COMPUTER APPLICATION

HUMANITIES

CLASS -XI

INDEX

HERE'S MY DREAM OF TURNING A TEXT BOOK INTO A COMPLETE QUESTIONS & ANSWERS…..THIS NOTE WILL BE UPDATED ON 1ST OF MAY EVERY YEAR.

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COMPUTER APPLICATION-HUMANITIES

Chapter 1

FUNDAMENTALS OF COMPUTER

The word computer comes from the word "compute" which means to calculate. Charles Babbage is known as the father of Computer.

Qn 1) Define computer   **(March 2017)**

Ans: Computer is an electronic device that operates upon information or data according to a set of instructions.

Data and Information

Qn 2) What is data ?

Ans: Set of raw facts and figures are called data.

Eg: Suresh,17,12

Qn 3) Raw facts and figures are known as…………..   **(March 2016)**

Ans: data

Qn 4) Raw facts and figures which can be processed is called…………………………………   **(July 2017)**

Ans: data

Qn 5) What is information ?

Ans: Processed data is known as information.

Qn 6) Write an information from the data Suresh, 17, 12

Ans: Suresh aged 17 years is in class 12

Qn 7) Processed data is known as……………………

Ans: Information

Qn 8) Distinguish between data and information   **(March 2017,March 2020)**

Ans:

Data	Information
Raw facts and figures	Processed data
Similar to raw material.	Similar to the finished product
Cannot be directly used.	Adds to knowledge and helps in taking decisions.
Does not give precise and clear sense.	Clear and meaningful.

Qn 9)………………………is used to help people to make decision

Ans: Information

Qn 10) Which of the following help us to make decision   **(Sep 2021)**

i) Data   ii) Information   iii) Knowledge

Ans: Information

Data processing

Qn 11) What is data processing

Ans: The process of converting data into information is called data processing.

Qn 12) Manipulation of data to get information is known as ……………………………

Ans: Data processing

Qn 13) Write down the steps used in data processing   **(Sep 2021)**

Ans: i) Capturing data   ii) Input of data   iii) Storage of data

iv) Processing /Manipulating data   v) Output of information   vi) Distribution of information.

Qn 14) Arrange the following in proper order   **(March 2016)**

Process , Output, Storage , Distribution ,Data Capture, Input

Ans: Data Capture, Input, Storage, Process, Output, Distribution

Qn 15) Third stage of data processing is …………………….

Ans: Storage of data

Qn 16) The last stage of data processing is …………………….

Ans: Distribution of information.

Qn 17) Explain 6 stages of data processing.

Ans: i) Capturing data

This is the first stage of data processing. Data must be captured in some prescribed form.

ii) Input of data

This is the second stage of data processing. Feeding data to the computer for processing is known as input.

iii) Storage of data

This is the third stage of data processing. In many cases, the amount of data given to the computers will be large. The data entry process may take few weeks. In this stage, the entire   data are stored in the computer for processing.

iv) Processing /Manipulating data

This is the fourth stage of data processing.The data stored in computers is retrieved for processing. Various operations like calculation, classification, comparison, sorting, filtering, summarising etc. are carried out as part of processing.

v) Output of information

This is the fifth stage of data processing. The information obtained after processing will be available in this stage.

vi)Distribution of information.

This is the sixth (last) stage of data processing. The information obtained in the output stage is distributed to the beneficiaries.

Qn 18) Feeding data to computer for processing is known as................................   **(July 2019)**

Ans : Input of data

Qn 19) Pick the odd one out and give reason

a) Calculation   b) Storage   c) Comparison   d) Categorization

Ans : Storage

Storage is the third stage of data processing. All others are operations in the fourth stage of data processing.

Four functional units of a computer

Qn 20) Name the four functional units of a computer   **(March 2019)**

Ans: Input unit, Central Processing Unit , Storage Unit, Output Unit

Qn 21) Write the functions of input units in a computer.   **(March 2018, Sep 2021)**

Ans : i) Accepts instructions and data from the outside world

ii) Converts these instructions and data to a form acceptable to the computer

iii) Supplies the converted instructions and data to the computer for processing

Qn 22) Explain the role of CPU in a computer   **(Sep 2021)**

Ans : The CPU is the brain of the computer. In a computer system ,all major computations and comparisons are made inside the CPU. The functions of CPU are performed by three components-Arithmetic Logic Unit(ALU), Control Unit(CU) and Registers.

Arithmetic Logic Unit(ALU):-It performs calculations and logical operations such as comparisons and decision making

Control Unit(CU):It is the central nervous system that manages and co-ordinates all other units of the computer.

Registers: These are temporary storage space in CPU

Qn 23) Write a short note on Storage unit

Ans : There are two types of storage units in computer. They are Primary memory and Secondary memory.RAM and ROM are primary memory. Hard Disc ,CD,DVD etc are Secondary Memory.

Qn 24) The functions of CPU are performed by three components: ALU,CU and....... **(March 2020)**

a)RAM   b) Registers   c) ROM   **Ans :** Registers

Qn 25)………………is the temporary storage place in CPU

Ans : Registers

Qn 26) Write the role of control unit in a computer   **(July 2018, Dec 2020)**

Ans : It is the central nervous system that manages and co-ordinates all other units of the computer.It invokes the other units to take charge of the operation they are associated with.

Qn 27) Identify the unit that manages and coordinates the functioning of different units of a computer. **(Sept 2016)**

a) ALU   b) Control Unit   c)   Input Unit   d) Output Unit.   **Ans :** Control Unit

Qn 28) Write the functions of output units in a computer.

