Code: 9A03403

B.Tech II Year II Semester (R09) Supplementary Examinations December/January 2014/2015

MANUFACTURING TECHNOLOGY

(Mechanical Engineering)

Time: 3 hours Max. Marks: 70

Answer any FIVE questions All questions carry equal marks

- 1 Explain the various components of a gating system with sketch.
- 2 (a) What are the two basic categories of casting processes? Explain.
 - (b) What are the advantages and disadvantages of sand casting over investment casting?
- 3 (a) Explain the main features of Plasma arc cutting torch with sketch.
 - (b) Explain the transferred arc Plasma cutting process with sketch.
- 4 (a) what are the general sources of weld defects? Explain.
 - (b) How the welding defects are classified? Explain.
- 5 (a) What effect does the elastic limit of a material have on ability to be cold worked.
 - (b) Explain the process of strain hardening.
- 6 (a) Define blanking, punching and piercing operations.
 - (b) What are different types of drawing? Explain any one.
- 7 (a) What is cold forging? What for cold heading is used?
 - (b) Explain the process of rotary forging with help of neat sketch.
- 8 (a) Explain the principle of EDM.
 - (b) What is the function of dielectric fluid in EDM?
 - (c) List advantages and disadvantages of EDM.
