

2 0 1 6

(6th Semester)

GEOLOGY

TWELFTH (B) PAPER

(**Economic Geology**)

Full Marks : 55

Time : 2½ hours

(PART : B—DESCRIPTIVE)

(Marks : 35)

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

Answer **five** questions, taking **one**
from each Unit

UNIT—I

1. Write an account on the morphology of concordant and discordant ore bodies.
3½+3½=7

G16/362a

(Turn Over)

2. Write notes on any *two* of the following :
3½×2=7

- (a) Determination of paragenetic sequence
- (b) Syngenetic ore deposits
- (c) Ore minerals

UNIT—II

3. Discuss the mode of formation of magmatic concentration deposits. 7

4. Write notes on any *two* of the following :
3½×2=7

- (a) Oxidation and supergene enrichment
- (b) Sublimation
- (c) Residual concentration

UNIT—III

5. Write an account on chromite deposits in India with special reference to their mode of occurrence, origin and distribution. 7

6. Mention various methods of mineral exploration. Write a detailed account of geophysical methods of mineral exploration.
2+5=7

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(Continued)

(3)

UNIT—IV

7. Discuss the occurrence, origin and distribution of atomic minerals in India. 7

8. Write notes on any *two* of the following :
 $3\frac{1}{2} \times 2 = 7$

(a) Types of coal

(b) Solar energy

(c) Wind energy

UNIT—V

9. Write notes on the following : $3\frac{1}{2} + 3\frac{1}{2} = 7$

(a) Metallogenic provinces

(b) Metallogenic epochs

10. Give an account on any *two* of the following :
 $3\frac{1}{2} \times 2 = 7$

(a) Deposits at convergent plate margins

(b) Economic factors in controlling minerals

(c) Copper province of Singhbhum

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Subject Code : GEOL/VI/12 (b)

Booklet No. A

Date Stamp

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To be filled in by the Candidate

DEGREE 6th Semester
(Arts / Science / Commerce /
.....) Exam., **2016**

Subject

Paper

INSTRUCTIONS TO CANDIDATES

- 1. The Booklet No. of this script should be quoted in the answer script meant for descriptive type questions and vice versa.**
- 2. This paper should be ANSWERED FIRST and submitted within 45 minutes of the commencement of the Examination.**
- 3. While answering the questions of this booklet, any cutting, erasing, over-writing or furnishing more than one answer is prohibited. Any rough work, if required, should be done only on the main Answer Book. Instructions given in each question should be followed for answering that question only.**

To be filled in by the Candidate

DEGREE 6th Semester
(Arts / Science / Commerce /
.....) Exam., **2016**

Roll No.

Regn. No.

Subject

Paper

Descriptive Type

Booklet No. B

*Signature of
Scrutiniser(s)*

*Signature of
Examiner(s)*

*Signature of
Invigilator(s)*

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GEOL/VI/12 (b)

2 0 1 6

(6th Semester)

GEOLOGY

TWELFTH (B) PAPER

(Economic Geology)

(PART : A—OBJECTIVE)

(Marks : 20)

The figures in the margin indicate full marks for the questions

SECTION—A

(Marks : 5)

- 1.** Put a Tick (✓) mark against the correct answer in the brackets provided : 1×5=5

(a) Concordant ore bodies which show development in two dimensions but limited in third dimension are called

(i) stockwork ()

(ii) stratabound ()

(iii) stratiform ()

(iv) skarn ()

(2)

(b) Early-formed heavy minerals of a melt by sinking early under gravity form

(i) magmatic segregation deposits ()

(ii) late magmatic deposits ()

(iii) pegmatitic deposits ()

(iv) pneumatolytic deposits ()

(c) Which of the following is not an ore of manganese?

(i) Pyrolusite ()

(ii) Bornite ()

(iii) Manganite ()

(iv) Braunite ()

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(3)

(d) When sediment contains more than 5% organic matter, it eventually forms a rock known as

(i) coal ()

(ii) fossil ()

(iii) limestone ()

(iv) black shale ()

(e) Permo-carboniferous epoch in India is known for

(i) coal deposits ()

(ii) oil deposits ()

(iii) copper deposits ()

(iv) semiprecious stones ()

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(4)

SECTION—B

(Marks : 15)

2. Write on the following :

3×5=15

(a) Basic geological requirements for ore deposition

(5)

(b) Gossan

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(6)

(c) Comminution

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(7)

(d) Geothermal energy

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(8)

(e) Precambrian epoch in Indian metallogeny

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