

Code: MEMD1T5C

I M.Tech - I Semester - Regular Examinations – March 2014

**RAPID PROTOTYPING
(MACHINE DESIGN)**

Duration: 3 hours

Marks: 5x14=70

Answer any FIVE questions. All questions carry equal marks

1. Discuss the various stages in the development of RP systems highlighting the merits and limitations. 14 M

2. Describe the five steps involved in a general RP process chain? 14 M

3. Describe principle, process of SLA and its applications. 14 M

4. Write a note on the following
 - a. Rapid Freeze prototyping 7 M
 - b. Micro fabrication 7 M

5. Describe LOM process and discuss the effects of process parameters on the quality of the final product. 14 M

6. Explain the working principle and details of process parameters of MJM? 14 M

7. Discuss about selective laser sintering with the help of neat sketch and what are strengths and weaknesses of the above method. 14 M

8. Describe principle and process of LENS and what are its major applications. 14 M