Ans : i) Receives the results produced by the CPU in coded form.

ii)Convert these coded results to human-readable form

iii)Supplies the results to the outside world.

Qn 29) Briefly explain the functional units of a computer   **(Jan 2022)**

Ans : Refer 21,22,23,26,28

Characteristics of computers

Qn 30) List the characteristics of computers

(July 2017,March 2017, March 2020, Jan 2022, Sep 2021, Dec 2020)

Advantages	Limitations
Speed: A computer can perform millions of operations in a second or in fraction of second	Lack of IQ: It possess no intelligence of its own. It's IQ is zero.A computer does not have natural intelligence as human have.
Accuracy: A computer can perform arithmetic operations with very high degree of accuracy.	
Diligence: Since computer is a machine ,it can operate for long hours untiringly. Unlike human beings it will not show any emotions or disobedience	
Versatility: It can be used to perform many different kinds of processing tasks.	Lack of decision making power:Computer cannot decide on its own.
Huge memory: Computer has enormous memory capacity. Huge volume of data can be stored in computer memory.	

Qn 31) "Computers are slaves ,humans are masters ".Do you agree with this? Give reasons by comparing its advantages and limitations.   **(March 2016)**

Ans : Refer Qn 30

Qn 32) Write any three features of computer that makes it superior to human beings in data processing   **(July 2019)**

Ans : Refer Qn 30

Qn 33) Who proposed the model of modern computers?   **Ans :**John Von Neumann

Number Systems

Qn 34) What is number system   **(March 2018)**

Ans :A number system is a systematic way to represent numbers. All number system have their own symbols or digits.

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Different Number Systems

Qn 35) Name the number systems associated with computers   **(March 2018,Dec 2020)**

Ans : Decimal number system, Binary number system, Octal number system, Hexadecimal number system

I)Decimal number system

Qn 36) Write a short note on Decimal number system

Ans : We use the decimal number system in our daily life. It uses 10 symbols (digits).They are 0,1,2,3,4,5,6,7,8,9. So its base is 10.

MSD & LSD

Qn 37) Expand MSD

Ans : Most Significant Digit

Qn 38) Expand LSD

Ans : Least Significant Digit

Qn 39) Write MSD and LSD in 5876   **Ans :** MSD = 5 , LSD = 6

Qn 40) Write MSD and LSD in 249.367   **Ans :** MSD = 2 , LSD = 7

II) Binary number system

Qn 41) Write a short note on binary number system

Ans : We use binary number system in computer. It uses 2 symbols (digits).They are 0,1. So its base is 2.

Eg: $(1001011)_2$

Qn 42) Define the term bit

Ans : Each digit of a binary number is called bit. A bit stands for binary digit.

III) Octal number system

Qn 43) Write a short note on Octal number system

Ans : It uses 8 symbols (digits).They are 0,1,2,3,4,5,6,7. So its base is 8.

Eg: $(5016)_8$

IV) Hexadecimal number system

Qn 44) Write a short note on Hexadecimal number system   **(July 2017)**

Ans : It uses 16 symbols (digits).They are 0,1,2,3,4,5,6,7,8,9,A,B,C,D,E,F. So its base is 16. The symbols A,B,C,D,E,F are used to represent the numbers 10,11,12,13,14,15 respectively.

Eg: $(8A6E)_{16}$

Qn 45) The number of symbols used in Hexadecimal number system is...........   **(March 2019)**

Ans : 16

Qn 46) Which of the following is an invalid number   **(Jan 2022)**

i)$(10011)_2$ ii)$(279)_8$ iii)$(1010)_{10}$ **Ans :** $(279)_8$

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Qn 47) Name any two number systems and their base   **(Jan 2022)**

Ans :i) Decimal number system, Base =10   ii) Binary number system,   Base = 2

iii) Octal number system , Base = 8   iv) Hexadecimal number system ,   Base =16

Qn 48) Apart from the ordinary number system we use, there are other number systems .Explain any two.   **(Sept 2016)**

Ans : Refer Qn 41,43,44

Representation of Numbers in Memory

 Qn 49) What are the different methods of representing numbers in memory.   **(July 2018)**

Ans : There are three methods for representing an integer number in computer memory. They are

i)Sign and magnitude representation   ii) 1's complement representation

iii)2's complement representation.

Representation of Characters

Qn 50) What are the different methods of representing characters in memory.   **(July 2018)**

Ans :ASCII, EBCDIC, ISCII, Unicode

Qn 51) Write any two character coding systems   **(Jan 2022)**

Ans :ASCII, EBCDIC, ISCII, Unicode

ASCII

Qn 52) Write a short note on ASCII

Ans : ASCII stands for American Standard Code for Information Interchange. It is a 7 bit code(7 bits to represent each character in computer memory). A unique integer number is assigned to each character. This number is called ASCII code of that character. It is capable of encoding 128 characters.

Note: New version of ASCII is ASCII-8. It is a 8 bit code. It is capable of encoding 256 characters.

EBCDIC

Qn 53) Write a short note on EBCDIC

Ans :EBCDIC stands for Extended Binary Coded Decimal Interchange Code. It is a 8 bit code. It is capable of encoding 256 characters.

ISCII

Qn 54) Write a short note on ISCII

Ans : ISCII stands for Indian Standard Code for Information Interchange. It is an encoding scheme for representing various writing systems of India. It is a 8 bit code .It is capable of encoding 256 characters.

Unicode

Qn 55) Briefly explain the significance of Unicode in character representation

(March 2016, July 2019)

Ans : It is a 16 bit code. It is capable of encoding 65536 characters.It is used to represent all characters of written languages of the world.

