



C14-MNG-506

4659

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

**ADVANCED MINE ENVIRONMENTAL ENGINEERING**

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 types of surface mine fires.
2. List the signs of spontaneous heating.
3. List the causes of spontaneous heating.
4. List the Methane drainage methods.
5. List different types of dams and their applicability.
6. List any 3 factors governing the design of dam.
7. List the method of CO detectors.
8. List any 3 disadvantages of Tele monitoring.
9. State the purpose of mine lighting.
10. Definitions of various terms in lighting: Lux, Lumen.

## 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. List the different methods of dealing with fires and their applicability.
12. Describe the Nitrogen infusion for fire fighting.
13. List the causes and preventive measures of fire damp explosions.
14. Explain the function and the use of burn side safety boring apparatus.
15. Describe the construction of concrete dam.
16. Explain the principles on which the detectors are developed or designed.
17. Explain the multi gas detector and its use.
18. List the places to be illuminated on the surface and below ground.

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