



(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 199131

Roll No.

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B. Tech.

(SEM. I) (ODD SEM.) THEORY
EXAMINATION, 2014-15

BASIC MANUFACTURING PROCESSES

Time : 2 Hours]

[Total Marks : 50

1 Attempt any FOUR parts :

$$3\frac{1}{2} \times 4 = 14$$

- (a) Differentiate between ferrous and non-ferrous materials.
- (b) Differentiate between extrusion and drawing processes.
- (c) What is tempering? Describe in brief, any one type of tempering.
- (d) Draw the sketch of a die and punch assembly.
- (e) What do you understand by grit, grade and bond of a grinding wheel?
- (f) Mention some important uses of rubber. Mention any four of its important properties.

- 2 Attempt any TWO parts : **6x2=12**
- (a) Write Short notes on
 - (i) Resilience
 - (ii) Toughness
 - (iii) Weldability.
 - (b) Classify the various types of Carbon on Steels on basis of percentage (%) of Carbon and mention the properties and applications of each.
 - (c) Write short notes on Bronze, their properties and uses.
- 3 Attempt any TWO parts : **6x2=12**
- (a) Compare hot working and cold working processes indicating advantages and disadvantages of each.
 - (b) Explain the defects in casting with their reasons. How these defects can be prevented?
 - (c) Explain briefly the following with suitable example :
 - (i) Electroplating
 - (ii) Galvanizing.
- 4 Attempt any TWO parts : **6x2=12**
- (a) Make a sketch of a centre lathe and label its main parts.
 - (b) Explain the working principle of Planer type milling machine with a neat sketch.
 - (c) Describe the principle of oxyacetylene gas welding. How many types of flames are used for welding?