

ME-202

B. Tech. (Semester IInd) Exam. -2012
Manufacturing Processes

Time: Three Hours

Maximum Marks: 50

Section - A

(Short Answer Type Questions)

Note: Attempt any ten questions. Each question carries 4 marks. (10x2=20)

1. What is the object of heat treatment the metal and alloys?
2. Explain with the help of neat sketch the part of lathe?
3. Define the terms
 - (a) Galvanizing and Electroplating
 - (b) Composite material and their application
4. Based on % on carbon. Classify carbon steels. How does stainless steel become stainless?

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5. Differentiate and explain

- (a) Blanking and piercing
- (b) Hardening and Tempering

6. Explain moulding sands and its desirable properties?

7. Briefly describe with neat sketch, process and application of

- (a) Die casting
- (b) Centrifugal casting?

8. Is brittle material is necessarily weak?

9. Write short note on

- (a) Gray cast iron
- (b) White cast iron
- (c) Malleable cast iron

10. Describe some common rolling defects. Also indicate remedial measure.

11. Difference between shaper and planer?

12. Describe the type of flames, obtain in an oxy-acetylene gas welding process? Also give their applications?

13. Describe casting defect with neat sketch and their remedies?

14. Explain the working and mechanism of drilling machine?

Section-B

(Long Answer Type Questions)

Note: Attempt any two questions. Each question carries 15 marks

(15x2=30)

1. How will you classify the manufacturing processing? Explain with suitable example of manufacturing towards Technological & Socio-Economic developments.

2. With the help of schematic sketch distinguish between the following:
 - (a) Spot and seam welding.
 - (b) Gas welding and gas cutting
3. How powder metallurgy is different from other manufacturing process, give two example of the product, manufacture by powder metallurgy process and also give advantages of this process?
4. Describe the various kind of pattern in use. What are the allowances provided? When making a pattern? How does a pattern differ from the casting?