

**B.Sc. (Part—II) Semester—III Examination
3S : GEOLOGY (Old)**

Time : Three Hours]

[Maximum Marks : 80

Note :—(1) All questions are compulsory and carry equal marks.

(2) Draw well labelled diagrams wherever necessary.

1. (A) Fill in the blanks :

(i) The class Anthozoa belongs to phylum _____.

(ii) A plane passing through Madreporic plate is _____.

(iii) The main source of evaporation deposits is _____.

(iv) Metal content of an ore is _____.

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(B) Choose the correct alternatives :

(i) Galena is the ore of :

(a) Mercury

(b) Copper

(c) Iron

(d) Lead

(ii) Open end of corallite is :

(a) Epical end

(b) Calyx

(c) Collumella

(d) None of the above

(iii) Ore deposits that are formed at the same time as the enclosing rock is :

(a) Epigenetic

(b) Syngenetic

(c) Taugmatic

(d) None of these

(iv) Following is a basic rock :

(a) Nepheline syenite

(b) Syenite

(c) Gabbro

(d) Granite

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(C) Answer the following in **one** sentence each :

(i) What is meant by microfossil ?

(ii) What is ore and ore mineral ?

(iii) Name the copper ore mineral.

(iv) What is peristome ?

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2. Describe magmatic-concentration deposits giving suitable example.

OR

What are hydrothermal deposits ? Describe the process of concentration of hydrothermal ore deposits.

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3. Explain the following :

- (a) Contact Metasomatic Deposits
- (b) Supergene Enrichment Deposits
- (c) Sedimentary Deposits.

OR

- (p) Placer Deposits
- (q) Residual Concentration Deposits
- (r) Mechanical Concentration Deposits.

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4. Explain the following :

- (a) One component system of Augite
- (b) Concept of phase, component and system
- (c) Mixed crystal.

OR

- (p) Three component system
- (q) One component system of Quartz
- (r) Two component system : Eutectics.

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5. Explain the following :

- (a) Consanguinity
- (b) Variation Diagram
- (c) Syenite-Nepheline Syenite – Alkaline Rocks.

OR

- (p) Petrographic provinces and periods
- (q) Kindreds of Igneous Rock
- (r) Granite-Granodiorite-Diorite.

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6. Explain the following :

- (a) Micropaleontology
- (b) Distinguish between regular and irregular echinoids
- (c) Morphology of Foraminifera.

OR

- (p) Classification of Echinoidae
- (q) Test or shell in Foraminifera
- (r) Microfossils and its uses.

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7. Describe morphology, classification and geological distribution of Class-Anthozoa.

OR

Describe morphology, classification and geological distribution of Class-Trilobita.

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