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| **Q. No.** | | **UNIT – I** |  |  |  |
| 1 | a | Explain the working principal of CRT with the help of neat sketches. |  |  |  |
| 1 | b | Distinguish between Random & Raster Scan Display systems |  |  |  |
| 1 | c | Can a 5 x 3 1/2 inch image be presented at 6 X 4 inch without introducing geometric distortion? |  |  |  |
|  | | | | | |
| 2 | a | Explain the working principal of Shadow mask CRT with the help of neat sketches. |  |  |  |
| 2 | b | Discuss about Applications of Computer Graphics from the context of Virtual reality, augmented reality, etc., |  |  |  |
| 2 | c | Given the portrait image of a person, describe a simpler way to make the person look more slender. |  |  |  |
|  | | | | | |
| 3 | | Write short note on the following: |  |  |  |
| 3 | a | Why is Speed So Important in Displaying Pictures? |  |  |  |
| 3 | b | North American presentation level protocol-level syntax (NAPLPS) |  |  |  |
| 3 | c | How are pictures made to grow, shrink and rotate? |  |  |  |
| 3 | d | What happens to pictures that are too large to fit on the screen? |  |  |  |
|  | | | | | |
| 4 | a | Explain the working principle of LED with the help of neat sketches |  |  |  |
| 4 | b | Write short note on the following  (i)Resolution, (ii) aspect ratio (iii) Graphics Adopter (iv) VGA (v) CGA |  |  |  |
|  | | | | | |
| 5 | a | How raster Graphics system works?, explain with the help of neat sketches. |  |  |  |
| 5 | b | Write a program to draw line, polyline, circle, ellipse., ete., using built in functions of OpenGL. |  |  |  |
|  | | | | | |
| 6 | a | Write a program to draw line, polyline, circle, ellipse, using built in functions <graphics.h>. |  |  |  |
| 6 | b | Explain the working principle of following Input devices:   1. Mouse, (ii) joystic, (iii) Trachball, |  |  |  |
|  | | | | | |
| 7 | a | How Characters are generated?, Explain the methods using examples. |  |  |  |
| 7 | b |  |  |  |  |
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| 8 | a | Explain the working principle of a Light pen with the help of neat sketches. |  |  |  |
| 8 | b |  |  |  |  |
|  | | | | | |
| 9 | a | How Touch screen works? Explain any two types of working principles. |  |  |  |
| 9 | b | Compute the following:  (i) Size of a 640 x 480 image at 240 pixel per inch.  (ii) Resolution of a 2 x 2 inch image that has 512 x 512 pixels |  |  |  |
|  | | | | | |
| 10 | a | Explain the working principle of a Light pen with the help of neat sketches. |  |  |  |
| 10 | b |  |  |  |  |
|  | | | | | |
| 11 | a | How data is represented to model an object in Computer graphics, explain with the help of appropriate data structures. |  |  |  |
| 11 | b | In a 512 x 512 raster on a monochrome display with an average access rate of 200 nanoseconds per pixel, what is the refresh rate? |  |  |  |
|  | | | | | |
| 12 | a | What is GKS? Explain with the help of examples. |  |  |  |
| 12 | b | What is the rate of a 1024 x 1024 frame buffer with an average access rate per pixel of 200 nanoseconds on a simple color display? |  |  |  |
|  | | | | | |
| 13 | a | What is PHIGS? Explain with the help of examples. |  |  |  |
| 13 | b | Calculate total memory required to store a video for 1 hour  Assume the data required, like resolution , number of bits/pixel Refresh rate etc., |  |  |  |
|  | | | | | |
| 14 | a | Write short note on the following  (i)Pixel and Voxel, (ii) DETECT (iii) MODE (iv) Initgraph() (v) Grey scale image |  |  |  |
| 14 | b | Write a note on working principle of Digital cameras and digitizing images. |  |  |  |
|  | | | | | |
| 15 | a | How interactive graphics system works? Explain with the help of neat sketches. |  |  |  |
| 15 | b | What is digitizer? Explain the working principle of Magnetic Tablet and acoustic tablet. |  |  |  |
|  | | | | | |
| 16 | a | Write a program for rotation of a wheel using <graphics.h> |  |  |  |
| 16 | b |  |  |  |  |
