

C14-MNG-501

4654

BOARD DIPLOMA EXAMINATION, (C-14)

MARCH / APRIL - 2019

DMNG - V SEMESTER EXAMINATION METAL MINING

Time: 3 Hours] [Total Marks: 80

PART - A

 $3 \times 10 = 30$

Instructions:

- (1) Answer ALL questions.
- (2) Each question carries THREE marks.
- (3) Answer should be brief and straight to the point and shall not exceed five simple sentences.
- 1 Define the terms:
 - (a) Crown pillar and (b) Sill Pillar.
- **2** Define the terms:
 - (a) Ore Pass (b) Cross-Cut.
- 3 List the factors for determining the size of the shaft station.
- 4 State the purpose of Ore Passes.
- 5 Mention the location of ore bin.
- 6 List the purpose of driving raises within the ore body.
- 7 Define the term "Drivage".
- 8 State the applicability of Open raising method.
- **9** List the applicability of Jora raise method.
- 10 List the merits of bored raises.

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PART - B $10 \times 5 = 50$

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 State the classification of mineral deposits basing on depth, inclination, regularity, geometry.
- 12 Explain the different factors to be considered for ore drives, winzes and raises within the ore body.
- Explain the factors to be considered for locating the position of the winzes and raises for the formation blocks.
- 14 Explain division of ore body along the strike by raises and winzes.
- 15 Sketch and explain the method of Alimak raising method.
- 16 Sketch and explain the three compartmental raising method.
- 17 Explain the method of drivage with tunnel boring.
- 18 Sketch and explain the long hole raising.

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