Roll No. .....

Subject Code—6023

M. Tech. EXAMINATION

(First Semester)

(Main/Re-appear Batch 2011)

MECH. ENGINEERING

MELP-714

CNC Technology and Programming

Time : 3 *Hours* *Maximum Marks* : 70

Note : Attempt any *Five* questions. All questions carry equal marks.

1. Discuss fined, programmable and flexible type of automation in industry using suitable examples.

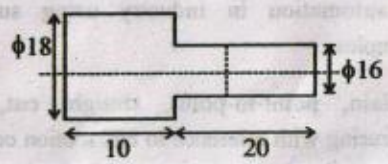
2. Explain, point-to-point, straight cut, and contruring with reference to NC motion control. Also write their advantages, limitations and applications.

3. Briefly explain and describe with neat sketch, the principle and working of :
   (a) Encoder
   (b) Stepper Motor.

4. Describe the following programming formats in detail :
   (a) Word address format
   (b) Tab sequential format
   (c) Fixed block format.

5. Write the syntax for geometry statement and motion statement in APT language. Give two examples for each.

6. Write NC part program for the following job. (All dimenssioning in mm) work material. Aluminium. Blank length 40 mm, dia 19 mm and depth of cut = 0.75 mm.



7. Write a small note on coating used in Cutting tools.

8. Write short notes on the following :
   (a) Post Processor
   (b) D Well
   (c) Radius Compensation in cutting tool.