|  | | | | | |
| 17 | a | Write a program for simulate an analog clock using <graphics.h> |  |  |  |
| 17 | b | Write a short note on following Graphics storage Formats:   1. Image-only storage 2. Display-memory storage 3. Compressed-memory storage 4. Information storage |  |  |  |
|  | | | | | |
| 18 |  |  |  |  |  |
| 18 |  | Write a program for simulate a digital clock using timer function. |  |  |  |
|  | | | | | |
| 19 |  | Write a note on LOOKUP TABLE and explain with the help of neat sketches showing for a 8 bit RGB color as an example. |  |  |  |
| 19 |  | Discuss the following from the context of raster scan CRT:  (i)Saw tooth pattern voltage variation,(ii)Raster scan,(iii) Refresh and flicker effect, (iv) Interlacing, (v) Overscan and blanking |  |  |  |
|  | | | | | |
| 20 |  |  |  |  |  |
| 20 |  | What steps are required to record the display location where a user is pointing to with a light pen? |  |  |  |
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| **Q. No.** | | **UNIT – II** | **Marks** | **CO’s** | **Blooms Level** |
| 1 | a | what are the properties of good line generation algorithm, explain with issues & solutions |  |  |  |
| 1 | b | Indicate which raster locations would be chosen by Bresenham’s algorithm when scan convering line from pixel coordinate (1,1) to pixel coordinate (8,5). |  |  |  |
|  | | | | | |
| 2 | a | Derive the mathematical formulation required to reflect an object with respect to arbitrary axis y=mx+c |  |  |  |
| 2 | b | What are the new coordinates of the point P(2,-4) after rotation by 300  With respect to origin. |  |  |  |
|  | | | | | |
| 3 | a | Derive the mathematical formulation required for Breshnaham’s line generation techniques |  |  |  |
| 3 | b |  |  |  |  |
|  | | | | | |
| 4 | a | Write the window to viewport transformation matrix, and discuss its formulation. |  |  |  |
| 4 | b | Reflect the diamond-shaped polygon whose vertices are A(-1,0), B(0,-2)C(1,0) and D(0,2) about (i) the horizontal line y=2, (ii) about the vertical line x=2, and(iii) about the line y=x+2. |  |  |  |
|  | | | | | |
| 5 | a | Generic vector generation algorithm, to handle steep slope, gentle slope cases. or – slope,etc., |  |  |  |
| 5 | b | Magnify the triangle with vertices A(0,0), B(1,1) and C(5,2) to rwice its size while keeping C(5,2) fixed. |  |  |  |
|  | | | | | |
| 6 | a | What is instance transformation; explain with the help of example. |  |  |  |
| 6 | b | Perform a 450 rotation of triangle A(0,0), B(1,1), C(5,2)  About the origin and about the P(-1,-1). |  |  |  |
|  | | | | | |
| 7 | a | With the help of flow chart explain the Polygon clipping method |  |  |  |
| 7 | b | Find the equation of the line y’ = mx’+b in xy coordinates if the x’y’ coordinate system results from a 900 rotation of the xy coordinate system. |  |  |  |
|  | | | | | |
| 8 | a | Write the edge Coherence and the scan line algorithm with the help of appropriate Bucket-stored edge table. |  |  |  |
| 8 | b | Show that the order in which transformations are performed is important by the transformation of triangle A(1,0), B(0,1). C)1,11), by (i) rotating 450 about the origin and then translating in the direction of vector I, and (ii) translating and then rotating. |  |  |  |
|  | | | | | |
| 9 | a | Explain Sutherland-Hodgman polygon clipping algorithm with the help of flowchart. |  |  |  |
| 9 | b | Find the new coordinates of the triangle A(0,0), B(1,1), C(5,2) after it has been (i) magnifies to twice its size and (ii) reduced to half its size. |  |  |  |
|  | | | | | |
| 10 | a | What is homogeneous coordinate, explain with the help of example. |  |  |  |
| 10 | b |  |  |  |  |
|  | | | | | |
| 11 | a | Distinguish between geometric transformations and coordinate transformation. |  |  |  |
| 11 | b |  |  |  |  |
|  | | | | | |
| 12 | a | Discuss any two Antialiasing techniques to minimize staircase effect and instance transformation. |  |  |  |