Qn 56) Name the coding system that can represent characters in almost all human languages.

(Sept 2016, July 2018)

Ans : Unicode

Qn 57) Which character representation encodes the characters of almost all languages?

(Dec 2020)

a) ASCII   b) ISCII   c) UNICODE   **Ans :** UNICODE

Qn 58) Which one of the following numeric coding system uses 16 bit representation

(March 2017)

a)ASCII   b) EBCDIC   c) ISCII   d) Unicode   **Ans :** Unicode

Qn 59) EBCDIC stands for........   **(March 2018, Sep 2021)**

Ans : Extended Binary Coded Decimal Interchange Code

Qn 60) ASCII stands for...........   **(Sep 2021)**

Ans : American Standard Code for Information Interchange

Qn 61) ISCII stands for........

Ans : Indian Standard Code for Information Interchange

Qn 62) Write notes on any three character representation codes.   **(March 2019)**

Ans : Refer Qn 52,53,54,55

Qn 63) Compare ASCII and Unicode .   **(March2020)**

Ans : Refer Qn 52, 55

Chapter 2

COMPONENTS OF THE COMPUTER SYSTEM

A computer has two major components -hardware and software.

Hardware

Qn 1) Define hardware

Ans: The physical equipments and components which one can see, touch and feel in a computer system are called hardware.

Various hardware components

1. Processors

CPU is called processor. Registers are storage locations inside CPU. They are temporary storage areas in CPU .

Important registers inside a CPU

Registers	Uses
Accumulator	It is a part of ALU. Results of arithmetic and logical operations are stored in accumulator.
Memory Address Register (MAR)	It stores the address of a memory location to which data is either to be read or written by the processor.
Memory Buffer Register (MBR)	It holds the data, either to be written to or read from the memory by the processor.
Instruction Register (IR)	The instructions to be executed by the processor are stored in the instruction register.
Program Counter(PC)	It holds the address of the next instruction to be executed by the processor.

Qn 2) Write the functions of the following register   **(March 2016)**

Accumulator, instruction register, program counter

Ans: Refer the above table

2. Motherboard

All the components of the computer like processor ,RAM, ROM,graphic card etc. are connected to the motherboard. Motherboard is a large Printed Circuit Board(PCB).

3)Peripherals and ports

Qn 3) What is Peripherals ?

Ans: Peripheral are devices that are attached to a computer system to enhance its capabilities.

Qn 4) What is the use of Ports on the motherboard

Ports on the motherboard are used to connect external devices.

Different ports and their uses.

Port name	Uses
Serial port	It transmits data one bit at a time. In older computers devices such as modem, mouse or keyboard were connected through serial ports.
Parallel port	Parallel ports can transmit several bits of data simultaneously. It is used to connect a printer or scanner to the computer.
USB Port	It provides high speed data communication between devices. It is used to connect keyboard, mouse, printer, scanner ,external hard disk etc to the computer.
LAN port	It allows a computer to connect to a network using a wired connector like Jack RJ45.
PS/2 port	It is used to connect keyboard and mouse to the computer.
Audio Ports	It is used to connect audio devices like speaker ,microphone, etc. There are three types of audio ports. They are line in ,line out, Mic in
Video Graphics Array (VGA) Port	It is used to connect a monitor or a projector to a computer.
High Definition Multimedia Interface(HDMI) Port	It is used to connect cable of high definition video to a computer.
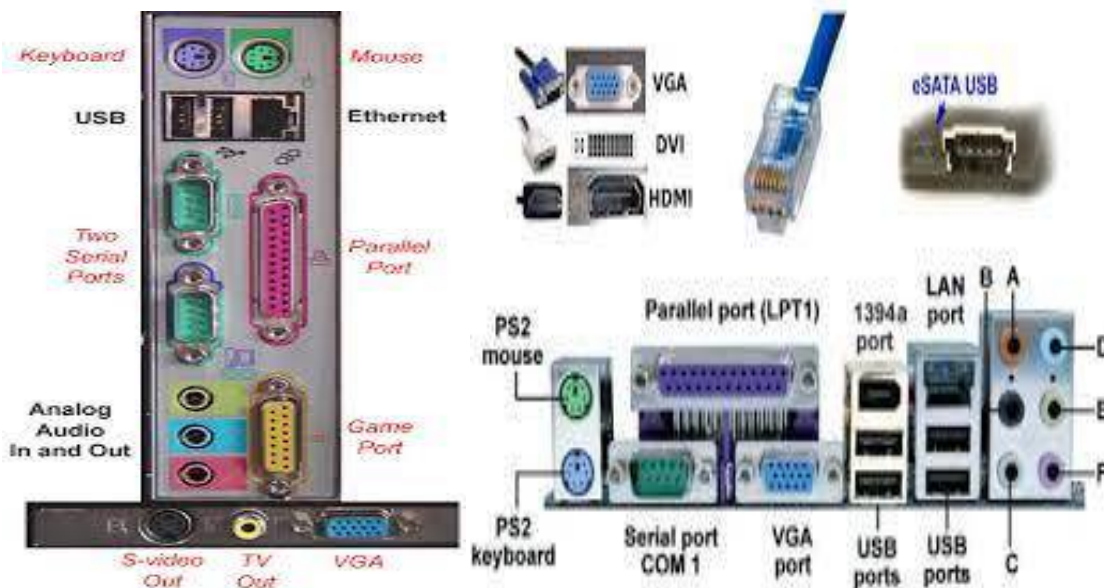
Qn 5) Ports on the motherboard are used to connect external devices .Explain about any three types of ports. **(July 2019)**

Ans: Refer the above table

Qn 6) Write any two ports in motherboard **(Jan 2022)**

Ans: Refer the above table

4. Memory

There are two kinds of computer memory .They are primary memory(main memory) and secondary memory(auxiliary memory).

