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## IT-6003 (CBGS)

## **B.E. VI Semester**

Examination, May 2019

## Choice Based Grading System (CBGS Computer Graphics and Multimedia

Time: Three Hours

Maximum Marks: 70

Vote: i) Attempt any five questions

- ii) All questions carry equal marks.
- a) Explain the role of pixel and Frame buffer in graphics devices?
- b) Describe the architecture of a roster scan display with a clear block diagram. How it differ from scan display?
- Explain Bezier curves? If a Bezier curve pasies through (2,1) and (6,2) and controlled by the points.
- 3. a) Rotate a Triangle A (0,0), B (2,2), C (4,2) about the origin and about P(-2,-2) as by an angle of 45°.
  - Explain in detail about CRT monitors and keyboard with suitable diagram.
- 4. a) Reflect the polygon (-1,0), (0,-2) (1,0) and (0,2) about the line Y=2 by using transformation matrix?
  - b) Explain Sutherland Hodgeman polygon clipping algorithm. Why this algorithm works for only convex clipping region?

- 5. What are the components of multimedia system? In what Formats are these data stored in computer? How they are linked with each other?
- 6. a) What are steps involved in compression of image? What are different types of compression techniques? Briefly explain one of them?
  - b) Explain video image and Animation?
- 7. a) Explain multimedia Authoring tools?
  - Write the properties of B-spline. Show that B spline curve is nonuniform and periodic.
- 8. Write a short notes (any three)
  - a) JPEG
  - b) RGB and HSV
  - c) Storage technologies
  - b) Positioning techniques

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