Student Regd. No

E

COURSE CODE : DCAP 504

COURSE TITLE : COMPUTER GRAPHICS

Time Allowed: 3 hours **Max. Marks: 80**

1. This paper contains 10 questions divided in two parts on __2__ pages.

2. Part A is compulsory.

3. In Part B (Questions 2 to 10), attempt any 6 questions out of 9. Attempt all parts of the questions chosen.

4. The marks assigned to each question are shown at the end of each question in square brackets.

5. Answer all questions in serial order.

PART – A

Q1. Write short notes on the following:

a) Pixel

b) CRT

c) Look-up table

d) Image Persistence

e) Resolution

f) Projection

g) Animation

h) Texturing

i) Ray Tracing

j) Phong Model

[2 * 10 = 20]

PART – B

Q2. Write down the step wise procedure to scan convert a line using Bresenham's Algorithm.

Q3. List and explain various anti -aliasing techniques.

Q4. Explicate the concept of clipping and its types in detail.

Q5. What is the use of Z-Buffer Algorithm in Hidden Surfaces. Also, explain the algorithm.

Q6. Give the 2-Dimentional transformation matrices for all the categories of transformations.

Q7. Explain 3D Representation and 3D Viewing.

Q8. List and explain various Input and Output devices used in Computer Graphics.

Q9. Explain various applications of computer graphics in real life.

Q10. What is the concept of Window and Viewport? How Window to Viewport Mapping is done? Support your answer with the help of an example.

[10 * 9 = 90]

-- End of Question Paper --