

U.G. 6th Semester Examination - 2024**GEOGRAPHY****[HONOURS]****Discipline Specific Elective (DSE)****Course Code : GEO-H-DSE-T-03A****(Fluvial Geomorphology)****[NEW SYLLABUS under CBCS]**

Full Marks : 60

Time : 2½ 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** of the following: 2×10=20

- a) What is a fluvial hydro-system?
- b) What is meander loop?
- c) What are anastomosing channels?
- d) What is the mid-channel bar?
- e) Identify different types of fluvial terraces.
- f) State Horton's law of stream length.
- g) What is bifurcation ratio?
- h) Draw a point bar and label it.
- i) Define run-off.

[Turn Over]

- j) Where does an alluvial fan form?
- k) What is sheet erosion?
- l) State the formation of arcuate delta.
- m) State the importance of checkdam.
- n) Mention any two examples of badland topography.
- o) What is watershed management?

2. Answer any **four** of the following : $5 \times 4 = 20$

- a) Comment on the approaches to the study of fluvial Geomorphology.
- b) State the factors that control the channel pattern.
- c) Explain the relief aspects of a drainage basin.
- d) Write a short note on the geometry of the braiding channel.
- e) Highlight the formation of river terraces.
- f) Comment on the components of the IRBM approach.

3. Answer any **two** of the following : $10 \times 2 = 20$

- a) Name different components of runoff. Discuss the controlling factors of surface runoff.

$4 + 6 = 10$

- b) Elaborate areal properties for morphometric analysis of drainage basin. 10
- c) Make a classification of the river delta. Describe major erosional landforms in the fluvial landscape. $4 + 6 = 10$
- d) Enumerate major types of bank failure that induce river bank erosion. Comment on the impact of bank erosion on the land use of riparian corridors. $6 + 4 = 10$