

This question paper contains 4 printed pages]

Code No. : 11(II) Roll No.

0(CCEM)9

GEOLOGY

Paper : II

Time Allowed : 3 hours]

[Maximum Marks : 300

Note : (i) Answers must be written in English.

(ii) Number of marks carried by each question are indicated at the end of the question.

(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.

(iv) Candidates should attempt five questions only. Candidates must answer at least one question from each Section.

P. T. O.

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SECTION – A

1. Describe in short *seven* crystal systems. 60
2. Write short notes on any *two* of the following :
30 × 2 = 60
 - (a) Enantiomorphic classes
 - (b) Biere fringence
 - (c) Penetrating twinning
3. Describe physical, chemical and optical properties of feldspar group of minerals. 60

SECTION – B

4. Write an essay on the textures and structures of intrusive igneous rocks. 60
5. Write short notes on any *two* of the following :
30 × 2 = 60
 - (a) Magmatic differentiation,
 - (b) Eutectic crystallization,
 - (c) Calc-alkaline magma.

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

30 × 2 = 60

- (a) Magmatism in relation to plate tectonics,
- (b) Perthite,
- (c) Subduction related magmatism.

SECTION - C

7. Give the classification of sandstone. 60

8. Write short notes on any *two* of the following :

30 × 2 = 60

- (a) Arkose
- (b) Graywacke
- (c) Heavy minerals

9. Write short notes on any *two* of the following :

30 × 2 = 60

- (a) Green-schist facies,
- (b) Relic series,
- (c) Contact metamorphism.

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SECTION - D

10. Write short notes on any *two* of the following :

30 × 2 = 60

- (a) Oil and natural gas deposits in India.
- (b) Copper deposits in India,
- (c) National mineral policy.

11. Write an essay on the fluvial geomorphic processes and their control over landforms and groundwater development. 60

12. Comment on flight planning and control and bring out the difference between the low obliques and high obliques. Describe the geometrical properties of tilted photographs. 60

(4)

400