UNIT 1: Introduction to Multimedia

Short Questions:

1. What is multimedia?
2. List out the applications of multimedia.
3. What is the role of multimedia designer?
4. List out any six basic software tools.
5. What is the role of Project manager?
6. Give full form of PDA.
7. Define multimedia authoring tools.
8. List out the software which is used in making multimedia project?
9. What is the role of Art director/Visual designer?
10. Give the full form of DHTML.
11. Define the term Cast and Score.
12. What do you mean by event-driven tools?
13. Give the full form of XML.
15. List out place where use of multimedia.
16. What do you mean by linear and nonlinear multimedia project?
17. What is the role of interface designer?
18. Which skills are required for multimedia writer?
19. List out basic stages in a multimedia project.
20. What do you mean by multimedia Programmer?

Long Questions:

1. Which are the stages for making multimedia project? Explain them.
2. Write short notes on Painting and Drawing Tools.
3. What are the multimedia authoring tools? Explain them.
4. Explain categories of multimedia.
5. Write short note on Sound Editing Programs
6. Define multimedia. What are the applications of multimedia? Explain any two in detail.
7. Write short notes on Virtual Reality.
8. Write short note on OCR Software.
9. What are the basic software tools used to develop multimedia project? Explain them.
10. Consider your own skills, abilities, and goals. Where do you see yourself fitting in to a multimedia production team? What abilities would you bring to team now? What abilities do you need to work to develop? What are your creative abilities? What is your level of mastery of multimedia tools (software and hardware)?
11. What we need for developing multimedia project?
12. What intangible aspect you need to take care of for creating a multimedia project?
13. Write a short note on OCR software.
14. What features should be considered when choosing a multimedia authoring tool?
15. Write a note on development platform for multimedia.
16. Write short note on Painting and Drawing tools.
17. Write short note on CAD and 3-D Drawing Tools.

**Multiple Choice Questions:**

1. Painting software is dedicated to producing _________________.
   a. Vector images           c. Animations
   b. 3-D images             d. Bitmap images
2. VR stands for _________________.
   a. Virtual reality        c. Visual response
   b. Valid registry         d. Video raster
3. Which of the following is not a stage of multimedia production?
   a. Testing                c. Planning and Costing
   b. Marketing              d. Delivering
4. Which of these is not one of the listed types of organizational structures?
   a. Linear                 c. Hierarchical
   b. Composite              d. Recursive
5. The visual representation of a project that includes a table of contents as well as a chart of the logical flow of the interactive interface is often called _________________.
   a. A storyboard           c. A workflow diagram
   b. A prototype            d. A navigation map
6. GUI stands for _________________.
   a. General/Universal/Individual
   b. Global Usage Image
   c. Guidelines for Usability and Interaction
   d. Graphical User Interface
7. Which multimedia database containing still images, sound files, text and even other director files.
   a. Score                   c. Stage
   b. Cast                    d. Lingo
8. As you design and build a multimedia project, your most often used tool may be your
   a. Word processor
   b. Authoring systems
   c. Image processor
   d. Drawing program
   e. Format converter
9. Which designers devise the navigation pathway and content maps
   a. Interface designers
   b. Instructional designers
   c. Information designers
   d. Graphical User Interface designers

10. Which designers are specialists in education and training and make sure that the subject
    matter is clear and properly presented for intended audience.
    a. Interface designers
    b. Instructional designers
    c. Information designers
    d. Graphical User Interface designers

11. LAN stands for:
    a. Logical access node
    b. Link/asset navigator
    c. List authoring number
    d. Low-angle noise

12. A browser is used to view:
    a. program code
    b. storyboard
    c. fonts
    d. web-based pages and documents
    e. videodiscs

13. The “ROM” in “CD-ROM” stands for:
    a. random-order memory
    b. real-object memory
    c. raster-output memory
    d. red-orange memory

14. PDA stands for:
    a. primary digital asset
    b. Processor digital application
    c. personal digital assistant
    d. portable digital armor

15. Which one of the following is not/are not typically part of the multimedia specification.
    a. text
    b. odors
    c. sound
    d. video

16. DVD stands for:
    a. Digital Versatile Disc
    b. Digital Video Disc
    c. Duplicated Virtual Disc
    d. Double-View Disc
17. Which of the following ability does not required in multimedia production.
   a. Creative
   b. Technical
   c. Organizing
   d. Behavioral

18. Which of the following is a one stage of multimedia project?
   a. Testing
   b. Analysis
   c. Coding
   d. Maintenance

19. Painting software is dedicated to producing.
   a. vector image
   b. animations
   c. 3-D images
   d. bitmap images
   e. video clips

20. Which of the following is not a stage of multimedia production?
   a. testing
   b. planning and costing
   c. marketing
   d. designing and producing

True or False:

1. Multimedia production requires creative, technical, organizing, and business ability.
2. VR stands for video raster.
3. Delivering is a last stage of a multimedia project.
4. Multimedia is piped to wireless devices such as cell phones and PDAs.
5. PDA stands for personal digital assistants.
6. VR requires terrific computing horsepower to be realistic.
7. Planning and costing is a last stage of a multimedia project.
8. LANs allow direct communication and sharing of peripheral resources such as file servers, printers, scanners, and network routers.
9. A word processor is usually the first software tool computer user learn.
10. Photoshop, Fireworks, and Printer are known as painting software.
11. CoralDraw, FreeHand, Illustrator, Designer, and Canvas are known as drawing software.
12. 3-D depth is labeled as the “z” axis.
13. Image-editing applications are specialized and powerful tools for creating, enhancing, and retouching existing bitmapped images.
14. The cast is a multimedia database.
15. Image-editing applications provide features and tools of painting and drawing programs.
16. To make movies from video, you may need special software to convert an analog video.
signal to digital data.
17. Animation can be made with the help of multimedia authoring software.
18. There are four group of multimedia authoring tools.
19. In car-based tools elements are organized as page of a book or a stack of cards.
20. Car-based tools are best to use when you have a message with a beginning an and.

