UPES
End Semester Examination, May 2024

Programme Name: B.Sc. (Hons.) Geology　　　　　　　　　**Semester: II**
Course Name　　: Stratigraphic Principles and Indian Stratigraphy　　**Time: 3hrs**
Course Code　　: PEGS 1019　　　　　　　　　　　　　　**Max. Marks: 100**
Nos. of page(s)　: 02
Instructions:　All questions are compulsory, internal choice is given in Q7, Q9 and Q11.

SECTION A

S. No.		Marks	CO
Q 1	State the Principles of stratigraphy	4	CO1
Q 2	Define magnetostratigraphy and draw magnetic polarity time scale	4	CO2
Q 3	Define Walther's law of facies with suitable diagram	4	CO3
Q 4	Differentiate between absolute and relative age	4	CO1
Q 5	Define stratotype, mention its importance in stratigraphic classification	4	CO1

SECTION B

Q 6	Give the significance of sequence stratigraphy w.r.t the paleogeographic reconstruction.	10	CO2
Q 7	'Stratum is different from Strata'. Give reason and explain the importance of Code of Stratigraphic Nomenclature. **OR** With a brief explanation of each unit give hierarchy of lithostratigraphic units.	10	CO3
Q 8	Describe system tracts and using a proper diagram explain different types of system tracts.	10	CO2
Q 9	Illustrate the geology of Spiti and Trichinopoly **OR** Give a brief account of the stratigraphic division and economic importance of Gondwana rocks	10	CO3

SECTION C

Q10	Differentiate between Shield and Craton. Illustrate the major physiographic and tectonic divisions of the Indian subcontinent, and briefly comment upon the Archaeozoic and Paleozoic stratigraphy of India.	20	CO4

Q11	Give the stratigraphic succession of Kutch and Saurashtra basin and comment upon its status of hydrocarbon exploration. **OR** Explain the concept and need of correlation. Give the Tertiary succession of Siwalik and establish its correlation with the Tertiary succession of Assam.	**20**	**CO4**