

Roll No.

Total Pages : 3

8216**BT-2/M-12****MANUFACTURING PROCESSES****Paper-ME-103-E****Time Allowed : 3 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) Explain the term manufacturing. Classify the manufacturing processes and briefly explain each process. 10
(b) What do you mean by industrial safety ? Discuss safety rules to be followed in a factory. 10
2. (a) What are the different properties of engineering materials ? Explain electrical and magnetic properties. 10
(b) Explain the composition, properties and applications of (a) medium carbon steels and (b) high speed steels. 10

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3. (a) What materials are used for making patterns ? Explain different types of patterns. 10
(b) Explain different types of casting methods. Also explain the steps involved to make a casting. 10
4. (a) With a neat sketch, explain different types of gates and risers. 10
(b) What is core ? Explain different types of cores with neat sketches. 10

UNIT-III

5. With neat sketches, explain sheet metal operations of (a) Shearing, (b) Blanking, (c) Forming, (d) Bending and (e) Joining. 20
6. (a) What is extrusion ? Explain different types of extrusion with neat sketches. 10
(b) Give a comparison between process layout and product layout with neat sketches. 10

UNIT-IV

7. (a) What is tool wear ? Explain different types of tool wear. What are the uses of cool in machining ? 10

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- (b) Draw a neat sketch of a shaper. What are the differences between a shaper and a planer. 10
8. (a) With neat sketches, explain different types of flanges in gas welding. 10
- (b) Explain the process of metal arc welding. What kind of electrode are used ? What is the purpose of flux on the flux coated electrodes ? 10