

**CODE: 17CD03108**

M. Tech I Year I Semester Regular Examinations, February 2018

**RAPID PROTOTYPING  
(CAD/CAM)**

Time : 3 hours

Max Marks : 60

Answer all **five** units. (5 x 12 = 60 Marks)

**UNIT-I**

1. (a) How is rapid prototyping different from the traditional machining method? Explain the material removal and material addition processes of RP.
- (b) Explain in detail, the applications of RP. Also identify its limitations.

OR

2. Discuss the benefits and applications of Stereo Lithography process.

**UNIT-II**

3. Explain the process of fusion decomposition modelling.

OR

4. Discuss the advantages and disadvantages of fusion decomposition modeling.

**UNIT-III**

5. With a neat sketch, explain laminated object manufacturing process..

OR

6. (a) What are the advantages and disadvantages of LOM? Explain.
- (b) Explain the applications and uses of LOM.

**UNIT-IV**

7. How has Z Corporation (Z Corp) incorporated the 3DP process into the Z402 system? Explain.

OR

8. (a) What is Rapid Tooling? How is it different from conventional tooling?
- (b) Give the broad classification of rapid tooling? Briefly explain them.

**UNIT-V**

9. (a) Explain the advantages of quick cast process.
- (b) Briefly discuss the direct AIM process.

OR

10. (a) What are the advantages and disadvantages of DLMS technology?
- (b) State the applications of MIMICS in RP.

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