Fill in the blanks:

1. ____________ is any combination of text, graphic art, sound, animation, and video delivered to you by computer or other electronic means.
2. OCR stands for ________________.
3. Animations and digital video movies are sequences of bitmapped graphic scenes ____________.
4. ____________ applications are specialized and powerful tools for creating, enhancing, and retouching existing bitmapped images.
5. A(n) ________________ allows your project to play back without requiring the full authoring software and all its tools and editors.
6. ____________, which offers the ability to go to another section of the multimedia production (via an activity such as a keypress, mouse click, or expiration of timer).
7. ________________, which supports a go-to based on the results of IF-THEN decisions or events.
8. ____________ that supports complex programming logic, such as nested IF-THENs, subroutines, and message passing.
9. A(n) ____________ file requires no cross-platform conversion.
10. A package of software applications that might include a spreadsheet, database, e-mail, web browser, and presentation applications is called a(n) ________________.
11. A program that changes in image from one type of graphics file to another is a(n) ____________.
12. Elements and events are organized along a timeline in a(n) ________________ authoring system.
13. Each graphic scene in an animation is referred to as a(n) ________________.
14. The people who weave multimedia into meaningful tapestries are called ________________.
15. ________________ allows an end user to control what and when the elements are delivered.
16. The hardware and software that govern the limits of what can happen are the multimedia ________________.
17. The sum of what gets played back and how it is presented to the viewer on a monitor is the ____________.
UNIT 2: Text

Short Questions:

1. Define Kerning with appropriate example.
2. List out software that can be used for editing and creating fonts.
3. Define leading with appropriate example.
4. Define typeface and font.
5. Define character entities with appropriate example.
6. Define Anchor.
7. What is rasterizing?
8. Define Hypertext
9. List out the differences between serif and sans-serif.
10. Define Link anchor
11. What is the difference between kerning and tracking?
12. Define the following term:
    a. Link
    b. Hypermedia
    c. Hotlinks
13. List out the differences between hypermedia and hypertext.
14. What is font substitution?
15. What is Jaggies? How to avoid jaggies from text?
16. What do you mean by anti-aliasing or dithering?
17. Define tracking with example.
18. Define intercap with example.
19. Give the examples of serif and sans serif fonts.

Long Questions:

1. Describe the problems you are likely to encounter in creating a cross-platform program, and list several ways to deal with these problems.
2. Define font and typeface giving examples. Draw a diagram illustrating the following measurements of type: point size, cap height, x-height, baseline, set width, ascender.
3. Write short note ASCII character set, Extended character set, and UNICODE.
4. What criteria should be considered while choosing a text font for multimedia project?
5. Discuss the problems encountered using text across computer platforms and in different languages.
6. Discuss the differences among multimedia, interactive multimedia, hypertext, and hypermedia.
7. Discuss the typical methods for word searching in hypermedia system.
8. Explain the hypermedia structure.
9. What is PostScript font, TrueType font, Bitmapped font? Explain them.
10. What are the different font editing and design tools? Briefly describe them.
11. Discuss the following terms:
   a. Fontographer
   b. Fontmonger
   c. Cool-3D text
12. Write a note on Extended character set.
13. Write a note on UNICODE.
14. Explain multimedia project.
15. List all text properties using CSS? Explain each.
16. Explain How to make Pretty text?
17. Give brief description on fonts.
18. Describe what characteristics a block of text might have.
19. Describe what characteristics a typeface might have.
20. List out common functions of hypermedia text management systems? Explain them.

Multiple Choice Questions:

1. The little decoration at the end of a letter stroke is a _____________.
   a. Sans-serif  c. New Century School Book
   b. Helvetica   d. Serif
2. A family of graphic characters that usually includes many type sizes and styles is called a _____________.
   a. Typeface    c. Point
   b. Font        d. Link
3. Web pages are coded using _____________.
   a. Unicode      c. ASCII
   b. Hypertext Markup Language   d. Encapsulated PostScript
4. The reference from one document to another document, image, sound, or file on the Web is a(n) ______________.
   a. Button
   b. Anchor
   c. Node
   d. tag

5. Which of the following is a typical method for word searching in a hypermedia system?
   a. Kerning
   b. Rasterizing
   c. Best fit
   d. Adjacency

6. Which of the following is a character encoding system?
   a. FontLab
   b. HTML
   c. CSS
   d. Unicode

7. A printed page might be presented in which of these orientation.
   a. News cape
   b. X-height
   c. Portrait
   d. Flat-file

8. Which of the following is a term that applies to the spacing between characters of text?
   a. Leading
   b. Tracking
   c. Kerning
   d. dithering

9. Which of the following provides a system for dynamically displaying a font?
   a. Apache
   b. PostScript
   c. HTTPD
   d. serif
   e. node

10. Which of the following is not a method of word searching in hypermedia systems?
    a. Categories
    b. Word relationships
    c. connector
    d. Adjacency

11. Which is a connection between the conceptual elements?
    a. Links
    b. nodes
    c. anchor
    d. pipe

12. Which term is used for reference from one document to another document?
    a. anchor
    b. links
    c. pipe
    d. nodes
13. Latin script used for:
   a. Gujarati language
   b. Hindi language
   c. Span ices language
   d. European language
14. The Unicode standard includes more than
   a. 18,000 Han characters
   b. 12,000 Han characters
   c. 16,000 Han characters
   d. 08,000 Han characters
15. In 1989, Apple a Microsoft announced a joint effort to develop a “better and faster” quadratic curves outline font methodology is called as.
   a. TrueType
   b. OpenType
   c. CloseType
   d. open-endedType
16. Which of the following tag is used if you want to make font bold?
   a. <h1> and </h1>
   b. <b> and </b>
   c. <u> and </u>
   d. <ol> and </ol>
17. Which of the following tag is used if you want to make font underline?
   a. <h1> and </h1>
   b. <b> and </b>
   c. <u> and </u>
   d. <ol> and </ol>
18. Which display can be used in direct sunlight and boast a long battery life?
   a. e-Ink
   b. eReaders
   c. eWriters
   d. eBook
19. The wider-than-tall orientation normal to monitors is called as.
   a. landscape
   b. portrait
   c. rollovers
   d. buttons
20. Which of the following is not a text properties using cascading style sheets.
   a. color
   b. directions
   c. word-spacing
   d. height-spacing
True or False:

