

**Model Viva Questions for “Name of the Lab: Television Engg.Lab
Common to: VI sem(ET&T)
Title of the Practical 1: Familiarization with consumer and technician control
and safety precautions**

Q1. List the safety precautions for technician and consumer?

A1 The safety precautions are:

1. Line connected receivers must have insulation so that no chassis point is available to the user.
2. The service man should stand or sit on an insulated surface and use only one hand when probing a receiver.
3. Technicians should be very careful not to introduce a fire hazard in the TV repairing.
4. All the connections with lead or otherwise to high voltage points must be made after disconnecting the receiver.

Q2 What is the function of position control?

A2 It is necessary to provide some means of positioning the trace on screen . This control can be exercised by varying voltage with help of potentiometer.

Q3 How the brightness of a picture is determined?

A3 The luminance of phosphor is a measure of brightness. It is determined by luminance efficiency of phosphor and by beam energy.

Q4 How focal length can be changed?

A4 It is changed by changing potential of focusing anode.

Q5. What is the function of tuner circuit?

A5 The purpose of tuner circuit is to amplify sound and picture signals picked up by antenna and to convert the carrier frequency and their associated band into IF frequency.

Q6 What is the essential feature of IF section?

A6 The main function of IF section is to amplify modulated IF signal over its bandwidth.

Q7 What are two methods of focussing in TV?

A7 The two methods are 1. Electro static focusing 2. Electromagnetic focusing.

Q8 When we use post deflection acceleration tubes?

A8 This is used when frequency is above 10Mhz.

Q9 What is the need of squelch circuit?

A9 It eliminates the RF interference when signal is weak.

Q10 Explain need of synchronization?

A10 It is essential that the same co-ordinates be scanned at any instant both at the camera tube target plate and at the raster of picture tube, otherwise, the picture details would split and get distorted.

Title of the Practical 2: Identify different components and section in TV receiver (black and white and colour)

Q1. List the types of television receiver?

A1 The types of receiver are 1. all tube receiver 2. solid state receiver 3. hybrid receiver.

Q2. What are different types of antennas used in receiver?

A2 The various antennas used are folded dipole, Yagi Uda, rhombic antenna and parabolic reflector.

Q3. What is the function of tuner circuit?

A3 The purpose of tuner circuit is to amplify sound and picture signals picked up by antenna and to convert the carrier frequency and their associated band into IF frequency.

Q4. Who invented color television?

A4 John Logie Baird (August 13, 1888 - June 14, 1946) Scottish engineer and inventor of the world's first working television system.

Q5. What is the essential feature of IF section?

A5 The main function of IF section is to amplify modulated IF signal over its bandwidth.

Q6. What is the function of AGC circuit?

A6 The AFC circuit employs a discriminator arrangement which compares the incoming horizontal sync pulses and the voltage that develops across output of horizontal deflection system.

Q7. Explain picture transmission?

A7 The picture information is optical in character and may be thought of as an assemblage of a large number of tiny areas representing picture details. These elementary areas into which picture details may be broken up are known as 'picture elements' or 'pixels', which when viewed together represent visual information of the scene. Thus, at any instant there are almost an infinite number of pieces of information that need to be picked up simultaneously for transmitting picture details. However, simultaneous pick-up is not practicable because it is not feasible to provide a separate signal path (channel) for the signal obtained from each picture element.

Q8. Briefly define TV receiver?

A8 The TV receiver has tuned circuits in its input section called 'tuner'. It selects desired channel signal out of the many picked up by the antenna. The selected RF band is converted to a common fixed IF band for convenience of providing large amplification to it. The amplified IF signals are detected to obtain video (picture) and audio (sound) signals. The video signal after large amplification drives the picture tube to reconstruct the televised picture on the receiver screen. Similarly, the audio signal is amplified and fed to the loudspeaker to produce sound output associated with the scene.

Q9. Explain need of synchronization?

A9 It is essential that the same co-ordinates be scanned at any instant both at the camera tube target plate and at the raster of picture tube, otherwise, the picture details would split and get distorted.

Q10. List the various controls in TV receiver?

A10 Most black and white receivers have on their front panel (i) channel selector, (ii) fine tuning, (iii) brightness, (iv) contrast, (v) horizontal hold and (vi) volume controls besides an ON-OFF switch. Some receivers also provide a tone control

Title of the Practical 3 : Study of signal injection and signal tracing in black & white and Color TV.

Q1 Define low -side injection?