| 12 | b |  |  |  |  |
|  | | | | | |
| 13 | a | Write the polygon filling algorithm, with the help of odd and even rule. |  |  |  |
| 13 | b |  |  |  |  |
|  | | | | | |
| 14 | a | Write matrix formulations required for reflection from standard axes. |  |  |  |
| 14 | b |  |  |  |  |
|  | | | | | |
| 15 | a | Discuss Cohen Sutherlands’ line clipping algorithm using 4 bit code. |  |  |  |
| 15 | b |  |  |  |  |
|  | | | | | |
| 16 | a | Write an Algorithm to generate a straight line using Symmetrical DDA technique. |  |  |  |
| 16 |  |  |  |  |  |
|  | | | | | |
| 17 | a | Write an Algorithm to generate a straight line using simple DDA technique. |  |  |  |
| 17 | b | What are the new coordinates of the point P(2,-4) after rotation by 300  With respect to arbitrary point P(2,-4). |  |  |  |
|  | | | | | |
| 18 | a | Derive the mathematical formation required to rotate an object with respect to arbitrary point/axis in 3D Space |  |  |  |
| 18 | b | Write an algorithm to draw a line using trigonometric method |  |  |  |
|  | | | | | |
| 19 | a | Derive the mathematical formulation required to translate an object with respect to arbitrary point in 2D |  |  |  |
| 19 | b | Use pseudo-code to describe the steps that are required to plot a line whose slope is between 450and -450 using the slope-intercept equation.  ( i.e.,lml >1) |  |  |  |
|  | | | | | |
| 20 | a | What are the steps to generate a circle using the polynomial method? |  |  |  |
| 20 | b |  |  |  |  |

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| **Q. No.** | | **UNIT – III** | **Marks** | **CO’s** | **Blooms Level** |
| 1 | a | With the help of block diagram, explain the conceptual model of the 3D viewing process. |  |  |  |
| 1 | b | The house extends from 30 to 54 in z, from 0 to 16 in x, and from 0 tp 16 in y, by keeping this as data, sketch the viewing situation in 3D as well as outcome of the setup for perspective projection.  VRP: (0,0,54) : origin (WC)  VPN: (0,0,1) : z axis (WC)  VUP: (0,1,0) : y axis (WC)  PRP: (8,6,30) : ( VRC)  Window: ( -1,17,-1,17) : (VRC) |  |  |  |
|  | | | | | |
| 2 | a | The 3D viewport default, which is the unit cube in Normalized projection coordinates (NPC assumed) illustrate with the help of table the default viewing specification used by PHIGS, for parallel and perspective projections. |  |  |  |
| 2 | b | Distinguish between Cabinet and cavalier projections. |  |  |  |
|  | | | | | |
| 3 | a | With the help of tree structure, explain different subclasses of planer geometric Projections. |  |  |  |
| 3 | b | The house extends from 30 to 54 in z, from 0 to 16 in x, and from 0 to 16 in y, by keeping this as data, sketch the viewing situation in 3D as well as outcome of the setup for parallel projection.  VRP: (0,0,0) : origin (WC)  VPN: (0,0,1) : z axis (WC)  VUP: (0,1,0) : y axis (WC)  PRP: (0.5,0.5,1.0) : ( VRC)  Window: ( 0,1,0,1) : (VRC) |  |  |  |
|  | | | | | |
| 4 | a | Explain the Viewing Reference coordinate system (VRC), with the help of View plane, CW, DOP,VPN, PRP, VRP, VUP, etc., |  |  |  |
| 4 | b | What is two point perspective projections, explain with the help of neat sketches. |  |  |  |
|  | | | | | |
| 5 | a | Design a program to display a cubic parametric curve. |  |  |  |
| 5 | b | The house extends from 30 to 54 in z, from 0 to 16 in x, and from 0 tp 16 in y, by keeping this as data, sketch the viewing situation in 3D as well as outcome of the setup for perspective projection.  VRP: (0,0,0) : origin (WC)  VPN: (0,0,1) : z axis (WC)  VUP: (0,1,0) : y axis (WC)  PRP: (8,6,84) : ( VRC)  Window: ( -50,50,-50,50) : (VRC) |  |  |  |
|  | | | | | |
| 6 | a | Distinguish between Parallel Projection and perspective projections |  |  |  |
| 6 | b | The house extends from 30 to 54 in z, from 0 to 16 in x, and from 0 tp 16 in y, by keeping this as data, sketch the viewing situation in 3D as well as outcome of the setup for perspective projection.  VRP: (8,6,54) : origin (WC)  VPN: (0,0,1) : z axis (WC)  VUP: (0,1,0) : y axis (WC)  PRP: (0,0,30) : ( VRC)  Window: ( -9 ,9, -7, 11) : (VRC) |  |  |  |
