Unit – 01 : Computer Graphics

1. **Which of the following statements define Computer Graphics?**
   a) It refers to designing plans
   b) It means designing computers
   c) It refers to designing images
   d) None of the mentioned
   Answer: c

2. **Among the given scientists/inventor who is known as the father of Computer Graphics?**
   a) Nikola Tesla
   b) Ivan Sutherland
   c) Ada Lovelace
   d) Marie Curie
   Answer: b

3. **Which of the following are the features of Computer Graphics?**
   a) Creation and deletion of images by computer only
   b) Deletion and manipulation of graphical images by computer
   c) Creation and manipulation of graphics by computer
   d) Creation of artificial images by computer only
   Answer: c

4. **Which of the following is a Computer Graphics type?**
   a) Raster and Vector
   b) Raster and Scalar
   c) Scalar only
   d) All of the above
   Answer: a

5. **Which of the following plane is used for 2D transformations?**
   a) Three-dimensional plane
   b) Two-dimensional plane
   c) One-dimensional plane
   d) Four-dimensional Plane
   Answer: b

6. **Which of the following is a Computer Graphics Curve?**
   a) Bezier Curves
   b) Implicit Curves
   c) Explicit Curves
   d) All of the above
   Answer: d

7. **Who is the first user of computer graphics ?**
   a) William Fetter
   b) Ivan Edward Sutherland
   c) Ada Lovelace
   d) Nicholas Williams
   Answer: a

8. **Which of the following is the purpose for using clipping in computer graphics?**
   a) copying
   b) zooming
   c) adding graphics
   d) removing objects and lines
   Answer: d

9. **In a graphical system, an array of pixels in the picture are stored in which of the following locations?**
   a) Frame buffer
   b) Processor

c) Memory

d) All of the mentioned

Answer: c

10. **Curves in computer graphics is primarily used for which of the following function?**

a) To draw different types of objects onto the screen

b) Zooming out a picture

c) Copying a picture

d) Zooming in a picture

Answer: a

11. **_____ types of translation are present in computer graphics.**

a) 5

b) 3

c) 4

d) 6

Answer: b

12. **Bitmap is a collection of _____ that describes an image.**

a) pixels

b) algorithms

c) bits

d) colors

Answer: a

13. **Which of the following devices provides positional information to the graphics system?**

a) Pointing devices

b) Both Input devices and Pointing devices

c) Output devices

d) Input devices

Answer: b

14. **Which of the following is a primary output device of a graphics system?**

a) Printer

b) Scanner

c) Video monitor

d) Neither Scanner nor Video monitor

Answer: c

15. **Which of the following is used in graphics workstations as input devices to accept voice commands?**

a) Speech recognizers

b) Touch panels

c) None of the mentioned

d) All of the mentioned

Answer: a

16. **Which of the following is defined as the process of elimination of parts of a scene outside a window or a viewport?**

a) editing

b) cutting

c) plucking

d) clipping

Answer: d

17. **Among the following process, which process is known as the elimination of parts of a scene outside a window or a viewport?**

a) editing

b) plucking

c) cutting

d) clipping

Answer: d

18. **Which of the following is commonly known as frame buffer on a black and white system with one bit per pixel?**

a) Bitmap

b) Pix map

c) Multi map

d) All of the mentioned

Answer: a

Explanation: The bit map frame buffer is always 1 bit per pixel.

19. **Which of the following algorithm is a faster method for calculating pixel positions?**

a) Parallel line algorithm

b) Mid-point algorithm

c) DDA line algorithm

d) Bresenham's line algorithm

Answer: c

20. **What does an aspect ratio mean?**

a) Ratio of vertical points to horizontal points

b) Ratio of vertical points to horizontal points and horizontal points to vertical points

c) Number of pixels

d) Ratio of horizontal points to vertical points

Answer: b

21. **Which of the following is a correct abbreviation of DDA algorithm?**

a) Data differential analyzer

b) Direct differential analyzer

c) Digital difference analyzer

d) Digital differential analyzer

Answer: d

Explanation: DDA stands for the digital differential analyzer.