



UN – 202

V Semester B.A./B.Sc. Examination, November/December 2015

(Fresh) (2015-16 Only)

(Semester Scheme)

COMPUTER SCIENCE – V

Computer Graphics

Time : 3 Hours

Max. Marks : 70

Instruction : Answer **all** Parts.

PART – A

Answer **any ten** questions. Each question carries **two** marks : (2×10=20)

1. What is colour lookup table ?
2. How raster scan display works ?
3. What are CRT colour monitors ?
4. Write simple DDA circle drawing algorithm.
5. What are the different attributes of a text ?
6. What is meant by Anti-Aliasing ?
7. What is Reflection ?
8. Define exterior clipping.
9. Explain 3D stereoscopic views.
10. What is Parallel projection ?
11. Explain the two different types of printers.
12. What are the several techniques of text clipping ?

P.T.O.



PART – B

Answer **all** the questions :

(10×5=50)

13. a) Explain the applications of Computer Graphics. 5

b) How interactive graphic display works ? 5

OR

a) Explain flat panel displays. 5

b) Explain direct view storage tubes. 5

14. a) What are the properties of a line ? 3

b) Write Bresenham's line drawing algorithm and illustrate it for a line with endpoints (10,10) and (20, 18). 7

OR

a) Write an algorithm for midpoint circle drawing. 7

b) What are bundled attributes ? 3

15. a) Explain composite transformations of 2D. 2

b) 2 Dimensional translation of an image by 10 units right and 10 units up. 4

c) Enlarge the 2D image to twice its size. 4

OR

a) Explain shortcomings of polygon clipping and explain the algorithm of Sutherland and Hodgman polygon clipping. (3+7)

16. a) Explain about 2 Dimensional window-to-viewpoint mappings. 7

b) Explain midpoint subdivision algorithm for line clipping. 3

OR

a) Explain three dimensional transformations with suitable illustrations. 10

17. a) Explain about Geometric data table representation with suitable example of a polygon. 7

b) Explain Bezier curves. 3

OR

a) Explain scan-line algorithm for multiple hidden surfaces. 7

b) Define depth cueing. 3