Internal Academic Audit

P.S.R. ENGINEERING COLLEGE SIVAKASI-626 140
(An Autonomous Institution, Affiliated to Anna University, Chennai)
Sevalpatti (P.O),Sivakasi – 626140
Tamilnadu State

Name of the Department Audited   : MECHANICAL ENGINEERING DEPARTMENT

Name of the Auditor(s) & Designation: **1. Dr.S.Ramesh, Prof & Head / EEE.**

2. Mr.S.Dharmar, AP/ Civil.

Date(s) of Auditing: **28.11.2014 (Friday)**

Report of Internal Academic Auditing

Files / Documents	Name of the Staff / In-charge	Auditing Done [Yes or No]	Comments / Suggestion of the Auditors [attach separate sheets if necessary	Remarks
Staff Log-Books	All Faculty Members	Yes	• In few log books record of class work is not filled properly. • In some log books are Students attendance is not Entry.	• Complete and Get verification from HOD
Course Files	All Faculty Members	Yes	• Some faculty is not updated Question Moderation and Mapping	• Complete and Get verification from HOD
Course Materials & Lab Manuals	All Faculty Members	Yes	Improve Course materials to Delivered Applications oriented	-
Slow Learners and Remedial Measures	All Faculty Members	Yes	• proof for the remedial measures was witnessed in some courses for assignment given	-
Tutorial Conduction	Faculty Members handling four credit courses	Yes		Available & updated
CO-PO Mapping and Evaluation	All Faculty Members	Yes	• Improvements have to be done in CO-PO mapping.	Updated
Course End Survey	All Faculty Members	Yes		Available & updated
Result Analysis	Mr. K. Ganesan	Yes	Verified	-
Student Records	Departments Advisors	Yes	Update End Semester Marks	-

Student Participation – Inter / Intra Events	Mr.P.Raja Inter events: 0 Intra events: 0	Yes	Verified	-
workshops, Paper presentation	Mr.P.Ebenezer Sathish Paul	Yes		Available & updated
Sports, and Games, YRC, RRC & NSS, etc.		Yes	Encourage the students to participate in all Extra -curricular Activities	-
Dept Association	Mr.P.Ebenezer Sathish Paul	Yes		Available & updated
Professional / Chapters / Forums	Dr. P. Pitchipoo			Available & updated
Staff Personal Files	All Faculty Members	Yes	• All personal files need to be updated	Updated
Dept Budjet Files	Mr. K. Rajkumar	Yes		Available and Updated
Dept Purchasing Files	Mr.S.Veera Saravanakumar	Yes		Available and Updated
Student Feedback & Analysis	Mr. M. Ramesh	Yes	II Year student feedback form is not collected	Updated
Dept Training and Placement Files	Mr. D. Sudarsan	Yes		Available and Updated
Value Added Courses, Guest Lectures, Seminars	Mr. P. Ebenezer Sathish Paul	Yes		Available and Updated
Dept Annual Report	Dr. P. Pitchipoo	Yes		Available and Updated
Dept AQAR Report	Mr. V.M. Saravanan	Yes		Available and Updated
Research and Development – Funded Projects,Publications,MOUs, etc.	Mr. K. Ganesan	Yes		Available and Updated
Students Projects-UG & PG	Mr.K.Ganesan Mr. M. Suresh	Yes		Available and Updated

Subject Allocation and Time Table	Mr. V.Ayyar	Yes		Available and Updated
Internal Exam & Class Test Conduction	Mr. K. Ganesan	Yes		Available and Updated
Minutes of Dept Meeting	Dr. P. Pitchipoo	Yes		Available and Updated
Dept Recruitment	A.Muthiah	Yes		Available and Updated
Board of Studies file-curriculum syllabus, Minutes, etc.	Dr.P.Pitchipoo	Yes		Available and Updated
Feedbacks from Stakeholders-Alumni, Employer, Parents etc.	Mr.M.Ramar	Yes		Available and Updated
Lab Maintanance / Service Log-book	Mr. J. Jerold John Britto	Yes		Available and Updated
No.of programme organized	Mr. P. Ebenezer Sathish Paul	Yes	No:04	-
Department Achievements	• Students won many prizes in Symposium, presentation contest at various colleges. • Faculty participated FDP in Various college.			
Any other Remarks by Auditors	• Can perceive continuous improvement in academic performance of faculties and students			

Signature(s) of the Auditors and Name

1.

2.

Head of the Department

Verified by

IQAC Co-ordinator

Dean

Principal 28/11/2014

P.S.R. ENGINEERING COLLEGE SIVAKASI-626 140
(An Autonomous Institution, Affiliated to Anna University, Chennai)
Sevalpatti (P.O),Sivakasi – 626140
Tamilnadu State

Name of the Department Audited   : **MECHANICAL ENGINEERING DEPARTMENT**

Name of the Auditor(s) & Designation: 1.Mr.M.Ramar, Asso.prof & Head/ ECE.

2. Mrs.R.Meenaprakash, AP/ECE.

Date(s) of Auditing: **08.05.2015 (Friday)**

Report of Internal Academic Auditing

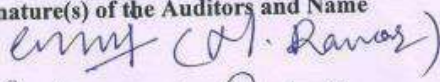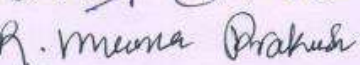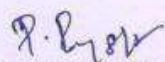| Files / Documents	Name of the Staff / In-charge	Auditing Done [Yes or No]	Comments / Suggestion of the Auditors [attach separate sheets if necessary	Remarks
Staff Log-Books	All Faculty Members	Yes	• In few log books record of class work is not filled properly.	• Complete and Get verification from HOD
Course Files	All Faculty Members	Yes	• Some faculty is not updated Summary attainment of CO, PO,PSO	Complete and Get verification from HOD
Course Materials & Lab Manuals	All Faculty Members	Yes	Some faculty is not updated from Update syllabus	-
Slow Learners and Remedial Measures	All Faculty Members	Yes	• proof for the remedial measures was witnessed in some courses Assignment given	
Tutorial Conduction	Faculty Members handling four credit courses	Yes	• No key was prepared for tutorial questions in some courses	-
CO-PO Mapping and Evaluation	All Faculty Members	Yes	• Improvements have to be done in CO-PO mapping.	updated
Course End Survey	All Faculty Members	Yes	• Most of the course files not having course end survey	-
Result Analysis	Mr. K. Ganesan	Yes	Verified	-
Student Records	Department Advisors	Yes		Available & updated
Student Participation – Inter / Intra Events	Mr.P.Raja Inter events: 11 Intra events: 2	Yes	Verified	-

workshops, Paper presentation	Mr.K.Rajkumar	Yes		Available & updated
Sports, and Games, YRC, RRC & NSS, etc.		Yes		Available & updated
Dept Association	Mr.P.Ebenezer Sathish Paul	Yes	Verified	-
Professional / Chapters / Forums	Dr. P. Pitchipoo	Yes		Available & updated
Staff Personal Files	All Faculty Members	Yes	• All personal files need to be updated	Updated
Dept Budjet Files	Mr. K. Rajkumar	Yes		Available & updated
Dept Purchasing Files	Mr.S.Veera Saravanakumar	Yes		-
Student Feedback & Analysis	Mr. M. Ramesh	Yes	Verified	Available & updated
Dept Training and Placement Files	Mr. D. Sudarsan	Yes		Available & updated
Value Added Courses, Guest Lectures, Seminars	Mr. P. Ebenezer Sathish Paul	Yes		Available & updated
Dept Annual Report	Dr. P. Pitchipoo	Yes		Available & updated
Dept AQAR Report	Mr. V.M. Saravanan	Yes		Available & updated
Research and Development – Funded Projects,Publications,MOUs, etc.	Mr. K. Ganesan	Yes		Available & updated
Students Projects-UG & PG	Mr.R.Ramaganesan Mr.R.Ramkumar	Yes		Available & updated
Subject Allocation and Time Table	Mr. V.M. Saravanan	Yes	Verified	Available & updated
Internal Exam & Class Test Conduction	Mr. K. Ganesan	Yes		Available & updated

Minutes of Dept Meeting	Dr. P. Pitchipoo	Yes	Verified	-
Dept Recruitment	Mr. P. Ebenezer Sathish Paul	Yes	Verified	-
Board of Studies file-curriculum syllabus, Minutes, etc.	Dr. P. Pitchipoo	Yes	Verified	-
Feedbacks from Stakeholders-Alumni, Employer, Parents etc.	Mr.M.Ramar	Yes		Available & updated
Lab Maintanance / Service Log-book	Mr.V.Pandiyaraj	Yes		Available & updated
No.of programme organized	Mr. P. Ebenezer Sathish Paul	Yes	No:03	-
Department Achievements	• Students won many prizes in Symposium, presentation contest at various colleges • Faculties secure 100% Results in University Examination			
Any other Remarks by Auditors	• Faculty's files update regularly.			

P. Ryor
Head of the Department

Signature(s) of the Auditors and Name
1. evry (M. Ravas)
2. R. meuna Prakash

Verified by

IQAC Co-ordinator

Dean

87/05/2015
Principal

[Type text]

P.S.R. ENGINEERING COLLEGE SIVAKASI-626 140
(An Autonomous Institution, Affiliated to Anna University, Chennai)
Sevalpatti (P.O),Sivakasi – 626140
Tamilnadu State

Name of the Department Audited　　: **MECHANICAL ENGINEERING DEPARTMENT**

Name of the Auditor(s) & Designation: **1. Dr.S.Ramesh, Prof & Head /EEE.**

2. Dr.K.Rubasoundar, Prof & Head /CSE.

Date(s) of Auditing: **30.11.2015 (Monday)**

Report of Internal Academic Auditing

Files / Documents	Name of the Staff / In-charge	Auditing Done [Yes or No]	Comments / Suggestion of the Auditors [attach separate sheets if necessary	Remarks
Staff Log-Books	All Faculty Members	Yes	• In few log books record of class work is not filled properly.	• Complete and Get verification from HOD
Course Files	All Faculty Members	Yes	• No separate file for course file / material for each course.	• Updation were made
Course Materials & Lab Manuals	All Faculty Members	Yes	Some Faculty is not updated 2 mark questions	-
Slow Learners and Remedial Measures	All Faculty Members	Yes	•	Available & updated
Tutorial Conduction	Faculty Members handling four credit courses	Yes		Available & updated
CO-PO Mapping and Evaluation	All Faculty Members	Yes	• Improvements have to be done in CO-PO mapping.	updated
Course End Survey	All Faculty Members	Yes	• Most of the course files not having course end survey	-
Result Analysis	Mr. C. Gururaj	Yes	Verified	-
Student Records	Department Faculty Members	Yes	Verified	-
Student Participation – Inter / Intra Events	Mr.P.Raja Inter events: 15 Intra events: 01	Yes	Verified	-

workshops, Paper presentation	Mr.M.Ramesh	Yes		Available & updated
Sports, and Games, YRC, RRC & NSS, etc.		Yes		Available & updated
Dept Association	Mr.P.Ebenezer Sathish Paul	Yes		Available & updated
Professional / Chapters / Forums	Dr. P. Pitchipoo			-
Staff Personal Files	All Faculty Members	Yes	• All personal files need to be updated	Updated
Dept Budjet Files	Mr. K. Ganesan	Yes	Verified	-
Dept Purchasing Files	Mr.S.Veera saravanakumar	Yes	Verified	-
Student Feedback & Analysis	Mr. M. Suresh	Yes		Available & updated
Dept Training and Placement Files	Mr. R. Ramkumar	Yes	Verified	-
Value Added Courses, Guest Lectures, Seminars	Mr. P. Ebenezer Sathish Paul	Yes		Available & updated
Dept Annual Report	Dr. P. Pitchipoo	Yes		Available & updated
Dept AQAR Report	Mr. V.M. Saravanan	Yes		Available & updated
Research and Development – Funded Projects,Public ations,MOUs, etc.	Mr. K. Ganesan	Yes	Verified	-
Students Projects-UG & PG	Mr.V.Ayyar Mr.P.Raja	Yes		Available & updated
Subject Allocation and Time Table	Mr. V.M. Saravanan	Yes		Available & updated
Internal Exam & Class Test Conduction	Mr. V.Ayyar	Yes		Available & updated

Minutes of Dept Meeting	Dr. P. Pitchipoo	Yes	Verified	-
Dept Recruitment	Mr.A.Muthiah	Yes		Available & updated
Board of Studies file-curriculum syllabus, Minutes, etc.	Dr. P. Pitchipoo	Yes		Available & updated
Feedbacks from Stakeholders- Alumni, Employer, Parents etc.	Mr.M.Ramar	Yes		Available & updated
Lab Maintanance / Service Log-book	Mr.R.Ramaganesan	Yes		Available & updated
No.of programme organized	Mr. P. Ebenezer Sathish Paul	Yes	No:04	-
Department Achievements	• Professor got Reviewer- International Journal of Fuzzy Systems • Faculty participated FDP in Various college. • Faculties secure 100% Results in University Examination.			
Any other Remarks by Auditors				

Signature(s) of the Auditors and Name

1.

2.

Head of the Department

Verified by

IQAC Co-ordinator

Dean

Principal

30/11/2015

P.S.R. ENGINEERING COLLEGE SIVAKASI-626 140
(An Autonomous Institution, Affiliated to Anna University, Chennai)
Sevalpatti (P.O),Sivakasi – 626140
Tamilnadu State

Name of the Department Audited   : **MECHANICAL ENGINEERING DEPARTMENT**

Name of the Auditor(s) & Designation:**1. Dr.K.Rubasoundar, Prof & Head / CSE.**

2. Mr.R.Thirumalai Kumar, AP/MBA.

Date(s) of Auditing: **06.05.2016 (Friday)**
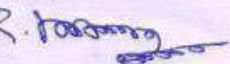
Report of Internal Academic Auditing

Files / Documents	Name of the Staff / In-charge	Auditing Done [Yes or No]	Comments / Suggestion of the Auditors [attach separate sheets if necessary	Remarks
Staff Log-Books	All Faculty Members	Yes	In some log books course plan is missing.	Complete and Get verification from HOD
Course Files	All Faculty Members	Yes	• Some faculty is not updated IAT 2 Mark details and Mapping	Complete and Get verification from HOD
Course Materials & Lab Manuals	All Faculty Members	Yes	Improve Course materials to include PPT, NPTEL and Animation Videos	-
Slow Learners and Remedial Measures	All Faculty Members	Yes	• proof for the remedial measures was witnessed in some courses for assignment given	-
Tutorial Conduction	Faculty Members handling four credit courses	Yes	• No key was prepared for tutorial questions in some courses	-
CO-PO Mapping and Evaluation	All Faculty Members	Yes	• Improvements have to be done in CO-PO-PSO mapping.	Updated
Course End Survey	All Faculty Members	Yes	• Most of the course files not having course end survey	-
Result Analysis	Mr. C. Gururaj	Yes	Verified	-
Student Records	Department faculty Advisors	Yes		Available and Updated
Student Participation – Inter / Intra Events	Mr.P.Raja Inter events:03 Intra events:Nil	Yes	Verified	-

workshops, Paper presentation	Mr.R.Ragavan	Yes		Available and Updated
Sports, and Games, YRC, RRC & NSS, etc.		Yes		Available and Updated
Dept Association	Mr.P.Ebenezer Sathish Paul	Yes		Available and Updated
Professional / Chapters / Forums	Dr. P. Pitchipoo	Yes		Available and Updated
Staff Personal Files	All Faculty Members	Yes	• All personal files need to be updated	Updated
Dept Budjet Files	Mr. K. Ganesan	Yes		Available and Updated
Dept Purchasing Files	Mr.S.Veera saravanakumar	Yes		Available and Updated
Student Feedback & Analysis	Mr. M. Suresh	Yes		Available and Updated
Dept Training and Placement Files	Mr. R. Ramkumar	Yes	Verified	-
Value Added Courses, Guest Lectures, Seminars	Mr. P. Ebenezer Sathish Paul	Yes	Verified	-
Dept Annual Report	Dr. P. Pitchipoo	Yes	• Verified	-
Dept AQAR Report	Mr. V.M. Saravanan	Yes		Available and Updated
Research and Development – Funded Projects,Public ations,MOUs, etc.	Mr. K. Ganesan	Yes		Available and Updated
Students Projects-UG & PG	Mr.V.Manojkumar	Yes	Verified	-
Subject Allocation and Time Table	Mr. V.M. Saravanan	Yes	Verified	-
Internal Exam & Class Test Conduction	Mr. K. Ganesan	Yes		Available and Updated

[Type text]

Minutes of Dept Meeting	Dr. P. Pitchipoo	Yes	Verified	-
Dept Recruitment	Dr.K.R.Viswanathan	Yes	Verified	-
Board of Studies file-curriculum syllabus, Minutes, etc.	Dr. P. Pitchipoo	Yes		Available and Updated
Feedbacks from Stakeholders-Alumni, Employer, Parents etc.	Mr.M.Ramar	Yes	Verified	-
Lab Maintanance / Service Log-book	Mr.K.Rajkumar	Yes		Available and Updated
No.ofprogramme organized	Mr. P. Ebenezer Sathish Paul	Yes	No:02	-
Department Achievements	• Faculties and Students got NPTEL Certificate • Students won many prizes in Symposium, presentation contest at various colleges.			
Any other Remarks by Auditors	• More assignments can be given to students and assignment & Seminar marks should be regularly updated in staff log books.			

$P \cdot R_y 6/5/16$
Head of the Department

Signature(s) of the Auditors and Name

1.

2. R.

Verified by

IQAC Co-ordinator

Dean

Principal 6/05/2016

P.S.R. ENGINEERING COLLEGE SIVAKASI-626 140
(An Autonomous Institution, Affiliated to Anna University, Chennai)
Sevalpatti (P.O),Sivakasi – 626140
Tamilnadu State

Name of the Department Audited   : **MECHANICALENGINEERING DEPARTMENT**

Name of the Auditor(s) & Designation: **1. Dr.P.Johnson Raja, Asso.Prof/CHEMISTRY**

2. Mr.R.Palanikumar, AP/ CSE.

Date(s) of Auditing: **25.11.2016(Friday)**

Report of Internal Academic Auditing

Files / Documents	Name of the Staff / In-charge	Auditing Done [Yes or No]	Comments / Suggestion of the Auditors [attach separate sheets if necessary	Remarks
Staff Log-Books	All Faculty Members	Yes	• In few log books record of class work is not filled properly. • In some log books are Students attendance is not Entry.	• Complete and Get verification from HOD
Course Files	All Faculty Members	Yes	• Some faculty is not updated Question Moderation and Mapping	• Complete and Get verification from HOD
Course Materials & Lab Manuals	All Faculty Members	Yes	Improve Course materials to Delivered Applications oriented	-
Slow Learners and Remedial Measures	All Faculty Members	Yes	• proof for the remedial measures was witnessed in some courses for Assignment given	-
Tutorial Conduction	Faculty Members handling four credit courses	Yes		Available & updated
CO-PO Mapping and Evaluation	All Faculty Members	Yes	• Improvements have to be done in CO-PO mapping.	Updated
Course End Survey	All Faculty Members	Yes	• Some few menbers of the course files not having course end survey	-
Result Analysis	Mr.R.Ragavan	Yes	Verified	-
Student Records	All Faculty Members	Yes	Update End Semester Marks	-

Student Participation – Inter / Intra Events	Mr.P.Raja Inter events: 15 Intra events: 03	Yes	Verified	-
workshops, Paper presentation	Mr.M.Ayyappan	Yes		Available & updated
Sports, and Games, YRC, RRC & NSS, etc.		Yes	Encourage the students to participate in all Extra -curricular Activities	-
Dept Association	Mr.K.Ganesan	Yes		Available & updated
Professional / Chapters / Forums	Dr. P. Pitchipoo			Available & updated
Staff Personal Files	All Faculty Members	Yes	• All personal files need to be updated	Updated
DeptBudjet Files	Mr.V. Pandiyaraj	Yes	Verified	-
Dept Purchasing Files	Mr.S.Veerasaravanakumar	Yes	Verified	-
Student Feedback & Analysis	Mr.M.Ramar	Yes		Available & updated
Dept Training and Placement Files	Mr. M. Ayyappan	Yes		Available & updated
Value Added Courses, Guest Lectures, Seminars	Mr. P. Ebenezer Sathish Paul	Yes		Available & updated
Dept Annual Report	Dr. P. Pitchipoo	Yes	Verified	
Dept AQAR Report	Mr. V.M. Saravanan	Yes	Verified	-
Research and Development – Funded Projects,Publications,MOUs, etc.	Mr. K. Ganesan	Yes		Available and Updated
Students Projects-UG	Mr.P.EbenezerSathish Paul	Yes		Available and Updated

PG	Mr.K.Ganesan			
Subject Allocation and Time Table	Mr. V.M. Saravanan	Yes	Verified	-
Internal Exam & Class Test Conduction	Mr. K. Ganesan	Yes	Verified	-
Minutes of Dept Meeting	Dr. P. Pitchipoo	Yes	Verified	-
Dept Recruitment	Mr.D.Sudharsan	Yes		Available and Updated
Board of Studies file- curriculum syllabus, Minutes, etc.	Dr. P. Pitchipoo	Yes	Verified	-
Feedbacks from Stakeholders- Alumni, Employer, Parents etc.	Mr.M.Ramar	Yes		Available and Updated
Lab Maintanance / Service Log-book	Mr. G. Uthayakumar	Yes		Available and Updated
No.of programme organized	Mr. K. Ganesan	Yes	No:04	-
Department Achievements	• Faculties applied for TNSCST projects • Faculties and Students got NPTEL Certificate			
Any other Remarks by Auditors	• Files are regularly updated • More assignments can be given to students and assignment & Seminar marks should be regularly updated in staff log books.			

