

**5/H-26 (vi) (Syllabus-2015)**

**2019**

**( October )**

**GEOLOGY**

**( Honours )**

**( GELH-503 )**

**( Economic Geology )**

**Marks : 56**

**Time : 3 hours**

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

**Answer four questions, selecting one  
from each Unit**

**UNIT—I**

**( General Economic Geology )**

1. (a) What do you understand by the terms  
'ore' and 'gangue' minerals? Give  
examples. 2+2=4
- (b) Outline the classification of mineral  
deposits as proposed by Lindgren in a  
tabular form. 10

( 2 )

2. Write short notes on any four of the following :  $3\frac{1}{2} \times 4 = 14$

- (a) Early magmatic deposits
- (b) Contact metasomatic deposits
- (c) Stockworks
- (d) Placer deposits
- (e) Metamorphic deposits

UNIT—II

( Indian Economic Mineral Deposits )

3. (a) Name any two important ore minerals of copper and give their composition. 2
- (b) What are the different types of manganese deposits found in India? Briefly mention the localities of each type. 6
- (c) Give a brief account on the mode of occurrence, origin and distribution of mica. 6

4. Write short notes on any four of the following :  $3\frac{1}{2} \times 4 = 14$

- (a) Uses of chromite
- (b) Khetri copper belt

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( Continued )

( 3 )

- (c) Uses of aluminium
- (d) Zawar belt of Rajasthan
- (e) Iron ore deposits of Madhya Pradesh

UNIT—III

( Petroleum and Radioactive Minerals )

5. (a) Discuss in brief the mode of occurrence of petroleum. 4
- (b) Give a brief account of the distribution of petroleum deposits in Western India. 8
- (c) Name two important productive oil fields in NE India mentioning the oil bearing horizons. 2
6. What is the principal mineral from which thorium is obtained in India? Write notes on the mode of occurrence, origin, uses and distribution of thorium deposits in India.  $2+2+3+3+4=14$

UNIT—IV

( Coal )

7. (a) Describe the various chemical properties of coal. 7
- (b) Write a brief note on the mode of occurrence, types and uses of coal.  $2+3+2=7$

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( Turn Over )

( 4 )

8. Write short notes on any four of the following : 3½×4=14

- (a) Fixed carbon content
- (b) Inertinite
- (c) Vitrain
- (d) Fusinite
- (e) Calorific value

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