

M. Sc. 4th Semester Examination – 2020 (DDE)

(Old Syllabus)

Subject: Computer Science

Paper: MCS – 403 (Elective – IV: Computer Graphics and Multimedia)

Full Marks: 22½

Time: 1 Hour

The figures in the margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Answer question number 1 and any three questions from the rest.

- 1)
 - a) Write Bresenham's line drawing algorithm for $m < 1$ and illustrate the algorithm with suitable example. 4½ + 3 = 7½
 - Or
 - b) Write and explain Cohen – Sutherland Line Clipping Algorithm. 7½
- 2) Explain working principle of CRT monitor. 5
- 3) Write and explain Boundary – Fill Algorithm. 5
- 4) Explain Translation, Rotation, and Scaling transformations. 5
- 5) Explain Window – to – Viewport transformation. 5
- 6) Explain working principle of **Graphics Card** along with it's components. 5