Name:

Enrolment No:

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2024

Course Name: M.Sc. Applied Geology **Semester:** I

Program: **Fossil Fuels and their Applicable, Stratigraphy and Palaeontology** **Time: 3** hrs.

Course Code: PEAG-7005 **Max. Marks:** 100

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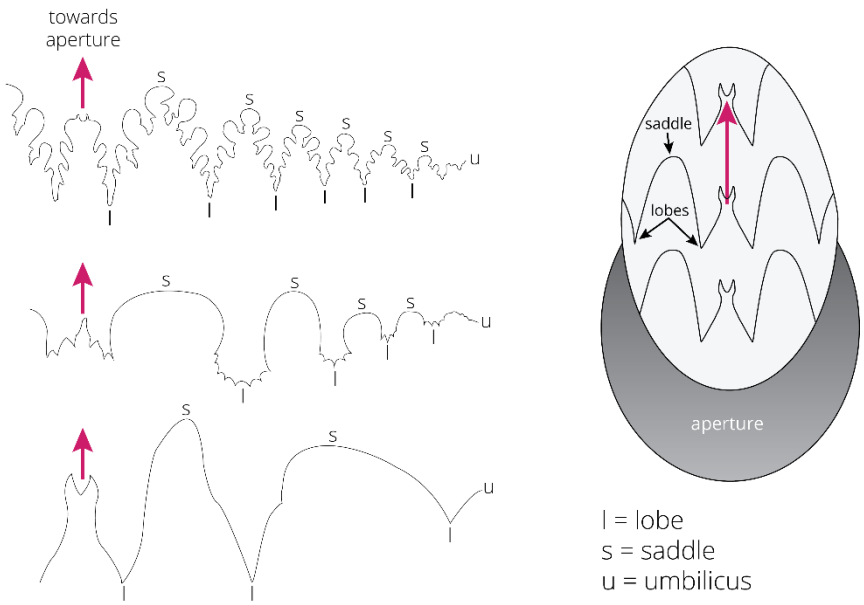
Instructions

I. All questions are compulsory.
II. Read the questions carefully and write the appropriate answers.
III. Write the correct unit after numerical calculation.
IV. Use a neat diagram with proper labeling to explain the answer.

SECTION A (5Qx4M=20Marks)

S. No.		Marks	CO
Q 1	State the principle of superposition and different laws of stratigraphy.	**4**	**CO1**
Q 2	Illustrate the different lithostratigraphic units.	**4**	**CO1**
Q 3	Discuss the types of fossil preservation with examples each type.	**4**	**CO3**
Q 4	Define an Index Fossil and its use in stratigraphy.	**4**	**CO3**
Q 5	Give the list of characteristic fossils that evolved in the Palaeozoic, Mesozoic, and Cenozoic Eras.	**4**	**CO4**
SECTION B (4Qx10M= 40 Marks)			
Q 6	Discuss the characteristic features of the Mesozoic Era in the domains of lithosphere, hydrosphere, atmosphere, biosphere, and tectonics. OR Explian the taphonomy. Give the main taphonomic attributes and processes.	**10**	**CO2**
Q 7	Discuss the Palaeo-biogeographic Implications of Fossils. Give one example each from the animal and plant kingdom.	**10**	**CO2**
Q 8	Explian the functional adaptations recorded in the Ammonoids.	**10**	**CO2**

Q 9	 Identify the above-mentioned suture patterns found in the ammonites and name each one of them. Briefly write about the different chamber shapes of ammonoid shells.	**10**	**CO2**
SECTION-C (2Qx20M=40 Marks)			
Q 10	Describe in detail the stratigraphy of the Cuddapah and Vindhyan Supergroup.	**20**	**CO4**
Q 11	List different types of microfossil collections and provide the classification of acritarchs with a diagram. OR Classify the Foraminifera Loeblich and Tappan (1964). Briefly describe the classification of foraminifera based on their morphology/wall structure.	**20**	**CO4**