Displaying Holidays 1 - 15 of 22

## Library software

**Simple Search**

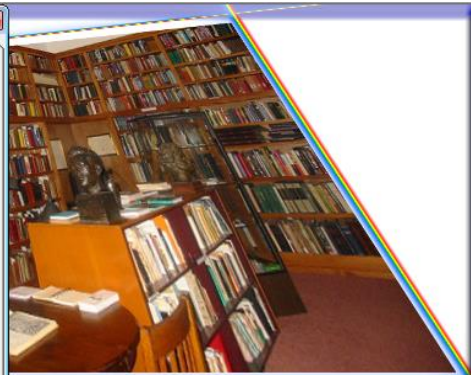
|   |                                    |   |   |
|---|------------------------------------|---|---|
| <input type="checkbox"/> Thesis         | <input type="checkbox"/> Non Book  | <input type="checkbox"/> News Clippings | <input type="checkbox"/> All Search       |
| <input type="checkbox"/> Journal Issues | <input type="checkbox"/> Reports   | <input type="checkbox"/> Book Bank      | <input type="checkbox"/> Proceedings      |
| <input type="checkbox"/> Book           | <input type="checkbox"/> Standards | <input type="checkbox"/> Back Volumes   | <input type="checkbox"/> Journal Articles |

Access No.  Call No.   
 Author  Isbn   
 Title   
 Publisher  Key Words   
 Subject  Availability   
 Edition  Year  Location

Book Details

|  |  |  |  |  |
|--|--|--|--|--|
|  |  |  |  |  |
|--|--|--|--|--|

Total Records



AutoLib Software Systems

## 2.ADMINISTRATION Department module

**iBoss Education Management System** Welcome admin

[Masters](#) | [Admission](#) | [Finance](#) | **[Department](#)** | [Academic](#) | [Student](#) | [Employee](#) | [Examination](#) | [Reports](#) | [Search](#) | [About](#) | [Change Password](#) | [Logout](#)

[Main departments](#) | [Department Master](#) | [Subject Policy](#) | [Regulation](#) | [Batch Master](#) | [Subject Allocation](#) | [Student Elective](#) | [Add Saturday Working Day](#)

[Academic Holidays](#) | [Time Table Master](#) | [Academic Calendar](#) | [HOD Evaluation](#)

You are in **Department module**. Menus in this module are listed below

- |                           |   |
|---------------------------|---|
| <b>Department master</b>  | - Create and Edit department information  |
| <b>Subject Master</b>     | - Add new subjects to Subject master  |
| <b>Subject Regulation</b> | - Assign subjects in the subject master to particular regulation  |
| <b>Batch/Semester</b>     | - Create Batch for students, assign regulation to batch, create class, create semesters and assign subjects for the created semesters |
| <b>Subject Allocation</b> | - Assign subjects to faculty  |
| <b>Time Table Master</b>  | - Create time table for current and upcoming semester with drag and drop interface  |
| <b>Academic Fees</b>      | - Fix/set fees for students in various departments and batches specifically   |
| <b>Academic Holidays</b>  | - Assign academic holidays  |
| <b>Batch Details</b>      | - View created batches information  |

## Faculty List

**iBoss Education Management System** Welcome PSRFEemadavan

[Department](#) | [Academic](#) | **[Employee](#)** | [Examination](#) | [Reports](#) | [Search](#) | [MyClass TimeTable](#) | [Profile](#) | [Change Password](#) | [About](#) | [LogOut](#)

**Employee Details**

---

**Employees List**

| Emp Id | First name           | Last name       | Role             | Designation | Date of Birth       | Mail id    |                            |
|--------|----------------------|-----------------|------------------|-------------|---------------------|------------|----------------------------|
| 1      | PSRFEajitha          | Ajitha          | Krishnamoorthy G | Lecturer    | Assistant Professor | 04-05-1996 | ajitha@psr.edu.in          |
| 2      | PSRFEanbarasi        | Anbarasi        | Soundarapandian  | Lecturer    | Associate Professor | 15-07-1982 | anbarasi@psr.edu.in        |
| 3      | PSRFEaruna           | Aruna           | Rajalah          | Lecturer    | Assistant Professor | 04-05-1985 | aruna@psr.edu.in           |
| 4      | PSRFEarunkumar       | Arun Kumar      | Ravindran        | Lecturer    | Assistant Professor | 04-06-1988 | arunkumareee@psr.edu.in    |
| 5      | PSRFEbalasubrama...  | Balasubramanian | Thirumalaisamy   | Lecturer    | Associate Professor | 13-11-1983 | balasubramanian@psr.edu.in |
| 6      | PSRFEedhivyarubini   | Dhivya Rubini   | Venkidusamy      | Lecturer    | Assistant Professor | 09-10-1991 | dhivyarubini@psr.edu.in    |
| 7      | PSRFEedwinjose       | Edwin Jose      | Sabariappan      | Lecturer    | Associate Professor | 23-07-1974 | syedwinjose@psr.edu.in     |
| 8      | PSRFEgengadevi       | Genga Devi      | Kallappan        | Lecturer    | Assistant Professor | 05-05-1983 | gengadevi@psr.edu.in       |
| 9      | PSRFEkrishnaveni     | Krishnaveni     | Selvaraj         | Lecturer    | Assistant Professor | 31-05-1984 | krishnaveneee@psr.edu.in   |
| 10     | PSRFEemadavan        | Madavan         | Rengaraj         | HOD         | Associate Professor | 25-02-1987 | madavan@psr.edu.in         |
| 11     | PSRFEmahendran       | Mahendran       | Raju             | Lecturer    | Assistant Professor | 20-04-1983 | mahendran@psr.edu.in       |
| 12     | PSRFEemangaiyarkk... | Mangaiyarkkarsi | Balasubramanian  | Lecturer    | Assistant Professor | 06-02-1992 | mangai@par.edu.in          |
| 13     | PSRFEmanimaran       | Manimaran       | Subramanian      | Lecturer    | Assistant Professor | 20-01-1991 | manimaran@psr.edu.in       |
| 14     | PSRFEmanikani        | Manikani        | Subramanian      | Lecturer    | Assistant Professor | 29-06-1991 | manikani@psr.edu.in        |
| 15     | PSRFEpraveena        | Praveena        | Ponraj           | Lecturer    | Assistant Professor | 29-05-1989 | praveena@psr.edu.in        |

Page 1 of 2    Displaying 1 - 15 of 24

# Employer Details

psr.ibossem.com/employee/

**iBoss Education Management System** Welcome PSRFEEanbarasi


Department Academic Examination Reports MyClass TimeTable Profile Change Password About LogOut

**Employee Details**

Employee Id: PSRFEEanbarasi College Type: FULL TIME  
Department: Electrical and Electronics Engineering Role: Lecturer  
Designation: Associate Professor

**Personal Information** Communication Information Job Information Academic Details Research Details Other Details

First Name\*: Anbarasi  
Last Name\*: Soundarapandan  
Date of Birth\*: 15-07-1982  
Gender\*: Female  
Blood Group: O+  
Father Name: Soundarapandan  
Father Occupation: Retired Librarian  
Mother Name: Selvarani  
Mother Occupation: Retired Teacher  
Marital Status:  Married  Unmarried  
Avaling College Hostel:  Yes  No  
Avaling College Transport:  Yes  No  
Spouse Name: Sivakumar



UPDATE

# Student personal details

SonicWall - User Login Status Education Management System

psr.ibossem.com/employee/

**iBoss Education Management System** Welcome PSRFEEamadavaan

Department Academic Employee Examination Reports Search MyClass TimeTable Profile Change Password About LogOut

Clear Filter Student Search Employee Search  
GOKULAPRIYA M Search by Roll No Search by Employee ID Search by Employee Name

**Student Informations**

Student Profile Internal Exam Details University Exam Details Fees Details


**My Profile**

**Personal Information**

First Name: GOKULAPRIYA M  
Last Name:  
Department: B.E Electrical and Electronics Engineering (EEE)  
Batch: 2017 Batch  
Academic: Sem - 5  
Class: Section A

**Academic Information**

Registration No: 1704014  
Role No: 17EE014  
Application No: 000650  
Admission Date: 09-08-2017  
Admission Quota: Government



**Personal information**

Student MailId:  
Date Of Birth: 16-08-2000  
Blood Group: O+ ve  
Gender: Female  
Community: MBC  
Caste: MARAVAR  
Religion: Hindu  
Cutoff Mark: 74.5

**Contact information**

Father Name: MURUGAN R  
Occupation: TNEB  
Address: 129/3  
Parent Mobile No: 9842592567  
Alternate Phone: 8883547288

# Student Attendance Entry

File Edit View History Bookmarks Tools Help

SonicWall - User Login Status x New Doc 2019-09-04 13:38:19 x Education Management System x +

psr.ibossem.com/employee/

**iBoss Education Management System** Welcome PSRFEEanbarasi

Department Academic Examination Reports MyClass TimeTable Profile Change Password About LogOut

Student Attendance Internal Mark Posting Internal Mark Calculation

**Attendance Closing Date : 25-10-2019**

Help Regular Subjects Exchange Subjects

Search by Registration No or Search by Student Name Clear Filter

Subject FULL TIME - B.E Electrical and Electronics Engineering (EEE) - 2017 Batch - Section A - Power Electronics Lab Batch Select Lab Batch Number

Date 09-09-2019 1st Hour 2nd Hour 3rd Hour 4th Hour 5th Hour 6th Hour  7th Hour 8th Hour Generate Attendance

Student Attendance - FULL TIME - B.E Electrical and Electronics Engineering (EEE) - 2017 Batch - Section A - Power Electronics

Save CANCEL

| Role No   | Register No | Student Name         | OD-7hr                   | Leave-7hr                | Absent-7hr               |
|---|-------------|----------------------|--------------------------|--------------------------|--------------------------|
| <b>B.E Electrical and Electronics Engineering (EEE) (67 Students)</b> |             |                      |                          |                          |                          |
| 1   | 17EE001     | ABIRAYA K            | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2   | 17EE002     | AMIRTHARAJ T         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3   | 17EE003     | ANANDH A             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4   | 17EE004     | ARAVINTH S           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5   | 17EE005     | AIYYAPPAH S          | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6   | 17EE006     | BALAKUMARAN V        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7   | 17EE007     | BASKAR K             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8   | 17EE008     | DEERANCHELLATHURAI J | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9   | 17EE009     | DHIVYA G             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10  | 17EE010     | ESAKKI SANKAR S      | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11  | 17EE011     | GANDHI R             | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 12  | 17EE012     | GANESHMOORTHII A     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 13  | 17EE013     | GOBINATHAN V         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 14  | 17EE014     | GOKULAPRIYA M        | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 15  | 17EE015     | GOWTHAMRAJ R         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Type here to search

11:23 AM 9/9/2019



## Student Report-GEIS

File Edit View History Bookmarks Tools Help  
SonicWall - U GEIS - PSR Eng X  
192.168.2.4:8080/geisstd/studentSearchData.do?checkValidation

**GEIS** T. BALASUBRAMANIAN Campus Name : PSR Engineering College  
Home Change Password Logout

Admission Course Attendance Exam Reports Staff Portal

Student Type :  Current Students  Passed / Dropped Out Students  
Student Name/Roll Number : SURYA S==15EE032  
Search Reset


**Admission Details**

|                            |  |                |              |
|----------------------------|--|----------------|--------------|
| Full Name                  | : SURYA S                                      | Application Id | : R204       |
| Roll Number                | : 15EE032                                      | Batch          | : JUN-2015   |
| University Register No     | : 1504032                                      | Admission Type | : Regular    |
| Admission Date             | : 03-Aug-2015                                  | Seat Type      | : Management |
| Academic Year of Admission | : 2015-2016                                    | Reservation    | : General    |
| Course                     | : B.E - Electrical and Electronics Engineering |                |              |

**Campus Activities**

|                    |               |                 |       |
|--------------------|---------------|-----------------|-------|
| Student Type       | : Day Scholar | Using Transport | : Yes |
| First Graduate     | : Yes         | Scholarship     | :     |
| Placement Required | : Required    |                 |       |

**Photo Details**



Fields marked with \* or with background yellow are mandatory fields

Copyright © 2015 VASA. All Rights Reserved Monday, September 09, 2019

Type here to search 5:06 PM 9/9/2019

## Staff Profile-GEIS

File Edit View History Bookmarks Tools Help  
SonicWall - U GEIS - PSR Eng X  
192.168.2.4:8080/geisstd/staffPortalProfileHome.do?par=15&sub=168&ssub=0&:


