

[This question paper contains 2 printed pages.]

Sr. No. of Question Paper : 892

E

Your Roll No.....

Unique Paper Code : 219403

Name of the Course : B.Sc. (H) Geology

Name of the Paper : Economic Geology [GEHT-402]

Semester : IV

Duration : 3 Hours

Maximum Marks : 75

Instructions for Candidates

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt any FIVE questions in all.
3. All questions carry equal marks.
4. Question ONE is compulsory.

1. Arrange the following ore deposits, associated processes and examples correctly :

S.No.	Deposit Type	Process	Example
1.	Barite	Sedimentary	Sudbury
2.	Ni-Cu-PGE	Regional-thermal metamorphism	Malanjkhand
3.	Porphyry Cu-Mo	Diagenetic -hydrothermal	Mansar
4.	BIF	Hydrothermal	Mangampet
5.	Mn deposits	Magmatic	Bailadela

(15)

2. Discuss grade and specifications of minerals used in the fertilizer and cement industry. (15)
3. Comment upon any two of the following :
 - (a) Algoma and Superior type of deposits

P.T.O.

- (b) Essential, strategic and critical minerals
- (c) Stratiform and Stratabound ores (7.5×2=15)
4. Discuss the significance of any **two** of the following :
- (a) Gossans
- (b) Zoned pegmatites
- (c) Wall rock alteration (7.5×2=15)
5. Discuss distribution, mode of occurrence, mineralogy and genesis of Precambrian Iron Ore deposits of India. (15)
6. Discuss the process involved during concentration of ores in the orthomagmatic stage. Describe different ore deposits formed and mention suitable Indian examples. (7.5×2=15)
7. Write geological notes of any **two** of the following :
- (a) Zawar Pb-Zn-deposit
- (b) Tin deposit of Bastar
- (c) Sukinda Chromite deposit (7.5×2=15)
8. Discuss factors controlling formation of **any two** the following :
- (a) Supergene sulphide enrichment deposits
- (b) Unconformity type of Uranium deposits
- (c) Podiform chromite deposits (7.5×2=15)