Model Viva Questions for "**Graphics and Multimedia lab**"
BRANCH: **IT 4th sem**

Title of the Practical: To study multimedia hardware system: -

a) INPUT DEVICES
b) OUTPUT DEVICES
c) COMMUNICATION DEVICES

Q1: Define Multimedia
A1: Multimedia is the use of the computer to present and combine text, graphics, audio and video with links and tools that lets the user to navigate, interact, create and communicate

Q2: What are the different components of Miltimedia hardware system ?
A2 : Multimedia hardware system consists of
(a) Input devices- mouse, keyboard,etc
(b) Output devices- Monitor, printers, etc
(c) Communication devices-Modems, ISDN,etc.

Q3: What is Full for of ATM?
A3**:** Automated teller machine.

Q4: What is OMR?
A4**:** Optical mark reader is an input device which can recognize the pen or pencil mark on paper.

Q5: In MICR characters are printed by what?
A5**:** In MICR technique characters are printed on cheque by magnetic ink.

Q6: What are the major functions mouse?
A6: Major function of mouse include clicking, right clicking , double clicking and dragging.

Q7: What are different types of mouse?
A7: There are three types of mouse Mechnical, optical, cordless.

Q8: Where to use multimedia?
A8: Multimedia improves information relation. Multimedia applications includes the following:
_ Business
_ Schools
_ Home
_ Public place

Q9: List out the benefits of multimedia.
A9: Benefits of multimedia are
_ Training
_ Sales
_ Communications
_ Medicines

Q10: List out the building blocks of multimedia.
A10: Text
Image
Sound
Animation
Video

Title of the Practical: To study the Multimedia basic software tools

Q1: What is hypermedia?
A1: A set of documents in which a given document can contain text, graphics video and audio clips as well as embedded references to other documents world wide web pages are hypermedia documents

Q2: What is hypertext?
A2:Hyper text is an application of indexing text to provide a rapid search of specific text strings in one or more documents. Hypertext is an integral part of hypermedia documents. In multimedia applications, a hypermedia documents is the basic complex object of which text is a sub-object. Other sub-objects in the basic object include images, sound, and full-motion video..

Q3: What is layer ?
A3: We can define layer as sheets of pixels that can be edited independently , without affecting the other part of image.

Q4:Define clipping?
A4:Clipping is the method of cutting a graphics display to neatly fit a predefined graphics region or the view port

Q5: Text editing and Word processing tools?
A5: Word processor such as Microsoft Word and Word Perfect are powerful that includes spell checkers, table formatters, templates for letters, resume purchase orders and other common documents. In many word processor we can actually embed multimedia elements such as sound, images and video etc.
.

Q6: What are Painting and Drawing tools?
A6: Painting and drawing tools as well as 3D modelers, are perhaps the most important items in your toolkit because of all multimedia elements, the graphical impact of our project will likely have the greatest influence on the end user. Painting software such as Corel draw, free hand is dedicated to producing vector based line art easily printed to paper at high resolution

Q7: Define computer graphics animation?
A7:Computer graphics animation is the use of computer graphics equipment where the graphics output presentation dynamically changes in real time. This is often also called real time animation

Q8: What is 3D modeling and animation tool?
A8: With 3D modeling software,object rendered in perspective appear more realistic. We can create stunning scenes and wander through them by choosing just the right lighting and perspective for our final renedered image. Powerful modeling packages

Q9: What areImage editing tools ?
A9: Image editing applications are specialized and powerful tools for enhancing and retouching existing bit-mapped images

Q10: What are sound editing tools?
A10: System sounds are shipped with both Machintosh and window system, and they are available as soon as we install the operating system. System sounds and beeps are used to indicate an error, warning or special user activity. Using sound editing software we can make our own sound effects.

Title of the Practical: To capture Audio from a Microphone(PC)

Q1: What are the types of sound objects that can be used in multimedia production?
A1:There are four types of sound objects that can be used in multimedia production:
Waveform audio
MIDI sound tracks
Compact disc (CD) audio
MP3 files?

Q2 : What is MIDI?
A2: Musical Instrument Digital Interface (MIDI) is the interface between electronic musical instruments and computers is a small piece of equipment that plugs directly into the computer's serial port and allows the transmission of music signal. MIDI is considered to be the most compact interface that allows full-scale output..

Q3: What are various attributes of sound ?
A3: Following are the attributes of sound:
(a) Sound – Frequency and wavelength
(b) Sound- Amplitude

Q4: What is wavelength?
A4: The wavelength is the distance between two successive crests and is the diatance that a wave complete a cycle.

Q5: What is Bit depth?
A5: Bit depth refers to the number of bits used to represent one sample of an audio signal.

Q6: What is sampling?
A6: Sampling is aprocess of reusing portions of sound recording in a piece.

Q7: Explain Speech recognition(SR) .
A7: Speech Recognition is the ability of the operating system to convert spoken words to written text. An internal driver, called an Sr engine , recognizes words and converts them to text.

Q8: What is needed to record sounds?
A8: To record sounds, your computer must be equipped with a microphone.

