Student Regd. No

C

DCAP504
Computer Graphics

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

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

a) List the operating characteristics for the display technologies: raster refresh systems, vector refresh systems and plasma panels. [2]

b) What is the most common type of monitor employing a CRT? [2]

c) Write down function of shadow mask. [2]

d) What are composite transformations? [2]

e) What does scaling mean? Give an example [2]

f) What is the difference between perspective projection and parallel projection? [2]

g) Distinguish between window port and viewport. In 2D clipping how are lines grouped into visible, invisible and partially visible categories. [2]

h) What do you understand by Interpolative shading Methods? [2]

i) Write down the rotation matrix in 3D? [2]

j) Explain the following:

I) Segment attributes. II) Segment files. [2]

PART-B

Q2 How persistence is different from resolution? Write an algorithm for scan line method. [10]

Q3. Write down Implementation of 2D Transformations [10]

Q4.Implement the cohen-sutherland line clipping algorithm [10]

Q5. Write down Implementation of Ellipse drawing [10]

Q6. A computer animation generally refers to any time sequence of visual changes in a scene. Write down the steps for designing animation sequence. [10]

Q7.Write the various applications of Computer Graphics. [10]

Q8. Write down Implementation of Boundary Fill & Flood Fill Algorithms [10]

Q9 Write a note on area subdivision method? [10]

Q10. Define Z buffer method and painters algorithm. [10]

-- End of Question Paper --