

20PEB107P					PHYSICS PRACTICAL					
Teaching Scheme					Examination Scheme					
L	T	P	C	Hours/Week	Theory			Practical		Total Marks
					MS	ES	IA	LW	LE/Viva	
0	0	2	1	2	0	0	0	50	50	100

#### COURSE OBJECTIVES

- Demonstrate the unique characteristics of waves
- Enhance knowledge of graduates on application of physics on petroleum
- Imbibe skills to develop minor devices for study purpose.
- Enhance the skill to develop laser hologram.

#### LIST OF EXPERIMENTS

1. Introduction to Oscilloscope.
2. Study of Interference using Newton's Ring experiment.
3. Determination of thermal conductivity of different solids.
4. Experiment with solar collector.
5. Experimental to determine linear thermal expansion coefficient of solid bodies.
6. Experiment on reflection of Ultrasonic waves.
7. Experiments with heat pump.
8. Determining Plank's constant and Inverse square law.
9. Experiments on diffraction with He-Ne Laser Kit.
10. Study of Hall Effect.
11. Determining semiconductor energy band gap using four probe method.
12. Experiment to study forced oscillations.
13. Study of charging and discharging of capacitive plates.
14. Study of Bio-Savart's Law
15. Experiments on Fiber Optics.
16. Study of Photoconductivity.
17. Determining e/m by Thomson's method.
18. Study of Polarization of light using LASER.
19. Millikan's oil drop experiment.
20. Study of Holography.

\*\* Any 10 experiments will be conducted relevant to theory course.

#### COURSE OUTCOMES

On completion of the course, student will be able to

CO1- Identify and classify different rock forming minerals

CO2- Identify and classify various Igneous, Sedimentary and metamorphic rocks.

CO3- Interpret and differentiate between different fossil groups for reconstructing paleoenvironment of the studied rocks.

CO4- Analyse the structural maps and evaluate the structural deformation in the map area;

CO5- Correlate the rock types and geological structures with the some aspects of petroleum systems

#### END SEMESTER EXAMINATION QUESTION PAPER PATTERN

Max. Marks: 100

PART A: 10 Questions of 2 marks each-No choice

PART B: 2 Questions from each unit with internal choice, each carrying 16 marks

Exam Duration: 3 Hrs.

20 Marks

80 Marks