



ME 3005

**III Semester B.Tech. in Mechanical Engineering Examination, August 2011
MANUFACTURING TECHNOLOGY – I**

Time : 3 Hours

Max. Marks : 75

Instruction : Answer any five questions from Part – A and Part – B.

PART – A

Answer any five questions :

(5×5=25)

1. Write the composition of good moulding sand.
2. Explain the casting defects.
3. Explain with some example of mechanical working of metals.
4. Which type of furnaces are suitable for melting of ferrous material and why ? Explain it.
5. What are the advantages of AC equipment over DC equipment in arc welding ?
6. Explain work holding devices.
7. Describe the essential features of the lathes.
8. Briefly explain the types of tool holding devices.

PART – B

(5×10=50)

9. What are the pattern allowances ? Explain briefly each.
10. Explain with a simple sketch how metal is melted in an electric arc furnace.
11. Distinguish between open die and closed die forging processes.
12. What are the defects in forgings ? Explain it.
13. Describe with neat sketches various steps in friction welding.
14. Distinguish between brazing, soldering and welding.
15. Explain in detail the standard components of lathes.
16. Explain the working principle of turret and capstan lathes.