

TUTORIAL QUESTIONS

Subject: Computer Graphics

	UNIT – I	Blooms taxonomy	Mapping with outcome
1	Explain the Bresenham’s line drawing algorithm	4	CO2
2	Explain the midpoint circle drawing algorithm. Assume 10cm as the radius and co-ordinate origin as the center of the circle	4	
3	Explain (a) random and raster scan devices (b) primitives used for filling	3	
4	Explain about filled area primitives	3	
5	Explain D viewing pipeline in detail	3	
6	Explain Cohen-Sutherland’s line clipping algorithm.	4	
7	Derive the viewing Transformation matrix in detail	6	
8	Explain polygon clipping algorithm	3	
9	Explain the different 2D transformations	4	
10	Explain the about the lines of attribute primitives?	3	
UNIT – II			
1	Explain about parallel and perspective projection in detail?	9	CO2
2	Discuss the concept of three dimensional object representations?	8	
3	Explain curved line and splines	9	
4	Explain about quadric surface in detail?	9	
5	Discuss about the concept of Visualization of data sets?	7	
6	Explain about 3D Transformation in detail?	3	
7	Explain the concept of 3D viewing in detail?	4	
8	What are the methods of visible surface detection?	2	
9	What is back face detection ?give one example	1	
10	Write the concept of painter’s method?	1	
UNIT – III			
1	What is the importance of graphics programming?	2	CO3
2	Write short note on the following color models: I. RGB II. YIQ III. CMY IV. HSV	2	
3	What is computer animation? give one example	1	
4	Explain about general computer animation techniques?	3	
5	Discuss about raster animation in detail?	9	
6	Discuss about key frame systems?	4	
7	What are basic graphics primitives?	2	
8	Write the concept of drawing three dimensional objects?	2	
9	Write the concept of drawing three dimensional scenes?	2	
10	What is animation sequence?	2	
UNIT – IV			
1	What is rendering? give one example	1	
2	What is shading ?give one example	1	
3	Explain the concept of shading models?	4	
4	Discuss the concept of flat and smooth shading?	7	
5	Write the concept of adding textures to faces?	2	

6	Write the concept of adding shadows of objects?	9	CO4
7	Discuss about the concept of building a camera in a program?	9	
8	Explain the concept of creating shaded objects?	3	
9	Discuss about rendering textures?	3	
10	Discuss about drawing shadows?	2	
UNIT – V			
1	Discuss about the concept of Fractals and self similarity?	3	CO5
2	Explain about the concept of peano curves?	9	
3	What is creating image by iterated functions?	2	
4	What are Mandelbrot sets? Give example?	4	
5	Explain about Julia sets? Give example?	3	
6	Explain about Random Fractals? Give example?	4	
UNIT – VI			
1	What is meant by intersecting rays?	2	CO6
2	Give the relationship between intersecting rays and primitives?	2	
3	Write the concept of adding surface textures?	9	
4	What is reflection and transference?	2	
5	Write the concept of Boolean operation on objects?	2	