

C16-MNG-405

5698

BOARD DIPLOMA EXAMINATION, (C-16) MARCH/APRIL—2018

DMNG—FOURTH SEMESTER EXAMINATION

MINE 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. Name the parts of the electric rotary drill.
- **2.** State the purposes of air-leg.
- **3.** State the types of power loaders used underground with their applicabilities.
- **4.** List the constituent parts of armoured face conveyor.
- **5.** List the types of hydraulic control system used in power supports.
- **6.** State the field of use of FLP and intrinsically safe apparatus.
- 7. State the purpose of a head gear.
- **8.** List the types of safety hooks.

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- 9. List the safety equipment used in drum winding.
- **10.** Write different types of cables used in mines.

PART—B

 $10 \times 5 = 50$

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- **Instructions**: (1) Answer any **five** questions.
 - (2) Each question carries ten marks.
 - (3) Drawing should be neat with necessary dimensions.
 - (4) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer.
- 11. Describe the working of hammer rock drill.
- **12.** Explain the principles of working of AM-50 road header.
- **13.** Explain the principle of lump breaker.
- 14. Describe electrical signalling system used in underground haulage roadway with a neat sketch.
- **15.** Explain the suspension and weighting of flexible guides.
- **16.** Describe the working of safety catches.
- **17.** Write the comparison between drum winding and friction winding.
- 18. Explain the layout of distribution of power supply from gate end panel to the drilling equipment.

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