**GEIS** T. BALASUBRAMANIAN Campus Name : PSR Engineering College  
Home Change Password Logout

Admission Course Attendance Exam Reports Staff Portal

**Profile**  
Staff Portal >> Profile Help

**Staff Profile**

**Personal Information**

|                   |  |                  |  |  |
|-------------------|--|------------------|--|--|
| Full Name         | : Balasubramanian T  | Staff Id         | : PSRFEE004  | <br>Photo |
| Username          | : balasubramanian  | Gender           | : Male   |  |
| Date of Birth     | : 13-Nov-1983  | Date of Joining  | : 06-Jun-2008  |  |
| Father Name       | : Thirumalaisamy   | Mother Name      | : Kanagamaniammal  |  |
| Nationality       | : Indian   | Religion         | : Hindu  |  |
| Caste             | : BC   | Community        | : Nadar  |  |
| Marital Status    | : <input checked="" type="radio"/> Married <input type="radio"/> Single          | Spouse Name      | : <input type="text"/>   |  |
| Email             | : t_balasubramanian13@yahoo.co.*   | Extra Curricular | : <input type="text"/>   |  |
| Permanent Address | : Roselin Illam,<br>Kamarajar 1st Street,<br>Vasudevapallur<br>Pincode - 627 758 | Mobile Number    | : 7502484095   |  |
| Blood Group       | : B-   | Current Address  | : 616/3, Senthil Colony,<br>Sivasanagar,<br>Kovilpatti - 628 502 |  |
| Using Transport   | : Yes  | Residence Type   | : Day scholar  |  |

Fields marked with \* or with background yellow are mandatory fields

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Type here to search 5:18 PM 9/9/2019

## Students attendance entry-GEIS

The screenshot shows the 'Student Attendance Entry' page in a web browser. The browser address bar shows the URL: 192.168.2.4:8080/geisstd/StudentAttendanceDisplay.do?cmt. The application header includes the GEIS logo and navigation tabs for Admission, Course, Attendance, Exam, Reports, and Staff Portal. The main content area is titled 'Student Attendance Entry' and contains a form with the following fields:

- Academic Year: 2018-2019
- Semester Type: Common Semesters (radio), Other Semesters (radio)
- Course: B.E - Electrical and Electronics Engineering
- Sub Part/Semester: Semester 8
- Section: EEE
- Display as: Roll Number (radio), Register Number (radio)

Buttons for 'List the students' and 'Reset' are located below the form. Below the form, there are five red notes:

- Note-1: To save attendance, first check any check box, then click any one of the Attendance Type (Present/Absent/OnDuty) then click save button.
- Note-2: Click on the text in the cell you want to edit, check box will appear, then follow Note-1.
- Note-3: D-Denote session wise attendance
- Note-4: D-Denote Day wise attendance
- Note-5: H-Denote Hours wise attendance

The main display area shows the 'Last Attendance Date : 05-Mar-2019' and a calendar for 'September-2019'. A table displays attendance data for three students:

| S.No | Student Name    | Roll Number | 8 Sunday Academic year ended | 9 Monday Academic year ended | 10 Tuesday Academic year ended | 11 Wednesday Academic year ended | 12 Thursday Academic year ended | 13 Friday Academic year ended | 14 Saturday Academic year ended |
|------|-----------------|-------------|------------------------------|------------------------------|--------------------------------|----------------------------------|---------------------------------|-------------------------------|---------------------------------|
| 1    | AJITH KUMAR S M | 15EE001     |                              |                              |                                |                                  |                                 |                               |                                 |
| 2    | ARUNKUMAR P     | 15EE002     |                              |                              |                                |                                  |                                 |                               |                                 |
| 3    | BALAMURUGAN U   | 15EE003     |                              |                              |                                |                                  |                                 |                               |                                 |

The bottom of the screenshot shows the Windows taskbar with the date 'Monday, September 09, 2019' and the time '5:30 PM 9/9/2019'.

## 3.FINANCE AND ACCOUNTS Fees payment

The screenshot shows the 'Instant Challan' window in the iBoss Education Management System. The window is titled 'Welcome PSRRFinancehead' and contains the following details:

**Payee Details:**

- Roll No: 18EE001
- Student Name: AARTHI SHUNMUGA LAKSHM
- Generated Date: 06-09-2019
- Register No: 1804001
- Department: B.E Electrical and Electronics
- Class: Section A

**Payment Details:**

| Year | Fees Type         | Fee A... | Paid Am... | Balance ... | Amount to ... | Check | PMSS |
|------|-------------------|----------|------------|-------------|---------------|-------|------|
| 1    | Year Tuition Fees | 45000    | 15000      | 30000       | 30000         |       |      |

At the bottom of the window, there are fields for:

- Total Amount: [ ]
- Penalty: [ ]
- Net Fee: [ ]
- Remarks: [ ]
- Mode of Payment: [ ]
- Bank Name: [ ]
- Branch: [ ]
- DD No: [ ]
- DD Date: [ ]

Buttons for 'Generate Challan' and 'Cancel' are located at the bottom right of the window.



## Student Fees details

**iBoss Education Management System** Welcome PSRFEemadavan

[Department](#)
[Academic](#)
[Employee](#)
[Examination](#)
[Reports](#)
[Search](#)
[MyClass TimeTable](#)
[Profile](#)
[Change Password](#)
[About](#)
[LogOut](#)

Clear Filter Student Search Employee Search  
 GOKULAPRIYA M Search by Roll No Search by Employee ID Search by Employee Name

**Student Informations**

[Student Profile](#)
[Internal Exam Details](#)
[University Exam Details](#)
[Fees Details](#)

**Fees Details**

| Fee Type Name                       | Fine Amount | Last Date Without Fine | Total Amount | Paid Amount | Balance Amount |
|-------------------------------------|-------------|------------------------|--------------|-------------|----------------|
| <b>Academic : I Year (3 Fees)</b>   |             |                        |              |             |                |
| Tuition Fees                        | 0           | 30-09-2018             | 85000        | 0           | 0              |
| Tuition Fees                        | 0           | 30-09-2018             | 55000        | 55000       | 0              |
| Hostel Fees and Mess Fees           | 0           | 30-09-2018             | 51000        | 0           | 0              |
| <b>Academic : II Year (3 Fees)</b>  |             |                        |              |             |                |
| Tuition Fees                        | 0           | 08-05-2019             | 80000        | 0           | 0              |
| Tuition Fees                        | 0           | 08-05-2019             | 55000        | 35000       | 20000          |
| Hostel Fees and Mess Fees           | 0           | 08-05-2019             | 51000        | 0           | 0              |
| <b>Academic : III Year (3 Fees)</b> |             |                        |              |             |                |
| Tuition Fees                        | 0           | 31-07-2020             | 85000        | 0           | 0              |
| Tuition Fees                        | 0           | 31-07-2020             | 55000        | 30000       | 25000          |
| Hostel Fees and Mess Fees           | 0           | 31-07-2020             | 51000        | 0           | 0              |

## Student Mark Entry

File Edit View History Bookmarks Tools Help

SonicWall - U GEIS - PSR Eng X

192.168.2.4:8080/geis/ExamMarkEntryConfig.do?&par=6&sub=70&ts= 80% Search

**GEIS** T. BALASUBRAMANIAN Campus Name : PSR Engineering College  
[Home](#) [Change Password](#) [Logout](#)

Admission Course Attendance Exam Reports Staff Portal

**Mark Entry** Help

Exam >> Post-Exam Activities >> Mark Entry

**Mark Entry**

**Subject**

Academic Year : Select Academic Year \*

Regulation Plan : Select Regulation Plan \*

Sub Part/Semester : Select Sub Part/Semester \*

Section : Select Section \*

Exam Event Planning : Select Exam Planning \*

Subject : Select options \*

Display as :  Roll Number  Register Number

**Student**

Course : Select Course \*

Sub Part/Semester : Select Sub Part/Semester \*

Student Roll Number/Name : Select options \*

Fields marked with \* or with background yellow are mandatory fields

Transferring data from 192.168.2.4... Monday, September 09, 2019 2 new notifications

Type here to search 5:49 PM 9/9/2019

## 4. STUDENTS ADMISSION AND SUPPORT

### Enquiry form

**Student Details**

Enquiry Date \*: 29-04-2019  
 First Name \*: PRAVEEN  
 Last Name \*: A  
 Gender \*: Male  
 Date of Birth \*: 13-09-2001  
 Aadhaar Number:  
 Fathers Name \*: ARUMUGAM A  
 Communication Address \*: 44/3, KEELARADHA VEETHI, JETTAYAPURAM  
 City:  
 District: TUTICORIN

Parent's Contact No \*: 7418794326  
 Personal Contact No \*: 7339674326  
 Email:  
 Community \*: BC  
 Caste \*: KAMMALAR  
 Religion \*: Hindu  
 Previous Qualified Examination \*: HSC  
 Year of Admission \*: 1  
 Category \*: UG  
 Board \*: State Board (PCM)  
 University \*:  
 Quota \*: Government

**Branch Preferred**

| Branch  | Preferred |
|---|-----------|
| 1. B.E Computer Science and Engineering (CSE)         | 1         |
| 2. B.E Electrical and Electronics Engineering (EEE)   |           |
| 3. B.E Mechanical Engineering (MECH)                  |           |
| 4. B.E Civil Engineering (CIVIL)                      |           |
| 5. B.E Electronic and Communication Engineering (ECE) |           |

**Enquiry Students List**

| Batch | Enquiry No | Enquiry Date | Student Name | Gender | DOB    | Contact No | Community | Print Challan | Make Fee | Register Program |
|-------|------------|--------------|--------------|--------|--------|------------|-----------|---------------|----------|------------------|
| 1     | 2019 B...  | 20190556     |              |        |        |            |           |               |          |                  |
| 2     | 2019 B...  | 20190555     |              |        |        |            |           |               |          |                  |
| 3     | 2019 B...  | 20190554     |              |        |        |            |           |               |          |                  |
| 4     | 2019 B...  | 20190553     |              |        |        |            |           |               |          |                  |
| 5     | 2019 B...  | 20190552     |              |        |        |            |           |               |          |                  |
| 6     | 2019 B...  | 20190551     |              |        |        |            |           |               |          |                  |
| 7     | 2019 B...  | 20190550     |              |        |        |            |           |               |          |                  |
| 8     | 2019 B...  | 20190549     |              |        |        |            |           |               |          |                  |
| 9     | 2019 B...  | 20190548     |              |        |        |            |           |               |          |                  |
| 10    | 2019 B...  | 20190547     |              |        |        |            |           |               |          |                  |
| 11    | 2019 B...  | 20190546     |              |        |        |            |           |               |          |                  |
| 12    | 2019 B...  | 20190545     |              |        |        |            |           |               |          |                  |
| 13    | 2019 B...  | 20190544     |              |        |        |            |           |               |          |                  |
| 14    | 2019 B...  | 20190543     |              |        |        |            |           |               |          |                  |
| 15    | 2019 B...  | 20190542     |              |        |        |            |           |               |          |                  |
| 16    | 2019 B...  | 20190541     |              |        |        |            |           |               |          |                  |
| 17    | 2019 B...  | 20190540     |              |        |        |            |           |               |          |                  |
| 18    | 2019 B...  | 20190539     | GAYATHRI     | S      | Female | 9597048269 | 367       | 119           | 61.33    |                  |
| 19    | 2019 B...  | 20190538     | GANESAN      | P      | Male   | 9442330796 | 347       | 113           | 55.67    |                  |

## Students Registration

**Register Program**

Select Shift Type:   
 Select Batch:   
 Select Department:   
 Select Application Number:   
 Search:   
 Clear Filter:   
 Admitted Student Report

| Enquiry Number | Department                                 | Student Name | DOB        | Email Id                    | Contact No | Community | Print Challan | Make Fee | Register Program |
|----------------|--|--------------|------------|-----------------------------|------------|-----------|---------------|----------|------------------|
| 20190103       | B.E Computer Science and Engineering (CSE) | SHAMILI N    | 06-01-2002 | shamil.nagarajan@gmail.c... | 9942417425 | BC        |               |          |                  |

## 5. EXAMINATION Examination module

**iBoss Education Management System** Welcome admin

Masters | Admission | Finance | Department | Academic | Student | Employee | **Examination** | Reports | Search | About | Change Password | Logout

Exam Fees | Exam Groups | Post Exam Fee | Exam Application | Exam Application Bulk | Payment Tracking | Revaluation | CA Mark Verification  
 Internal Exam | Internal Mark Posting | Internal Mark Calculation | Examination View | Moderation | University Exams | Exam Room | Exam Room Allotment  
 Hall Ticket | SE Mark Conflict | SE Mark view | Examination Mark posting status | Question Paper Encode | Revaluation Exam Application | Packet/Dummy Number Generation | Dummy Number Associations  
 Unlock Attendance

You are in **Examination module**. Exam conducting flows are listed below

- Exam Group Creation** - To create new Exam group for submitting exam application.
- Exam Fees Assigning** - To Assign fees against all category papers to collect exam fees.
- Exam Application** - To save (in case of manual payment) or view and exam application submitted by students.
- Exam Initiation** - Initiate an exam to conduct departmentwise.
- Exam Room Allotment** - To allocate rooms for the students.
- With held and Condonation Marking** - Mark withheld and condonation Students.
- Attendance Sheet** - Take Attendance sheet for Part IV Subjects/Other Subjects room wise.
- Hallticket** - Generate an Hall ticket for the students.
- Folhsheet** - Generate an Folhsheet for evaluation purposes.
- Mark Entry** - First/Second Mark Entry after evaluating the papers..
- SE Mark Conflicts** - To resolve the conflicted marks entered in first/second entry.
- Galley Sheet** - To generate an Galley Sheet department wise.
- Exam Result Analysis** - To analyse the results in Pass Comunity Meeting.
- Marksheet** - To take marksheet student wise.

