

Third Year B.C.A (Semester - II) Examination
Paper - 15BCA311

Computer Graphics Multimedia & Animation

Time : Three hours]

[Full Marks - 60

- N.B. :**
- i) All questions carry equal marks
 - ii) Due credit will be given to neatness & adequate dimensions.
 - iii) Illustrate your answer with the help of neat sketches, wherever necessary.
 - iv) Use Blue/Black ink/refill only for writing the answer book.

- Q.1 Choose correct alternatives. 5
- a) Aspect ratio means.
 - i) Number of pixels
 - ii) Ratio of vertical point to horizontal points
 - iii) Ratio of horizontal points to vertical points
 - iv) Both(ii) & (iii)
 - b) Expansion of line DDA algorithm
 - i) Digital difference analyzer
 - ii) Direct differential analyzer
 - iii) Digital differential analyzer
 - iv) None of above
 - c) For 2D transformation the value of third coordinate is $W = ?$
 - i) 1 ii) 0
 - iii) -1 iv) None of the above
 - d) _____ is used to compress video.
 - i) MPEG ii) JPEG
 - iii) Either (i) or (ii) iv) None of the above

- e) Graphics and image processing technique used to produced a transformationn of one object into other is called ____
- i) Animation ii) Morphing
iii) Tuning iv) None of the above

- Q.2 a) What is computer Graphics ? Explain the major components are needed for computer graphics. 6
b) What do you mean by coordinate system ? Explain any two coordinate system. 5

OR

- Q.3 a) Explain the following. 6
i) Resolution ii) Color depth iii) Refresh Rate
b) Explain file format in detail. 5

- Q.4 a) Describe the difference between Raster scan and Random scan display. 6
b) Write DDA line drawing algorithm. 5

OR

- Q.5 a) Explain CRT in detail with neat label diagram. 6
b) Write a program to draw ellipse and explain it. 5

- Q.6 a) What is transformation ? Explain it with their different type. 6
b) Explain the need of homogenous coordinate with example. 5

OR

- Q.7 a) Describe cohen - sutherland algorithm. 6
b) Describe viewing transformation. 5
- Q.8 a) Explain multimedia with their components. 6
b) Explain sound card with their feature and function. 5

OR

- Q.9 a) What does data compression mean ? Explain with their method. 6
b) Explain multimedia software tools. 5

- Q.10 a) What is Computer Animation ? Explain history of computer animation. 6
b) Explain the following 5
i) Tweening ii) Morphing

OR

- Q.11 a) Explain any two method for controlling animation. 6
b) Explain which hardware and software tools used in animation. 5
