

DEPARTMENT OF PHYSICS				CLASS: I M.Sc. Physics				
Sem	Course Type	Course Code	Course Title	Credits	Contact Hours/week	CIA	Ext	Total
II	Practical	21P2PMP4	Practical IV	4	4	40	60	100

Nature of Course			
Knowledge and skill		✓	Employability oriented
Skill oriented			Entrepreneurship oriented

**Objectives:** To expose the students to experiments in Electronics.

#### Practical - IV (Any six only/semester)

No.	Experiments (Electronics)
1	Zener Characteristics & Zener Regulator
2	OP-AMP Adder, Subtractor Differentiator & Integrator
3	Schmitt trigger
4	Counters using Flip Flops
5	Shift Register
6	Amplitude Modulation
7	FET Characteristics & FET amplifier
	Any experiment related to Electronics

#### Books for reference:

1. M.N.Srinivasan, S.Balasubramanian, R.Ranganathan, A Text Book of Practical Physics, 2007, Sultan Chand & Sons.
2. Indu Prakash & Ramakrishna, A Text Book of Practical Physics, 2008, Kitab Mahal Agencies
3. S.R. GovindaRajan, T. Murugaiyan, S. SundaraRajan, Practical Physics, 2006, Rochouse & Sons
4. Relevant reference from web Sources.

#### Course Designer(s):

1. Dr.M. Prema Rani
2. Mr.S.Sivaramakrishnan
3. Dr.R.Vishnu Priya

**Pedagogy :** Demonstration and practical session.

### Course Learning Outcomes (CLOs)

On the successful completion of the course, students will be able to

CLOs	Course Learning Outcomes	Knowledge level	Marks
1	Understand the given problem in terms of domain knowledge in the field of physics.	Up to K2	10
2	Design appropriate Experiment /Test for the given problem.	Up to K3	10
3	Demonstrate skill in doing the experiment by choosing the appropriate technique and instruments and record data.	Up to K3	15
4	Analyze the data collected and infer the outcome and represent the analysis in meaningful form.	Up to K4	20
5	Communicate the findings in appropriate scientific terminology.	Up to K2	5

### Mapping of CLO's with PSOs

#	PSO1	PSO2	PSO3	PSO4	PSO5
CLO1	3	1	3		1
CLO2	3	1	3		
CLO3	3	1	3	1	
CLO4	3	1	3		
CLO5	3	1	3		1