Name: Enrolment No:



### UNIVERSITY OF PETROLEUM & ENERGY STUDIES End Semester Examination – Dec- 2024

Program: MBA Oil & GAS Subject/Course: Oil &Gas Storage and Transportation

Course Code: OGOG 8007

Semester: III Max. Marks: 100 Duration: 3 Hours

#### SECTION- A Each Question will carry 2 Marks S.No. **Question** Q.1 1. Write the three segments included in Mid-Stream Oil & Gas CO<sub>1</sub> 2. Write the two segments included in Downstream Oil & Gas **Q.2** 1. Mention two critical factors considered in petroleum gas storage. **CO1** 2. Explain why site selection is crucial for oil and gas storage facilities. 1. List two common modes of transporting crude oil. 0.3 2 Why is inventory management essential in oil and gas operations? MCQ: Which of the following companies are not Integrated Oil & Gas Companies 1. Vedanta Limited Q.4 2. ONGC **CO1** 3. Oil India Limited 4. Petronas 5. Petronet LNG 1. What is the role of safety measures in the storage of petroleum products? **CO1** Q.5 2. Describe a risk associated with transporting LNG. Oil companies carry out functions independently but overall framework in **CO1** Q.6 which they have to operate in a country is governed by \_ For moving large volumes of oil and gas across the country, availability of **CO1** Q.7 adequate is necessary.

Q.8	<ol> <li>List two common methods for storing natural gas.</li> <li>Define "inventory turnover" in the context of oil and gas inventory management</li> </ol>	CO1
Q.9	One of the serious problems in pipeline transportation of crude oil is	CO1
Q.10	<ol> <li>Artificial lift in a production well is used for</li> <li>Workover operations are meant for</li> </ol>	CO1

# SECTION- B Each Question will carry 5 Marks

Q.1	Describe the various oil & Gas production facilities at a typical oil field.	CO2
Q.2	Describe the followings storage concepts  1. FSO  2. FSU  3. FDPSO  4. FLNG  5. CTF	CO2
Q.3	Describe <i>Syncrude</i> and the challenges faced in production and transportation of Heavy Oil/Tar sands. What are the remedial technologies in use?	CO2
Q.4	Give an overview of Gas Production Management: Initial gas treatment and gas processing operations.	CO2

# SECTION- C Each Question will carry 10 Marks

Q.1	National Monetization Pipeline is a scheme aimed at "structured contractual partnerships" as against "privatization or slump sale of assets."  Describe the philosophy of the above statement and what are the priority pipelines segments identified under NMP scheme and their projected revenue targets?	CO3
-----	---	-----

Q.2	Road transportation covers last mile journey to the end user. Describe various aspects of oil movement by road through tank trucks (TT) covering loading/unloading, safety precautions, contracts, bridging, major issues faced by oil companies etc.	CO3
Q.3	Attempt any one of the following:  Oil companies own and operate pipelines for transportation of crude and petroleum products. Explain advantages of using pipelines, types of pipelines, pumping sequence for products, interface handling, major issues faced by oil companies etc. Name few product pipelines  OR  Describe the market size of crude handling from Indian ports, the major ports on Indian coast, SPM its product transfer Components system.	CO3

#### **SECTION- D**

### Each Question will carry 15 Marks

Q.1	<ol> <li>Describe the role of IMO. Describe the significance of <i>Cabotage Law</i> and its adoption by India.</li> <li>Describe MARPOL CONVENTION 1983 and its objectives.</li> </ol>	CO4
	3. Describe World Scale (WS) and ATRS with respect to Tanker freight, what does WS100 and WS80 mean?	
Q.2	Attempt any one of the following:  Describe the Multi Product pipelines and the give the examples of Indian sector. Describe <i>Diffusion Theory</i> for Interface generation and handling. Describe the business significance of <i>Langeled Pipeline</i> between North Sea and UK.	CO4
	OR	
	Describe the history of Railroad transportation of crude oil in USA, its relation to Bakken Shale and compare the multi-mode transportation of petroleum sector between India and USA. Also, highlight the transportation safety and environmental impact concerns of Rail Road method.	