Code No: D0402/ B0402

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
M. Tech II Semester Regular Examinations September 2010
FLEXIBLE MANUFACTURING SYSTEMS
(CAD / CAM)

Time: 3hours   **Max. Marks: 60**

Answer any five questions
All questions carry equal marks
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1.a)   Discuss strategic issues in flexible automation and explain benefits of FMS.
 b)   With a block diagram explain components structure of FMS and their functions.

2.a)   Discuss with an example on planning and control of FMS.
 b)   Discuss the problems involved in implementation of FMS.

3.a)   Discuss the architecture of supervisory computer in FMS and its role in coordination of FMS activities.
 b)   With a block diagram explain hierarchy of computer control in FMS.

4.a)   Discuss the need for databases in FMS and explain the data base retrieval procedure deployed in FMS.
 b)   Discuss the steps involved in selection of simulation software.

5.a)   With a block diagram explain data flow path in manufacturing data systems.
 b)   Discuss the strategy of flexible workforce concept in FMS and procedure for scheduling of work force under above concept.

6.   Explain various CAD/CAM considerations involved in planning FMS data base with illustrations wherever necessary.

7.   Discuss need, scope and limitations of deployment of karban system in flexible manufacturing system and its pertinent implementation issues.

8.   Write short notes on any **THREE.**
      a) Knowledge based scheduling
      b) Trends in simulation software for FMS.
      c) Close supplier ties in FMS.
      d) Preventine maintenance of FMS systems.

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