SRM VALLIAMMAI ENGINEERING COLLEGE

(An Autonomous Institution)

SRM Nagar, Kattankulathur – 603 203

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

QUESTION BANK

VIII SEMESTER

1908010- COMPUTER GRAPHICS AND MULTIMEDIA

Regulation – 2019

Academic Year 2022-2023 (EVEN Semester)

Prepared by

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SUBJECT : 1908010- COMPUTER GRAPHICS AND MULTIMEDIA

SEM / YEAR : VIII Sem / IV Year

UNIT I OUTPUT PRIMITIVES AND COLOR MODELS			
Introduction to computer graphics and applications- Output primitives – points and lines line, drawing algorithms - circle and ellipse generating algorithms - filled area primitives – Light sources - basic illumination models – halftone patterns and dithering techniques; Properties of light - Standard primaries and chromaticity diagram; Intuitive colour concepts – RGB colour model - YIQ colour model - CMY colour model - HSV colour model - HLS colour model; Colour selection			
PART - A			
Q.No	**Questions**	**BT Level**	**Competence**
1.	Classify the nature of line primitive in graphics.	BTL 4	Analyzing
2.	What do you mean by 'color model'?	BTL 2	Understanding
3.	What is scan conversion?	BTL 1	Remembering
4.	What is the difference between Bresenham's and DDA line drawing Algorithm?	BTL 1	Remembering
5.	What do you infer by complementary colors and primary colors?	BTL 1	Remembering
6.	Point out, how Y,I,Q represent in YIQ color model?	BTL 1	Remembering
7.	Applying DDA algorithm to rasterize the line from (0,0) to (6,7)	BTL 3	Applying
8.	Assess flat shading.	BTL 5	Evaluating
9.	Applying the use of error term in Bresenham's line drawing algorithm?	BTL 3	Applying
10.	Write the conversion matrix of CMY to RGB representation.	BTL 5	Evaluating
11.	What would you Understanding the Octant symmetry of a circle?	BTL 2	Understanding
12.	How to create dithered image?	BTL 6	Creating
13.	Identify any two attributes of a line?	BTL 3	Applying
14.	What do you understand about chromaticity?	BTL 2	Understanding
15.	Define persistence.	BTL 1	Remembering
16.	Infer the working principle of Raster-Scan System.	BTL 4	Analyzing
17.	Differentiate aliasing and antialiasing?	BTL 2	Understanding
18.	Creating a line from (10,12) to (15,15) on a raster screen using Bresenham's straight line algorithm.	BTL 6	Creating
19.	What is meant by ambient reflection.	BTL 3	Applying
20.	Conclude about light diffusion.	BTL 4	Analyzing

21.	Define Computer Graphics.	BTL1	Remembering
22.	List the applications of computer graphics.	BTL 5	Evaluating
23.	Define pixel.	BTL1	Remembering
24.	Discuss the disadvantages of DDA algorithm.	BTL 4	Analyzing
	PART-B		
1.	(i) Describe about the properties of a circle. (7) (ii) Describe pen and brush attribute options. (6)	BTL 1	Remembering
2.	Use the midpoint method to derive decision parameters for generating points along a straight line path with slope in the range 0<m<1. Compose that the midpoint decision parameters are the same as those in the Bresenham's line drawing algorithm. (13)	BTL 6	Creating
3.	Describe about the Bresenham's ellipse drawing algorithm. (13)	BTL 1	Remembering
4.	Using midpoint circle algorithm calculate the pixel that will be put ON for an origin center at (4,5) of a circle with radius 4. (13)	BTL 5	Evaluating
5.	(i)Compare and contrast between the RGB and CMY color models(7) (ii)Summarize about CIE color model. What are its advantages? (6)	BTL 2	Understanding
6.	(i)Discuss about the properties of light. (7) (ii)Interpret light sources in detail. (6)	BTL 2	Understanding
7.	(i)Depict and discuss the HSV and HLS color models in detail. (7) (ii)Discuss briefly on standard primaries and chromaticity diagram. (6)	BTL 2	Understanding
8.	Make a detailed comparison of all color models. (13)	BTL 4	Analysing
9.	Explain in detail about halftone patterns and dithering techniques in detail. (13)	BTL 4	Analysing
10.	Explain attributes of output primitives. (13)	BTL 4	Analysing
11.	Illustrate the basic illumination model in detail. (13)	BTL 3	Applying
12.	Describe about the various types of shading? (13)	BTL 1	Remembering
13.	Write a short notes on RGB and HSV color models. (13)	BTL 1	Remembering
14.	Explain the basic concepts of Midpoint ellipse algorithm. Apply the decision parameter for the algorithm and write down the algorithm steps. (13)	BTL 3	Applying
15.	Explain various applications of Computer Graphics. (13)	BTL5	Evaluating
	PART-C		
1.	Consider the line from (0,0) to (-8,-4).Use general Bresenham's line algorithm to rasterize this line. Evaluate and tabulate all the steps involved . (15)	BTL 6	Creating
2.	(i) Explain different light source models with illustration (6) (ii) Explain the following 1.Ambient illumination (3) 2.Diffuse Reflection. (3) 3.Specular reflection. (3)	BTL 5	Evaluating

