



C14-MNG-403

4467

BOARD DIPLOMA EXAMINATION, (C-14)

MARCH / APRIL - 2019

DMNG - IV SEMESTER EXAMINATION

MECHANIZED METHODS OF COAL MINING

Time : 3 Hours]

[Total Marks : 80

PART - A

3×10=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 Define the term "Gate roads".
- 2 Define the term "Pack wall".
- 3 State the limitations of longwall method.
- 4 Classifies the methods of longwall mining.
- 5 List the machinery employed on a mechanized longwall face.
- 6 List the merits of longwall retreating over long wall advancing.
- 7 State the applicability of longwell top coal caving (LTCC).
- 8 Compare single unit and double unit longwall methods in any three aspects.
- 9 List the demerits of blasting gallery method.
- 10 State the importance of spacers used in blasting gallery method.

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[Contd...

PART - B

10×5=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 the development of gate roads by drill and blast load by gathering arms loader.
- 12 Compare long wall advancing with longwall retreating in any ten aspects.
- 13 Explain the layout of mechanized longwall face advancing with stowing.
- 14 Explain the layout of mechanized longwall face retreating with caving.
- 15 Explain the methods of sumping in longwall face extraction.
- 16 Explain the method of longwall top coal caving (LTCC).
- 17 Explain supporting and loading operations in blasting gallery method.
- 18 The estimated production of a mine by blasting gallery method is 0.7 M. tons per annum. Estimate the man power and machinery required to meet the forgotten production.
