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Paper Code: ME-202/ME-102	Roll No.					

## B.Tech. (SEM II) EVEN SEMESTER THEORY EXAMINATION, 2015-16 MANUFACTURING PROCESS

[Time: 2 hrs.] [Max. Marks: 50]

**Note:** (i) Attempt all questions.

(ii) Marks allotted to each question are indicated on right hand side.

1. Write short answers to any four of the following:-

[3.5x4=14]

- (a) Write a brief note on Brazing..
- (b) What is case hardening?
- (c) Explain Hardness and Toughness in brief.
- (d) Write a brief note on Pattern materials
- (e) What is Bronze? Give its types and uses.
- (f) Write a note on Malleability.
- 2. Attempt any two of the following:-

[6x2=12]

- (a) Explain Rolling process in detail giving suitable sketches. List some of the products madeby rolling.
- (b) List various types of sands used in foundry. Write about the important properties of moulding sand?
- (c) Write a brief note on any two of the following:
  - (i) Casting defects
- (ii) Extrusion
- (iii) Master pattern

3. Attempt any two of the following:-

[6x2=12]

- (a) Draw a labeled diagram of Cupola furnace. Explain its working.
- (b) Explain ArcWelding processes in detail. What are the equipments used? Why welding electrodes are coated.
- (c) Draw label diagrams of three types of flames used in Oxy acetylene gas welding. Also give the uses of these flames.
- **4.** Attempt any **two** of the following: -

[6x2=12]

- (a) Explain about the Plant layout. Why is it necessary in any manufacturing unit? List its types.
- (b) Give the percentage of Carbon in different Carbon steels. Also give their properties and uses.
- (c) Write a noteonmaterials other than metals used in manufacturing of consumer and engineering goods in brief.

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