



M.Tech II Semester Supplementary Examinations January/February 2019

RAPID PROTOTYPING

(CAD/CAM)

(For students admitted in 2017 only)

Time: 3 hours

Max. Marks: 60

Answer all the questions

- 1 (a) Discuss the evolution of RP systems indicating the history and their growth rate in the industrial sector.
(b) List the classification of RP systems.

OR

- 2 (a) Describe the process flow of the 3D system stereo lithography apparatus.
(b) What are the advantages and disadvantages of stereo lithography systems?

- 3 (a) Describe Fused deposition modeling process with a neat diagram.
(b) What are the applications of FDM models? Give an example.

OR

- 4 (a) Write the limitations and advantages of FDM process.
(b) With a neat sketch, explain solid ground curing process.

- 5 (a) Describe 3D printing process with a neat sketch.
(b) In the LOM systems, what are the factors that limit the work volume of the systems?

OR

- 6 (a) Describe the process flow of Cubic's laminated object manufacturing.
(b) What are concept modelers? What are their advantages?

- 7 (a) Explain in detail the LENS process with a neat diagram. Also write the advantages and disadvantages.
(b) Classify direct rapid tooling methods.

OR

- 8 (a) What is the common format used by RP systems? Describe the format and illustrate with an example. What are the pros and cons of using this format?
(b) Differentiate soft tooling and hard tooling.

- 9 Write short notes on:
(a) Influence of building orientation.
(b) Part building error.

OR

- 10 Write short notes on:
(a) Error in STL file.
(b) File exchanging error.