1. Text is an important to cultivate accuracy and conciseness in the specific word you choose.
2. A typeface is a family of graphics characters that usually includes many type sizes and style.
3. A font is a collection of characters of a single size and style belonging to a particular typeface family.
4. Typical font sizes are boldface and italic.
5. One point is a 0.0138 inch.
6. A font’s size does not exactly describe the height or width of its characters.
7. Character metrics are the general measurements applied to individual character.
8. Tracking is the spacing between character pairs.
9. Capital letter is called lowercase and a smaller letter is called uppercase.
10. The serif is the little decoration at the end of letter stroke.
11. Times, New Century, Schoolbook, Bookman and Palatino are examples of serif fonts.
12. Helvetica, Verdana, Arial, Optima, and Avant Garde are examples of sans serif fonts.
13. Anti-aliased text gives a more professional appearance.
14. EPSF stands for encapsulated prescript files.
15. Icons are symbolic representations of object and processes common to the graphical user interfaces of many computer operating systems.
16. Text is helpful to users to provide persistent cues about their location within the body of content.
17. Buttons are one kind of method in multimedia.
18. JavaScript is used for implements graphics images rollovers on the web page.
19. The taller-than-wide orientation used for printed documents is called portrait.
20. eBooks are books digitized and formatted to be read using an eWriter.

Fill in the blanks:

1. ____________ is the spacing between character pairs.
2. A ________ is a family of graphic characters that usually includes many type sizes and styles.
3. ____________ is the process of converting text from a mathematical representation to a recognizable symbol displayed on the screen or in printed out.
4. The ____________ facility, which is a sequencer for displaying, animating, and playing cast members.
5. ____________ is the adjusting the space between characters.
6. Placing an uppercase letter in the middle of the word that is called an 
   _________________.
7. WYSIWYG stands for _________________________________.
8. Using too many fonts on the same page is called _______________________________.
9. Translating and designing multimedia into a language other than the one in which it was 
   originally written is called _________________________________.
10. ____________________ blends the colors along the edges of the letters to create a soft 
    transition between the letter and its background.
11. Type sizes are usually expressed in _______________________.
12. A(n) ____________________ is a collection of characters of a single size and style belonging to a 
    particular typeface family.
13. A capital latter is called _________________________________.
14. A small latter is called _________________________________.
15. A(n)__________________ is a family of graphics characters that usually includes many type sizes 
    and styles.
16. ____________________ is the spacing between character pairs.
17. Anti-aliasing blends the color along the edges of the letters to create a soft transition 
    between ________________ and _________________.
18. ____________________ are the symbolic representation of object.
19. The taller-than-wide orientation used for printed documents is called _________________.
20. The wider-than-tall orientation normal to monitor is called _________________.

UNIT 3: Sound

Short Questions:

1. Define following terms in digital audio context: sampling rate, sample size, quantization, 
   clipping.
2. What are the attributes of sound? Explain any one.
3. Define sound. List out the system sounds in Windows and Macintosh.
4. Digital audio is device independent - Justify this statement.
5. MIDI is device dependent - Justify this statement.
6. Define the following term:
   a. Sampling
   b. Digitizing
   c. Sample point
7. What is bit resolution and audio resolution?
8. List out the software which is used for making MIDI scores.
9. What is MIDI?
10. List out crucial aspects of preparing digital audio files.
11. Define the term Resampling/Downsampling and Equalization
12. Define the term: Attack, Sustain, and Decay.
13. List out the audio file formats according to Windows and Macintosh.
14. What is codec?
15. List out the sound editing software.
17. What do you mean by device independent?
18. List out all basic sound editing operations.
19. What is Buffer?
20. Give file format that uses a shorthand representation of musical notes and durations stored in numeric form.

**Long Questions:**

1. Describe what MIDI is, what its benefits are, and how it is best used in multimedia project.
2. Differentiate between MIDI and digital audio.
3. Discuss the operations those are used in editing digital recordings.
4. Write a short note on MIDI.
5. Write a short note on Digital audio.
6. Discuss advantages and disadvantages of MIDI.
7. Write a short note on multimedia system sounds.
8. Write a short note on audio file formats.
9. Determine which audio file formats are best used in a multimedia project.
10. Explain the steps for adding sound to your multimedia project.
11. Write a short note on Copyright Issues.
14. Write process to bring an audio recording into your multimedia project.
15. Explain audio recording?
16. Write a short note on audio CDs.
17. Write vaughan’s law of multimedia minimums.
18. Explain Codec.
19. Write all sound editing operation. Explain any three?
20. Define sound. Also write power of it?
Multiple Choice Questions:

1. The process of recording a sound, stored in the form of thousands of individual measurements, each at a discrete point in time, is called _________________.
   a. Sampling  c. Synthesizing
   b. Quantizing  d. Streaming

2. Each individual measurement of a sound that is stored as digital information is called a _________________.
   a. Buffer  c. Stream
   b. Sample  d. Byte

3. Which of the following sound file characteristics does not affect the size of a digital audio file?
   a. Sample rate  d. Sample size
   b. Tracks (Stereo vs. mono)  e. Volume
   c. Compression

4. The file format that uses a shorthand representation of musical notes and durations stored in numeric form is _________________.
   a. AIFF  d. CD-ROM/XA
   b. DSP  e. MIDI
   c. QuickTime

5. Audio recorded at 44.1 kHz, 16-bit stereo is considered _________________.
   a. Phone-quality  d. Voice-quality
   b. FM-quality  e. CD-quality
   c. AM-quality

6. Removing blank space or “dead air” at the beginning or end of a recording is sometimes called _________________.
   a. Quieting  d. Pre-rolling
   b. Quantizing  e. Trimming
   c. Flashing

