



C14-MNG-304

4269

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

MINING MACHINERY-I

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. State the composition of material of wire ropes.
2. List the causes of deterioration of wire ropes.
3. List the different methods of capping the wire ropes.
4. State the purpose of splicing of wire ropes.
5. State the purpose of transportation in mines.
6. List the disadvantages of direct rope haulage.
7. State the merits of belt conveyor.
8. Classify Locomotive haulage systems.
9. Define the terms (a) Water hammer (b) End thrust.
10. List the characteristic curves of pumps.

PART-B

10X5=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 field tests to be conducted on wires in rope.
12. Describe the constructional details of different types of ropes.
13. Describe the method of interlocking wedge capping.
14. Describe endless haulage system including safety devices.
15. Describe the endless rope haulage system including safety devices used.
16. Explain scraper chain conveyor system.
17. Describe the construction and working of Bi-cable aerial rope ways.
18. Explain the constructional details of turbine pump.

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