

Code: ME7T5B

**IV B.Tech - I Semester – Regular / Supplementary Examinations
November 2016**

**CAD / CAM
(MECHANICAL ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

Answer any FIVE questions. All questions carry equal marks

1. a) Briefly explain the various categories of manufacturing activities. Write down the advantages to be gained by the adoption of CAD and also CAM. 7 M

b) What are the functions of CPU in CAD workstation? 7 M

2. a) Explain Raster Scan Graphics coordinate system. 7 M

b) Explain the importance of database during geometric modeling and also explain how database is structured? 7 M

3. Explain various curve representation methods used for geometric modeling. 14 M

4. a) Emphasize on the importance of LAYERS during design of a CAD model. 4 M

- b) Differentiate Surface modeling and Solid modeling with context to designing a CAD model. What measures do you consider while modeling them? 10 M
5. a) What do you understand by the word “Numerical Control”? 7 M
- b) What are the factors that contributed to the development of Numerical Control? 7 M
6. a) Discuss the benefits of Group Technology. 7 M
- b) Briefly explain about MICLASS system. 7 M
7. a) What is FMS? 7 M
- b) Explain in detail the basic components of FMS. 7 M
8. a) How manufacturing systems are classified? Explain in detail. 7 M
- b) Discuss the scope of CIM with respect to an automobile industry. 7 M