

Name:

Enrolment No:



UPES

End Semester Examination, December 2024

Programme Name: B. Tech APE

Course Name : Sedimentary and Petroleum Geology

Course Code : PEGS 2002

Nos. of page(s) : 01

Semester : III

Time : 03 hrs

Max. Marks : 100

Instructions:

- I. Attempts all questions from Section A, Section B & Section C.
- II. Use neat and labeled diagram to explain answer where is needed.

SECTION A [Attempt All Questions] -4x5=20 Marks

S. No.		Marks	CO
Q 1	Illustrate the Origin of petroleum.	5	CO1
Q 2	Define Oil Window & Gas Window.	5	
Q 3	Give the sandstone classification based on mineralogical composition.	5	
Q 4	Discuss characteristics of Alluvial fan with its Litholog. OR	5	CO2
	Describe the importance of Porosity and Permeability in Source and Reservoir rocks.	5	

SECTION B [Attempt All Questions] 10X4=40 Marks

Q 5	Describe in detail about marine processes and their role in understanding depositional environments.	10	CO2
Q 6	Write a short notes on : i- Reynold's Number ii- Migration of Hydrocarbon	5+5	CO4
Q 7	Differentiate between clastic and carbonate reservoirs. Explain the petro physical properties of both reservoirs. OR	10	CO3
	Discuss the complete process of hydrocarbon generation, migration and accumulation in petroliferous basin.		
Q 8	Discuss the maturation levels of Organic Matters. OR	10	CO4
	Give the classification of petroliferous basins based on commercial hydrocarbon resources.		

SECTION C [Attempt All Questions] 20X2=40 Marks

Q 9	Discuss in detail about source rock evaluation methods and Organic Matter preservation potentiality in Basin.	20	CO3
Q 10	Discuss the Relative sea level changes. Illustrate the various system tracts and their geological significance in hydrocarbon exploration. OR	20	CO4
	Elaborate the trapping mechanism and different types of petroleum Traps.		