A1 The amount that a signal is down-shifted by the local oscillator depends on whether its frequency f is higher or lower than f_{LO} . $f = f_{LO} - f_F$. The other case is called low-side injection.

Q2 What is High-side injection ?

A2 The amount that a signal is down-shifted by the local oscillator depends on whether its frequency f is higher or lower than f_{LO} . $f = f_{LO} + f_F$ When the upper one is filtered out, it is called high-side injection.

Q3.What is the value of IF for various systems?

A3 common IFs are 455 kHz for medium-wave AM radio, 10.7 MHz for FM, 38.9 MHz (Europe) or 45 MHz (US) for television, and 70 MHz for satellite and terrestrial microwave equipment.

Q4 What is the theory for TV?

A4 Colour television is based on the theory of additive colour mixing, where all colours Including white can be created by mixing red, green, and blue lights.

Q5 Define cathodoluminescence?

A5 When electron beam strikes phosphor crystals it increases its energy level it is called cathodoluminescence.

Q6 Which control performs the function of dc bias for picture tube?

A6 brightness control.

Q7 How would you eliminate ghost in a picture?

A7 It can be changed by orientation and location of antenna.

Q8 Which coupling is used in IF stage?

A8 the coupling is double tuned transformer coupling.

Q9 How intensity of signal is controlled?

A9 It is varied by varying the grid potential cathode.

Q10 What is the purpose of double conversion?

A10 It is carried to prevent overloading of last amplifier in receiver.

Title of the Practical 4 : . **Voltage and frequency measurements of a signal.**

Q1 Which instrument are used for voltage measurement?

A1 Instruments for measuring voltages include the voltmeter, the potentiometer, and the oscilloscope.

Q2. What is measured with help of voltmeter?

A2 A voltmeter measures the voltage difference between the positive input terminal of the voltmeter and the negative input terminal.

Q3. Define frequency?

A3 Frequency is the number of occurrences of a repeating event per unit time. It is also referred to as temporal frequency. The period is the duration of one cycle in a repeating event, so the period is the reciprocal of the frequency. Loosely speaking, 1 year is the period of the Earth's orbit around the Sun, and the Earth's rotation on its axis has a frequency of 1 rotation per day.

Q4 List the methods for measurement of frequency?

A4 The methods used are :

1. By counting
2. By stroboscope
3. By frequency counter
4. Heterodyne methods

Q5. Explain counting method of measurement of frequency?

A5 Calculating the frequency of a repeating event is accomplished by counting the number of times that event occurs within a specific time interval, then dividing the count by the length of the time interval. For example, if 71 events occur within 15 seconds, the frequency is:

$$f = \frac{71}{15 \text{ sec}} = 4.7 \text{ hertz}$$

If the number of counts is not very large, it is more accurate to measure the time interval for a predetermined number of occurrences, rather than the number of occurrences within a specified time. The latter method introduces a random error into the count of between zero and one count, so on average half a count. This is called *gating error* and causes an average error in the calculated frequency of $\Delta f = 1/(2 T_m)$, or a fractional error of $\Delta f / f = 1/(2 f T_m)$ where T_m is the timing interval and f is the measured frequency. This error decreases with frequency, so it is a problem at low frequencies where the number of counts N is small.

Q6 Give example of time base signal?

A6 High sawtooth waveform.

Q7 Which frequency meter is used for radio frequency?

A7 Heterodyne frequency meter.

Q8 On which factor colour of spot on screen depends?

A8 It depends on coating material of screen.

Q9 What is the amplifier used at the output of TV Transmitter?

A9 Grid modulated class C amplifier at output of TV transmitter.

Q10 Which circuit separates sync pulses at output of composite video signal?

A10 Clipper circuit separates sync pulses at output of composite video signal.

Title of the Practical 5 : **Alignment of RF,IF and SIF sections**

Q1 Specify radio frequency range?

A1 the range is above 30kHz.

Q2What is function of sweep generator?

A2 It provides a sinusoidal output voltage whose frequency varies smoothly and continuously over entire frequency band.

Q3 How frequency modulation is carried out in sweep generator?

A3 the modulation is carried using tank circuit components and by means of motor driven capacitor.

Q4 What is function of RF generator?

A4 It provides recording of circuit performance one frequency at a time.

Q5 What is frequency of output signal?

A5 50 hz

Q6 What is function of marker generator?

A6 It provides display of characteristics of circuit and amplifierand precise information of frequency.

Q7What is frequency range of IF section?

A7 the IF is 30-40 MHz.

