

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

Paper ID : 199228

Roll No. **B.TECH.****Theory Examination (Semester-II) 2015-16****BASIC MANUFACTURING PROCESS***Time : 3 Hours**Max. Marks : 100***Section-A****Q1. Attempt all question.****(2×10=20)**

- (a) Explain rolling process.
- (b) What is film blowing?
- (c) What is electroplating?
- (d) Explain crop failure of materials.
- (e) What is tonnage capacity.
- (f) What is the purpose of gases in moulding ?

- (g) What is process of ductile & brittle fracture?
- (h) What is the advantage and application of ceramic mould?
- (i) How can slag inclusion in welding be avoided?
- (j) What is the application of neutral, carburising & oxidizing flame in gas welding?

Section-B

Q2. Attempt any Five (5×10=50)

- a) What are tool steels? Explain in brief their classification.
- b) What are the major uses of copper? What are the alloying elements in brass and bronze, respectively and also write its uses
- c) With the help of neat diagram, explain the working principle of Cupola Furnace. Also write the limitation.
- d) What is die-casting? Explain with neat sketches.

(2)

- e) What is the principle of oxy-acetylene gas welding? Discuss various types of flames used in oxy acetylene gas welding and their applications.
- f) Write short notes on annealing and normalizing of carbon steels.
- g) What is meant by production? What are types of production? Explain production versus productivity with examples.
- h) Explain electroplating and galvanizing in brief with help of neat sketches.

Section-C

Attempt any two (2×15=30)

- Q3. With the help of neat sketch explain the basic component of shaper machine and various operation performed on it. What are the main difference between shaper and planer? Which of the drive mechanism used in shaper? Discuss any one in brief with neat sketch.
- Q4. Discuss the role of materials and manufacturing for the growth of any nation. Explain with suitable example the type of production.

(3)

Q5. Why heat treatment of steel is required? Describe the process of steel hardening. Why steel is required to be tempered after it has been hardened?