

Ex/SC/GEOG/UG/CORE/TH/01/2024

BACHELOR OF SCIENCE EXAMINATION, 2024

(1st Year, 1st Semester)

GEOGRAPHY

PAPER : SC/GEOG/UG/CORE/TH/01

(Geotectonics and Geomorphology)

Time : Two Hours

Full Marks : 50

UNIT—I

(Key Concepts of Geotectonics and Geomorphology)

*Answer **any one** question :*

10×1=10

1. What is half-life period? Difference between absolute and relative dating methods in geological time scale. Write an account of geomorphological characteristics and significance of the Cenozoic Era. 2+2+6
2. Define threshold. Classify equilibrium with suitable sketches. Briefly discuss the system approaches in geomorphology. 2+4+4

GEOG-421

[Turn Over]

(2)
UNIT—II

(Geotectonics and Landforms)

Answer any one question : 10×1=10

3. What do you mean by 'level of compensation'? Elucidate the structure and composition of earth's interior layers with special reference to seismic waves. 2+8
4. Discuss the formation of fracture zone. Explain the characteristics and related landforms of different convergent plate boundaries with suitable diagrams. 3+7

UNIT—III

(Fundamental Principles and Theories of Geomorphology)

Answer any one question : 10×1=10

5. Define primarumpf. Briefly discuss the concept of 'dynamic equilibrium' by J. T. Hack on landscape change. 2+8
6. What is uniformitarianism? Write about the cause of interruption in the cycle of erosion. 'Geologic structure is a dominant control factor in the evolution of landforms and is reflected in them' — elaborate this concept of W. D. Thornbury. 2+3+5

(3)
UNIT—IV

(Geomorphological Processes and Landforms)

Answer any one question : 10×1=10

7. What is denudation? How is the chemical process of hydration different from hydrolysis? Briefly discuss the different fast-moving processes of mass wasting and their resulting landforms with suitable sketches. 2+2+6
8. Distinguish between fault scarp and fault-line scarp. Describe the evolution of drainage network and resultant landforms in a region of folded structure. 3+7

Internal Assessment 10

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