


Name:			
Enrolment No:			
UNIVERSITY OF PETROLEUM AND ENERGY STUDIES End Semester Examination, December 2022			
Course: Petroleum Refining and Petrochemical Technology Program: B. Tech CE + RP Course Code: CHGS 3013 P		Semester: V Time : 03 hrs. Max. Marks: 100	
Instructions:			
SECTION A (5Qx4M=20Marks)			
S. No.		Marks	CO
Q 1	Compare isomerization and reforming.	4	CO4
Q 2	Distinguish between fire point and smoke point.	4	CO2
Q 3	Write briefly about the catalysts used in cracking.	4	CO2
Q 4	Differentiate between thermal cracking and coking.	4	CO3
Q 5	Define thermosetting and thermoplastics.	4	CO4
SECTION B (4Qx10M= 40 Marks)			
Q 6	Describe conventional Vis breaking process with the help of a neat flowsheet. Mention all the units present along with the products	10	CO1
Q 7	Describe sweetening of natural gas with a neat flowsheet.	10	CO4
Q 8	Explain any one of the following processes in detail, with a neat flowsheet. a) Hydrocracking or (b) Ammonia manufacturing	10	CO3
Q 9	Describe the structure of petrochemical industry with the help of a flowchart.	10	CO3
SECTION-C (2Qx20M=40 Marks)			
Q 10	Discuss the objective and process of FCC, with a neat flowsheet.	20	CO4
Q 11	Describe the manufacturing process of methanol from syngas, with a neat flowsheet.	20	CO4