

2022

M.Sc.

Third Semester

CORE – 10

GEOLOGY

Course Code: MGLC 3.21

(Economic & Ore Geology)

Total Mark: 70

Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

UNIT-I

1. Discuss the origin, occurrences, and distribution of bauxite deposit in India. 14
2. Write notes on the following: 7×2=14
 - (a) Origin and occurrences of magnesium
 - (b) Occurrence and distribution of mercury deposit in India

UNIT-II

3. Explain the origin, mineralogy, and occurrences of clay minerals. Add a note on the reserves in India. 10+4=14
4. Write notes on the following: 7×2=14
 - (a) Chemical composition, occurrences, and distribution of ochre
 - (b) Origin and occurrences of diamond

UNIT-III

5. Discuss in detail the mineralogy and origin of monazite group of metals. Explain their mode of occurrences, uses, and distribution in India. 7+7=14
6. Write notes on the following: 7×2=14
 - (a) Origin, occurrence and uses of REE
 - (b) Mineralogy and mode of occurrences of antimony metal

UNIT-IV

7. Write an essay on modern concept of ore genesis. 14
8. Write notes on any two of the following: 7×2=14
- (a) Ore textures
 - (b) Wall rock alteration
 - (c) Trace elements in ores

UNIT-V

9. Write an account on placers and palaeoplacers. 14
10. Write notes on any two of the following: 7×2=14
- (a) Diamonds in kimberlite
 - (b) Kiruna type
 - (c) Metamorphism of ores and metamorphogenic ores
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