3.	Write down and explain the midpoint circle drawing algorithm. Assume 10 cm as the radius and co-ordinate origin as the centre of the circle. (15)	BTL 6	Creating
4.	Explain about additive and subtractive color models in detail. (15)	BTL 5	Evaluating
5.	Write down and explain the Bresenham circle drawing algorithm. Assuming 8 cm as the radius and co-ordinate origin as the centre of the circle. (15)	BTL 6	Creating

UNIT II -TWO-DIMENSIONAL GRAPHICS

Two dimensional geometric transformations – Matrix representations and homogeneous coordinates, composite transformations; Two dimensional viewing – viewing pipeline, viewing coordinate reference frame; window-to-viewport coordinate transformation, Two dimensional viewing functions; clipping operations – point, line, and polygon clipping algorithms.

PART - A

Q.No	Questions	BT Level	Competence
1.	List out the basic geometric transformation.	BTL 1	Remembering
2.	What is point clipping and line clipping?	BTL 1	Remembering
3.	Give the final coordinates of a unit square ABCD with vertex A placed on the origin after applying a uniform scaling of 2 units with respect to the centre of the square.	BTL 2	Understanding
4.	Point out, how you will clip a point?	BTL 4	Analysing
5.	Define - View Up Vector	BTL 1	Remembering
6.	Evaluating the effect of scaling factor $S_x=\frac{1}{2}$ and $S_y=\frac{1}{2}$ on a given triangle ABC whose co-ordinates are A=[4,1], B=[5,2],C=[4,3]	BTL 5	Evaluating
7.	Outline viewing pipeline.	BTL 2	Understanding
8.	What is the effect of inverse transformations?	BTL 4	Analysing
9.	Write down shear transformation.	BTL 2	Understanding
10.	How you perform text clipping?	BTL 4	Analyzing
11.	Apply the equation for homogeneous transformation.	BTL 3	Applying
12.	How composite transformation works?	BTL 2	Understanding
13.	What is curve clipping?	BTL 1	Remembering
14.	Identify the need of homogeneous coordinates?	BTL 3	Applying
15.	Distinguish between window and viewport?	BTL 2	Understanding
16.	Design transformation matrix for reflection with respect to the line y=x?	BTL 6	Creating
17.	A Polygon has 4 vertices loaced at A(20,10),B(60,10),C(60,30), d(20,30) Create a Transformation matrix to double the size of the polygon with point A located at the same place.	BTL 6	Creating