P. R 28/11

Signature(s) of the Auditors and Name **Head of the Department**

1. 8. Johnson Rg. [S. Johnson Raja]
2. [R. PALANIKUMAR]

Verified by

IQAC Co-ordinator   **Dean**   **Principal**

P.S.R. ENGINEERING COLLEGE SIVAKASI-626 140
(An Autonomous Institution, Affiliated to Anna University, Chennai)
Sevalpatti (P.O),Sivakasi – 626140
Tamilnadu State

Name of the Department Audited : **MECHANICALENGINEERING DEPARTMENT**

Name of the Auditor(s) & Designation:**1. Dr.K.Subramanian, Prof& Head /Bio Tech.**

2. Dr.R.Srinivasan, Asso.Prof./PHYSICS

Date(s) of Auditing: **28.04.2017 (Friday)**

Report of Internal Academic Auditing

Files / Documents	Name of the Staff / In-charge	Auditing Done [Yes or No]	Comments / Suggestion of the Auditors [attach separate sheets if necessary	Remarks
Staff Log-Books	All Faculty Members	Yes	In some log books course plan is missing.	Complete and Get verification from HOD
Course Files	All Faculty Members	Yes	• Some faculty is not updated Pre Semester Examination Mark details and Mapping	• Complete and Get verification from HOD
Course Materials & Lab Manuals	All Faculty Members	Yes	Improve Course materials to include PPT, NPTEL and Animation Videos	-
Slow Learners and Remedial Measures	All Faculty Members	Yes	• proof for the remedial measures was witnessed in some courses for Assignment given	-
Tutorial Conduction	Faculty Members handling four credit courses	Yes	• No key was prepared for tutorial questions in some courses	-
CO-PO Mapping and Evaluation	All Faculty Members	Yes	• Improvements have to be done in CO-PO mapping.	updated
Course End Survey	All Faculty Members	Yes	• Some few of the course files not having course end survey	-
Result Analysis	Mr.R.Ragavan	Yes	Verified	-
Student Records	All Faculty Members	Yes	Verified	-
Student Participation – Inter / Intra Events	Mr.P.Raja Inter events:16 Intra events:02	Yes		-
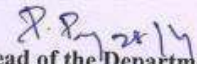
workshops, Paper presentation	Mr. R. Siddarth	Yes		Available and Updated
Sports, and Games, YRC, RRC & NSS, etc.		Yes		Available and Updated
Dept Association	Mr. K. Ganesan	Yes	Verified	-
Professional / Chapters / Forums	Dr. P. Pitchipoo	Yes	Verified	
Staff Personal Files	All Faculty Members	Yes	• All personal files need to be updated	Updated
Dept Budjet Files	Mr.V. Pandiyaraj	Yes		Available and Updated
Dept Purchasing Files	Mr.S.Veera saravanakumar	Yes		Available and Updated
Student Feedback & Analysis	Mr.M.Ramar	Yes	Verified	-
Dept Training and Placement Files	Mr. M. Ayyappan	Yes		Available and Updated
Value Added Courses, Guest Lectures, Seminars	Mr. P. Ebenezer Sathish Paul	Yes	Verified	-
Dept Annual Report	Dr. P. Pitchipoo	Yes		Available and Updated
Dept AQAR Report	Mr. V.M. Saravanan	Yes	Verified	-
Research and Development – Funded Projects,Public ations,MOUs, etc.	Mr. K. Ganesan	Yes	TNSCST Project Sanctioned with Rs 10000/- (Dr. P. Pitchipoo)	-
Students Projects-UG & PG	Mr. V. Manoj Kumar Mr. R. Siddarth	Yes		Available and Updated
Subject Allocation and Time Table	Mr. V.M. Saravanan	Yes	Verified	-
Internal Exam & Class Test Conduction	Mr. K. Ganesan	Yes	Verified	-

Minutes of Dept Meeting	Dr. P. Pitchipoo	Yes	Verified	-
Dept Recruitment	Mr. G. Uthayakumar	Yes		Available and Updated
Board of Studies file-curriculum syllabus, Minutes, etc.	Dr. P. Pitchipoo	Yes	Verified	-
Feedbacks from Stakeholders-Alumni, Employer, Parents etc.	Mr.M.Ramar	Yes	Verified	-
Lab Maintanance / Service Log-book	Mr.K.Muthusamy	Yes		Available and Updated
No.of programme organized	Mr. K. Ganesan	Yes	No:01	-
Department Achievements	• Faculties and Students got NPTEL Certificate. • Faculty got TNSCST Project			
Any other Remarks by Auditors	• Faculty's files update regularly.			

Signature(s) of the Auditors and Name

1. K.

2. R. Sreenivasan (CR.sreenivasan)

Head of the Department

Verified by

IQAC Co-ordinator

Dean

Principal

P.S.R. ENGINEERING COLLEGE SIVAKASI-626 140
(An Autonomous Institution, Affiliated to Anna University, Chennai)
Sevalpatti (P.O),Sivakasi – 626140
Tamilnadu State

Name of the Department Audited   : **MECHANICAL ENGINEERING DEPARTMENT**
Name of the Auditor(s) & Designation: **1. Dr.M.Shahul Hameed, Prof & Head / Civil.**

2. Mr.S.Dharmar, Asso.Prof./ Civil.

Date(s) of Auditing: **25.11.2017 (Saturday)**

Report of Internal Academic Auditing

Files / Documents	Name of the Staff / In-charge	Auditing Done [Yes or No]	Comments / Suggestion of the Auditors [attach separate sheets if necessary	Remarks
Staff Log-Books	All Faculty Members	Yes	• In few log books record of class work is not filled properly. • In some log books are Students attendance is not Entry.	• Complete and Get verification from HOD
Course Files	All Faculty Members	Yes	• Some faculty is not updated Question Moderation and Mapping	• Complete and Get verification from HOD
Course Materials & Lab Manuals	All Faculty Members	Yes	Improve Course materials to include PPT, NPTEL and Animation Videos	-
Slow Learners and Remedial Measures	All Faculty Members	Yes	• proof for the remedial measures was witnessed in some courses for assignment given	
Tutorial Conduction	Faculty Members handling four credit courses	Yes	• No key was prepared for tutorial questions in some courses	-
CO-PO Mapping and Evaluation	All Faculty Members	Yes	• Improvements have to be done in CO-PO mapping.	updated
Course End Survey	All Faculty Members	Yes	• Few of the course files not having course end survey	-
Result Analysis	Mr. M. V. Maheswaran	Yes	Verified	-
Student Records	Department Advisors	Yes		Available & updated
Student Participation – Inter / Intra	Mr.P.Raja Inter events:17 Intra events: 02	Yes	Verified	-

[Type text]

Events				
workshops, Paper presentation	Mr.K.Ganesan	Yes		Available & updated
Sports, and Games, YRC, RRC & NSS, etc.		Yes		Available & updated
Dept Association	Mr. K.Ganesan	Yes	Verified	-
Professional / Chapters / Forums	Dr. P. Pitchipoo		Verified	-
Staff Personal Files	All Faculty Members	Yes	• All personal files need to be updated	Updated
Dept Budjet Files	Mr.K.Muthusamy	Yes		Available & updated
Dept Purchasing Files	Mr.S.Veera saravanakumar	Yes	Verified	Available & updated
Student Feedback & Analysis	Mr.P.Raja	Yes		Available & updated
Dept Training and Placement Files	Mr.R.Ragavan	Yes		Available & updated
Value Added Courses, Guest Lectures, Seminars	Mr. P. Ebenezer Sathish Paul	Yes		Available & updated
Dept Annual Report	Dr. P. Pitchipoo	Yes	Verified	-
Dept AQAR Report	Mr. V.M. Saravanan	Yes	Verified	-
Research and Development – Funded Projects,Public ations,MOUs, etc.	Mr. K. Ganesan	Yes		Available & updated
Students Projects-UG & PG	Mr.P.EbenezerSathish Paul Mr.K.Karthik	Yes	Verified	-

Subject Allocation and Time Table	Mr. V.M. Saravanan	Yes	Verified	-
Internal Exam & Class Test Conduction	Mr.T.Suresh	Yes		Available & updated
Minutes of Dept Meeting	Dr. P. Pitchipoo	Yes		Available & updated
Dept Recruitment	Dr.A.Muthiah	Yes		Available & updated
Board of Studies file- curriculum syllabus, Minutes, etc.	Dr. P. Pitchipoo	Yes	Verified	-
Feedbacks from Stakeholders- Alumni, Employer, Parents etc.	Mr.M.Ramar	Yes		Available & updated
Lab Maintanance / Service Log-book	Mr.D.Sundarrajan	Yes		Available & updated
No.of programme organized	Mr. K. Ganesan	Yes	No:04	-
Department Achievements	- Faculty got Best Paper Award- NITTTR, Chennai - Faculty achieved Anna University Supervisor Recognition.			
Any other Remarks by Auditors				

Signature(s) of the Auditors and Name

1. _____ (M. SHAHUL HAMEED)

2. _____

Verified by

IQAC Co-ordinator   **Dean**   **Principal**

Head of the Department

P.S.R. ENGINEERING COLLEGE SIVAKASI-626 140
(An Autonomous Institution, Affiliated to Anna University, Chennai)
Sevalpatti (P.O),Sivakasi – 626140
Tamilnadu State

Name of the Department Audited : **MECHANICALENGINEERING DEPARTMENT**

Name of the Auditor(s) & Designation: **1. Dr.P.Johnson Raja, Asso.Prof /CHEMISTRY.**

2. Dr.R.Srinivasan, Asso.Prof /PHYSICS.

Date(s) of Auditing: **04.05.2018(Friday)**

Report of Internal Academic Auditing

Files / Documents	Name of the Staff / In-charge	Auditing Done [Yes or No]	Comments / Suggestion of the Auditors [attach separate sheets if necessary	Remarks
Staff Log-Books	All Faculty Members	Yes	• Some Faculty Members is not updated in Assignment marks.	• Complete and Get verification from HOD
Course Files	All Faculty Members	Yes	Some faculty is not updated pre-semester Examination Mark details and Mapping	• Complete and Get verification from HOD
Course Materials & Lab Manuals	All Faculty Members	Yes	Improve Course materials to include PPT, NPTEL and Animation Videos	-
Slow Learners and Remedial Measures	All Faculty Members	Yes	• proof for the remedial measures was witnessed in some courses for Assignment given	-
Tutorial Conduction	Faculty Members handling four credit courses	Yes	• Faculty handled the subject in Tutorial hour to give more problems to solve for Students.	-
CO-PO Mapping and Evaluation	All Faculty Members	Yes	• Some Faculty is not update summary attainment of CO,PO,PSO	updated
Course End Survey	All Faculty Members	Yes	• Some few t of the course files not having course end survey	-
Result Analysis	Mr. M. V. Maheswaran	Yes	Verified	-
Student Records	Department advisors	Yes	Verified	-
Student Participation – Inter / Intra Events	Mr.P.Raja Inter events:29 Intra events:02	Yes	Verified	-

workshops, Paper presentation	Mr.M.Ramar	Yes		Available and Updated
Sports, and Games, YRC, RRC & NSS, etc.		Yes		Available and Updated
Dept Association	Mr. K.Ganesan	Yes	Verified	-
Professional / Chapters / Forums	Dr. P. Pitchipoo		Verified	-
Staff Personal Files	All Faculty Members	Yes	• All personal files need to be updated	Updated
DeptBudjet Files	Mr.K.Muthusamy	Yes		Available and Updated
Dept Purchasing Files	Mr.S.Veerasaravanakumar	Yes		Available and Updated
Student Feedback & Analysis	Mr.P.Raja	Yes		Available and Updated
Dept Training and Placement Files	Mr.R.Ragavan	Yes	Verified	-
Value Added Courses, Guest Lectures, Seminars	Mr. P. Ebenezer Sathish Paul	Yes	Verified	-
Dept Annual Report	Dr. P. Pitchipoo	Yes	Verified	Updated
Dept AQAR Report	Mr. V.M. Saravanan	Yes	Verified	-
Research and Development – Funded Projects,Publications,MOUs, etc.	Mr. K. Ganesan	Yes	TNSCST Project Sanctioned with Rs10000/- Mr.S.Durairaj Mr.Y.Kumarasamy	-
Students Projects-UG & PG	Mr.R.Dinagaran Mr.M.Ramar	Yes	Verified	-
Subject Allocation and Time Table	Mr. V.M. Saravanan	Yes	Verified	-

Internal Exam & Class Test Conduction	Mr.T.Suresh	Yes		Available and Updated
Minutes of Dept Meeting	Dr. P. Pitchipoo	Yes	Verified	-
Dept Recruitment	Mr.K.Ganesan	Yes	Verified	-
Board of Studies file-curriculum syllabus, Minutes, etc.	Dr. P. Pitchipoo	Yes		Available and Updated
Feedbacks from Stakeholders-Alumni, Employer, Parents etc.	Mr.M.Ramar	Yes		Available and Updated
Lab Maintanance / Service Log-book	Mr.V.M.Saravanan	Yes		Available and Updated
No.ofprogram me organized	Mr.K.Ganesan	Yes	No:04	-
Department Achievements	• Students applied for TNSCST projects • Faculties and Students got NPTEL Certificate. • Students won many prizes in Symposium, presentation contest at various colleges.			
Any other Remarks by Auditors	• Files are regularly updated • More assignments can be given to students and assignment & Seminar marks should be regularly updated in staff log books.			

Signature(s) of the Auditors and Name

Head of the Department

1. S. Johnson Rj. [S. Johnson Raja]

2. R.Sreenivasan (R. Sreenivasan)

Verified by

IQAC Co-ordinator   **Dean**   **Principal**

P.S.R. ENGINEERING COLLEGE SIVAKASI-626 140
(An Autonomous Institution, Affiliated to Anna University, Chennai)
Sevalpatti (P.O),Sivakasi – 626140
Tamilnadu State

Name of the Department Audited   : **MECHANICAL ENGINEERING DEPARTMENT**

Name of the Auditor(s) & Designation: **1. Dr.K.Valarmathi, Prof & Head / ECE.**

2. Dr.P.Karuppasamy, Prof./ ECE.

Date(s) of Auditing: **28.11.2018(Wednesday)**

Report of Internal Academic Auditing

Files / Documents	Name of the Staff / In-charge	Auditing Done [Yes or No]	Comments / Suggestion of the Auditors [attach separate sheets if necessary	Remarks
Staff Log-Books	All Faculty Members	Yes	• Some Faculty Members is not updated in Assignment marks.	• Complete and Get verification from HOD
Course Files	All Faculty Members	Yes	Some faculty is not updated pre-semester Examination Mark details and Mapping	• Complete and Get verification from HOD
Course Materials & Lab Manuals	All Faculty Members	Yes	Some faculty is not give Lab manual for students	Available & updated
Slow Learners and Remedial Measures	All Faculty Members	Yes	• proof for the remedial measures was witnessed in some courses for Assignment given in failure students	Available & updated
Tutorial Conduction	Faculty Members handling four credit courses	Yes	•	-
CO-PO Mapping and Evaluation	All Faculty Members	Yes		Available & updated
Course End Survey	All Faculty Members	Yes	• In few of the course files not having course end survey	-
Result Analysis	Mr. K.Ganesan	Yes	-	Available & updated
Student Records	All Faculty Advisors	Yes	Update IAT 1 and IAT 2	-
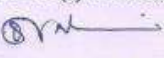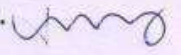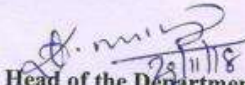
Student Participation – Inter / Intra Events	MR.P.Raja Numbers: Inter events:16 Intra events:01	Yes		Available & updated
workshops, Paper presentation	Mr. K.Ganesan	Yes		Available & updated
Sports, and Games, YRC, RRC & NSS, etc.		Yes	Encourage the students to participate in all Extra - curricular Activities for Inter college	Number of Participants are very less
Dept Association	Mr. Y.Kumarasamy	Yes		Available & updated
Professional / Chapters / Forums	Dr.R.Sivasubramanian	Yes		Available & updated
Staff Personal Files	All Faculty Members	Yes	• All personal files need to be updated	Updated
Dept Budjet Files	Mr. K.Muthusamy	Yes		Available & updated
Dept Purchasing Files	Mr.S.Veera saravanakumar	Yes	To updated stack file	-
Student Feedback & Analysis	Mr. K.Karthick	Yes		Available & updated
Dept Training and Placement Files	Mr.M.V.Maheshwaran	Yes	Students participate in various company at inter college level	-
Value Added Courses, Guest Lectures, Seminars	Mr.S.Veera saravanakumar	Yes		Available & updated -
Dept Annual Report	Dr.R.Sivasubramanian	Yes	•	Available and Updated
Dept AQAR Report	Mr. V.M. Saravanan	Yes	•	Available and Updated
Research and Development – Funded Projects,Publications,MOUs, etc.	Dr.S.M.Rajkumar	Yes		Available and Updated
Students Projects-UG & PG	Mr.M.Ramar MR.R.Dinagran	Yes	UG students doing interne ship projects	-

Subject Allocation and Time Table	Mr. V.M. Saravanan	Yes		Available and Updated
Internal Exam & Class Test Conduction	Mr.M.Kalimuthu	Yes	Verified	-
Minutes of Dept Meeting	Dr.R.Sivasubramanian	Yes		Available and Updated
Dept Recruitment	Mr.S.Durairaj	Yes		-
Board of Studies file- curriculum syllabus, Minutes, etc.	Mr.D.Sundarrajan	Yes		Available and Updated
Feedbacks from Stakeholders- Alumni, Employer, Parents etc.	Mr.M.Ramar	Yes		Available and Updated
Lab Maintanance / Service Log-book	Mr.S.Veera saravanakumar	Yes		Available and Updated
No.of programme organized	Mr. Y.Kumarasamy	Yes	No:01	-
Department Achievements	• Faculty is participated Summer Fellowship- Math Art and Design in Bangalore • Professor got award "Guest Editor- International Journal of Computer Aided Engineering and Technology" • Faculty got Elite NPTEL Examination			
Any other Remarks by Auditors	• Faculty updated personal File			

Signature(s) of the Auditors and Name

1. (Dr. Ic VAUBEMBOHI)

2. (Dr. P. KARUPPASAMY)

