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) With suitable diagram, deduce and write Bresenham's line drawing algorithm for m < 1. Also, give suitable example.   7½

  Or

  b) Write down DDA line drawing algorithm and point out it's drawbacks.   7½

2) Explain steps of 2 – Dimensional Viewing Pipeline. What are **window** and **viewport**?   5

3) Write down Cohen – Sutherland line clipping algorithm (Explanation not required).   5

4) Deduce transformation matrix for general pivot point rotation.   5

5) Explain RGB, YMC and HSV colour models.   5

6) Explain working principle of **Graphics Card** alongwith it's components.   5