7. DSP stands for _________________.
   a. Dynamic sound programming
   b. Data structuring parameters
   c. Direct splicing and partitioning
   d. Delayed streaming playback
   e. Digital signal processing
8. Which of the following is used for measuring the power of earthquakes and stellar magnitudes?
   a. logarithmic scale
   b. interval scale
   c. rational scale
   d. inverse scale

9. A process referred as digitizing is
   a. Digital video
   b. Digitizing video
   c. Diagrammatic video
   d. Analog video

10. Which of the following is not used in digitized sound process in digital video?
    a. microphone
    b. live audio
    c. synthesizer
    d. headphone

11. Which of the following is aspect of preparing digital audio files?
    a. Microphone
    b. Setting power recording levels
    c. Device dependent
    d. Headphone

12. Which of the following is not a sound editing operation?
    a. Trimming
    b. Splicing and Assembly
    c. Volume Adjustment
    d. Forwarding

13. Which one is required to determine the accuracy with which a sound can be digitized?
    a. Audio resolution
    b. synthesizer
    c. Volume Adjustment
    d. headphone

14. Which sound editing operation is used to modify recording frequency content?
    a. Equalization
    b. Time Stretching
    c. Volume Adjustment
    d. Trimming

15. Removing “dead air” or blank space from the front of a recording used to.
    a. Trimming
    b. synthesizer
    c. Volume Adjustment
    d. headphone
16. Store recording are more lifelike and realistic because.
   a. human beings have two ears
   b. human being have two hand
   c. human being have one nose
   d. human being have two lag

17. SACD stands for:
   a. Super audio CD
   b. Super audio compact disk
   c. Signal access compact disk
   d. Super access compact disk

18. MIDI is a communications standard developed in the year.
   a. 1980
   b. 1981
   c. 1990
   d. 1991

19. A MIDI file is a list of time-stamped commands that are recording of.
   a. musical actions
   b. audio actions
   c. video actions
   d. headphone actions

20. Which keyboard is useful for simplifying the creation of musical score?
   a. MIDI keyboard
   b. Doted Keyboard
   c. Blind keyboard
   d. Digital keyboard

True or False:

1. Image is perhaps the most sensuous element of multimedia.
2. Sound can make the difference between an ordinary multimedia presentation and a professionally spectacular.
3. Acoustics is the branch of physics that studies sound.
4. A logarithmic scale is used for measuring the power of earthquakes and stellar magnitudes.
5. MIDI audio is a process referred to as digitizing.
6. The quality of your audio is based on the quality of your recording.
7. There are three critical aspects of preparing digital audio files.
8. Sizing is a one sound editing operation in multimedia.
9. DRM stand to Digital Rights Management.
10. Sampling rate determines the frequency at with samples will be taken for the recording.
11. MIDI is a communication standard developed in early 1980 for electronic musical instruments and computers.
12. The process of creating MIDI music is same as digitizing existing recorded audio.
13. A MIDI keyboard is used for simplifying the creation of musical scores.
14. Digitized waveform files are bigger than MIDI files.
15. MIDI files are smaller than digital audio files.
16. A codec is software that compresses a stream of audio or video data for storage or transmission, then decompresses it for playback.
17. MP4, MOV, or OGG are known as container formats.
18. Digital video tape systems provide a tape-based 44.1 kHz, 16-bit record and playback capability.
19. CD music market is an international standard called ISO 10149.
20. Acoustics is the branch of physics that studies sound.

Fill in the blanks:

1. Sound presser levels are measured in ________________.
2. ________________ is the process of converting an analog signal to a digital signal.
3. The process of taking a measurement of the amplitude of the sound is called ________________.
4. The branch of physics that studies sound is ________________.
5. To adjust the level of a number of tracks to bring them all up to about the same level is to ________________ them.
6. When audio is measured in order to be digitally stored, the value of each measurement is rounded off to the nearest integer in a process called ________________.
7. Reducing the number of separate measurements of an audio file is called ________________.
8. MIDI stands for ________________.
9. The number of channels is ________ for stereo and ________ for monophonic.
10. The time span of the recording is measured in ________________.
11. LPCM stands for ________________.
12. MPEG stands for ________________.
13. AIFF stands for ________________.
14. ________________ is the branch of physics that studies sound.
15. Digital audio is created when you represent the ________________ of a sound wave using numbers.
16. A ________________ is also useful for simplifying the creation of musical scores.
17. Acquire source material by creating it from ________________ or ________________ it.
18. ________________ plays on a very small speaker.
19. A place where data is stored temporarily is called ________________.
20. MIDI score require ________________ and ________________.
UNIT 4: Images

Short Questions:

1. What are the types of still images?
2. Define Bitmap and vector-drawn graphics with example.
3. What are the software tools for bitmap painting and editing programs?
4. Explain quantum theory in brief.
5. What are the different ways of representing information about color?
6. What are the features of 3-D application?
7. What are the applications of vector-drawn graphics?
8. Write a short note on CMYK model.
9. Write a short note on RGB model.
10. Write a short note on HSB model.
11. What are the stages for creating images in multimedia?
12. What criteria should be considered for creating still images?
13. List out the image file formats.
14. Define pixels or pels.
15. What are the bitmap sources?
16. Define morphing with example.
17. What are panoramas?
18. Define color with brief description.
19. Write a short note on natural light and color.
20. Write a short note on additive color and subtractive color.
21. Define palette or color lookup tables (CLUTs).
22. Define dithering with appropriate example.
23. List out the file formats which uses lossy compression.
24. List out the file formats which uses lossless compression.
25. Give the difference between JPEG and GIF file formats.
26. Write a short note on graphic file formats conversions.

