BTS – VI – (S) – 06 – 017 (C)

B. Tech Degree VI Semester (Supplementary) Examination June 2006

CS 605 COMPUTER GRAPHICS

(1998 Admissions)

Time : 3 Hours Maximum Marks : 100

I.		Explain the working of shadow mask CRT and plasma panel with neat diagrams. Mention their advantages and disadvantages. Why short persistence phosphor is Preferred in shadow mask CRT?	(20)
		OR	
II.	(a)	Explain raster scan and random scan systems.	(10)
	(b)	What is interlacing?	(5)
	(c)	What is the role played by the display processor in a raster scan systems?	(5)
III.		Explain reflection of an object about X axes, Y axes, Y =X and Y = -X.	(20)
		OR	
IV.	(a)	Explain Sutherland Hodgman polygon clipping.	(10)
	(b)	Explain windowing transformations.	(10)
V.		Explain the working of a mouse, light pen, tablet and a joy stick.	(20)
		OR	
VI.	(a)	Explain display file compilation and display file structure.	(10)
	(b)	Explain rubber band technique.	(5)
	(c)	Comment about graphic parameters.	(5)
VII.	(a)	Compare object space and impage space share approach.	(6)
	(b)	Explain Z buffer algorithm. What are the limitations of Z buffer algorithm? List the name of any two algorithms that can be used to overcome its limitations.	(14)
		OR	
VIII.	(a)	Explain the basic 3D transformation.	(10)
	(b)	Explain Phong shading and Gouraud shading.	(10)
IX.	(a)	Explain a high performance display.	(10)
	(b)	Explain device independence and how it can be achieved with an example.	(10)
		OR	
X.	(a)	What are the components of a user interface?	(10)
	(b)	Explain the key issues involved in the design of graphics command language.	(10)

***