


Name:			
Enrolment No:			
UNIVERSITY OF PETROLEUM AND ENERGY STUDIES End Semester Examination, May 2022			
Course: Well Intervention and Stimulation Techniques Program: M.Tech (PE) Course Code: PEAU 7008		Semester: II Time: 03 hrs. Max. Marks: 100	
Instructions: All questions are compulsory			
SECTION A (5Qx4M=20Marks)			
S. No.		Marks	CO
Q 1	Explain the following work over fluid (i.) Solids-laden fluids (ii.) Solids-free fluids	4	CO1
Q 2	Write short note on continuous-flow gas lift.	4	CO1
Q 3	Summarize the work over fluids and their functions.	4	CO2
Q 4	Differentiate between wellbore temperature and crystallization temperature	4	CO2
Q 5	Discuss the scraper construction and their operation in well intervention process.	4	CO2
SECTION B (4Qx10M= 40 Marks)			
Q 6	Write detailed notes on the following water flooding control method (i.) Gel type chemical solution (ii.) Polymer flooding OR Discuss the following Squeeze techniques in detail (i.) Running squeeze (ii.) Hesitation squeeze	10	CO1
Q 7	Explain the following packers in detail (i) Permanent packers (ii) Retrievable packers	10	CO2
Q 8	Illustrate the concept of well activation and their applications.	10	CO3
Q 9	Write detailed notes on chemical and mechanical paraffin and scale removal technique.	10	CO3
SECTION-C (2Qx20M=40 Marks)			

Q 10	Write detailed notes on following work over fluids (i) Water-based fluid (ii) Acid-soluble fluid (iii) Oil-in-water emulsion (iv.) Oil-based fluid	20	CO3
Q 11	Critically evaluate hydraulic fracturing with their treatment and orientation. OR Evaluate various types of acidizing technique and their applications .	20	CO4