

Bachelor of Computer Application (B.C.A.-III) Fifth Semester  
**5BCA3 - Computer Graphics Paper - III**

P. Pages : 2

Time : Three Hours



**GUG/W/18/1115**

Max. Marks : 80

- Notes :
1. All questions are compulsory and carry equal marks.
  2. Draw neat and labelled diagram and use supporting data wherever necessary.
  3. Avoid vague answer and write specific answer related to question.

**1.** Either:

- a) Write a detail note on display device. **8**
- b) Explain the character generation in detail write algorithm also. **8**

**OR**

- c) What is vector generation? Write an algorithm for vector generation. **8**
- d) Explain the concept of Normalized device coordinator. **8**

**2.** Either:

- a) Explain Polygon Representation technique in detail. **8**
- b) Write a short note on: **8**
  - i) Display file Structure
  - ii) Rotation

**OR**

- c) Define segment. Explain raster technique in detail. **8**
- d) What is transformation? Explain scaling transformation. **8**

**3.** Either:

- a) Explain the parallel projection in detail. **8**
- b) Explain in detail viewing transformation. **8**

**OR**

- c) What do you mean by clipping? How do you explain clipping of polygons? **8**
- d) Discuss the concept of 3-D Geometry in detail. **8**

4. Either:
- a) Explain the procedure to check the hidden surfaces. 8
  - b) Explain Back face Removal Algorithm. 8

**OR**

- c) Write pointers Algorithm Explain. 8
  - d) Write a note on; 8
    - i) Diffusion
    - ii) Illustration
5. Solve all the questions.
- a) Explain the text line style primitix. 4
  - b) Write a short note on Homogeneous coordinates. 4
  - c) Write a note on special projection. 4
  - d) Explain point source illustration. 4

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