## Student End Semester Marks details

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Department | Academic | Employee | Examination | Reports | Search | MyClass TimeTable | Profile | Change Password | About | Logout

Student Search:  Search by Roll No | Employee Search:  Search by Employee ID |  Search by Employee Name

**Student Informations**

Student Profile | Internal Exam Details | **University Exam Details** | Fees Details

| Semester  | Sub Code | Sub Name   | Grade | Result | Attempt Type |
|---|----------|--|-------|--------|--------------|
| <b>Semester - I (9 Subjects) Exam Group Name - OCT 2017</b>   |          |  |       |        |              |
| I   | 161HS11  | Essential English                                | A     | P      | Regular      |
| I   | 161EE17  | Engineering Practices Laboratory                 | A+    | P      | Regular      |
| I   | 161CY11  | Engineering Chemistry                            | A     | P      | Regular      |
| I   | 161PC17  | Physics and Chemistry Laboratory - I             | A+    | P      | Regular      |
| I   | 161MA11  | Engineering Mathematics - I                      | A+    | P      | Regular      |
| I   | 161CS11  | Computer Programming                             | A     | P      | Regular      |
| I   | 161CS17  | Computer Practices Laboratory                    | A+    | P      | Regular      |
| I   | 161PH11  | Engineering Physics                              | A     | P      | Regular      |
| I   | 161ME11  | Engineering Graphics                             | A     | P      | Regular      |
| <b>Semester - II (9 Subjects) Exam Group Name - APR-2018</b>  |          |  |       |        |              |
| II  | 161EE27  | Electric Circuits Laboratory                     | A     | P      | Regular      |
| II  | 161PH21  | Physics of Materials                             | A     | P      | Regular      |
| II  | 161EE22  | Basic Electronic Devices and Circuits            | B+    | P      | Regular      |
| II  | 161HS21  | Technical English                                | A     | P      | Regular      |
| II  | 161EE26  | Basic Electronic Devices and Circuits Laboratory | A+    | P      | Regular      |
| II  | 161CY21  | Environmental Science                            | B+    | P      | Regular      |
| II  | 161PC27  | Physics and Chemistry Laboratory - II            | O     | P      | Regular      |
| II  | 161MA21  | Engineering Mathematics - II                     | B+    | P      | Regular      |
| II  | 161EE21  | Electric Circuits Theory                         | B+    | P      | Regular      |
| <b>Semester - III (9 Subjects) Exam Group Name - NOV-2018</b> |          |  |       |        |              |
| III   | 161EE37  | Integrated Circuits Laboratory                   | O     | P      | Regular      |
| III   | 161EE31  | Linear Integrated Circuits                       | A     | P      | Regular      |
| III   | 161EE34  | Measurements and Instrumentation                 | A     | P      | Regular      |
| III   | 161EE36  | Measurements and Instrumentation laboratory      | O     | P      | Regular      |
| III   | 161EE32  | Digital Circuits and Design                      | A     | P      | Regular      |
| III   | 161EE35  | Data Structures and Algorithms                   | A     | P      | Regular      |
| III   | 161MA31  | Transforms and Partial Differential Equations    | B+    | P      | Regular      |
| III   | 161HS39  | Functional English - I                           | A+    | P      | Regular      |

## Student Internal Marks details

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Department Academic Employee Examination Reports Search MyClass TimeTable Profile Change Password About LogOut

Clear Filter Student Search: GOKULAPRIYA M Search by Roll No Employee Search: Search by Employee ID Search by Employee Name

**Student Informations**

Student Profile Internal Exam Details University Exam Details Fees Details

**Exam Results**

| Semesters         | Sub Code | Sub Name                             | IA1 | IA2 | Modal | Exam Avg | Attendance | Assignm... | Seminar | Observati... | Record ... | Lab Mod... | Internal E... | Observati... |
|-------------------|----------|--------------------------------------|-----|-----|-------|----------|------------|------------|---------|--------------|------------|------------|---------------|--------------|
| 2017 Batch/Sem -1 | 161HS11  | Essential English                    | 23  | 34  | 82    | 41.6     | 10         | 15         | 15      |              |            |            |               |              |
| 2017 Batch/Sem -2 | 161CY11  | Engineering Chemistry                | 33  | 31  | 76    | 39.3     | 10         | 14         | 14      |              |            |            |               |              |
| 2017 Batch/Sem -3 | 161PH11  | Engineering Physics                  | 23  | 34  | 68    | 37.4     | 10         | 14         | 13      |              |            |            |               |              |
| 2017 Batch/Sem -5 | 161ME11  | Engineering Graphics                 | 38  | AA  | 90    | 46       | 10         | 15         | 15      |              |            |            |               |              |
| 2017 Batch/Sem -6 | 161MA11  | Engineering Mathematics - I          | 45  | 49  | 91    | 51.8     | 10         | 14         | 14      |              |            |            |               |              |
| 2017 Batch/Sem -7 | 161CS11  | Computer Programming                 | 38  | 41  | 82    | 45.1     | 10         | 15         | 10      |              |            |            |               |              |
| 2017 Batch/Sem -8 | 161PC17  | Physics and Chemistry Laboratory - I |     |     |       |          | 10         |            |         | 20           | 24         | 35         |               |              |
|                   | 161CS17  | Computer Practices Laboratory        |     |     |       |          | 10         |            |         | 25           | 25         | 35         |               |              |
|                   | 161EE17  | Engineering Practices Laboratory     |     |     |       |          | 10         |            |         | 22           | 23         | 35         |               |              |

## Student Internal Mark Entry

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Assign Subject CO Mapping of CO to PO GP CO Mapping QM Assigning IA Mark Entry Reports ESE QM Assigning ESE QP CO Mapping

Department: Exam Type: Internal Assessment I Submit

**Evaluation Analysis**

All Marks Posted

| Sl.No | Roll No | Name                 | Absent                   | PART - A |   |   |   |   |   | PART - B |       |       |       |       |       | Total |
|-------|---------|----------------------|--------------------------|----------|---|---|---|---|---|----------|-------|-------|-------|-------|-------|-------|
|       |         |                      |                          | 1        | 2 | 3 | 4 | 5 | 6 | 7.a.i    | 7.b.i | 8.a.i | 8.b.i | 9.a.i | 9.b.i |       |
| 1     | 17EE001 | ABINAYA K            | <input type="checkbox"/> |          |   | 1 |   | 1 |   |          |       | 14    |       | 14    |       | 8     |
| 2     | 17EE002 | AMIRTHARAJ T         | <input type="checkbox"/> |          |   |   |   |   |   |          | 10    |       |       |       |       | 10    |
| 3     | 17EE003 | ANANDH A             | <input type="checkbox"/> |          |   |   | 1 |   |   |          | 10    |       |       | 15    |       | 4     |
| 4     | 17EE004 | ARAVINTH S           | <input type="checkbox"/> |          | 2 |   |   |   |   |          | 10    |       |       | 15    |       | 10    |
| 5     | 17EE005 | AIYAPPAN S           | <input type="checkbox"/> |          |   |   |   |   |   | 1        |       |       |       | 2     |       |       |
| 6     | 17EE006 | BALAKUMARAN V        | <input type="checkbox"/> | 1        | 1 | 1 | 1 |   |   |          | 10    |       |       | 14    |       | 6     |
| 7     | 17EE007 | BASKAR K             | <input type="checkbox"/> |          | 1 | 2 |   |   |   |          | 6     |       |       | 14    |       | 2     |
| 8     | 17EE008 | DEEPANCHELLATHURAJ J | <input type="checkbox"/> | 2        | 2 |   |   |   |   |          | 12    |       |       |       |       | 8     |
| 9     | 17EE009 | DHIVYA G             | <input type="checkbox"/> |          |   | 1 |   |   |   |          |       | 15    |       | 14    |       | 8     |
| 10    | 17EE010 | ESAKKI SANKAR S      | <input type="checkbox"/> | 1        | 2 | 2 | 2 |   |   |          | 10    |       |       | 10    |       | 10    |
| 11    | 17EE011 | GANDHI R             | <input type="checkbox"/> | 1        | 2 | 1 | 2 |   |   |          | 10    |       |       | 15    |       |       |
| 12    | 17EE012 | GANESHMOORTHY A      | <input type="checkbox"/> |          | 1 |   |   |   |   |          | 10    |       |       | 14    |       |       |
| 13    | 17EE013 | GOBINATHAN V         | <input type="checkbox"/> | 1        | 2 | 2 |   |   |   |          | 11    |       |       | 12    |       | 3     |
| 14    | 17EE014 | GOKULAPRIYA M        | <input type="checkbox"/> |          |   | 1 |   |   |   |          | 15    |       |       | 15    |       | 10    |
| 15    | 17EE015 | GOWTHAMRAJ R         | <input type="checkbox"/> | 1        | 2 | 2 |   |   |   |          | 13    |       |       | 15    |       | 6     |
| 16    | 17EE016 | HARIHARA LINGAM J    | <input type="checkbox"/> | 1        | 2 | 1 |   |   |   |          | 13    |       |       |       |       | 10    |
| 17    | 17EE017 | JENIPER M            | <input type="checkbox"/> |          |   |   |   |   |   |          | 15    |       |       | 15    |       | 10    |
| 18    | 17EE018 | JEYANANTH S          | <input type="checkbox"/> |          |   | 2 |   |   |   |          | 10    |       |       |       |       |       |
| 19    | 17EE019 | JEYAPRAKASH J        | <input type="checkbox"/> |          |   |   |   |   |   |          | 11    |       |       | 14    |       |       |
| 20    | 17EE020 | JOHN SUVEKAR S       | <input type="checkbox"/> |          | 1 | 2 |   |   | 1 | 5        |       |       |       | 12    |       | 2     |
| 21    | 17EE021 | KANIMOZHI N          | <input type="checkbox"/> | 1        | 2 | 2 | 1 | 1 | 1 |          |       | 15    |       | 15    |       | 10    |
| 22    | 17EE022 | KARPAGASARAVANAKU... | <input type="checkbox"/> |          | 2 |   |   |   |   |          | 10    |       |       | 11    |       | 7     |
| 23    | 17EE023 | KARTHICK G           | <input type="checkbox"/> |          | 2 |   |   |   |   |          |       |       |       | 12    |       | 4     |
| 24    | 17EE024 | KARTHICK K           | <input type="checkbox"/> |          | 1 | 2 | 1 |   | 1 | 13       |       |       |       | 14    |       | 2     |
| 25    | 17EE025 | KARTHIK V            | <input type="checkbox"/> |          |   |   |   |   | 1 | 11       |       |       |       | 15    |       | 10    |
| 26    | 17EE026 | KARTHIKEYAN G        | <input type="checkbox"/> | 2        | 2 | 2 | 2 |   |   |          | 12    |       |       | 14    |       | 8     |
| 27    | 17EE027 | KARTHIKEYAN T        | <input type="checkbox"/> |          |   |   |   |   |   |          |       |       |       |       |       |       |
| 28    | 17EE028 | KUMARAVEL V          | <input type="checkbox"/> |          | 2 |   | 1 |   |   |          | 10    |       |       |       |       | 13    |

## CO-PO mapping with bloom's taxonomy

psr.ibossem.com/employee/

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QP CO Mapping | QM Assigning | IA Mark Entry | Reports | ESE QM Assigning | ESE QP CO Mapping

Exam Type: Internal Assessment I | Pattern: IAT Pattern | Submit

Save | Download

**Moderation of Question Paper**

| Qn.no | Mark | Competence Category              |                                  |                                  |                                  |                                  |                       |                       | Qn Level                         |                                  |                       | COs |
|-------|------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|-----------------------|-----------------------|----------------------------------|----------------------------------|-----------------------|-----|
|       |      | Remembering ...                  | Understandin...                  | Applying (AP)                    | Analysis (AY)                    | Evaluating (EV)                  | Creating (CR)         | E                     | M                                | C                                |                       |     |
| 1     | 2    | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/> | CO1 |
| 2     | 2    | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/> | CO1 |
| 3     | 2    | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/> | CO1 |
| 4     | 2    | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/> | CO2 |
| 5     | 2    | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/> | CO2 |
| 6     | 2    | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/> | CO2 |
| 7.a.i | 16   | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/> | CO1 |
| 7.b.i | 16   | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/> | CO1 |
| 8.a.i | 16   | <input type="radio"/>            | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/> | CO1 |
| 8.b.i | 16   | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/> | CO2 |
| 9.a.i | 16   | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> | <input type="radio"/>            | <input checked="" type="radio"/> | <input type="radio"/> | CO2 |
| 9.b.i | 16   | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/>            | <input type="radio"/> | <input type="radio"/> | <input checked="" type="radio"/> | <input type="radio"/>            | <input type="radio"/> | CO2 |

# OUTCOME BASED EDUCATION



**INTERNAL ASSESSMENT TEST – I**

|                  |                                |               |   |          |          |
|------------------|--------------------------------|---------------|---|----------|----------|
| Programme:       | B.E.                           | Branch        | Electronics and Communication Engineering |          |          |
| Acad. Year:      | 2017-2018                      | Year/Semester | II Yr/IV Sem                              |          |          |
| Course Code:     | 161EC43                        | Course Name   | Signals and Systems                       |          |          |
| Maximum Marks:   | 60 Marks                       | Date of Test  | 19.01.2018 (AN)                           | Duration | 1.30 hrs |
| Course Tutor(s): | Section-1: Dr.K.Valarmathi/ECE |               | Section-2: Mrs.P.Lingeswari /ECE          |          |          |

**Answer All Questions**

**PART - A**

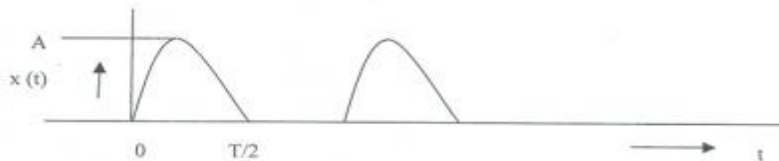
**6 x 2 Marks = 12 Marks**

- Distinguish between symmetric and Asymmetric signal.
- What is the fundamental period of  $e^{j\omega t}$ ?
- Find the power and RMS value of signal  $x(t)=20\cos 2\pi t$ .
- Define LTI system.
- Compare Fourier series and Fourier transform.
- Define the Dirichlet's conditions for continuous time Fourier series.

