

R09

Code No: 09A40301

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY, HYDERABAD

B.Tech II Year II Semester Examinations, November/December-2013

PRODUCTION TECHNOLOGY

(Common to ME, MCT, AME)

Time: 3 hours

Max. Marks: 75

Answer any five questions

All questions carry equal marks

- 1.a) Briefly describe various steps involved in making a casting.
b) With the help of sketches write about types of patterns used in casting process. [15]
- 2.a) What are the advantages of an alloy over a pure metal and describe different phases of an alloys during its solidification.
b) Compare among centrifugal casting, Die casting and investment casting processes. [15]
- 3.a) Explain the oxy-acetylene welding process and its applications.
b) What is the principle of an arc welding? Differentiate between TIG and MIG welding processes. [15]
- 4.a) List the differences between soldering and brazing giving their applications.
b) Describe any one non destructive testing method of welds, with diagram. [15]
- 5.a) Compare and contrast the cold working and hot working processes.
b) Write short notes on rolling fundamentals giving a list of types of rolling products. [15]
- 6.a) Write a short note on the following:
i) Blanking
ii) Piercing
iii) Coining
iv) Spinning.
b) Briefly describe hot and cold spinning processes. [15]
- 7.a) Explain Hydrostatic extrusion and how it is advantageous over other extrusion methods.
b) Write a note on forging tools and dies and list out forging defects and their causes. [15]
8. Write short notes on:
a) Classification of plastics
b) Advantages of plastics over metals
c) Processing of plastics. [15]
