(DME 422)

B. Tech. DEGREE EXAMINATION, MAY - 2015

(Examination at the end of Final Year)

MECHANICAL ENGINEERING

Paper - II : Computer Aided Design

Time : 3 Hours **Maximum Marks : 75**

Answer question No. 1 compulsory ***(15)***

Answer ONE question from each unit ***(4 x 15 = 60)***

1) Write a short notes on the following :

a) Design process.

b) CRT.

c) Parametric and Non parametric representation.

d) Secondary storage devices.

e) Viewing operation.

f) Constructive solid geometry.

g) Geometry and Topology.

UNIT - I

2) a) Explain the applications computers for design.

b) Discuss about the graphics terminals used in CAD.

OR

3) a) Define CAD? Give its applications and benefits?

b) Discuss about the following.

i) DVST

ii) Input Devices.

UNIT – II

4) Draw the flow chart and write the Bresenham's algorithm. Generate a line with points (4, 4) (8, 4) get the slope.

OR

5) a) Explain about the different types of Wire frame modeling entities.

b) Explain about the representation of different curves.

UNIT – III

6) a) What are the different forms of representation of surface modeling? Explain.

b) Define surface modeling? Give it's applications.

OR

7) Briefly explain about the following :

a) B-rep (Boundary representation)

b) CSG (constructive solid geometry)

c) Sweep representation.

UNIT – IV

8) a) Explain the principles of Transformation.

b) Distinguish between 2-D and 3-D Transformations.

OR

9) Distinguish between viewing, windowing and clipping operations.

κβκβ