

**B.Sc. (Part—III) Semester—VI Examination**  
**COMPUTER APPLICATIONS/INFORMATION TECHNOLOGY**  
**(Computer Graphics, Multimedia and Animation)**

Time : Three Hours]

[Maximum Marks : 60

- Note** :— (1) All questions are compulsory.  
(2) Assume suitable data wherever necessary.  
(3) Illustrate your answer with the help of neat sketch.  
(4) Question 1 carries 8 marks and all other questions carry 12 marks each.

1. (A) Fill in the Blanks : 2
- (i) LCD stands for \_\_\_\_\_ .
  - (ii) Scanner is an \_\_\_\_\_ device.
  - (iii) DDA algorithm is used to generate \_\_\_\_\_ .
  - (iv) MPEG is an acronym for \_\_\_\_\_ .
- (B) Choose the correct alternatives :— 2
- (i) GUI stands for \_\_\_\_\_ :
    - (a) Graphical User Interface
    - (b) Graphical User Image
    - (c) Good User Image
    - (d) Geometric User Interface
  - (ii) \_\_\_\_\_ is not a file format.
    - (a) PNG
    - (b) JPEG
    - (c) BMP
    - (d) Graph.

(iii) \_\_\_\_\_ is used to store data temporarily :

- (a) Flash memory
- (b) Secondary Memory
- (c) Buffer
- (d) DVD

(iv) \_\_\_\_\_ is not a markup language.

- (a) XML
- (b) HTML
- (c) PML
- (d) SGML

(C) Answer in **ONE** sentence each :—

4

- (i) Define hypermedia.
- (ii) List out multimedia software tools.
- (iii) What is Animation ?
- (iv) Define the term Scaling.

2. (a) Explain :—

6

- (i) Random Scan Display
- (ii) Virtual Reality system.

(b) Enlist and explain different input devices used in graphics system.

6

**OR**

3. (a) Explain 3D viewing system.

6

(b) Compare Raster Scan Display with Vector Scan Display.

6

4. (a) What is Curve ? Explain its different attributes.

6

(b) Explain Bresenham's Line Algorithm.

6

**OR**

5. (a) Explain Line drawing algorithm.

6

(b) What is grayscale system ? Explain four level grayscale level system.

6

6. (a) Explain character attributes. 6  
(b) Explain scaling transformation. 6

**OR**

7. (a) What is Rotation Transformation ? Explain. 6  
(b) Explain the procedure used for area filling. 6
8. (a) What is Hypermedia ? Explain. 6  
(b) Explain :  
(i) Digital Audio  
(ii) Window BMP. 6

**OR**

9. (a) What is image editing ? Explain. 6  
(b) Explain :  
(i) PDF (ii) GGIF (iii) TIFF 6
10. (a) How multimedia data is compressed ? Explain. 6  
(b) Explain :  
(i) 3D Sound system (ii) VCR. 6

**OR**

11. (a) Explain different tools used for Virtual Reality. 6  
(b) What is hypertext ? Explain. 6
12. (a) Write difference between Multimedia and Animation. 6  
(b) Explain motion tweening. 6

**OR**

13. (a) What is 2-D Animation ? Explain. 6  
(b) Explain the anatomy behind Animation. 6