|  | | | | | |
| 7 | a | Write the matrix representations required for Bezier surfaces, along with sketches of Bezier patches. |  |  |  |
| 7 | b | The house extends from 30 to 54 in z, from 0 to 16 in x, and from 0 tp 16 in y, by keeping this as data, sketch the viewing situation in 3D as well as outcome of the setup for perspective projection.  VRP: (16,0,54) : origin (WC)  VPN: (0,0,1) : z axis (WC)  VUP: (0,1,0) : y axis (WC)  PRP: (25,25,20) : ( VRC)  Window: ( -20, 20, -5, 35) : (VRC) |  |  |  |
|  | | | | | |
| 8 | a | With the help of neat sketches, distinguish between Parallel and perspective canonical Projections. |  |  |  |
| 8 | b | The house extends from 30 to 54 in z, from 0 to 16 in x, and from 0 tp 16 in y, by keeping this as data, sketch the viewing situation in 3D as well as outcome of the setup for perspective projection.  VRP: (16,0,54) : origin (WC)  VPN: (1,0,1) : z axis (WC)  VUP: (0,1,0) : y axis (WC)  PRP: (0,25,20√2) : ( VRC)  Window: ( -20, 20, -5, 35) : (VRC) |  |  |  |
|  | | | | | |
| 9 | a | Explain the Hermite surfaces, with the help of formulations and sketches. |  |  |  |
| 9 | b | The house extends from 30 to 54 in z, from 0 to 16 in x, and from 0 to 16 in y, by keeping this as data, sketch the viewing situation in 3D as well as outcome of the setup for parallel projection.  VRP: (0,0,0) : origin (WC)  VPN: (0,0,1) : z axis (WC)  VUP: (0,1,0) : y axis (WC)  PRP: (8,8,100) : ( VRC)  Window: (-1,17,-1,17) : (VRC) |  |  |  |
|  | | | | | |
| 10 | a | Write the matrix representations required for B-Spline surfaces, and discuss. |  |  |  |
| 10 | b | The house extends from 30 to 54 in z, from 0 to 16 in x, and from 0 to 16 in y, by keeping this as data, sketch the viewing situation in 3D as well as outcome of the setup for parallel projection.  VRP: (0,0,54) : origin (WC)  VPN: (1,0,0) : z axis (WC)  VUP: (0,1,0) : y axis (WC)  PRP: (12,8,16) : ( VRC)  Window: (-1,25,-5,21) : (VRC) |  |  |  |
|  | | | | | |
| 11 | a | Derive the mathematical formulation required to represent beizier curve. |  |  |  |
| 11 | b | The house extends from 30 to 54 in z, from 0 to 16 in x, and from 0 tp 16 in y, by keeping this as data, sketch the viewing situation in 3D as well as outcome of the setup for parallel projection.  VRP: (16,0,54) : origin (WC)  VPN: (0,1,0) : z axis (WC)  VUP: (-1,0,0) : y axis (WC)  PRP: (12,8,30) : ( VRC)  Window: (-1, 25, -5, 21) : (VRC) |  |  |  |
|  | | | | | |
| 12 | a | Derive the mathematical formulation required to represent B-Spline curve. And sketch the family of curves by changing the control point positions. |  |  |  |
| 12 | b | The house extends from 30 to 54 in z, from 0 to 16 in x, and from 0 to 16 in y, by keeping this as data, sketch the viewing situation in 3D as well as outcome of the setup for parallel projection.  VRP: (8,8,42) : origin (WC)  VPN: (1,1,1) : z axis (WC)  VUP: (0,1,0) : y axis (WC)  PRP: (0,0,10) : ( VRC)  Window: (-20, 20, -20, 20) : (VRC) |  |  |  |
|  | | | | | |
| 13 | a | Derive the mathematical formulation required to represent Hermite curve and sketch the sketch the family of curves after changing the direction and magnitude of tangent. |  |  |  |
| 13 | b | The house extends from 30 to 54 in z, from 0 to 16 in x, and from 0 tp 16 in y, by keeping this as data, sketch the viewing situation in 3D as well as outcome of the setup for parallel projection.  VRP: (8,8,54) : origin (WC)  VPN: (0,0,1) : z axis (WC)  VUP: (0,1,0) : y axis (WC)  PRP: (cos, sin,1) : ( VRC)  Window: (-15,15,-15,15) : (VRC) |  |  |  |
|  | | | | | |
| 14 | a | Why parametric cubic curves? Justify. |  |  |  |
