Roll No.									

(18)

B.E. (FULL TIME) DEGREE END SEMESTER EXAMINATIONS – NOV/ DEC 2011

MANUFACTURING ENGIENERING BRANCH

FOURTH SEMESTER

MF 9251 – MANUFACTURING PROCESSES II

(REGULATIONS 2008)

Time : 3 hr Max. Marks : 100

Answer ALL Questions

Part – A (10 x 2 = 20 Marks)

1. What is a Pattern? How does it differ from the actual product to be made from it?
2. List the methods of inspection and testing of castings.
3. What principle is involved in hot rolling? Explain.
4. Describe the Forging Process.
5. What is the principle of Resistance Welding?
6. What is soldering and brazing? Explain.
7. Explain the process of thermoforming.
8. Enumerate the characteristics of thermosets.
9. Write a short note on abrasive water jet machining process.
10. Explain why EBM process is generally performed in a vaccum chamber.

Part – B (5 x 16 = 80 Marks)

11. Explain the process of MIG and TIG welding with a neat sketch. Give their advantages and limitations.

12. a) Sketch and explain the construction and operation of hot chamber die casting machine.

(OR)

b) Explain the complete operation of cupola with a neat sketch.

13. a) i) Describe the process of hot extrusion of tubes. (6)

ii) Differentiate between hot working and cold working of metals. Bring out the advantages and disadvantages of each of these techniques. (10)

(OR)

b) Describe the principle and types of sheet metal forming operations. (16)

14. a) Explain the extrusion and injection moulding processes of thermoplastic with neat sketches. (16)

(OR)

b) Describe any two fabrication methods of composites. Mention their limitations and applications. (16)

15. a) Explain the principle and process of ultrasonic machining. List the common materials used for tool in USM. (16)

(OR)

b) Explain the principle of ECM and EDM with the help of a schematic diagram. (16)