

NP - 417

V Semester B.C.A. Examination, January/February 2025 (NEP)

(Freshers/Repeaters)

CA - E1 (Elective 1) : COMPUTER GRAPHICS

Time: 2½ Hours Max. Marks: 60

Instruction: Answer any four questions from each Section.

SECTION - A

I. Answer any four questions. Each question carries 2 marks. (4×2=8)

- 1) Give the various applications of computer graphics.
- 2) What is meant by refreshing of the screen?
- 3) Define scaling and how the object is doubled its size.
- 4) What is window and view port?
- 5) What do you mean by segment files?
- 6) How do you convert a gravity field to a line?

SECTION - B

II. Answer any four questions. Each question carries 5 marks.

 $(4 \times 5 = 20)$

- 7) Compare raster scan display and random scan display techniques.
- 8) Explain circle drawing algorithm.
- 9) Describe two-dimensional translation with an example.
- 10) Define clipping and explain text clipping.
- 11) How are polygon surfaces stored in polygon table?
- 12) Write short note on Tablet.

P.T.O.



SECTION - C

III. Answer any four questions. Each question carries 8 marks.

 $(4 \times 8 = 32)$

- 13) Explain cathode ray tube monitor with a suitable diagram.
- 14) Explain DDA line drawing algorithm and demonstrate the line generation with coordinate points (20, 10) and (30, 18).
- 15) Explain two-dimensional rotation and shear in detail.
- 16) Explain Cohan-Sutherland line clipping algorithm.
- 17) Explain Parallel projection and Perspective projection.
- 18) Write short notes on:
 - a) Keyboard
 - b) Touch panel.

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