Paper Code: ME-102

B.Tech.

Roll No.

(SEM I) ODD SEMESTER THEORY EXAMINATION, 20115-16 MANUFACTURING PROCESS

Time: 2 Hours

Note: *(i) Attempt all questions.* (*ii*) Marks allotted to each question are indicated on right hand side.

Q.1. This question contains six parts. Attempt any four of the following.

- (a) Write a note on the socio economic impact of materials.
- (b) Write a brief note on classification of materials giving their uses.
- (c) Discuss in brief Hardness and toughness?
- (d) Write a brief noteon fatigue and creep.
- (e) List various types of Carbon steels giving percentage of carbon in them and their uses.
- (f) What is Brass? Give its types and uses.

Q.2. Attempt any two of the following. All questions carry equal marks.

- (a) Discuss various operations done in Forging processes. What do you understand by Hot working and cold working?
- (b) Write a detail note on types of materials used for making Patterns. Why allowances are given on patterns.
- (c) Write short notes on any two of the following: i. Functions of Risers. ii. Casting Defects. Iii. Moulding Sands.

0.3. Attempt any **two** questions of the following

- (a) Draw a labeled diagram of Lathe Machine. Also list various operations performed on lathe.
- (b) How Welding processes are classified? List various welding processes also explain Soldering in detail.
- (c) Write short notes on any two of the following: i. Coating of electrodes. ii. Shaper and Planner iii. Difference between AC and DC welding.

Q.4. Attempt any **two** questions of the following

- (a) What do you understand by Heat Treatment of Carbon Steels? Explain Annealing Process in detail.
- (b) WriteAbout various types of plant layout. What are its advantages?. What do you understand by Productivity?
- (c) Write short notes on any two of the following: i. Wood its types and uses ii. Plastics iii. Electroplating.

6x2=12

6x2 = 12

3.5x4=14

Maximum Marks: 50

6x2 = 12