

Code No: R05310303

Set No. 2

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 the advantages of casting process over other production processes?
(b) Give advantages of different pattern materials? [8+8]
2. (a) What are crucible furnaces? Where are they preferred and why?
(b) Explain the reasons for using the flux in melting of metals in cupola. [8+8]
3. (a) Why is it possible for fusion zone to have a chemistry that is different from that of the filler metal? Explain.
(b) Sketch and explain various welding positions? Give their applications [8+8]
4. (a) List and explain the destructive tests applied in welding.
(b) What are the essential steps in brazing operation? [9+7]
5. (a) How is roll forming fundamentals different from rolling process.
(b) Distinguish between plastic formations in single crystals and polycrystalline aggregates. [8+8]
6. (a) Write short notes on elements of die and press.
(b) Explain the working of hydraulic press with neat sketch. [8+8]
7. (a) Describe deformation in extrusion and explain possible defects and suitable remedies?
(b) Derive an equation for ideal extrusion pressure. [8+8]
8. (a) Distinguish between thermosetting plastics and thermoplastics. Give their applications.
(b) List few components manufactured by the injection moulding and justify why they are manufactured by this process. [8+8]
