

SET A

B.Sc. (H) Geology (CBCS) Sem-III 2020

Paper-C2, Sedimentary Petrology

Paper Code: 32191302_OC (old course)

Duration: 3 hours

Maximum Marks: 75

Attempt any four questions. All questions carry equal marks.

1. What are the essential features to describe the sedimentary texture. Describe the role of reworking in grain sorting and textural maturity of sediment.
2. What do you understand by the concept of flow regimes in subaqueous flows? Describe the formation of bedforms in coarse sand after grain entrainment and increasing stream velocity. Explain your answer with neat and labelled diagrams.
3. What are the essential components of clastic rocks? Give a brief note on classification of sandstones. How you will differentiate between 'Arenite' and 'Arkose' in thin sections?
4. Describe the key features and significance of (i) Flaser bedding, (ii) Climbing ripples, (iii) Tool Marks, and (iv) Ichnofacies
5. What do you understand by the terms "allochems" and "orthochems" in carbonate sedimentary rocks? Describe the essential conditions required for the formation of biospartite and micritic limestone.
6. Describe the processes required for the formation of (i) Black Shales, (ii) Dolomite and (ii) Graded bedding.