**PART - B**

**3 x 16 Marks = 48 Marks**

- Distinguish between the following:
    - Continuous time signal and discrete time signal
    - Unit step and unit ramp function
    - Periodic and aperiodic signal
    - Deterministic and random signal
- Prove the signal  $x(t) = e^{-3t}u(t)$  is an energy signal not the power signal.
    - Solve the fundamental period of the signal  $e^{j(\frac{2\pi}{3})n} + e^{j(\frac{3\pi}{4})n}$ .
    - Outline the signal  $t^2(t) - u(2-t)$ .
    - Find the even and odd components of the signal  $x(t) = \cos t + \sin t + \cos t \sin t$ .
- Classify the following systems under their linearity, time invariance, casual, stability.
    - $y(n) = x(n) \cos \omega n$
    - $y(n) = 0.25x(n-1)$
- Elaborate the classification of system with examples.
- Construct the Trigonometric Fourier series representation of the half wave rectifier output as shown in figure.



- Determine the Fourier transform and sketch the magnitude and phase spectrum for the signal  $x(t) = e^{-0.5t}u(t)$ .
  - Summarize the properties of Fourier transform.

----- End of Questions -----

*Dr. K. Valarmathi*  
Faculty In charge

*P. Lingeswari*  
HOD/ECE



**P.S.R. ENGINEERING COLLEGE SIVAKASI-626 140**  
(An Autonomous Institution, Affiliated to Anna University, Chennai)



**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**MODERATION OF QUESTION PAPER**

| Internal Assessment I |   |               |   |          |  |
|-----------------------|---|---------------|---|----------|--|
| Programme:            | B.E   | Branch        | Electronics and Communication Engineering |          |  |
| Acad.Year:            | 2016-2017   | Year/Semester | IIYr/IVSem                                |          |  |
| Course Code:          | 161EC43   | Course Name   | Signals and Systems                       |          |  |
| Maximum Marks:        | 60  | Date of Test  | 19-01-2018                                | Duration |  |
| Course Tutor(s):      | LingeswariPonnusamy/Electronics and Communication Engineering |               |   |          |  |

| Qn. No. | Competence Category |                   |              |              |                |              | Qn Level |        |           | COs |
|---------|---------------------|-------------------|--------------|--------------|----------------|--------------|----------|--------|-----------|-----|
|         | Remembering(RM)     | Understanding(US) | Applying(AP) | Analysis(AY) | Evaluating(EV) | Creating(CR) | Easy     | Medium | Challenge |     |
| 1       |                     |                   |              | 2            |                |              |          | ✓      |           | CO1 |
| 2       | 2                   |                   |              |              |                |              | ✓        |        |           | CO1 |
| 3       | 2                   |                   |              |              |                |              | ✓        |        |           | CO2 |
| 4       | 2                   |                   |              |              |                |              | ✓        |        |           | CO1 |
| 5       |                     | 2                 |              |              |                |              | ✓        |        |           | CO3 |
| 6       | 2                   |                   |              |              |                |              | ✓        |        |           | CO3 |
| 7.a.i   |                     |                   |              | 16           |                |              | ✓        |        |           | CO1 |
| 7.b.i   |                     |                   | 8            |              |                |              |          |        | ✓         | CO2 |
| 7.b.ii  |                     | 8                 |              |              |                |              | ✓        |        |           | CO1 |
| 8.a.i   |                     |                   |              | 16           |                |              |          | ✓      |           | CO1 |
| 8.b.i   |                     | 16                |              |              |                |              | ✓        |        |           | CO1 |
| 9.a.i   |                     |                   |              |              |                | 16           |          |        | ✓         | CO3 |
| 9.b.i   |                     |                   |              |              | 8              |              |          | ✓      |           | CO3 |
| 9.b.ii  |                     | 8                 |              |              |                |              | ✓        |        |           | CO3 |
| Total   | 8                   | 34                | 8            | 34           | 8              | 16           | 58       | 26     | 24        |     |
| %       | 7.41                | 31.48             | 7.41         | 31.48        | 7.41           | 14.81        | 53.7     | 24.07  | 22.22     |     |

Desirable: a+b=30% to 40%,c+d+e+f = 60% to 70%  
E-Easy(50.00%),M-Medium(25.00%),C-Challenge(25.00%)

Remarks

Programme Coordinator

Signature of the Course Tutor

Signature of course  
Coordinator/Moderator

Head of the Department





P.S.R.ENGINEERING COLLEGE, SIVAKASI-626140  
[An Autonomous Institution, Affiliated to Anna University, Chennai]

Evaluation Analysis



Programme : B.E Electronics and Communication Engineering (ECE) Internal Assessment Test : I  
Year : II Section : B  
Course Code : 161EC43 Course Name : Signals and Systems  
Course Tutor : Lingeswari Ponnusamy, Assistant Professor/Electronics ; Date of Test : 19-01-2018

| Sl.No | Roll No. | Name                  | PART - A |   |   |   |   | PART - B |       |       |        |       | Total Mark | Result |       |       |       |
|-------|----------|-----------------------|----------|---|---|---|---|----------|-------|-------|--------|-------|------------|--------|-------|-------|-------|
|       |          |                       | 1        | 2 | 3 | 4 | 5 | 6        | 7.a.i | 7.b.i | 7.b.ii | 8.a.i |            |        | 8.b.i | 9.a.i | 9.b.i |
| 1     | 16EC048  | MANIMEGALAI           | 1        | 1 | 2 | 1 | 2 | 6        |       |       | 14     | 13    |            |        |       | 40    | PASS  |
| 2     | 16EC049  | MARIAMMAL             | 1        | 2 | 2 |   | 1 | 2        | 8     |       |        | 11    | 12         |        |       | 37    | PASS  |
| 3     | 16EC050  | MARRAJ                |          |   | 1 |   |   | 1        | 9     |       |        | 10    |            |        |       | 21    | FAIL  |
| 4     | 16EC051  | MARUNMANI             |          |   |   |   |   | 1        | 8     |       |        | 10    | 13         |        |       | 32    | PASS  |
| 5     | 16EC052  | MONIKA                | 1        | 2 | 2 |   |   |          | 12    |       |        | 8     | 10         |        |       | 33    | PASS  |
| 6     | 16EC053  | MURUGAN               |          |   |   |   |   |          | 3     |       |        | 10    | 6          |        |       | 19    | FAIL  |
| 7     | 16EC054  | MUTHUKUMAR            | 1        |   | 1 |   |   | 1        |       | 7     | 7      | 14    | 12         |        |       | 43    | PASS  |
| 8     | 16EC056  | MUTHUMANI             |          |   | 2 |   |   |          | 13    |       |        |       |            |        |       | 15    | FAIL  |
| 9     | 16EC059  | NAGARAJ               | 2        | 1 | 2 |   |   | 2        |       | 7     | 5      | 9     | 7          |        |       | 35    | PASS  |
| 10    | 16EC060  | NAVANEETHA VENKATESAN |          | 2 | 2 |   |   |          |       | 6     | 5      | 10    | 5          |        |       | 30    | PASS  |
| 11    | 16EC061  | PANDEESWARAN          | 1        | 1 |   |   |   |          | 11    |       |        | 4     | 2          |        |       | 21    | FAIL  |
| 12    | 16EC062  | PARTHASARATHI         | 1        | 2 | 2 |   |   | 1        | 2     | 8     | 6      | 14    | 16         |        |       | 52    | PASS  |
| 13    | 16EC063  | PATHTMA PRIYA         | 1        | 2 | 2 |   |   |          | 7     |       |        | 8     | 12         |        |       | 33    | PASS  |
| 14    | 16EC064  | PAVITHRA DARWIN       | 1        | 1 | 2 |   |   | 1        | 2     | 8     | 6      | 14    | 8          |        |       | 43    | PASS  |
| 15    | 16EC065  | PRABAKAR              | 1        | 1 | 2 |   |   |          | 1     | 8     | 5      | 12    | 7          |        |       | 37    | PASS  |
| 16    | 16EC066  | PREMAKARTHIKA         | 1        | 1 | 2 |   |   |          | 2     | 15    |        | 12    | 13         |        |       | 46    | PASS  |
| 17    | 16EC067  | PRIYADHARSHINI        | 2        |   | 2 |   |   |          | 2     | 8     |        | 8     | 8          |        |       | 30    | PASS  |
| 18    | 16EC069  | RAMESH                | 1        | 1 |   | 1 |   |          | 2     | 12    |        | 14    |            |        |       | 31    | PASS  |



|                              |     |      |      |      |     |     |     |      |     |     |     |      |     |     |
|------------------------------|-----|------|------|------|-----|-----|-----|------|-----|-----|-----|------|-----|-----|
| Total Marks Questionwise     | 34  | 32   | 68   | 5    | 10  | 53  | 263 | 124  | 108 | 222 | 214 | 346  | 3   |     |
| No of Students Attended      | 30  | 24   | 36   | 5    | 10  | 30  | 30  | 19   | 19  | 21  | 26  | 43   | 1   |     |
| Total Marks / No.of Students | 1.1 | 1.3  | 1.89 | 1    | 1   | 1.8 | 8.8 | 6.53 | 5.7 | 11  | 8.2 | 8.05 | 3   |     |
| Competence Category          | AY  | RM   | RM   | RM   | US  | RM  | AY  | AP   | US  | AY  | US  | CR   | EV  | US  |
| Course Outcome               | CO1 | CO1  | CO2  | CO1  | CO3 | CO3 | CO1 | CO2  | CO1 | CO1 | CO1 | CO3  | CO3 | CO3 |
| Programme Outcome            | PO1 | PO1  | PO1  | PO1  | PO1 | PO1 | PO1 | PO1  | PO1 | PO1 | PO1 | PO1  | PO1 | PO1 |
|                              | PO2 | PO2  | PO2  | PO2  | PO2 | PO2 | PO2 | PO2  | PO2 | PO2 | PO2 | PO2  | PO2 | PO2 |
|                              |     |      | PO3  |      | PO3 | PO3 |     | PO3  |     |     |     | PO3  | PO3 | PO3 |
|                              |     | PO4  |      | PO4  | PO4 | PO4 |     | PO4  |     |     |     | PO4  | PO4 | PO4 |
|                              |     | PO6  |      | PO6  |     |     |     | PO6  |     |     |     |      |     |     |
|                              |     | PO7  |      | PO7  |     |     |     | PO7  |     |     |     |      |     |     |
|                              |     | PO8  |      | PO8  |     |     |     | PO8  |     |     |     |      |     |     |
|                              |     | PO12 |      | PO12 |     |     |     | PO12 |     |     |     |      |     |     |

Signature of the Course Tutor

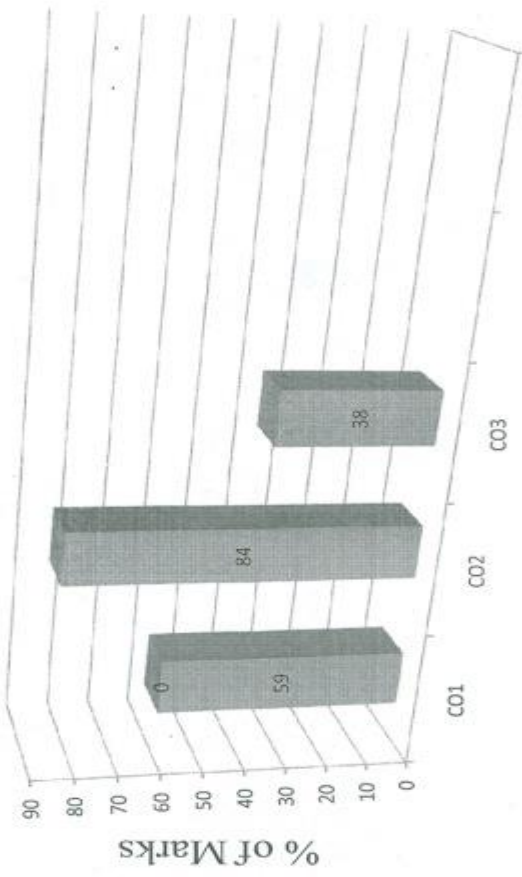
Signature of the Course Co-ordinator/Moderator

