2022

M.Sc.

First Semester

CORE - 04

GEOLOGY

Course Code: MGLC 1.41 (Sedimentology)

Pass Mark: 28 Total Mark: 70

Time: 3 hours

Answer five questions, taking one from each unit.

UNIT-I

1. Define weathering. Discuss in detail the various weathering processes.

14

2. Write notes on the following:

 $7 \times 2 = 14$

- (a) Mechanism of sediment transport
- (b) Concept of flow regime

UNIT-II

- 3. Define the term sedimentary facies. Discuss various sedimentary facies associated with marine environment. 4+10=14
- 4. Write notes on the following:

 $7 \times 2 = 14$

- (a) Deltaic environment
- (b) Arid environment

UNIT-III

5. How does plate tectonics control sedimentation in a sedimentary basin?

14

- 6. Write notes on the following:
- $7 \times 2 = 14$ (a) Tectonics and sedimentation
 - (b) Palaeoenvironment

UNIT-IV

14

7. What are volcaniclastic rocks? Discuss their classification.

8. Write notes on the following: 7×2=14

(a) Shallow water carbonates
(b) Carbonate diagenesis

9. Write notes on the following: 7×2=14

(a) Lithologs
(b) Palaeocurrents

10. Briefly discuss the application of quartz, feldspar and rock fragments in determination of provenance. 14