

**UG 5th Semester Examination 2021**

**COMPUTER SCIENCE (Honours)**

**Paper Code : DC-12**

**Computer Graphics**

**[CBCS]**

**Full Marks: 25**

**Time: 2 Hours**

*The figures in the margin indicate full marks.*

**Group -A**

(2 × 5=10)

Answer any five questions.

1. (a) Explain Aspect Ratio with suitable example.
- (b) What is Translation?
- (c) Name the primary colours of the CMY colour model.
- (d) What is aliasing?
- (e) Define Projection.
- (f) Compute the resolution of a 4 X 4 inch image that has 512 X 512 pixels.

**Group -B**

(5 × 3=15)

Answer any three questions.

2. Discuss Bresenham's circle drawing Algorithm. 5
3. (a) Perform a 45° rotation of triangle A(0,0), B(2,1), C(5,2) about P(-2,-2).
- (b) A monitor can display 4 shades of red, 8 shades of blue and 16 shades of green. Find out the colour depth supported by the monitor. (3+2)=5
4. Discuss DDA Line Drawing Algorithm. 5
5. Write a short note (any one): 5
  - (a) Cohen-Sutherland Algorithm
  - (b) Boundary-fill algorithm