

III B.Tech I Semester Regular Examinations, November 2008
PRODUCTION TECHNOLOGY
(Common to Mechanical Engineering, Mechatronics and Automobile Engineering)

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. (a) What are different elements in a typical gating system?
(b) What is the significance of shrinkage in the production of castings? [8+8]
2. (a) Describe the solidification of a pure metal with a neat sketch in moulding process.
(b) Large castings are not made by investment casting. Explain, why? [8+8]
3. (a) Write the applications, advantages and limitation of gas welding.
(b) Write about various types of spot welding electrodes with neat sketches. [8+8]
4. (a) What are the low temperature joining processes? Explain briefly.
(b) Why is brazing an appropriate method for joining dissimilar metals with widely different melting points? [8+8]
5. (a) Explain the advantages of cold working. Name typical applications of cold working.
(b) Explain hot rolling operations through
 - i. Two high reversing mill
 - ii. Three high mill
 - iii. Four high mill. [8+8]
6. (a) What are the various ways in which presses can be classified?
(b) Explain shearing action in press working? [8+8]
7. (a) What is the difference between open die forging and impression die forging?
(b) What are the attractive features of extrusion process? [8+8]
8. (a) Discuss the structure of polymers giving examples for different types of structures.
(b) Discuss the various types of additives used in polymers. Give their function and example for each type of additive? [8+8]
