

Name:	
Enrolment No:	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May 2022

Course: IT for Petroleum Refining and Petrochemical
Program: B.Tech. CS-OGI
Course Code: CSOG3005
Marks: 100
Instructions: The QP contains 2 pages

Semester: VI
Time : 03 hrs.
Max.

SECTION A (5Qx4M=20Marks)			
S. No.	Write short notes on the following [30-40 words]	Marks	CO
Q 1	Identify the different components of GIS.	4	CO1
Q2	Illustrate the types of Satellite.	4	CO1
Q3	Derive different types of EOR.	4	CO2
Q4	Differentiate between Hydro-skimming & Conversion refining.	4	CO3
Q5	Identify the working of PLC.	4	CO2

SECTION B (4Qx10M= 40 Marks)			
	All questions are compulsory [100-150 words]	Marks	CO
Q6	Identify and explain the Thermal EOR Process	10	CO3
Q7	Describe the process of zerobottom refinery	10	CO2
Q8	Analyze the concept of Digital Oil field	10	CO4
Q9	Elaborate on the concept of Agent Based Modelling. Or Identify & explain the key MES integration components	7+3 Or 7+3	CO4

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SECTION-C
(2Qx20M=40 Marks)

	Q10 is compulsory and choose any 1 question from Q11 [200+ words]	Marks	CO
Q 10	For a petrochemical refinery you have been assigned to design an MES. Please design a prototype component.	20	CO5
Q11	For the same above scenario please design the component architecture of the GIS system. OR Identify and implement the network architecture for the above given scenario. You need to also identify and justify the different protocols being used.	20	CO5