



B.E/B.Tech (Full-Time) DEGREE END SEMESTER EXAMINATIONS, NOV/DEC2012  
**MECHANICAL ENGINEERING BRANCH**  
THIRD SEMSTER-REGULATION 2008

22

**ME 9201 – MANUFACTURING TECHNOLOGY-I**

Time: 3Hrs

Max.Mark:100

**Answer All Questions**

**Part –A (10x2=20 Marks)**

1. Why draft allowance is provided on the patterns?
2. What is the importance of Permeability in sand Moulds?
3. How is an arc obtained in Arc welding?
4. What are the typical applications of soldering?
5. Briefly explain the principle of rolling with a neat sketch.
6. What is Wire drawing?
7. Define Notching.
8. What types of components are generally manufactured by spinning process?
9. Differentiate between Thermo plastics and Thermosetting plastics.
10. Write short notes on Thermoforming.

**Part – B (5x16 = 80 Marks)**

- 11 Explain Magnetic pulse forming process with the help of a neat diagram .List down the applications of this process.
- 12a Describe the process of Shell moulding and give its advantages. For what applications it will best fit.
- (OR)
- 12b Describe and enumerate the characteristics of the following methods of sand ramming  
(i)Hand (iii)Squeeze  
(ii)Jolt (iv)Slinger (Each 4 Marks)
- 13a Explain the Gas Tungsten arc welding (GTAW) process. How does it differ from Gas metal arc welding (GMAW) process.
- (OR)
- 13b Describe Electron beam welding (EBW) with the help of a neat diagram. Why electron beam welding is done in vacuum?
- 14a Distinguish between forging hammers and forging presses. Explain the working of drop hammer with a neat sketch.
- (OR)
- 14b Define Extrusion and explain the various classifications.

15a Explain the working principle and applications of  
(i) Compression Moulding (ii) Transfer Moulding ( Each 8 Marks)

(OR)

15b What is laminating? Explain the low pressure method of laminating.