Long Questions:

1. Give the differences between vector-drawn images and bitmaps.
2. What are the features of 3-D application? Explain them.
3. Explain color models.
4. Explain the applications of vector-drawn graphics.
5. Discuss the image file formats and explain the differences between them.
6. List out the bitmap sources. Explain them.
7. How vector-drawn images work?
8. What are the basic methods for making color? Explain them.
9. What are the different ways of representing information about color? Explain them.
10. Discuss lossy compression and lossless compression in different image file formats.
11. Explain the color palettes.
12. Write a short note on 3-D modeling.
13. Write a short note on vector drawing and also explain how it works?
14. Write note on bitmap.
15. Explain vector drawing.
16. Write a short note on color as a component of multimedia.
17. Explain computerized color.
18. Write a note on Dithering.
19. List out all image file format. Explain them.
20. Explain methodologies used to specify colors in computer.

Multiple Choice Questions:

1. Which image file type is best for photographs?
   a. Vector
   b. Encapsulated PostScript
   c. Bitmap
   d. Shockwave
   e. Laser
2. A 24-bit image is capable of representing how many different colors?
   a. 2
   b. 16
   c. 256
   d. 65, 536
   e. 16, 772, 216
3. Perhaps the single most significant advance in computer image processing during the late 1980s was the development of:
   a. Digital cameras
   b. 3-D modeling programs
   c. Image-editing programs
   d. Scanners
   e. Electronic crayons
4. A 1-bit image is capable of representing how many different colors?
   a. 2
   b. 16
   c. 256
   d. 65, 536
   e. 16, 772, 216
5. Name the area of memory where data such as text and images is temporarily stored when you cut or copy within an application.
   a. Scrapbook
   b. Notepad
   c. Junkyard
   d. Filedump
   e. Clipboard

6. An 8-bit image is capable of representing how many different colors?
   a. 2
   b. 16
   c. 256
   d. 65, 536
   e. 16, 772, 216

7. Vector-drawn objects are used for all of the following except:
   a. Lines
   b. Circles
   c. Polygons
   d. Photographs
   e. Boxes

8. A 16-bit image is capable of representing how many different colors?
   a. 2
   b. 16
   c. 256
   d. 65, 536
   e. 16, 772, 216

9. Graphic artists designing for print media use vector-drawn objects because:
   a. They can contain more subtle variations in shading than bitmap graphics
   b. Printing inks respond better to them
   c. They can be converted across platforms more easily
   d. They can be scaled to print at any size
   e. They can be viewed directly in web browsers

10. The 3-D process of extending a plane surface some distance, either perpendicular to the shape’s outline or along a defined path, is called:
    a. Lathing
    b. Rendering
    c. Modeling
    d. Extruding
    e. Skinning

11. A GIF may contain:
    a. 8 bits of color information per pixel
    b. 16 bits of color information per pixel
    c. 24 bits of color information per pixel
    d. 32 bits of color information per pixel
    e. 48 bits of color information per pixel
12. Which of these is the correct HTML hexadecimal representation of magenta (red+blue)?
   a. 00GGHH
   b. #FF00FF
   c. 255,0,255
   d. %R100-%G0-%B100
   e. <color= “magenta”>

13. Which of the following is not a color specification format?
   a. RGB
   b. HSB
   c. GIF
   d. CMYK
   e. CIE

14. Which of the following is not a native Windows graphics file format?
   a. BMP
   b. RIFF
   c. TIFF
   d. PCX
   e. PICT

15. TIFF stands for:
   a. Transitional Image File Format
   b. Total Inclusion File Format
   c. Tagged Interchange File Format
   d. Temporary Instruction File Format
   e. Table Index File Format

16. Most drawing programs can export a vector drawing as a.
   a. bitmap
   b. dot pitch
   c. bit
   d. binary

17. To model an object that you want to place into your scene, you must start with a.
   a. shape
   b. size
   c. color
   d. angle

18. A vector object can be filled with ___________ , and you can select it as a single object.
   a. color and patterns
   b. brightness
   c. lights
   d. shadow
19. Which one of the following is a process whereby the color value of each pixel is change to the closest matching color value in the target palette, using a mathematical algorithm?
   a. Dithering  
   b. Synthesizer  
   c. Volume Adjustment  
   d. Threading  

20. The Device-independent bitmap also known as a.
   a. BMP  
   b. TIFF  
   c. DXF  
   d. PCX  

True or False:

1. Palettes are mathematical tables that define the color of pixel displayed on the screen.  
2. 1-bit palettes are available in black and white color.  
3. The most common palettes are 1,4,8,16, and 24 bits.  
4. 24-bit color systems allow a total of 16,777,216 colors.  
5. 4-bit palettes are available in 256 colors.  
6. 8-bit palettes are available in 16 colors.  
7. 16-bit palettes are available in thousands of colors.  
8. IGS was developed by an industry committee as a broader standard for transferring CAD drawing.  
9. IGS stands to Initial Graphics Exchange standard.  
10. GIF is only for 8-bit images.  
11. The GIF89a and PNG specification allows for transparency.  
12. Image-editing tools provide a palette from which you can select the transparency index color. 
13. JPEG file can be making as a transparent.  
14. Image-editing applications are specialized and powerful tools for creating, enhancing, and retouching existing bitmapped images.  
15. Multiple windows that provide views of more than one image at a time.  
16. Image-editing tools provide features of painting and drawing programs.  
17. Scanners, video frame-grabbers, digital cameras, clip art files, or original artwork files created with a painting or drawing package.  
18. Dithering is a process whereby the color value of each pixel is changed to the closest matching color value in the target palette, using a mathematical algorithm.
19. The image-editing program to select the best set of 256 colors from the original image called an adaptive palette.
20. System palette or the browser-safe web palette are the example of adaptive palette.

