



C09-MNG-105

3055

BOARD DIPLOMA EXAMINATION, (C-09)

MARCH / APRIL - 2019

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) Answer should be brief and straight to the point.

- 1 Compare Shaft vs Incline on any six aspects.
- 2 Define the terms with sketches (a) Face (b) Raise.
- 3 State the purpose of core recovery.
- 4 State the composition of Electric detonators.
- 5 Define the terms (a) Socket (b) Mis - fire.
- 6 List the types of initiation of explosives.
- 7 Classify the detonators.
- 8 List the different detectors used for detection CH₄.

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- 9 State the composition of surface air and mine air.
- 10 List different stages of shaft sinking.

PART - B

10×5=50

Instructions :

- (1) Answer any **FIVE** questions.
- (2) Each question carries **TEN** marks.
- (3) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.

- 11 (a) List the various Mining Industries in the state.
- (b) List the various Mining Industries in the country.
- 12 Give the classification of coal seams based on the thickness depth, inclination.
- 13 State the reasons for deviation of bore holes.
- 14 Explain Hydraulic feed mechanism.
- 15 Explain the method of application of Burn cut, coromunt cut, ring drill patterns.
- 16 List the high explosives with composition used in Now Coal Mines.
- 17 State the occurrence and mention the chemical, physical and physiological effects of inflammable gases.
- 18 Sketch and explain Cementation process.