

Name:
Enrolment No:



UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December- 2021

Course: Introduction to Petroleum Operations
Program B. Tech: APE (Gas)
Course Code: PEAU2002

Semester: III
Time: 03 hrs.
Max. Marks: 100

SECTION A

- 1. All questions are compulsory**
- 2. Each question carries 4 marks**
- 3. Assume suitable and necessary data if required and Justify**

Q 1	What are the stages in formation of crude oil?	4	CO1
Q 2	How formation fluids are kept out of annulus during drilling operations	4	CO2
Q 3	What is the primary purpose of surface casing string?	4	CO3
Q 4	What are Onshore and Offshore installations?	4	CO5
Q 5	Why sulfur is objectionable in petroleum products ?	4	CO5

SECTION B

- 1. All questions are compulsory**
- 2. Each question carries 10 marks**
- 3. Assume suitable and necessary data if required and justify**

Q 6	What are the different geochemical parameters used to study the crude oil?	10	CO1
Q 7	Explain productivity evaluation based on mud logging and well logging data.	10	CO3
Q 8	Discuss about different types of well completions and their advantages and disadvantages.	10	CO3
Q 9	Explain in detail the working of sucker rod pumping system and its components with neat sketch.	10	CO4

SECTION C

- 1. Answer All Questions**
- 2. Each Question carries 20 Marks.**
- 3. Assume Suitable and necessary data if required and Justify**

Q 10	Describe with neat sketch the working of horizontal and a vertical separators. Discuss in detail various factors affecting the separation.	20	CO5
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Q 11	a. Name different unit operations along with their applications in surface petroleum operations and refinery operations. b. Compare different modes of transportation of petroleum products.	10+10	CO6
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