Head of the Department

Verified by

IQAC Co-coordinator

Dean

Principal

P.S.R. ENGINEERING COLLEGE SIVAKASI-626 140
(An Autonomous Institution, Affiliated to Anna University, Chennai)
Sevalpatti (P.O),Sivakasi – 626140
Tamilnadu State

Name of the Department Audited   : **MECHANICAL ENGINEERING DEPARTMENT**

Name of the Auditor(s) & Designation:**1. Dr.K.Rubasoundar, Prof & Head / CSE.**

2. Dr.S.Singaravelan ,Prof./ CSE.

Date(s) of Auditing: **06.05.2019 (Monday)**

Report of Internal Academic Auditing

Files / Documents	Name of the Staff / In-charge	Auditing Done [Yes or No]	Comments / Suggestion of the Auditors [attach separate sheets if necessary	Remarks
Staff Log-Books	All Faculty Members	Yes	• In few log books record of class work is not filled properly. • In some log books course plan is missing.	• Complete and Get verification from HOD
Course Files	All Faculty Members	Yes	• Some faculty is not updated IAT 1 Mark details and Mapping	• Complete and Get verification from HOD
Course Materials & Lab Manuals	All Faculty Members	Yes	Improve Course materials to include PPT, NPTEL and Animation Videos	-
Slow Learners and Remedial Measures	All Faculty Members	Yes		• Available & updated
Tutorial Conduction	Faculty Members handling four credit courses	Yes	• Faculty handled the subject in Tutorial hour to give more problems to solve for Students.	/ -
CO-PO Mapping and Evaluation	All Faculty Members	Yes	• Improvements have to be done in CO-PO mapping.	updated
Course End Survey	All Faculty Members	Yes	• Most of the course files not having course end survey.	Updated
Result Analysis	Mr. M. V. Maheswaran	Yes	Verified	-
Student Records	Department Advisors	Yes	Update End Semester Marks	-
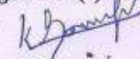
Student Participation – Inter / Intra Events	Mr.P.Raja Inter events:8 Intra events:Nil	Yes		Available and Updated
workshops, Paper presentation	Mr.M.Ramar	Yes	--	Available and Updated
Sports, and Games, YRC, RRC & NSS, etc.		Yes	Encourage the students to participate in all Extra - curricular Activities	Number of Participants are very less
Dept Association	Mr. Y.Kumarasamy	Yes	-	Available and Updated
Professional / Chapters / Forums	Dr.A.Muthiah	Yes		Available and Updated
Staff Personal Files	All Faculty Members	Yes	• Some Faculty personal files is not to be updated	Updated
Dept Budjet Files	Mr. K.Muthusamy	Yes		Available and Updated
Dept Purchasing Files	Mr.S.Veera saravanakumar	Yes		Available and Updated
Student Feedback & Analysis	Mr. K.Karthick	Yes		Available and Updated
Dept Training and Placement Files	Mr.M.V.Maheshwaran	Yes	Some students is not interest attend the Interview due to higher study	-
Value Added Courses, Guest Lectures, Seminars	Mr.S.Veera saravanakumar	Yes		Available and Updated
Dept Annual Report	Dr.A.Muthiah	Yes		Available and Updated
Dept AQAR Report	Mr. V.M. Saravanan	Yes		Available and Updated
Research and Development – Funded Projects,Public ations,MOUs, etc.	Dr.S.M.Rajkumar	Yes	TNSCST Project Sanctioned with Rs 7500/- (Mr.K.Ravikumar	-
Students Projects-UG & PG	Mr.D.Sundarrajan Mr.P.Raja	Yes	Encourage the students to apply for getting Funded projects	-

Subject Allocation and Time Table	Mr. V.M. Saravanan	Yes		Available and Updated
Internal Exam & Class Test Conduction	Mr.K.Kalimuthu	Yes		Available and Updated
Minutes of Dept Meeting	Dr.A.Muthiah	Yes	Verified	-
Dept Recruitment	Dr.S.M. Rajkumar	Yes		Available and Updated
Board of Studies file-curriculum syllabus, Minutes, etc.	Dr.P.Pitchipoo	Yes		Available and Updated
Feedbacks from Stakeholders-Alumni, Employer, Parents etc.	Mr.M.Ramar	Yes		Available and Updated
Lab Maintanance / Service Log-book	Mr.S.Veera saravanakumar	Yes		Available and Updated
No.of programme organized	Mr. Y.Kumarasamy	Yes	No:04	-
Department Achievements	- Students applied for TNSCST projects - Faculties and Students got NPTEL Certificate. - Students won many prizes in Symposium, presentation contest at various colleges.			
Any other Remarks by Auditors	- Files are regularly updated - More assignments can be given to students and assignment & Seminar marks should be regularly updated in staff log books.			

Signature(s) of the Auditors and Name

1.

2. (S.SINAPRAVEEAN)

Head of the Department

Verified by

IQAC Co-ordinator

Dean

Principal 6/05/2019

EXTERNAL ACADEMIC AUDIT

P.S.R Engineering College, Sivakasi – 626140

(An Autonomous Institution, Affiliated to Anna University, Chennai)

Minutes of the External Academic Audit Report

The academic audit was conducted at P.S.R.Engineering College on 19.07.2019 for the academic year 2018 – 19, by the following external expert members.

S. No.	Name of the Members
1	Dr.P.Latha Head of the Department, Department of Electrical and Electronics Engineering, Government College of Engineering, Tirunelveli – 627 007.
2	Dr.R.Ramesh Pandian Associate Professor, Department of Civil Engineering, Anna University Regional Campus, Dindigul - 624 622

The committee was provided with the copies of regulation 2012 & 2016, Curriculum Syllabi of all the autonomous programmes and external audit report of the academic year 2017-2018 for favor of perusal.

After a brief appraisal of the regulations, the team visited the exam cell and office of the Controller of Examinations. The following documents were carefully scrutinized.

1. End Semester Examination process.
2. Regulations 2012 & 2016
3. Syllabus
4. End Semester Questions and Answer Key
5. Answer Booklets and valuation process.
6. Mark entry process.

Based on the scrutiny of the above records followed by an exit meeting with Director, Principal, Dean and COE, the committee furnishes its audit report.

Also the committee visited the departments for academic auditing and samples of the following documents were checked.

➢ Course Files.
➢ Internal Examination File
➢ BOS Meeting File

Report of External Exam cell Audit – 2018 – 2019:

1. The committee appreciates the formation, function and process of COE office.
2. Academic calender and time table have been prepared in advance and followed meticulously.
3. Continuous assessment and award of internal marks are done effectively.
4. The committee is fully satisfied with the smooth and orderly functioning of the Office of the Controller of Examinations in the conduct of End Semester Examinations.
5. The standards of question paper and valuation process are appreciable.
6. Random scrutiny of the all records revealed that the entries are proper.
7. The Valuation and Revaluation process were done meticulously and in an unbiased manner.
8. The committee is of the opinion that P.S.R Engineering College, COE Office is exercising the responsibilities of the Autonomous status in a right way.

Name of the Members	Signature
Dr.P.Latha Head of the Department, Department of Electrical and Electronics Engineering, Government College of Engineering, Tirunelveli – 627 007.	P.Latha 19/07/2019
Dr.R.Ramesh Pandian Associate Professor, Department of Civil Engineering, Anna University Regional Campus, Dindigul - 624 622	d.d 19/07/19

P.S.R Engineering College, Sivakasi – 626140
(An Autonomous Institution, Affiliated to Anna University, Chennai)
Minutes of the External Academic Audit Report

The academic audit was conducted at P.S.R.Engineering College on 12.06.2018 for the academic year 2017 – 18, by the following external expert members.

SL NO	Name of the Members
1	Dr.S.Iniyan Professor / Mechanical Anna University, Chennai - 600025
2	Dr.K.Ramanathan Professor / Mechanical Alagappa Chettiar college of Engineering and Technology, Karaikudi – 630 003.

The committee was provided with the copies of regulation 2012 & 2016, Curriculum Syllabi of all the autonomous programmes and external audit report of the academic year 2016-2017 for favor of perusal.

After a brief appraisal of the regulations, the team visited the exam cell and office of the Controller of Examinations. The following documents were carefully scrutinized.

1. End Semester Examination process.
2. Regulations 2012 & 2016
3. Syllabus
4. End Semester Questions and Answer Key
5. Answer Booklets and valuation process.
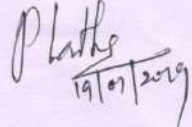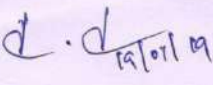6. Mark entry process.

Based on the scrutiny of the above records followed by an exit meeting with Director, Principal, Dean and COE, the committee furnishes its audit report. Also the committee visited the departments for academic auditing and samples of the following documents were checked.

➢ Course Files.
➢ Internal Examination File
➢ BOS Meeting File

Report of External Exam cell Audit – 2017 – 2018:

1. The committee appreciates the formation, function and process of COE office.
2. Academic calender and time table have been prepared in advance and followed meticulously.
3. Continuous assessment and award of internal marks are done effectively.
4. The committee is fully satisfied with the smooth and orderly functioning of the Office of the Controller of Examinations in the conduct of End Semester Examinations.
5. The standards of question paper and valuation process are appreciable.
6. Random scrutiny of the all records revealed that the entries are proper.
7. The Valuation and Revaluation process were done meticulously and in an unbiased manner.
8. The committee is of the opinion that P.S.R Engineering College, COE Office is exercising the responsibilities of the Autonomous status in a right way.

Name of the Members	Signature
Dr.S.Iniyan Professor / Mechanical Anna University, Chennai - 600025	
Dr.K.Ramanathan Professor / Mechanical Alagappa Chettiar college of Engineering and Technology, Karaikudi – 630 003.	

External Academic Audit

Dept.	Mech	Programme	B.E
Sem.		Experts Name & Address	Dr. S. Iniyan
Sub. Code & Title	Sample Subjects		

1. Coverage of Question paper with the syllabus and format.

   well covered.

2. Standard of question paper.

   good.

3. Typographical errors if any.

   Nil

4. Adequacy of key and distribution of marks.

   Fair

5. Standard of valuation of answer scripts.

   good.

6. Remarks.

   The syllabus is covered well in the question paper. The correction and distribution of marks are good. The standard of question paper is also good.

   Iniyan
   12/6/18.

   Signature of the Expert Member

P.S.R. Engineering College, Sivakasi - 626140

(An Autonomous Institution - Affiliated to Anna University)

OFFICE OF THE CONTROLLER OF EXAMINATIONS

Phone No: 04562-239097   Website:www.psr.edu.in   Email id:coe@psr.edu.in

Date: 12.06.18

External Academic Audit

Dept.	Mech	Programme	B.E
Sem.		Experts Name & Address	Dr. K. Ramanathan Prof /mech Alagappa Chettiar College of Engg & Technology Karaikudi - 630003
Sub. Code & Title			

1. Coverage of Question paper with the syllabus and format.

   Well Covered

2. Standard of question paper.

   V- good

3. Typographical errors if any.

   NIL

4. Adequacy of key and distribution of marks.

   Good

5. Standard of valuation of answer scripts.

   Good

6. Remarks.

   The valuation is good.
   The standard of question paper is very good.

Signature of the Expert Member

P.S.R Engineering College, Sivakasi – 626140
(An Autonomous Institution, Affiliated to Anna University, Chennai)
Minutes of the External Academic Audit Report

The academic audit was conducted at P.S.R.Engineering College on 25.03.2017 for the academic year 2016 – 17. The following expert members were presented.

SL NO	Name of the Members
1	Dr. Selvin Rajadurai Associate Professor/Mechanical Government College of Engineering, Tirunelveli-627007
2	Dr. K. Karthikeyan Associate Professor/CSE Anna University Regional Campus, Madurai - 625019
3	Prof. R.Ramesh Pandian Assistant Professor/Civil University College of Engineering, Dindigul - 624622

The committee was provided with the copies of regulation 2012 & 2016, Curriculum Syllabi of all the autonomous programmes and external audit report of the academic year 2016-2017 for favor of perusal.

After a brief appraisal of the regulations, the team visited the exam cell and office of the Controller of Examinations. The following documents were carefully scrutinized.

1. End Semester Examination process.

2. Regulations 2012 & 2016

3. Syllabus

4. End Semester Questions and Answer Key

5. Answer Booklets and valuation process.

6. Mark entry process.

Based on the scrutiny of the above records followed by an exit meeting with Director, Principal, Dean and COE, the committee furnishes its audit report.

Report of External Exam cell Audit – 2016 – 2017:

1. The committee appreciates the formation, function and process of COE office.
2. The committee is fully satisfied with the smooth and orderly functioning of the Office of the Controller of Examinations in the conduct of End Semester Examinations.
3. The standards of question paper and valuation process appreciable.
4. Random scrutiny of the all records revealed that the entries are proper.
5. The Valuation and Revaluation process were done meticulously and in an unbiased manner.
6. The committee is of the opinion that P.S.R Engineering College, COE Office is exercising the responsibilities of the Autonomous status in a right way.

Name of the Members	Signature
Dr. Selvin Rajadurai Associate Professor/Mechanical Government College of Engineering, Tirunelveli-627007	
Dr. K. Karthikeyan Associate Professor/CSE Anna University Reginal Campus, Madurai - 625019	
Prof. R.Ramesh Pandian Assistant Professor/Civil University College of Engineering, Dindigul - 624622	

External Academic Audit

Dept.	Mech. Es.	Programme	B.E / M.E
Sem	As applicable	Experts Name & Address	J. SELWIN RAJADURAI APME, GCE, Tirunelveli-7
Sub. Code & Title	Sample Subjects Allotted.		

1. Coverage of Question paper with the syllabus and format.

    Well within the Syllabus

2. Standard of question paper.

    Good

3. Typographical errors if any.

    Nil

4. Adequacy of key and distribution of marks.

    Adequate

5. Standard of valuation of answer scripts.

    Up to the mark.

6. Remarks.

    Good.

J. ~~~~~~~ 25/3/17

Signature of the Expert Member

P.S.R. ENGINEERING COLLEGE, SIVAKASI – 626 140

(An Autonomous Institution, Affiliated to Anna University, Chennai)

OFFICE OF THE CONTROLLER OF EXAMINATIONS

Phone No: 04562-239097   Website: www.psr.edu.in   E-mail id: coe@psr.edu.in

DNV·GL

Date: 25.03.17

External Academic Audit

Dept.	Civil	Programme	B.E /ME
Sem	As Applicable	Experts Name & Address	R. Ramesh Pandian · AP/civil University College of Engg Dindigul – 624622
Sub. Code & Title	Sample subject Allotted		

1. Coverage of Question paper with the syllabus and format.

   The Question Paper within the Syllabus.

2. Standard of question paper.

   V. good

3. Typographical errors if any.

   Nil

4. Adequacy of key and distribution of marks.

   Yes, Adequate

5. Standard of valuation of answer scripts.

   good.

6. Remarks.   Nil

(R. Ramesh Pandian)
Signature of the Expert Member

External Academic Audit

Dept.	CSE	Programme	B.E /M.E
Sem	AS Applicable	Experts Name & Address	Dr. K. Karthikeyan AP/CSE/mca Anna University, Regional Campus, Madurai – 625 019.
Sub. Code & Title	Sample Subject Alloted.		

1. Coverage of Question paper with the syllabus and format.

   Within the syllabus and format.

2. Standard of question paper.

   Good.

3. Typographical errors if any.

   —Nil—

4. Adequacy of key and distribution of marks.

   Yes, Adequate

5. Standard of valuation of answer scripts.

   Good.

6. Remarks. NIL

Signature of the Expert Member

P.S.R Engineering College, Sivakasi – 626140
(An Autonomous Institution, Affiliated to Anna University, Chennai)
Minutes of the External Academic Audit Report

The academic audit was conducted at P.S.R.Engineering College on 19.08.2016 for the academic year 2015 – 16, by the following external expert members.

SL NO	Name of the Members
1	Dr. Selvin Rajadurai Associate Professor/Mechanical Government College of Engineering, Tirunelveli-627007.
2	Dr.S.Baulkani, Assoc. Prof, Dept of ECE, Govt College of Engg, Tirunelveli.

The committee was provided with the copies of regulation 2012 & 2016, Curriculum Syllabi of all the autonomous programmes and external audit report of the academic year 2014-2015 for favor of perusal.

After a brief appraisal of the regulations, the team visited the exam cell and office of the Controller of Examinations. The following documents were carefully scrutinized.

1. End Semester Examination process.
2. Regulations 2012 & 2016
3. Syllabus
4. End Semester Questions and Answer Key
5. Answer Booklets and valuation process.
6. Mark entry process.

Based on the scrutiny of the above records followed by an exit meeting with Director, Principal, Dean and COE, the committee furnishes its audit report. Also the committee visited the departments for academic auditing and samples of the following documents were checked.

➤ Course Files.
➤ Internal Examination File
➤ BOS Meeting File

Report of External Academic Audit – 2015 – 2016:

1. The committee appreciates the formation, function and process of COE office.
2. Academic calender and time table have been prepared in advance and followed meticulously.
3. Continuous assessment and award of internal marks are done effectively.
4. The committee is fully satisfied with the smooth and orderly functioning of the Office of the Controller of Examinations in the conduct of End Semester Examinations.
5. Random scrutiny of the all records revealed that the entries are proper.
6. Course plan, coures delivery, record of class work, attendance and all other records are well maintained.
7. The committee is of the opinion that P.S.R Engineering College, COE Office is exercising the responsibilities of the Autonomous status in a right way.

Name of the Members	Signature
Dr. Selvin Rajadurai Associate Professor/Mechanical Government College of Engineering, Tirunelveli-627007.	J. l 19/8/16
Dr.S.Baulkani, Assoc. Prof, Dept of ECE, Govt College of Engg, Tirunelveli.	S. Brudha 19.01.16

P.S.R. Engineering College, Sivakasi - 626140

(An Autonomous Institution - Affiliated to Anna University)

OFFICE OF THE CONTROLLER OF EXAMINATIONS

Phone No: 04562-239097   Website:www.psr.edu.in   Email id:coe@psr.edu.in

Date: 19.08.16

External Academic Audit

Dept.	Mech-Engg	Programme	B·E/M·E
Sem.	As applicable	Experts Name & Address	J. SELWIN RAJADURAI APME GCE Tirunelvel-7
Sub. Code & Title	Sample subjects		

1. Coverage of Question paper with the syllabus and format.

Well within the Syllabus

2. Standard of question paper.

Good

3. Typographical errors if any.

Nil

4. Adequacy of key and distribution of marks.

Adequate

5. Standard of valuation of answer scripts.

Upto the mark.

6. Remarks.

Good

J. l
19/8/16
Signature of the Expert Member

External Academic Audit

Dept.		Programme	
Sem.		Experts Name & Address	Dr. S. Boulkani
Sub. Code & Title			

1. Coverage of Question paper with the syllabus and format.

   With in the Syllabus.

2. Standard of question paper.

   Good.

3. Typographical errors if any.

   - Nil.

4. Adequacy of key and distribution of marks.

   Yes, Adequd.

5. Standard of valuation of answer scripts.

   Good.

6. Remarks.

   NIL.

Signature of the Expert Member

P.S.R. ENGINEERING COLLEGE
SIVAKASI – 626140

Action Taken Report on External Academic Audit -2014-15

9.6.2016

Sl No	Suggestions / Recommendations	Action Taken
1	New regulation based on Choice Based Credit System (CBCS) may be introduced	CBCS is implemented under Regulation 2016
2	Rules and regulation for conducting Supplementary Examination may be prepared and followed with the approval of academic statutory bodies of the college	Implemented
3	Students may be encouraged to take up self-learning through online open courses	Implemented. Students are encourage to register NPTEL courses

Principal 9/06/2016

PRINCIPAL
P.S.R. ENGINEERING COLLEGE
SIVAKASI

ACADEMIC AUDIT REPORT FOR THE YEAR 2014 -15
OF P.S.R. ENGINEERING COLLEGE, SIVAKASI - 626140

All UG programmes and PG programmes offered by P.S.R.Engineering College under Autonomus scheme have been audited based on the invitation of the Principal for the academic year 2014-15 on 17th October 2015. The committee was provided with the academic calendar, regulation 2012 copy, curriculum, syllabi and time table of all the programmes and external audit report of the academic year - 2013 -14 for reference. The team visited all the departments and the Office of the Controller of Examinations and scrutinized the processes and documents.

