

5. Explain the following :
- (a) Autometamorphism 4
- (b) Cataclastic metamorphism and its products. 4
- (c) Metasomatism and its types. 4

OR

- (p) Dynamothermal metamorphism and its products. 4
- (q) Injection metamorphism. 4
- (r) Products of Plutonic metamorphism. 4
6. Explain the following :—
- (a) Lithological characteristics of Gondawana. 4
- (b) Infra-trappean. 4
- (c) Economic importance of Deccan Traps. 4

OR

- (p) Classification of Gondwana Supergroup. 4
- (q) Age of Deccan Traps. 4
- (r) Inter-trappean. 4
7. Describe the geographic distribution, classification, fossil content and economic importance of Siwalik Supergroup. 12

OR

Describe the Cretaceous of Narmada Valley and Trichanapally. 12

**B.Sc. (Part-II) Semester—IV Examination**  
**4S : GEOLOGY**

Time : Three Hours]

[Maximum Marks : 80

**Note :—**(1) ALL the questions are compulsory.  
(2) Draw neat diagrams wherever necessary.

1. (A) Fill in the blanks : 2
- (i) In India, high grade petroleum produces from the \_\_\_\_\_ State.
- (ii) Plaster of Paris is obtained from \_\_\_\_\_ mineral.
- (iii) Asbestos deposits of Rajasthan are found in \_\_\_\_\_.
- (iv) The largest Coal deposits occurs in \_\_\_\_\_ rocks.
- (B) Choose the correct alternative : 2
- (i) Which State is the largest producer of Asbestos in India ?
- (a) Bihar
- (b) Rajasthan
- (c) Orissa
- (d) Karnataka

- (ii) The youngest formation of Gondwana in Pranhita Godawari basin valley is \_\_\_\_\_
- Kota formation
  - Maleri
  - Bhimaram
  - Gangpur formation.
- (iii) Lignite deposits of Neyveli belongs to \_\_\_\_\_
- Cuddalore Sandstone
  - Warkala beds
  - Chail Series
  - Railo series.
- (iv) Which mineral is added to the paper pulp to give the paper a better surface \_\_\_\_\_
- Kaoline
  - Bauxite
  - Asbestos
  - Feldopar.

(C) Answer the following in **ONE** or **TWO** sentences :— 4

- What is inter-trappean ?
- What is the chemical composition of Bauxite ?
- What is metamorphism ?
- What is the age of Deccan traps ?

2. Explain the following :
- Origin and occurrence of Bauxite in Maharashtra. 4
  - Geographical distribution of Iron Ore in India. 4
  - Mineralogy of copper. 4

**OR**

- Zinc and Lead deposits of Rajasthan. 4
- Manganese Deposits of Vidarbha. 4
- Khetri-copper-belt. 4

3. Describe the origin, traps and distribution of 'Petroleum Deposits' in India. 12

**OR**

Describe the geological occurrences, origin and geographical distribution of 'Lime Stone' deposits in India. 12

4. Explain the following :—
- Lacustrine deposition 4
  - Paragenetic diagrams 4
  - Nearshore deposits. 4

**OR**

- Aeolean environment of deposition 4
- Projective analysis 4
- Glacial deposits. 4