

II B.Tech I Semester(R07) Supplementary Examinations, May/June 2010
PRODUCTION TECHNOLOGY
(Mechanical Engineering)

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. (a) What is permeability and why is it important in molding sands?
(b) What are the advantages, disadvantages and limitations of casting process? [8+8]
2. (a) Write notes on nucleation and grain growth related to casting?
(b) What must be the preferred shape of a riser? Explain. [8+8]
3. (a) What are the parameters that decide drag in oxy-fuel gas cutting? Explain how a good cut is achieved?
(b) Differentiate between solid phase welding and liquid phase welding? [8+8]
4. (a) What are the disadvantages of bare wire electrode?
(b) Mention the causes and remedies for magnetic arc blow. [8+8]
5. (a) Discuss briefly the advantages of hot working over cold working?
(b) What is meant by grain flow in the case of forged (or) rolled components? [8+8]
6. (a) Explain the coining operation with a neat sketch?
(b) Describe briefly the deep drawing operation with a neat sketch? And discuss its advantages and applications? [8+8]
7. (a) Why are heat-treatments given to forged components ? Explain Annealing, Hardening, tempering in relation to forging?
(b) List the different stages in the drop forging processes in production of a component such as a spanner? [8+8]
8. (a) Explain with a neat sketch compression moulding method for processing of plastics? and state their advantages and applications?
(b) Explain briefly blow moulding with help of neat sketch and state its advantages and applications? [8+8]
