

C14-MNG-404

4468

BOARD DIPLOMA EXAMINATION, (C-14) MARCH/APRIL—2018 DMNG—FOURTH SEMESTER EXAMINATION

MINING MACHINERY—II

Time: 3 hours [Total Marks: 80

PART—A

 $3 \times 10 = 30$

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. State the field uses of drills.
- 2. State the purpose of air leg.
- **3.** State the field applications of AM-50.
- **4.** State the applications of DERDS.
- **5.** State the purpose of face guard in power supports.
- **6.** Define the terms 'flameproof apparatus' and 'intrinsically safe apparatus'.
- 7. State the purpose of head gear.
- **8.** State the applicability of rigid guides.

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- **9.** List the safety devices used in winding system.
- 10. Define the terms 'bedding' and 'armouring'.

PART—B

 $10 \times 5 = 50$

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 classification of the coal cutting machines.
- **12.** Explain the principles of working of rocker shovel.
- **13.** Explain the principles of working of armoured face conveyers.
- 14. List the factors governing the selection of power supports.
- **15.** Describe the electrical signalling system used in underground haulage roadway with a neat sketch.
- **16.** Explain the principles of koepe/friction winding.
- 17. Describe the suspended caliper brake.
- **18.** Explain the care and maintenance of cables.

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