## U.G. 6th Semester Examination - 2023

## GEOGRAPHY [HONOURS]

Discipline Specific Elective (DSE)

Course Code: GEO-H-DSE-T-03A (Fluvial Geomorphology) [New Syllabus under CBCS]

Full Marks: 60

Time:  $2\frac{1}{2}$  Hours

The figures in the right-hand margin indicate marks.

Candidates are required to give their answers in their own words as far as practicable.

- 1. Answer any ten from the followings:  $2 \times 10 = 20$ 
  - a) What is fluvial geomorphology?
  - b) What are the important fluvial processes?
  - c) What is channel pattern?
  - d) Define surface runoff.
  - e) What is neck cutoff?
  - f) What is the Yazoo stream?
  - g) Define point bar.
  - h) What is stream frequency?
  - i) What is gully erosion?

- i) What is meant by watershed?
- k) Identify the relief aspects of drainage basin morphometry.
- 1) What is hypsometric curve?
- m) Give two examples of cuspate delta.
- n) State the major causes of river bank erosion.
- o) What is rainwater harvesting?
- 2. Answer any **four** of the followings:  $5 \times 4 = 20$ 
  - a) State the hydrological properties of a drainage basin.
  - b) Explain the concept of fluvial hydro-system.
  - c) Classify rivers based on channel patterns.
  - d) Distinguish between alluvial fan and alluvial cone.
  - e) Bring out the salient features of the river terraces.
  - f) Mention important management strategies for river bank erosion.
- 3. Answer any **two** from the followings:  $10 \times 2 = 20$ 
  - a) What is base flow? Describe the runoff cycle with suitable diagrams. 2+8=10
  - b) Discuss the linear properties for morphometric analysis of drainage basins.

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- c) Enumerate the depositional landforms in fluvial landscape with suitable diagrams. 10
- d) What are the important strategies of IRBM? Explain the significance of watershed management. 4+6=10