

Code No: **R41032****R10****Set No. 1****IV B.Tech I Semester Supplementary Examinations, March/April - 2016****CAD/CAM****(Common to Mechanical Engineering and Automobile Engineering)****Time: 3 hours****Max. Marks: 75**

Answer any FIVE Questions
All Questions carry equal marks

- 1 a) Explain about CAD/CAM hardware. [8]
b) Explain about different display devices. [7]
- 2 a) Explain 2D transformation matrix for translation, rotation and scaling with a neat diagram. [8]
b) What is necessity of transformation? Give 3D homogeneous transformation matrix for (i) XY-Flip (ii) YZ-Flip (iii) O-Flip [7]
- 3 a) What are the requirements of geometric models and explain the need of geometric modeling. [8]
b) Explain B-spline curve with a neat figure and state the advantages. [7]
- 4 a) Explain various display control commands in drafting and modeling systems. [8]
b) Explain the layering technique in drafting and modeling systems. [7]
- 5 a) Explain about the features of machining center. [8]
b) State the advantages and disadvantages of Computer Numerical Control. [7]
- 6 a) Explain about coding and classification system. [8]
b) What is group technology? Explain its advantages and disadvantages. [7]
- 7 a) "Computers play an important role in quality control". Justify the statement with suitable examples. [8]
b) Explain about different noncontact optical inspection methods. [7]
- 8 a) Define CIM? What are the advantages and disadvantages of implementing CIM in a manufacturing unit? [8]
b) What is lean manufacturing? Explain the steps used in implementing lean manufacturing. [7]