Q8 What is heterodyning?

A8 It produces sum and difference of frequencies of two input signals.

Q9 What is function of frequency sweeper?

A9 It provides varying sweep voltage for synchronization to drive horizontal deflection plates.

Q10What is function of constant power level?

A10 It prevents any source mismatch and provides a constant read out with frequency.

Title of the Practical 6: Study of composite signal

Q1 Define composite signal?

A1 Composite video is the format of an analog television (picture only) signal before it is combined with a sound signal and modulated onto an RF carrier.

Q2 What are the standard formats of TV?

A2 It is in standard formats such as NTSC, PAL, and SECAM.

Q3 Explain the constituents?

A3 It is a composite of three source signals called Y, U and V (together referred to as YUV) with sync pulses. Y represents the brightness or *luminance* of the picture and includes synchronizing pulses, so that by itself it could be displayed as a monochrome picture. U and V represent hue and saturation or *chrominance*; between them they carry the color information. They are first modulated on two orthogonal phases of a color carrier signal to form a signal called the *chrominance*. Y and UV are then combined. Since Y is a baseband signal and UV has been mixed with a carrier, this addition is equivalent to frequency-division multiplexing.

Q4. What are the methods of synchronizing the video display?

A4 Several methods used: for synchronizing the video display

1. composite sync, where the horizontal and vertical signals are mixed together on a separate wire (the S in RGBS)

2. separate sync, where the horizontal and vertical are each on their own wire (the H and V in RGBHV)

3. sync on green, where a composite sync signal is overlaid on the green wire (SoG or RGsB).

Q5. Define Luminance ?

A5. The luminance signal carries the black and white parts of the picture. This component of the composite video signal requires the most bandwidth (typically to 5MHz), and signal integrity, to convey sharp and clear images.

Q6 What is principle for vidicon and plumbicon?

A6 Photoconduction is the basis for working of vidicon and plumbicon.

Q7 Which element is conducting during flyback?

A7 High voltage rectifier.

Q8 What are components of transponder?

A8 the components are transmitter, receiver and antenna.

Q9 What do you mean by blocking performance?

A9 It is the ability to be unaffected by AGC circuit derived from nearby transmitter.

Q10 What is delayed AGC?

A10 It is application of AGC only when signal strength has increased beyond specified value.

Title of the Practical 7: Colour TV adjustments using: gray scale tracking, Colour killer, focus, chroma traps, sound traps, saturation control, black level

Q1. Define grey scale tracking?

A1 Red, green and blue must combine in definite proportion to produce white light. So it becomes necessary to incorporate suitable adjustment known as grey scale tracking. Two methods are adjustment of low and adjustment of high light.

Q2. Define colour killer circuit?

A2 In color TV waveform a reference pulse, named burst is transmitted in the back porch of the line. (Burst is actually a 10 period color carrier signal.) If the transmitted signal is monochromatic, then the burst is not transmitted. The color killer is actually a muting circuit in the chroma section which supervises the signal and turns off the color amplifiers when the signal is received in monochrome.

Q3. Define chroma trap?

A3 The trap filter is designed with a response to remove the chroma so that the output of the filter only contains the luma. Since this trap stops chroma, it's called a chroma trap.

Q4. Define sound traps?

A4 A sound trap is a special acoustical treatment designed to reduce transmission of noise through the ductwork, either from equipment into occupied spaces in a building, or between occupied spaces. In its simplest form, a sound trap consists of an offset in the ductwork to reflect the sound back to its source.

Q5. Define saturation control circuit?

A5 A chrominance saturation control circuit comprising a first differential amplifier having two transistors, a chrominance saturation control DC voltage being coupled to the base of one of said transistors, two current-to-voltage converting transistors connected to the respective collectors of said first-mentioned transistors of said first differential amplifier, two emitter-follower transistors connected to the respective emitters of said converting transistors, and a second differential amplifier having two transistors.

Q6. Which element generates noise in receiver?

A6 Mixer.

Q7. What is function of equalizing pulse?

A7 The equalizing pulse is used to smooth out difference between vertical sync signal.

Q8. Which frequency band is selected for transmission of Vivid Bharti?

A8 Medium frequency range.

Q9. Which cable is used for Home TV receiver antenna?

A9 A twin wire flat ribbon of 300 ohms.

Q10. What is value of no. of lines per frame?

A10 For American system 525, For European system 625

Title of the Practical 8: Familiarisation with specification operation, use of TV set equipment DVM, TVM, monochrome and color pattern generator ,sweep generator, display wobboscope

Q1 Define video pattern generator?

