


<b>Name:</b> <b>Enrolment No:</b>			
<b>UNIVERSITY OF PETROLEUM AND ENERGY STUDIES</b> <b>End Semester Examination, May 2025</b>			
<b>Course:</b> MBA OG <b>Program:</b> Understanding Natural Gas Business <b>Course Code:</b> OGOG 7011		<b>Semester:</b> II <b>Time:</b> 03 hrs. <b>Max. Marks:</b> 100	
<b>Instructions:</b>			
<b>SECTION A</b> <b>10Q x2 M=20 Marks</b>			
S. No.		Marks	CO
Q 1	Fill in the blanks (i) 1.0 cubic meter of Gas Hydrate releases ..... cubic meters of natural gas (ii) What is the proposed length of PS-2 pipeline?	2	CO1
Q 2	Name the two natural gas fields in middle east.	2	CO1
Q 3	The bi-products from natural gas processing are.....	2	CO1
Q 4	What is a Slug Catcher and its use in pipeline transportation?	2	CO1
Q 5	Which from the following is the dominant component of natural gas? a. Oxygen b. Hydrogen c. Methane d. Nitrogen	2	CO1
Q 6	Define a Gas Pool Account?	2	CO1
Q 7	What is the chemical formula of Diethanol amine (DEA) and its use in gas industry?	2	CO1
Q 8	Name the five LNG companies in India.	2	CO1
Q 9	What is the use of mono ethylene glycol and its chemical formula?	2	CO1
Q 10	Name the JV partners of Atlantic LNG.....	2	CO1
<b>SECTION B</b> <b>4Qx5M= 20 Marks</b>			
Q 1	Describe the Natural gas Composition and its phase behavior. Also, describe <i>Dry- and Wet-Gas Phase Behaviors</i> .	5	CO2

Q 2	Describe Shale potential of North America L48) and compare with Shale exploration in Indian Basins	5	CO2
Q 3	Describe the India CBM gas-pricing scenario and its challenges.	5	CO2
Q 4	Describe the south American gas markets- the producing nations and the gas infrastructure for increasing share of natural gas in energy basket.	5	CO2
<b>SECTION-C</b> <b>3Qx10M=30 Marks</b>			
Q 1	Choose one major gas field (India or global) and summarize the followings: 1. Location and size (Remaining reserves) of the gas field. 2. Strategic significance and associated gas markets 3. Project cost and future challenges	10	CO3
Q 2	Describe the full “LNG value chain” and components of the LNG project Hammerfest.	10	CO3
Q 3	Describe the “Gas to Wire “technology and its main consideration for monetizing stranded gas. How does it compare with GTL?	10	CO3
<b>SECTION-D</b> <b>2Qx15M= 30 Marks</b>			
Q 1	Describe the domestic gas pricing mechanism and oil indexation. Summarize the main recommendations of Rangarajan committee for gas pricing and subsequent recommendations by Kirit Parikh committee.	15	CO4
Q 2	Describe in details “ <b>Project Structure, Cost, and Financing of LNG projects</b> ”. Compare the project cost components for two LNG projects: <i>Algeria II and Pac Indonesia</i>	15	CO4