

SECTION-B

- II. Differentiate between raster scan systems and random scan systems.
- III. Find the transformation matrix for reflection about a line L with slope m and y intercept $(0, b)$.
- IV. What do you mean by window and viewport? Describe window to viewport transformation.
- V. What is the difference between Boundary-fill and Flood-Fill algorithms? Write 8-boundary fill algorithm.
- VI. Describe z-buffer algorithm for hidden surface elimination.

SECTION-C

- VII. Derive the decision parameter expressions for Bresenham line drawing algorithm. Write Bresenham line drawing algorithm and explain how it is better than DDA algorithm for line generation.
- VIII. Describe in detail Sutherland-Hodgeman polygon clipping algorithm. What are its shortcomings?
- IX. Write short notes on :
 - a. Gouraud and Phong Shading
 - b. Edge fill and fence fill algorithms