Signature of Programme Co-ordinator

Signature of Head of the Department

| Course Outcomes | Max Marks | Average Marks Scored | % of Marks |
|-----------------|-----------|----------------------|------------|
| CO1             | 62        | 36.71                | 59         |
| CO2             | 10        | 8.42                 | 84         |
| CO3             | 36        | 13.82                | 38         |

Result Analysis - Course Outcomes

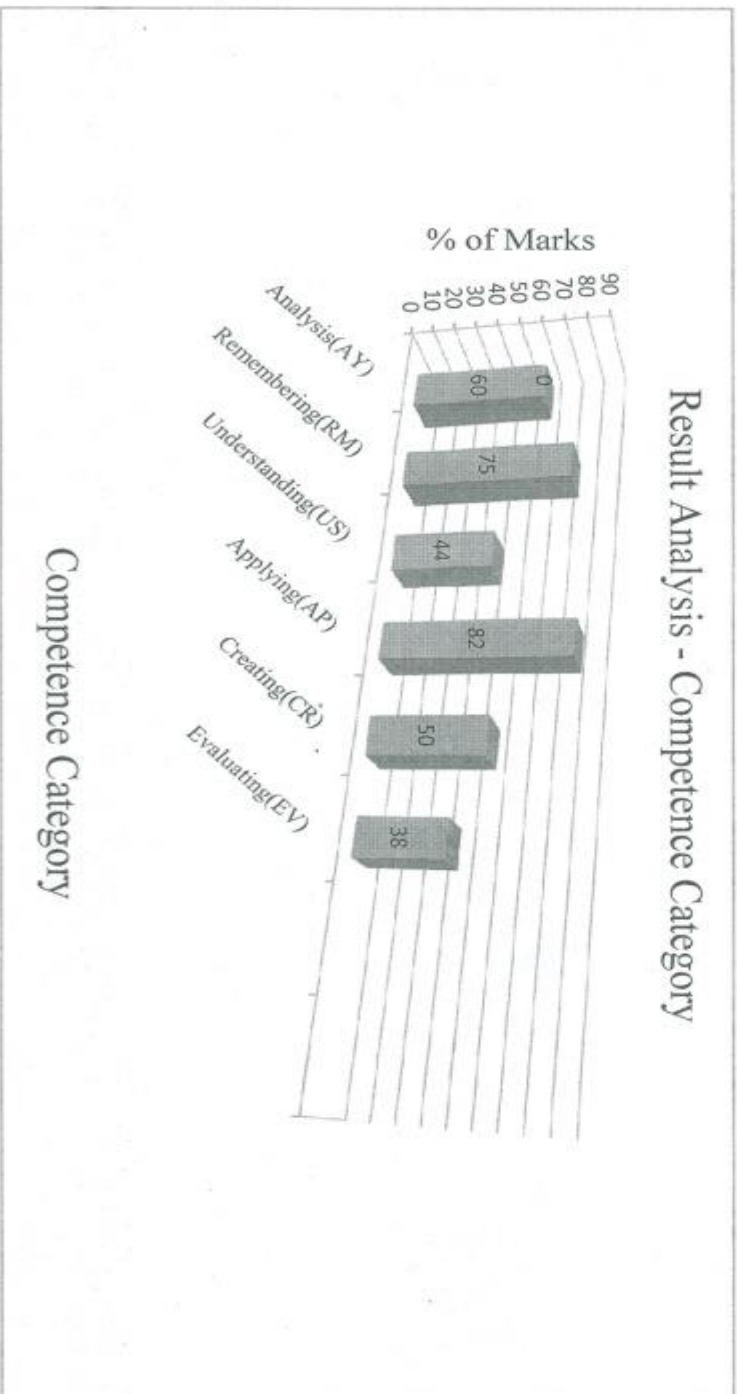


Course Outcomes



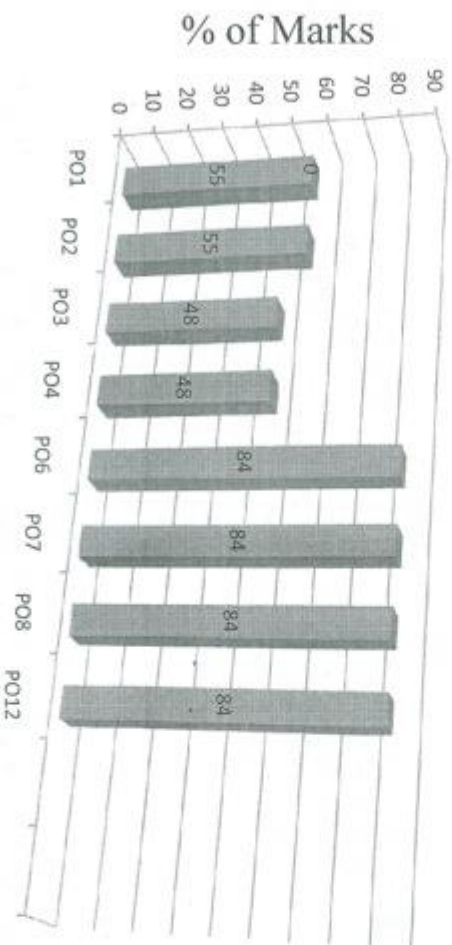
| Competence Category | Max Marks | Average Marks Scored | % of Marks |
|---------------------|-----------|----------------------|------------|
| Analysis(AY)        | 34        | 20.47                | 60         |
| Remembering(RM)     | 8         | 5.99                 | 75         |
| Understanding(US)   | 34        | 14.91                | 44         |
| Applying(AP)        | 8         | 6.53                 | 82         |
| Creating(CR)        | 16        | 8.05                 | 50         |
| Evaluating(EV)      | 8         | 3                    | 38         |

Result Analysis - Competence Category



| Programme Outcomes | Max Marks | Average Marks | % of Marks |
|--------------------|-----------|---------------|------------|
| PO1                | 108       | 58.95         | 55         |
| PO2                | 108       | 58.95         | 55         |
| PO3                | 46        | 22.24         | 48         |
| PO4                | 46        | 22.24         | 48         |
| PO6                | 10        | 8.42          | 84         |
| PO7                | 10        | 8.42          | 84         |
| PO8                | 10        | 8.42          | 84         |
| PO12               | 10        | 8.42          | 84         |

### Result Analysis - Programme Outcomes



### Programme Outcomes

Signature of the Course Tutor

*[Signature]*

Signature of the Course Co-ordinator/Moderator

*[Signature]*

Programme Co-ordinator

*[Signature]*

Head of the Department

*[Signature]*



**INTERNAL ASSESSMENT TEST – II**

|                  |                                |               |   |          |          |
|------------------|--------------------------------|---------------|---|----------|----------|
| Programme:       | B.E.                           | Branch        | Electronics and Communication Engineering |          |          |
| Acad. Year:      | 2017-2018                      | Year/Semester | II Yr/IV Sem                              |          |          |
| Course Code:     | 161EC43                        | Course Name   | Signals and Systems                       |          |          |
| Maximum Marks:   | 60 Marks                       | Date of Test  | 02.03.2018 (AN)                           | Duration | 1.30 hrs |
| Course Tutor(s): | Section-1: Dr.K.Valarmathi/ECE |               | Section-2: Mrs.P.Lingeswari /ECE          |          |          |

**Answer All Questions**

**PART - A**

**6 x 2 Mark = 12 Marks**

1. Define initial and final value theorem of Laplace transform.
2. Find the Laplace transform of unit step function.
3. Compare natural response and forced response.
4. Define ROC.
5. List the properties of convolution integral.
6. Find the final value  $x(\infty)$ , given that  $X(s) = \frac{s+5}{s+3}$ .

**PART - B**

**3 x 16 Mark = 48 Marks**

- 7.a) Evaluate the Laplace transform for the following signals: 16
- (i)  $x(t) = e^{-2t} \sin tu(t)$                       (ii)  $x(t) = \begin{cases} \sin \pi t; 0 \leq t \leq 1 \\ 0; \text{otherwise} \end{cases}$
- (iii)  $x(t) = t^2 e^{-t} u(t)$                       (iv)  $x(t) = \delta(t) - \frac{1}{5} e^{-5t} u(t)$
- or
- b) i) Prove any two properties of Laplace Transform. 8
- ii) Develop the inverse Laplace Transform of  $X(s) = \frac{(s+2)}{s^3 + 7s^2 + 15s + 9}$ . 8
- 8.a) i) Solve the inverse Laplace Transform of  $X(s) = \frac{2(s+2)}{s^2 + 7s + 12}$ ;  $\text{Re}(s) > -3$ . 8
- ii) Analyze the output of the system which having the impulse response and the input to the system is given as  $x(t) = u(t+1)$  and  $h(t) = u(t-2)$ . 8
- or
- b) i) Determine the impulse response of the continuous time system described by the differential equation  $\frac{d^2 y(t)}{dt^2} + 4 \frac{dy(t)}{dt} + 3y(t) = \frac{dx(t)}{dt} + 2x(t)$ . 8
- ii) Find the impulse response of causal system described by  $H(s) = \frac{(s+3)}{s^2 + 4s + 3}$ . 8
- 9.a) Consider the system characterized by the differential equation  $x(t) = \frac{d^3 y(t)}{dt^3} + 6 \frac{d^2 y(t)}{dt^2} + 11 \frac{dy(t)}{dt} + 6y(t)$ . 16
- (i) Find the zero state response of the system for the input  $x(t) = e^{-4t} u(t)$ . 8
- (ii) Determine the zero input response of the system given that  $y(0) = 1$ ;  $\frac{dy(t)}{dt} \Big|_{t=0} = -1$ ;  $\frac{d^2 y(t)}{dt^2} \Big|_{t=0} = 1$ . 8
- or
- b) i) Construct direct form I and II for the given LTI system  $\frac{d^2 y(t)}{dt^2} + 5 \frac{dy(t)}{dt} + 4y(t) = \frac{dx(t)}{dt}$ . 8
- ii) Construct cascade and parallel form of  $H(s) = \frac{1}{(s+1)(s+2)}$ . 8

*Dr. K. Valarmathi*  
Faculty in charge

*Dr. P. Lingeswari*  
HOD/ECE



**P.S.R. ENGINEERING COLLEGE SIVAKASI-626 140**  
(An Autonomous Institution, Affiliated to Anna University, Chennai)



**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**MODERATION OF QUESTION PAPER**

| Internal Assessment II |   |               |   |          |  |
|------------------------|---|---------------|---|----------|--|
| Programme:             | B.E   | Branch        | Electronics and Communication Engineering |          |  |
| Acad.Year:             | 2016-2017   | Year/Semester | IIYr/IVSem                                |          |  |
| Course Code:           | 161EC43   | Course Name   | Signals and Systems                       |          |  |
| Maximum Marks:         | 60  | Date of Test  | 02-03-2018                                | Duration |  |
| Course Tutor(s):       | LingeswariPonnusamy/Electronics and Communication Engineering |               |   |          |  |

| Qn. No. | Competence Category |                   |              |              |                |              | Qn Level |        |           | COs |
|---------|---------------------|-------------------|--------------|--------------|----------------|--------------|----------|--------|-----------|-----|
|         | Remembering(RM)     | Understanding(US) | Applying(AP) | Analysis(AI) | Evaluating(EV) | Creating(CR) | Easy     | Medium | Challenge |     |
| 1       | 2                   |                   |              |              |                |              | ✓        |        |           | CO3 |
| 2       | 2                   |                   |              |              |                |              | ✓        |        |           | CO3 |
| 3       |                     | 2                 |              |              |                |              | ✓        |        |           | CO4 |
| 4       | 2                   |                   |              |              |                |              | ✓        |        |           | CO3 |
| 5       | 2                   |                   |              |              |                |              | ✓        |        |           | CO4 |
| 6       | 2                   |                   |              |              |                |              | ✓        |        |           | CO3 |
| 7.a.i   |                     |                   |              |              | 16             |              |          | ✓      |           | CO3 |
| 7.b.i   |                     |                   |              |              | 8              |              |          |        | ✓         | CO3 |
| 7.b.ii  |                     |                   | 8            |              |                |              |          | ✓      |           | CO3 |
| 8.a.i   |                     |                   | 8            |              |                |              | ✓        |        |           | CO3 |
| 8.a.ii  |                     |                   |              | 8            |                |              | ✓        |        |           | CO4 |
| 8.b.i   |                     |                   |              |              | 8              |              | ✓        |        |           | CO4 |
| 8.b.ii  | 8                   |                   |              |              |                |              | ✓        |        |           | CO4 |
| 9.a.i   | 16                  |                   |              |              |                |              | ✓        |        |           | CO4 |
| 9.b.i   |                     |                   |              |              |                | 8            |          |        | ✓         | CO4 |
| 9.b.ii  |                     |                   |              |              |                | 8            |          |        | ✓         | CO4 |
| Total   | 34                  | 2                 | 16           | 8            | 32             | 16           | 60       | 24     | 24        |     |
| %       | 31.48               | 1.85              | 14.81        | 7.41         | 29.63          | 14.81        | 55.56    | 22.22  | 22.22     |     |

