Seat No.	

SE -200

Total No. of Pages : 1

T.E. (Computer Science & Engineering) (Semester -V) Examination, November - 2018

COMPUTER GRAPHICS

Sub. Code : 66293

Day and Date : Monday, 19- 11 - 2018 **Total Marks : 50**

Time : 09.30 a.m. to 11.30 a.m.

Instructions :
1) **Q.No. 3 and Q.No. 6 are compulsory. Attempt any one from Q. No. 1 and Q. No. 2 and any one from Q.No.4 and 5.**
2) **Figures to the right indicate full marks.**
3) **Assume suitable data if necessary.**

Q1) a) Define parallel and perspective projections. Explain Orthographic projection in detail **[6]**

b) Explain Run Length Encoding technique. **[6]**

Q2) a) Explain Scan line seed fill algorithm. **[6]**

b) Explain with the help of transformation matrix the procedure to rotate an object about an axis parallel to coordinate axis **[6]**

Q3) a) Explain Bresenham's line drawing algorithm with suitable example. **[7]**

b) Explain end point code algorithm for line clipping. **[6]**

Q4) a) Explain the following tests to find the relation between polygon and the window in Warnock algorithm

i) Infinite line test

ii) Angle count test **[6]**

b) Explain basic ray tracing algorithm. **[6]**

Q5) a) Explain parametric representation of cubic spline curve segments. **[6]**

b) What is warping? Explain feature based image warping. **[6]**

Q6) a) Explain the steps to construct an animation sequence. **[7]**

b) Explain Phong specular reflection model. **[6]**

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