Reg. No. | | | | | | | | | | | | |

Question Paper Code	11520

B.E./B.Tech. - DEGREE EXAMINATIONS, NOV/DEC 2022
Sixth Semester
Information Technology
CS8092 - COMPUTER GRAPHICS AND MULTIMEDIA
(Regulations 2017)

Duration: 3 Hours

Max. Marks: 100

PART-A (10 × 2 = 20 Marks)
Answer ALL Questions

Marks,
K-Level,CO

1. What do you understand about chromaticity? — 2,K2,CO1
2. What is meant by ambient reflection? — 2,K2,CO1
3. List out the differences between Bresenham's and DDA line drawing algorithms. — 2,K2,CO2
4. Apply DDA algorithm to rasterize the line from (0,0) to (4,5). — 2,K3,CO2
5. What is vanishing point? — 2,K1,CO3
6. Distinguish between window and viewport. — 2,K1,CO3
7. List the advantages of B-spline over Beizer Curve. — 2,K1,CO4
8. Point out the types of voice recognition systems. — 2,K1,CO4
9. Assess the challenges in multimedia databases. — 2,K1,CO5
10. Compare the characteristics of lossy and lossless compression technique. — 2,K2,CO5

PART - B (5 × 13 = 65 marks)
Answer ALL Questions

11. a) Illustrate the basic illumination models in detail. — 13,K2,CO1

OR

b) (i)Discuss the properties of light. — 07,K2,CO1
(ii)Illustrate about light sources in detail. — 06,K2,CO1

12. a) Explain the basic concepts of the Midpoint circle drawing algorithm. Given the centre point coordinates (4, -4) and radius as 10, generate all the points to form a circle. — 13,K3,CO2

OR

b) Analyze the window to viewport coordinate transformation. — 13,K2,CO2

K1 – Remember; K2 – Understand; K3 – Apply; K4 – Analyze; K5 – Evaluate; K6 – Create

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13. a) Explain Cohen-Sutherland line clipping with the algorithm and summarize it by using clipping against rectangular boundaries. *13,K2,CO3*

OR

   b) Discuss Polygon clipping algorithm and explain Sutherland Hodgeman with an example. *13,K2,CO3*

14. a) Explain Bezier Curves and surfaces. List out its advantages and disadvantages. *13,K2,CO4*

OR

   b) What is projection? Explain various types of projections. *13,K2,CO4*

15. a) Explain the specification, structure and tags of TIFF File Formats. *13,K2,CO5*

OR

   b) What are the components available in distributed multimedia systems? Explain them in detail. *13,K2,CO5*

PART - C (1 × 15 = 15 Marks)

16. a) Develop a model with basic 3D shapes, shading and texturing using BLENDER. *15,K3,CO6*

OR

   b) Develop a simple multimedia application that receives one of the biometrics of an employee and announces the status of matching with the records along with suitable displays. *15,K3,CO6*