



C14-MNG-602

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

ADVANCED MINING METHODS

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 and shall not exceed five simple sentences.

1. List the Classifications of HEMM deployed in OC mines.
2. List the main components of Shovel.
3. Define the terms (a) Bucket fill factor (b) Swell factor.
- * 4. Calculate the annual production of Shovel. Assume your own conditions.
5. List the types of Transport systems.
6. (a) List the types of Dumpers (b) List the applicabilities of Dumpers.
7. Define slope stability.
8. List the types of slope failures.
9. How the thickness of over burden influence while designing the layout of surface mine.
10. State the impact on environment due to opencast mining operations.

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PART-B

10X5=50

- Instructions* : *
1. Answer any **Five** questions, choosing at least one from each section.
 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
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11. Explain the operation and place of application of Bucket wheel Excavator with sketch.
 12. List the main components their functions, place of applications of Dragline with sketch.
 13. Explain the general construction of dumper with neat sketch.
 14. (a) List the applications of belt conveyors in OC Mines (b) list the applicabilities conditions, merits and demerits of In-Pit Crusher Technology.
 15. List and explain the methods of preventing slope failures.
 16. (a) State the formula to calculate the factor of safety of bench slope (b) Explain the term 'overall slope of the bench' with sketch.
 17. Explain and draw the Layout of Dragline mining in opencast mines.
 18. Explain the prevention and control of various pollutions due to mining.

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