

**UNIT – IV**

8. What do you mean by projection ? Describe different types of projection with examples. What are the various projection anomalies ?
9. Explain the following with example: Translation, reflection, shear transformation and composite transformation.
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Roll No. ....

**BCA 5th  
Examination**

**COMPU**

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**Time : Three Hours ]**

*Before answering the questions, the candidates should ensure that all the questions have been supplied the correct copy. If any complaint in this regard, write immediately.*

**Note :** Attempt *five* questions from each Unit. Each question carries 8 marks. All questions carry equal marks.

1. (a) What is the difference between vector scan display and raster scan display?
- (b) What are the applications of vector scan display?

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- (c) What are 2D graphics transformations ?
- (d) Define view port and clipping.
- (e) What is illumination model ?
- (f) What is Hermite curve ?
- (g) What do you mean by rotation ?
- (h) What is the difference between parallel and Perspective projection ?

### UNIT - I

2. (a) Compare shadow mask and beam penetration techniques for construction of colored monitor.
- (b) Draw the block diagram and explain the working of a raster display system ? Differentiate between horizontal retrace and vertical retrace.
3. (a) Write and explain the flood fill algorithms.
- (b) Explain Bresenham's line drawing algorithm.

4. Describe the transform reduction with respect to the coordinates of the triangle. It has been (a) magnified (b) reduce to half its size.
5. Write and explain Cohen-Sutherland line clipping. Why is it better than over Cohen-Sutherland?

6. Where has the term 'Bezier curve' been used? Compare B-spline curve with Bezier curve expression for Bezier curve.
7. Explain Gouraud Shading model.