Desirable: a+b=30% to 40%,c+d+e+f = 60% to 70%  
E-Easy(50.00%),M-Medium(25.00%),C-Challenge(25.00%)

Remarks

Programme Coordinator

Signature of Course Tutor

Signature of course Coordinator/Moderator

Head of the Department







| 53 | 17ECR01 | MATHIMITHRA                  | 2    | 2    | 2   | 3   | 3    | 7    | 8   | 4   | 4   | 32   | PASS |     |     |     |     |      |
|----|---------|------------------------------|------|------|-----|-----|------|------|-----|-----|-----|------|------|-----|-----|-----|-----|------|
|    |         | Total Marks Questionwise     | 64   | 56   | 18  | 35  | 36   | 52   | 228 | 83  | 58  | 142  | 85   | 104 | 100 | 161 | 111 | 103  |
|    |         | No of Students Attended      | 36   | 29   | 15  | 23  | 26   | 30   | 23  | 23  | 16  | 22   | 16   | 19  | 20  | 17  | 26  | 25   |
|    |         | Total Marks / No.of Students | 1.78 | 1.93 | 1.2 | 1.5 | 1.38 | 1.73 | 9.9 | 3.6 | 3.6 | 6.45 | 5.3  | 5.5 | 5   | 9.5 | 4.3 | 4.12 |
|    |         | Competence Category          | RM   | RM   | US  | RM  | RM   | RM   | EV  | EV  | AP  | AP   | AY   | EV  | RM  | RM  | CR  | CR   |
|    |         | Course Outcome               | CO3  | CO3  | CO4 | CO3 | CO4  | CO3  | CO3 | CO3 | CO3 | CO3  | CO4  | CO4 | CO4 | CO4 | CO4 | CO4  |
|    |         | Programme Outcome            | PO1  | PO1  | PO1 | PO1 | PO1  | PO1  | PO1 | PO1 | PO1 | PO1  | PO1  | PO1 | PO1 | PO1 | PO1 | PO1  |
|    |         |                              | PO2  | PO2  | PO2 | PO2 | PO2  | PO2  | PO2 | PO2 | PO2 | PO2  | PO2  | PO2 | PO2 | PO2 | PO2 | PO2  |
|    |         |                              | PO3  | PO3  | PO3 | PO3 | PO3  | PO3  | PO3 | PO3 | PO3 | PO3  | PO3  | PO3 | PO3 | PO3 | PO3 | PO3  |
|    |         |                              | PO4  | PO4  | PO4 | PO4 | PO4  | PO4  | PO4 | PO4 | PO4 | PO4  | PO4  | PO4 | PO4 | PO4 | PO4 | PO4  |

Signature of the Course Tutor



Signature of the Course Co-ordinator/Moderator



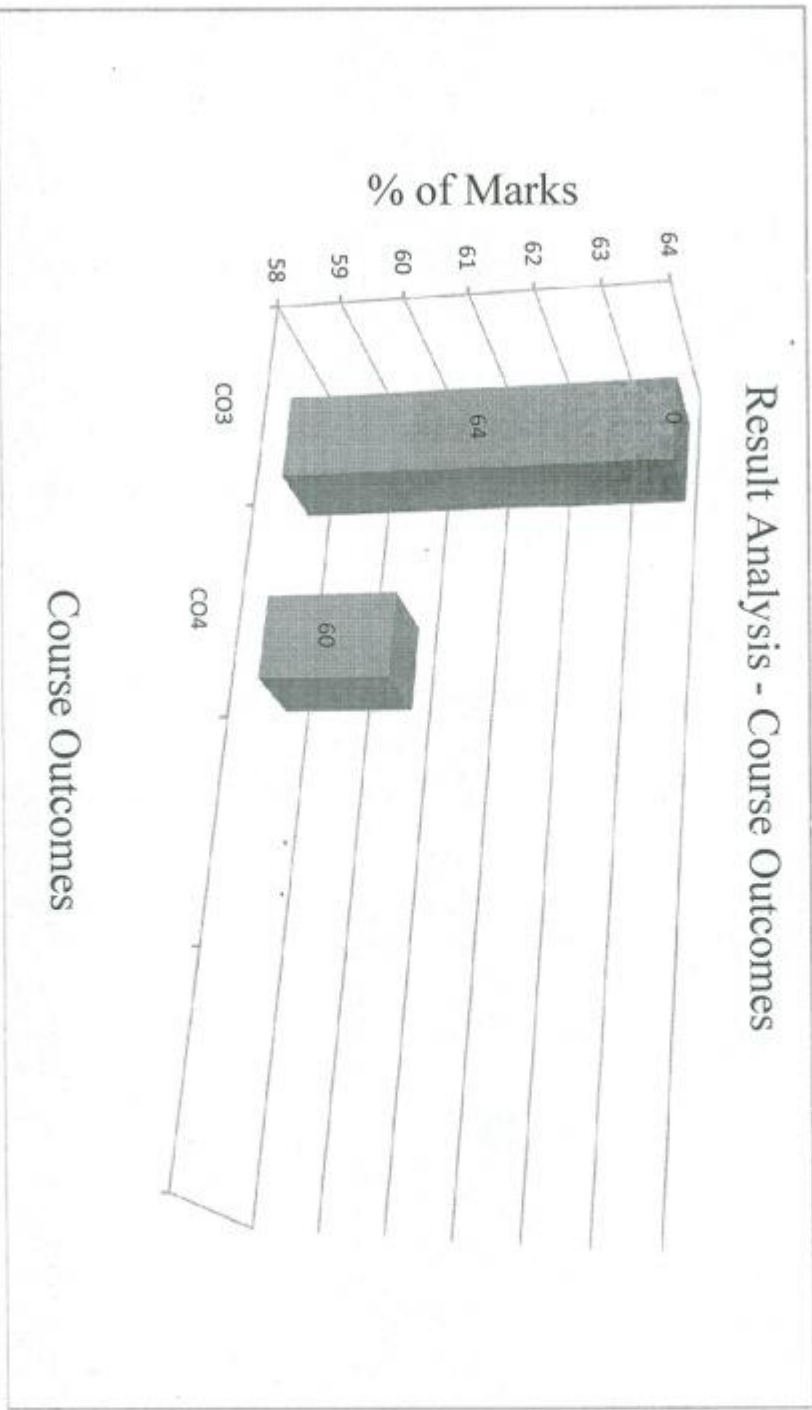
Programme Co-ordinator



Head of the Depart

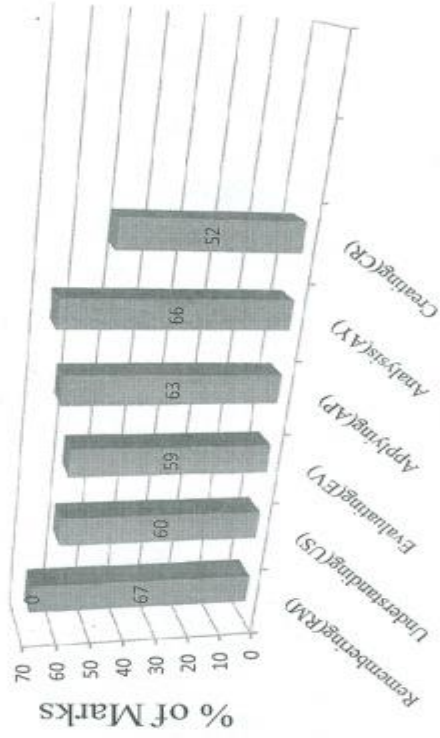
| Course Outcomes | Max Marks | Average Marks Scored | % of Marks |
|-----------------|-----------|----------------------|------------|
| CO3             | 48        | 30.56                | 64         |
| CO4             | 60        | 36.22                | 60         |

Result Analysis - Course Outcomes



| Competence Category | Max Marks | Average Marks Scored | % of Marks |
|---------------------|-----------|----------------------|------------|
| Remembering(RM)     | 34        | 22.81                | 67         |
| Understanding(US)   | 2         | 1.2                  | 60         |
| Evaluating(EV)      | 32        | 18.99                | 59         |
| Applying(AP)        | 16        | 10.08                | 63         |
| Analysis(AI)        | 8         | 5.31                 | 66         |
| Creating(CR)        | 16        | 8.39                 | 52         |

Result Analysis - Competence Category

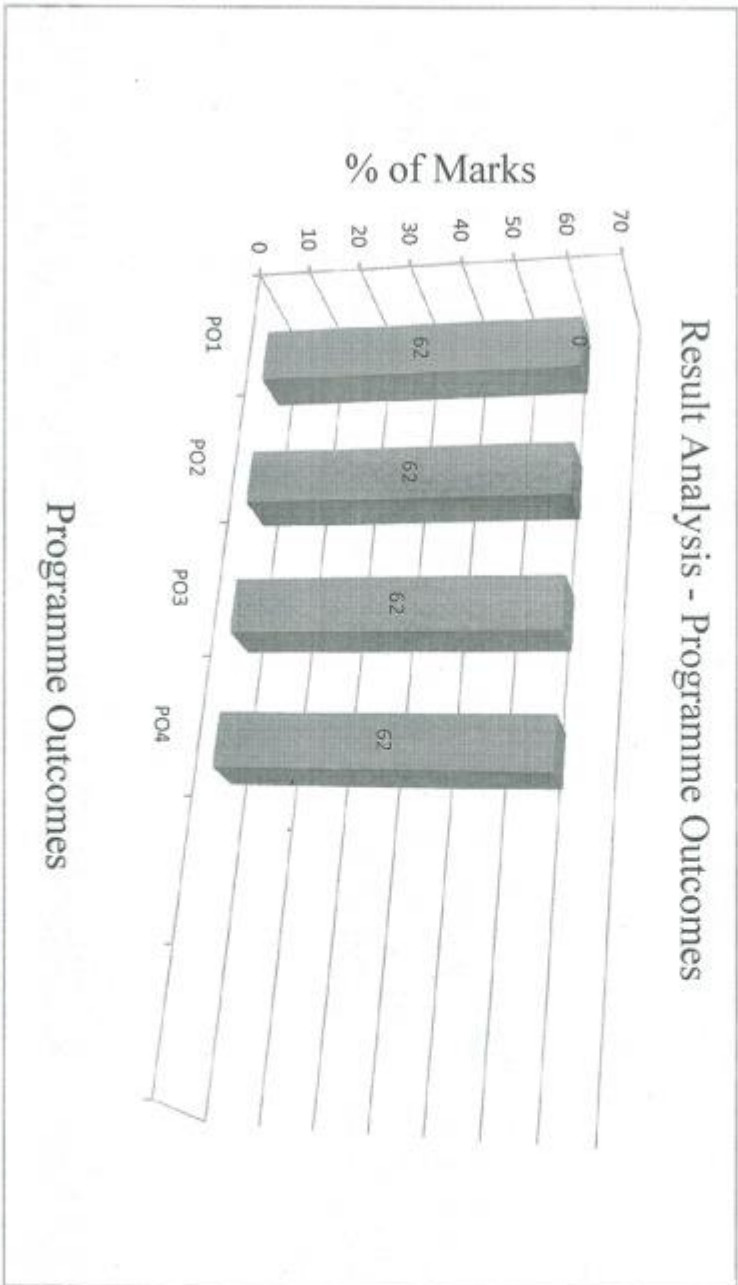


Competence Category



| Programme Outcomes | Max Marks | Average Marks | % of Marks |
|--------------------|-----------|---------------|------------|
| PO1                | 108       | 66.78         | 62         |
| PO2                | 108       | 66.78         | 62         |
| PO3                | 108       | 66.78         | 62         |
| PO4                | 108       | 66.78         | 62         |

### Result Analysis - Programme Outcomes



Signature of the Course Tutor

Signature of the Course Co-ordinator/Moderator

Programme Co-ordinator

Head of the Department





**PRESEMESTER EXAMINATION**

|                  |                                |               |   |          |          |
|------------------|--------------------------------|---------------|---|----------|----------|
| Programme:       | B.E.                           | Branch        | Electronics and Communication Engineering |          |          |
| Acad. Year:      | 2017-2018                      | Year/Semester | II Yr/IV Sem                              |          |          |
| Course Code:     | 161EC43                        | Course Name   | Signals and Systems                       |          |          |
| Maximum marks:   | 100 Marks                      | Date of Test  | 23.03.2018                                | Duration | 3.00 hrs |
| Course Tutor(s): | Section-1: Dr.K.Valarmathi/ECE |               | Section-2: Mrs.P.Lingeswari /ECE          |          |          |

**Answer All Questions**

**PART - A**

10 x 2 Marks = 20 Marks

- List any two properties of unit impulse function.
- Outline the signal  $u(t) - u(t - 10)$ .
- Define the Dirichlet's conditions for continuous time Fourier series.
- What is the relationship between Fourier transform and Laplace transform?
- Define convolution integral.
- Find the DTFT of  $x(n) - \delta(n) + \delta(n - 1)$
- What is aliasing and how it is overcome?
- Find the Nyquist rate of the signal  $x(t) = \sin 200\pi t - \cos 100\pi t$
- Find the z-transform and its associated ROC for  $x(n) = \{1, -1, 2, 3, 4\}$ .
- Distinguish between recursive and non recursive systems.

