Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

M. E. - SEMESTER – I • EXAMINATION – WINTER 2012

Subject code: 710202N Date: 09-01-20 Subject Name: Advanced Computer Graphics		}	
_	: 02.3	30 pm – 05.00 pm Total Marks: 70)
	2. N	ttempt all questions. Iake suitable assumptions wherever necessary. igures to the right indicate full marks.	
Q.1	(a)	What is the basic purpose of composite transformation? Explain with	07
	(b)	example. What are the steps involved for modeling and converting a world-coordinate description of a scene to device coordinates, with respect to 3D.	07
Q.2	(a)		07
	(b)	Uniform B-spline, and Nonuniform B-spline. What is the most intuitive and popular methods for combining objects such as Union, Difference and Intersection? OR	07
	(b)	What are the main kind of representations and compare them in terms of the following-Accuracy, Domain, Uniqueness, validity, Closer, Compactness and Efficiency.	07
Q.3	(a) (b)	Differentiate Achromatic and Chromatic light. What are the algorithms for visible line determination? Explain any two. OR	07 07
Q.3	(a) (b)	Write description about any one color model for raster graphics? Write an algorithm for depth-buffer image precision algorithm	07 07
Q.4	(a) (b)	Write two pass object precision shadow algorithm. What is image based rendering? OR	07 07
Q.4	(a)	What are the different methods are used to approximate the way in which the colors of two objects are combined when one object is seen through the other.	07
Q.4	(b)	Compare image based rendering with geometry based rendering and also write its application.	07
Q.5	(a) (b)	What is morphing? Write any five name of the morphing software. What are the components of typical interactive computer graphics? OR	07 07
Q.5	(a) (b)	What is animation? Explain character animation and facial animation. What is the system architecture of simple raster display system?	07 07
