

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES

End Semester Examination, December 2021

Course : Introduction to Petroleum Operation

Semester : 7th

Program : B.Tech (Geo Science Engineering)

Time : 03 hrs

Course Code : PEAU2002P

Max. Marks : 100

Nos. of page(s) : 01

Instructions: Attempt all the questions.

SECTION A

S. No.	Statement of questions	Marks	CO
Q 1	Listed the components of wellhead assembly to control an oil well	4	CO1
Q 2	Write the types of drilling bits used in drilling a well.	4	CO1
Q 3	Listed the components of rotary drilling rig.	4	CO2
Q 4	Discuss the importance of geological and geophysical methods.	4	CO2
Q 5	Write the importance of wireline logging method.	4	CO3

SECTION B

Q 6	Listed the different types of logging tools used in oil industry for the formation evaluation with their applications.	10	CO3
Q 7	Differentiate between spherically focused log and micro-spherically focused log.	10	CO3
Q 8	Write the types of stimulation techniques used to enhanced the productivity of oil well and explain one of them.	10	CO4
Q 9	Discuss the importance of perforation in oil well. Write the methods are available to perforate a well	10	CO5

SECTION-C

Q 10	Write the different types of artificial lifts used in oil industry. Explain the sucker rod pump with their merits, demerits and uses with suitable diagram. OR Elaborate each component of vertical heater treater with the suitable diagram. Also compare the vertical and horizontal heater treater.	20	CO4
Q 11	The group gathering stations (GGSs) are important part of production operations, Explain the step by step refining processes performed at GGSs. OR Write the modes available to transport the crude oil to refinery. Explain the problems occur during the transportation of crude oil.	20	CO5