

18016

**B.C.A. Examination, May-2024**

**Computer Graphics and Multimedia**

**Application**

**[BCA-401]**

*Time : Three Hours ]*

*[Maximum Marks : 75*

**Note :** Attempt **all** the Sections as per instructions.

**Section-A**

**Note :** Attempt **all** questions.  $3 \times 5 = 15$

1. Give the applications of Multimedia? 3
2. Explain the brief notes on pivot point rotation of an object. 3
3. What is output primitive? 3
4. What is aspect ratio? 3

**P.T.O.**

5. What do you mean by scan conversion.

3

**Section-B**

**Note :** Attempt any **two** questions

$7\frac{1}{2} \times 2 = 15$

6. Show that two successive reflections about the coordinates axel is equivalent to a single rotation about the coordinate origin.  $7\frac{1}{2}$
7. Compare between window part and view port.  $7\frac{1}{2}$
8. Explain Ellipse generating algorithm?  $7\frac{1}{2}$

**Section-C**

**Note :** Attempt any **three** questions.

$15 \times 3 = 45$

9. Write about Cohen-Sutherland line clipping algorithm with an example. 15

10. Explain Computer Animation. What are different types of functions available for computer animation. Also write in details types of animation. 15
11. What do you mean by multimedia? What are different types of hardware and software requirement to make good multimedia. Explain in details. 15
12. Translate the Polygon with co-ordinates A(2, 5), B(7, 10) and C(10, 2) by 3 units in x direction and u units of y direction. 15
13. Write short notes on the following: 15
- (a) Cyrus-Beck Algorithm
  - (b) Bezier Curve
  - (c) Boundary fill algorithm