

2022
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 Penck's model of landscape development. 14
2. Write notes on the following: 7×2=14
 - (a) Landforms form by fluvial process
 - (b) Landforms form by extra-terrestrial process

UNIT-II

3. What is tectonic geomorphology? Explain the geotectonic forces and the relationship between tectonic geomorphology and continental landforms. 4+10=14
4. Write notes on the following: 7×2=14
 - (a) Stream length gradient index (SL index)
 - (b) Mountain front sinuosity.

UNIT-III

5. Explain how geomorphology helps in locating mineral deposits. 14
6. Write notes on the following: 7×2=14
 - (a) Types of settlement pattern
 - (b) Effects of landslide in engineering works

UNIT-IV

7. What are the different types of ocean sediments? Explain the factors affecting and distribution of shelf sedimentation. 7+7=14
8. Write notes on the following: 7×2=14
- (a) Pelagic and benthic organism
 - (b) Ocean floor morphology

UNIT-V

9. Explain in detail the thermohaline circulation and the impact of climate change on circulation. 4+10=14
10. Write notes on the following: 7×2=14
- (a) El Nino
 - (b) Thermocline and pycnocline
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