

2023
M.Sc.
First Semester
CORE – 04
GEOLOGY
Course Code: MGLC 1.41
(Sedimentology)

Total Mark: 70
Time: 3 hours

Pass Mark: 28

Answer five questions, taking one from each unit.

UNIT-I

1. Explain the classification of sedimentary structures. 14
2. Write notes on the following: 7×2=14
 - (a) Reynolds number and Froude number
 - (b) Sediment transport

UNIT-II

3. Write an account on classification of sedimentary environment. 14
4. Write notes on the following: 7×2=14
 - (a) Deep sea environment
 - (b) Significance of ichnofossils in depositional environment

UNIT-III

5. Discuss sedimentary basins and their classifications. 14
6. Write notes on the following: 7×2=14
 - (a) Palaeoclimate
 - (b) Basin analyses

UNIT-IV

7. Explain the diagenesis of sandstone. 14
8. Write notes on the following: 7×2=14
- (a) Deep water sedimentation
 - (b) Shallow coastal clastics

UNIT-V

9. Discuss the use of various directional structures in palaeocurrent analysis.
What are the various possible palaeocurrent directions? 14
10. Write notes on the following: 7×2=14
- (a) Provenance determination using heavy minerals
 - (b) Preparation of litho-logs
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