Different memory measuring units

Binary Digit	= **1** Bit	1 KB (Kilo Byte)	= **1024** Bytes
1 Nibble	= **4** Bits	1MB (Mega Byte)	= **1024** KB
1 Byte	= **8** Bits	1GB (Giga Byte)	= **1024** MB
		1 TB (Tera Byte)	= **1024** GB
		1 PB (Peta Byte)	= **1024** TB

Sample question from the above table

Qn 7) 1KB=………Bytes **(March 2016)**

   a) 1024   b) 1000   c) 1014   d) 1054   **Ans:** 1024

Qn 8) Expand HDMI   **Ans:** High Definition Multimedia Interface

Primary memory

There are three types of primary memory .They are RAM(Random Access Memory), ROM(Read Only Memory) and Cache memory

Qn 9) Mention any two uses of primary memory **(Sep 2021)**

Ans: Primary memory(main memory) is the component of the computer that holds data,programs and instructions that are currently in use.Primary memory is located on the motherboard.As a result,data can be read from and written to primary storage extremely quickly.

Qn 10) Differentiate RAM and ROM

Ans:

RAM	ROM
It is faster than ROM.	It is a slower memory.
It stores the operating system, application programs and data when the computer is functioning.	It stores the program required to boot the computer initially.
It allows reading and writing.	Usually allows reading only.
It is volatile (Its contents are lost when the device is powered off).	It is non-volatile (Its contents are retained even when the device is powered off).

Cache memory

Qn 11) Briefly explain about Cache memory

Ans: Cache memory is a small and fast memory between the processor and RAM.Frequently accessed data ,instructions, intermediate results etc.are stored in cache memory for quick access. Cash memory is more expensive than RAM.

Qn 12) Expand RAM   **Ans:** Random Access Memory

Qn 13) Expand ROM   **Ans:** Read Only Memory

Qn 14) Explain three types of primary memories   **(March 2020)**

Ans: Refer Qn 10, Qn 11

Qn 15) Which one of the following memory is non-volatile   **(March 2017)**

 a) ROM   b) Cache memory   c) RAM   d) All of these   **Ans:** ROM

Different types of ROM

Qn 16) Explain different types of ROM

Ans: PROM:- Programmable ROM can be programmed only at the time of manufacturing .

EPROM:-   Erasable Programmable ROM can be erased using ultraviolet radiation and can be programmed using special electronic circuits.

EEPROM :- Electrically Erasable Programmable ROM which can be erased and rewritten electrically.

Secondary memory or Auxiliary memory

 It is a non- volatile memory.The major categories of secondary memory are magnetic, optical and semiconductor memory.

i.Magnetic storage devices.

Qn 17) Write a short note on Magnetic storage devices

Ans: It uses plastic tape or metal (plastic)disc coated with magnetic materials.

Popular magnetic storage devices

a) Magnetic Tape

It is a recording medium consisting of a thin tape with a coating of fine magnetic material. It is a slower device.

b)Hard disk

Hard disks have very high storage capacity. The hard disk consists of metal disks coated with magnetic material concealed in dust free containers. It contains one or more platters.Data is stored on the surface of a platter in sectors and tracks.

ii) Optical storage devices

Qn 18) Write a short note on Optical storage devices

Optical disc is a data storage medium which uses low- powered laser beam to read from and write data into it .It consists of an aluminium foil sandwiched between two circular plastic disks. Data is written on a single continuous spiral in the form of pits and lands.

Different Optical storage devices

1)CD

There are two type of CD. They are CD - R and CD- RW. In CD - R ,data can be written once and read many times where in CD - RW disks can be erased and rewritten at any time.

2)DVD

The storage capacity of a DVD is higher than the storage capacity of a CD.

3)Blue-ray DVD

Blu-ray is an optical disk format developed to enable recording ,rewriting and playback of High Definition (HD)video as well as storing huge amount of data.CD and DVD technologies use red laser to read and write data while Blu-ray format uses a blue violet laser.

iii)Semiconductor storage flash memory

Qn 19) Write a short note on Semiconductor storage flash memory

Flash drives use EEPROM chips for data storage.Flash memory is faster than other types of secondary memory.

Different types of flash memories

1)USB flash drive

USB flash drives are portable and rewritable.

2)Flash memory cards

It is simply called memory cards. Memory cards have high storage capacity.

Qn 20) Write the names of any two auxiliary memory and their features.   **(March 2020)**

Ans: Refer Qn 17,18,19 (Explain any two-Magnetic storage devices, Optical storage devices, Semiconductor storage flash memory)

Qn 21) Explain any five secondary (auxiliary) memory devices.   **(July 2017)**

Ans: Refer Qn 17,18,19 (Explain any five from Magnetic Tape, Hard disk ,CD,DVD, Blue-ray DVD, USB flash drive , Flash memory cards)

Qn 22) Arrange the following computer memories in ascending order of their speed.

Register, Hard disk, Cache memory,RAM

Ans: Hard disk, RAM, Cache memory, Registers

Qn 23) The fastest memory in a computer is.........

Ans: Registers

Qn 24) Select the odd one out .State the reason.   **(Sept 2016)**

MAR ,RAM ,flash memory card, CD

Ans: MAR. Here MAR is a register in CPU. All others are primary and secondary memories.

5)Input devices

An input device is used to feed data into a computer.

