

U.G. 6th Semester Examination - 2022

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** questions: 2×10=20
- a) What is fluvial hydro-system approach?
 - b) Mention major types of river channel.
 - c) What is *anabranching* river?
 - d) What is channel gradient?
 - e) Define alluvial cone.
 - f) State Horton's Stream law of numbers.
 - g) What is bifurcation ratio?
 - h) What is the drainage basin hydrological cycle?
 - i) Define hypsometric integral.

[Turn Over]

- j) Where does an alluvial fan form?
 - k) What is thalweg?
 - l) Give two examples of badland topography.
 - m) Define check dam.
 - n) What is *Neeranchal* programme?
 - o) State four major objectives of watershed development.
2. Answer any **four** questions : 5×4=20
- a) What are the contemporary approaches of the study of rivers?
 - b) Indicate major controlling factors of the channel pattern.
 - c) Highlight the morphometric attributes of drainage basin.
 - d) Write a short note on geometry of river meander.
 - e) State salient features of river terraces.
 - f) Comment on the strategies of IRBM approach.
3. Answer any **two** questions : 10×2=20
- a) Identify different types of runoff. Analyse major determinant factors of run off process. 4+6=10

- b) Discuss the areal properties for morphometric analysis of drainage basin. 10
- c) Classify delta. Explain different types of delta formation with suitable illustrations.
 $2+8=10$
- d) Bring out the causes of river bank erosion. Discuss major types of bank failure with appropriate sketches. $4+6=10$
-