Roll No. | | | | | | | | | | | | |

Total No. of Pages : 02

Total No. of Questions : 18

B.Tech (CSE) (Sem.–5)

COMPUTER GRAPHICS

Subject Code : CS-309

Paper ID : [A0468]

Time : 3 Hrs. Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

SECTION-A

1. Explain in brief about graphics hardware.
2. What do you mean by scan conversion?
3. Explain in brief about perspective projection.
4. What is Transformation?
5. Differentiate between window and view port.
6. Define clipping and list types of clipping.
7. Explain in brief about vanishing points.
8. Write advantages of z-buffer algorithms.
9. Explain in brief about fractals.
10. Define B-Spline curve.

SECTION-B

11. Write a brief note on Geometric Manipulation.

12. Explain the Bresenham's circle Algorithm with an example.

13. Write a detailed note on Plane projections.

14. Explain in detail about homogeneous coordinates.

15. Explain the concept of Gourard and Phong shading in detail.

SECTION-C

16. Write a detailed note on I/O devices.

17. Discuss the scan line polygon fill algorithm in detail. What is a sorted edge table?

18. Explain in detail the Line clipping algorithms with an example.