18.	Is Sutherland Cohen line clipping algorithm applicable to any type of window?Justify.	BTL 5	Evaluating
19.	Apply the role of region code.	BTL 3	Applying
20.	Differentiate uniform scaling from differential scaling.	BTL 4	Analyzing
21.	Define geometric transformation.	BTL1	Remembering
22.	Define projection.	BTL1	Remembering
23.	What is window-to-viewport coordinate transformation?	BTL3	Applying
24.	What are the different concatenation properties?	BTL5	Evaluating
	PART-B		
1.	(i).Describe 2D geometric transformations. (7) (ii).Show that two successive reflections about the coordinate axes is equivalent to a single rotation about the coordinate origin. (6)	BTL 1	Remembering
2.	(i)Discuss about matrix representation and homogeneous coordinates (7) (ii)Give composite transformation for translation and rotation (6)	BTL 2	Understanding
3.	Illustrate with example the available two dimensional geometric transformations. (13)	BTL 3	Applying
4.	(i)Scale a square ABCD A(0,0) , B(3,0),C(3,3),D(0,3) three units in X direction and three units in Y direction. (7) (ii)Explain the brief notes on pivot point rotation of an object. (6)	BTL 5	Evaluating
5.	Construct a triangle ABC whose coordinates are A(1,1), B(5,2) and C(4,3) i. Reflect the given triangle about X axis ii. Reflect the given triangle about Y axis iii. Reflect the given triangle about Y=X axis iv. Reflect the given triangle about X =Y axis In each case find the Coordinates of reflected triangle. (13)	BTL 3	Applying
6.	(i)How would you transform an object from one coordinate system to another coordinate system? (7) (ii)Give a brief note on two dimensional viewing transformation pipeline. (6)	BTL 1	Remembering
7.	(i)What are the stages involved in 2D viewing transformation pipeline? Describe briefly about each stage. (7) (ii)Describe in detail about viewing coordinate reference frame.(6)	BTL 1	Remembering
8.	(i)List and Explain 2D viewing functions. (7) (ii)Compare between window port and view port. (6)	BTL 2	Understanding
9.	Analyze the window to viewport coordinate transformation. (13)	BTL 4	Analyzing
10.	(i) Show the different types of clipping operations with neat diagram. (10) (ii) Write short notes on exterior clipping. (3)	BTL 1	Remembering

11.	(i)Explain Cohen-Sutherland line clipping with example. (7) (ii) Summarize the notes on clipping against rectangular boundaries. (6)	BTL 2	Understanding
12.	(i)Examine the Sutherland Hodgeman polygon clipping algorithm with example. (7) (ii)Explain the possible relationships between the line positions and a standard rectangular clipping region. (6)	BTL 3	Applying
13.	(i) Explain in brief on point and curve clipping. (7) (ii) Point out about text clipping techniques. (6)	BTL 4	Analysing
14.	Use Cohen Sutherland algorithm to clip the line P1(70,20) and p2(100,10) against a window lower left hand corner (50,10) and upper right hand corner(80,40) . (13)	BTL 6	Creating
15.	Explain the different two dimensional geometric transformations. (13)	BTL2	Understanding
	PART-C		
1.	Explain about Composite transformation in general and Explain the following with matrix representation: (i) Two Successive Translation. (3) (ii) Two Successive Rotations. (3) (iii) Two Successive Scaling. (3) (iv) General Pivot Point Rotation. (3) (v) General Fixed Point Scaling. (3)	BTL 6	Creating
2.	(i)Translate a square with the coordinate A(0,0),B(3,0),C(3,3),D(0,3) by 2 units in x and y directions. (7) (ii) Scale the polygon with coordinates A(2,5),B(7,10,C(10,2) by two units in x direction 2 units in Y direction. (8)	BTL 5	Evaluating
3.	Explain with neat diagram of Processing the vertices of the polygon through the boundary clipping pipeline using Sutherland Hodgeman polygon clipping algorithm. (15)	BTL 6	Creating
4.	At R be Rectangular window whose lower left head corner is at L(-3,1) and upper right head corner is at R(2,6). Find the region codes for the endpoints A(-4,2),B(-1,7),C(-1,5),D(3,8),G(1,-2),H(3,3),I(-4,7) and J(-2,10). (15)	BTL 5	Evaluating
5.	Compare and contrast Cohen-Sutherland and Nicholl-Lee-Nicholl line clipping. (15)	BTL 5	Evaluating

