

Reg. No. :

Code No. : 1367

Sub. Code : DNA 3 B

B.C.A. DEGREE EXAMINATION, APRIL 2015.

Third Year — Non-Semester

Computer Application — Main (DD & CE)

Paper XI — COMPUTER GRAPHICS AND
MULTIMEDIA

(For those who joined in July 2008 onwards)

Time : Three hours

Maximum : 100 marks

PART A — (5 × 5 = 25 marks)

Answer any FIVE questions out of Eight.

1. A video monitor with a display area that measures 12 inches across and 9.6 inches high is available. If the resolution is 1280 by 1024 and the aspect ratio is 1, what is the diameter of each screen point?
2. Write the matrix representation translation and explain.
3. Write notes on three-dimensional graphics packages.

4. Obtain the transformation matrix for 3-dimensional translation.
5. Write notes on ray-casting method.
6. How are points and lines interpreted in CRT monitors?
7. What is meant by rotation angle and rotation point?
8. Explain the Nicholl-Lee-Nicholl line clipping algorithm.

PART B — (5 × 15 = 75 marks)

Answer any FIVE questions out of Eight.

9. Write notes on character generation in computer graphics.
10. Explain composite transformations.
11. Explain the three-dimensional display methods.
12. Write notes on three-dimensional coordinate – axes rotations.
13. Explain depth-sorting method. Illustrate.

14. Write notes on the three-dimensional viewing devices.
 15. What is meant by scaling? Illustrate with an example.
 16. Write and explain the procedure for Nicholl-Lee-Nicholl line clipping algorithm.
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