MASTER OF COMPUTER APPLICATION
THIRD SEMESTER
COMPUTER GRAPHICS
MCA-303.2
[USE OMR SHEET FOR OBJECTIVE PART]

SET B

Duration: 3 hrs.

Full Marks: 70

(**Objective**)

Time: 30 mins.

Marks: 20

Choose the correct answer from the following:

1 ×20=20

1. Key frames are:
   a. In between frames
   b. Transition frames
   c. Starting and ending frames
   d. None of the above

2. Clay motion is:
   a. Clay model in 3d
   b. 2d animation
   c. 3d animation
   d. Stop motion animation

3. Which of the following is a commonly used tool for code generation in web development?
   a. Photoshop
   b. Sublime Text
   c. Bootstrap
   d. Microsoft Excel

4. In computer graphics, what is the primary purpose of using a vector list?
   a. Sorting pixels in an image
   b. Storing 3D coordinates of vertices
   c. Defining color gradients in a shader
   d. Specifying animation timelines

5. In computer graphics, what is the typical range of screen coordinates for a standard display with a resolution of 1920x1080?
   a. [0, 0] to [1920, 1080]
   b. [-1, -1] to [1, 1]
   c. [0, 0] to [1, 1]
   d. [-1920, -1080] to [1920, 1080]

6. In computer graphics, which coordinate system is commonly used to represent colors in an image?
   a. Cartesian coordinates
   b. Polar coordinates
   c. RGB color coordinates
   d. Homogeneous coordinates

7. ....is a rigid body transformation that moves objects without deformation.
   a. Rotation
   b. Scaling
   c. Translation
   d. All of the mentioned

8. The basic geometric transformations are................
   a. Translation
   b. Rotation
   c. Scaling
   d. All of the mentioned

9. The model which is created by using basic entities of two dimensioning, is called.........
   a. Surface model
   b. Wire frame model
   c. Solid model
   d. Isometric model

10. Short films that use stop motion techniques are what type of animation?
    a. Frame-based animation
    b. HTML
    c. Animation
    d. Production

11. 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

12. Vector graphics is composed of?
    a. Pixels
    b. Paths
    c. Palette
    d. None of these

13. Pixel can be arranged in a regular:
    a. One dimensional grid
    b. Two-dimensional grid
    c. Three-dimensional grid
    d. All of the above

14. GPU stands for:
    a. Grouped Processing Unit
    b. Graphical Performance Unit
    c. Graphics Processing Unit
    d. Graphical Processing Unit

15. Which transformation is used to change the size of an object?
    a. Scaling transformation
    b. Vector transformation
    c. Simple transformation
    d. Reflection transformation

16. A bitmap is a collection of:
    a. Bits
    b. Colors
    c. Algorithms
    d. Pixels

17. CAD stands for:
    a. Computer Art Design
    b. Computer Aided Design
    c. Car Art Design
    d. None of the above

18. Which of the following is a 3d graphics API?
    a. OpenGL
    b. DirectX
    c. Vulcan
    d. All of the above

19. Which of the following is a commonly used file format for 3d models?
    a. Mp3
    b. PNG
    c. OBJ
    d. TXT

20. What is the option in 3d that regenerate your final image or animation?
    a. Playing
    b. Animation
    c. Rendering
    d. Compositing

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(Descriptive)

[Answer question no.1 & any four (4) from the rest]

1. Describe Raster and Vector. Explain the features of display processors.   5+5=10

2. Describe the frame buffer. Explain the various types of plotters with suitable examples.   3+7=10

3. Explain the Homogenous Coordinates. Explain the Composite Transformation with diagram and example.   5+5=10

4. Explain briefly wireframe modelling and its uses. Describe 3D Graphic.   2+5+3=10

5. Define Vector graphics and Vector list. What is graphical data structure? Explain the concepts related to graphical data structures.   4+2+4=10

6. Describe Pixel, line and Polygon. Write the advantages of Point Clipping Algorithm.   6+4=10

7. What is animation? What are the different types of animation and what are the basic rules of animation?   2+5+3=10

8. Explain Image processing. Write down the key concepts of Image processing. Describe briefly about probability peculiar of animation.   2+4+4=10

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