



C14-MNG-303

4268

BOARD DIPLOMA EXAMINATION, (C-14)

MARCH/APRIL—2018

DMNG—THIRD SEMESTER EXAMINATION

CONVENTIONAL 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) Answers should be brief and straight to the point and shall not exceed *five* simple sentences.

1. List the different stages of shaft sinking.
- * 2. List the modern techniques used in shaft sinking.
3. Define the term 'induced blasting'.
4. List the blasting tools used in the fuse and electric blasting.
5. List the factors influencing the size of the panel.
6. State the merits and demerits of panel system.
7. Define the terms (a) caving and (b) stowing.
8. State the conditions under which caving method is adopted.
9. Define the terms 'local falls' and 'main fall'.
10. Define the terms (a) split and (b) rib.

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[Contd...

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PART—B

10×5=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 special method of shaft sinking under special condition RCC piling.
- 12.** Explain the permanent supporting of the shaft sides by brick walling.
- 13.** (a) List the dangers associated with underground blasting.
(b) List precautions to be taken before and after blasting.
- 14.** Explain the method of development in board and pillar system with SDL.
- 15.** Explain the method of development with belt conveyer.
- 16.** List the preparatory arrangements immediately before the commencement of depillaring.
- 17.** Explain diagonal line of extraction and step diagonal line of extraction.
- 18.** (a) List the dangers due to air blast.
(b) List the precautions against the air blast.
