

Roll No. ....

Total No. of Pages : 3

**1(CCEM)0**

**Geology**

**(11)**

**Paper—I**

Time : Three Hours]

[Maximum Marks : 300

- Note** :—
- (i) Answers must be written in English.
  - (ii) All questions carry equal marks.
  - (iii) Part/Parts of the same question must be answered together and should not be interposed between answers to other questions.
  - (iv) The answer to each question or Part thereof should begin on a fresh page.
  - (v) Your answers should be precise and coherent.
  - (vi) Candidates must answer **six** questions in all. Candidates should attempt Question No. **1** which is compulsory and any **five** out of the remaining questions, selecting **one** question from each Section.
  - (vii) If you encounter any typographical error, please read it as it appears in the text-book.

**SECTION–A**

1. Discuss the various absolute and relative dating methods and state briefly how the age of the earth has been determined ? Also explain on the basis of Salinity. 50
2. Describe the various causes of volcanic eruptions. What do you understand by the term 'Ring of Fire' ? Discuss earthquake classification also. 50

3. Write explanatory notes on the following :
- (a) Sea-Floor Spreading
- (b) Origin and growth of Continents. 25×2=50
4. Discuss the various evidences in favour of continental drift and plate tectonics. 50

#### SECTION-B

5. Describe the various geomorphic processes that have shaped the Himalayas. 50
6. Describe the following with suitable illustrations :
- (a) Glacial landscape / Landforms
- (b) Sand Dunes 25×2=50

OR

Discuss the geological work of wind with neat diagrams. 50

#### SECTION-C

7. Discuss the mechanics of folding. Draw neat sketches to illustrate various types of folds. 50
8. Define normal and reverse faults. Discuss the mechanics of reverse faulting and thrust faulting. 50

OR

Discuss stress-strain diagram and secondary lineation with suitable sketches. 50

#### SECTION-D

9. Define fossilisation and describe the various modes of fossil preservation. Also find out significance of fossils. 50
10. Discuss the differences between brachiopods and bivalves with illustrations. 50

OR

Write brief notes on the following :

- (a) Significance of microfossils
- (b) Mammals of Pinjor Formation. 25×2=50

#### SECTION-E

11. Describe the various stratigraphic principles with suitable sketches. Differentiate biostratigraphy from biochronology. 50
12. Discuss the evidences of Cretaceous-Tertiary Boundary event. 50