

Name:	
Enrolment No:	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, January 2021

Course: Micropaleontology
Program: M.Sc. Petroleum Geoscience
Course Code: PEGS7007

Semester: I
Time: 03 hrs.
Max. Marks:100

SECTION A

Attempt all questions

Words limit-60

S. No.		Marks	CO
Q 1	What are the most critical factors affecting chronostratigraphic significance in biostratigraphy?	5	CO4
Q 2	Write applications of Diatoms in environmental and earth sciences.	5	CO3
Q 3	Provide your views on fossil assemblage vs. index fossil.	5	CO1
Q 4	Write short notes on morphometric and particle analysis.	5	CO5
Q 5	The advantages of 'microfossils' over 'megafossils' in biostratigraphy and paleogeological reconstruction is/are 1. They can be analysed up to the species level 2. They have facies independence 3. They are restricted vertically but widespread geographically a) 1 only b) 1 and 2 only c) 2 and 3 only d) All of the above	5	CO5
Q 6	Write short notes on geological time scale.	5	CO1

SECTION B

Attempt all questions

Words limit 200

Q 7	What is micropaleontology? Write its application in petroleum exploration.	10	CO1
Q 8	Write short notes on- A. Dinoflagellate B. Acritarch	10	CO2
Q 9	What is palynology? Explain the techniques to interpret the organic matter maturation.	10	CO2
Q 10	Explain the morphology of fossil Foraminifera with its wall structures, composition and chamber growth with suitable diagram.	10	CO4
Q 11	Describe quantitative biostratigraphy with the help of different methods and biostratigraphy events. <p style="text-align: center;">Or</p> Describe stable isotope stratigraphy with application in micro-paleontology.	10	CO5

SECTION-C
Words limit-400

Q 12	<p>Explain Shaw's graphic correlation methods with suitable diagrams. Describe the correlation in different sedimentation rate conditions in two different geological sections.</p> <p style="text-align: center;">Or</p> <p>What is Index fossil? Describe its application in Biostratigraphy. 'Draw Acme zone' correlation of same species at different areas.</p>	20	CO3
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