

20PEB328P					Petroleum Product Testing Practical					
Teaching Scheme					Examination Scheme					
L	T	P	C	Hrs/Week	Theory			Practical		Total Marks
					MS	ES	IA	LW	LE/Viva	
0	0	2	1	2	-	-	-	50	50	100

**COURSE OBJECTIVES**

- To have the engineering knowledge of liquid petroleum products and their related repercussions.
- To analyse the problem related to storage, transportation and use of petroleum products.
- To recognize the design aspects related to distillation methods.
- Properties determination of the petroleum product properties and Understanding the petroleum product aromatic properties.

**Week 1:** Determination of Acid number of Fossils Oil Samples

**Week 2:** Determination of percentage purity of refinery products by Auto Distillation Apparatus.

**Week 3:** Determination of viscosity of a sample by Say Bolt Viscometer

**Week 4:** Determination of Smoke point and find the Luminosity Number of given samples.

**Week 5:** Determination of Calorific value of Coal, Lignite and Oil samples of different formation by Bomb Calorimeter.

**Week 6:** Determination of Flash & fire point of Refinery Products by semi-automatic Pensky & Martin apparatus.

**Week 7:** Determination of Flash & fire point b of Refinery Products by Cleveland open cup apparatus.

**Week 8:** Determination of Cloud point and Pour point of given samples.

**Week 9:** Determination of Aniline Point of a given samples of Refinery products

**Week 10:** Determination of Diesel Index of given samples

**Week 11:** Determination of Cetane Number of given samples of Refinery Products.

**Week 12:** Determine the moisture content of the given liquid fuel sample using dean and stark apparatus

**Week 13:** Determine the saponification value of given oil sample

**COURSE OUTCOMES**

On completion of the course, student will be able to

CO1: Preparing them to understand the experiments related to Midstream sector of oil and Gas refinery

CO2: Estimate the calorific value of crude oil sample by Bomb Calorimeter

CO3: Examine the flash and fire point of diesel and Kerosene oil.

CO4: Estimate the aniline point of refinery products to confirm the organic contents

CO5: Understand the Quality Assurance issues as per requirements of the industry practices.

CO6: Assess the distillation characteristics of refinery products such as gasoline, diesel & Kerosene by auto distillation apparatus.

**END SEMESTER EXAMINATION QUESTION PAPER PATTERN**

**Max. Marks: 100**

**PART A:** Evaluation Based on the class performance and Laboratory book

**PART B:** Viva Examination based conducted experiments

**Exam Duration: 3 Hrs**

**50 Marks**

**50 Marks**