UNIT III THREE-DIMENSIONAL GRAPHICS
Three dimensional concepts; Three dimensional object representations – Polygon surfaces- Polygon tables- Plane equations – Polygon meshes; Curved Lines and surfaces, Quadratic surfaces; Blobby objects; Spline representations – Bezier curves and surfaces -B-Spline curves and surfaces. TRANSFORMATION AND VIEWING: Three dimensional geometric and modeling transformations – Translation, Rotation, Scaling, composite transformations; Three dimensional viewing – viewing pipeline, viewing coordinates, Projections, Clipping; Visible surface detection methods.
PART - A

Q.No	Questions	BT Level	Competence
1.	Define Quadratic surface.	BTL 1	Remembering
2.	What is blobby object.	BTL 1	Remembering
3.	How do you represent sphere in three dimensions?	BTL 3	Applying
4.	List the classifications of visible surface detection algorithm.	BTL 4	Analyzing
5.	Define Uniform B-Spline curve with example.	BTL 1	Remembering
6.	Compare orthographic and oblique parallel projections.	BTL 5	Evaluating
7.	Formulate the single point perspective projection transformation matrix when projectors are placed on Z-axis.	BTL 6	Creating
8.	Classify the common representation in solid modeling technique.	BTL 5	Evaluating
9.	Differentiate: Parallel and perspective projections.	BTL 2	Understanding
10.	What do you infer about polygon surface?	BTL 2	Understanding
11.	Construct the 3D viewing pipeline.	BTL 3	Applying
12.	Define Polygon Tables.	BTL 1	Remembering
13.	What is meant by Backface Culling?	BTL 1	Remembering
14.	How do we identify the principal vanishing point?	BTL 3	Applying
15.	Differentiate oblique and orthogonal projection.	BTL 2	Understanding
16.	Prepare the need for modeling transformations?	BTL 6	Creating
17.	List the advantages of B - spline over Bezier curve?	BTL 4	Analyzing
18.	Compare the advantage of B-spline over Bezier curve.	BTL 5	Evaluating
19.	What is the use of control point?	BTL 3	Applying
20.	Outline about viewing operation?	BTL 2	Understanding
21.	Distinguish between bitBlt and pixBlt.	BTL4	Analyzing
22.	Define cubic spline.	BTL1	Remembering
23.	Differentiate parallel projection from perspective projection.	BTL2	Understanding
24.	Analyse the matrix representation for scaling, translation	BTL4	Analyzing
	PART-B		
1.	With suitable examples describe 3D transformations (i)Rotation .(7) (ii)Translation.(6)	BTL 1	Remembering
2.	Write short notes and analyse on the list given below (i)Polygon surfaces and Curved line surfaces .(7) (ii) Quadric surfaces. (6)	BTL 4	Analysing
3.	With suitable examples discuss the following (i)Reflection and Scaling. (7) (ii) Shearing.(6)	BTL 2	Understanding
4.	(i)Describe B spline and Bezier surfaces. (7) (ii)Tabulate the advantages and disadvantages of B spline surfaces over Bezier surfaces. (6)	BTL 1	Remembering

