

2023

Time - 3 hours

Full Marks - 60

Answer all groups as per instructions.

Figures in the right hand margin indicate marks.

GROUP - A

1. Fill in the blanks. (all) [1 × 8]
- (a) Three forms of bauxite are _____.
- (b) Black mica is also known as _____.
- (c) An amber coloured mica is also known as _____.
- (d) The banded-hematite-quartzites are of _____ origin.
- (e) Azurite is an ore mineral of _____.
- (f) Lepidolite is an ore mineral of _____.
- (g) The formula of mineral cuprite _____.
- (h) _____ is the major ore of Aluminium.

[2]

GROUP – B

2. Write notes on any eight of the following within two to three sentences each. [1½ × 8

- (a) Grade
- (b) Resources
- (c) Mineralogy of iron
- (d) Ore minerals
- (e) Industrial minerals
- (f) Host rock
- (g) Assay value
- (h) Cut-off grade
- (i) Mineralogy of copper
- (j) Comb structure

GROUP – C

3. Write notes on any eight of the following within 75 words each. [2 × 8

- (a) Trenching
- (b) Augering and washboring

- (c) Drilling
- (d) Ore districts
- (e) Metallogenic epoch
- (f) Ore deposits
- (g) Gangue minerals
- (h) Drilling
- (i) Gravity methods
- (j) Self-potential methods

GROUP – D

Answer all questions within 500 words each.

4. Explain the modern classification of ore deposits. [6]

OR

Discuss briefly the important metallogenic provinces of India.

5. Describe in detail the stages of mineral exploration. [6]

OR

Write in brief about the geochemical exploration method.

6. Discuss the mode of occurrences, mineralogy and distribution of iron deposits. [6]

[4]

OR

Discuss Lead and Zinc deposits.

7. Describe mode of occurrences, mineralogy of graphite deposits.

[6

OR

Describe mode of occurrences, mineralogy of limestone deposits.