

3. Attempt any **Two** of the following questions: **10 x 2 = 20**

- (a) Give the matrix representation for 2D Scaling.
- (b) Explain 2D transformation with its basic types.
- (c) Explain the Window to viewport transformation.

4. Attempt any **Two** of the following questions: **10 x 2 = 20**

- (a) Explain the various types of Polygon meshes.
- (b) Explain the Parametric cubic curve with suitable example.
- (c) (i) Discuss the sweep representations of Solid.
(ii) Write the regularized Boolean set.

5. Attempt any **Two** of the following questions: **10 x 2 = 20**

- (a) Give the use of Animation. What are animation file format?
- (b) List the various file formats used in Multimedia system.
- (c) Discuss the digital video processing standards used in multimedia systems.

Roll No.

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B.C.A.**FIFTH SEMESTER EXAMINATION, 2018-19****COMPUTER GRAPHICS AND
MULTIMEDIA APPLICATION**Time : **3 Hours**Max. Marks : **100**

Note : (i) Attempt **ALL** questions.
(ii) Choices are given in each question set.

1. Attempt any **Four** of the following questions: **5 x 4 = 20**

- (a) Define scan conversion.
- (b) State equation of line in slope intercepts form.
- (c) Consider the line from (5, 5) to (13, 9). Use the Bresenham's algorithm to rasterize this line.
- (d) Write the classification of hardware in computer graphics.
- (e) Explain the advantage of interactive graphics.
- (f) Draw the conceptual frame work for interactive graphics.

2. Attempt any **Four** of the following questions: **5 x 4 = 20**

- (a) Differentiate between Vector scan display and Raster scan display.
- (b) Write algorithm to clip line using Cohen Sutherland line clipping algorithm.
- (c) Explain the video controller with diagram.
- (d) How coordinate values of selected screen position

determined in touch screen?

- (e) Explain Midpoint submission algorithm.
- (f) Write the Cyrus-Beck algorithm.