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C09-MNG-404

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**BOARD DIPLOMA EXAMINATION, (C-09)  
OCTOBER/NOVEMBER-2018  
DMNG - FOURTH SEMESTER EXAMINATION**

**MINING MACHINERY -I**

*Time* : 3 Hours ]

[ Total Marks: 80

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**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 and shall not exceed five simple sentences.

1. List various standard and locked coil ropes used in mining.
2. List the causes of deterioration of wire ropes.
3. State the applicability's of wedge capping.
- \* 4. List the different methods of capping the wire ropes.
5. Explain the direct rope haulage with a neat sketch.
6. List the advantages and disadvantages of gravity haulage system.
7. List the classification of conveyors based on their applicability.
8. State the merits of scraper chain conveyor.
9. State the merits and demerits of diesel locomotive.
10. List the applicabilities of mono cable aerial rope

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**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

- 1) Space factor.
- 2) Factor of safety
- 3) Capacity factor
- 4) Bending factor.

12. Explain the stages of manufacturing of wires and ropes.

13. Describe the methods of splicing of wire rope with sketches.

14. (a) State the dimensions of the man hole in main building haulage roadway.

(b) Sketch and explain the diamond section in haulage system

15. Describe the endless rope haulage system including safety devices used with sketches.

16. State the factors influencing the size of the rope haulage engine, HP.

17. Sketch and explain loop taking arrangement of belt conveyors.

\* 18. State merits, demerits of battery locomotives system.

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