Geography (P.G.)
[CBCS]
M.Sc. Third Semester End Examination-2023
(Regular & Supplementary Paper)
PAPER-303

Full Marks: 40   **Time: 02 Hrs**

The figures in the right hand margin indicate marks
Candidates are required to give their answers in their own words as
far as practicable
Illustrate the answers wherever necessary

[Use separate answer script for each unit]

Unit 29

[Fluvial Geomorphology]

Full Marks 20

Group A

Answer any one question of the following: **1x8=8**

1. What is meant by sediment transport? Illustrate the various processes of sediment transport in open channel.

2. Illustrate various types of resistance in natural channel.

Group B

Answer any two questions of the following: 2x4= 8

3. Briefly discuss the processes of bank erosion along the rivers.

4. What are the socio-economic impacts of channel shifting?

5. Explain in brief the impact of climate change on river system.

6. Briefly describe in-stream deposition features.

Group C

Answer any two questions of the following: 2x2= 4

7. What is meant by Integrated River Basin Management?

8. Define hydraulic geometry.

9. Define entrainment.

10. What do you mean by suspended load?

Unit 30

[Applied Techniques in Fluvial Geomorphology]

Full Marks 20

Group A

Answer any one question of the following: 1x8=8

1. Explain the field techniques for measuring flow velocities and discharge of a natural channel.

2. Elucidate the techniques for dam site selection and assessing its impact on river system.

Group B

Answer any two questions of the following: 2x4= 8

3. Write down the relationship between bed form geometry and bed material transport.

4. Elucidate the methods and application of shape analysis of a watershed.

5. How do you measure bed load of a river?

6. Write the steps to prepare DEM using GIS.

Group C

Answer any two questions of the following: 2x2= 4

7. What is ellipticity index?

8. What is stage-discharge relationship?

9. What do you mean by river health?

10. What is channel avulsion?