Name:

Enrolment No:

UPES
End Semester Examination, December 2024

Course: Fundamental of Geology **Semester: I**
Program: B.Sc. Chem, Physics & Maths. **Time : 03 hrs.**
Course Code: PEGS 1014 **Max. Marks: 100**

Instructions:
1. **All Questions are Compulsory in Sections A, B and C.**
2. **Choices are given in Section B for Question No.7 and in Section C for Question No. 11.**

SECTION A
(5Qx4M=20Marks)

S. No.		Marks	CO
Q 1	State the importance of geology in the development of a nation	**[4M]**	**CO1**
Q.2	Match the Following: 1. Physical Geology — 1. Geologic history of the area through rock records 2. Stratigraphy — 2. Study of rocks 3. Geomorphology — 3. Study of landforms and the processes that shape them. 4. Petrology — 4. Causes & Consequences of natural Earth Processes	**[4M]**	**CO1**
Q.3	Identify the application of chemistry in Geo Sciences.	**[4M]**	**CO1**
Q.4	Explain the term wind attrition.	**[4M]**	**CO2**
Q.5	Distinguish between Bhabar and Tarai	**[4M]**	**CO2**

SECTION B **(4Qx10M= 40 Marks)**			
Q.6	Describe the Planetesimal Hypothesis for the origin of the earth with suitable figure. Also highlight the drawbacks of this hypothesis.	**[8+2M]**	
Q.7	Illustrate the causes for the formation of sedimentary rock. **OR,** Illustrate in detail the agents which bring about metamorphic changes in the rocks.	**[10M]**	**CO3**
Q.8	Discuss the types of unconformities with neat figures.	**[10M]**	**CO4**
Q.9	Demonstrate with neat figures the mechanism of convergent plate boundaries and the associated features that are formed in this type of plate boundaries.	**[10M]**	**CO3**
SECTION-C **(2Qx20M=40 Marks)**			
Q.10	Illustrate the following stratigraphic principles with neat figures: 1. Principle of the order of ssuperposition 2. Principle of uuniformitarianism 3. Principle of original horizontally 4. Principle of llateral ccontinuity	**[5×4= 20M]**	**CO4**
Q.11	Illustrate the classification of folds on the basis of position of axial plane. **OR,** (a) Illustrate the classification of faults on the basis of fault pattern. (b) Analyze the importance of faults.	**[20M]** **[16+4M]**	**CO4**