

H-4/18/22

Roll No.

IV Semester Examination, 2022

M.Sc.

GEOLOGY

Paper II

[Economic Geology (Deposits)]

Time : 3 Hours]

[Max. Marks : 80

Note : *All questions are compulsory. Question Paper comprises of 3 sections. Section **A** is objective type/multiple choice questions with no internal choice. Section **B** is short answer type with internal choice. Section **C** is long answer type with internal choice.*

SECTION A

1×10=10

(Objective Type/Multiple Type Questions)

Choose the correct answer :

1. Hematite usually forms in :

- (a) An acidic oxidizing environment
- (b) An alkaline oxidizing environment
- (c) An acidic reducing environment
- (d) An alkaline reducing environment

P.T.O.

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2. Bauxite deposits of Western India have been formed from :

- (a) Granite
- (b) Syenite
- (c) Basalt
- (d) Nepheline syenite

3. Which of the following is not a sulphide ore of copper ?

- (a) Conellite
- (b) Chalcocite
- (c) Cuprite
- (d) Bornite

4. 'Wolframite' is an ore of :

- (a) Tin
- (b) Platinum
- (c) Tungsten
- (d) Molybdenum

5. Jhumarkotra (Rajasthan) is a famous deposit of :

- (a) Limestone
- (b) Gypsum
- (c) Marble
- (d) Phosphorite

6. Which of the following clay mineral expand much more in the presence of water ?

- (a) Kaolinite
- (b) Montmorillonite
- (c) Illite
- (d) Fire clay

7. Sapphire is a blue transparent gem variety of :

- (a) Quartz
- (b) Topaz
- (c) Corundum
- (d) Feldspar

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8. Careinogenic mineral is :

- (a) Orthoclase (b) Diamond
(c) Talc (d) Asbestos

9. Rudrasagas oil field is located in :

- (a) Gujarat (b) Assam
(c) Maharashtra (d) Andhra Pradesh

10. Which of the following is referred as 'Brown Coal' ?

- (a) Peat (b) Lignite
(c) Bitumin (d) Anthracite

SECTION B

4×5=20

(Short Answer Type Questions)

Unit-I

1. Describe the genesis of Baurite deposits.

Or

Discuss the geological setting of Sukinda chromite deposit.

Unit-II

2. Write down the mineralogical characteristics of Tin ores.

Or

Enumerate the geological setting of Kolar gold deposit.

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Unit-III

3. Discuss the uses of Gypsum.

Or

Describe the uses of sillimanite and kyanite.

Unit-IV

4. Describe the genesis and uses of Baryte.

Or

Describe the geological setting of Diamond deposit of Panna (M.P.).

Unit-V

5. Describe the microscopic constituents of coal.

Or

Explain the structural traps with neat sketches and suitable examples.

SECTION C

10×5=50

(Long Answer Type Questions)

Unit-I

1. Describe the mineralogical characteristics, geological setting and genesis of the Bailadila Iron deposit of Chhattisgarh.

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Or

Discuss the mineralogical characteristics, geological setting and origin of the Rampua-Agucha Pb-Zn deposit of Rajasthan.

Unit-II

2. Describe the mineralogy, geological setting and origin of the malanjkhand copper deposit of Balaghat (M.P.).

Or

Discuss the mineralogical characteristics and origin of the platinum and cobalt. Add note on the platinum and cobalt ore deposits of India.

Unit-III

3. Give brief account on the limestone deposits of Chhattisgarh. Add note on their suitability for Cement Industry.

Or

Describe the geological distribution and origin of clay deposits of India. Add note on their uses.

Unit-IV

4. Enumerate the geological setting, Origin and Indian distribution of Mica deposits. Add note on their uses.

Or

Give a brief account on the Gem mineral deposits of India.

Unit-V

5. Describe the off-shore petroleum deposits of India with suitable examples.

Or

What do you mean by grades of coal ? Add note on the origin and geological setting of Indian coal deposits.

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