

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

45

- (a) Age of Deccan Traps
- (b) Mineral Wealth of Archeans
- (c) Cretaceous Tertiary Boundary Problem.

Total No. of Printed Pages : 4

Roll No.

1[CCE.M]1

Geology-I

(11)

Time : Three Hours

Maximum Marks : 300

INSTRUCTIONS

- (i) Answers must be written in English.
- (ii) The number of marks carried by each question is indicated at the end of the question.
- (iii) The answer to each question or part thereof should begin on a fresh page.
- (iv) Your answers should be precise and coherent.
- (v) The part/parts of the same question must be answered together and should not be interposed between answers to other questions.
- (vi) Candidates should attempt question no. **1** which is compulsory and **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.
- (viii) Candidates are in their own interest advised to go through the General Instructions on the back side of the title page of the Answer Script for strict adherence.

- (ix) No continuation sheets shall be provided to any candidate under any circumstances.
- (x) Candidates shall put a cross (X) on blank pages of Answer Script.
- (xi) No blank page be left in between answer to various questions.

1. Write notes on the following :
 - (a) Volcanic Belts of the world
 - (b) Geomorphic features of Indian Sub Continent
 - (c) Petrofabric analysis
 - (d) Siwalik Vertebrates
 - (e) Standard Stratigraphic Scale. 5×15=75

SECTION–A

2. Write a detailed account of Plate Tectonics. 45
3. Discuss the following :
 - (a) Interior Structure of the earth
 - (b) Radio Active Dating of the earth. 45
4. Briefly describe the following :
 - (a) Island arcs
 - (b) Isostasy
 - (c) Geosynclines. 45

SECTION–B

5. Give an account of the various types of drainage patterns and their significance. 45
6. Write an essay on topography and its relation to structures and Lithology. 45

OR

Give a detailed account of geomorphic cycles and their significance.

SECTION–C

7. Justify how stress and strain ellipsoids are useful to understand rock deformation. 45
8. Describe any **two** of the following : 45
 - (a) Foliation and Lineation
 - (b) Mechanics of folding
 - (c) Tectonic framework of India.

OR

Describe the following with neat sketches.

- (a) Recumbent fold
- (b) Disconformity
- (c) Horst and Graben
- (d) Columnar and Prismatic Joints.

SECTION–D

9. Write an essay on the morphology, classification, geological history and evolutionary trends of Trilobites. 45
10. Give a detailed account of types of micro fossils and their significance in Petroleum Exploration. 45

OR

Describe any **two** of the following :

- (a) Evolution of Horse
- (b) Modes of preservation of Fossils
- (c) Types of Corals.

SECTION–E

11. Discuss in detail the stratigraphic succession, lithology and economic importance of Gondwana System. 45