



PRESIDENCY UNIVERSITY

BENGALURU

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Mid - Term Examinations - March 2026

Date: 12-03-2026

Time: 02:00pm - 03:30pm

School: SOE	Program: B.Tech.-PET		
Course Code: PET2018	Course Name: Integrated Field Development and Planning		
Semester: VI	Max Marks: 50	Weightage: 25%	

CO - Levels	C01	C02	C03	C04	C05
Marks	26	24	-	-	-

Instructions:

- (i) Read all questions carefully and answer accordingly.
- (ii) Do not write anything on the question paper other than roll number.

Part A

Answer ALL the Questions. Each question carries 2marks.

5Q x 2M=10M

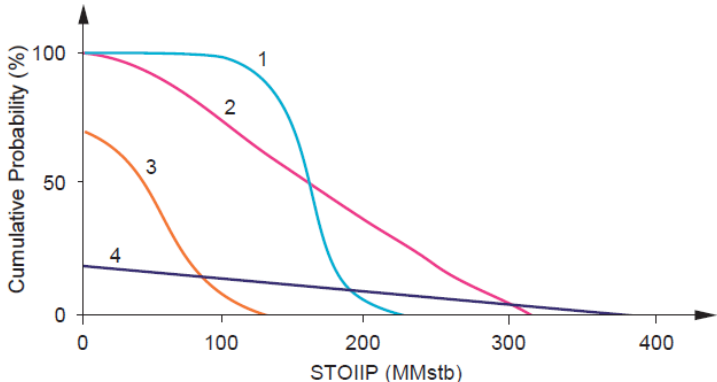
1	State meaning of "Spudding of a Well" and "Economic lifetime of well".	2 Marks	L1	C01
2	List out the Category-II sedimentary basins.	2 Marks	L1	C01
3	State two responsibility of DGH.	2 Marks	L1	C01
4	State how we represent various nodes on a decision tree and their significance.	2 Marks	L1	C02
5	Define Wild Cat Drilling. Mention its role in O&G industry.	2 Marks	L1	C02

Part B

Answer the Questions.

Total Marks 40M

6.	a.	Explain the role of a Field Development Plan (FDP) in the planning and development of an oil and gas field. Describe how the FDP functions as a conceptual project blueprint, facilitating communication and decision-making among stakeholders. Describe the key activities that follow FDP approval, culminating in the commencement of production.	10 Marks	L2	CO1
Or					
7.	a.	NELP was introduced to promote private and foreign investment in India's oil and gas sector. Compare its key features with the policies that existed before its implementation. HELP replaced NELP with a more investor-friendly framework. Discuss the major differences between the two policies.	10 Marks	L2	CO1
Or					
8.	a.	Describe the Open Acreage Licensing Process within India's hydrocarbon exploration framework, outlining the sequential steps investors follow, from studying potential blocks and submitting Expressions of Interest (EOI) to engaging in the bidding process.	10 Marks	L2	CO1
Or					
9.	a.	Describe the key phases of the production period in an oil and gas field. Reducing operating costs and increasing hydrocarbon throughput are two methods used to defer field decommissioning. Explain their impact on project longevity.	10 Marks	L2	CO1
Or					
10.	a.	Compute the cost-benefit calculation of an appraisal well using a decision tree approach, considering factors such as drilling costs, potential reserves confirmation, economic viability, and associated uncertainties.	10 Marks	L2	CO2
Or					
11.	a.	Describe the cost-benefit calculation during the appraisal phase of hydrocarbon exploration using a decision tree. Explain how different decision points (e.g., resource evaluation, financial feasibility, and risk assessment) impact the final investment decision. Based on your decision tree, summarize under what conditions a project should proceed to full-field development or be abandoned.	10 Marks	L2	CO2
Or					
12.	a.	Estimate the role of appraisal well A in reducing uncertainty in STOIP estimation using the expectation curve. Explain how the expectation curve quantifies uncertainty and interpret the changes in high (H), medium (M), and low (L) cases based on different outcomes of well A (oil-bearing or water-bearing).	10 Marks	L2	CO2
Or					

13.	a.	<p>Describe the significance of the expectation curve in the discovery phase of a reservoir.</p> <p>Compare and contrast the characteristics of curves 1, 2, 3, and 4 in terms of risk and resource estimation confidence.</p> 	10 Marks	L2	CO2
		<p>Figure Types of expectation curve.</p>			