**Fill in the blanks:**

1. __________ is a process whereby the color value of each pixel is changed to the closest matching color value in the target palette.
2. SVG stands for __________
3. __________ are mathematical tables that define the color of pixels displayed on the screen.
4. Four-color printing includes __________ color which is designated with K.
5. __________ is the frequency of a light wave within the narrow band of the electromagnetic spectrum, to which the human eye responds.
6. Bitmaps can be converted to vector images is called __________.
7. A __________ is a line that is described by the location of its two endpoints.
8. __________ images is used for photo-realistic images and detailed drawings.
9. __________ graphics is used for lines, polygons and other mathematical objects.
10. A __________ is a data matrix describing the individual dots of an image that are the smallest elements (pixels) of resolution on a computer screen or printer.
11. An area of memory where data such as text and images is temporarily stored when you cut or copy them within an application is called __________.
12. __________ blends two images so that one seems to “melt” into the other.
13. __________ involves drawing a shape, such as a 2D letter, then extruding it or lathing it into a third dimension.
14. Extending its shape along a defined path is called __________.
15. Rotating a profile of the shape around a defined axis is called __________.
16. __________ images are created by stitching together a sequence of photos around a circle and adjusting them into a single seamless bitmap.
17. In __________ culture, red is the color of anger and danger; In __________ culture, red is the color of happiness.
18. __________ is the process used to create color in printing.
19. JPEG stands for __________.
20. A bitmap is made up of individual dots or picture elements known as __________.
21. __________ is the blocky, jagged look resulting from too little information in a bitmapped image.
22. Bitmapped images are known as __________.
23. GIF stands for __________.
24. The type of image used for photo-realistic images and for complex drawings requiring fine detail is the ________________.
25. The type of image used for lines, polygons, boxes, circles, and other graphic shapes that can be mathematically expressed in angles, coordinates, and distances is the ________________.
26. PNG stands for ________________________.
27. The picture elements that make up a bitmap are called ____________________.
28. ________________ allows you to smoothly blend two images so that one image seems to melt into the next.
29. CIF stands for ________________________.
30. The working area of a computer display is sometimes called ____________________.
31. ________________ is a process whereby the color value of each pixel is changed to the closest matching color value in the target palette, using a mathematical algorithm.
32. A collection of color values available for display is called a ____________________.
33. The process that computes the bounds of the shapes of colors within a bitmap image and then derives the polygon object that describes that image is called ____________________.
34. EPS stands for ________________________.
35. ________________ is when the computer uses intricate algorithms to apply the effects you have specified on the objects you have created for a final 3-D image.

UNIT 5: Animation

Short Questions:

1. What is an animation? Give the example.
2. What are the animation tools?
3. Inverse Kinematics.
4. What are the file-formats used for animation?
5. What are the different levels of computer animation? List out the animation which is created on each level?
7. Give the difference between path-based 2-D and 2 ½ -D animation and cel-based 2-D animation.
8. Give the difference between Computer animation and Cel animation.
9. What is path animation and cel animation?
10. Define Key frames.
11. What is tweening?
12. List out the animation techniques and give the definition of each animation technique.
13. Give the short note on Animation space.
14. Define Kinematics

Ms. Vaibhavi K. Barad.
15. List out the usage of animation.
16. List out the basic principles of animation.
17. Define cel animation.
18. Explain computer animation.
19. Which animations occur in 3-D space?
20. Define inverse kinematics.

Long Questions:

1. What are the basic principles for making animation? Explain them.
2. Define Animation. Discuss the physical and psychological principles as to why animation works, as well as how it is usually presented.
3. Briefly discuss the origins of cel animation and the concepts that go into creating these animations. Be sure to include keyframes, and tweening.
4. What are usages of animation? Explain them in each area.
5. Explain animations occur in different animation space. What are the differences between them?
6. Explain animation techniques.
7. Discuss the differences between Cel animation and Path animation.
8. Discuss features and limitations of animation that is used for the web.
9. What are the steps for creating animation for the web? Explain with example.
10. How to make successful animation? What is the software tools used for animation?
11. Write a short note on animation tools.
12. Explain animation techniques: cel animation, computer animation, path animation
13. Write a short note on Kinematics, Morphing.
15. Write short note on color cycling.
16. List out animation file format. Define them.
17. Explain cel animation.
18. Explain computer animation.
20. Give the physical and psychological principals as to why animation works, as well as how it is usually presented.

Multiple Choice Questions:

1. Most authoring packages include visual effects such as:
   a. Planning, zooming, and tilting
   b. Wipes, fades, zooms, and dissolves
   c. Tweening
   d. Inverse kinematics
2. The term cel derives from:
   a. The concept of each action in a sequence being a separate element or “cell”
   b. The fact that the inks used in early animations were based on extracts from celery plants
   c. An abbreviation of the phrase “composite element”
   d. The clear celluloid sheets that were used for drawing each frame

3. Movie on film are typically shot at a shutter rate of:
   a. 15 frames per second
   b. 24 frames per second
   c. 30 frames per second
   d. 48 frames per second

4. The clear sheets that were used for drawing each frame of animation have been replaced today by:
   a. Acetate or plastic
   b. Titanium
   c. Fiberglass
   d. Epoxy resin
   e. Digital paper

5. The effect in which one image transforms into another is known as:
   a. Kinematics
   b. Inverse kinematics
   c. Morphing
   d. Tweening

6. The study of movement and motion of structures that have joints is known as:
   a. Tweening
   b. Kinematics
   c. Inverse kinematics
   d. Morphing

7. The process by which you link objects such as hands to arms and define their relationship and limits (for example, elbows cannot bend backward), then drag these parts around and let the computer calculate the result is called:
   a. Rotoscopying
   b. De-morphing
   c. Cyber-motion
   d. Inverse kinematics

8. To create a smooth transition between two images when morphing, it’s important to set numerous:
   a. Layers
   b. Keyframes
   c. Key points
   d. Anchor tags
   e. Splinters
9. The movement of an object happened along a predetermined path on the screen during a specified amount of time is called:
   a. Cel animation
   b. Path animation
   c. Computer animation
   d. Animation

10. The technique in which a series of progressively different graphics are used on each frame of movie film is called:
    a. Animation
    b. Cel animation
    c. Path animation
    d. Computer animation

11. Today, the most widely used tool for creating vector-based animation is:
    a. Adobe’s Flash
    b. Adobe’s GoLive
    c. Corel’s CorelDraw
    d. Microsoft’s KineMatix
    e. Activa’s InterStudio