The committee is pleased to furnish its report based on scrutiny of the records and documents of the departments and COE office as below:
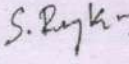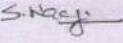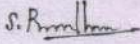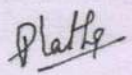
- Some samples of Course / Lesson plan, Course delivery, Record of class work, attendance have been verified and they found to be well prepared and maintained as per the requirements.
- In all the course plan and syllabus, mapping of Course Outcomes with Programme Outcomes table is included. This is appreciated as it is an important requirement in Outcome Based Education.
- All the academic activities were carried out as per the Academic Calendar.
- Bloom's Taxonomy is being followed in question paper setting.
- Tutorial Classes have been conducted as per the Time Table.
- Internal assessment test, model examinations are conducted and evaluated according to the plan.
- The standards of question paper and valuation process are appreciable.
- Supplementary Examination has been introduced as per the recommendation of the Academic Council of the College.

The committee suggests the following for further improvement:

- New regulation based on Choice Based Credit System (CBCS) may be introduced as per the guidelines of UGC

- Rules and regulation for conducting Supplementary Examination may be prepared and followed with the approval of academic statutory bodies of the college
- The students may be encouraged to take up self-learning through online open courses.
- Question banks may be prepared for the benefit of slow learners

The above are only suggestions and not deficiencies. Overall performance in the academic is highly commendable.

Sl No	Name of the Members	Signature
1	Dr.S.Rajakarunakaran, Professor & Head, Ramco Institute of Tech Rajapalayam.	
2	Dr.S.Nagan, Assoc. Prof Dept of Civil, Thiagarajar College of Engg. Madurai.	
3	Dr.S.Baulkani, Assoc. Prof Dept of ECE, Govt College of Engg, Tirunelveli.	
4	Dr.P.Latha, Assoc. Prof Dept of CSE, Govt College of Engg, Tirunelveli.	

P.S.R ENGINEERING COLLEGE
(An Autonomous Institution & Affiliated to Anna University, Chennai)

DEPARTMENT OF ECE

CIRCULAR   03.07.2018

CLASS COMMITTEE MEETING

First meeting of class committee for Second year (B.E ECE) students are arranged on 09.07.2018 (Monday) at 12.30 p.m in **VLSI lab.** The students and faculties are requested to attend the meeting without fail.

Agenda of meeting:

1. Syllabus coverage

2. Discipline

3. General Queries

4. Preparation for Internal Assessment test I

Course code	Course title	Faculty In-Charges	
		Section I	Section II
161MA31	Transforms and Partial Differential Equations	Ms.B.Suganya	Dr.V.Ramamoorthy
161EC31	Analog Electronic Circuits	Dr.P.Marichamy/ Ms.T.Vaishubiah	Ms.M.Vimala
161EC32	Digital Electronics	Mr.G.Lingasamy	Mr.S.Athimoolam
161EC33	Electromagnetic Fields	Dr.P.Ranjith Kumar	Ms.P.Krishnaleela
161EC34	Electronic Measurements and Instrumentation	Ms.V.Rohini	Mr.N.S.Yoga Ananth
161EC35	Data Structures and C++	Ms.K.R.Indira	Ms.K.R.Indira
161EC37	Analog Electronic Circuits Laboratory	Ms.P.A.Mathina Ms.M.Vimala	Ms.P.A.Mathina Ms.M.Vimala
161EC38	Data Structures and C++ Laboratory	Ms.K.R.Indira Ms.V.Rohini	Ms.K.R.Indira Ms.V.Rohini
161HS39	Functional English I	Mr.G.Ganesh Kumar	Ms.J.Blessing Kiruba

Student Members:

S.No	Section -I	Section -II
1.	Archana P	Sivaranjani G
2.	Chitra J	Saranya S
3.	Kanagalakshmi M	Suguna R
4.	Mari Shanker Raja A	Surya Prakash L S
5.	Marimuthu M	Vijay Prakash R
6.	Gnana Prakashraj A	Vignesh K

Chair Person   **HOD/ECE**   **PRINCIPAL**

P.S.R. ENGINEERING COLLEGE
SIVAKASI-626140

DEPARTMENT OF ELECTRONICS AND COMMUNICATION

EVALUATION OF STAFF BY STUDENTS

(ACADEMIC YEAR 2017-2018)EVEN SEM

YEAR/SEM: II/IV

SEC: I

S.No	Aspects	COURSE CODE					
		161MA41	161EC41	161EC42	161EC43	161EC44	161EC45
1.	Punctuality	4.70	4.50	4.87	4.73	4.48	4.7
2.	Regularity In Taking Classes	4.55	4.30	4.61	4.36	4.39	4.55
3.	Completes Syllabus Of The Course In Time	4.45	4.55	4.04	4.27	4.48	4.45
4.	Makes Alternate Arrangement Of Class In His/Her Absence	4.30	4.20	4.39	4.50	4.52	4.3
5.	Focus On Syllabi	4.40	4.40	4.35	4.23	4.35	4.4
6.	Self Confidence	4.25	4.10	4.57	4.27	4.22	4.2
7.	Communication Skills	4.25	4.15	4.52	4.23	4.43	4.1
8.	Teaching The Subject Matter	4.60	4.35	4.48	4.41	4.52	4.35
9.	Skill Of Linking Subject To Life Experience & Creating Interest In The Subject	4.25	3.85	4.26	4.27	4.30	4.2
10.	Refers To Latest Development In The Field	4.40	3.75	4.09	4.45	4.35	4.3
11.	Usage Of Teaching Aids(Ohp,Blackboard,Ppts)	4.45	4.10	4.30	4.50	4.43	4.45
12.	Clarify In Usage Of Blackboard / White Board	4.30	4.10	4.26	4.14	4.61	4.3
13.	Uses Of Innovative Teaching Methods	4.15	3.65	4.30	4.68	4.48	4.15
14.	Helping Approach Towards Varied Academic Interests Of Student	4.30	3.70	4.43	4.64	4.52	4.3
15.	Approach Towards Developing Professional Skills Among Students	4.50	3.80	4.65	4.59	4.52	4.5
16.	Helps Students In Realizing Career Goals	4.55	3.90	4.48	4.50	4.30	4.55
17.	Regular Checking Of Lab Log Books /Note Books	4.50	4.10	4.43	4.36	4.48	4.5
18.	Availability Of Teacher In The Lab or Whole Duration Of Lab Hours	4.20	4.20	4.36	5.77	4.48	4.2

No.	Criteria						
19.	Takes Interests In Conduct of lab/Seminars/GD/Develop Programme Coding/Circuit Design/Applying Lab Concept In Real Life Problems	4.10	4.30	4.39	4.27	4.39	4.1
20.	Motivation To Applying Patents/Proposals	4.05	4.30	4.43	4.41	4.39	4.05
21.	Control Mechanism In Effectively Conducting The Class	4.10	4.35	4.39	4.59	4.48	4.1
22.	Skills Of Addersing In Appropriate Behaviour Of Student	4.15	4.20	4.22	4.50	4.39	4.15
23.	Tendency Of Inviting Opinion & Question On Subject Matter From Student	3.90	4.15	4.52	4.64	4.39	3.9
24.	Inspires Students Of Ethical Conduct	4.00	4.20	4.43	4.64	4.17	4
25.	Act As A Role Model	4.35	4.50	4.35	4.27	4.17	4.3
	TOTAL AVERAGE	4.31	4.15	4.41	4.49	4.41	4.28
	PERCENTAGE(%)	86.2%	83%	88.2%	89.8%	88.2%	85.6%

161MA41	161EC41	161EC42	161EC43	161EC44	161EC45
Mr.R.Venkateshwara	Ms.K.Ramalakshmi	Mr.S.Balasubramanian	Dr.K.Valarmathi	Ms.P.Krishnaleela	Ms.B.Mangiyarkkarasi

PREPARED BY
Mrs.P.Krishnaleela,AP/ECE
Ms.M.Indhumathi,AP/ECE

HOD/ECE

PRINCIPAL

P.S.R ENGINEERING COLLEGE, SIVAKASI-626 140
DEPARTMENT OF ECE
FEEDBACK – ANALYSIS (EVEN SEM 2017-18)

FACULTYNAME: Mrs.P.KRISHNALEELA,AP/ECE   YEAR: II   SECTION: I   SEMESTER: IV

COURSE NAME: 161EC44/TRANSMISSION LINES AND WAVEGUIDES

AVG-4.41

Series1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	4.4	4.3	4.4	4.5	4.3	4.2	4.4	4.5	4.3	4.3	4.4	4.6	4.4	4.5	4.5	4.3	4.4	4.4	4.3	4.3	4.4	4.3	4.3	4.1	4.1

1 – Punctuality	2 -Regularity In Taking Classes	3- Completes Syllabus Of The Course In Time	4 -Makes Alternate Arrangement Of Class In His/her Absence	5 - Focus On Syllabi
6 - Self Confidence	7 - Communication Skills	8 - Teaching The Subject Matter	9 Skill Of Linking Subject To Life Experience & Creating Interest In The Subject	10-Refers To Latest Development In The Field
11-Usage Of Teaching Aids(OHP,Blackboard,PPTs)	12-Clarify In Usage Of Blackboard /White Board	13-Uses Of Innovative Teaching Methods	14-Helping Approach Towards Varied Academic Interests Of Student	15-Approach Towards Developing Professional Skills Among Students
16-Help students In Realizing Career Goals	17-Regular Checking Of Lab Log Books /Note Books	18-Availability Of Teacher In The Lab For Whole Duration Of Lab Hours	19-Takes Interests In Conduct of lab/Seminars/GD/Develop Programme Coding/Circuit Design /Applying Lab Concept In Real Life Problems	20-Motivation To Applying Patents/Proposals
21-Control Mechanism In Effectively Conducting The Class	22-Skills Of Addressing In Appropriate Behavior Of Student	23-Tendency Of Inviting Opinion & Question On Subject Matter From Student	24-Inspires Students Of Ethical Conduct	25-Act As A Role Model

PREPARED BY
MRS.P.KRISHNA LEELA,AP/ECE
MS.M.INDHUMATHI,AP/ECE

APPROVED BY
HOD/ECE

P.S.R ENGINEERING COLLEGE, SIVAKASI-626 140
DEPARTMENT OF ECE
FEEDBACK – ANALYSIS (EVEN SEM 2017-18)

FACULTY NAME: Dr.K.VALARMATHI,HOD/ECE   YEAR: II   SECTION: I   SEMESTER: IV

COURSE NAME: 161EC43/SIGNALS AND SYSTEMS

AVG- 4.49

Series1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	4.7	4.3	4.2	4.5	4.2	4.2	4.2	4.4	4.2	4.4	4.5	4.1	4.6	4.6	4.5	4.5	4.3	5.7	4.2	4.4	4.5	4.5	4.6	4.6	4.2

1 – Punctuality	2 -Regularity In Taking Classes	3- Completes Syllabus Of The Course In Time	4 -Makes Alternate Arrangement Of Class In His/Her Absence	5 - Focus On Syllabi
6 - Self Confidence	7 - Communication Skills	8 - Teaching The Subject Matter	9 Skill Of Linking Subject To Life Experience & Creating Interest In The Subject	10-Refers To Latest Development In The Field
11-Usage Of Teaching Aids(OHP,Blackboard,PPTs)	12-Clarify In Usage Of Blackboard / White Board	13-Uses Of Innovative Teaching Methods	14-Helping Approach Towards Varied Academic Interests Of Student	15-Approach Towards Developing Professional Skills Among Students
16-Helps Students In Realizing Career Goals	17-Regular Checking Of Lab Log Books / Note Books	18-Availability Of Teacher In The Lab For Whole Duration Of Lab Hours	19-Takes Interests In Conductoflab/Seminars/Gd/Develop Programme Coding/Circuit Design /Applying LabConcept In Real Life Problems	20-Motivation To ApplyingPatents/Proposals
21-Control Mechanism In Effectively Conducting The Class	22-Skills Of Addersing In Appropriate Behaviour Of Student	23-Tendency Of Inviting Opinion & Question On Subject Matter From Student	24-Inspires Students Of Ethical Conduct	25-Act As A Role Model

PREPARED BY
MRS.P.KRISHNA LEELA,AP/ECE
MS.M.INDHUMATHI,AP/ECE
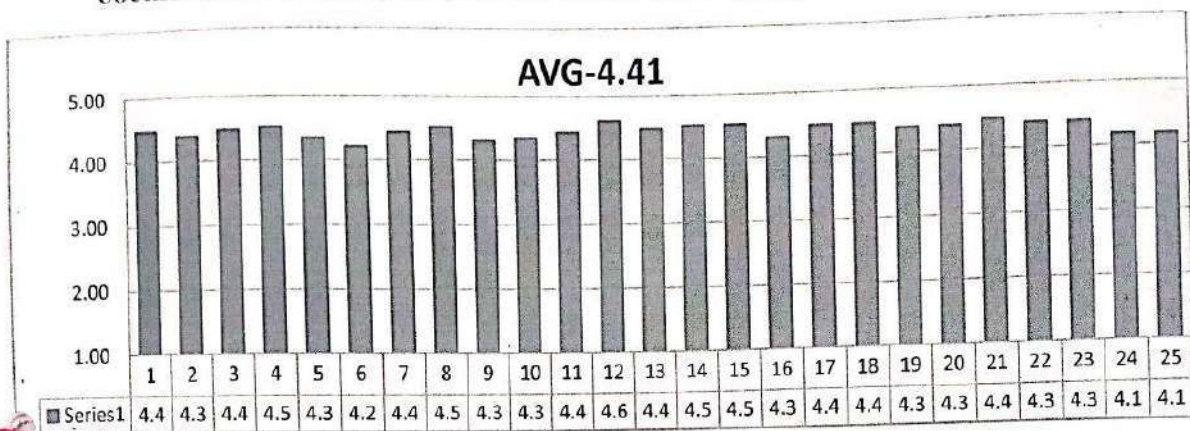
APPROVED BY
HOD/ECE

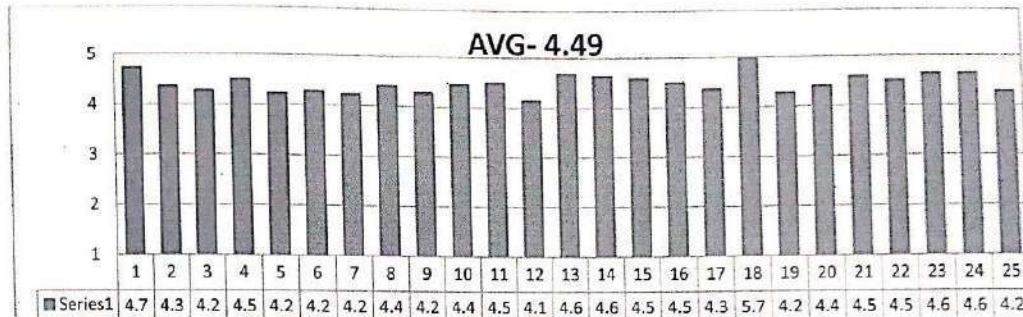# P.S.R ENGINEERING COLLEGE, SIVAKASI-626 140
DEPARTMENT OF ECE
FEEDBACK – ANALYSIS (EVEN SEM 2017-18)

FACULTY NAME: MR.S.BALASUBRAMANIAN,AP/ECE   YEAR: II SECTION: I SEMESTER: IV

COURSE NAME: 161EC42/LINEAR INTEGRATED CIRCUITS

AVG-4.41

Series1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	4.8	4.6	4.0	4.3	4.3	4.5	4.5	4.4	4.2	4.0	4.3	4.2	4.3	4.4	4.6	4.4	4.4	4.3	4.3	4.4	4.3	4.2	4.5	4.4	4.3

1 – Punctuality	2 -Regularity In Taking Classes	3- Completes Syllabus Of The Course In Time	4 -Makes Alternate Arrangement Of Class In His/her Absence	5 - Focus On Syllabi
6 - Self Confidence	7 - Communication Skills	8 - Teaching The Subject Matter	9 Skill Of Linking Subject To Life Experience & Creating Interest In The Subject	10-Refers To Latest Development In The Field
11-Usage Of Teaching Aids(OHP,Blackboard,PPTs)	12-Clarify In Usage Of Blackboard /White Board	13-Uses Of Innovative Teaching Methods	14-Helping Approach Towards Varied Academic Interests Of Student	15-Approach Towards Developing Professional Skills Among Students
16-Help students In Realizing Career Goals	17-Regular Checking Of Lab Log Books /Note Books	18-Availability Of Teacher In The Lab For Whole Duration Of Lab Hours	19-Takes Interests In Conduct of lab/Seminars/GD/Develop Programme Coding/Circuit Design /Applying Lab Concept In Real Life Problems	20-Motivation To Applying Patents/Proposals
21-Control Mechanism In Effectively Conducting The Class	22-Skills Of Addressing In Appropriate Behavior Of Student	23-Tendency Of Inviting Opinion & Question On Subject Matter From Student	24-Inspires Students Of Ethical Conduct	25-Act As A Role Model

PREPARED BY
MRS.P.KRISHNA LEELA,AP/ECE
MS.M.INDHUMATHI,AP/ECE

APPROVED BY
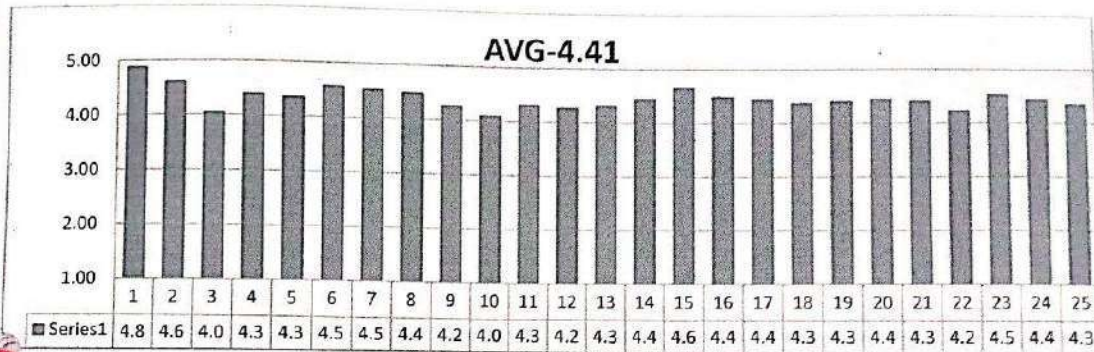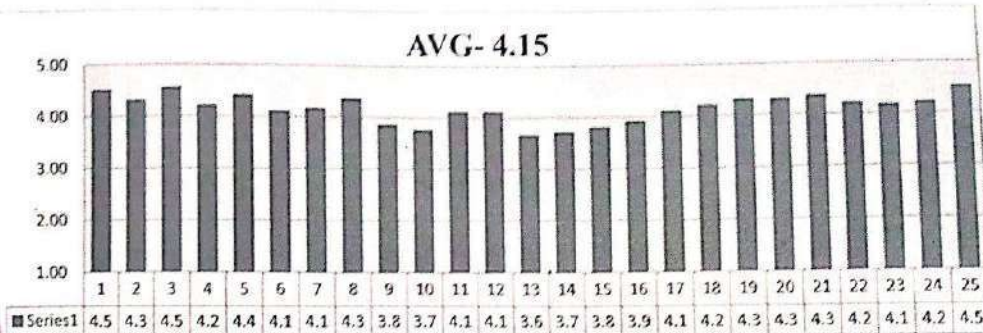**HOD/ECE**

