



NP – 417

V Semester B.C.A. Examination, Jan./Feb. 2026
(NEP)

COMPUTER APPLICATION
Computer Graphics (Elective – I)



Time : 2½ Hours

Max. Marks : 60

Instruction : Answer *all* the questions.

SECTION – A

Answer **any 4** questions :

(4×2=8)

1. What is Gravity field ?
2. Define 2D Transformation.
3. What is the use of Control Points ?
4. Give any 2 applications of computer graphics.
5. What is meant by Rubber band method ?
6. List any 2 graphical input devices.

SECTION – B

Answer **any 4** questions :

(4×5=20)

7. Explain Raster Scan Display in detail.
8. Explain DDA Line Drawing Algorithm in detail.
9. Explain 2D Composite Transformation.
10. Explain Menu Selection in detail.
11. Explain Cohen Sutherland Line Clipping.
12. Explain the functions of segmenting.

P.T.O.



SECTION – C

Answer **any 4** questions :

(4×8=32)

13. Explain CRT in detail along with its functions.
 14. Explain the following :
 - a) Window to viewport Coordinate Transformation. **4**
 - b) Text Clipping. **4**
 15. Explain 3D Scaling in detail.
 16. Explain Bezier Curves and Surfaces.
 17. What is meant by Octree ? Explain in detail.
 18. Explain Beam Penetration method in detail.
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