**PART - B**

5 x 16 Marks = 8 Marks

- Find out whether the following signals are periodic or not. If periodic find the fundamental period.
  - $x(t) = 4 \cos(3\pi t + \frac{\pi}{4}) + 2 \cos(4\pi t)$
  - $x(n) = \cos(0.1\pi n)$
- Prove the signal  $x(t) = e^{-3t}u(t)$  is an energy signal not the power signal.
 

or
- Classify the following systems under their linearity, time invariance, casual, stability
  - $y(n) = \frac{d}{dt}x(t)$
  - $y(n) = x(n) - x(n - 1)$
- Determine the Fourier series expansion for a periodic ramp signal with unit amplitude and a period T.
 

or
- Evaluate the inverse Laplace transform of  $X(s) = \frac{8s + 10}{(s + 1)(s + 2)^2}$ .
  - Determine the inverse Laplace transform of  $X(s) = \frac{1 - 2s^2 - 14s}{s(s + 3)(s + 4)}$ .
- Using Laplace transform find the response of the system described by the equation  $\frac{d^2y(t)}{dt^2} + 5\frac{dy(t)}{dt} + 4y(t) = \frac{dx(t)}{dt}$  with initial conditions  $y(0) = 0; \frac{dy(t)}{dt} \Big|_{t=0} = 1$  for the input  $x(t) = e^{-2t}u(t)$ .
 

or
- Construct direct form I, II, cascade and parallel form realization structure for the given LTI system  $H(s) = \frac{4s + 28}{s^2 + 6s + 5}$ .
  - Explain in detail about sampling theorem and how it is reconstructed for a band limited signal.
 

or
  - Evaluate the inverse Z transform of  $X(z) = \frac{z^{-1}}{1 - 0.25z^{-1} - 0.375z^{-2}}$ .



For (i) ROC  $|z| > 0.75$  (ii) ROC  $|z| > 0.5$

ii) Determine the Z transform of  $x(n) = n^2 u(n)$

4

15.a) Perform convolution to find the response of the systems  $h_1(n)$  and  $h_2(n)$  for the input sequences  $x_1(n)$  and  $x_2(n)$  respectively. 16

i)  $x_1(n) = \{1, -1, 2, 3\}$   $h_1(n) = \{1, -2, 3, -1\}$

ii)  $x_2(n) = \{1, 2, 3, 2\}$   $h_2(n) = \{1, 2, 2\}$

b) i) Solve the impulse response and step response of  $y(n) + y(n-1) - 2y(n-2) = x(n-1) + 2x(n-2)$  8

ii) Design the cascade and parallel form block diagram realization structure for the following system function,  $H(z) = \frac{1}{(1 + \frac{1}{2}z^{-1})(1 - \frac{1}{4}z^{-1})}$  8

----- End of Questions -----

  
Faculty In charge

  
HOD/ECE



**P.S.R. ENGINEERING COLLEGE SIVAKASI-626 140**  
(An Autonomous Institution, Affiliated to Anna University, Chennai)



**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**MODERATION OF QUESTION PAPER**

| Pre Semester     |   |               |   |          |  |
|------------------|---|---------------|---|----------|--|
| Programme:       | B.E   | Branch        | Electronics and Communication Engineering |          |  |
| Acad.Year:       | 2017-2018   | Year/Semester | IIYr/IVSem                                |          |  |
| Course Code:     | 161EC43   | Course Name   | Signals and Systems                       |          |  |
| Maximum Marks:   | 100   | Date of Test  | 23-03-2018                                | Duration |  |
| Course Tutor(s): | LingeswariPonnusamy/Electronics and Communication Engineering |               |   |          |  |

| Qn. No. | Competence Category |                   |               |              |                |              | Qn Level |        |           | COs |
|---------|---------------------|-------------------|---------------|--------------|----------------|--------------|----------|--------|-----------|-----|
|         | Remembering(RM)     | Understanding(US) | Applying(API) | Analysis(AI) | Evaluating(EV) | Creating(CR) | Easy     | Medium | Challenge |     |
| 1       | 2                   |                   |               |              |                |              | ✓        |        |           | CO1 |
| 2       |                     | 2                 |               |              |                |              | ✓        |        |           | CO1 |
| 3       | 2                   |                   |               |              |                |              | ✓        |        |           | CO3 |
| 4       | 2                   |                   |               |              |                |              | ✓        |        |           | CO3 |
| 5       | 2                   |                   |               |              |                |              | ✓        |        |           | CO4 |
| 6       | 2                   |                   |               |              |                |              | ✓        |        |           | CO5 |
| 7       | 2                   |                   |               |              |                |              | ✓        |        |           | CO5 |
| 8       | 2                   |                   |               |              |                |              | ✓        |        |           | CO5 |
| 9       | 2                   |                   |               |              |                |              | ✓        |        |           | CO5 |
| 10      |                     |                   |               | 2            |                |              | ✓        |        |           | CO6 |
| 11.a.i  | 8                   |                   |               |              |                |              | ✓        |        |           | CO1 |
| 11.a.ii |                     |                   |               |              | 8              |              |          |        | ✓         | CO1 |
| 11.b.i  |                     |                   |               | 16           |                |              |          | ✓      |           | CO2 |
| 12.a.i  |                     |                   |               |              | 16             |              |          |        | ✓         | CO3 |
| 12.b.i  |                     |                   |               |              | 8              |              |          |        | ✓         | CO4 |
| 12.b.ii |                     |                   |               |              | 8              |              |          |        | ✓         | CO4 |
| 13.a.i  | 16                  |                   |               |              |                |              | ✓        |        |           | CO4 |
| 13.b.i  |                     |                   | 16            |              |                |              |          | ✓      |           | CO4 |
| 14.a.i  |                     | 16                |               |              |                |              | ✓        |        |           | CO5 |
| 14.b.i  |                     |                   |               |              | 12             |              |          | ✓      |           | CO5 |
| 14.b.ii |                     |                   |               |              | 4              |              |          | ✓      |           | CO5 |
| 15.a.i  | 16                  |                   |               |              |                |              | ✓        |        |           | CO6 |
| 15.b.i  |                     |                   | 8             |              |                |              | ✓        |        |           | CO6 |
| 15.b.ii |                     |                   |               |              |                | 8            |          |        | ✓         | CO6 |
| Total   | 56                  | 18                | 24            | 18           | 56             | 8            | 84       | 48     | 48        |     |
| %       | 31.11               | 10                | 13.33         | 10           | 31.11          | 4.44         | 46.67    | 26.67  | 26.67     |     |

Desirable: a+b=30% to 40%,c+d+e+f = 60% to 70%  
E-Easy(50.00%),M-Medium(25.00%),C-Challenge(25.00%)

Remarks

Programme Coordinator

*B1*  
Signature of the Course Tutor

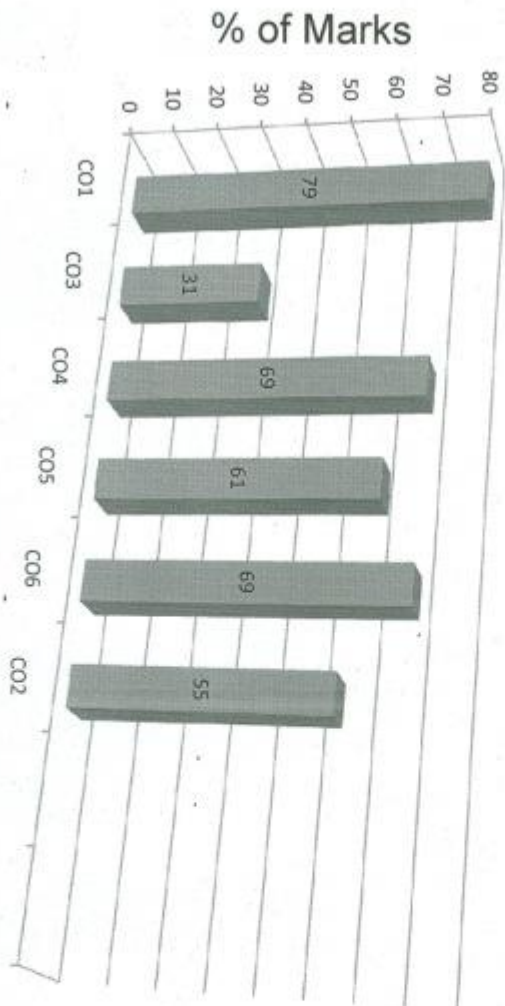
*[Signature]*  
Signature of course  
Coordinator/Moderator

*[Signature]*  
Head of the Department



| Course Outcomes | Max Marks | Average Marks Scored | % of Marks |
|-----------------|-----------|----------------------|------------|
| CO1             | 20        | 15.71                | 79         |
| CO3             | 20        | 6.29                 | 31         |
| CO4             | 50        | 34.64                | 69         |
| CO5             | 40        | 24.47                | 61         |
| CO6             | 34        | 23.3                 | 69         |
| CO2             | 16        | 8.75                 | 55         |

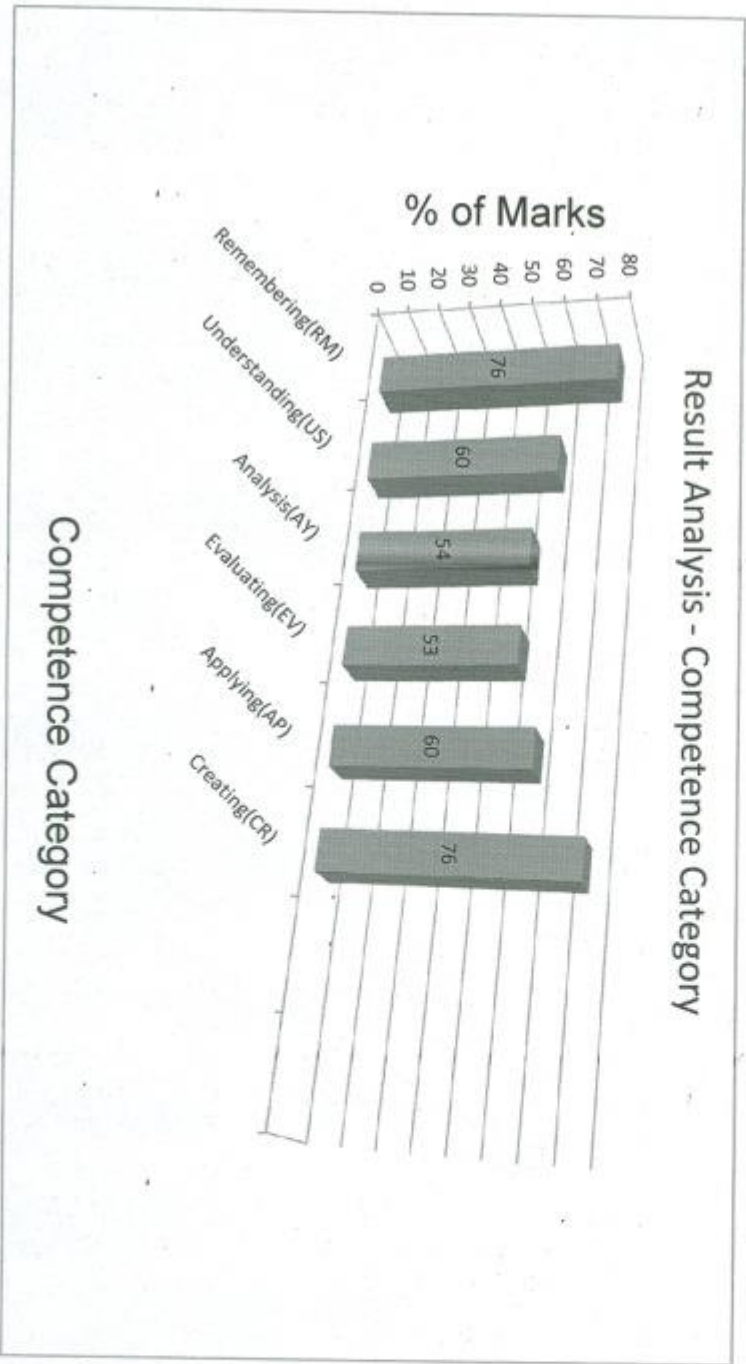
Result Analysis - Course Outcomes



Course Outcomes



| Competence Category | Max Marks | Average Marks Scored | % of Marks |
|---------------------|-----------|----------------------|------------|
| Remembering(RM)     | 56        | 42.56                | 76         |
| Understanding(US)   | 18        | 10.77                | 60         |
| Analysis(AV)        | 18        | 9.75                 | 54         |
| Evaluating(EV)      | 56        | 29.51                | 53         |
| Applying(AP)        | 24        | 14.48                | 60         |
| Creating(CR)        | 8         | 6.09                 | 76         |



