



C14-MNG-503

4656

**BOARD DIPLOMA EXAMINATION, (C-14)  
OCTOBER/NOVEMBER-2018  
DMNG-FIFTH SEMESTER EXAMINATION**

MODERN COAL MINING TECHNOLOGY

Time : 3 Hours ]

[ Total Marks: 80

**PART-A**

3X10=30

- Instructions :**
1. Answer **All** questions.
  2. Each question carries **THREE** marks
  3. Answer should be brief and straight to the point

1. List the limitations of coal ploughing.
2. List the merits and demerits of coal ploughing.
3. List the situations, necessitating the adoption of thick seam working.
4. List the methods of slicing.
5. List the applicable conditions of inclined slicing.
6. List the merits and demerits of Hydraulic mining of coal.
7. State the hydraulic breaking of coal.
8. List the merits and demerits of sub-level caving.
9. List the merits and demerits of underground gasification.
10. List the types of linkages between bone holes.

**PART-B**

10X5=50

**Instructions** :

1. Answer any **five** questions. Each question carries **ten** marks.
2. Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer

11. Explain the cutting operations of unidirectional and bidirectional ploughing.
12. Explain the method of unidirectional, over passing ploughing.
13. Explain the horizontal slicing in descending order with caving.
14. Explain the Room and Pillar method.
15. Explain the method of horizon mining.
16. Explain the hydraulic breaking of coal.
17. Explain layout of Hydraulic Mining in moderately thick seams
18. Explain opening up of coal seams for underground gasification.

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