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Your Roll No.

Sl. No. of Ques. Paper : 2056

GC-3

Unique Paper Code : 32191302

Name of Paper : Sedimentary Petrology

Name of Course : B.Sc. (Hons.) Geology (CBCS)

Semester : III

Duration : 3 hours

Maximum Marks : 75

(Write your Roll No. on the top immediately on receipt of this question paper.)

Attempt any five questions. All questions carry equal marks

1. What is the role of ultimate base level in sedimentation? Describe the source-sink approach during the formation of sedimentary rocks.
2. What is the difference between millimetre and phi scale? Describe the 4 major classes particle size in sediments. Give a brief note on methods used for measuring the grain sizes in sediments.
3. Discuss the critical features of laminar and turbulent flows and the possible transition between the two during sedimentation.
4. What do you understand by lower and upper flow regimes in sedimentation? Explain your answer in terms of bed form stability diagram with neat sketches and key features of bed structures.
5. What are post-depositional structures? Explain your answer with labelled diagrams of three such structures occurring in sedimentary records.
6. Discuss important criteria followed in classification of sandstones. Give a brief description with labelled diagram of sandstones following the scheme of William, Turner, and Gilbert.
7. What are the major components of the carbonate rocks? Discuss the important features of allochemical and microcrystalline limestones.
8. Discuss the key components of mudrocks. What kinds of sedimentary environments favour formation of black shales?