

G 1322

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Reg. No.....

Name.....

B.TECH. DEGREE EXAMINATION, MAY 2016

Seventh Semester

Branch : Computer Science and Engineering

CS 010 703—COMPUTER GRAPHICS (CS)

(New Scheme—2010 Admission onwards)

[Improvement/Supplementary]

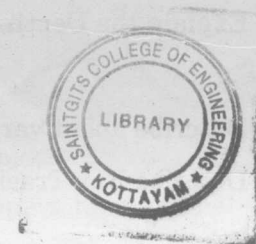
Time : Three Hours

Maximum : 100 Marks

Part A

*Answer all questions.
Each question carries 3 marks.*

1. Define Raster Scan displays.
2. State Bresenham's Line drawing algorithm.
3. Define Bezier Curves.
4. Define Perspective Projection.
5. What is Texture Mapping ?



(5 × 3 = 15 marks)

Part B

*Answer all questions.
Each question carries 5 marks.*

6. Describe briefly about Display files.
7. State and explain Cohen-Sutherland line clipping algorithm.
8. Briefly explain B-Spline curve technique.
9. Explain any *one* Back-face detection technique.
10. Describe Constant shading method.

(5 × 5 = 25 marks)

Part C

*Answer all questions.
Each full question carries 12 marks.*

11. Explain the working of any *three* Graphical Input devices with neat diagrams.

Or

12. Explain the functions and components of Random Scan display system.

Turn over

13. Explain Polygon clipping and viewing transformations in detail.

Or

14. Describe Bresenham's Circle drawing algorithm with examples.

15. Explain Bezier Curves and Surfaces.

Or

16. Write notes on the following :—

(a) Quadric surfaces ;

(b) Sweep representation ;

(c) Octrees.

17. Explain the Depth Buffer algorithm for hidden surface removal..

Or

18. Describe about various 3D viewing projections.

19. Describe Ray Tracing and Ray Casting fractals with examples.

Or

20. Explain various Interpolative shading methods.

(5 × 12 = 60 marks)

