

Roll No.

Total Pages : 2

CMDQ/D-23

5085

FLUVIAL GEOGMORPHOLOGY

Paper–M–GEO–303(iii)

Time allowed : 3 Hours]

[Maximum Marks : 70

Note : Attempt **five** questions in all, selecting **one** question from each unit. Question No. **1** is compulsory. All questions carry equal marks.

Compulsory Question

1. Write short notes (not more than 50 words for each) on the following: 7×2=14

- (i) Drainage pattern
- (ii) Stream Bank erosion
- (iii) Sinuosity
- (iv) Denudation rate
- (v) Paleo flood
- (vi) Bed protection
- (vii) Restoration.

UNIT-I

2. How a watershed is delineated? Explain the watershed variables that could be quantitatively assessed to evaluate fluvial processes. 14

3. Define erodibility. Discuss various factors affecting erodibility with suitable examples. 14

UNIT-II

4. What role floods do play in sediment load transport in a fluvial system? Give examples. 14
5. Classify channels and explain diagrammatically the geometry of bedrock channels. 14

UNIT-III

6. While defining floods according to Central Water Commission, discuss various nonstructural measures of flood management in India. 14
7. How do the different obstructions affect river ecosystem? Explain both the negative and positive effects with suitable examples. 14

UNIT-IV

8. How would you manage river channels? Elaborate citing examples from India. 14
9. How would geomatic tools help in managing fluvial environments? Give a tree diagram using geomatic tools in mapping, monitoring and management of flood plains. 14