Name:

**Enrolment No:** 



## **UPES**

## **End Semester Examination, December 2023**

Course: Introduction to Geology Semester: III

Program: B.Tech APE(Upstream) Time : 03 hrs.
Course Code: PEGS2012 Max. Marks: 100

**Instructions: Draw suitable sketch wherever necessary** 

## SECTION A (5Qx4M=20Marks)

Q 1	Define Index fossil and its significance	04	CO1
Q 2	Define unconformities and its types	04	CO1
Q 3	Classify igneous rocks with respect to their mineral composition	04	CO2
Q 4	Differentiate between lineation and foliation.	04	CO3
Q 5	Describe Turbidites and its importance	04	CO2

## SECTION B (4Qx10M= 40 Marks)

Q 6	Fossils are an important tool in rock dating-Defend the statement	10	CO5
Q 7	Explain the various modes of fossil preservation.	10	CO3
Q 8	<ul> <li>a. Define Lehman discontinuity</li> <li>b. Explain Mid-oceanic ridge</li> <li>c. Differentiate between oceanic and continental crust</li> <li>d. Define hinge of fold</li> <li>e. Messa VS Butte</li> </ul>	10	CO2
Q 9	The formation of meanders leads to the formation of Ox-Bow lakes- Analyze the same and give suitable conclusion.  OR  Organize the erosional features by wind corresponding to its different stages/ modes of erosion.	10	CO4

	SECTION-C (2Qx20M=40 Marks)				
Q 10	Collision of two plates lead to the formation of subduction zones. Is it true always? Support/ argue with proper justification.	20	CO5		
Q 11	Deltas are one of the prolific sites of hydrocarbon deposition. Validate the statement with suitable example.				
	OR	20	CO4		
	Explain Oozes in detail and assess their role in indicating thermal maturity of sedimentary rocks.				