Q9: In Which format is the recorded sound captured?
A9: Recorded Sounds are save as waveform(.wav) files.

Q10: What is MP3?
A10: MP3 is an audio-specific format . The compression removes certain parts of sound that are outside the normal human hearing range so cannot be heard by the listner.

Title of the Practical: To cut clips from any VCD cutter.

Q1: What is frame rate?
A1: The number of pictures shown per second is called the frame rate.

Q2: What is a Video Compact Disc?
A2: Video CD(VCD) is a format that allows to be played back in computers or players that supports the video CD standard

Q3: What are different video capturing Instruments?
A3: Following are the various video capturing Instruments
(a) DVCAM
(b) CAMCORDER.

Q4: What is compression?
A4: Compression is a reversible conversion of data to a format that requires fewer bits usually performed so that the data can be stored or transmitted more efficiently.

Q5: What are various digitial video file formats ?
A5: Digital video file formats:
(a) AVI (b) MPEG (c) DV (d) MOVE real video.

Q6: What is the full for of AVI ?
A6: Audio Video Interleaved.

Q7: What is a Video disk?
A7:Video disk serves as the output of motion pictures and audio. The data are stored in an analog-coded format on the disk. The reproduced data meet the highest quality requirements. Video disk has a diameter of approximately 30cm and stores approximately 2.6 Giga bytes?

Q8 What is an MPC?
A8:The MPC computer is not a hardware unit but rather a standard that includes minimum specifications to turn Intel microprocessor-based computers into multimedia computers

Q9: Define the term flicker in video.
A9:A periodic fluctuation of brightness perception is called flicker effect

Q10: What is a codec?
A10: A codec is software that is used to compress or decompress a digital media file , such as a song or video.

Title of the Practical: To crop a picture using crop tool

Q1: What s cropping?
A1: Cropping is the process of removing portions of an image to create focus or strengthen the composition.

Q2: What are the different attributes of image?
A2: Images has the following attribute:
(a) size (b) color (c) depth (d) image resolution.

Q3: Define quantization (or) resolution?
A7:The resolution (or) quantization of a sample value depends on the number of bits used in measuring the height of the waveform. An 8-bit quantization yields 256 possible values, 16-bit CD-qudra quantization results in over 65536 values

Q4: What is synchronization?
A4:Integration of the different media is given through a close relation between information units. This is called synchronization.

Q5: What is meant by Multimedia User Interface?
A5: Multimedia user interface is a computer interface that communicates with users multiple media.

Q6: How special effects achieved?
A6: Filters can be used to achieve a special effect.

Q7 How is image corrected?
A7: We can use the dropper tool and the brush toolto make detailed corrections to your image.

Q8: What is the use of healing brush?
A8: You can quickly and easily remove cracks and scratches from your photographs using healing brush.

Q9: What is antialiasing?
A9:The process of adjusting intensities of the pixels along the line to minimize the effect of aliasing is called antialiasing.

Q10: What is run length encoding?
A10: Run length encoding is a compression technique used to store the intensity values in the frame buffer, which stores each scan line as a set of integer pairs. One number each pair indicates an intensity value, and second number specifies the number of adjacent pixels on the scan line that are to have that intensity value

Title of the Practical: Hot spot removal using clone stamp tool.

Q1: What does the layer window shows?
A1: The layer window shows the various layers that your image is made up of.

Q2: What is CorelDraw?
A2: CorelDRAW is a vector graphics editor developed and marked by Corel Corporation of Ottawa , Canada . Coreldraw is a popular drawing program for windows market.

Q3: Why there is need to create layer for each part of image?
A3: This allows you to go back and edit the layer individually.

Q4: What is the purpose of using clone stamp tool ?
A4: The Cloning Stamp Tool does exactly what its name implies. Using this tool, you can copy a portion of an image and reapply it repeatedly to cover an unwanted portion of the image.

Q5: Why is TIFF used?
A5: TIFF stands for tagged image file format . It is used to exchange files between application and computer platforms.

Q6: What is Graphics file format conversion?
A6: The file format conversion is aprocess in which we can convert one format to another using software tools such as Adobe Photoshop , Core PHOTO –PAINT etc.

Q7: What is opacity ?
A7: Opacity determines transparency of the paint. A setting of 1 Makes the paint almost completely transparent . A setting of 100 makes the paint opaque.

Q8: What does the layer window show?
A8: The layer window shows the various layers that your image is made up of.

Q9:What are different modifying color and effect tools in photoshop?
A9: Grayscale;- changes everything to different shades of gray
RGB color:- Best one: 16.7 million colors
Multichannel:- Uses 256 shades of gray based on the color value of each pixel

Q10: How can you convert a color image to a black and white image?
A10: Chose Image >Mode> Grayscale from the menu in Photoshop .You we get a window showing Discard Color information with OK and Cancel button clicking on Ok your image will become Black ad white.

Title of the Practical: To study the working of Macromedia Flash MX.

Q1: Define computer graphics animation?
A1:Computer graphics animation is the use of computer graphics equipment where the graphics output presentation dynamically changes in real time. This is often also called real time animation.

