

**May 2025**  
**M.Sc.**  
**Second Semester**  
**CORE – 08**  
**GEOLOGY**  
*Course Code: MGLC 2.41*  
(Geomorphology & Oceanography)

Total Mark: 70

Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

**UNIT-I**

1. Explain the Davis model of landscape development with illustrations. 14
2. Write a note on each the following: 7×2=14
  - (a) Biological and extra-terrestrial processes
  - (b) Endogenic and exogenic processes

**UNIT-II**

3. Discuss the types and evolution of slopes with suitable illustrations. 14
4. Write a note on each of the following: 7×2=14
  - (a) Hypsometric curve and hypsometric integral
  - (b) Valley-floor width to valley-height ratio

**UNIT-III**

5. Discuss the applications of applied geomorphology in regional planning. 14
6. Write a note on each of the following: 7×2=14
  - (a) Role of geomorphology in mineral exploration
  - (b) Geomorphology as a tool in engineering works

**UNIT-IV**

7. Explain the zones of marine environment and its communities. 14

8. Write a note on each of the following: 7×2=14  
(a) Ocean sediments  
(b) Law of the sea

### UNIT-V

9. Discuss oceanic conveyor belt and its role in global climate change. 14
10. Write a note on each of the following: 7×2=14  
(a) Major water masses of world's ocean  
(b) Coriolis effect and Ekman spiral
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