A1 A video pattern generator provides video signal directly and with RF modulation, on standard TV channel for alignment, testing and servicing of TV receivers.

Q2 What are types of pattern produced at output?

A2 The output patterns are vertical and horizontal bars, checkboard, crosshatch, dots. These patterns are used for linearity and video amplifier adjustment.

Q3 List parts of wobboscope?

A3 It consists of sweep generator, marker generator and oscilloscope.

Q4 What is function of wobboscope?

A4 It is very useful for alignment of RF, IF and video sections.

Q5 What are parts of generator?

A5 The parts of generator are chain of multivibrators, dividers and pulse shaping circuits. The signals are modified into short duration pulses which when fed to video section of receiver along with sync pulse train produce fine lines on screen.

Q6 What is the function of horizontal bar pattern?

A6 It is used for checking vertical linearity. These should be placed for checking and setting horizontal linearity.

Q7 What is function of pattern generator?

A7 The pattern generator can also be used for detecting any spurious oscillation in sweep generation circuits, interaction between two oscillators, poor interlacing, barrel and cushion pin effects.

Q8 Define vectroscope ?

A8 This is an instrument that combines a keyed colour bar generator with an oscilloscope and is used for alignment and testing the colour section of TV receiver.

Q9 What is represented by amplitude and phase?

A9 The colour saturation and hue are represented by amplitude and phase.

Q10 Define vectrogram?

A10 The information of amplitude and phase displayed on screen in form of Lissajous pattern called as vectrogram.

Title of the Practical 9: **Testing of TV antenna and booster**

Q1 Define TV antenna?

A1 television antenna, or TV aerial, is an antenna specifically designed for the reception of over the air broadcast television signals, which range from 54 to 698 megahertz in the United States (with low power TV extending to 806 megahertz). Aerial, is an antenna specifically designed for the reception of over the air broadcast television signals, which range from 54 to 698 megahertz in the United States (with low power TV extending to 806 megahertz).

Q2 What are the antennas used for TV transmission?

A2 Many antennas used for television are a simple half-wave dipole antenna with one or a few loop antennas (for UHF band) that are made to be placed indoors; often these are referred to as "rabbit ears" or "bunny aerials".

Q3 Explain setup of aerial antenna?

A3 Aerial antennas are commonly placed on rooftops, and sometimes in attics. Placing an antenna indoors is generally considered to significantly attenuate its performance. Directional antennas must face the direction of the transmitter they are receiving; generally pointing in the general direction of the city of a station works well enough. In the analog television days; a signal picked up by an antenna facing the wrong direction would often produce ghosting in the image. This would also happen if multiple antennas connected to the same receiver were picking up the same station, especially if the lengths of the cables connecting them to the splitter/merger were different lengths or the antennas were too close together.

Q4 What about safety precautions with TV antenna?

A4 There are a few safety considerations involved with TV antennas. One is that they are large conductors and attract lightning; acting as a large lightning rod. The use of a lightning arrester is common to protect against this. A large grounding rod should be connected to both the antenna and the mast/pole. There is inherent danger in any activity taking place on the rooftop of a house, such as installing or adjusting a television antenna. An antenna rotator is a simple solution to the problem of having to adjust the antenna. When a mast is used, especially one of significant height, it should be guyed with galvanized cable with no insulators (as they are not necessary). It should be able to aptly handle whatever weather conditions are common to the area and should be spaced so that it will not interfere with power lines in operation or should it fall.

Q5 What are types of Outdoor Antennas ?

A5 Types of Outdoor Antennas are:

1. Small Multi-directional: The smallest of all outdoor television antennas. They are designed to receive equal amounts of signal from all directions. These generally receive signals up to a maximum of thirty miles away from the transmitting station, greatly depending on the type. But, things such as large buildings or thick woods may greatly affect signal. They come in many different styles, ranging from small dishes to small metal bars, some can even mount on existing satellite dishes.
2. Medium Multi-directional: A step up from the small multi-directional, these also receive signals from all directions. These usually require an amplifier in situations when long cable lengths are between the television receiver and the antenna. Styles are generally similar to small multi-directionals, but slightly larger.
3. Large Multi-directional: These are the largest of all multi-directional outdoor television antennas. Styles include large "nets" or dishes, but can also greatly vary. Depending on the type, signal reception usually ranges from 30 to up to 70 miles.
4. Small Directional: The smallest of all directional antennas, these antennas are multi-element antennas, typically placed on rooftops. This style of antenna receives signals

generally equal to that of large multi-directionals. One advantage that small directionals hold, however, is that they can significantly reduce "ghosting" effects of television picture.