P.S.R ENGINEERING COLLEGE, SIVAKASI-626 140
DEPARTMENT OF ECE
FEEDBACK – ANALYSIS (EVEN SEM 2017-18)

FACULTYNAME: Mrs.M.RAMALAKSHMI,AP/ECE   YEAR: II   SECTION: I   SEMESTER: IV

COURSE NAME: 161EC41/ANALOG COMMUNICATION

AVG- 4.15

Series1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	4.5	4.3	4.5	4.2	4.4	4.1	4.1	4.3	3.8	3.7	4.1	4.1	3.6	3.7	3.8	3.9	4.1	4.2	4.3	4.3	4.3	4.2	4.1	4.2	4.5

1 – Punctuality	2 -Regularity In Taking Classes	3- Completes Syllabus Of The Course In Time	4 -Makes Alternate Arrangement Of Class In His/her Absence	5 - Focus On Syllabi
6 - Self Confidence	7 - Communication Skills	8 - Teaching The Subject Matter	9 Skill Of Linking Subject To Life Experience & Creating Interest In The Subject	10-Refers To Latest Development In The Field
11-Usage Of Teaching Aids/(OHP,Blackboard,PPTs)	12-Clarify In Usage Of Blackboard /White Board	13-Uses Of Innovative Teaching Methods	14-Helping Approach Towards Varied Academic Interests Of Student	15-Approach Towards Developing Professional Skills Among Students
16-Help students In Realizing Career Goals	17-Regular Checking Of Lab Log Books /Note Books	18-Availability Of Teacher In The Lab For Whole Duration Of Lab Hours	19-Takes Interests In Conduct of lab/Seminars/GD/Develop Programme Coding/Circuit Design /Applying Lab Concept In Real Life Problems	20-Motivation To Applying Patents/Proposals
21-Control Mechanism In Effectively Conducting The Class	22-Skills Of Addressing In Appropriate Behavior Of Student	23-Tendency Of Inviting Opinion & Question On Subject Matter From Student	24-Inspires Students Of Ethical Conduct	25-Act As A Role Model

PREPARED BY
MRS.P.KRISHNA LEELA,AP/ECE
MS.M.INDHUMATHI,AP/ECE

APPROVED BY
HOD/ECE

DNV-GL

FACULTY NAME: Mr.VENKATESWARA,AP/MATHS   YEAR: II   SECTION: I   SEMESTER: IV

COURSE NAME: 161MA41/TRANSFORMS AND PARTIAL DIFFERENTIAL EQUATION

AVG- 4.42

Series1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	4.7	4.5	4.5	4.4	4.4	4.2	4.2	4.6	4.4	4.2	4.3	4.1	3.9	4.1	4.5	4.6	4.3	4.5	4.2	4.3	4.7	4.6	4.6	4.5	4.6

1 – Punctuality	2 -Regularity In Taking Classes	3- Completes Syllabus Of The Course In Time	4 -Makes Alternate Arrangement Of Class In His/Her Absence	5 - Focus On Syllabi
6 - Self Confidence	7 - Communication Skills	8 - Teaching The Subject Matter	9 Skill Of Linking Subject To Life Experience & Creating Interest In The Subject	10-Refers To Latest Development In The Field
11-Usage Of Teaching Aids(OHP,Blackboard,PPTs)	12-Clarify In Usage Of Blackboard / White Board	13-Uses Of Innovative Teaching Methods	14-Helping Approach TowardsVaried Academic Interests Of Student	15-Approach Towards Developing Professional Skills Among Students
16-Helps Students In Realizing Career Goals	17-Regular Checking Of Lab Log Books / Note Books	18-Availability Of Teacher In The Lab For Whole Duration Of Lab Hours	19-Takes Interests In Conductoflab/Seminars/Gd/Develop Programme Coding/Circuit Design /Applying LabConcept In Real Life Problems	20-Motivation To ApplyingPatents/Proposals
21-Control Mechanism In Effectively Conducting The Class	22-Skills Of Addersing In Appropriate Behaviour Of Student	23-Tendency Of Inviting Opinion & Question On Subject Matter From Student	24-Inspires Students Of Ethical Conduct	25-Act As A Role Model

PREPARED BY
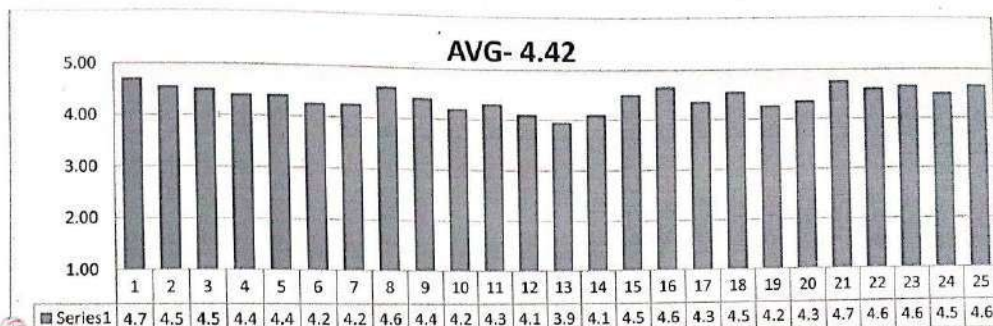MRS.P.KRISHNA LEELA,AP/ECE
MS.M.INDHUMATHI,AP/ECE

APPROVED BY
HOD/ECE

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

STAFF MEET-01

STAFF ATTENDED: **DATE: 22.08.14**

Mr.C.K.Ramar   Mrs.D.Venkateshwari
Dr.K.Valarmathi   Ms.M.Vijaya Gandhi
Mrs.R.Meenaprakash   Ms.N.Krishna Praba
Mr.C.Shanmugaraja   Mr.P.Ranjith Kumar
Mrs.J.Meena   Ms.R.Sudha
Mrs.K.Rama lakshmi   Ms.R.Niveda
Mr.S.Balasubramanian   Mr.K.Raja
Mr.S.Athimoolam   Ms.S.Abinaya
Mr.N.S.Yogaananth   Ms.D.Vijayarohini
Mr.G.Lingasamy   Mr.R .Balakumar
Mrs.P.A.Mathina   Mr.H.Vignesh
Mrs.P.Lingeswari   Mr.S.Karthick

STAFF ABSENT: Mr. R. Arunkumar

DISCUSSION DETAILS:

1. Discussions regarding syllabus coverage of all subjects and its effectiveness.

2. Had a review about the results of internal assessment test- 1.

3. Got feedback from final year students as, more soft skill trainings are needed rather than aptitude training.

4. ISO Surveillance auditing will be scheduled on August 26 & 27, 2014.

5. Students are instructed to wear proper dress code (i.e. Shirt inserted with pant, black shoes and belt). Girls should not wear leggings.

6. Students were suggested to increase more no of department association activities.

7. Motivation must be given to the students of III year for attending internship programs.

8. Department profile for placements must be prepared by Mrs.D.Venkateshwari.

9. Had an enquiry explanation from staff regarding results of internal assessment test, who scored less than 50%

10. Advised to improve the minimum results of internal assessment test II to be atleast 75%.

11. Overall pass percentage of the department for internal assessment test-II should be atleast 50% to 55%

12. Student database for placement like pass percentage, history of arrears must be upgraded by class advisor and placement coordinator.

13. Tech Mahendra placement will be scheduled in the month of October 2014

14. Planned to issue provisional certificate for ME students on 25th Aug, 2014.

15. Internal Assessment test –II will starts from 27th Aug, 2014.

16. One week placement training for III year students will be scheduled from 8th September, 2014.

17. Third year students is planned to undergo an industrial visit to Vickram Sarabhai space centre, Trivandrum on 23rd Aug, 2014.

HOD/ECE   Principal 25/08/2014

Prepared by,

S. Abinaya

(S.ABINAYA, AP/ECE)

P.S.R ENGINEERING COLLEGE

(An Autonomous Institution & Affiliated to Anna University, Chennai)

DEPARTMENT OF ECE

Minutes of staff meeting held on 25.11.15 at 12:40pm in VLSI Laboratory

POINTS DISCUSSED:

1. Model question paper for each subject has to be submitted on or before 4th December, 2015.
2. Unit wise Question bank has to be submitted on or before 4th December, 2015.
3. All faculties are requested to speed up their syllabus.
4. Every faculty is requested to send their course plan to our Department Assistant (DA) through mail.
5. Prepare course file and tutorial sheet in each subject for current semester.
6. Project supervisors are asked to follow their batch students and ask them to submit their project work for every week.
7. Faculties must get signature on log book from HOD for every week.
8. Academic audit is going to be held on 30.11.15, so all staff members are asked to be ready with their course file and log book for previous semester.
9. Class advisors are requested to collect the student participation (workshop, seminar, association etc...) certificates and submit to Mr.R.Balakumar AP/ECE
10. Faculties are asked to give their participation (workshop, seminar, FDP etc..) certificates to Mr.R.Balakumar AP/ECE
11. Class advisors are requested to submit student absentee's statement for every month, if the student was in a long leave, must inform their parents through letter.
12. Concerned NBA incharges are requested to be updated on their criteria's.

Prepared by,

25/11/15

(A.Krishnaveni AP/ECE)

HOD/ECE

P.S.R ENGINEERING COLLEGE

(An Autonomous Institution & Affiliated to Anna University, Chennai)

DEPARTMENT OF ECE

Minutes of Department staff meeting held on 07.09.2016 at 12:40pm in VLSI Laboratory

DISCUSSION:

1. The faculties are asked to prepare Unit wise Question bank and it has to be submitted on or before 15th Sep 2016.
2. Commencement of Internal Assessment-II will be held from 26th Sep 2016.
3. Second Class Committee Meeting was instructed to conduct next week. The Students are motivated to get great score in next IAT.
4. Placement classes are conduct based on GD, stage presence, and verbal.
5. The faculty advisors are asked to collect the softcopy and hardcopy of the student's passport size photo, signature, resume and all other needed information.
6. It was announced to the faculty members, for Staff Performance Appraisal. The faculties are motivated to attend FDP/STTP/QIP in various NITs and IITs.It was motivated to submit/publish paper in conference per reviewed journals.
7. It was instructed to the faculty advisors, the industrial visit is restricted for one day only.
8. Mrs.K.Ramalakshmi had allot for academic council of 2016 to 2017(both UG & PG) as a new member.

Prepared by,

[R.N.NIVETHITHA,M.E.,Asst.Prof/ECE]

HOD/ECE

P.S.R.ENGINEERING COLLEGE
(An Autonomous Institution & ISO 9001:2008 certified Institution)
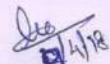Sivakasi-626 140, Virudhunagar Dt., Tamil Nadu
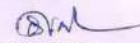
DNV·GL

DEPARTMENT OF ECE

Minutes of placement meeting held on 11.04.2018 at 12.30 pm in VLSI Laboratory.

POINTS DISCUSSED:

1. Staffs were instructed to prepare their respective course material and submit it to the HOD on or before 25.05.2018.

2. Staff members must motivate their students to attend inplant training and internship programs during semester holidays.

3. Students are asked to register the NPTEL courses for forthcoming semester.

4. Various placement incharges are allotted to II,III and IV year students.

5. Placement classes to be conducted in different sessions like GD,mock interview,online test and technical languages.

6. Faculties are instructed to conduct GATE clases for final year students.

7. Faculties are instructed to prepare the students in programming languages like C,C++ and JAVA.

Prepared by

(Mrs.S.MAHALAKSHMI,AP/ECE)

HOD/ECE

P.S.R.ENGINEERING COLLEGE

(An Autonomous Institution & ISO 9001:2008 certified Institution)

Sivakasi-626 140, Virudhunagar Dt., Tamil Nadu

DEPARTMENT OF ECE

MINUTES OF MEETING

DATE: 01.03.2019   **TIME: 12.30 PM**   **VENUE: VLSI LAB**

POINTS DISCUSSED:

1. Faculty members are instructed to prepare the Progress Report for Model Exams.
2. All the staff members are asked to update their Log book, Course File, Course Material.
3. The Lab Incharges are asked to prepare their Lab Reqirements.
4. College day will be deliberated on Last Week of March.
5. Class Advisors should prepare academic prize winners list for their Classes.
6. HoD instructed the Faculty members to identify the Slow learners in their Subjects and advised to take a special care on them.
7. Staff members are asked to fill the count of printout sheets in that concerned note book.
8. The faculties are asked to prepare Question Bank and it has to be submitted on or before 01.04.2019.

Prepared by

(Ms.M.Indhu Mathi,AP/ECE)

HOD/ECE

P.S.R ENGINEERING COLLEGE

(An Autonomous Institution & Affiliated to Anna University, Chennai)

DEPARTMENT OF ECE

Minutes of placement meeting held on 06.12.2017 at 12:40pm in VLSI Laboratory

POINTS DISCUSSED:

1. Staffs were instructed to prepare their respective course material and submit it to the head of the department on or before 12,Dec 2017.

2. Course files must be updated frequently to make it effective.

3. BOS meeting, syllabus and curriculum revision for UG and PG program must be revised. Revision should include innovation in lab exercise, new open source hardware and software and downsize the syllabus to our environment by comparing with Anna university syllabus and other premier/autonomous institution.

4. Suggest the prescribed textbooks to students and recommend new textbooks to both central and department library.

5. Students are asked to get signature in their observation and record notebooks periodically.

Prepared by

HOD/ECE

[R.N.NIVETHITHA,M.E.,Asst.Prof/ECE]

P.S.R. ENGINEERING COLLEGE SIVAKASI-626 140

(An Autonomous Institution, Affiliated to Anna University, Chennai)

DEPARTMENT OF ECE

PREFACE

COURSE NAME : SIGNALS AND SYSTEMS

COURSE CODE : 161EC43

YEAR/SEMESTER/SECTION : II/IV/II

PROGRAMME : B.E.,ECE

NAME OF THE FACULTY : Mrs.P.LINGESWARI, AP/ECE

ACADEMIC YEAR : 2017-2018

DURATION : NOV'17 – APRIL'18

REGULATION : 2016

PREPARED BY

Mrs. P.LINGESWARI, AP/ECE

APPROVED BY

HOD/ECE

161EC43	SIGNALS AND SYSTEMS		L-T-P	C
			3-2-0	4
Programme:	B.E. – Electronics and Communication Engineering	Sem: IV	Category:	PC
AIM:	To study and analyze the characteristics of continuous, discrete signals and systems.			

Course Outcomes:

The Students will be able to

CO1: Analyze the properties of signals and systems.
CO2: Determine the appropriate signals for basic signal processing applications.
CO3: Signify CT systems in the Frequency domain using Fourier Analysis
CO4: Apply Fourier transform and Laplace transform to Continuous Time systems.
CO5: Apply Z transform to Characterize Discrete time systems.
CO6: Design the block diagrams for complex systems.

CLASSIFICATION OF SIGNALS AND SYSTEMS   12

Basic signals, Classification of signals - Continuous and Discrete signals, Periodic and Aperiodic signals, Deterministic and Random signals, Energy and Power signals - Classification of systems – Continuous and Discrete systems, Static and Dynamic, Linear and Nonlinear, Time-variant and Time-invariant, Causal and Non causal, Stable and Unstable.

ANALYSIS OF CONTINUOUS TIME SIGNALS   12

Fourier series analysis-spectrum of Continuous Time signals- Fourier and Laplace Transforms in Continuous Time Signal Analysis – Properties of Fourier and Laplace Transforms.

LINEAR TIME INVARIANT- CONTINUOUS TIME SYSTEMS   12

Differential Equation-Block diagram representation-impulse response, convolution integrals- Fourier and Laplace transforms in Analysis of CT systems.

ANALYSIS OF DISCRETE TIME SIGNALS   12

Baseband Sampling - Aliasing, Reconstruction of CT signal from DT signal- DTFT – Properties of DTFT - Z Transform – Properties of Z Transform.

LINEAR TIME INVARIANT-DISCRETE TIME SYSTEMS   12

Difference Equations-Block diagram representation-Impulse response - Convolution sum- Discrete Fourier and Z Transform Analysis of Recursive & Non-Recursive systems.

	TOTAL PERIODS	60

TEXT BOOKS

1. Simon Haykins and Barry Van Veen, "Signals and Systems", Second Edition, John Wiley and Sons, Reprint 2012.

REFERENCES

1. B. P. Lathi, "Principles of Linear Systems and Signals", Second Edition, Oxford, 2009.
2. R.E.Zeimer, W.H.Tranter and R.D.Fannin, "Signals & Systems - Continuous and Discrete", Pearson, 2007.
3. M.J.Roberts, "Signals & Systems Analysis using Transform Methods & MATLAB", Tata McGraw Hill, 2007.
4. Allan V.Oppenheim, S.Wilsky and S.H.Nawab, "Signals and Systems", Pearson, 2007.

Course Outcomes	Program Outcomes (POs)												Program Specific Outcomes (PSOs)			
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	PSO4
CO1	3	3											3	1	2	1
CO2	3	3	2	2		1	1	1				1	3		2	1
CO3	3	3	3	3									3		2	
CO4	3	3	3	3									3		2	1
CO5	3	3	3	3									3		2	1
CO6	3	3	3	2									2	1	2	1

Enter correlation levels 1, 2 or 3 as defined below: 1: Slight (Low) 2: Moderate (Medium) 3: Substantial (High)

P.S.R ENGINEERING COLLEGE
(An Autonomous Institution & Affiliated to Anna University, Chennai)
DEPARTMENT OF ECE
COURSE PLAN

COURSE CODE & NAME: 161EC43 & SIGNALS AND SYSTEMS   YEAR: II

SEMESTER: IV   SECTION: II   PROGRAMME: ECE

FACULTY NAME: Mrs.P.Lingeswari,AP/ECE

UNIT NO.	S.NO.	TOPICS	PERIODS	CUM. PERIODS	REF. BOOKS
		CLASSIFICATION OF SIGNALS AND SYSTEMS			
1	1	Basic signals, Classification of signals	1	1	T1 & R2
	2	Continuous and Discrete signals, Periodic and Aperiodic signals, Deterministic and Random signals	2	3	
	3	Energy and Power signals	2	5	
	4	Classification of systems – Continuous and Discrete systems, Static and Dynamic,	2	7	
	5	Linear and Nonlinear, Time-variant and Time-invariant, Causal and Non causal, Stable and Unstable	2	9	
	6	Tutorial	3	12	
		ANALYSIS OF CONTINUOUS TIME SIGNALS			
2	7	Fourier series analysis	2	14	T1 & R2
	8	Spectrum of Continuous Time signals	1	15	
	9	Fourier Transform in Continuous Time Signal Analysis	1	16	
	10	Properties of Fourier Transform	2	18	
	11	Laplace Transform in Continuous Time Signal Analysis	1	19	
	12	Properties of Laplace Transform	2	21	
	13	Tutorial	3	24	
		LINEAR TIME INVARIANT- CONTINUOUS TIME SYSTEMS			
3	14	Differential Equation	2	26	T1 & R2
	15	Block diagram representation-impulse response	2	28	
	16	convolution integrals	1	29	
	17	Fourier transform in analysis of CT systems	2	31	
	18	Laplace transform in analysis of CT systems	2	33	
	19	Tutorial	3	36	
		ANALYSIS OF DISCRETE TIME SIGNALS			
4	20	Baseband Sampling - Aliasing	1	37	T1 & R2
	21	Reconstruction of CT signal from DT signal	1	38	
	22	DTFT	1	39	
	23	Properties of DTFT	2	41	
	24	Z Transform	2	43	
	25	Properties of Z Transform	2	45	
	26	Tutorial	3	48	
		LINEAR TIME INVARIANT-DISCRETE TIME SYSTEMS			
5	27	Difference Equations	1	49	T1 & R2
	28	Block diagram representation-Impulse response	2	51	
	29	Convolution sum	2	53	
	30	Discrete Fourier Transform Analysis of Recursive & Non-Recursive systems	2	55	
	31	Discrete Fourier and Z Transform Analysis of Recursive & Non-Recursive systems.	2	57	
	32	Tutorial	3	60	

TEXT BOOKS:

1. Simon Haykins and Barry Van Veen, "Signals and Systems", Second Edition, John Wiley and Sons, Reprint 2012.

REFERENCES:

1. B. P. Lathi, "Principles of Linear Systems and Signals", Second Edition, Oxford, 2009.
2. R.E.Zeimer, W.H.Tranter and R.D.Fannin, "Signals & Systems - Continuous and Discrete", Pearson, 2007.
3. M.J.Roberts, "Signals & Systems Analysis using Transform Methods & MATLAB", Tata McGraw Hill, 2007.
4. Allan V.Oppenheim, S.Wilsky and S.H.Nawab, "Signals and Systems", Pearson, 2007.
5. P.Ramesh Babu and R.Anandanatarajan, "Signals and Systems", Scitech publication, Fourth edition, 2011.