| 14 | b | The house extends from 30 to 54 in z, from 0 to 16 in x, and from 0 tp 16 in y, by keeping this as data, sketch the viewing situation in 3D as well as outcome of the setup for perspective projection.  VRP: (0,0,54) : (WC): Lower-left front of house  VPN: (0,0,1) : z axis (WC)  VUP: (0,1,0) : y axis (WC)  PRP: (8,6,30) : ( VRC)  Window: (-1,17,-1,17) : (VRC)  F(VRC) : +1 one unit in front of house, at z=54 +1 =55  B (VRC): -23 One unit back of house. At z=54-23=31 |  |  |  |
|  | | | | | |
| 15 | a | What are the important properties required to design a curve, discuss. |  |  |  |
| 15 | b | Design polygon meshes required to represent a curves and surfaces: explicit, pointers to a vertex list, and pointers to an edge list. |  |  |  |
|  | | | | | |
| 16 | a | Design an algorithm to draw a Bezier curve. |  |  |  |
| 16 | b | How 3D object is represented by polygons, explain with the help of examples. |  |  |  |
|  | | | | | |
| 17 | a | Design an algorithm to draw a B-Spline curve. |  |  |  |
| 17 | b | Role of plane equations in working with the polygons and its normal  Discuss. |  |  |  |
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| **Q. No.** | | **UNIT – IV** | **Marks** | **CO’s** | **Blooms Level** |
| 1 | a | Explain the role of winged edge data structure, with the help of neat diagram. |  |  |  |
| 1 | b | Role of Regularized Boolean set operations and Boolean intersections explain from the context of solid modeling. |  |  |  |
|  | | | | | |
| 2 | a | How to represent data for wire frame model in solid modeling, explain. |  |  |  |
| 2 | b | What is primitive instancing; explain with the help of neat sketches. |  |  |  |
|  | | | | | |
| 3 | | Write a note on |  |  |  |
| 3 | a | User interfaces for solid modeling |  |  |  |
| 3 | b | Sweep representations |  |  |  |
|  | | | | | |
| 4 | a | With the help of neat sketches explain representation of boundary using Polyhedra and Euler’s formula | 10 | CO 4 | L2 |
| 4 | b | How nonpolyhedral Boundary is represented, explain with example. |  |  |  |
|  | | | | | |
| 5 Discuss the following on Spatial Partitioning Representations | | | | | |
| 5 | a | Cell Decomposition |  |  |  |
| 5 | b | Spatial-Occupancy Enumeration. |  |  |  |
|  | | | | | |
| 6 | a | Explain the Octree enumeration from the context of solid modeling. |  |  |  |
| 6 | b | Discuss Binary space portioning tree from the context of solid modeling |  |  |  |
|  | | | | | |
| 7 | a | Distinguish the role of BSP tree from the context of solid modeling and hidden surface elimination. |  |  |  |
| 7 | b | How an object defined by Constructive solid geometry and its tree, explain with the help of an example. |  |  |  |
|  | | | | | |
|  | | | | | |
| 8 | a | Halftone Approximation, discuss with the help of dither matrix |  |  |  |
| 8 | b | Explain HSV color model along with neat sketches. |  |  |  |
|  | | | | | |
| 9 | a | Explain YIQ color Model for television broadcasting. |  |  |  |
| 9 | b |  |  |  |  |
|  | | | | | |
| 10 | a | Explain CMY color model along with the appropriate matrix . |  |  |  |
| 10 | b | Discuss the fundamentals of Chromatic color, along with Tints, tones and shades. |  |  |  |
|  | | | | | |
| 11 | a | Sketch the CIE Chromaticity Diagram for colour-matching functions and explain colour gamuts, with the help of a 2D horseshoe pattern. |  |  |  |
| 11 | b | Write an algorithm for converting HLS to RGB space |  |  |  |
|  | | | | | |
| 12 | a | Write an algorithm for converting RGB to HLS space |  |  |  |
| 12 | b | Interactive specification of colors, explain with the help of GUI. |  |  |  |
|  | | | | | |
| 13 | a |  |  |  |  |
| 13 | b | Explain HLS color model along with neat sketches. |  |  |  |
|  | | | | | |
| 14 write short note on : | | | | | |
| 14 | a | RGB color model |  |  |  |
| 14 | b | Gamma correction |  |  |  |
|  | | | | | |
| 15 | a | Design a user interface for solid modeling. |  |  |  |
| 15 | b | With the help of typical spectral energy distribution P( of a light and spectral energy distribution , explain dominant wavelength, excitation purity, and luminance. |  |  |  |
