

UG Even Semester (CBCS) Exam. September, 2020**COMPUTER SCIENCE
(6th Semester)**Course No: MCSCC-602
(Computer Graphics)*Full Marks: 70**Pass Marks : 28*

Time: 3 hours

*The figures in the right margin indicate full marks for the question
Answer any five questions.*

5. What is translation, rotation, scaling in 2D? Explain with proper diagrams. 14
6. (a) What is viewing transformation? 2
(b) What are the various clipping operations? Explain any three of them. 12
7. (a) What are the various 3D display methods? Explain. 7
(b) What is 3D Graphics packages? 4
(c) List the properties of B-Spline curves. 3
8. (a) Write detail technical note on spline representation. 7
(b) Explain OCTREES, Quadtrees, Vowels. How are they linked to each other? 7
9. Write a technical note on application of Graphics Packages. 14
10. (a) What is Morphing? 2
(b) Write notes on : 6+6=12
(i) Multimedia
(ii) Animation.

1. With the help of diagrams explain how Refresh Cathode Ray Tubes work. 14
2. (a) Explain Raster Scan system with respect to-
(i) Video Controller (with diagram) 5+5=10
(ii) With display processor (with diagram)
(b) What is Shadow Mask? 2
(c) What are the different types of electron guns? 2
3. (a) Explain the Line drawing (DDA Algorithms) with an example. 8
(b) Discuss any circle drawing algorithm or method with proper example. 6
4. (a) Explain Bresenham's Line drawing algorithm for $|m| < 1$. 8
(b) Explain Flood fill Algorithm. 6