

SECOND SEMESTER M.Tech DEGREE EXAMINATION

M.Tech MECHANICAL ENGINEERING

SPECIALIZATION: COMPUTER INTEGRATED MANUFACTURING

STREAM ELECTIVE II

MCE 2007: RAPID PROTOTYPING, TOOLING AND MANUFACTURE

Answer any two questions from each module. Each question carries 10 marks.

Time: 3hrs

Max Marks: 60mks.

MODULE I

1. a. Describe the term rapid Prototyping.
1. b. Explain the impact of rapid prototyping on product development.
2. Explain Digital prototyping and Virtual prototyping.
3. Describe Reverse engineering in detail.

MODULE II

4. Describe the working of Solid ground curing technique in detail.
5. Describe the working principle and apparatus used in Fused deposition modeling
6. Describe the details of processes of Laminated object manufacturing

MODULE III

7. a. Describe "Selective laser melting"
7. b. Explain the term Rapid manufacturing.
8. Explain the working principle of Selective laser sintering.
9. Explain Shape deposition manufacturing.