Q2: What is tweening?
A2:It is the process, which is applicable to animation objects defined by a sequence of points, and that change shape from frame to frame.

Q3: Define frame?
A3:One of the shape photographs that a film or video is made of is known as frame.

Q4: What is key frame?
A4: One of the shape photographs that a film or video is made of the shape of an object is known initially and for a small no of other frames called keyframe

Q5What is motion guide?
A5: Motion guide is nothing but moving your symbol in a predefined path such as curves of circle.

Q6: Explain motion tweeening.
A3: Motion tweening is nothing but tweening a symbol movement from one positon to another.

Q7: What are the three basic type of animation ?
A7: The 3 basic type of animation ar e cel , stop , computer animation.

Q8:What is cel animation?
A8: Cel animation is based on the series of frames or cels in which the object is redrawn in each consecutive cel to depict motion.

Q9:What is a stage?
A9: The stage is your main workspace . This is the area where you place the content as it will appear in your movie.

Q10:What is computer animation?
a10: Computer animation is the latest technique of animation that includes 2D and 3D animation.

Title of the Practical: Program for tossing a coin in C language using graphics.

Q1: What is scan conversion?
A1:A major task of the display processor is digitizing a picture definition given in an application program into a set of pixel-intensity values for storage in the frame buffer. This digitization process is called scan conversion.

Q2: Write the properties of video display devices?
A2: Properties of video display devices are persistence, resolution, and aspect ratio.

Q3: What is rasterization?
A3:The process of determining the appropriate pixels for representing picture or graphics object is known as rasterization.

Q4: Define Computer graphics.
A4:Computer graphics remains one of the most existing and rapidly growing computer fields. Computer graphics may be defined as a pictorial representation or graphical representation of objects in a computer.

Q5:Name any four input devices.
A5:Four input devices are keyboard, mouse, image scanners, and trackball.

Q6: Write the two techniques for producing color displays with a CRT?
A6:Beam penetration method, shadow mask method

Q7: What is vertical retrace of the electron beam?
A7:In raster scan display, at the end of one frame, the electron beam returns to the left top corner of the screen to start the next frame, is called vertical retrace of the electron beam.

Q8: Short notes on video controller?
A8:Video controller is used to control the operation of the display device. A fixed area of the system is reserved for the frame buffer, and the video controller is given direct access to the frame buffer memory.

Q9:What is bitmap?
A9:Some system has only one bit per pixel; the frame buffer is often referred to as bitmap.

Q10: Differentiate plasma panel display and thin film electro luminescent display?
A10: In plasma panel display, the region between two glass plates is filled with neon gas. In thin film electro luminescent display, the region between two glasses plates are filled with phosphor, such as zinc sulphide doped with manganese.

Title of the Practical: To study the basic features of windows Xp movie maker.

Q1: How is windows Xp movie maker user interface divided ?
A1: The Windows Movie Maker user interface is divided into three main areas: the menu bar and toolbar, the panes, and the storyboard and timeline.

Q2: What is a storyboard?.
A2: The area where you create and edit your project is displayed in two views, the storyboard and the timeline. You can switch between these two views when making a movie.

Storyboard/timeline. Indicates that the task can be performed on both the storyboard and timeline.
Storyboard. Indicates that the task can be performed on the storyboard only.
Timeline. Indicates that the task can be performed on the timeline only.

Q3: What are video capture devices ?
A3: A video capture device lets you transfer live or recorded video to your computer. In Windows Movie Maker, you can use the following types of capture devices to capture video (and in some cases, audio as well) to your computer:

- Analog video source such as an analog camera or video cassette recorder (VCR) connected to an analog capture card
- Web camera

Q4: How tone can save a project in Windows Xp movie maker ?
A4: To save a project

1. On the **File** menu, click **Save Project**.
2. In the **File name** box, type the file name, and then click **Save**.

Q5: Explain splitting a clip..
A5: You can split a video clip into two clips. This is useful if you want to insert either a picture or a video transition in the middle of a clip. You can split a clip that appears on the storyboard/timeline of a current project, or you can split the clip in the Contents pane.

Q6: What are the steps for previewing a clip?
A6: To preview a clip

1. In the Contents pane, click the clip you want to preview.
2. On the **Play** menu, click **Play Clip**

Q7: Where are the title and credits used ?
A7: Titles and credits. Titles and credits let you enhance your movie by adding text-based information to your movie. You can add whatever text you want, but you may want to include information such as the title of your movie, your name, the date, and so forth. You can change the appearance of the title or credit, in addition to changing the title animation, which determines how your title or credit displays in your movie

Q8: 11. What is resolution?
A8:The maximum number of points that can be displayed without overlap on a CRT is referred to as the resolution

Q9: What is persistence?
A9:The time it takes the emitted light from the screen to decay one tenth of its original intensity is called as persistence.

Q10: What is Aspect ratio?
A10:The ratio of vertical points to the horizontal points necessary to produce length of lines in both directions of the screen is called the Aspect ratio. Usually the aspect ratio is ¾.