14 (GGY–1) 1026

2021

(Held in 2022)

GEOGRAPHY

Paper : GGY–1026

(Geomorphology)

Full Marks : 80

Time : Three hours

The figures in the margin indicate full marks for the questions.

Unit–I

(Principles and Concepts in Geomorphology)

Marks : 48

*Answer **any two** questions from the following :* 16×2=32

1. State the significance of system approach in Geomorphology. Elaborate the system concept associated with steady state and dynamic equilibrium condition considering steady time, graded time and cyclic time. 4+6+6=16

2. Discuss the development trend of Geomorphology after the Davisian age with special emphasis on the recent developments. 16

3. State the importance of Fluvial Geomorphology as a major branch of Applied Geomorphology. Discuss the relevant techniques applied in fluvio-geomorphic studies. 6+10=16

*Answer **any two** questions from the following :* 8×2=16

4. Explain the concept and techniques of Palaeogeomorphological study. 2+6=8

5. State why the ideas of catastrophism cannot be ruled out in the study of geomorphology. 8

6. Elaborate the threshold concept in geomorphology and show how this concept can be applied to the study of bank erosion processes. 3+5=8

Unit–II

(Processes in Geomorphology)

Marks : 32

Answer Question No. **7** *and* ***any two*** *from the rest.*

7. Describe with diagrams, the aggradational and degradational processes and their resultant features in the flood plain. 8+8=16

Or

Elaborate with examples, how climate and vegetations affect the actions and intensities of geomorphic processes. 8+8=16

8. Explain the slope forming processes leading to development of secondary slopes. 8

9. What is a morphogenetic region ? How do the various types of morphogenetic regions originate ? 2+6=8

10. Write short notes on the following : 4×2=8

    (a) Techniques to study depositional processes in a river

    (b) Ideal slope profile and its slope elements.
