# Manufacturing Processes (ME-103 E, June-2007)

**Note:** Attempt five questions taking at least one question from each unit.

## UNIT-1

- 1. a) What is an accident? Explain in brief, causes of accident.
  - b) Explain various in brief, the safety precautions associated with the material handling.
  - c) Explain the various methods of safety, in brief.
- 2. a) Classify the plain carbon steel.
  - b) Write short note on grey cast iron.
  - c) Classify in brief, the manufacturing processes.

## **UNIT-2**

- 3. a) What are the different casting defects? What are their remedies?
  - b) What are the different types of pattern used in foundry?
- 4. a) What are the main constituents of moulding sand? Explain in brief.
  - b) Explain in brief, the various types of moulding processes.
  - c) What is a core? How many types of cores are there? Explain with the help of neat sketch.

### **UNIT-3**

- 5. a) Explain the difference between punching, blanking and piercing.
  - b) Discuss various shearing operations performed on sheet metal.
  - c) Define recrystallization temperature.
- 6. a) Explain in brief, the various methods of hot extrusion with neat sketches.
  - b) Describe the various types of plant layout and the situation in which each type is used.

## **UNIT-4**

- 7. a) How can you specify a lathe?
  - b) Explain various types of operations performed on a drilling machine.
  - c) Show the nomenclature of a single point cutting tool.
- 8. a) Explain the mechanism of tool wear. What are its regions?
  - b) What is the difference between soldering and brazing?
  - c) Discuss the method of resistance welding. What are its advantages and disadvantages?