

B.Tech DEGREE EXAMINATION, MAY - 2015

(Examination at the end of Third Year)

COMPUTER SCIENCE AND IT

Paper - V : Computer Graphics

Time : 3 Hours

Maximum Marks : 75

Answer question No.1 is compulsory

(15)

Answer ONE question from each unit

(4 × 15 = 60)

1) Write short notes on :

- a) Frame buffer
- b) Display file structure
- c) Display controllers
- d) Segment table
- e) Scaling transformations

UNIT - I

2) Explain the following :

- a) Display devices.
- b) Vector generation.

OR

3) a) Antialiasing.

- b) How much time is spent scanning across each row of pixels during screen refresh on a raster system with a resolution of 640×480 and refresh rate of 60 frames per second.

UNIT - II

4) Explain Mid point circle generating algorithm in detail.

OR

5) Write in detail about inherent memory devices.

UNIT - III

6) Explain image transformation using segment table.

OR

7) a) Polygon filling using Boundary filling method.

b) Scan line algorithm.

UNIT - IV

8) Explain Rotation about arbitrary point using transformation matrices.

OR

9) Define viewing transformation, Describe Sutherland-Hodgeman algorithm for clipping polygons.

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