

6. Describe the classification, geographical distribution, lithological characteristics and economic importance of Deccan Traps. 12

OR

Describe the classification, geographical distribution, lithological characteristics and economic importance of Gondwana supergroup. 12

7. Explain the following :

- (a) Cretaceous of Trichinopoly 4
(b) Lameta formation 4
(c) Lithology of Siwalik Supergroup. 4

OR

- (p) Cretaceous of Narmada Valley 4
(q) Jurassic of Kutch 4
(r) Classification of Siwalik Supergroup. 4

AP-471

B.Sc. Part – II (Semester – IV) Examination

4S : GEOLOGY

Time—Three Hours]

[Maximum Marks—80

1. (A) Fill in the blanks : 2

- (i) _____ is a coal of highest rank.
(ii) The age of Deccan trap is _____.
(iii) Magnetite is the ore mineral of _____.
(iv) Oil in Digboi is found in _____ rock.

- (B) Choose the correct alternative : 2

- (i) Coal is composed chiefly of :
(a) Carbon, Oxygen, Hydrogen and Nitrogen
(b) Chloride, Sulphate and Nitrate
(c) Potassium and Magnesium
(d) None of the above
(ii) Bauxite is the ore of :
(a) Iron (b) Copper
(c) Lead and Zinc (d) Aluminium

(iii) The Bombay high deposits of oil lies in :

- (a) Pacific Ocean
- (b) Arabian Sea
- (c) Bay of Bengal
- (d) None of the above

(iv) Manganite and Psilomelane is the ore minerals of :

- (a) Manganese
- (b) Zinc and Lead
- (c) Asbestos
- (d) Copper

(C) Answer the following in **one** or **two** sentences :

4

- (i) What is Barchan Dune ?
- (ii) What are the uses of Gypsum ?
- (iii) What is alluvial fan ?
- (iv) What is Metasomatism ?

2. Describe the mineralogy, geological occurrence, origin and geographical distribution of Lead and Zinc deposits of India. 12

OR

Describe the mineralogy, geological occurrence, origin and geographical distribution of Iron deposit of India.

12

3. Write note on :

- (a) Mineralogy and use of Mica 4
- (b) Geographic distribution of Gypsum 4
- (c) Origin of Coal. 4

OR

- (p) Origin of Petroleum 4
- (q) Mode of occurrence and origin of Asbestos 4
- (r) Magnesite of Salem. 4

4. Explain the following :

- (a) Paragenetic diagrams 4
- (b) Delta formation 4
- (c) Deep-sea environments. 4

OR

- (p) Flood plains 4
- (q) Aeolean deposits 4
- (r) Projective analysis. 4

5. Explain the following :

- (a) Pneumatolytic Metamorphism 4
- (b) Cataclastic Metamorphism 4
- (c) Injection Metamorphism. 4

OR

- (p) Dynamothermal Metamorphism 4
- (q) Thermal Metamorphism 4
- (r) Autometamorphism. 4