5. Medium Directional: These antennas are the ones most often seen on suburban rooftops. Usually consisting of many elements, and slightly larger than the small directionals, these antennas are ideal for receiving television signals in suburban areas. Signal usually ranges from 30 to 60 miles away from the broadcasting station

Q6 What is the modulation technique for video in TV?

A6 VSB modulation is used for video.

Q7 What is the value of interlace and aspect ratio?

A7 interlace ratio is 2:1 and aspect ratio is 4:3.

Q8 When we send equalizing pulses?

A8 We send equalizing pulses during vertical blanking.

Q9 Which antenna is used for TV reception?

A9 The log periodic and Turnstile antenna is used for TV reception.

Q10 What is frequency band for TV channels?

A10 The lower range is 54-88Mhz and higher range 174-216Mhz.

Title of practical: 10. **Troubleshooting of VCRs for simple faults**

Q1 Explain concept of recording?

A1 When electrical signal consisting of an ac current pass through an em coil a magnetic flux is produced in soft iron coil. The core has a small reluctance gap. When a tape with a coil of low reluctance is pressed against the gap the magnetic flux passes through the magnetic material of the tape. The tape gets magnetized. The tape moves past the gap with uniform speed and hence video signal is converted to magnitude of tape.

Q2 What are problems encountered in video recording?

A2 The problems are:

1. high frequency signal requires high frequency of tape.
2. high bandwidth of luminance.
3. duration of video signal is of several hours.
4. three signal one of luminance and two of colour difference are to be recorded.

Q3 What is the need of FM recording?

A3 It is required for high bandwidth of frequency .The frequency varies from low to high frequency.

Q4 Why recording is done diagonally?

A4 To make the playback time long increasing the tape length.

Q5 Define under colour system?

A5 The chroma colour in the original video signal is down converted to 4.43 MHz to 562.5MHz by heterodyning process which is called under colour system.

Q6 What are formats of VCR?

A6 The formats are: 1. Video home system 2. Betamax 3. Video 2000.

Q7 Define troubleshooting?

A7 It refers to process of locating faulty location and components in equipment and to determine the cause to become faulty.

Q8 How VCR is different from video tape recorder?

A8 A VCR is different from a *video tape recorder* in that VTRs can also be reel-to-reel devices that require hand-threading of the tape from a single supply reel, through the recording mechanism and onto a separate take-up reel. VCRs tend to be lower maintenance than reel-to-reel VTRs, since the tape path is usually fully enclosed to keep dust out of the mechanism, and the tape is almost never touched by the user except when malfunctions occur.

Q9 What are controls in VCR?

A9 1. eject 2. forward 3. backward 4. record 5. reset 6. rewind 7. pause.

Q10 Define diplexer?

A10 The signals are combined in the diplexer to be fed to the antenna port.

Title of the Practical 11: **Study of multimedia and animation**

Q1 Define multimedia?

A1 Multimedia is media and content that uses a combination of different content forms. The term can be used as a noun (a medium with multiple content forms) or as an adjective describing a medium as having multiple content forms. The term is used in contrast to media which only use traditional forms of printed or hand-produced material. Multimedia includes a combination of text, audio, still images, animation, video, and interactivity content forms.

Q2 Explain categorization of multimedia?

A2 Multimedia may be broadly divided into linear and non-linear categories. Linear active content progresses without any navigational control for the viewer such as a cinema presentation. Non-linear content offers user interactivity to control progress as used with a computer game or used in self-paced computer based training. Hypermedia is an example of non-linear content. Multimedia presentations can be live or recorded. A recorded presentation may allow interactivity via a navigation system. A live multimedia presentation may allow interactivity via an interaction with the presenter or performer.

Q3 What are the characteristics of multimedia?

A3 Multimedia presentations may be viewed in person on stage, projected, transmitted, or played locally with a media player. A broadcast may be a live or recorded multimedia presentation. Broadcasts and recordings can be either analog or digital electronic media technology. Digital online multimedia may be downloaded or streamed. Streaming multimedia may be live or on-demand.

Multimedia games and simulations may be used in a physical environment with special effects, with multiple users in an online network, or locally with an offline computer, game system, or simulator.

The various formats of technological or digital multimedia may be intended to enhance the users' experience, for example to make it easier and faster to convey information. Or in entertainment or art, to transcend everyday experience.

