

This question paper contains 2 printed pages.]

Your Roll No.

1319

A

B.Sc. (Hons.)/II

GEOLOGY—Paper IV

(Principles of Stratigraphy and Sedimentation)

(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. Describe sedimentation in a tidal flat, highlighting the energy conditions and sedimentary packages that is generated in this regime.
2. Explain the following with suitable sketches :
 - (a) Paleosol
 - (b) Turbidite sequence.
3. Differentiate between :
 - (a) Transgressive and Regressive sequences
 - (b) Deltaic and Flood Plain deposits.

[P.T.O.]

4. What geological informations are derived from :
 - (a) Shape and size of the detrital particles
 - (b) Matrix composition in graywackes
 - (c) Insoluble residues in carbonate rocks.

5. Discuss the principles involved in any *two* of the following :
 - (a) Sequence stratigraphy
 - (b) Magnetostratigraphy
 - (c) Biostratigraphy.

6. What are the biological and geochemical parameters used in defining the Proterozoic Cambrian boundry? Where is the stratotype of this sequence located?

7. Describe geological timescale for Cenozoic Era.

8. Discuss any *one* of the following :
 - (a) Diagenesis of Sandstone
 - (b) Sandstone Prorenance.