17/12/14/FN
IT B

Reg. No. : | | | | | | | | | | | | |

Question Paper Code : 91361

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2014.

Seventh Semester

Computer Science and Engineering

CS 2401/CS 71/10144 CS 702 — COMPUTER GRAPHICS

(Common to Information Technology)

(Regulation 2008/2010)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. List down any two attributes of lines.

2. Give an example for text clipping.

3. Differentiate parallel and perspective projections.

4. What are splines?

5. State the difference between CMY and HSV color models.

6. Write down the different types of animation.

7. What is meant by flat shading?

8. Define texture patterns.

9. What are Julia sets?

10. Define ray tracing.

PART B — (5 × 16 = 80 marks)

11. (a) Explain the ellipse drawing algorithm with an example.

Or

(b) Explain briefly the line clipping algorithm with an example.

12. (a) Discuss the three dimensional object representations in detail.

Or

(b) Discuss the visible surface detection methods in detail.

13. (a) (i) Explain briefly the RGB color model. (8)

(ii) Mention the salient features of Raster Animation. (8)

Or

(b) Discuss the following :

(i) Methods to draw 3D objects. (8)

(ii) Basic OPENGL operations. (8)

14. (a) Explain the steps involved in the following :

(i) Smooth and Flat Shading. (8)

(ii) Adding shadows of objects. (8)

Or

(b) Explain the following :

(i) Adding texture to faces. (8)

(ii) Building camera in a program. (8)

15. (a) Write notes on the following :

(i) Random fractals. (8)

(ii) Boolean operations on objects. (8)

Or

(b) Discuss the following :

(i) Adding surface texture. (8)

(ii) Peano curves. (8)

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