12. The Director file format has which extension?
    a. .dir and .dcr
    b. .fli and .flc
    c. .avi
    d. .qt, .mov
    e. .mpeg or .mpg

13. The file format that is most widely supported for web animation is:
    a. PICT
    b. .DCR
    c. GIF89a
    d. JPEG
    e. AIFF

14. The series of frames in between the first and last frames in an action are drawn in a process called:
    a. Cel animation
    b. Animation
    c. Tweening
    d. Path animation

15. The act of making static presentations come alive is called:
    a. Computer animation
    b. Animation
    c. Path animation
    d. Tweening
16. _____________ is an effect in which one image transform into another.
   a. Morphing
   b. Twinning
   c. Cel animation
   d. Path animation

17. ______________ is the study of the movement and motion of the structures that have joints.
   a. Kinematics
   b. Morphing
   c. Volume Adjustment
   d. Computer animation

18. The first and last frames of an action are called______________.
   a. Cel animation
   b. Tweening
   c. Computer animation
   d. Morphing

19. Visual effects such as _________ ,_________ and _______________ are a simple form of animation.
   a. wipes, zooms, fades
   b. shadow, brightness, color
   c. wipes, brightness, zooms
   d. zooms, shadow, fades

20. _________________ is the study of the movement and motion of structure that have joints.
   a. Kinematics
   b. Tweening
   c. Computer animation
   d. Cel animation

True or False:
1. Animation is an object actually moving across or into or out of the screen.
2. Primitive animation consists of wipes, fades, zooms, and dissolves visual effects.
3. Animation is visual change over time and can add great power of your multimedia projects and web pages.
4. In animation biological phenomenon known as persistence of vision.
5. In animation psychological phenomenon called phi.
6. When the images are progressively and rapidly changed, the arrow of the compass is perceived to be spinning.
7. Quickly changing the viewed image is the principal of animatic, a flip- book, or a zoetrope.
8. The simplest animation occurs in three-dimensional space.
9. The complicated animation occurs in two-dimensional space.
10. In color-cycling logo colors of an image are rapidly altered according to a formula.
11. Flash is authoring and presentation software.
12. Path animation in 2-D space increases the complexity of an animation and provides motion, changing the location of an image.
13. The animation techniques made famous by Disney.
14. Keyframes is the first and last frame of an action.
15. The series of frames in between the keyframes are drawn in a process called tweening.
16. Kinematics is the study of the movement and motion of the structure that have joints, such as a walking man.
17. Morphing is a popular effects in which one image transforms into another.
18. Tweening is a action that involves creating the frame to depict the action that happens between keyframs.
19. Animation is an object actually moving across, into, or out of the screen.
20. Cel animation artwork begins with keyframes.

Fill in the blanks:

1. ____________ is defined as the act of making static presentations come alive.
2. An object seen by the human eye remains chemically mapped on the retina for a brief time after viewing. This phenomenon is called ____________.
3. The human mind needs to conceptually complete a perceived action. This phenomenon is called ____________.
4. To make an object travel across the screen while it changes its shape, just change the shape and also move or ____________ it a few pixels for each frame.
5. The animation technique made famous by Disney involves showing a different image for each frame. This technique is called ____________ animation.
6. The first and last frames of an action are called ____________.
7. The series of frames in between the first and last frames in an action are drawn in a process called ____________.
8. In computer animation terminology, ____________ usually refers to special methods that allow images to blend or otherwise mix their colors to produce special transparencies, inversions, and effects.
9. The study of movement and motion of structures that have joints is called ____________.
10. The effect in which one image transforms into another is known as ____________.
11. ____________ is the process by which you link objects and define their relationship and limits.
12. Electronically generated movement of anything on your computer screen is called ____________.
13. The movement of an object happened along a predetermined path on the screen during a specified amount of time is called ____________.
UNIT 6: Video

Short Questions:

1. Define video.
2. What is analog video?
3. What is charge-coupled device (CCD)?
4. What is digital video?
5. Define codec and list an example of a codec.
6. Define the term component in the context of video
7. Define tracking in the context of video.
8. Define lossy and lossless compression in the context of video.
9. Give the file formats of video.
10. What are the digital component formats?
11. What is non-linear editing?
12. What do you mean by tracking?
13. What is degaussing?
15. What do you mean by MPEG?
16. List out tools which are implemented in digital video editing applications.
17. What do you mean by blue screen?
18. Which places the highest performance demand on any computer system?
19. Which provides high resolution in a 16:9 aspect ratio?
20. What are the useful exercise when planning a shoot?
Long Questions:

1. What is the difference between analog and digital video?
2. Discuss the differences between lossy and lossless compression.
3. Discuss the differences between Spatial and Temporal compression in the context of JPEG and MPEG.
4. List out the broadcast video standards. Explain them.
5. List out the video recordings and tape formats. Explain them.
6. Write a short note on MPEG.
7. Explain NTSC.
8. Discuss the differences between NTSC and PAL.
9. Write a short note on Chroma Key
10. Discuss the differences between NTSC and SECAM.
11. Explain PAL.
12. Write a short note on NTSC.
13. Explain shooting and editing video.
14. Write a short note on Storyboarding.
15. List out an example of a codec. Explain them.
16. Explain SECAM.
17. Write a short note on lighting.
18. Explain HDTV.
19. Write a short note on Optimizing video files for CD-ROMs.
20. What do you mean by HDMI?

