



# 3791

## **BOARD DIPLOMA EXAMINATION, (C-09) OCTOBER/NOVEMBER-2018** DMNG-SIXTH 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 and shall not exceed five simple sentences.
- 1. List the causes of surface fires.
- 2. List the methods of reopening of sealed of areas in mines.
- 3. State the functions of water barrier.
- 4. Write the difference between self rescuer and gas mask.
- 5. Define the term Rescue.
- 6. Define the term Inundation.
- 7. List the birds used for co detection.
- 8. List the uses of multi gas detector.
- 9. List different miners diseases.
- 10. List the limitations of Tele monitoring.

#### **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 method of collection of samples behind fire seals.
- 12. Explain coal dust explosions.
- 13. Describe the rescue operation in a mine with sketch.
- 14. Describe the constructional details of concrete dam.
- 15. Explain the method of detection of gasses with infrared spectrometer.
- 16. Sketch and explain methane detector.
- 17. List the symptoms and effects of chromium poisoning.
- 18. Explain principles of Tele monitoring.

\*\*\*\*\*\*