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Pictures of Input devices

Keyboard   **Mouse**   **Light Pen**   **Touch Screen**

Graphic Tablet   **Joystick**   **Scanner**   **Biometric sensor**

Digital Camera   **Microphone**   **OMR Reader**   **Smart card reader**

Barcode reader   **Touchpad**

Different input devices and their uses

Input devices	Description
Keyboard	Keyboard is the most common input device. Keyboard detects the key pressed and generates the corresponding ASCII code which can be recognised by the computer. Wired keyboards and wireless keyboards are available. Standard keyboard has a keyboard layout which is called QWERTY design.
Mouse	Mouse is a pointing device ,that controls the movement of the cursor or pointer on a display screen. This is a hand held device. A mouse has one or more buttons and possibly a scroll wheel.

Light pen	A light pen is a pointing device shaped like a pen.Light pens have the advantage of 'drawing' directly onto the screen. They are used by engineers, artists, fashion designers for Computer Aided Designing (CAD)and drawing purposes
Touch screen	It allows the user to operate by simply touching on the display screen.
Graphic tablet	It consists of an electronic writing area and a special " pen " that works with it. An artist can draw pictures using graphic tablet.
Touchpad	Touchpad is operated by using finger.
Joystick	The joystick like mouse ,is a pointing device that lets the user to select and move objects on the screen.It is used in computer video game.
Microphone	A microphone can be attached to a computer to input sound.
Scanner	Scanners can capture information, like pictures or text, and convert it into a digital format that can be edited using a computer . The quality of the image depends on the resolution of the scanner. The different types of scanners are flat bed ,sheet feed and handheld scanner.
Optical Mark Reader(OMR)	OMR sheets are normaly used to evaluate multiple choice questions in competitive exams. OMR readers can detect marks made by a dark pencil or ink on OMR sheets. An OMR can process thousands of answer sheets in an hour.
Barcode/ Quick Response(QR) code reader	A bar code is a set of vertical lines of different thickness and spacing that represents a number. Barcode reader convert this pattern into a number.They are used in supermarket for identifying the products. A QR code is similar to barcodes. Barcodes are single dimensional where as QR codes are two dimensional.
Biometric sensor	It is an essential component of a biometric system which uses physical features like finger prints , retina, iris patterns etc to identify the user .
Smart card reader	A smart card is a plastic card that stores and transacts data. Smart card readers are used to access data in a smart card.
Digital camera	A digital camera can take pictures and videos and convert them into digital format.

Qn 25) Briefly explain about any five input devices. **(March 2019)**

 Ans: Refer above table

Qn 26) List any two graphic input devices **(Jan 2022)**

Ans: Mouse, Lightpen   (Any Two)

Output devices

Output devices are devices that print/ display output from a computer. Outputs may be hardcopy or soft copy .

I) Visual Display Unit(VDU)   (Monitor)

Different types of monitors are given below

CRT Monitor

LCD Monitor

LED Monitor

Plasma Monitor

OLED Monitor

Qn 27) Explain the different types of monitor available in the market

Ans:

1.Cathode Ray Tube (CRT)monitor

It looks like a television set of the past and works the same way. Two types of CRT monitors are available - monochrome and colour.CRT monitors have some disadvantages- they are heavy ,big and require huge power supply.

2.Flat panel monitor

Flat panel displays are thinner, lighter in weight ,consume less power and emit less heat compared to CRT monitors. Different types of flat panel monitors are LCD Monitors, LED Monitors, Plasma Monitors and OLED Monitors.

a. Liquids Crystal Display (LCD)Monitors

LCD displays consists of liquid crystals sandwiched between two plastic plates. These crystals rearrange to form an image when an electric current is passed through them.

b. Light Emitting Diode (LED) Monitors

LED monitors use LED directly behind the liquid crystal display(LCD) in order to light up the screen. This technology is expensive .The advantage of using LED is better colour quality, clarity, wider viewing angle ,faster refresh rates and power savings .

c. Plasma Monitors

Plasma panels consists of two glass plates separated by a thin gap filled with a gas such as neon. Each plate has several parallel electrodes running across it.Plasma monitors provide high resolution but are expensive.

d. Organic Light Emitting Diode (OLED) Monitors.

The panel of OLED is made up of millions of tiny LEDs. Advantage of OLED monitors - screens are thinner , lighter, produce better quality images , better viewing angles, consume less power. They are very expensive.

Qn 28) Compare CRT and LCD displays   **(Jan 2022)**

Ans: Refer Qn 27

Qn 29) Mr Sudeep has decided to buy a new monitor for his home PC .

Explain the different types of monitor available in the market.   **(July 2017)**

Ans: Refer Qn 27

II) Printer

There are two type of printers. They are impact printers and non impact printers. Impact printer produces sound (noise) during their working. Dot Matrix printer is an impact printer. Inkjet, Laser and Thermal printers are non- impact printers.

Qn 30) Explain the different types of Printers available in the market

Ans:

Features	Laser Printers	Inkjet Printers	Thermal Printers	DotMatrix Printers
Printing material used	Ink powder	Liquid ink	Heat sensitive paper	Ink soaked ribbon
How it prints?	It fuses the powder on the paper through heating	It sprays liquid ink on paper through microscopic nozzles.	Thermal paper is passed over the thermal print head	Pins are pushed against ribbon on paper
Printing speed	20 pages per minute	6 pages per minute	150 mm per second.	30-550 characters per second
Quality	Printing quality is good	Printing quality is good	Poor quality printing of images. Good quality of text printing	Poor quality printing of images. Good quality of text printing
Advantages	Quiet, prints faster, high print quality	Quiet, high print quality, no warm up time, device cost is less	Quiet, fast, smaller, lighter ,consume less power, portable	Cheaper to print. Carbon copy possible
Disdvantages	More susceptible to paper jams. Toner is expensive. Device itself is expensive.	Ink is expensive, ink is not waterproof	Requires special thermal quality paper.Poor quality printing.	Initial purchase is expensive,maintenance is expensive, printing is not fast, makes noise

