

AM-245

B.C.A. Part-III (Semester-V) Examination
COMPUTER GRAPHICS (A) – 5ST4

Time : Three Hours]

[Maximum Marks : 60

1. (a) Explain the history of Computer Graphics. 6
- (b) Explain technologies related to Computer Graphics. 6

OR

2. (a) What is Computer Graphics ? Explain its components. 6
- (b) Explain the advantages and disadvantages of Computer Graphics. 6
3. (a) Explain rotation transformation with suitable example. 6
- (b) Explain cathode ray tube with suitable diagram. 6

OR

4. (a) Explain homogeneous co-ordinate system. 6
- (b) Explain window-to-viewport transformation. 6
5. (a) Explain Digital Differential Analyser (DDA) algorithm for line drawing. 6

- (b) Write and explain properties of B-spline. 6

OR

6. (a) Explain midpoint subdivision algorithm. 6
(b) Explain Parallel Projection. 6
7. (a) Explain morphing and tweening in detail. 6
(b) Explain the applications of animation. 6

OR

8. (a) Explain how computer graphics works with animation. 4
(b) Explain hardware and software tools in detail. 8
9. (a) Write a program in graphics for translation. 8
(b) Write a program in graphics for drawing arc. 4

OR

10. (a) Write a program in graphics to draw square using rectangle () method. 6
(b) Write a program in graphics to draw line using line () method which divides the screen in two parts, horizontally and completely. 6