

Q.2 a. What do you understand by the raster image? Explain.

Answer: Page Number 47 of Text Book

b. Explain any four types of physical input devices.

Answer: Page Number 64 of Text Book

Q.3 a. How lines are drawn using `moveto()` and `lineto()`?

Answer: Page Number 90 of Text Book

b. What are the different types of arches? How can they be drawn?

Answer: Page Number 148 of Text Book

Q.4 a. Write the pseudocode for the Cyrus-Beck clipper for a convex polygon, 2D case.

Answer: Page Number 224 of Text Book

b. Explain the logic of the Sutherland-Hodgman polygon clipping algorithm with the help of an example.

Answer: Page Number 234 of Text Book

Q.5 a. Explain the geometric effects of elementary 2D affine transformations.

Answer: Page Number 218 of Text Book

b. What is the matrix associated with x-roll of 45° , followed by y-roll of 30° , followed by z-roll of 60° .

Answer: Page Number 240 of Text Book

Q.6 a. Describe the properties of meshes in solid modelling.

Answer: Page Number 292 of Text Book

b. Describe the oblique parallel projections.

Answer: Page Number 388 of Text Book

Q.7 a. Describe the technique of Phong shading.

Answer: Page Number 426 of Text Book

b. How does the depth-buffer approach determine which surfaces are hidden?

Answer: Page Number 426 of Text Book

Q.8 Explain the following:

(i) Filling polygon-defined regions

(ii) Antialiasing techniques.

Answer: Page Number 509 of Text Book

Q.9 a. How curves are described by means of polynomial?

Answer: Page Number 635 of Text Book

b. Explain the properties of Bezier curves.

Answer: Page Number 646 of Text Book

Text Book

Computer Graphics using OpenGL, F.S. Hill, Jr., Second Edition, Pearson Education,
2005