

Total No. of Pages : 1

Register Number :

**7889**

Name of the Candidate :

**DIPLOMA IN MINING ENGINEERING EXAMINATION DECEMBER 2013.**

**130 — MINING EQUIPMENTS**

Time : Three hours

Maximum : 100 marks

**Answer any FIVE questions.**

**(5 × 20 = 100)**

**All questions carry equal marks.**

1. Explain any (2) of the following (2 × 10 = 20)
  - (a) Side dump loaders.
  - (b) Interlocks.
  - (c) Mine blasting.
2. State and explain the types of mine surveying in detail. (20)
3. Enumerate the mine pumping system analysis. (20)
4. Discuss any (2) of the following (2 × 10 = 20)
  - (a) Mine communication
  - (b) Need of drainage in mines.
  - (c) Suspension gears.
5. What are the safety device used in mines? Explain in detail. (20)
6. Explain any two types of winding system in detail. (2 × 10 = 20)
7. Write short note on (4) of the following (4 × 5 = 20)
  - (a) Shuttle cars.
  - (b) Shaft fittings.
  - (c) Head sheare skips.
  - (d) Diesel locomotives in mines.
  - (e) Intrinsically safe apparatus.
8. (a) Explain how electrical power is distributed in mines. (10)
  - (b) State the advantages and uses of compressed air power. (10)