

This question paper contains 3 printed pages.

Your Roll No.

Sl. No. of Ques. Paper: 2806

GC-4

Unique Paper Code : 32191402

Name of Paper : Stratigraphic Principles & Indian Stratigraphy

Name of Course : B.Sc. (Hons.) Geology

Semester : IV

Duration : 3 hours

Maximum Marks : 75

(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 are cratons? Describe five major Archaean cratons and three prominent Proterozoic mobile belts of Indian shield in brief.***
- 2. Explain the salient features of Proterozoic basins of India. Describe stratigraphy and palaeogeographic setting during Vindhyan sedimentation.***
- 3. Discuss marine incursion during Cretaceous in Cauvery basin. Describe the effect of marine incursion on lithostratigraphic framework and depositional environment of Cauvery basin.***
- 4. Give the classification of Gondwana Supergroup and***

P. T. O.

list the basins where these sediments have been deposited on Indian continent. Also describe the stratigraphic succession of the Godavari basin.

5. Answer any *three* of the following:

- (a) Describe the significance of Intertrappean and bole beds in Deccan Stratigraphy
- (b) Define Sequence Stratigraphy and its application in oil exploration
- (c) Explain the role of lithology and fossil contents in palaeogeographic reconstructions
- (d) Define "Precambrian" and its division with approximate dates.

6. Write short notes on any *three* of the following:

- (a) Application of Walther's Law of Facies in stratigraphy
- (b) Delhi Super Group
- (c) Hadean Rock record on Earth
- (d) Stratigraphy and tectonic setting of Satpura mobile belt.

7. Write notes on any *two* of the following:

- (a) Basis of Permian-Triassic boundary demarcation
- (b) Um Sohryngkew section
- (c) Age of Rajmahal traps and its faunal content.

8. Answer the following:—

- (a) Bombay offshore basin and its hydrocarbon potential
- (b) Classification of Siwalik Group and their depositional environment
- (c) Criterion for demarcation of different lithostratigraphic units.