21I702 (Pages: 2) Name: .....

Reg.No: .....

SEVENTH SEMESTER M.Sc. INTEGRATED GEOLOGY DEGREE EXAMINATION, NOV. 2024

(CBCSS)

(Regular/Supplementary/Improvement)

CC20 GLO7 IB13 - 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. Define geomorphic processess.
2. Theory of uniformitarianism.
3. Terrain.
4. Triangular Facet.
5. Pedeplain.
6. Flexural response.
7. Earth creep.
8. Landslide prevention.
9. Trans Himalaya.
10. Salt Marshes.
11. Organic components.
12. Coastal 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. Explain the process of crustal thickening in tectonic settings.
15. Discuss the role of fault scarps as geomorphic markers and how they provide insights into past seismic events.
16. Briefly explain the classification of hillslopes.

17. List the main geomorphic features of the Himalayan region.

18. Wetland functions and ecosystem services.

19. Soils of arid and semi-arid regions.

(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. Discuss the role of dating techniques in the study of palaeoseismic displacements. How do these methods contribute to constructing a chronological framework for past seismic activity?

22. Explain the models of slope development proposed by Davis, Penck, and King.

23. Coastal geomorphology of Kerala.

(2 × 10 = 20 Marks)

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