

Roll No. ....

Total No. of Pages : 2

**BT-1/D11**

**7514**

**Manufacturing Processes**

**Paper : ME-103 E**

Time : Three Hours]

[Maximum Marks : 100

**Note :-** Attempt FIVE questions in all, selecting at least ONE question from each Unit. All questions carry equal marks.

**UNIT-I**

- 1. (a) What is an accident ? Explain in brief the causes of accident. 10
- (b) Write short notes on :
  - (i) Nodular Cast Iron
  - (ii) Malleable Cast Iron. 10
- 2. (a) Explain in detail the properties and application of the following :
  - (i) High Carbon Steel 5
  - (ii) High Speed Steel 10
- (b) Explain in brief the safety precautions associated with material handling. 5

**UNIT-II**

- 3. (a) Explain the various properties of moulding sand. 10
- (b) Explain the different types of cores with the help of neat sketches. 10
- 4. Explain the various casting defects with causes and remedies. 20

**UNIT-III**

- 5. (a) Explain in brief the various methods of hot extrusion with neat sketches. 10
- (b) Write short notes on :
  - (i) Cold bending
  - (ii) Stretch forming. 10
- 6. Describe the various types of plant layout and the situation in which each type is used. Also write the advantages of good plant layout. 20

**UNIT-IV**

- 7. (a) Show nomenclature of a single point cutting tool with the help of neat sketch. 10
- (b) What is the difference between TIG and MIG Welding ? 10
- 8. (a) Explain various types of Chips with neat sketches. 10
- (b) Write short notes on :
  - (i) Arc crater
  - (ii) Electrode
  - (iii) Arc blow
  - (iv) Flux. 10