III) Plotter

Qn 31) Prepare a short note on Plotter

Ans: Plotter is a device that draws pictures on paper based on commands from a computer. Plotters are of two types :Drum plotters and Flatbed plotters.

i)Drum plotter(Roller plotter)

In a drum plotter the paper is mounted on the surface of a rotating drum. Particular coloured pens are used in this floater for drawing graphs.

ii)Flatbed plotter(Table plotter)

In a flatbed plotter ,the paper does not move and the pen -holding mechanism provides the motion that draws pictures. It is very slow in drawing graphs.

Qn 32) What are the two types of plotters?   **(Jan 2022)**

Ans: Drum plotters , Flatbed plotters.

IV) Three dimensional (3D) printer

Qn 33) What is the use of 3D printer

Ans: It is used to print 3D objects like plastic toys, metal machine parts etc.

V) Audio output device

Qn 34) What is the use of audio output device

Ans: The audio outputs is the ability of the computer to produce sound.Speakers are the output device that produces sound.

Qn 35) Explain the different categories of output devices   **(March 2018)**

Ans: Refer Qn 27 ,30,31,33,34

Qn 36) List any three output devices and explain   **(Jan 2022)**

Ans: Refer Qn 27 ,30,31,33,34

Qn 37) Pick the odd one out   **(March 2020)**

a)Printer   b) Plotter   c) Scanner   **Ans:** Scanner

Qn 38) Match the following   **(March 2018)**

	A		B
a)	Registers	i)	Plotter
b)	Port	ii)	Blue Ray DVD
c)	Memory	iii)	VGA
d)	Output Device	iv)	Program Counter

Ans: a……iv   , b……iii , c………ii , d……..i

Qn 39) Categorise the following devices into two. Name each category   **(March 2017)**

Plotter , LCD , Joystick , OMR , DMP, Microphone

Ans:

Input devices	Output devices
OMR	Plotter
Joystick	LCD
Microphone	DMP

Qn 40) Consider the following devices and categorise them according to input, output,and storage devices. **(March 2016)**

Light pen, Flatbed plotter, Drum plotter , Joystick , OMR, Ram, Optical disc, Magnetic disk, MICR, Thermal printer, USB flash drive, Three dimensional (3D)printer

Ans:

Input devices	Output devices	Storage devices
Light pen	Flatbed plotter	Ram
Joystick	Drum plotter	Optical disc
OMR	Thermal printer	Magnetic disk
MICR	Three dimensional (3D)printer	USB flash drive

Qn 41) Categorize the following devices and explain the usage **(Sept 2016)**

QR Code Reader, Biometric sensor, Flat bed plotter, 3D printer, Digital camera

Ans:

Input devices	Output devices
QR Code Reader	Flat bed plotter
Biometric sensor	3D printer
Digital camera	

For explanation Refer:Qn:22,29

e-Waste (Electronic waste)

Qn 42) What is e-waste? **(Dec 2020)**

Ans: e-waste refers to electronic products like computers, mobile phones,televisions,office electronic equipents, refrigerators etc nearing the end of their " useful life".

Qn 43) "E-waste management is very important for the existence of future generations". Justify the above statement.Substantiate your answer with relevant facts. **(Sept 2016)**

Ans: e- waste is not just waste.It contains some very toxic substances, such as mercury, lead, cadmium etc. The toxic materials can cause cancer, reproductive disorders and many other health problems , if not properly managed.

Qn 44) Explain the commonly used e -Waste disposal methods **(July 2018, Sep 2021, Dec 2020)**

Ans:

 i) Reuse

It refers to second - hand use or usage after the equipment has been upgraded or modified.

ii) Incineration

e -waste is burned in specially designed incinerators at a high temperature.

iii) Recycling of e- waste

Recycling is the process of making new products from e- Waste.

iv) Land filling

In this method soil is excavated from the trenches made and e- waste is buried in it,which is covered by a thick layer of soil.

Qn 45) Briefly explain any three e -Waste disposal methods.

(March 2016,March 2020, Jan 2022)

Ans: Refer 44

Qn 46) Due to safety reasons e-waste should never be handled carelessly .Suggest the ways to dispose e -waste safely.   **(July 2019)**

Ans: Refer 44

Qn 47) Write the role of student in disposing e-waste.   **(Dec 2020)**

Ans: i) Stop buying unnecessary electronic equipments.

2) When electronic equipments get faulty try to repair it instead of buying a new one.

3) Try to recycle electronic equipments by selling them or donating them to others.

4) Visit the manufacturer's website to find out if they have a take back scheme for your discarded electronics.

5) Buy products with good warranty and take back policies.

Green computing or Green IT

Qn 48) Define green IT

Ans: Green computing is the study and practice of environmentally sustainable computing or IT.

Qn 49) The 'Energy Star ' program is related to ....

 a) e-Waste b) Hardware Maintanence c) Green IT d) KSEB   **Ans:** Green IT

Qn 50) Write any four methods used to promote Green Computing   **(Dec 2020)**

Ans: Green design   , Green manufacturing   , Green use   , Green disposal

Qn 51) List and explain the approaches that you can adopt to promote Green computing concepts at all possible levels.

