



C16-MNG-404

5697

BOARD DIPLOMA EXAMINATION, (C-16)  
MARCH/APRIL—2018  
DMNG—FOURTH SEMESTER EXAMINATION  
METHODS OF WORKING METAL

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.

1. List the different metal mines of world.
2. Define the following terms :
  - (a) Gangue
  - (b) Vein
3. State the purpose of ore bin.
4. Define the following terms :
  - (a) Ore shoot
  - (b) Sublevel
5. Define the term drop raising.
6. Classify the raising method.
7. List the applicabilities of Alimak raise climber.

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8. List the merits of (reaming) raise boring.
9. Give the classification of stoping methods.
10. List the disadvantages of square set timbering method.

**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 occurrence and distribution of different metals in India.
12. Sketch and explain the ore pass.
13. Explain the method of drivage with tunnel boring machine (TBM).
14. Sketch and explain the method of alimak raising method.
15. Sketch and explain the long hole raising.
16. Explain the method underhand stoping systems with a sketch.
17. Sketch and explain cut and fill method stoping.
18. Sketch and explain vertical crater retreating method.

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