Total No. of Printed Pages:2

SUBJECT CODE :- 112

FACULTY OF ENGINEERING AND TECHNOLOGY

T.E.(Mech) Examination Nov/Dec 2015

CAD/CAM/CAE

(Revised)

[Time: Three Hours] **[Max. Marks: 80]**

"Please check whether you have got the right question paper."

N.B i) Use suitable data if sequined.

ii) Attempt three questions from each section

Section – A

Q1. a) Explain the use of computers in product life cycle with the help of neat block diagram. 07

b) Explain the hardware and software requirement for implementing CAD / CAM facilities. 06

OR

Q.1 a) Explain the data input devices used in CAD 07

b) Explain and differentiate the image generation techniques. 06

Q.2 a) Compare CSCY against Boundary representation method of solid modelling 07

b) Discuss the advantages of parametric representation over nonparametric representation 06

OR

Q.2 a) Explain the role of manufacturing data base in CIM. 07

b) Explain the concept of pointing & positioning 06

Q.3 Write short notes on any two. 14

a) CAD & CAM software's
b) B-spline curves
c) Product dosing process
d) Concurrent engineering

Section – B

Q.4 a) Explain MC coordinate system for lathe and milting machines 06

b) Discuss the use of computers in quality control. 07

OR

Q4 Write an APT programme for milting the profile of the part of shown in fig. 1 the thickness of the part is 20mm 13

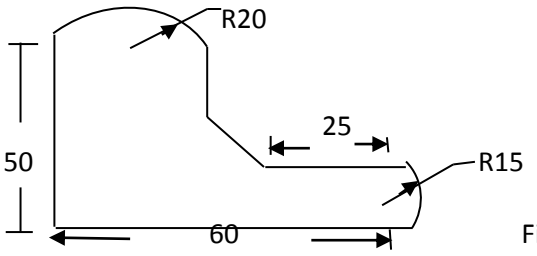

Fig. 1

Q.5 a) What is DMC? Explain 06

b) Explain NC motion control systems. 07

OR

Q.5 a) Discuss the use of Robot in industrial applications. 07

b) Define the following terms applied to a robot arm. 06

a) Accuracy
b) Repeatability
c) Resolution
d) Work volume

Q.6 Write short note on any two 14

a) Robot programming methods
b) CIMS
c) GIT
d) Robot sensors