

## 4468

### **BOARD DIPLOMA EXAMINATION, (C-14)**

MARCH / APRIL - 2019

# DMNG - IV 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) Answer should be brief and straight to the point and shall not exceed five simple sentences.
- 1 State the field use of electric rotary drill.
- 2 Name the parts of Hammer rock drill.
- 3 State the field of applications of power loader.
- 4 State the applicable conditions of SERDS.
- 5 State the purpose of the lemniscate links in power supports.
- 6 State the applicabilities of intrinsically safety apparatus used in mines.
- 7 State the purpose of head gear.
- **8** List the shaft fittings.
- **9** List the demerits of friction winding.
- 10 Draw the cross sectional diagram of 3 core cable and name its parts.

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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 Describe the working of electrical rotary drill with neat sketch.
- 12 Explain the principle of working "Side Discharge Loader" (SDL).
- 13 Describe the principle of working of DERDS.
- 14 (a) State the principle of lump breaker.
  - (b) State the purpose of power pack.
- 15 Describe the gate-end switch gear used for coal drill.
- 16 Describe working of the Keps.
- Explain the loading and unloading run-round arrangement of pit top layout used in winding.
- 18 Explain the care and maintenance of cables used in mines.

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