Q4. What are its applications?

A4 Multimedia finds its application in various areas including, but not limited to, advertisements, art, education, entertainment, engineering, medicine, mathematics, business, scientific research and spatial temporal applications.

Q5 Explain structure of multimedia?

A5 Multimedia represents the convergence of text, pictures, video and sound into a single form. The power of multimedia and the Internet lies in the way in which information is linked. Multimedia and the Internet require a completely new approach to writing. The style of writing that is appropriate for the 'on-line world' is highly optimized and designed to be able to be quickly scanned by readers.

Q6. Define animation?

A6 Animation is the rapid display of a sequence of images of 2-D or 3-D artwork or model positions in order to create an illusion of movement. The effect is an optical illusion of motion due to the phenomenon of persistence of vision, and can be created and demonstrated in several ways.

Q7 Define full animation?

A7 Full animation refers to the process of producing high-quality traditionally animated films, which regularly use detailed drawings and plausible movement. Fully animated films can be done in a variety of styles, from more realistically animated works such as those produced by the Walt Disney studio (Beauty and the Beast, Aladdin, Lion King) to the more 'cartoony' styles of those produced by the Warner Bros. animation studio. Many of the Disney animated features are examples of full animation, as is non-Disney works such as The Secret of NIMH (US, 1982).

Q8. What are different techniques?

A8 Drawn on film animation: a technique where footage is produced by creating the images directly on film stock,

1. Paint-on-glass animation: a technique for making animated films by manipulating slow drying oil paints on sheets of glass.
2. Erasure animation: a technique using traditional 2D medium, photographed over time as the artist manipulates the image.
3. Pinscreen animation: makes use of a screen filled with movable pins, which can be moved in or out by pressing an object onto the screen. The screen is lit from the side so that the pins cast shadows. The technique has been used to create animated films with a range of textural effects difficult to achieve with traditional animation.
4. Sand animation: sand is moved around on a back- or front-lighted piece of glass to create each frame for an animated film. This creates an interesting effect when animated because of the light contrast.
5. Flip book: A flip book (sometimes, especially in British English, called a flick book) is a book with a series of pictures that vary gradually from one page to the next, so that when the pages are turned rapidly, the pictures appear to animate by simulating motion or some other change. Flip books are often illustrated books for children, but may also be geared towards adults and employ a series of photographs rather than drawings. Flip books are not always separate books, but may appear as an added feature in ordinary books or magazines, often in the page corners. Software packages and websites are also available that convert digital video files into custom-made flip books.

Q9 What is the pulse at output of vertical amplifier to TV receiver?

A9 Sawtooth current.

Q10 What is the purpose of shadow mask?

A10 It ensures that each beam hits its own dots.

Title of practical 12: **Various video cameras and its control**

Q1 Define frame?

A1 Computer video deals with recording and display of a sequence of images at a resonance speed to create an impression of movement. Each individual image of a sequence of images is called frame.

Q2 what is the rate of video signal?

A2 The rate is 25-30 frames per second

Q3 How video signal travels?

A3 It travels in natural medium in form of light waves that are analog in nature.

Q4 Define video camera?

A4 It is a transducer used to convert light waves into electrical signals.

Q5 What is function of video camera?

A5 It is used as input device for capturing video data.

Q6 What is function of video editor?

A6 The video editor used to cut and paste video sequence add special features and create new video sequence from existing video sequence.

Q7 What are software requirements for video?

A7 1. Video clips: It is a library of video clips, One can select and import a video clip directly from his library for use in multimedia application.

2. Recording and playback: It enables user to control reading and display of video sequence.

Q8 what are type's camera tube?

A8 The types of camera tube are: 1. 3 tube camera: In this it is broken up into red, green and blue with help of dichroic mirrors and colour filters.

2 tube camera : In this one tube for luminance and the other is used for red, green and blue colours.

Single tube camera : In this system face plate contains very closed spaced strips of R,G,B which acts as colour filter.

Q9 What is need of TV standard?

A9 Scanning of video image is necessary in transmitter and identical scanning in receiver. Due to this perfect exactness required sync and colour bursts are transmitted along with video signal which are separated in receiver to produce scanning signals and subcarrier. On account of this requirements TV signals have to be specified exactly and hence the need of TV standards.

Q10 What are three tube camera?

A10 In this it is broken up into red, green and blue with help of dichroic mirrors and colour filters. These colour beams fall onto faceplate of three monochrome camera tube.