

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

Time : Three Hours]

[Maximum Marks : 80

**Note** :— (1) All questions are compulsory.

(2) Assume suitable data wherever necessary.

(3) Illustrate your answer wherever necessary with the help of neat sketches.

(4) Q. No. 1 carries 8 marks and all other questions carry 12 marks.

1. (A) Fill in the blanks : 2

(i) PNG is an acronym for \_\_\_\_\_.

(ii) Bresenham's Algorithm is used for generation of \_\_\_\_\_.

(iii) Light Pen is an \_\_\_\_\_ device.

(iv) Zip files are \_\_\_\_\_ file.

(B) Choose the correct alternative : 2

(i) \_\_\_\_\_ is not display type.

(a) LED

(b) LCD

(c) Plasma

(d) Light Pen

(ii) Transformation includes \_\_\_\_\_ .

(a) Scaling

(b) Rotation

(c) Translation

(d) All of the above

(iii) Paint-brush image is stored in \_\_\_\_\_ format.

(a) bmp

(b) png

(c) jpeg

(d) All of the above

(iv) \_\_\_\_\_ is the basic component of any drawing.

(a) Line

(b) Circle

(c) Pixel

(d) Colour

(C) (i) What is Computer Graphics ?

(ii) What is Multimedia ?

(iii) What is Animation ?

(iv) Explain types of Tweening. 4

2. (a) Explain the working of CRT with suitable diagram. 6  
(b) Compare Raster Scan System with Random Scan System. 6
- OR**
3. (a) Explain the working of Light Pen. 6  
(b) Explain how graphics are helpful in the area of fine arts and animation. 6
4. (a) Explain various attributes of line. 6  
(b) Write an algorithm for generation of circle. 6
- OR**
5. (a) Explain :  
(i) Frame Buffer  
(ii) Color Tables. 6  
(b) Explain Parallel Line algorithm. 6
6. (a) What is composite transformation ? Explain. 6  
(b) Explain various fill styles used for area filling. 6
- OR**
7. (a) What is scaling transformation ? Explain. 6  
(b) Explain :  
(i) Rotation  
(ii) Translation. 6
8. (a) Explain different components of multimedia 6  
(b) Explain music sequencing and rotation tools. 6
- OR**
9. (a) Explain different file formats of multimedia. 6  
(b) Compare multimedia with hypermedia. 6
10. (a) What is SGML ? Explain. 6  
(b) Explain :  
(i) Augmented Reality  
(ii) Head Mounted Display. 6
- OR**
11. (a) What is run length coding ? Explain. 6  
(b) Explain VR devices and VR chair. 6
12. (a) Explain motion tweening. 6  
(b) What is sketching ? Explain its role in animation. 6
- OR**
13. (a) Explain different applications of Animation. 6  
(b) How flash is used in animation ? Explain. 6