Ans:)

i) Green design

Designing energy -efficient and eco-friendly computers and other digital devices.

ii) Green manufacturing

Minimising waste during the manufacturing of computer and other components.

iii) Green use

 Minimising the electricity consumption of computers.

iv) Green disposal

Reconstructing used computers or appropriately disposing off or recycling unwanted electronic equipment.

Qn 52) As a supporter of Green computing /IT ,what type of monitor will you suggest for him?

Justify   **(July 2017)**

Ans: Refer Qn 27, Explain LED or OLED

Qn 53) Anitha wants to buy a flat panel monitor. What are the different types of flat panel monitors ?Explain any two.   **(Sept 2016)**

Ans: Refer Qn 27

Software

Qn 54) Define Software

Ans: Software is a set of programs to perform a desired and useful work by a computer.

There are two types of software. They are system software and application software.

1. System software

Qn 55) Write a short note on System Softwares

Ans: It is a set of programs which are written for the system to manage its resources and control its operations. There are three types of system softwares. They are operating system , language processor and utility software.

a) Operating system

Qn 56) Define the term operating system   **(March 2016, July 2017, Sep 2021)**

Ans: Operating system is a set of programs that acts as an interface between the user and the computer hardware.

Qn 57) System software and Application software are the two types of softwares.

Name the system software that acts as an interface between user and the hardware.   **(July 2019)**

Ans: Operating system

Qn 58) List and explain the major functions of operating system.

(March 2016, July 2017, Jan 2022)

Ans: i) Process management

The process management module of an operating system takes care of the allocation and de allocation of processes and scheduling of various system resources to the different requesting processes.

ii) Memory management

It calculates how much memory is to be allocated to each process and allocates it. It de-allocates memory, if it is not needed further.

iii) File management

It takes care of file related activities.

iv)Device management

It performs the management of devices attached to the computer.

Qn 59) Write any two major functions of an operating system   **(March 2019, Sep 2021)**

Ans: Refer Qn 58

Qn 60) Write the name of any five operating systems

Ans:DOS, Windows, Unix, Linux, Mac OS X

b) Language processor

Qn 61) Why we need language processors?   **(March 2017)**

Ans: Language processors are the system programs that translate programs written in high level language or assembly language into its equivalent machine language.We need language processors to convert program into machine language ,as computer can only understand machine language.

Machine language

Qn 62) Write a short note on Machine language

Ans:A computer can understand only machine language. This language uses binary digits 0 and 1 only.

Assembly language

Qn 63) Write a short note on Assembly language

Ans: Assembly languages use mnemonics.Mnemonic is a symbolic name given to an operation.For example ADD for addition operation ,SUB for subtraction operation etc.

High Level Language

Qn 64) Write a short note on high level language(HLL)

Ans: These are like English languages and are simpler to understand than the assembly language or machine language. BASIC, C, C++, Java are examples of high level programming languages.

Qn 65) Distinguish between source program and object program

Ans: The programs written in assembly language and high level languages are called source programs and the translated version of the source programs are called object programs.

Qn 66) Write the name of different type of language processors

Ans: Assembler, Interpreter,Compiler

Qn 67) Explain the different types of language processors.   **(March 2017)**

Assembler

Assembler is a language processor which is used for translating the program code written in assembly language to machine language.

Interpreter

It converts a HLL program into machine language line by line. If there is an error in one line ,it reports and the execution of the program is terminated.It will continue the translation only after correcting the error.The execution of the program requires both the source program and the interpreter.

Compiler

It translate a program written in high level language into machine language by converting all the lines at a time. The errors are provided at the end of the compilation. If there are no errors, the compiler will generate an object program. Translation using compiler is called compilation.The execution of the object program requires neither the source program nor the compiler.

Qn 68) Differentiate Interpreter and Compiler.   **(March 2020, Sep 2021)**

Ans: Refer 67

Qn 69) Compare the language processors assembler and compiler.   **(July 2019)**

Ans: Refer 67

Qn 70) Pick the odd one out   **(Jan 2022)**

i) Assembler   ii)Compiler.   iii) Compressor   **Ans:** Compressor

c) Utility software

Qn 71) What is utility software?   **(Dec 2020)**

Ans:A set of programs which help users in system maintenance tasks and in performing tasks of routine nature.

Some of the utility programs are given below

Qn 72) Name four utility software   **(Dec 2020)**

Ans: Compression tools , Disk defragmenter , Backup software , Antivirus software

Qn 73) List and explain utility programs with examples

1. Compression tools

Large files can be compressed so that they take less storage area.

Eg: WinZip, WinRAR

2.Disk defragmenter

Disk defragmenter is a program that rearranges files on a computer hard disk.

3.Backup software

 Backup means duplicating the disk information so that in an event of disk failure or in an event of accidental deletion ,this backup may be used .Backup utility programs facilitates the backing up of disk.

4.Antivirus software

A computer virus is a program that causes abnormality in the functioning of a computer.Antivirus software is a utility program that scans the computer system for viruses and removes them.

Eg: Norton Antivirus, Kaspersky

Qn 74) Match the following   **(July 2017)**

A	B
a) Joystick	i) Plastic cups
b) DVD	ii) Magnetic storage

c) Hard disk	iii) Compiler
d) 3D printer	iv) Optical storage
e) Utility software	v) Games
f) Language processor	vi) Antivirus

Ans: a ......v , b......iv , c......ii, d.......i, e.........vi, f.........iii

Application software

Software developed for specific application is called application software.

Qn 75) Write the name of any four application software

Ans: GIMP ,Payroll System, Airline Reservation System,Tally

a . General purpose software packages

Qn 76) List and explain general purpose application software with examples   **(July 2018)**

Ans: i)Word processing software

Word processing software is designed for creating and modifying documents.