Multiple Choice Questions:

1. In a video camera, the sensor that picks up light is called a CCD. CCD stands for:
   a. Color coding data
   b. Custom color descriptor
   c. Chroma-calculation daemon
   d. Charge-coupled device
   e. Carbon crystal digitizer
2. A computer’s output on a CRT is calibrated to display an image:
   a. Smaller than the actual monitor’s capability
   b. Larger than the actual monitor’s capability
   c. Exactly the same size as the actual monitor’s capability
   d. That adjusts automatically to the monitor’s capability
   e. Of a fixed size; whether it is a larger and smaller than the monitor’s capability depends on the monitor
3. Removing a residual magnetic field that distorts the colors on a television screen is called:
   a. Tracking
   b. Dubbing
   c. Streaming
   d. Flattening
   e. Degaussing

4. A video signal transmitted with all the signals mixed together and carried on a single cable is called:
   a. RGB video
   b. Composite video
   c. Component video
   d. Multi format video
   e. Chroma key video

5. Which of the following is not a television signal format?
   a. MPEG
   b. NTSC
   c. PAL
   d. SECAM
   e. HDTV

6. Computer displays draw the lines of an entire frame in a single pass; this technique is called:
   a. Streaming
   b. Progressive-scan
   c. Packing
   d. Flattening
   e. Overscan

7. The video technique that allows you to choose a color or range of colors that become transparent, allowing the video image to be visible behind those colors in the overlying image is known by all of the following except:
   a. Blue screen
   b. Ultimate
   c. Chroma key
   d. Interlacing
   e. Green screen

8. Which of the following is a multimedia container format?
   a. JPEG
   b. DVD-RW
   c. ComponentY
   d. Hi-8
   e. Ogg
9. Generation loss occurs when:
   a. An analog tape is copied to another analog tape
   b. A digital file is copied to another hard-disk
   c. A digital file is copied to another hard-drive
   d. A digital file is compressed with a lossy codec
   e. Your teenage son gets his tongue pierced
10. MPEG stands for:
    a. Multiformat Proceed Event Graphics
    b. Multi-Phase Element Grid
    c. Meta-Program Environment Graph
    d. Moving picture Experts Group
    e. Micro-Phase Electronic Guidance
11. Fonts for the titles should be ____________, ___________ and ___________.
    a. Plain, sans serif, bold
    b. bold, underline, italic
    c. red, black, green
    d. plain, bold, underline
12. HDTV provides high resolution in a _____ aspect ratio.
    a. 16:9
    b. 20:12
    c. 4:8
    d. 16:12
13. The MPEG standards were developed by the_____________________.
    a. Moving Picture Export Group
    b. Moving Pixel Export Group
    c. Moving Period Export Group
    d. Moving Picture Executive Group
14. Which device converts the light that has been reflected from an object through the camera’s lens?
    a. CCD
    b. LCD
    c. PAL
    d. NTSC
15. Which of the following technique provide help to prevent flicker?
    a. Audio resolution
    b. Interlacing
    c. Volume Adjustment
    d. Storyboard
16. The process of building a single frame from two fields is called_______________.
    a. interlacing
    b. synthesizer
    c. Volume Adjustment
    d. Tweening
17. Which one of the following is useful exercise when planning a shoot?
   a. Storyboards
   b. Trimming
   c. Volume Adjustment
   d. Interlacing

18. CRT stands to:
   a. Cathode ray tube
   b. Cathode ray tape
   c. Cathode rate tube
   d. Cathode rate tape

19. Which one is required to determine the accuracy with which a sound can be digitized?
   a. Audio resolution
   b. Synthesizer
   c. Volume Adjustment
   d. Headphone

20. Which of the following is the fine adjustment of the tape during playback?
   a. Dubbing
   b. Tracking
   c. Degaussing
   d. B-rolling

True or False:
1. Video place the highest performance demand on your computer or device of all the multimedia element.
2. RAID stands to Redundant Array of Independent Disks.
3. Light is converted into an electronic signal by a special sensor called a charge-coupled device.
4. Digital video signals consist of a discrete color and brightness value for each pixel.
5. S-video stands to standard video.
6. Tracking is the fine adjustment of the tape during playback.
7. NTSC, PAL, and SECAM are the three standards of analog broadcast video commonly used in the world.
8. ATSC Digital television standards and format are not easily interchangeable.
9. NTSC standards defined a method for encoding information into the electronic signal that ultimately created a television picture.
10. SECAM system was used in United Kingdom, Western Europe, Australia, South Africa, China, and South America.
11. PAL system was used in France, Eastern Europe, the former USSR.
13. HDTV provides high resolution in a 2:01 ratio.
14. Blue screen, green screen, ultimate are tools used in digital video editing application.
15. Green screen is a popular technique for making multimedia title because expensive sets are not required.
16. Titles and text are used to introduce a video and its content.
17. Storyboards are a useful exercise when planning a shoot.
18. The MPEG standards were developed by the moving picture experts group.
19. A CCD converts the light that has been reflected from an object through the camera’s lens.
20. Fonts for titles should be plain, sans serif, and bold enough to be easily read.

Fill in the blanks:

1. A redundant hard-disk system that will support high-speed data transfer rates is called a ____________________.
2. The television signal format used in the United States, Japan, and many other countries is known as ____________________.
3. Television screens use a process of building a single frame from two fields to help prevent flicker on CRTs in a technique called ____________________.
4. High-Definition Television (HDTV) is displayed in a(n) ____________________ aspect ratio.
5. The television signal format used in France, Russia, and a few other countries is known as ____________________.
6. The digital video and audio compression schemes that compress the video or delivery and then decode it during playback are called ____________________.
7. When reformatting a 4:3 aspect ratio video to fit in the center of a HDTV screen, leaving the sites empty, the effect is called ____________________.
8. The video compression and decompression scheme use in an Ogg container is called ____________________.
9. CCD stands for ____________________.
10. MPEG is an acronym for ____________________.
11. ____________________ places the highest performance demand on any computer systems.
12. Storyboards are a useful exercise when planning a ____________________.
13. The MPEG standards were developed by ____________________.
14. Fonts for ____________________ should be plain, sans serif, and bold enough to easily read.
15. ____________________ and ____________________ are used to introduce a video and it’s content.
16. The MPEG standards were developed by ____________________.
17. LCD stands ____________________.
18. ____________________ is an electronic process that readjusts the magnets that guide the electrons.
19. The process of building a single frame from two fields is called ____________________.
20. ____________________ formats also include metadata.