5.	(i)Explain and illustrate three dimensional display methods with example.(7) (ii) Illustrate Blobby objects and examples.(6)	BTL 3	Applying
6.	(i) Describe in brief parallel projections with examples. (7) (ii)Describe in brief perspective projections with examples.(6)	BTL 1	Remembering
7.	Explain and analyse on Clipping in 3D for the following (i)Normalized view volumes and Viewport clipping. (7) (ii)Clipping in homogeneous coordinates .(6)	BTL 4	Analysing
8.	Describe on the following visible surface detection methods. (i) Depth –Buffer method and A-Buffer method.(7) (ii)Back face detection.(6)	BTL 1	Remembering
9.	i)Show the general characteristics of B spline curves. (7) ii)Demonstrate uniform and cubic periodic B splines curves. (6)	BTL 2	Understanding
10.	Given the plane parameters A,B,C,D for all surfaces of an object, device and algorithm to determine whether any specified points is inside or outside the object. (13)	BTL 6	Creating
11.	What are the two advantages of B-splines over Beizer curve? Briefly explain how curves are generated using B-spline function and properties of B-Spline curves.(13)	BTL 4	Analysing
12.	Evaluate the 3D transformation matrix rotation about an arbitrary axis and arbitrary plane.(13)	BTL 5	Evaluating
13.	Explain different types of projection in detail and also explain the perspective projection for projecting 3D objects on a 2D surface.(13)	BTL 2	Understanding
14.	Explain and illustrate the various representation schemes and types of spline.(13)	BTL 3	Applying
15.	Differentiate parallel and perspective projections and derive their projection matrices. (13)	BTL 3	Applying
PART-C			
1.	(i)Derive transformation matrix for rotating any object about an axis passing through the origin and point (10,0,10). (8) (ii)Derive the oblique projection matrix and apply it to find the transformation for cavalier projection with $\theta=45^{o}$and cabinet projection$\theta=30^{o}$.(7)	BTL 6	Creating
2.	Construct three dimensional transformations with example.(15)	BTL 6	Creating
3.	Determine the blending function for uniform periodic B-Spline curve for n=4 , d=4. (15)	BTL 5	Evaluating
4.	Compare parallel projections from perspective projections.(15)	BTL 5	Evaluating
5.	Explain and analyse on Clipping in 3D i)normalized view volumes (5) ii)viewport clipping (5) iii)clipping in homogeneous coordinates (5)	BTL 5	Evaluating

UNIT IV MULTIMEDIA SYSTEM DESIGN & MULTIMEDIA FILE HANDLING			
Multimedia basics − Multimedia applications − Multimedia system architecture − Evolving technologies for multimedia − Defining objects for multimedia systems − Multimedia data interface standards − Multimedia databases. Compression and decompression − Data and file format standards − Multimedia I/O technologies − Digital voice and audio − Video image and animation − Full motion video − Storage and retrieval technologies.			
PART - A			
Q.No	**Questions**	**BT Level**	**Competence**
1.	Write short notes on multimedia element.	BTL 1	Remembering
2.	What is meant by multimedia database and list out its characteristics.	BTL 1	Remembering
3.	Show the basic objects of multimedia.	BTL 1	Remembering
4.	Point out basic objects of multimedia systems?	BTL 4	Analyzing
5.	Write about how are image annotation useful for information systems?	BTL 6	Creating
6.	Show the data objects used in multimedia system?	BTL 2	Understanding
7.	Classify the methods of defining objects for multimedia systems.	BTL 3	Applying
8.	Assess the challenges in multimedia databases.	BTL 5	Evaluating
9.	Give the uses of GIS Map.	BTL 2	Understanding
10.	Relate the preferred database management systems for multimedia data.	BTL 3	Applying
11.	Define lossy compression.	BTL 1	Remembering
12.	Rearrange the types of file formats standards for data?	BTL 6	Creating
13.	How entropy encoding is done?	BTL 4	Analyzing
14.	Define quantization.	BTL 1	Remembering
15.	Point out the types of voice recognition systems?	BTL 4	Analyzing
16.	Compare the characteristics of lossy and lossless compression technique.	BTL 2	Understanding
17.	Write about disk spanning?	BTL 4	Analyzing
18.	Conclude the role compression in multimedia.	BTL 5	Evaluating
19.	Show the requirements of Full- Motion video Controller.	BTL 3	Applying
20.	Express in short about Run length encoding?	BTL 2	Understanding
21.	Define lossy compression.	BTL2	Understanding
22.	How pack bits encoding is done?	BTL5	Evaluating
23.	Identify the factors governing the ADC process.	BTL3	Applying
24.	Define quantization.	BTL1	Remembering
PART-B			

