Practical Session Plan

Faculty : Binsy Joseph

CLASS	SE Production, Semester IV
Academic Term	Jan – April 2019
Subject	**PEC405** **Electrical And Electronics engineering**

Evaluation System		***Hours***	***Marks***
	Practical Examination	--	--
	Oral Examination	--	--
	Term work	--	25
	Total	--	25

Time Table	***Day***	***Batch***	***Time***
	Monday	***C***	***1.30 –3.30 pm***
	Monday	***B***	***3.30 –5.30 pm***
	Friday	***A***	***1.30 –3.30 pm***
	Friday	***D***	***3.30 –5.30 pm***

Title of Experiments

Sr. No.	***Title***	***Module***	***Attained POs***
1	To study the characteristics of DC shunt motor	Module. 1. DC Motors	PO1, PO2
2	To study the Speed Control of DC shunt motor	Module. 1. DC Motors	PO1, PO2
3	To study the characteristics of 3-phase induction motor	Module. 2. Induction Motor	PO1, PO2
4	To study Inverting and non inverting amplifier using IC741	Operational amplifier	PO1, PO2

5	To implement Integrator using IC741	Operational amplifier	PO1, PO2
6	To implement Differentiator using IC741	Operational amplifier	PO1, PO2
7	To study and verify the truth tables of Logic Gates	Module 5. Logic Gates	PO1, PO2
8	To study 8:1 multiplexer using IC74151	Module 5. Multiplexer	PO1, PO2
9	To implement the RC phase shift oscillator using IC741	Module 6. Oscillators	PO1, PO2
10	To Learn the working principles of Stepper Motor	Module. 3. Stepper Motor	PO1, PO2
11	To study Speed Control of AC/ DC motor using Thyristor control	Module 6 SCR control	PO1,PO2
12	To Study the efficiency and regulation of single phase Transformer by performing OC&SC Test	Module4 Transformer	PO1,PO2

Newly added Experiments

To study Speed Control of AC/ DC motor using Thyristor control	Module 6 SCR control	PO1,PO2
To Study the efficiency and regulation of single phase Transformer by performing OC & SC Test	Module4 Transformer	PO1,PO2

Overall (all experiments together) mapping with POs

	Programme Outcomes
3	***PO1***
3	***PO2***

Practical Session Plan

Batch	***Dates***		***Remarks***
	Planned	***Actual***	
Experiment No. 1	**To study the characteristics of DC shunt motor**		

C	14– 01 – 2019		
B	14 – 01 -2019		
A	18– 01 – 2019		
D	18– 01 – 2019		
Experiment No. 2		**To study the Speed Control of DC shunt motor**	
C	21– 01 – 2019		
B	21 – 01 -2019		
A	25 – 01 – 2019		
D	25 – 01 -2019		
Experiment No. 3		**To study the characteristics of 3-phase induction motor**	
C	\28 – 01 – 2019		
B	28 – 01 -2019		
A	01 – 02 – 2019		
D	01 – 02 – 2019		
Experiment No. 4		**To study Inverting and non inverting amplifier using IC741**	
C	11 – 02 – 2019		
B	11 – 02 -2019		
A	08– 02 – 2019		
D	08 – 02 – 2019		
Experiment No. 5		**To implement Integrator using IC741**	
C	18 – 02 – 2019		
B	18 – 02– 2019		
A	22 – 02 – 2019		
D	22 – 02 – 2019		
Experiment No. 6		**To implement Differntiator using IC741**	
C	18 – 02 – 2019		
B	18 – 02– 2019		
A	22 – 02 – 2019		
D	22 – 02 – 2019		

Experiment No. 7		**To study 8:1 multiplexer using IC74151**	
C	25 – 02 – 2019		
B	25 – 02 -2019		
A	01 – 03 – 2019		
D	01 – 03 – 2019		
Experiment No. 8		To study 8:1 multiplexer using IC74151	
C	11 – 03 – 2019		
B	11 – 03 -2019		
A	08– 03 – 2019		
D	08 – 03 – 2019		
Experiment No.9		To implement the RC phase shift oscillator using IC741	
C	18 – 03 – 2019		
B	18 – 03 -2019		
A	15 – 03 – 2019		
D	15 – 03 – 2019		
Experiment No. 10		To Learn the working principles of Stepper Motor	
C	25 – 03 – 2019		
B	25 – 03 -2019		
A	22 – 03 – 2019		
D	22 – 03 – 2019		
Quiz No. 1			
C	01 – 04 – 2019		
B	01 – 04 -2019		
A	29 – 03 – 2019		
A	29 – 03 – 2019		

Term work:
Term work shall consist of
1. Assignments: On topics drawn from syllabus.
2. Practical's: Based on topics from syllabus, experiments can be conducted and presented with inferences.

3. Three experiments covering module no. 1 and 2.
4. From module 4 and 5, suggested experiments (any three of the following).
i. SCR characteristics.
ii. Speed control of DC motor by SCR.
iii. OP Amp used as differentiator and integrator.
iv. Multiplexers.
5. Factory report: Preparation of equipment, process, quality control and failure analysis of engineering components reports after visit to important industrial plants.

The distribution of marks for term work shall be as follows:
- Laboratory work (assignments, Practicals and Factory report): 20 Marks.
- Attendance (practicals & theory):

Internal Assessment:
Assessment consists of two tests out of which; one should be a compulsory class test (on minimum 40% of curriculum) and the other is either a class test (on minimum 70% of curriculum) or assignment on live problems or course project.

Theory Examination:
1. Question paper will comprise of total 6 questions, each of 20 Marks.

2. Only 4 questions need to be solved.

3. Question 1 will be compulsory and based on maximum part of the syllabus.

4. Remaining questions will be mixed in nature (for example suppose Q.2 has part (a) from module 3 then part (b) will be from any module other than module 3).

In question paper, weightage of each module will be proportional to the number of respective lecture hours as mentioned in the syllabus Practical Examination & Oral Examination:

Oral will be based on any experiment performed from the list of experiment given in the syllabus and the entire syllabus

Submitted by

Binsy Joseph
25/01/2019