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

Question Paper Code : 52391

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2017

Seventh Semester

Computer Science and Engineering

CS 2401 – COMPUTER GRAPHICS

(Common to : Information Technology)

(Regulations 2008)

Time : Three Hours | Maximum : 100 Marks

Answer ALL questions

PART – A (10×2=20 Marks)

1. What are the attributes of line ?
2. What are the disadvantages of DDA algorithm ?
3. What is transformation and its applications ?
4. Define clipping.
5. What is anti-aliasing ?
6. Define reflection.
7. What is wood grain texture ?
8. What is called a shadow and its uses ?
9. What is ray tracing ?
10. What is Hidden-surface problem and how it is handled ?

PART – B (5×16=80 Marks)

11. a) Explain in detail about Bresenham's line algorithm with example.

(OR)

b) Write down the midpoint circle drawing algorithm. Apply this algorithm to draw the circle for the radius of 10 cm and origin as a center.

12. a) Illustrate in detail on 3d object representation.

(OR)

b) Give details about classification of Visible Surface Detection Algorithms and their applications.

13. a) Explain in detail about the various color models and their in image processing.

(OR)

b) Write short notes on the following :

i) Raster animation. (8)

ii) Animation functions. (8)

14. a) Write about the types of light in shading process. Describe flat and smooth shading models.

(OR)

b) Explain the following :

i) Adding texture to faces. (8)

ii) Adding shadows of objects. (8)

15. a) Write notes on the following :

i) Julia sets. (8)

ii) Random fractals. (8)

(OR)

b) Discuss the following :

i) Reflection and transparency. (8)

ii) Boolean operations on objects. (8)