SP - 68

Total No. of Pages : 2

Seat No.	

S.Y.B. Tech. (CSE) (AIML) (Semester - IV) (CBCS)
Examination, December - 2023
ADVANCED COMPUTER GRAPHICS
Sub. Code : 86169

Day and Date : Friday, 29 - 12 - 2023 **Total Marks : 70**
Time : 2.30 p.m. to 5.00 p.m.

Instructions :
1) **Question no. 6 is Compulsory.**
2) **Solve any four questions from Q. No. 1 to Q. No. 5.**
3) **Assume suitable data wherever necessary.**
4) **Figures to the right indicate full marks.**

Q1) a) Explain 3D Reflection & Scaling in detail. **[8]**

b) Explain following types of parallel projections. **[7]**

i) Orthographic

ii) Axonometric

iii) Oblique

Q2) a) Explain 2D Translation & Shearing in detail. **[8]**

b) Explain RLE & frame buffer. **[7]**

Q3) a) Explain Bresenham's line drawing algorithm. **[8]**

b) Explain Rotation about an axis parallel to a coordinate axis. **[7]**

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Q4) a) Explain Windowing and View-porting? Explain sutherland - Cohen line clipping algorithm. **[8]**

b) What are different light sources? Explain point & Directional light. **[7]**

Q5) a) What is an Animation? Explain types of animation. **[8]**

b) Explain Diffuse illumination & specular reflection. **[7]**

Q6) Write a short notes on : (Any 2) (5 Marks each) **[10]**

a) Z Buffer Algorithm

b) SFX

c) Ray Tracing

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