

A-811

Total Pages : 3

Roll No.

BCA-17

Bachelor of Computer Application (BCA)

(Interactive Computer Graphics)

5th Semester Examination, 2024 (June)

Time : 2:00 Hrs.

Max. Marks : 70

Note :- This paper is of Seventy (70) marks divided into Two (02) Sections ‘A’ and ‘B’. Attempt the questions contained in these Sections according to the detailed instructions given therein. *Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.*

Section–A

(Long Answer Type Questions) 2×19=38

Note :- Section ‘A’ contains Five (05) Long-answer type questions of Nineteen (19) marks each. Learners are required to answer any *two* (02) questions only.

1. Explain the Architecture of Random and Raster Scan Systems. Discuss the graphics s/w (GKS and PHIGS). List all applications of Computer Graphics.
2. Explain point clipping and text clipping algo. Write the algorithm for line clipping.
3. Draw Ellipse drawing algorithm. Describe the various 2-Ds Geometric Transformations.
4. What is Animation ? Discuss principles of animation and types of animation. Discuss morphing and future of Animation.
5. Explain the composite Transformation for 3-D objects with example. Write note on 3-D viewing.

Section–B

(Short Answer Type Questions) 4×8=32

Note :- Section ‘B’ contains Eight (08) Short-answer type questions of Eight (08) marks each. Learners are required to answer any *four* (04) questions only.

1. Explain video display devices.
2. Explain about different line drawing algorithms in detail. (DPA and Bresanhm’s algo).
3. What are the different 2-D Transformations ? Explain.
4. Explain Translation, Rotation and Scaling in 3-D Transformation.

5. What do you understand by Parallel Projections ? Explain.
6. Differentiate between one point and two point perspective projections.
7. Differentiate between RGB, CMYK and HSV color models.
8. Explain the steps involved in animation sequence.
