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**5 SEM TDC GEO M 3**

**2 0 1 8**

( November )

**GEOLOGY**

( Major )

Course : 503

**( Economic Geology )**

*Full Marks : 48*

*Pass Marks : 19/14*

*Time : 2 hours*

*The figures in the margin indicate full marks  
for the questions*

**UNIT—7.1**

**( Principles of Economic Geology )**

( Marks : 10 )

1. (a) Define ore minerals and gangue, and give suitable examples. 1
- (b) What do you mean by tenor of ores? Mention the factors which control tenor. 1

( 2 )

- (c) Mention the essential factors which control mineral deposition. 1
- (d) Write on morphology of fluvial placer deposit. 1
- (e) How is global tectonics involved in metallogeny? 2
- (f) Describe *either* 'contact metasomatism' or 'metamorphism' process of formation of economic mineral deposits. 4

UNIT—7.2

( **Types of Mineral Deposits** )

( Marks : 15 )

2. (a) Write briefly on the following : 1×4=4
- (i) Economic mineral deposits found in ultrabasic rocks
  - (ii) Zones of oxidation
  - (iii) Cavity filling deposits
  - (iv) Kimberlites and their economic minerals
- (b) Describe the origin and structure of porphyry copper or tin deposit. 5

- (c) Write short notes on any *two* of the following : 3×2=6
- (i) Skarn deposits
  - (ii) Pegmatite deposits
  - (iii) Metallogenic province

UNIT—7.3

( Mineral Deposits of India )

( Marks : 15 )

3. (a) Discuss the origin, occurrence and distribution of copper deposits in India. 7

Or

What are the common ores of iron? Describe the geology and structure of an iron ore deposit of India. 7

- (b) Write short notes on any *two* of the following : 4×2=8
- (i) Geology of the Bombay High Oil Field
  - (ii) Distribution of manganese ores in India
  - (iii) Limestone deposits of N-E India
  - (iv) Refractory and ceramic mineral deposits of N-E India

UNIT—7.4

( Mineral Policy )

( Marks : 8 )

4. (a) Describe in brief the National Mineral Policy of India. 4
- (b) Write short notes on any *two* of the following : 2×2=4
- (i) Substitution
  - (ii) Essential minerals of India
  - (iii) Economy in use of minerals

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