

**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) Graphics file format that are used by most graphics system are \_\_\_\_\_
    - i) GIF ii) TIFF
    - iii) JPEG iv) All of these
  - b) TIFF stands for \_\_\_\_\_
    - i) tagged image file format
    - ii) time image file format
    - iii) tariff image file format
    - iv) None of the above
  - c) \_\_\_\_\_ is a rigid body transformation that moves without deformation.
    - i) Rotation ii) Scaling
    - iii) Translation iv) All of the mentioned
  - d) A multimedia file \_\_\_\_\_
    - i) is same as any other regular file
    - ii) must be accessed at specific rate
    - iii) stored on remote server cannot be delivered to its client
    - iv) None of the mentioned

- e) What is another term to describe vector animation ?  
 i) Vector ii) Path animation  
 iii) Alpha iv) Animation

- Q.2 a) Explain any three input devices in details. 6  
 b) Explain how Computer Graphics play important role in various applications. 5

OR

- Q.3 a) What is Computer Graphics ? Explain various components in computer graphics with its characteristics . 6  
 b) Explain any two file formats with proper example. 5
- Q.4 a) Write and explain DDA algorithm with example. 5  
 b) Explain Random Scan Display and Raster Scan Display. Differentiate it also. 6

OR

- Q.5 a) Explain Virtual Reality System and CRT with example. 5  
 b) Explain line, curve and text attribute and write a C code to implement circle. 6
- Q.6 a) Write and explain Sutherland Line Clipping Algorithm 6  
 b) Explain composite transformation with proper matrix representation. 5

OR

- Q.7 a) What is Transformation ? Explain translation and scaling in detail. 6  
 b) Explain viewing coordinate reference frame with example. 5

- Q.8 a) What is Compression ? Explain multimedia and hypermedia with advantages and disadvantages. 6  
 b) Explain Simple Compression techniques and transform coding techniques. 5

OR

- Q.9 a) Explain software Tools with example. 5  
 b) Explain need and types of compression with example. 6
- Q.10 a) Explain tweening and morphing in detail. 6  
 b) Explain how computer graphics works with animation. 5

OR

- Q.11 a) Explain traditional animation and computer animation. Differentiate it also. 6  
 b) State application of animation with its advantages and disadvantages. 5

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