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| Register Number:Date: 21-04-2018 (1PM) |



**ST JOSEPH’S COLLEGE (AUTONOMOUS), BANGLORE-27**

**BSc – VI SEMESTER**

**SEMESTER EXAMINATION APRIL-2018**

**CS 6215 – COMPUTER GRAPHICS**

**Time – 2 ½ hrs MaxMarks-70**

This question paper has 13 printed page

**I Answer the following question 2\*10=20**

1. What is computer graphics? List the application of computer graphics.
2. What is a difference DDA and Bresenham’s line algorithm?
3. What is the feature of line attribute?
4. What is pixel? what are the values stored in pixel?
5. Write the metric’s notation for composite translation.
6. What are the differences between window and view port transformation.
7. What is clipping? List the different type of clipping.
8. What is the difference between MOUSE and trackball?
9. List the difference between parallel and perspective projection.
10. What is homogenous co-ordinates?

**II Answer any FIVE question 6\*5=30**

1. Explain the working of basic CRT.
2. Explain the working of floodfill.
3. Write an algorithm to demonstrate the working of ellipse.
4. Write an algorithm to demonstrate the working of midpoint circle algorithm.
5. Perform scaling for a given triangle A(100,100), B(300,100) C(200,300) where Sx=2 and Sy=3.
6. Write a short note on area clipping.
7. Explain 3D object representation of polygon using polygon table.

**III Answer any TWO question 2\*10=20**

1. Write an algorithm to explain the working of DDA line drawing algorithm. Illustrate with an example.
2. Explain basic three dimensional transformation.
3. A) Explain the steps involved in cohen sutherland line clipping algorithm.

B) Short note on trackball and joystick.

CS-6215-B-18