AP - 561

Fifth Semester B.C.A. (Part - III) Examination

COMPUTER GRAPHICS

Paper - 5 ST 4

P. Pages: 3

Time: Three Hours]

[Max. Marks: 60

Note: (1) All questions are compulsory.

- (2) All questions carry equal marks.
- (3) Assume suitable data wherever necessary.
- (a) Explain various characteristics of computers 6 graphics.
 - (b) Explain technologies related to computer graphics.

OR

- What is computer graphics? Explain history 2. of computer graphics. 6
 - (b) Explain advantages and disadvantages of 6 computer graphics.
- (a) Explain window to viewport transfo-rmation. 3. 6

(b) Explain scaling two dimension transformation. (a) Explain any six application of animation. 6 OR (b) Explain following in short :--(a) Tweening. (a) What is co-ordinate system? Explain homogeneous co-ordinate system. 6 (b) Morphing. (b) Explain in short for following:-OR (1) Cathode Ray Tube. Compare hardware and software tools for (2) Raster Scan. 6 animatin. 6 (b) What is Animation? Explain with its types. What is clipping? Explain with clipping 6 algorithm. 6 9. (a) Write a program in 'C' for drawing arc. (b) Write and explain line drawing algorithm. 6 (b) Explain 2 D and 3 D transformation using OR 'C' Programming. Explain the following:--OR (1) B-spline curve. 10. (a) Write a aprogram in C language for scaling (2) Bezier curve. transformation. (b) Write and explain mid-point sub division Explain any two graphics header file used algorithm. in C programming with their advantages for 6 C.programming.