Code No: G0402/R13

M. Tech. I Semester Supplementary Examinations, December-2016
COMPUTER AIDED MANUFACTURING
(Common to CAD/CAM and AMS)

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

Answer any FIVE Questions
All Questions Carry Equal Marks

1. a   Briefly explain any 2 types of auxiliary statements used in APT.   4
    b   Write the APT program for the geometry shown in Figure 1 below: 8
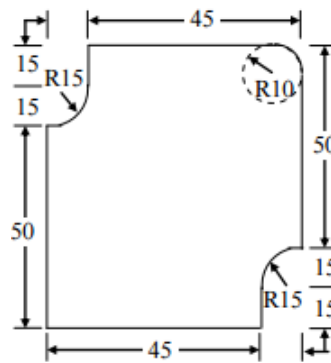

Fig.1

2. a   What is adaptive control machining system? Discuss its advantages to the   6
        manufacturing technology?
    b   List out various types of quick change tooling systems. Explain any one.   6

3.   Discuss the functioning of a DAPP based post processor and mention about the   12
        major variables that effect DAPP.

4. a   What are the factors to be considered to the Selection of Micro Controllers?   6
    b   Discuss the various hardware components of a PLC.   6

5. a   What is CAPP? Explain about hybrid CAPP system.   6
    b   Discuss briefly about the construction of Coordinate measuring machine.   6

6. a   Differentiate between manual part programming and APT-programming.   6
    b   Explain about modular fixturing.   6

7. a   What is the role of post processor in NC machining system?   6
    b   Explain the principle of operation of internal relays and counters in PLC.   6

8.   Write short notes on following: 4+4+4
            a) Artificial Neural Networks
            b) Automatic Tool Path generation
            c) Preset tools

*****