|    |         |                              |     |      |      |     |     |      |      |      |     |     |      |      |      |     |      |     |       |      |      |     |      |      |      |      |     |      |      |      |      |      |      |      |     |    |      |
|----|---------|------------------------------|-----|------|------|-----|-----|------|------|------|-----|-----|------|------|------|-----|------|-----|-------|------|------|-----|------|------|------|------|-----|------|------|------|------|------|------|------|-----|----|------|
| 29 | 16EC080 | SOINDHARA KUMAR              | 2   | 2    | 2    |     |     |      |      |      |     |     |      |      |      |     | 8    | 7   | 7     | 8    |      |     |      |      |      |      | 50  | PASS |      |      |      |      |      |      |     |    |      |
| 30 | 16EC081 | SRIDHARAN                    |     |      |      |     |     |      |      |      |     |     |      |      |      |     |      | 1   | 1     | 2    | 1    |     |      |      |      |      |     | 4    | FAIL |      |      |      |      |      |     |    |      |
| 31 | 16EC082 | SUBTISHA                     | 2   |      |      |     |     |      |      |      |     |     |      |      |      |     |      | 8   | 6     | 8    | 7    | 15  |      |      |      |      |     | 61   | PASS |      |      |      |      |      |     |    |      |
| 32 | 16EC083 | SUNDARA LAKSHMI              | 2   |      |      |     |     |      |      |      |     |     |      |      |      |     |      | 8   | 8     | 7    | 8    | 15  |      |      |      |      |     | 54   | PASS |      |      |      |      |      |     |    |      |
| 33 | 16EC084 | SURESH KANNAN                | 2   |      |      |     |     |      |      |      |     |     |      |      |      |     |      | 8   | 6     | 4    | 4    | 4   |      |      |      |      |     | 26   | FAIL |      |      |      |      |      |     |    |      |
| 34 | 16EC085 | SURYA PRIYA                  | 2   | 2    | 1    | 2   | 2   | 2    | 2    | 2    | 1   | 8   | 7    | 8    | 7    | 8   | 7    | 8   | 7     | 8    | 7    | 15  |      |      |      |      |     | 94   | PASS |      |      |      |      |      |     |    |      |
| 35 | 16EC087 | SURYA                        | 2   | 2    | 1    | 2   | 1   | 2    | 2    | 2    | 2   | 8   | 7    | 7    | 7    | 7   | 15   | 8   | 7     | 7    | 15   |     |      |      |      |      |     | 8    | 8    | 94   | PASS |      |      |      |     |    |      |
| 36 | 16EC086 | SURYA PRAKASH                |     |      |      |     |     |      |      |      |     |     |      |      |      |     |      | 8   | 7     | 7    | 7    | 15  |      |      |      |      |     | 72   | PASS |      |      |      |      |      |     |    |      |
| 37 | 16EC088 | SWETHA                       | 1   |      |      |     |     |      |      |      |     | 1   | 1    | 1    | 1    | 1   | 1    | 1   | 2     | 2    |      |     |      |      |      |      |     | 11   | FAIL |      |      |      |      |      |     |    |      |
| 38 | 16EC089 | THIRUMALAMBIRUGAN            | 2   | 2    | 1    | 2   | 1   | 2    | 1    | 2    |     | 6   | 6    | 7    | 7    | 7   | 7    | 7   | 7     | 7    | 7    |     |      |      |      |      |     | 47   | FAIL |      |      |      |      |      |     |    |      |
| 39 | 16EC090 | THIRUMALAMBIRUGAN            | 2   |      |      |     |     |      |      |      |     | 1   | 2    | 2    | 2    | 2   | 7    | 2   | 6     | 8    | 15   |     |      |      |      |      |     | 8    | 8    | 71   | PASS |      |      |      |     |    |      |
| 40 | 16EC091 | UMAMAHESWARI                 | 2   |      |      |     |     |      |      |      |     | 2   |      | 2    |      | 6   | 4    | 4   | 6     | 8    | 15   |     |      |      |      |      |     | 35   | FAIL |      |      |      |      |      |     |    |      |
| 41 | 16EC092 | VAIBALAKSHMI                 |     |      |      |     |     |      |      |      |     |     |      |      |      | 12  |      | 12  | 7     | 3    | 11   |     |      |      |      |      |     |      | 48   | FAIL |      |      |      |      |     |    |      |
| 42 | 16EC094 | VIDHYA                       |     |      |      |     |     |      |      |      |     | 1   |      | 1    | 1    | 7   | 6    | 7   | 7     | 3    | 11   |     |      |      |      |      |     | 12   | 2    | 55   | PASS |      |      |      |     |    |      |
| 43 | 16EC095 | YATHEENDIRARAJAN             |     |      |      |     |     |      |      |      |     |     |      |      |      | 7   | 6    | 6   | 7     | 8    | 7    |     |      |      |      |      |     | 6    | 6    | 2    | 8    | 55   | PASS |      |     |    |      |
| 44 | 17LEC01 | BHOVANESHWARI K              | 1   |      |      |     |     |      |      |      |     |     |      |      |      |     | 8    | 6   |       |      |      |     |      |      |      |      |     |      | 2    | 8    | 29   | FAIL |      |      |     |    |      |
| 45 | 17LEC03 | ESAKIAMMAL@RACHANNADEVI R    |     |      |      |     |     |      |      |      |     | 1   |      | 1    |      |     |      | 5   | 5     | 4    | 7    |     |      |      |      |      |     | 12   | 15   | 13   |      | 29   | FAIL |      |     |    |      |
| 46 | 17LEC06 | MUTHUKANI S                  |     |      |      |     |     |      |      |      |     |     |      |      |      |     | 2    |     | 12    | 4    | 4    |     |      |      |      |      |     |      | 6    | 6    | 34   | FAIL |      |      |     |    |      |
| 47 | 17LEC07 | MUTHUMANPANDI M              |     |      |      |     |     |      |      |      |     |     |      |      |      |     |      |     |       |      |      |     |      |      |      |      |     |      |      |      | 4    | 4    | 4    | FAIL |     |    |      |
| 48 | 17LEC08 | PADMA PRIYA B                | 2   |      |      |     |     |      |      |      |     |     |      |      |      |     |      | 5   | 6     | 6    | 6    | 6   |      |      |      |      |     |      |      |      | 17   | FAIL |      |      |     |    |      |
| 49 | 17LEC11 | PREETHI K                    |     |      |      |     |     |      |      |      |     |     |      |      |      |     |      | 6   | 6     | 5    | 5    |     |      |      |      |      |     |      |      | 2    | 1    | 36   | FAIL |      |     |    |      |
| 50 | 17LEC13 | RATHIKAR                     | 2   |      |      |     |     |      |      |      |     |     |      |      |      |     |      | 3   | 3     | 2    | 2    |     |      |      |      |      |     |      |      |      | 12   | 7    | 12   | FAIL |     |    |      |
| 51 | 17LEC14 | RUPADEVI P                   |     |      |      |     |     |      |      |      |     |     |      |      |      |     |      |     |       |      |      |     |      |      |      |      |     |      |      |      | 3    | 3    | 24   | FAIL |     |    |      |
| 52 | 17TEC01 | PUSHPAPRIYA N                | 2   | 2    | 1    |     |     | 1    | 2    | 2    | 2   | 2   | 2    | 2    | 2    |     | 8    | 8   | 6     | 8    | 8    |     |      |      |      |      |     |      |      | 8    | 8    | 76   | PASS |      |     |    |      |
| 53 | 17ECR01 | MATHINITHIRA                 | 2   |      |      |     |     |      |      |      |     | 1   | 2    | 1    | 1    | 8   | 6    | 8   | 8     | 5    | 8    |     |      |      |      |      |     |      |      | 16   | 12   | 10   | 2    | 8    | 8   | 76 | PASS |
|    |         | Total Marks Questionwise     | 3   | 61   | 25   | 11  | 33  | 5    | 15   | 45   | 16  | 2   | 239  | 198  | 70   | 7   | 219  | 242 | 294   | 182  | 124  | 177 | 20   | 104  | 93   | 134  | 8   | 8    | 69   |      |      |      |      |      |     |    |      |
|    |         | No of Students Attended      | 2   | 32   | 14   | 11  | 22  | 3    | 12   | 27   | 9   | 2   | 36   | 35   | 8    | 2   | 42   | 41  | 22    | 21   | 14   | 23  | 13   | 10   | 16   | 22   |     |      |      |      |      |      |      |      |     |    |      |
|    |         | Total Marks / No of Students | 1.5 | 1.91 | 1.79 | 1   | 1.5 | 1.67 | 1.25 | 1.67 | 1.8 | 1   | 6.64 | 5.66 | 8.75 | 3.5 | 5.21 | 5.9 | 13.36 | 8.67 | 8.86 | 7.7 | 1.54 | 10.4 | 5.81 | 6.09 |     |      |      |      |      |      |      |      |     |    |      |
|    |         | Competence Category          | RM  | US   | RM   | RM  | RM  | RM   | RM   | RM   | RM  | AV  | RM   | EV   | AY   | EV  | AV   | EV  | EV    | RM   | AP   | US  | EV   | EV   | RM   | AP   | CR  |      |      |      |      |      |      |      |     |    |      |
|    |         | Course Outcome               | CO1 | CO1  | CO3  | CO3 | CO4 | CO5  | CO5  | CO5  | CO5 | CO6 | CO1  | CO1  | CO2  | CO3 | CO4  | CO4 | CO4   | CO4  | CO5  | CO5 | CO5  | CO6  | CO6  | CO6  | CO6 | CO6  |      |      |      |      |      |      |     |    |      |
|    |         | Programme Outcome            | PO1 | PO1  | PO1  | PO1 | PO1 | PO1  | PO1  | PO1  | PO1 | PO1 | PO1  | PO1  | PO1  | PO1 | PO1  | PO1 | PO1   | PO1  | PO1  | PO1 | PO1  | PO1  | PO1  | PO1  | PO1 | PO1  | PO1  | PO1  | PO1  | PO1  | PO1  | PO1  | PO1 |    |      |
|    |         |                              | PO2 | PO2  | PO2  | PO2 | PO2 | PO2  | PO2  | PO2  | PO2 | PO2 | PO2  | PO2  | PO2  | PO2 | PO2  | PO2 | PO2   | PO2  | PO2  | PO2 | PO2  | PO2  | PO2  | PO2  | PO2 | PO2  | PO2  | PO2  | PO2  | PO2  | PO2  | PO2  | PO2 |    |      |
|    |         |                              | PO3 | PO3  | PO3  | PO3 | PO3 | PO3  | PO3  | PO3  | PO3 | PO3 | PO3  | PO3  | PO3  | PO3 | PO3  | PO3 | PO3   | PO3  | PO3  | PO3 | PO3  | PO3  | PO3  | PO3  | PO3 | PO3  | PO3  | PO3  | PO3  | PO3  | PO3  | PO3  | PO3 |    |      |
|    |         |                              | PO4 | PO4  | PO4  | PO4 | PO4 | PO4  | PO4  | PO4  | PO4 | PO4 | PO4  | PO4  | PO4  | PO4 | PO4  | PO4 | PO4   | PO4  | PO4  | PO4 | PO4  | PO4  | PO4  | PO4  | PO4 | PO4  | PO4  | PO4  | PO4  | PO4  | PO4  | PO4  | PO4 |    |      |

Signature of the Course Tutor

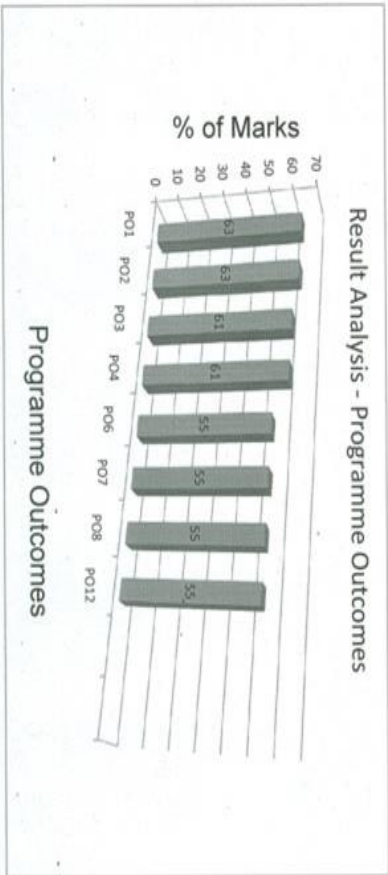
Signature of the Course Co-ordinator/Moderator

Programme Co-ordinator

Head of the Department

| Programme Outcomes | Max Marks | Average Marks | % of Marks |
|--------------------|-----------|---------------|------------|
| PO1                | 180       | 113.16        | 63         |
| PO2                | 180       | 113.16        | 63         |
| PO3                | 180       | 97.45         | 61         |
| PO4                | 180       | 97.45         | 61         |
| PO6                | 16        | 8.75          | 55         |
| PO7                | 16        | 8.75          | 55         |
| PO8                | 16        | 8.75          | 55         |
| PO12               | 16        | 8.75          | 55         |

### Result Analysis - Programme Outcomes



Signature of the Course Tutor

Signature of the Course Co-ordinator/Moderator

Programme Co-ordinator

Head of the Department