

Manufacturing Processes
(ME-103E, Dec-2005)

Note: Attempt any five questions in all selecting at least one question from each unit.

UNIT-I

1. a) What do you mean by manufacturing process? Give the classification of manufacturing processes. Briefly explain casting and joining process.
b) Explain the types of industrial accidents and their causes.
2. Discuss the properties and uses of engineering materials.
 - a) Steels
 - b) Cast iron

UNIT-II

3. What is the use of a pattern? Discuss its any four types and pattern allowances.
4. What tools are used in moulding? Explain. Discuss floor moulding and pit moulding along with their applications.

UNIT-III

5. Explain the mechanism of shear of metal plate in blanking operation. Describe piercing, blanking, bending, slitting and lancing operations.
6. What are the advantages of hot working over cold working? Describe direct and indirect extrusion processes with sketches.

UNIT-IV

7. a) Explain the principle of operation of a lathe. Name any five operations performed on a lathe. Briefly explain the taper turning operation and methods of taper turning.
b) What are the reasons of flank wear and crater wear? What are the means of reducing tool wear?
8. Describe and discuss the advantages and applications of following joining processes:
 - i) Gas welding
 - ii) TIG Welding