

Name:

Enrolment No:



End Semester Examination, May 2023

Course: BASIN ANALYSIS

Program: M.Sc. Petroleum Geoscience

Course Code: PEGS 7033

Semester: II

Time: 03 hrs.

Max. Marks: 100

Instructions: Draw correct diagram whenever requires

**SECTION A
(5X4=20Marks)**

S. No.		Marks	CO
Q 1	Discuss about Divergent Margin Basins, and Convergent Margin Basins.	4M	CO1
Q 2	Write about Cratonic Basins.	4M	CO2
Q 3	Explain Stratigraphic Basin Modeling.	4M	CO3
Q 4	Define Forward and Reverse Modeling with diagram.	4M	CO3
Q 5	Mention the significance of sequence stratigraphy studies.	4M	CO2

**SECTION B
(4Qx10M= 40 Marks)**

Q 6	Discuss about Cambay Basin, in terms of (i) Petroleum System, (ii) tectonic history of the basin	5M + 5M	CO2
Q 7	Elaborate (a) aggradation, (b) progradation, (c) retrogradation.	10M	CO3
Q 8	Explain the concept of Facies Analysis and Sedimentary Process Response Deltaic Environmental Interpretation.	10M	CO4
Q 9	Discuss the Concept of (a) Subsurface Mapping, (b) Cross Section. OR Discuss about Structural Maps and cross sections.	10M	CO4

**SECTION-C
(2Qx20M=40 Marks)**

Q 10	(a) Analyze the Concept of Basin modeling. (b) Structural modeling, introduction of lithostratigraphic modeling	10x2 =20 M	CO5
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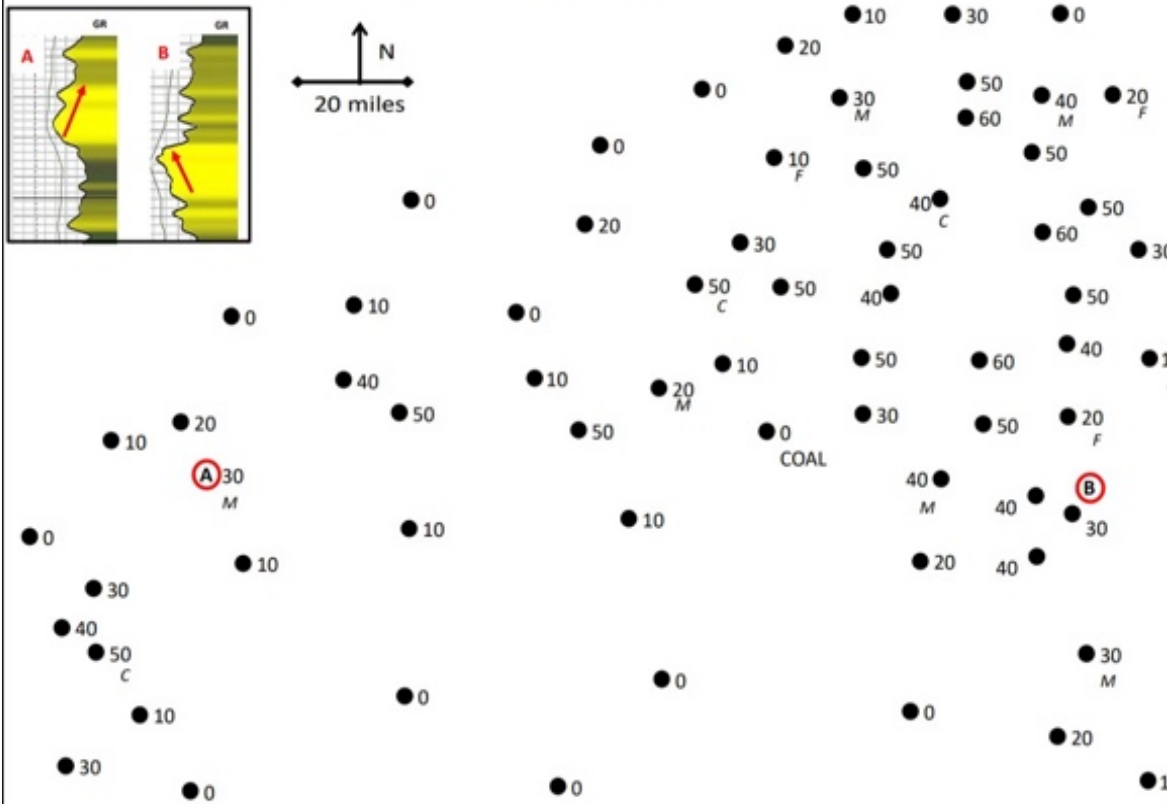
Q 11

- (a) Discuss about Paleogeographic modeling.
- (b) Elaborate the Palaeobathymetry and Sea Level Variation processes.

CO5

OR

Draw Isolith contours for following thickness map



20M