

U.G. 6th Semester Examination - 2025**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** of the following: **2×10=20**
- a) What is channel substrate?
 - b) Define discharge.
 - c) Differentiate braided channel from anabranching channel.
 - d) What is wetted perimeter?
 - e) Define hypsometric integral.
 - f) Define strath terraces.
 - g) What is stream ordering?
 - h) What is drainage density?

[Turn Over]

- i) Define drainage basin.
- j) What is overland flow?
- k) What is avulsion?
- l) Differentiate dams from barrages.
- m) What is *neeranchal programme*?
- n) What is watershed?
- o) What is bifurcation ratio?

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

- a) State the fluvial hydrosystem approach to the study of river basin.
- b) Discuss the important morphometric measurements to analyse the shape of the river basins.
- c) Mention different types of accretion and their significance in fluvial landscape development.
- d) Write the significance of different types of hypsometric curves in fluvial geomorphology.
- e) What are the favourable conditions for the formation of alluvial fan?
- f) Identify the important management strategies of river bank erosion.

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

- a) Discuss the linear properties for the morphometric analysis of a drainage basin. 10
- b) Identify the stages of run off cycle. Analyse major determinant factors of run off process. $4 + 6 = 10$
- c) What do you mean by channel pattern? Account for the development of different types of channel pattern. $2 + 8 = 10$
- d) What are the important strategies of IRBM? Explain the significance of watershed management. $4 + 6 = 10$