1.	(i) What are the evolving technologies for multimedia systems? Explain them. (6) (ii) Describe multimedia system architecture of a multimedia workstation environment. (7)	BTL 1	Remembering
2.	Describe in detail about multimedia database.(13)	BTL 1	Remembering
3.	Discuss multimedia applications in detail. (13)	BTL 2	Understanding
4.	(i)Show how to define objects for multimedia system.(7) (ii)Illustrate short notes on multimedia data interface standards.(6)	BTL 3	Applying
5.	How will you design the network architecture for multimedia systems? Explain(13)	BTL 2	Understanding
6.	Derive the issues involved in multimedia storage and retrieval.(13)	BTL 6	Creating
7.	(i)What are the types of compression available in multimedia? Explain any two types of compression technology.(7) (ii)Describe about Digital audio and voice in multimedia I/O technologies.(6)	BTL 1	Remembering
8.	(i)Contrast TIFF fill structure and RIFF fill structure.(7) (ii)Discuss CCITT group of compression standards in detail. (6)	BTL 2	Understanding
9.	Explain how does RAID technologies help in efficient storage and retrieval of multimedia data? (13)	BTL 1	Remembering
10.	Give a detailed summary of MIDI. (13)	BTL 2	Understanding
11.	Illustrate briefly about WORM technology. How does a magneto optical technology differ from WORM technology? (13)	BTL 3	Applying
12.	(i)Explain the MPEG encoder with sequence of events for MPEG.(8) (ii) Explain CGA in detail.(5)	BTL 4	Analyzing
13.	(i)Explain briefly about multimedia I/O technologies.(7) (ii)Explain briefly about types of voice recognition system.(6)	BTL 4	Analyzing
14.	In a document imaging system ,where would you compress the image in the scanner node, in host system, or in the storage node? Examine the implications of where compression and decompression take place in a document imaging system. (13)	BTL 5	Evaluating
15.	(i) Show how scanners are used for image enhancements.(7) (ii) Which storage device is used for storing archival media? Why? Explain.(6)	BTL3	Applying
PART-C			
1.	Develop a simple multimedia application that receives one of the biometrics of an employee and announces the status of matching with the records along with suitable displays.(15)	BTL 6	Creating
2.	Explain How a multimedia application used in your current college or work environment.(15)	BTL 5	Evaluating

3.	Write in detail about JPEG Compression standard.(15)	BTL 6	Creating
4.	Examine a TIFF file Creating by a graphics package and identify the tags in it. Does this packets follow the TIFF5 or TIFF6 standards.(15)	BTL 5	Evaluating
5.	Suggest with reasons a potential Applications of multimedia other than the applications in the field of entertainment and education.(15)	BTL 5	Evaluating

UNIT V - HYPERMEDIA

Multimedia authoring and user interface – Hypermedia messaging -Mobile messaging − Hypermedia message component − Creating hypermedia message − Integrated multimedia message standards − Integrated document management − Distributed multimedia systems.CASE STUDY: BLENDER GRAPHICS Blender Fundamentals – Drawing Basic Shapes – Modelling – Shading & Textures.

PART - A

Q.No	Questions	BT Level	Competence
1.	What is meant by multimedia authoring system?	BTL 1	Remembering
2.	What is Simulation loop?	BTL 1	Remembering
3.	Classify the characteristics of Document store?	BTL 3	Applying
4.	Evaluate the performance of Large Capacity file system.	BTL 5	Evaluating
5.	Prepare the list of any four kinds of user interface development tools.	BTL 6	Creating
6.	Define video panning.	BTL 1	Remembering
7.	What are the functions of an object request broker in managing distributed multimedia objects?	BTL 1	Remembering
8.	Formulate the essential steps needed for designing a good hypermedia system.	BTL 6	Creating
9.	List the pros and cons of linking and embedding multimedia objects?	BTL 4	Analysing
10	What are the design issues in Gesture recognition?	BTL 3	Applying
11	What is meant by Dedicated Authoring systems.	BTL 2	Understanding
12	Classify the components of a distributed multimedia application.	BTL 3	Applying
13	Give the standard types of multimedia object servers.	BTL 2	Understanding
14	Express in short about Premixing?	BTL 2	Understanding
15	Design an object identification scheme for a wide area multimedia application.	BTL 2	Understanding
16	Analysing the needs for distributed multimedia systems.	BTL 4	Analysing
17	Compare distributed system with multimedia system.	BTL 5	Evaluating
18	Evaluating the need for integrated document management.	BTL 5	Evaluating

