1: Answer following questions in brief: [14]
   1. Differentiate concave & convex polygon.
   2. Define anti-aliasing.
   4. How to get reflection from origin?
   5. Differentiate vector and pixel graphics.
   6. What is fixed point scaling?
   7. Explain term image processing.

2: Answer the following questions: (Any Two) [14]
   (1) What is segment? Explain various operations of a segment.
   (2) Explain rotation about an arbitrary point in detail.
   (3) Explain even odd polygon inside test method.

3: Answer the following questions: (Any Two) [14]
   (1) Explain boundary fill algorithm.
   (2) Explain method for character generation.
   (3) Discuss basic transformation of geometric shapes.

4: Answer the following questions: (Any Two) [14]
   (1) Explain raster scan display and random scan display with their differences.
   (2) Explain Orthographic projections.
   (3) What is homogeneous coordinates? Explain 2D transformation in detail.
5: Answer the following questions: (Any Two)

(1) Explain reflection and shear transformations.
(2) Explain Three-Point perspective Transformation.
(3) Consider a line from P(0,0) to Q(8,6). Use Bresenham’s line drawing algorithm for rasterizing the line.