

III B.Tech I Semester Supplementary Examinations, February 2008
MANUFACTURING TECHNOLOGY
(Mechatronics)

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. (a) Describe various types of Chaplets used in moulding
(b) Discuss the different types of cores. [8+8]
2. (a) Explain the process of making Moulds by Jolt-Squeezing machines.
(b) Describe Oil Fired tilting type Crucible Furnace with a neat sketch. [8+8]
3. (a) Compare the hot rolling and cold rolling process.
(b) Explain the theory of rolling and rolling forces. [8+8]
4. (a) Differentiate between extrusion and drawing.
(b) Explain the forward extrusion process with a neat sketch. [8+8]
5. (a) Sketch and explain various hand hammers and power hammers used in practice. Mention their applications.
(b) Bring out the differences between punching and drifting operations. Mention their applications. [10+6]
6. (a) How does the arc-length, weld-speed and current strength affect the quality of weld?
(b) Differentiate between straight polarity and reverse-polarity as applied to D.C welding. [9+7]
7. (a) How the straightness is checked by straight edge and Auto-collimators?
(b) Sketch and explain the construction and working of inside micrometer. [8+8]
8. (a) Sketch and explain about clearance fit, interference fit and transition fit. Explain their applications.
(b) Explain the meaning of $25 H_7/d_9$ and indicate the importance of each one of the numericals and alphabets. [9+7]
