

GEOLOGY

(Paper I)

Time Allowed : Three Hours

Maximum Marks : 300

QUESTION PAPER SPECIFIC INSTRUCTIONS

(Please read each of the following instructions carefully before attempting questions)

There are EIGHT questions divided in two Sections.

Candidate has to attempt FIVE questions in all.

Question Nos. 1 and 5 are compulsory and out of the remaining, any THREE are to be attempted choosing at least ONE question from each Section.

All questions carry equal marks.

Wherever any assumptions are made for answering a question, they must be clearly indicated.

Word limit in questions, wherever specified, should be adhered to.

SECTION 'A'

1. Explain any three of the following in about 200 words each:
 - (a) Island Arcs
 - (b) Atolls and Reefs
 - (c) Isostasy
 - (d) Unconformities
2. Comment on the classification of folds, Illustrate your answer with neat sketches.
3. Write brief notes:
 - (a) Stalactites and Stalagmites
 - (b) Antecedent drainage
 - (c) Piedmont glacier
 - (d) Yardangs
 - (e) Tombolo
4. Trace the evolution of the Plate Tectonic theory and describe its main features.

SECTION 'B'

5. Answer any three of the following in about 200 words each:
 - (a) Classification of the Gondwanas
 - (b) Cretaceous-Eocene boundary
 - (c) Sausar Group
 - (d) Siwalik sedimentation
6. Draw neat labelled diagrams to illustrate the morphology of Echinoids. Tabulate the distinction between Regular and Irregular Echinoids. Add notes on their distribution in time.
7. Write detailed notes on:
 - (a) Inter-trappeans and their importance in Stratigraphy
 - (b) Himalayan uplift
 - (c) Marine transgression in Permocarboniferous

- 8.** What is Stratigraphy? Discuss the principles of stratigraphic correlation. Also briefly explain the basis of reconstruction of standard stratigraphic scale.