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Reg. No. : .....

Name : .....

Fourth Semester B.Tech. Degree Examination, February 2015
(2008 Scheme)
Branch : Mechanical Engineering
08.404 : MANUFACTURING PROCESS (MN)
(Special Supplementary)

Time : 3 Hours Max. Marks : 100

Instruction : *Answer* ***all*** *questions*

PART – A

1. What is a Muller and what function does it perform ?
2. What is the benefit of a split pattern over a one piece or solid pattern ?
3. What are cores ? How does core sand differ in composition from molding sand ?
4. Explain Thermit welding and give its applications.
5. How does MIG welding differ from TIG welding ?
6. What tests can be used to check the soundness of the weld ?
7. Give the advantage of press forging over drop forging.
8. What are the defects in rolled parts ?
9. Explain the difference between extrusion and drawing.
10. What are the various stages associated with sintering operation in powder a metallurgy ?

(10×4 = 40 Marks)

P.T.O.

PART – B

Module – I

11. a) Explain the various sand molding machines.

    b) Explain the different types of risers and their applications.

OR

12. a) Explain the process of Carbon dioxide molding.

    b) Differentiate between centrifugal and semi centrifugal casting processes. 20

Module – II

13. a) What is solid state welding ? Explain any two solid state welding processes.

    b) Illustrate and describe the Gas tungsten arc welding process.

OR

14. a) Explain the oxy-acetylene gas welding process. Mention the significance of various types of flames.

    b) Explain the working principle of the plasma arc welding and mention its applications. 20

Module – III

15. a) Define the principle of rolling and discuss its classification.

    b) How are forging processes classified ? Explain with sketches the various forging processes.

OR

16. a) Explain the different methods of extrusion stating the merits and demerits.

    b) Explain the method of rotary piercing for producing seamless tubes. 20