

End Semester/ Reappear (Semester V) Examination December, 2024

Programme: Diploma (MiE)

Course: Mining Machinery II

Course Code: 8D.303

Enrolment no. _____

Full Marks: 70

Time: 3 Hrs.

Section I

- 1. Short Answer type questions. Answer any four. 4 x 5 = 20**
- Elaborate the term “Static Head of the pump” with schematic diagram.
 - Compare between the LHD and SDL.
 - Elaborate the problems faced in laying cable underground.
 - What is the of belt tension and transmitting energy through belt?
 - Differentiate between flexible cable and semi flexible cable.
 - Explain with neat sketch the different type of cables used in mines.

Section II

- Long Answer type questions. Answer any three. 3 x 10 = 30**
- Draw a neat labelled diagram & explain the construction and working of “Turbine pump”.
 - Briefly describe the drilling machine used in opencast & underground mines
 - Discuss the special features of construction on single core & high tension belted core cable
 - Illustrate the working process of different types of gears used in mining machinery with neat sketch diagram.
 - Draw and label the cable along with the parts discussion.

Section III

- Application based questions. Answer any one. 1 x 20 = 20**
- Describe the Jumbo drill machine. Explain the different types of Jumbo drill machine.
 - Provide a Brief of reciprocating pumps explaining its mechanism and working with diagram.
 - Suppose being a mining engineer what types of cables you will suggest your superior to use in mines and why give brief description in your word?