PREPARED BY   APPROVED BY

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

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

## PART – B
3 x 16 Marks = 48 Marks

7.a) Distinguish between the following: 16
   (i) Continuous time signal and discrete time signal
   (ii) Unit step and unit ramp function
   (iii) Periodic and aperiodic signal
   (iv) Deterministic and random signal

or

b) i) Prove the signal $x(t) = e^{-3t}u(t)$ is an energy signal not the power signal.   4

ii) Solve the fundamental period of the signal $e^{j(\frac{2\pi}{3})n} + e^{j(\frac{3\pi}{4})n}$.   4

iii) Outline the signal $r(t) - u(2 - t)$.   4

iv) Find the even and odd components of the signal $x(t) = \cos t + \sin t + \cos t \sin t$.   4

8.a) Classify the following systems under their linearity, time invariance, casual, stability.   16
   (1) $y(n) = x(n)\cos \omega n$ (2) $y(n) = 0.25x(n-1)$

or

b) Elaborate the classification of system with examples.   16

9.a) Construct the Trigonometric Fourier series representation of the half wave rectifier output   16
   as shown in figure.
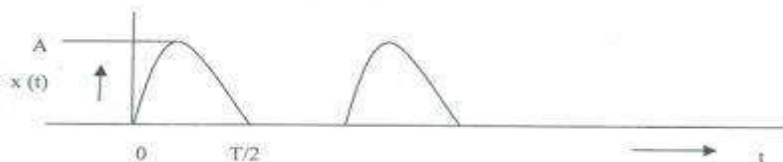
or

b) i) Determine the Fourier transform and sketch the magnitude and phase spectrum for the   8
   signal $x(t) = e^{-0.5t}u(t)$.

ii) Summarize the properties of Fourier transform.   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

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%)

Signature of the Course Tutor

Remarks

Programme Coordinator

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	9.b.ii				
1	16EC048	MANIMEGALAI	1	1	2	1		2	6									40	PASS
2	16EC049	MARIAMMAL	1	2	2			2	8			14	13	12				37	PASS
3	16EC050	MARIRAJ			1	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				11	6	5	10	5	5				30	PASS
11	16EC061	PANDEESWARAN	1	1	2			2				4	2	2				21	FAIL
12	16EC062	PARTHASARATHI	1	2	2		1	2		8	6	14		16				52	PASS
13	16EC063	PATHMA PRIYA	1	2	2		1		7				8	12				33	PASS
14	16EC064	PAVITHRA DARWIN	1	1	2	1		2	8	8	6	14	8	8				43	PASS
15	16EC065	PRABAKAR	1	1	2			1	8	8	5	12		7				37	PASS
16	16EC066	PREMAKARTHIKA	1	1	2			2	15			12		13				46	PASS
17	16EC067	PRIYADHARSHINI	2	1	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
Programme Outcome	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
			PO3	PO3	PO3			PO3				PO3	PO3
			PO4	PO4	PO4			PO4				PO4	PO4
			PO6					PO6					
			PO7					PO7					
			PO8					PO8					
			PO12					PO12					

Signature of the Course Tutor

Signature of the Course Co-ordinator/Moderator

Programme Co-ordinator

Head of the Department

| S.No	Reg No	Name	Total	Result
19	16EC070	SAKTHI PANDI	11	FAIL
20	16EC072	SANTHINE	40	PASS
21	16EC073	SANTHIYA	36	PASS
22	16EC074	SARAVANA KUMAR	19	FAIL
23	16EC075	SATHYA	43	PASS
24	16EC078	SELVA KUMAR	5	FAIL
25	16EC076	SELVA KUMAR	10	FAIL
26	16EC077	SELVA KUMAR	39	PASS
27	16EC080	SOUNDHARA KUMAR	22	FAIL
28	16EC081	SRIDHARAN	16	FAIL
29	16EC082	SUBITSHA	36	PASS
30	16EC083	SUNDARA LAKSHMI	53	PASS
31	16EC084	SURESH KANNAN	18	FAIL
32	16EC085	SURIYA PRIYA	37	PASS
33	16EC087	SURYA	45	PASS
34	16EC086	SURYA PRAKASH	2	FAIL
35	16EC088	SWETHA	35	PASS
36	16EC089	THIRUMALAIMURUGAN	31	PASS
37	16EC090	THIRUMALAIMURUGAN	21	FAIL
38	16EC091	UMAMAHESWARI	33	PASS
39	16EC092	VAIRALAKSHMI	32	PASS
40	16EC094	VIDHYA	32	PASS
41	16EC095	YATHEENDIRARAJAN	30	PASS
42	17LEC01	BHUVANESHWARI K	21	FAIL
43	17LEC03	ESAKKIAMMAL@RACHANADEVI R	21	FAIL
44	17LEC06	MUTHUKANI S	14	FAIL
45	17LEC07	MUTHUMANIPANDI M	14	FAIL
46	17LEC08	PADMA PRIYA B	31	PASS
47	17LEC11	PREETHI K	23	FAIL
48	17LEC13	RATHIKA R	16	FAIL
49	17LEC14	RUPADEVIP	16	FAIL
50	17TEC01	PUSHPAPRIYA N	46	PASS
51	17ECR01	MAITHIMITHRA	36	PASS

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

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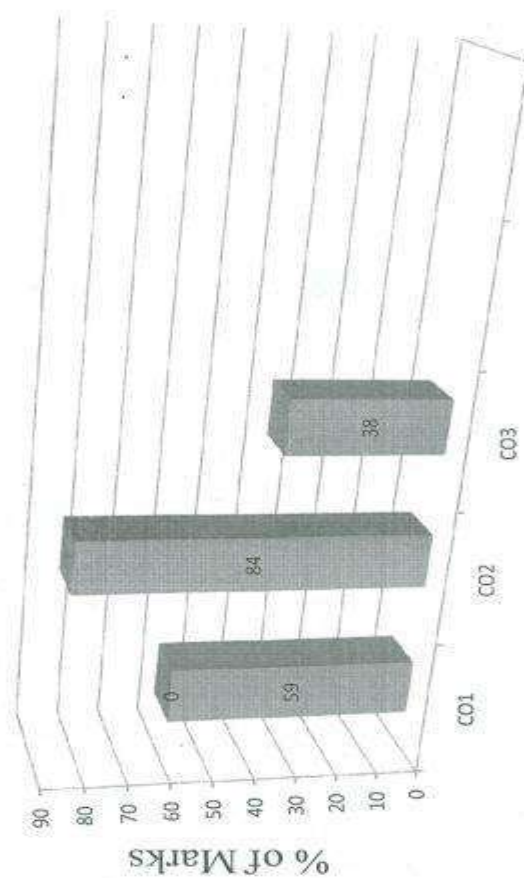
Competence Category	Max Marks	Average Marks Scored	% of Marks
Analysis(AY)	34	20.47	60
Remembering(RM)	8	5.99	75
Understanding(US)	34	14.91	44
Applying(AP)	8	6.53	82
Creating(CR)	16	8.05	50
Evaluating(EV)	8	3	38

% of Marks

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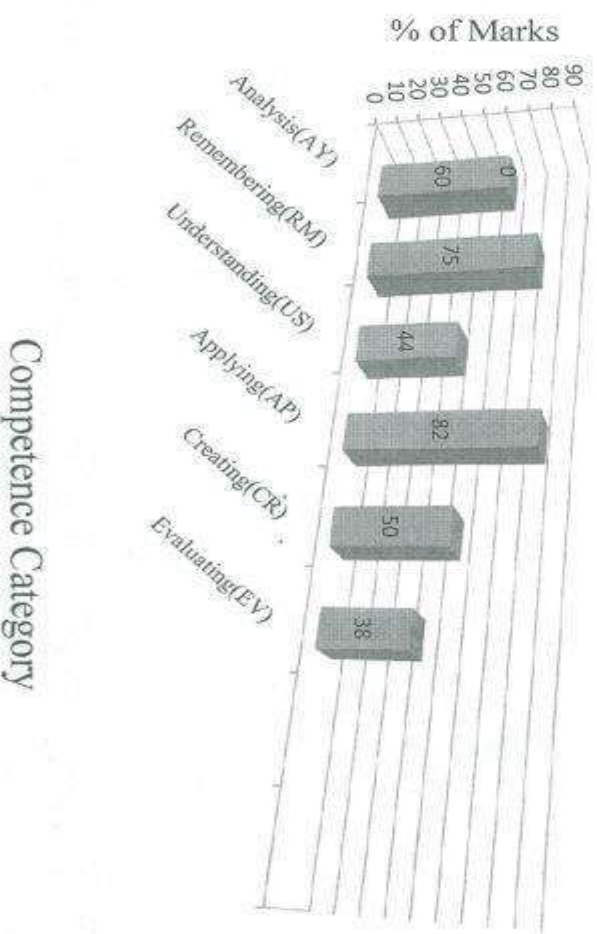
Programme Outcomes	Max Marks	Average Marks	% of Marks
PO1	108	58.95	55
PO2	108	58.95	55
PO3	46	22.24	48
PO4	46	22.24	48
PO6	10	8.42	84
PO7	10	8.42	84
PO8	10	8.42	84
PO12	10	8.42	84

Result Analysis - Programme Outcomes
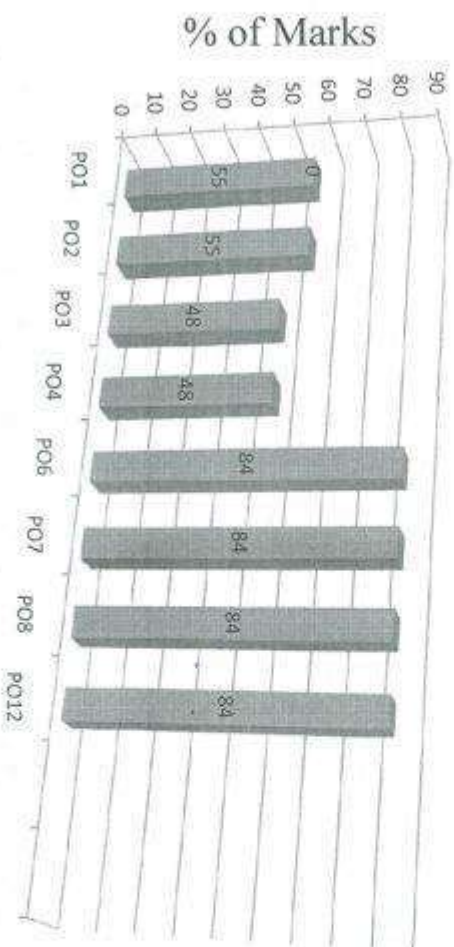
% of Marks

Programme Outcomes

Programme Outcomes

Signature of the Course Tutor

Signature of the Course Co-ordinator/Moderator

Programme Co-ordinator

Head of the Department

Assignment 1

1. The image captured by a cellphone is an example of a

- Discrete Time Signal
- 2D Signal
- Energy Signal
- All of the Above

2. Consider the Signal $\sin(4t)$. Which of the following is true

- The given Signal is aperiodic
- The given Signal is finite Energy Signal
- The given Signal is Even
- The given Signal is periodic

3. Consider the Signal $\sin(4\pi t)+\sin(6\pi t)$. The Signal is

- Aperiodic
- Periodic with period 2π
- Periodic with period 1
- Periodic with period 2

4. The Signal $\exp(-\frac{1}{2}|t|)$

- Power Signal with power=2
- Power Signal with power=1
- Energy Signal with power=2
- Energy Signal with power=1

5. The unit step signal is an

- Energy Signal
- Power Signal
- Neither Energy Nor Power
- Periodic Signal

6. Current $i(t) = e^{-\alpha t}u(t), \alpha > 0$ is given as input to capacitor with capacitance C. The resulting voltage across the capacitor is

- $\frac{1}{c\alpha}(1-e^{-\alpha t})u(t)$
- $\frac{1}{c}(\alpha e^{-\alpha t})u(t)$
- $-c(\alpha e^{-\alpha t})u(t)$
- $\frac{1}{c}(e^{-\alpha t})u(t)$

7. The Signal $\delta(-2t)$ equals

- $\delta(t/2)$
- $(1/2)\delta(t)$
- $-(1/2)\delta(t)$
- $-2\delta(t)$

8. The sifting property of the impulse function states that

- $\int_{-\infty}^{\infty} x(t)\delta(t)dt = x(0)$
- $x(t)\delta(t) = x(0)\delta(0)$
- $\int_{-\infty}^{\infty} x(\tau)\delta(t-\tau)d\tau = x(t)$
- $\int_{-\infty}^{\infty} x(t)\delta(t-t_0)dt = x(t_0)$

9. Given the general signal x(t), the even and odd components of signal $x_e(t), x_0(t)$, such that $x(t)=x_e(t)+x_0(t)$, are

- $(1/2)[x(t)-x(-t)],(1/2)[x(t)+x(-t)]$
- $(1/2)[x(t)+x(-t)],(1/2)[x(t)-x(-t)]$
- $(1/2)[x(-t)-x(t)],(1/2)[x(t)-x(-t)]$
- $(1/2)[x(-t)+x(t)],(1/2)[x(-t)-x(t)]$

10. Consider the Signal $x(t)=sin(t)u(t)$ given as input to integrator $\int_{-\infty}^{t} x(\tau)d\tau$. What is the power of resulting output signal

- 1
- 3/2
- 1/2
- 3/4

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

Programme: B.E. Electronics and Communcation Engineering

Year & Sem: II & IV

Course Code & Name: 161EC43 & Signals and Systems

Course Tutor: Mrs.P.Lingeswari, AP/ECE

Internal Assessment Test :I

Section: II

Date of Test: 19.01.2018

SLOW LEARNERS LIST

S.No	Roll No	Name of the Student	Marks
1	16EC050	MARIRAJ	21
2	16EC053	MURUGAN	19
3	16EC056	MUTHUMANI	15
4	16EC061	PANDEESWARAN	21
5	16EC070	SAKTHI PANDI	11
6	16EC074	SARAVANA KUMAR	19
7	16EC078	SELVA KUMAR	5
8	16EC076	SELVA KUMAR	10
9	16EC080	SOUNDHARA KUMAR	22
10	16EC081	SRIDHARAN	16
11	16EC084	SURESH KANNAN	18
12	16EC086	SURYA PRAKASH	2
13	16EC090	THIRUMALAIMURUGAN	21
14	17LEC01	BHUVANESHWARI K	21
15	17LEC03	ESAKKIAMMAL@ RACHANADEVI R	21
16	17LEC06	MUTHUKANI S	14
17	17LEC07	MUTHUMANIPANDI M	14
18	17LEC11	PREETHI K	23
19	17LEC13	RATHIKA R	16
20	17LEC14	RUPADEVI P	16

Assignments given to the students.

ADVANCE LEARNERS LIST

S.No	Roll No	Name of the Student	Marks
1	16EC062	PARTHASARATHI	52
2	16EC066	PREMAKARTHIKA	46
3	16EC083	SUNDARA LAKSHMI	53
4	16EC087	SURYA	45
5	17TEC01	PUSHPAPRIYA N	46

Asked to solve NPTEL questions.

Signature of the Course Tutor

Signature of the Course Co-ordinator/Moderator

Programme Co-ordinator

Head of the Department

Assignment I

Solution

1. The image captured by a cellphone is a Discrete time signal, 2D signal as well as n energy Energy signal (since it is of finite size and each pixel has finite amplitude).
   Ans d

2. The given signal $\sin(4t)$ is periodic. In fact, its period is $\pi/2$.
   Ans d

3. Consider the signal $\sin(4\pi t) + \sin(6\pi t)$. Period of first component is $\frac{1}{2}$. Period of second component is $1/3$. The lowest common multiple of both is 1. Hence, period of sum signal is 1.
   Ans c

4. The given signal $e^{-\frac{1}{2}|t|}$ is an energy signal. Its energy is

   $$\int_{-\infty}^{\infty}\left(e^{-\frac{1}{2}|t|}\right)^2 dt = 2\int_0^\infty e^{-t}dt = 2$$

   Ans c

5. The unit step signal is a Power signal. This can be seen as follows

   $$\lim_{T\to\infty}\frac{1}{T}\int_{-T/2}^{T/2}|u(t)|^2 dt = \lim_{T\to\infty}\frac{1}{T}\int_{0}^{T/2} 1 \times dt = \lim_{T\to\infty}\frac{T/2}{T} = \frac{1}{2}$$

   Ans b

6. Given current $i(t) = e^{-\alpha t}u(t)$, $\alpha > 0$ is given as input to capacitor with capacitance C. The voltage across the capacitor is given as

   $$\frac{1}{C}\int_{-\infty}^{t} i(\tau)d\tau = \frac{1}{C}\int_{-\infty}^{t} e^{-\alpha\tau}u(\tau)d\tau = \left(\frac{1}{C}\int_{0}^{t} e^{-\alpha\tau}d\tau\right)u(t) = -\frac{1}{C\alpha}e^{-\alpha\tau}|_0^t u(t)$$

   $$= \frac{1}{C\alpha}(1 - e^{-\alpha\tau})u(t)$$

   Ans a

7. From the property $\delta(at) = 1/|a| \times \delta(t)$. Hence, $\delta(-2t) = \frac{1}{2} \times \delta(t)$
   Ans b

8. The sifting property of the impulse function is $\int_{-\infty}^{\infty} x(\tau)\delta(t-\tau)d\tau = x(t)$.

   Ans c

9. The even and odd components of the signal $x_e(t)$, $x_o(t)$ are respectively $\frac{1}{2}(x(t) + x(-t))$, $\frac{1}{2}(x(t) - x(-t))$.
   Ans b

10. Given the signal $x(t) = \sin(t)u(t)$ given as input to the integrator $\int_{-\infty}^{t} x(\tau)d\tau$. The output of the integrator is $(1-\cos(t))u(t)$. Power of $1-\cos(t)$ is $1+ \frac{1}{2} = 3/2$. The power of $(1-\cos(t))u(t)$ is $\frac{1}{2} \times 3/2 = \frac{3}{4}$.

Ans d

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):	Lingeswari Ponnusamy/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						✓			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%)

Signature of the Course Tutor

Remarks

Programme Coordinator

Signature of course
Coordinator/Moderator

Head of the Department

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 $X(s) = \dfrac{s+5}{s+3}$.

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) $x(t) = \begin{cases} \sin \pi t; 0 \le t \le 1 \\ 0; otherwise \end{cases}$

(iii) $x(t) = t^2 e^{-t} u(t)$ (iv) $x(t) = \delta(t) - \dfrac{1}{5} e^{-5t} u(t)$

or

b) i) Prove any two properties of Laplace Transform.   8

ii) Develop the inverse Laplace Transform of $X(s) = \dfrac{(s+2)}{s^3 + 7s^2 + 15s + 9}$.   8

8.a) i) Solve the inverse Laplace Transform of $X(s) = \dfrac{2(s+2)}{s^2 + 7s + 12}$; $Re(s) > -3$.   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 $\dfrac{d^2 y(t)}{dt^2} + 4\dfrac{dy(t)}{dt} + 3y(t) = \dfrac{dx(t)}{dt} + 2x(t)$.   8

ii) Find the impulse response of causal system described by $H(s) = \dfrac{(s+3)}{s^2 + 4s + 3}$.   8

9.a) Consider the system characterized by the differential equation $x(t) = \dfrac{d^3 y(t)}{dt^3} + 6\dfrac{d^2 y(t)}{dt^2} + 11\dfrac{dy(t)}{dt} + 6y(t)$.   16

(i) Find the zero state response of the system for the input $x(t) = e^{-4t} u(t)$.

