


Name:			
Enrolment No:			
UPES, End Semester Examination, May 2024			
Course: Well intervention and stimulation techniques		Semester: II	
Program: M Tech Petroleum engineering		Time: 03 hrs.	
Course Code: PEAU 7008		Max. Marks: 100	
Instructions: Attempt all questions. There is internal choice in Q8 and Q11.			
SECTION A (5Qx4M=20Marks)			
S. No.		Marks	CO
Q1	Describe the function of stripper in coil tubing unit.	4	CO1
Q2	Name four types of mechanical jobs performed by workover rigs?	4	CO1
Q3	Define the role of proppants in hydraulic fracturing.	4	CO1
Q4	Describe in brief the difference between matrix and fracture acidization?	4	CO1
Q5	List five reservoir related problems encountered in a producing well?	4	CO1
SECTION B (4Qx10M= 40 Marks)			
Q6	Explain what is backpressure on formation? Examine how it is generated and evaluate the remedies to improve production in such scenario.	10	CO2
Q7	Discuss various methods of paraffin removal from an oil well?	10	CO2
Q8	Distinguish between sweet and sour corrosion? OR Explain the difference between pour point and cloud point of crude oil?	10	CO3
Q9	Discuss various ways of minimizing corrosion of oil and gas wells.	10	CO3
SECTION-C (2Qx20M=40 Marks)			
Q10	With a suitable diagram explain how coiled tubing can be used to clean the well. OR With a suitable diagram, describe the mechanism of hydraulic fracturing of sub surface rocks.	20	CO4
Q11	Draw suitable diagram to illustrate the configuration of slickline on well head. Discuss four well intervention jobs done by slick line.	20	CO5