Name: **Enrolment No:**	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May 2023

Course: Sedimentary Petrology **Semester: II**
Program: B. Sc. Geology **Time : 03 hrs.**
Course Code: PEGS 1011 **Max. Marks: 100**

Instructions: All questions are compulsory in all the sections; however, internal choice is given in Q 11 (Section C).

SECTION A
(5Q × 4M = 20Marks)

S. No.	Question	Marks	CO
Q 1	Infer the conditions or environment under which one mineral replaces the other.	**04**	**CO1**
Q 2	Differentiate among the following: a) Biolithite, b) Biopelmicrite, c) Pelsparite and d) Intrasparrudite	**04**	**CO1**
Q 3	Explain the effects of compaction on sediments.	**04**	**CO2**
Q 4	Explain the difference in shape of particles found in river and beach samples.	**04**	**CO1**
Q 5	List various subtypes of Plannar or Idiotopic Dolomites based on their textures along with suitable diagram.	**04**	**CO2**
	SECTION B **(4Q × 10M = 40 Marks)**		
Q 6	Compare between conditions for replacement, solution activity and recrystallization with examples.	**10**	**CO2**
Q 7	Design a classification scheme for limestones.	**10**	**CO3**
Q 8	Discuss the differences in characteristics of Quartz-arenite and Feldspathic wacke.	**10**	**CO3**
Q 9	Explain about density relationship between sediment laden inflowing water and receiving standing water body and the resulting structures.	**10**	**CO4**
	SECTION-C **(2Q × 20M = 40 Marks)**		
Q 10	Critically examine **factors** that control Porosity and Permeability during diagenesis.	**20**	**CO3**
Q 11	Critically examine **any two** of the following: a. Tectonics and sedimentation. [10] b. System tract and Sequence boundary. [10] c. Organic units of coal (Macerals). [10]	**20**	**CO4**