(ii) Determine the zero input response of the system given that $y(0)=1$; $\dfrac{dy(t)}{dt}\Big|_{t=0} = -1$; $\dfrac{d^2 y(t)}{dt^2}\Big|_{t=0} = 1$.

or

b) i) Construct direct form I and II for the given LTI system $\dfrac{d^2 y(t)}{dt^2} + 5\dfrac{dy(t)}{dt} + 4y(t) = \dfrac{dx(t)}{dt}$.   8

ii) Construct cascade and parallel form of $H(s) = \dfrac{1}{(s+1)(s+2)}$.   8

Faculty In charge   HOD/ECE

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)

Year : II

Course Code : 161EC43

Course Tutor : Lingeswari Ponnusamy, Assistant Professor/Electronics and Communication Engineering

Internal Assessment Test : II

Section : B

Course Name : Signals and Systems

Date of Test : 02-03-2018

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.a.ii	8.b.i	8.b.ii	9.a.i	9.b.i	9.b.ii		
1	16EC048	MANIMEGALAI	2	2	1	1	1	2	7			-		8	8	10	7	3	40	PASS
2	16EC049	MARIAMMAL	2	2	2	2	1	2	11			8	7				5	7	3	47	PASS
3	16EC050	MARIRAJ	1	2	2	1	1				5						5			18	FAIL
4	16EC051	MARUNMANI		2			1	2		2	2	2	2				5		4	16	FAIL
5	16EC052	MONIKA	1	2	1		1	2		3		8	5				6		4	33	PASS
6	16EC053	MURUGAN							5			8					1		4	18	FAIL
7	16EC054	MUTHUKUMAR	2	2			2	1	13			8	8				7	6		49	PASS
8	16EC056	MUTHUMANI		2					8			8					7	7		32	PASS
9	16EC059	NAGARAJ	2	2		2	1	2	7						2		7	6		31	PASS
10	16EC060	NAVANEETHA VENKATESAN		2			1	1	8	3		6	4	8	2		4	4		30	PASS
11	16EC061	PANDEESWARAN	2	1				2		3				8	2		4	4		31	PASS
12	16EC062	PARTHASARATHI	2	2	1	2	2	2	13	8	8	8	8			15			55	PASS
13	16EC063	PATHMA PRIYA	2	2	1	1	1			8	8	8	2			10			41	PASS
14	16EC064	PAVITHRA DARWIN	2	2	1	2	1	2	12			4	8			6			40	PASS
15	16EC065	PRABAKAR	2	2	1	1		2	14					8	8			4	42	PASS
16	16EC066	PREMAKARTHIKA	1	2	1	1	2	2	8	8		6	6			10			47	PASS
17	16EC067	PRIYADHARSHINI	1	2		1	1	1	6	7		8	4				6		4	40	PASS
18	16EC069	RAMESH	2			1	2	2	12			8				10			37	PASS
19	16EC070	SAKTHI PANDI																			ABSENT
20	16EC071	SANGEETHA																			ABSENT

S.No	Reg. No	Name	Total	Result
21	16EC072	SANTHINE	49	PASS
22	16EC073	SANTHIYA	43	PASS
23	16EC074	SARAVANA KUMAR	18	FAIL
24	16EC075	SATHYA	38	PASS
25	16EC078	SELVA KUMAR		ABSENT
26	16EC076	SELVA KUMAR	4	FAIL
27	16EC077	SELVA KUMAR	32	PASS
28	16EC079	SELVALAKSHMI		ABSENT
29	16EC080	SOUNDHARA KUMAR	43	PASS
30	16EC081	SRIDHARAN	6	FAIL
31	16EC082	SUBITSHA	42	PASS
32	16EC083	SUNDARA LAKSHMI	46	PASS
33	16EC084	SURESH KANNAN	17	FAIL
34	16EC085	SURIYA PRIYA	56	PASS
35	16EC087	SURYA	42	PASS
36	16EC086	SURYA PRAKASH	12	FAIL
37	16EC088	SWETHA	30	PASS
38	16EC089	THIRUMALAIMURUGAN	42	PASS
39	16EC090	THIRUMALAIMURUGAN	18	FAIL
40	16EC091	UMAMAHESWARI	14	FAIL
41	16EC092	VAIRALAKSHMI	39	PASS
42	16EC094	VIDHYA	30	PASS
43	16EC095	YATHEENDIRARAJAN	13	FAIL
44	17LEC01	BHUVANESHWARI K	19	FAIL
45	17LEC03	ESAKKIAMMAL@ RACHANADEVI R	13	FAIL
46	17LEC06	MUTHUKANI S	4	FAIL
47	17LEC07	MUTHUMANIPANDI M	12	FAIL
48	17LEC08	PADMA PRIYA B		ABSENT
49	17LEC11	PREETHI K	10	FAIL
50	17LEC13	RATHIKA R	12	FAIL
51	17LEC14	RUPADEVI P	8	FAIL
52	17TEC01	PUSHPAPRIYA N	45	PASS

53	17ECR01	MATHIMITHRA	2	2					2	3						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	AP	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

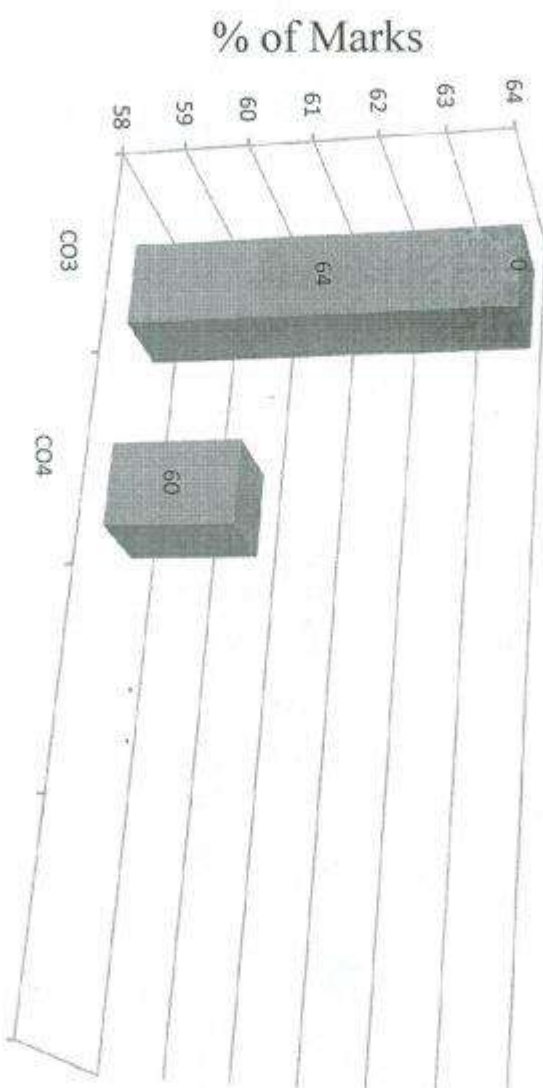Signature of the Course Co-ordinator/Moderator

Programme Co-ordinator

Head of the Depart

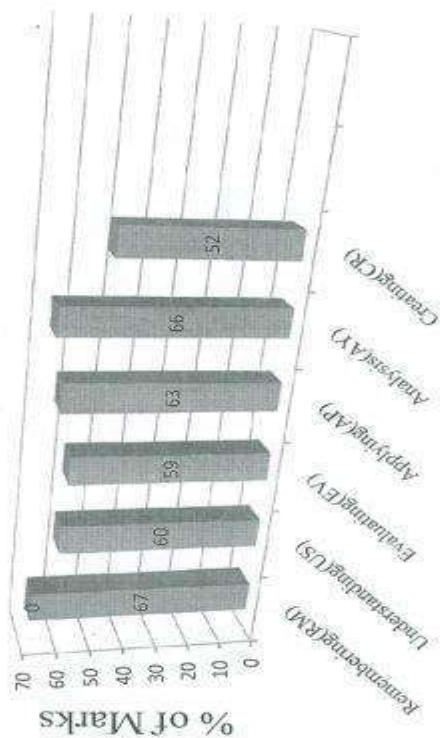| Course Outcomes	Max Marks	Average Marks Scored	% of Marks
CO3	48	30.56	64
CO4	60	36.22	60

Result Analysis - Course Outcomes

% of Marks

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(AY)	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
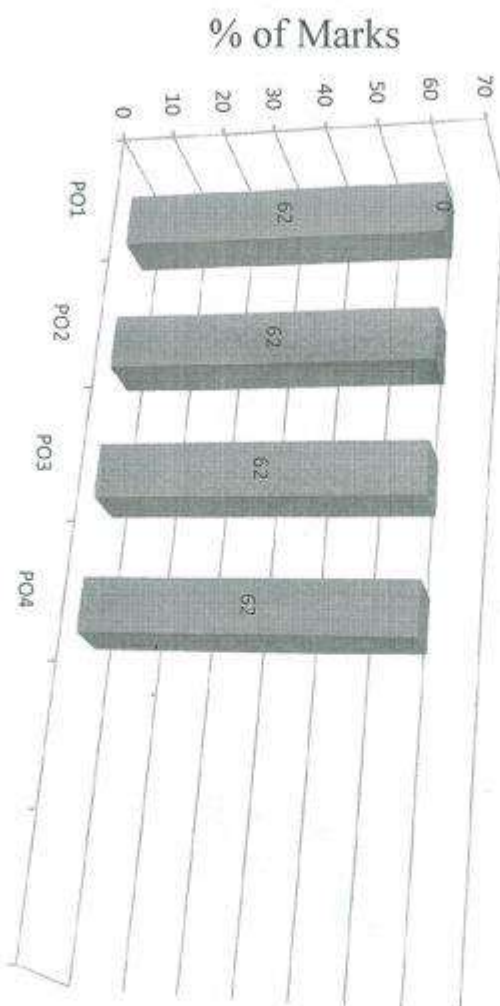
% of Marks vs Programme Outcomes

	PO1	PO2	PO3	PO4
	62	62	62	62

Programme Outcomes

Signature of the Course Tutor

Signature of the Course Co-ordinator/Moderator

Programme Co-ordinator

Head of the Department

1. The property $T(x_1(t) + x_2(t)) = y_1(t) + y_2(t)$ is termed Additivity
   Ans a

2. Given the system $y(t) = 2\frac{dx(t)}{dt} + 3\frac{d^2x(t)}{dt^2}$. The system is LTI since the differentiator is an LTI system.
   Ans c

3. Given $y(t) = 2\frac{dx(t)}{dt} + 3\frac{d^2x(t)}{dt^2}$. Consider the input $x(t) = u(t)$, the unit-step signal. The input is bounded since $|x(t)| \leq 1$. However, the output is unbounded at $t = 0$. Hence system is NOT BIBO stable
   Ans b

4. Given the signal $x(t) = -t$ for $-1 \leq t \leq 0$ and 0 otherwise. The signal $-x(2-t) = -(-(2-t))$ $= 2-t$ for $-1 \leq 2-t \leq 0 \Rightarrow 2 \leq t \leq 3$. Hence, it is non-zero in the interval $(2,3]$. In this interval it can be seen to take $-$ve values and have a $-$ve slope
   Ans d

5. Using the property $\int_{-\infty}^{\infty} \phi(t)\delta'(t)dt = -\phi'(0)$, it follows that

$$\int_{-\infty}^{\infty} \frac{1}{\sqrt{2\pi\sigma^2}} e^{-\frac{t^2}{2\sigma^2}} \delta'(t)dt = \frac{d}{dt}\frac{1}{\sqrt{2\pi\sigma^2}} e^{-\frac{t^2}{2\sigma^2}}\bigg|_{t=0} = -\frac{t}{\sigma^2} \times \frac{1}{\sqrt{2\pi\sigma^2}} e^{-\frac{t^2}{2\sigma^2}}\bigg|_{t=0} = 0$$

Ans a

6. Given $v_i(t)$ applied across a series RL circuit with the voltage $v_o(t)$ across the inductor. the input output relation can be derived as follows

$$i(t) = \frac{(v_i(t)-v_o(t))}{R} \Rightarrow L\frac{d}{dt}\frac{(v_i(t)-v_o(t))}{R} = v_o(t)$$
$$\Rightarrow \frac{L}{R}\frac{d}{dt}v_i(t) = v_o(t) + \frac{L}{R}\frac{d}{dt}v_o(t)$$

Ans d

7. Given complex exponential signal $\exp(j6\pi t/13)$ sampled with sampling interval $T_s = 1/3\pi$. The sampled signal is $x(n) = e(j6\pi/13 \times n/3\pi) = \exp(j2n/13)$. Let period be N. $\exp(j2(n+N)/13) = \exp(j2n/13)$ if $2N/13 = 2K\pi \Rightarrow N/K = 13\pi$. Since π is not rational, there do not exist N, K satisfying above relation. Hence the signal is aperiodic
   Ans b

8. The output can be calculated as follows. For $t \geq 0$, output $z(t)$ is

$$z(t) = \int_{-\infty}^{\infty} e^{-a\tau} u(\tau) e^{b(t-\tau)} u(\tau - t)d\tau = e^{bt}\int_{t}^{\infty} e^{-(a+b)\tau}d\tau = e^{bt} \times \frac{e^{-(a+b)t}}{a+b} = \frac{e^{-at}}{a+b}$$

For $t < 0$, output $z(t)$ is

$$z(t) = \int_{-\infty}^{\infty} e^{-a\tau} u(\tau) e^{b(t-\tau)} u(\tau - t)d\tau = e^{bt}\int_{0}^{\infty} e^{-(a+b)\tau}d\tau = e^{bt} \times \frac{1}{a+b} = \frac{e^{bt}}{a+b}$$

Assignment-2

1.Consider a system represented by T(.). For any input signals $x_1(t)$, $x_2(t)$ such that $T(x_1(t))=y_1(t)$ and $T(x_2(t))=y_2(t)$,the system satisfies the property $T(x_1(t)+x_2(t))=y_1(t)+y_2(t)$. This property is termed as

C Additivity   C Homogenity   C Time-variance   C None of these

2.Consider the output $y(t)$ of a system for a given input signal $x(t)$ described as $y(t) = 2\dfrac{dx}{dt} + 3\dfrac{d^2x}{dt^2}$. The system is

C Linear only   C Time-Invariant only   C LTI   C None of these

3.Consider the output $y(t)$ of a system for a given input signal $x(t)$ described as $y(t) = 2\dfrac{dx}{dt} + 3\dfrac{d^2x}{dt^2}$. The system is

C BIBO stable   C Not BIBO stable   C Depends on the input signal   C None of these

4. Consider the signal $x(t) = -t$ for and $-1\leq t\leq0$ and 0 otherwise. The signal $-x(2-t)$, in the interval it is non-zero, has

C value >0 and +ve slope   C value<0 and +ve slope

C value>0 and -ve slope   C value <0 and -ve slope

5.The integral $\displaystyle\int_{-\infty}^{+\infty}\dfrac{1}{\sqrt{2\pi}\sigma}e^{\frac{-t^2}{2\sigma^2}}\delta'(t)dt$ evaluates to

C 0   C $e^{\frac{-t^2}{2\sigma^2}}$ C $-\dfrac{1}{\sigma^2\sqrt{2\pi}}$ C $\dfrac{1}{\sqrt{2\pi\sigma^2}}e^{\frac{-t^2}{2\sigma^2}}$

6.Consider input voltage $v_i(t)$ applied across a series RL circuit with the voltage $v_o(t)$.across the inductor being the output voltage. The input-output relation of the system is

C $v_i(t)=\dfrac{L}{R}\dfrac{dv_o(t)}{dt}+v_o(t)$ C $\dfrac{L}{R}\dfrac{dv_i(t)}{dt}+v_i(t)=v_o(t)$

C $\dfrac{dv_i(t)}{dt}=\dfrac{R}{L}\dfrac{dv_o(t)}{dt}+v_o(t)$ C $\dfrac{L}{R}\dfrac{dv_i(t)}{dt}=\dfrac{L}{R}\dfrac{dv_o(t)}{dt}+v_o(t)$

7.Consider the complex exponential signal $e^{j\frac{6\pi}{13}t}$ sampled with sampling interval $Ts=1/(3\pi)$ .The resulting signal is

○ Periodic with period $n = 13$ ○ Aperiodic

○ Periodic with period $n = 6$ ○ Periodic with period $n = 2$

8. Let $x(t) = e^{-at} u(t)$ and $y(t) = e^{-bt} u(t)$, $a, b > 0$ and $a \neq b$. $x(t) * y(-t)$, where $*$ denotes convolution is

○ $\dfrac{e^{-at}}{a+b} - \dfrac{e^{-bt}}{a+b}$

○ $\dfrac{e^{-(a+b)t}}{a+b} u(t) + \dfrac{e^{(a+b)t}}{a+b} u(-t)$

○ $\dfrac{e^{-at}}{a+b} u(t) + \dfrac{e^{bt}}{a+b} u(-t)$

○ $\dfrac{e^{at}}{a+b} u(-t) + \dfrac{e^{-bt}}{a+b} u(t)$

9. The modulator, which modulates the baseband signal $x(t)$ with a carrier at frequency f_c, has which of the following properties

      i.   Linearity

     ii.   Causality

    iii.   BIBO Stability

○ Only i and ii ○ Only ii and iii ○ Only i and iii ○ i, ii and iii

10. The sifting property of the discrete time impulse is

○ $\displaystyle\sum_{k=-\infty}^{\infty} x(k)\delta(n-k) = x(n)$ ○ $x(n)\delta(n) = x(0)\delta(n)$

○ $x(n)\delta(n) = x(0)$ ○ $\displaystyle\sum_{k=-\infty}^{\infty} x(k)\delta(k) = x(0)$

Programme: B.E. Electronics and Communcation Engineering

Year & Sem: II & IV

Course Code & Name: 161EC43 & Signals and Systems

Course Tutor: Mrs.P.Lingeswari, AP/ECE

Internal Assessment Test :II

Section: II

Date of Test: 02.03.2018

SLOW LEARNERS LIST

S.No	Roll No	Name of the Student	Marks
1	16EC050	MARIRAJ	18
2	16EC051	MARUNMANI	16
3	16EC053	MURUGAN	18
4	16EC074	SARAVANA KUMAR	18
5	16EC076	SELVA KUMAR	4
6	16EC081	SRIDHARAN	6
7	16EC084	SURESH KANNAN	17
8	16EC086	SURYA PRAKASH	12
9	16EC090	THIRUMALAIMURUGAN	18
10	16EC091	UMAMAHESWARI	14
11	16EC095	YATHEENDIRARAJAN	13
12	17LEC01	BHUVANESHWARI K	19
13	17LEC03	ESAKKIAMMAL@ RACHANADEVI R	13
14	17LEC06	MUTHUKANI S	4
15	17LEC07	MUTHUMANIPANDI M	12
16	17LEC11	PREETHI K	10
17	17LEC13	RATHIKA R	12
18	17LEC14	RUPADEVI P	8

Assignments given to the students.

