

Code No: **R41032****R10****Set No. 1****IV B.Tech I Semester Supplementary Examinations, Oct/Nov - 2018****CAD/CAM****(Common to Mechanical Engineering and Auto Mobile Engineering)****Time: 3 hours****Max. Marks: 75****Answer any FIVE Questions  
All Questions carry equal marks**

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- 1 a) Explain the CAD/CAM Hardware, basic structure, and CPU functions with neat diagram. [9]  
b) Describe about memory types and display devices. [6]
- 2 a) Explain the method of hidden surface removal. Give its advantages and limitations. [8]  
b) Distinguish between 2-D and 3-D wire frame models. [7]
- 3 a) Describe with the help of neat sketches the major surface entities provided by CAD/CAM Systems. [8]  
b) Explain the requirements and types of geometric models. [7]
- 4 a) Explain about various editing commands. [7]  
b) Describe the construction of various solid modeling techniques. [8]
- 5 a) Explain the features of machining center and turning center. [8]  
b) Write about the special features of Numerical Control machine tools when compared to the Conventional machine tools. [7]
- 6 a) What is Group Technology? Classify a component using any one type of coding system. [8]  
b) Explain the Retrieval type Computer Aided Process Planning with neat diagram. [7]
- 7 a) Explain about terminology in quality control in detail. [7]  
b) Explain general types of non-contact with non-optical inspection methods. [8]
- 8 a) Write about the functions of Machine tools and related equipment in CIM systems in detail. [8]  
b) Explain the benefits of Computer Integrated Manufacturing Systems. [7]