|  | | | | | |
| 16 | a | Sketch the color-matching functions, showing the amounts of three primaries needed to match all the wavelengths of the visible spectrum, and explain the same. |  |  |  |
| 16 | b | Spectral-response functions of each of the three types of cones and Luminous-efficiency function for the human eye works, explain with neat diagram. |  |  |  |

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| **Q. No.** | | **UNIT – V** | **Marks** | **CO’s** | **Blooms Level** |
| 1 |  | With the help of illumination equation for the various illumination models, explain the fundamental principle behind the following… |  |  |  |
| 1 | a | Ambient Light, |  |  |  |
| 1 | b | Diffuse reflection, |  |  |  |
|  | | | | | |
| 2 | a | Explain the Phong shading with the help of neat sketches. |  |  |  |
| 2 | b | Write a brief note on the following shading models |  |  |  |
| 2 | i | Constant shading |  |  |  |
| 2 | ii | Interpolated shading |  |  |  |
|  | | | | | |  | Interpolated shading |
| 3 | a | Explain the guard shading with the help of neat sketches. |  |  |  |
| 3 | b | What is rendering? explain the role of normal ( vector) in shading models for polygons |  |  |  |
|  | | | | | |  | Constant shading |
| 4 | a | How visible surfaces can be determined explain with the help of Z Buffer Algorithm. |  |  |  |
| 4 | b | With the help of neat sketches explain the MiniMax tests in hidden surface elimination process. |  |  |  |
|  | | | | | |
| 5 | a | Write the scan line coherence algorithm from the context of visible surface determination. |  |  |  |
| 5 | b | Write a note on Binary Space partition technique under priority Issues |  |  |  |
|  | | | | | |
| 6 | a | Explain the Area Coherence algorithm from the context of Hidden Surface elimination, Warnock’s algorithm. |  |  |  |
| 6 | b | Discuss the issues and solutions under priority algorithm for hidden surface elimination. |  |  |  |
|  | | | | | |
| 7 | a | Discuss the span coherence algorithm with the help of examples. |  |  |  |
| 7 | b | Discuss sorting and coherence using scan line algorithm and priority algorithm. |  |  |  |
|  | | | | | |
| 8 | a |  |  |  |  |
| 8 | b |  |  |  |  |
|  | | | | | |
| 9 | a | How morphing is done, explain with the help of interpolation of polygons in rendering. |  |  |  |
| 9 | b | Discuss the role of polygons and normal’s in calculating the light intensity in rendering. Explain with the help of a polyhedral example. |  |  |  |
|  | | | | | |
| 10 | a | Atmospheric attenuation from the context of illuminating model |  |  |  |
| 10 | b | Discuss Specular Reflection in illuminating an object |  |  |  |
|  | | | | | |
| 11 | a | Explain formulation required to handle Multiple light sources. |  |  |  |
| 11 | b | List the techniques required for efficient visible surface algorithms. |  |  |  |
|  | | | | | |
| 12 | a | Discuss Appel’s algorithm for visible surface determination. |  |  |  |
| 12 | b | Discuss the formulation for colour lights and surfaces in illumination perspective. |  |  |  |
|  | | | | | |
| 13 | a |  |  |  |  |
| 13 | b | Discuss Light source attenuation, from the context of illumination models. |  |  |  |
|  | | | | | |
| 14 | a | With the help of neat sketches explain the back face elimination technique in visible surface determination. |  |  |  |
| 14 |  |  |  |  |  |
|  | | | | | |
| 15 | a | How do you club octree algorithm with the Z- Buffer algorithm, explain with the help of an example. |  |  |  |
| 15 | b |  |  |  |  |
|  | | | | | |
| 16 | a | With the help of plane equation, how z is computed in depth buffer algorithm? Write the pseudo code for the Z-buffer Technique. |  |  |  |
| 16 | b | Write the Pseudocode for building a BSP tree. |  |  |  |
|  | | | | | |
| 17 | a | How do you club quad tree algorithm with the Z- Buffer algorithm, explain with the help of an example. |  |  |  |
| 17 | b | Explain Polygon mesh Shading. |  |  |  |