

R09

Code No: D0410

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M.TECH II - SEMESTER EXAMINATIONS, APRIL/MAY 2012
COMPUTER AIDED PROCESS PLANNING
(CAD/CAM)**

Time: 3hours

Max. Marks: 60

**Answer any five questions
All questions carry equal marks**

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- 1.a) Explain the Computer aided process plan design approach using generative CAPP system.
- b) What methods are available for taking decisions in the process of developing a process plan?
- 2.a) Why will a CAPP system facilitate the integration of CAD and CAM?
- b) Discuss the criteria for selecting a CAPP system.
- 3.a) Explain why group technology is important in achieving the integration of CAD and CAM.
- b) What are the advantages of retrieval CAPP system? Give the applications?
4. State and explain the reasons for selection of optimum machining parameters in machining process.
5. With an example explain tolerance analysis and tolerance synthesis in machining parts design.
6. Explain the role of NC in manufacturing integration. State the advantages of NC system.
7. Develop a macro for milling an elliptical cavity in a solid block in a CNC machining centre.
8. Write short note on the following
 - a) Advantages of integrated approach over sequential approach of tolerancing.
 - b) Optimum indexing position for executing fixed sequence in CNC.
 - c) MIPLAN System.
