Program: BE Information Technology Engineering

Curriculum Scheme: CBSGS

Examination: Third Year Semester V

Course Code: TEITC501  and Course Name: Computer Graphics and Virtual Reality

Time: 1hour                                                                                          Max. Marks: 50

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Note to the students:- All the Questions are compulsory and carry equal marks .

| Q1. | Different types of Graphic scan are |
|---|---|
| Option A: | Vector and Raster |
| Option B: | Scalar and raster |
| Option C: | Vector and Scalar |
| Option D: | Random and Vector |
| | |
| Q2. | In the Midpoint Circle Algorithm, what is the coordinates of the Midpoint pixel? |
| Option A: | $(X_k+\frac{1}{2}, Y_k+1)$ |
| Option B: | $(X_k+1, Y_k+\frac{1}{2})$ |
| Option C: | $(X_k, Y_k+\frac{1}{2})$ |
| Option D: | $(X_k+\frac{1}{2}, Y_k)$ |
| | |
| Q3. | An accurate and efficient raster line-generating algorithm is |
| Option A: | DDA algorithm |
| Option B: | Mid-point algorithm |
| Option C: | Parallel line algorithm |
| Option D: | Bresenham's line algorithm |
| | |
| Q4. | In Beizer Curve, which control points lie on the curve of the polygon |
| Option A: | only the first control point |
| Option B: | only the last control point |
| Option C: | only the first and last control points |
| Option D: | all the control points |
| | |
| Q5. | A polygon in which the line segment joining any two points within the polygon lies completely inside the polygon, is called |
| Option A: | Convex |
| Option B: | Concave |
| Option C: | Complete |
| Option D: | closed |
| | |
| Q6. | Odd and even and Non - zero winding are types of |
| Option A: | Scan line polygon fill algorithm |

| | |
|---|---|
| Option B: | Inside outside test |
| Option C: | Boundary fill algorithm |
| Option D: | Flood fill algorithm |
| | |
| Q7. | The 2D transformation that is used to alter the size of an object is |
| Option A: | Translation |
| Option B: | Rotation |
| Option C: | Scaling |
| Option D: | Shearing |
| | |
| Q8. | Shearing is also termed as |
| Option A: | Selecting |
| Option B: | Sorting |
| Option C: | Scaling |
| Option D: | Skewing |
| | |
| Q9. | Which type of clipping is used to clip character strings? |
| Option A: | line clipping |
| Option B: | text clipping |
| Option C: | word clipping |
| Option D: | sentence clipping |
| | |
| Q10. | Sutherland-Hodgeman clipping is an example of which algorithm |
| Option A: | curve clipping |
| Option B: | Line clipping |
| Option C: | text clipping |
| Option D: | polygon clipping |
| | |
| Q11. | Reflection about the line y=0, the axis, is accomplished with the transformation matrix with how many elements as "0" |
| Option A: | 8 |
| Option B: | 1 |
| Option C: | 6 |
| Option D: | 9 |
| | |
| Q12. | The types of parallel projection are |
| Option A: | Orthographic projection and quadric projection |
| Option B: | Orthographic projection and oblique projection |
| Option C: | Oblique projection and quadric projection |
| Option D: | None of these |
| | |
| Q13. | Which transformation distorts the shape of an object such that the transformed shape appears as if the object were composed of internal layers that had been caused to slide over each other? |

| | |
|---|---|
| Option A: | Scaling up |
| Option B: | Shearing |
| Option C: | Rotation |
| Option D: | Scaling down |
| | |
| Q14. | It refers to simulated motion pictures showing movement of drawn objects. |
| Option A: | Animation |
| Option B: | Motion |
| Option C: | VR |
| Option D: | SMD |
| | |
| Q15. | Which of the following is a technique to blend two or more images to form a new image |
| Option A: | Warping |
| Option B: | Modeling |
| Option C: | Morphing |
| Option D: | Animating |
| | |
| Q16. | HMD stands for? |
| Option A: | Head Mounted Display |
| Option B: | Head Masked Display |
| Option C: | Head Made Display |
| Option D: | Head Mounted Detection |
| | |
| Q17. | A term for Illusion of immersion by projecting stereo images on the walls and floor of a room. |
| Option A: | CAVE |
| Option B: | BOOM |
| Option C: | GUI |
| Option D: | HMD |
| | |
| Q18. | It is a mediated environment which creates the sensation in a user of being present in a (physical) surrounding. |
| Option A: | WWW |
| Option B: | VR |
| Option C: | HMD |
| Option D: | GUI |
| | |
| Q19. | A type of VR environment in which subjects are visually isolated from the real environment. |
| Option A: | Immersive |
| Option B: | Semi immersive |
| Option C: | Non immersive |
| Option D: | Augmented |
| | |
| Q20. | What does Open GLSL stand for? |

| | |
|---|---|
| Option A: | Graphical Library of Shade Languages |
| Option B: | Geographic Land and Survey Library |
| Option C: | Graphics Library Shader Language |
| Option D: | Graphical Language and Shading Library |
| | |
| Q21. | When animating, OpenGL provides: |
| Option A: | A complete suite of tools and downloadable applications for making classic 2D and 3D animation right out of the box |
| Option B: | FBOs, VBOs, VAOs and integer-related functions such as glFrameNumber and glMovieType |
| Option C: | Accumulation buffers, frame-buffer objects, VBOs, depth and stencil buffers, blending modes, and other types of buffers that allow a developer to achieve the desired effect |
| Option D: | No way to draw pixels on the screen |
| | |
| Q22. | Which function call sets up the size of the output area? |
| Option A: | glViewport() |
| Option B: | gluPerspective() |
| Option C: | None of These |
| Option D: | glDisplayfunc() |
| | |
| Q23. | With Java 3D, each Shape3D object should call its method _____ to reference one and only one Geometry object. |
| Option A: | setBgcolor() |
| Option B: | setColor() |
| Option C: | setCoordinate() |
| Option D: | setGeometry() |
| | |
| Q24. | Pressure-sensitive joysticks are also called |
| Option A: | Non movable stick |
| Option B: | Joystick |
| Option C: | Isometric joystick |
| Option D: | None of these |
| | |
| Q25. | Acronym for VRML: |
| Option A: | Virtual Reality Modeling Level |
| Option B: | Virtual Reality Modulation Language |
| Option C: | Virtual Rate Modeling Language |
| Option D: | Virtual Reality Modeling Language |