

Name:

Enrolment No:



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Sem Examination, Dec 2023

Program Name: B.Tech AI/ML

Semester : VII

Course Name : Information Technology for E&P, Refining & Petrochemicals Time : 3 hr

Course Code : CSOG4004P

Max. Marks : 100

Nos. of page(s) :1

Instructions: All Questions are compulsory

SECTION A

(5Qx 4M = 20 Marks)

S. No.	Write short notes on the following [30-40 words]	Marks	CO
Q 1	Identify 5 important IT technologies in Upstream sector.	4	CO1
Q2	Explain the concept of layers in GIS	4	CO1
Q3	Explain the working principle of PLC	4	CO2
Q4	Identify the different types of faults	4	CO3
Q5	Describe ANN in refining	4	CO2

SECTION B

(4Qx10M = 40 Marks)

	All questions are compulsory. Q9 has internal option [100-150 words]	Marks	CO
Q6	Explain the block diagram of PLC architecture	10	CO3
Q7	Identify the importance of Gravimeter	10	CO2
Q8	Analyze the requirement of GIS in Upstream process.	10	CO4
Q9	Explain in detail the architecture of Telemetry. OR Explain the block diagram of SCADA software architecture.	10	CO4

SECTION-C

(2Qx 20M= 40 Marks)

	Q10 is compulsory and choose any 1 question from Q11 [200+ words]	Marks	CO
Q 10	Enumerate and analyze the different application of GIS in Oil and Gas industry.	5+15	CO5
Q11	Analyze in detail how SCADA is applied in Upstream & Downstream sector. OR Identify & explain the working principle of an antenna.	20	CO5