



(Pages : 2)

4438

Reg. No. :

Name :

**Fourth Semester B.Tech. Degree Examination, July 2015
(2008 Scheme)**

**Branch : Mechanical Engineering
08.404 : MANUFACTURING PROCESS (MN)**

Time : 3 Hours

Max. Marks : 100

Instruction : Answer *all* questions from Part – A and *any one* full question from *each* Module of Part – B.

PART – A

1. Compare the different types of sand moulds.
2. Write notes on internal and external chills.
3. Write notes on riser location.
4. Discuss about the types of flames in gas welding.
5. Explain the principle of explosive welding.
6. Describe the resistance seam welding.
7. Explain the planetary rolling mill.
8. Explain the wire drawing operation.
9. Write notes on weld defects.
10. Describe the thread rolling process. **(10×4=40 Marks)**

**PART – B****Module – I**

11. a) Explain the properties of moulding sand.
b) Discuss the different types of cores with neat sketch.

OR

12. a) Explain the hot chamber die casting process and give its applications.
b) Write notes on solidification of castings.

Module – II

13. a) Differentiate between TIG and MIG welding process.
b) Explain the principle of carbon arc welding. How does it differ from shielded metal arc welding ?

OR

14. a) Describe the thermit welding process.
b) Explain the friction welding process.

Module – III

15. a) Explain the process of manufacturing aluminium utensils.
b) Discuss the open die and closed die forging operations.

OR

16. a) Differentiate between hot extrusion and cold extrusion.
b) Write notes on :
i) compacting
ii) sintering.

(3×20 = 60 Marks)