

Code: 9D04206a

M.Tech II Semester Supplementary Examinations August/September 2018

**RAPID PROTOTYPING**

(CAD/CAM)

(For students admitted in 2013, 2014, 2015 &amp; 2016 only)

Time: 3 hours

Max. Marks: 60

Answer any FIVE questions

All questions carry equal marks

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- 1 (a) Discuss the need of rapid prototyping for time compression in product development.  
(b) Discuss the growth of RP industry with regard to geometric modeling in CAD.
- 2 Explain the data preparation and process parameters of stereo lithography systems.
- 3 Explain the principle and path generation in fusion decomposition modeling process.
- 4 Explain the concept, principle of operation and process details of laminated object manufacturing process.
- 5 What is a concept model? Discuss about thermo jet printer and object Quadra system.
- 6 (a) Distinguish between direct AIM and DTM rapid tool process.  
(b) Discuss about the features of various internet based RPT software.
- 7 (a) Explain the errors due to slicing, curing and control errors.  
(b) Describe the process of selection of part deposition orientation.
- 8 Discuss the possibilities of increase in the rapid prototyping methods, range of applications by utilizing the vacuum casting technology.

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