Hall Ticket Number: **14IT606/C**

III/IV B.Tech (Supplementary) DEGREE EXAMINATION

November, 2019 **Information Technology**

Sixth Semester **Computer Animation**

Time: Three Hours **Maximum :** 60 Marks

Answer Question No.1 compulsorily. (1X12 = 12 Marks)

Answer ONE question from each unit. (4X12=48 Marks)

1 Answer all questions (1X12=12 Marks)

a) What is the role of modelling department in Computer animation?
b) Write about shape animation.
c) Define Vector and Matrix.
d) How Ray Casting differs from display pipeline transformations.
e) Define Affine transformations.
f) Write a rotation transformation matrix for rotation about y-axis.
g) What are the features of animation languages?
h) List the approaches to find the arc length.
i) Define control Points.
j) Types of Facial Models.
k) Write about Double Buffering.
l) What is anti aliasing.

UNIT I

2	a)	Explain the principles of Computer Animations?	6M
	b)	How can you transforming a vector and point using Matrix Multiplication.	6M

(OR)

3	a)	List and explain the basic types of animation.	6M
	b)	Explain Geometric computations and functional integration.	6M

UNIT II

4	a)	Explain Homogenous coordinates and transformation Matrix.	6M
	b)	Explain Fixed Angle and Euler Angle Representation	6M

(OR)

5	a)	Write about compound transformations	6M
	b)	Explain the description of Transformations in the Display pipeline.	6M

UNIT III

6	a)	How to calculate arc length in controlling motion along a curve?	6M
	b)	Explain about key frame systems.	6M

(OR)

7	a)	Explain recursive subdivision approach in 3D shape interpolation.	6M
	b)	Explain smoothing a path using linear and cubic interpolation.	6M

UNIT IV

8	a)	How can you modelling the Arm and Hand? Explain.	6M
	b)	Discuss about various approaches to Animating the Face.	6M

(OR)

9	a)	What is motion blur in moving objects?.	6M
	b)	Write short notes on drop shadows.	6M