ADVANCE LEARNERS LIST

S.No	Roll No	Name of the Student	Marks
1	16EC049	MARIAMMAL	47
2	16EC054	MUTHUKUMAR	49
3	16EC062	PARTHASARATHI	55
4	16EC066	PREMAKARTHIKA	47
5	16EC072	SANTHINE	49
6	16EC083	SUNDARA LAKSHMI	46
7	16EC085	SURIYA PRIYA	56

Asked to solve gate questions

Signature of the Course Tutor

Programme Co-ordinator

Signature of the Course Co-ordinator/Modera

Head of the Department
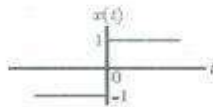
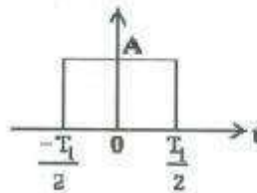| Programme:	B.E.	Branch	Electronics and Communication Engineering		
Acad. Year:	2017-2018	Year/Semester	II Yr/ IV Sem		
Course Code:	161EC43	Course Name	**SIGNALS AND SYSTEMS**		
Section :	II	Date of Tutorial		Duration	50 min
Course Tutors:	Mrs.P.Lingeswari AP/ECE				

CLASSIFICATION OF SIGNALS

Answer the following Problems/Questions

1. For a periodic signal $v(t) = 30\sin 100t + 10\cos 300t + 6\sin(500t + \frac{\pi}{4})$, the fundamental frequency in rad/sec

   a) 100   b) 300   c) 500   d) 1500   [GATE 2013]

2. Find whether the signal $x(t) = 2\cos(10t+1) - \sin(4t-1)$ is periodic or not. [APRIL/MAY 2010]

3. Find the fundamental period T of the continuous time signal $x(t) = 20\cos(10\pi t + \frac{\pi}{6})$.

                                                                        [APRIL/MAY 2010]

4. The discrete-time signal $x(n) = (-1)^n$ is periodic with fundamental period

   a) 6   b) 4   c) 2   d) 0

5. Determine the power and RMS value of the following signals

   (i) $x_1(t) = 5\cos(50t + \frac{\pi}{3})$

   (ii) $x_2(t) = 10\cos 5t \cos 10t$.   [NOV/DEC 2009]

6. The function $x(t)$ is shown in the figure. Even and odd parts of a unit step function $u(t)$ are respectively,

   a) $\frac{1}{2}, \frac{1}{2}x(t)$ b) $-\frac{1}{2}, \frac{1}{2}x(t)$ c) $\frac{1}{2}, -\frac{1}{2}x(t)$ d) $-\frac{1}{2}, -\frac{1}{2}x(t)$ [GATE 2013]

7. The power in the signal $s(t) = 8\cos(20\pi - \frac{\pi}{2}) + 4\sin(15\pi t)$ is

   a) 40   b) 41   c) 42   d) 82   [GATE 2005]

8. If a signal f(t) has energy E, the energy of the signal f(2t) is equal to

   a) 1   b) E/2   c) 2E   d) 4E   [GATE 2001]

9. The period of the signal $x(t) = 10\sin 12\pi t + 4\cos 18\pi t$ is

   a) $\dfrac{\pi}{4}$ b) $\dfrac{1}{6}$ c) $\dfrac{1}{9}$ d) $\dfrac{1}{3}$

10. The average power of the following signal is

   a) $\dfrac{A^2}{2}$ b) A^2 c) AT_1^2 d) A^2T_1

11. Check whether the given signals are energy or power signal.

   (i) $x(n) = (\dfrac{1}{2})^n u(n)$

   (ii) $rect(\dfrac{t}{T_0})$

   (iii) $x(t) = \cos^2(\omega_0 t)$

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
Section :	II	Date of Tutorial	Duration	50 min
Course Tutors:	Mrs.P.Lingeswari AP/ECE			

BASIC OPERATION ON SIGNALS

Answer the following Problems/Questions

1. A continuous-time signal x(t) is shown in below. Sketch and label each of the following signals.

(a) $x(t)u(1 - t)$; (b) $x(t)[u(t) - u(t-1)]$; (c) $x(t)\delta(t - \frac{3}{2})$
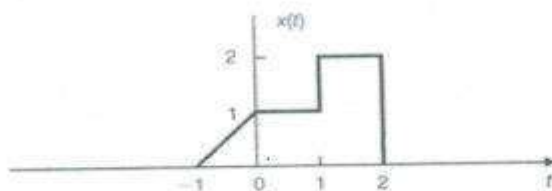
2. The signal x(t) is shown in figure. Sketch $y(t)=x(10t-5)$.
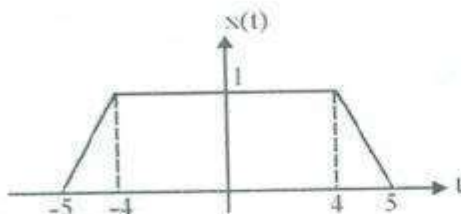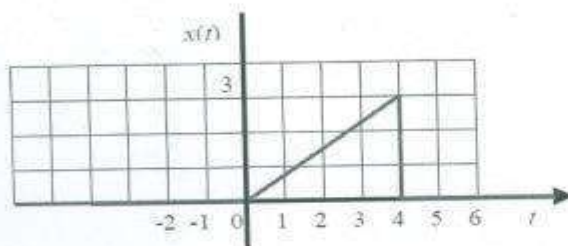

3. A discrete-time signal x[n] is shown in Fig. 1-29. Sketch and label each of the following signals.
(a) $x[n]u[1 - n]$; (b)$x[n]\{u[n + 2] - u[n]\}$; (c) $x(n)\delta(n-1)$
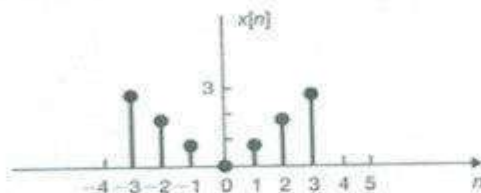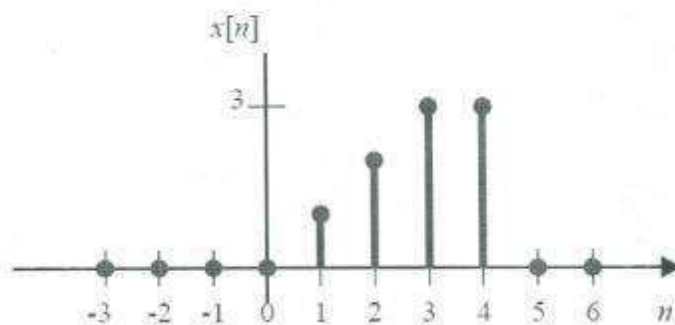

4. A continuous-time signal x(t) is shown below. Sketch and label each of the following signals.
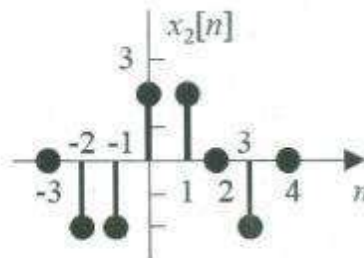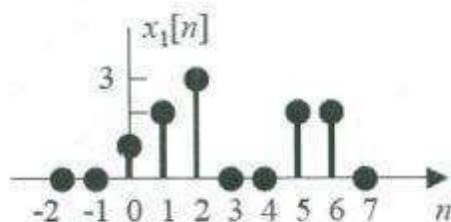(a). $x(t-2)$; (b). $x(2t)$; (c). $x(t/2)$; (d). $x(-t)$; (e). $x(2t-2)$.

5. A discrete signal x[n] is shown below. Sketch and label each of the following signals.
(a). x[n-2]; (b). x[2n]; (c). x[-n] (d). x[-n+2].

6. Using the discrete-time signals $x_1[n]$ and $x_2[n]$ shown as follows, represent each of the signals by a graph and by a sequence of numbers.
(a). $y_1[n] = x_1[n] + x_2[n]$; (b). $y_2[n] = 2 x_1[n]$; and (c). $y_3[n] = x_1[n] x_2[n]$.

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		
Section :	II	Date of Tutorial		Duration	50 min
Course Tutors:	Mrs.P.Lingeswari AP/ECE				

CLASSIFICATION OF SYSTEMS

Answer the following Problems/Questions

1. check the following system is linear or not.
   (i) $y(t) = e^{x(t)}$
   (ii) $y(n) = x(n-1)$

2. Determine whether the system is a linear and time invariant.
   (i) $y = te^x$
   (ii) $y(t) = tx(t)$
   (iii) $\frac{dy}{dt} + 3ty(t) = t^2 x(t)$
   (iv) $y(n) = 2x(n) + \frac{1}{x(n-1)}$

3. Check whether the system is linear,time invariant,causal,static(memoryless) and stable.
   (i) $y(n) = \log_{10}|x(n)|$
   (ii) $y(n) = x(3n+1) + x(n-1)$
   (iii) $y(n) = x(2n)$
   (iv) $y(n) = x(n)\cos \omega n$
   (v) $y(n) = x(n) + nx(n+1)$

4. Let $x(t)$ be the input and $y(t)$ be the output of a continuous time system. Match the system properties P1, P2 and P3 with system relations R1, R2, R3, R4

Properties	Relations
P1 : Linear but NOT time - invariant	R1 : $y(t) = t2x(t)$
P2 : Time - invariant but NOT linear	R2 : $y(t) = t\,x(t)$
P3 : Linear and time - invariant	R3 : $y(t) = x(t)$
	R4 : $y(t) = x(t - 5)$

   a) (P1, R1), (P2, R3), (P3, R4)   b) (P1, R2), (P2, R3), (P3, R4)
   c) (P1, R3), (P2, R1), (P3, R2)   d) (P1, R1), (P2, R2), (P3, R3)

   [GATE 2008]

5. The input and output of a continuous time system are respectively denoted by $x(t)$ and $y(t)$. Which of the following descriptions corresponds to a causal system?

   a) $y(t) = x(t-2) + x(t+4)$ b) $y(t) = (t-4)x(t+1)$
   c) $y(t) = (t+4)x(t-1)$ d) $y(t) = (t+5)x(t+5)$

   [GATE 2008]

6. A system with input $x(n)$ and output $y(n)$ is given as $y(n) = \sin(\frac{5\pi n}{6})x(n)$. The system is

   a)linear, stable   b)non-linear, stable   c)linear, unstable   d) non-linear, unstable
   [GATE 2006]

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(AP)	Analysis(AY)	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%)

Signature of the Course Tutor

Remarks

Signature of course
Coordinator/Moderator

Programme Coordinator

Head of the Department

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

<div align="center">

PART - A   **10 x 2 Marks = 20 Marks**
</div>

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

<div align="center">

PART – B   **5 x 16 Marks = 8 Marks**
</div>

11.a) i) Find out whether the following signals are periodic or not. If periodic find the   8
   fundamental period.

   a) $x(t) = 4\cos(3\pi t + \frac{\pi}{4}) + 2\cos(4\pi t)$ b) $x(n) = \cos(0.1\pi n)$

   ii) Prove the signal $x(t) = e^{-3t}u(t)$ is an energy signal not the power signal.   8

<div align="center">or</div>

b) Classify the following systems under their linearity, time invariance, casual, stability   16

   i) $y(n) = \frac{d}{dt}x(t)$ ii) $y(n) = x(n) - x(n-1)$

12.a) Determine the Fourier series expansion for a periodic ramp signal with unit amplitude and   16
   a period T.

<div align="center">or</div>

b) i) Evaluate the inverse Laplace transform of $X(s) = \frac{8s+10}{(s+1)(s+2)^3}$.   8

   ii) Determine the inverse Laplace transform of $X(s) = \frac{1-2s^2-14s}{s(s+3)(s+4)}$.   8

13.a) Using Laplace transform find the response of the system described by the equation   16
   $\frac{d^2y(t)}{dt^2} + 5\frac{dy(t)}{dt} + 4y(t) = \frac{dx(t)}{dt}$ with initial conditions $y(0) = 0; \frac{dy(t)}{dt}\Big|_{t=0} = 1$ for the
   input $x(t) = e^{-2t}u(t)$.

<div align="center">or</div>

b) Construct direct form I, II, cascade and parallel form realization structure for the given LTI   16
   system $H(s) = \frac{4s+28}{s^2+6s+5}$.

14.a) Explain in detail about sampling theorem and how it is reconstructed for a band limited   16
   signal.

<div align="center">or</div>

b) i) Evaluate the inverse Z transform of $X(z) = \frac{z^{-1}}{1-0.25z^{-1}-0.375z^{-2}}$.   12

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   16
sequences $x_1(n)$ and $x_2(n)$ respectively.

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

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

or

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

ii) Design the cascade and parallel form block diagram realization structure for the   8

following system function, $H(z) = \dfrac{1}{(1 + \dfrac{1}{2} z^{-1})(1 - \dfrac{1}{4} z^{-1})}$

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

Faculty In charge

HOD/ECE

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

DNV-SL

TUTORIAL NO.4

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**		
Section :	II	Date of Tutorial		Duration	50 min
Course Tutors:	Mrs.P.Lingeswari AP/ECE				

LAPLACE TRANSFORM AND INVERSE LAPLACE TRANSFORM

Answer the following Problems/Questions

1. Find the Laplace transform of $[4e^{-2t}\cos 5t - 3e^{-2t}\sin 5t]u(t)$.

2. Find the initial and final values of $X(S) = \dfrac{s+5}{s^2+3s+2}$.

3. Find the Laplace transform of $x(t) = t^2 e^{-4t} u(t)$.

4. Find the Laplace transform of $x(t) = e^{-at}\cos \omega t u(t)$.

5. Find the inverse Laplace transform of $X(S) = \dfrac{1+e^{-2s}}{3s^2+2s}$.

6. Find the inverse Laplace transform of $X(S) = \dfrac{1}{(s+5)(s-3)}$ for the ROCs.

   (i) $-5 < Re(s) < 3$
   (ii) $Re(s) > 3$

7. Determine the inverse Laplace transform of $X(S) = \dfrac{2(s+2)}{s^2+7s+12}$ for the ROCs.

   (i) $Re(s) > -3$

8. Obtain the inverse Laplace transform of the function $X(S) = \dfrac{1}{s^2+3s+2}$ for the ROCs.

   (i) $-2 < Re(s) < -1$

9. Find the Laplace transform of (i) $x(t) = e^{-at}u(t-1)$ (ii) $x(t) = \delta(t) + t^2 + u(t)$.

Hence, the net result is, $\frac{e^{-at}}{a+b} u(t) + \frac{e^{bt}}{a+b} u(-t)$

Ans c

9. The modulator output can be described as $y(t) = x(t)\cos(2\pi f_c t)$. As shown in lectures the system is linear. Further, $y(t)$ depends only on $x(t)$ and not past values of $x(t)$. Hence it is also causal. Further, if $|x(t)| < C$, $|y(t)| = |x(t)\cos(2\pi f_c t)| \le |x(t)| < C$. Hence, system is also BIBO stable

Ans d

10. The sifting property of the discrete time impulse is $\sum_{k=-\infty}^{\infty} x(k)\delta(n-k) = x(n)$

Ans a

Evaluation Analysis

Programme : B.E Electronics and Communication Engineering (EC

Year : II

Course Code : 161EC43

Course Tutor : Lingeswari Ponnusamy, Assistant

Professor/Electronics and

Presemester Examination

Section : B

Course Name : Signals and Systems

Date of Test : 23-03-2018

Sl.No.	Roll No.	Name	Total Mark	Result
1	16EC048	MANIMEGALAI	61	PASS
2	16EC049	MARIAMMAL	53	PASS
3	16EC050	MARIRAJ	50	PASS
4	16EC051	MARUNMANI	11	FAIL
5	16EC052	M6NIKA	41	FAIL
6	16EC053	MURUGAN	7	FAIL
7	16EC054	MUTHUKUMAR	77	PASS
8	16EC056	MUTHUMANI	13	FAIL
9	16EC059	NAGARAJ	69	PASS
10	16EC060	NAVANEETHA VENKATESAN	59	PASS
11	16EC061	PANDEESWARAN	4	FAIL
12	16EC062	PARTHASARATHI	83	PASS
13	16EC063	PATHMA PRIYA	66	PASS
14	16EC064	PAVITHRA DARWIN	78	PASS
15	16EC065	PRABAKAR	72	PASS
16	16EC066	PREMAKARTHIKA	70	PASS
17	16EC067	PRIYADHARSHINI	70	PASS
18	16EC069	RAMESH	79	PASS
19	16EC070	SAKTHI PANDI	3	FAIL
20	16EC071	SANGEETHA		ABSENT
21	16EC072	SANTHINE	70	PASS
22	16EC073	SANTHIYA	71	PASS
23	16EC074	SARAVANA KUMAR	15	FAIL
24	16EC075	SATHYA	68	PASS
25	16EC078	SELVA KUMAR	14	FAIL
26	16EC076	SELVA KUMAR	58	PASS
27	16EC077	SELVA KUMAR		FAIL
28	16EC079	SELVALAKSHMI	6	ABSENT

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
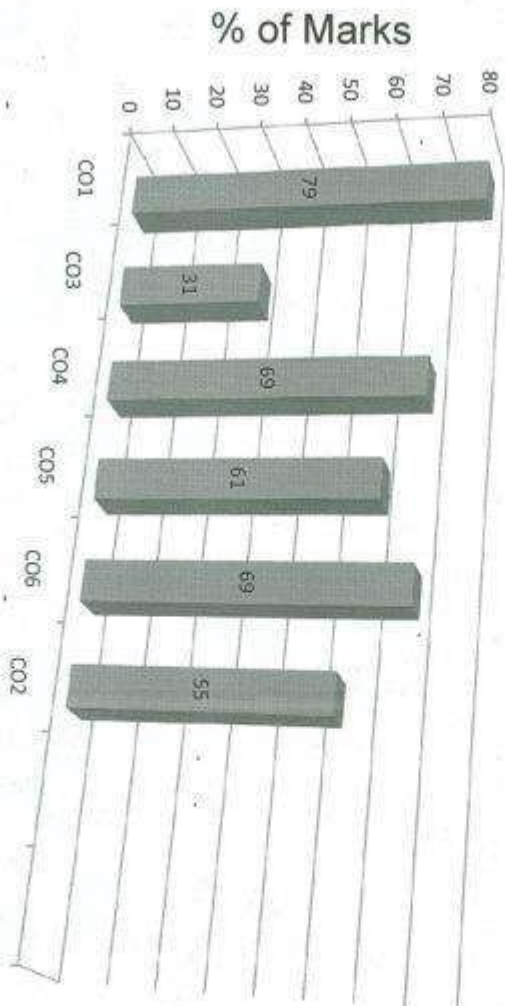
% of Marks

Course Outcomes

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

Result Analysis - Competence Category

% of Marks

Competence Category

Course Outcome / Programme Outcome Attainment Table

S.No	Reg. No	Name	Result
29	16EC080	SOUNDHARA KUMAR	PASS
30	16EC081	SRIDHARAN	FAIL
31	16EC082	SUBITSHA	PASS
32	16EC083	SUNDARA LAKSHMI	PASS
33	16EC084	SURESH KANNAN	PASS
34	16EC085	SURIYA PRIYA	FAIL
35	16EC085	SURIYA	PASS
36	16EC086	SURYA PRAKASH	PASS
37	16EC088	SWETHA	FAIL
38	16EC089	THIRUMALAIMURUGAN	FAIL
39	16EC090	THIRUMALAIMURUGAN	PASS
40	16EC091	UMAMAHESWARI	FAIL
41	16EC092	VAIRALAKSHMI	FAIL
42	16EC094	VIDHYA	PASS
43	16EC095	YATHEENDIRARAJAN	PASS
44	17LEC01	BHUVANESHWARI K	FAIL
45	17LEC03	ESAKKIAMMAL@RACHANADEVI R	FAIL
46	17LEC06	MUTHUKANI S	FAIL
47	17LEC07	MUTHUMANIPANDI M	FAIL
48	17LEC08	PADMA PRIYA B	FAIL
49	17LEC11	PREETHI K	FAIL
50	17LEC13	RATHIKA R	FAIL
51	17LEC14	RUPADEVI P	FAIL
52	17LEC01	PUSHPAPRIYA N	FAIL
53	17TEC01	MATHIMITHRA	PASS

Summary rows:
- Total Marks Questionwise
- No. of Students Attended
- Total Marks / No. of Students
- Competence Category (RM)
- Course Outcome (CO1–CO6)
- Programme Outcome (PO1–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	160	97.45	61
PO4	160	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

% of Marks

Programme Outcomes

Signature of the Course Tutor

Signature of the Course Co-ordinator/Moderator

Programme Co-ordinator

Head of the Department