19	Compare the performances of high speed LAN's for multimedia data transfer.	BTL 4	Analysing
20	Classify common navigation modes?	BTL 3	Applying
21	List 3 multimedia authoring tools.	BTL 1	Remembering
22	What is meant by media communication?	BTL 1	Remembering
23	Differentiate hypertext and hypermedia.	BTL 4	Analyzing
24	What is mobile messaging?	BTL 2	Understanding
	PART-B		
1.	Explain the types of multimedia authoring systems and list the main attribute, benefits and drawbacks of authoring systems.(13)	BTL 2	Understanding
2.	(i) Explain the various types of database replication techniques used in handling very large distributed databases.(7) (ii)Explain about the Hypermedia Message Components.(6)	BTL 1	Remembering
3.	Write a short notes on following: (i)Explain about Mass storage for multimedia servers.(8) (ii)Explain in detail about Multiserver network topologies.(5)	BTL 2	Understanding
4.	(i)What is editing features? Analyze it briefly.(7) (ii)Explain-Integrated multimedia message standards.(6)	BTL 4	Analysing
5.	(i)Explain the MAPI Architecture in detail.(7) (ii)Point out about application software.(6)	BTL 3	Applying
6.	(i) Generalize full motion video authoring system.(8) (ii)Explain the process of creating hypermedia messages.(5)	BTL 2	Understanding
7.	(i) Describe the common forms of navigation for information access. (7) (ii) Explain any two components of a typical multimedia application environment.(6)	BTL 1	Remembering
8.	Illustrate about distributed multimedia systems.(13)	BTL 3	Applying
9.	(i)Discuss in brief about hypermedia linking and embedding.(7) (ii)Give in detail about transaction management for distributed multimedia database systems.(6)	BTL 2	Understanding
10.	(i)Describe about the popular user interface design metaphors.(7) (ii)List out and define briefly about playback issues for image , audio and video objects.(6)	BTL 1	Remembering
11.	(i)Chart the navigation through an application for editing a hypermedia mail message. What menu items are required for this application? Can the user customize this sequence?(7) (ii)Describe Hypermedia messaging.(6)	BTL 1	Remembering
12.	(i)Describe mobile messaging.(7) (ii)Compare multimedia system and hypermedia system.(6)	BTL 5	Evaluating
13.	Show the features and facilities incorporated in any one of the integrated document management system.(13)	BTL 3	Applying

14.	Write short notes on (i) Object Revision Management (4) (ii) Components of a distributed multimedia system (4) (iii) Metaphors for multimedia applications. (5)	BTL 4	Analysing
15.	How to create hypermedia messages? Give an example also explain hypermedia message components.	BTL 6	Creating
	PART-C		
1.	How would you address the requirements for dynamic customization of display resolution to suite the destination system on which an object is being rendered? What happens if the resolution of the display device is higher than the resolution of the stored object.(15)	BTL 5	Evaluating
2.	How does video conferencing related to hypermedia messaging? What are the implications of building a system where the user starts with video conferencing and switches to integrated stored messaging.(15)	BTL 5	Evaluating
3.	Develop a design scheme for automatic load balancing of video objects in a cross enterprise wide area network. What are the main design issues that must be addressed.?(15)	BTL 6	Creating
4.	Develop a model with basic shapes, shading and texturing using BLENDER.(15)	BTL 6	Creating
5.	Write notes on any 2 popular metaphors for user interface design with examples for each one of them. (15)	BTL 5	Evaluating

Subject Incharge Course Coordinator HOD