B. Tech. NME**-101**

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

BASIC MANUFACTURING PROCESSES

Time : 2 Hours] [Total Marks : 50

1 Attempt any FOUR parts : 3 ½ *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 :

(a)Write Short notes on

(i) Resilience

(ii)Toughness 6x2=12

(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 www.uptuonline.com

(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.

(d)How many types of flames are used for welding?