



C09-MNG-105

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BOARD DIPLOMA EXAMINATION, (C-09)
MARCH/APRIL—2018
DMNG—FIRST YEAR EXAMINATION
ELEMENTS OF MINING

Time : 3 hours]

[Total Marks : 80

PART—A

3×10=30

- Instructions** : (1) Answer **all** questions.
(2) Each question carries **three** marks.
(3) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.

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1. Define the term 'exploration'.
2. Give the classification of mineral deposits based on (a) depth and (b) inclination.
3. Give the classification of rotary drilling methods.
4. Define the term 'solid blasting'.
5. State the composition of booster.
6. List different types of exploders and state their applicability.
7. Define the term 'low explosive'.

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8. State the principle of flame safety lamp.
9. State the composition of surface air and mine air.
10. Write in brief about temporary lining used in sinking shaft.

PART—B

10×5=50

Instructions : (1) Answer *any five* questions.

(2) Each question carries **ten** marks.

(3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.

11. Explain the contribution of mining activity in the cause of human civilization.
12. Define the terms with sketches (a) stook, (b) barrier, (c) sump and (d) auxiliary shaft. 2½×4=10
13. State the reasons for deviation of boreholes.
14. Describe the hydraulic feed mechanism with sketches.
15. Describe the construction of delay detonators and its field of application.
16. List the precautions to be taken during and after blasting in mines.
17. State the occurrence and mention the chemical, physical and physiological effects of carbon monoxide.
18. Explain the permanent supporting of the shaft sides by brick walling.

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