



3788

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

OPENCAST MINING

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. Define the terms (a) Alluvial Mining (b) Strip Mining.
- 2. Define the terms (a) Floor of bench (b) Depth of hole.
- 3. List the different stages of surface mining.
- 4. Classify the drill holes basing on depth.
- 5. List any three merits and demerits of vertical drilling.
- 6. List the place of application Wagon Drill.
- 7. List the main parts of the Dozer.
- 8. List the merits and demerits of bucket wheel excavator.
- 9. List the essential features of EMP.
- 10. Define Ecology with particular reference to mining.

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. Define the following terms (a) Spacing (b) Toe (c) Crust (d) Stripping ratio (e) Angle of Repose (f) Burden.
- 12. Explain with sketch the layouts of Semi Mechanised Open Cast Mine. Assume your own conditions.
- 13. Explain the difference patterns of drill holes employed in opencast mines.
- 14. List the main parts, functions, and place of applications of drag line applications of drag line sketch.
- 15. List the main parts and functions of the Road Scrapper with a neat sketch.
- 16. List the main parts, functions, and place of applications of shovel with sketch.
- 17. (a) List the applicable conditions, merits and demerits of surface miner.
 - (b) Explain the method of working.
- 18. Explain the various problems of Environmental and Ecology as a result of mining operations.
