

Seat No.	
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B. Tech. (Part - II) (Semester - IV) (CBCS)**Examination, May - 2025****ADVANCED COMPUTER GRAPHICS (CSE-AIML)****Sub. Code : 86169****Day and Date : Monday, 19/05/2025****Total Marks : 70****Time : 10.30 a.m. to 1.00 p.m.**

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

- Q.1.** a) Explain types of 2D translation and shearing in detail. [8]
b) Explain the following types of parallel projections. [7]
a) Orthographic b) Axonometric c) Oblique
- Q.2.** a) Explain types of 3D transformation in detail. [8]
b) Explain the following types of perspective projections. [7]
a) Single point b) Two point c) Three point
- Q.3.** a) Explain Bresenham's line drawing algorithm. [8]
b) Explain Rotation about an axis parallel to a coordinate axis. [7]
- Q.4.** a) Explain Sutherland - Cohen line Clipping algorithm. [8]
b) What are different light sources? Explain Point and Directional light. [7]

- Q.5.** a) What is an Animation? Explain types of animation. [8]
b) Explain Diffuse illumination and specular reflection. [7]

Q.6. Write short notes on: (Any two) [10]

- a) Z Buffer Algorithm
- b) VFX
- c) Raytracing