C14-MNG-303

4268

BOARD DIPLOMA EXAMINATION, (C-14)

MARCH / APRIL - 2019

DMNG - III SEMESTER EXAMINATION CONVENTIONAL METHODS OF COAL 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 List the factors consider for selection of a site for shaft sinking.
- 2 Define the terms : (a) Silicatization, (b) Weep holes.
- 3 Define the term "Induced blasting".
- 4 List the precautions to be taken before and after blasting.
- 5 State the applicability's of bord and pillar method.
- 6 List the factors influencing the size of the panel.
- 7 Write the formula to calculate the percentage of extraction.
- 8 State the conditions under which caving method is adopted.
- 9 Define the terms : (a) Local fall, (b) Main fall.
- 10 List the precautions taken against fire during and after depillaring.

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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 Explain freezing method of shaft sinking.
- 12 Explain piling method of shaft sinking.
- 13 Explain solid blasting and state rules, provisions related to solid blasting.
- 14 Explain the method of development in bord and pillar system with LHD.
- Explain the method of development by cross cuts in steeply dipping seams.
- 16 Explain the sequence of operations involved in depillaring.
- 17 Explain the method of extraction of contiguous seams.
- 18 Explain diagonal and step diagonal line of extraction with simple sketches.

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