



**2022/TDC (CBCS)/EVEN/SEM/  
CACCC-402T/351**

**TDC (CBCS) Even Semester Exam., 2022**

**COMPUTER APPLICATION**

**( 4th Semester )**

**Course No. : CACCC-402T**

**( Computer Graphics )**

*Full Marks : 50*

*Pass Marks : 20*

*Time : 3 hours*

*The figures in the margin indicate full marks  
for the questions*

**SECTION—A**

Answer any ten from the following :  $2 \times 10 = 20$

1. What do you mean by frame buffer? How is it related to the quality of video?
2. What is aspect ratio? Give example.
3. What is pixel? How is it represented in a computer?



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4. What are the applications of computer graphics?
5. What is 2D transformation in computer graphics?
6. Define window port and view port.
7. What is the use of homogenous coordinate in computer graphics?
8. What are 3D display methods?
9. Which 3D method is used to display internal structure of object?
10. What is Bezier curve?
11. How do you make a spline curve?
12. What is 3D transformation?
13. Briefly define 3D viewing in computer graphics.
14. What is visible surface detection method?
15. How many types of hidden surface algorithms are there?

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SECTION—B

Answer any *five* of the following questions : 6×5=30

16. Compare the structure of raster scan and random scan systems.
17. Explain the Bresenham's line drawing algorithm.
18. Discuss 2D transformation.
19. If a triangle with A(2, 3), B(2, 8) and C(8, 3) is displaced five points along x-axis, find out the new coordinates of the triangle.
20. What is the difference between spline curve and B-spline curve? Why do we use cubic spline?
21. How are different types of polygon represented in computer graphics?
22. Explain 3D-transformation with all sub-cases.

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( Turn Over )



23. How is 3D viewing different from 2D viewing?  
Explain.

24. What is morphing? Why is it used? Write  
down the steps of morphing.

25. Compare graphics and animation.

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