22I702 (Pages: 2) Name: .....

Reg.No: .....

SEVENTH SEMESTER M.Sc. INTEGRATED GEOLOGY DEGREE EXAMINATION, NOV. 2025

(CBCSS)

(Regular/Supplementary/Improvement)

CC20GLO7IB13 - ADVANCED GEOMORPHOLOGY

(Geology)

(2020 Admission onwards)

Time : Three Hours Maximum : 80 Marks

Credit: 4

(Draw neat sketches, wherever necessary)

Section A

I. Answer in one or two sentences. Answer any ***ten*** questions. Each question carries 2 marks.

1. Climatic effects on geomorpholgy of landscapes.
2. Theories of isostasy.
3. Relief.
4. Define tectonic geomorphology.
5. Fault scarp.
6. Constructional marine terraces.
7. Rectilinear Element of hillslope.
8. Great Indian Desert.
9. Environmental Geomorphology.
10. Salt Pan (inland).
11. Cambisols.
12. Mixed alluvium.

(10 × 2 = 20 Marks)

Section B

II. Write short notes on any ***five*** of the following. Each question carries 8 marks.

13. Analyze the role of hydrothermal vents in shaping ocean basin features.
14. Describe the methods used to measure and document palaeoseismic displacements in the field.

15. Discuss the influence of lithospheric flexure on isostatic adjustments.

16. Explain King's model of slope development.

17. Examine the role of vegetation in stabilizing slopes and preventing mass movements.

18. Translocation processes in soil formation.

19. Major landforms of Kerala.

(5 × 8 = 40 Marks)

Section C

III. Write long essay on any ***two*** of the following. Each question carries 10 marks.

20. Write an essay on various human effects on geomorphic processes.

21. Define long-term deformation and discuss its significance in geomorphology. How does long-term deformation influence landscape evolution?

22. Explain the role of geomorphological mapping in site selection for large infrastructure projects like dams and highways.

23. Wetland functions and ecosystem services.

(2 × 10 = 20 Marks)

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