

This question paper contains 3 printed pages.]

Your Roll No.

1328

A

B.Sc. (Hons.)/III
GEOLOGY—Paper XII (ii)
(Geomorphology)

(Admissions of 2004 and onwards)

Time : 3 Hours

Maximum Marks : 45

*(Write your Roll No. on the top immediately
on receipt of this question paper.)*

Attempt any five questions.

All questions carry equal marks.

1. What is magnitude-frequency concept? Discuss its importance in geomorphic studies.
2. Discuss any *three* of the followings :
 - (a) Headlands in the coastal areas are more prone to erosion processes
 - (b) Temperate and humid environment conditions are best suitable for development of karst topography

[P.T.O.]

- (c) Esker have sinusoidal shape
 - (d) Levees are formed along river banks
3. What are the major processes responsible for catchment erosion?
Discuss the role of topography on catchment erosion processes.
4. What information about geomorphic processes may be extracted from these any *four* types of valleys :
- (a) V-shaped valley
 - (b) U shaped valley
 - (c) Blind valley
 - (d) Hanging valley
 - (e) Allogenic valley
 - (f) Dry valley

Provide neat sketches to support your answer.

5. Differentiate among any *three* of the followings :
- (a) Rip current and longshore current
 - (b) Creep and flow
 - (c) Davis erosion model and Penck erosion model
 - (d) Alluvial fan and river terrace

6. How different types of dunes can be interpreted to know about the variation in sediment supply and wind direction. Explain with neat sketches.
7. Discuss geomorphic features associated convergent plate margins.
8. What are the major geomorphic classes in the Ganga Plains? How this vast geomorphic setup has evolved?