Eg: MS Word, Open Office Writer

ii) Spreadsheet software

Spreadsheet software allows users to perform calculations using spreadsheets.

Eg:Microsoft Excel, Open Office Calc, Lotus 1-2-3, Apple Numbers

iii)Presentation software

The software that is used to display information in the form of a slide show is known as presentation software.

Eg:Microsoft Power Point, Open Office Impress

iv)Database software

Database is an organised collection of data arranged in tabular form.Data Base Management System (DBMS)consists of a collection of interrelated data and a set of programs to access those data.

 Eg: DBMS softwares are Microsoft Access,Oracle,PostgreSQL,My SQL

iv)Multimedia software

Multimedia is the integration of multiple forms of media. This includes text , graphics ,audio, video etc. Eg: VLC Player, Adobe Flash, Real Player etc

Qn 77) Explain any two types of general purpose application software.   **(July 2019)**

Ans: Refer Qn 76

Qn 78) Categorize the given below in the operating system, application packages, utility software and language processor.   **(July 2018)**

(Linux, Tally ,WinZip ,MS -Word,Windows,MS -Excel ,Interpreter.)

Ans:

Operating system	Application packages	Utility software	Language processor
Linux	Tally	WinZip	Interpreter
Windows	MS -Word		
	MS -Excel		

b. Specific purpose software (Customised software)

Specific purpose software (customised software) is a highly specialised software designed to handle particular tasks .

Qn 79) Write the name of any three specific purpose software (customised software)

Ans: Payroll System, Inventory Management System, Human Resource Management System.

Free and open source software

Qn 80) Explain free and open source software   **(Sep 2021)**

Ans: Free and open source software gives the user the freedom to use, copy ,distribute,examine, change and improve the software.

Qn 81) Classify or match the following softwares.   **(March 2016)**

a) System software	i) Operating system	1) Kaspersky
b) Application software	ii) Specific purpose	2) WinZip
	iii) Utility software	3) Windows
	iv) General purpose software	4) Compiler
	v) Language processor	5) Payroll

Ans: a…..i……..3 ;   a……..iii…….1 ; a……..iii…….2 ;   a………v……….4 ;

b….. ii……..5;   b……….iv

Qn 82) Match the following   **(March 2019)**

A		B	
a)	Application software	i)	Winzip
b)	Utility software	ii)	Unix
c)	Operating System	iii)	Calc

Ans: Application software ……… Calc ,   Utility software……….. Winzip ,   Operating System…. Unix

Four freedom in open software

The Free Software Foundation(FSF) define the four freedom for free and open source software.

Qn 83) Define the freedom which given to user that make up a free software   **(Sept 2016)**

Ans: Freedom 0   :The freedom to run program for any purpose.

Freedom 1 :The freedom to study how the program works and adapt it to your needs. Access to source code should be provided.

Freedom 2 : The freedom to distribute copies of the software.

Freedom 3 :The freedom to improve the program and release your improvements to the public, so that the whole community benefits.

Qn 84) Briefly explain any three freedom in open software   **(March 2018)**

Ans: Refer Qn 83

Qn 85) Which freedom permits to distribute copies of the software?   **(Dec 2020)**

 a) Freedom 3   b) Freedom 2   c) Freedom 0   **Ans:** Freedom 2

Qn 86) Write any four examples of free and open source software.

Ans: 1. GNU/LINUX: It is an Operating System introduced by Richard Stallman.

2.GIMP: It is an image editing software.

3.Mozilla Firefox: It is a web browser created by the Mozilla Corporation.

4.OpenOffice.org: It is a complete office package works on both Linux and Windows platforms.

Qn 87) Give an example of free and open source software   **(Sep 2021)**

Ans: GNU/LINUX , GIMP, Mozilla Firefox, OpenOffice.org (Any one)

Freeware and shareware

Qn 88) Differentiate between freeware and shareware

Freeware	Shareware
It can download from the Internet and use for free.	Shareware give users a chance to try the software before buying it.
All the features are free.	All features are not available.
It can be distributed free of cost.	It may or may not be distributed freely.

Qn 89) Prepare a short note on   a) Freeware.   b) Shareware   **(March 2020)**

Ans: Refer Qn 88

Qn 90) What is meant by proprietary software.

Ans: Proprietary software is a computer program that is an exclusive property of its developer or publisher and cannot be copied or distributed without licensing agreements.

 Eg: Windows operating system.

Humanware or Liveware

Qn 91) What do you mean by humanware and write their names.

Ans: Humanware or Liveware refers to humans who use computer.

Different humanwares are:-

System Administrators, System Managers, System Analysts, Database Administrators, Computer Engineers ,Computer Programmers, Computer Operators.

Qn 92) Define the following: **(Dec 2020)**

 a) Freeware   b) Share-ware   c) Human or live-ware   **Ans:** Refer Qn 88,91

Chapter 3

DATA PROCESSING WITH ELECTRONIC SPREAD SHEET

Qn 1) Define electronic spreadsheet

Ans: The software package for processing numbers and characters in tabular form is generally known as electronic spreadsheet.

Qn 2) Write down the features of an electronic spreadsheet   **(Sep 2021)**

Ans: 1) Store large volume of data in tabular form.

2) Carries out numeric calculations, comparisons and analysis using formulae and functions.

3) Automatically updates results, if any change is made in the related data.

4) Provides text formatting features like alignment, borders, merge cells, font setting etc.

5) Offers facilities like sorting, filtering, etc.

6) Creates charts for graphical data analysis.

Qn 3) List any three major features of an electronic spreadsheet.   **(March 2016)**
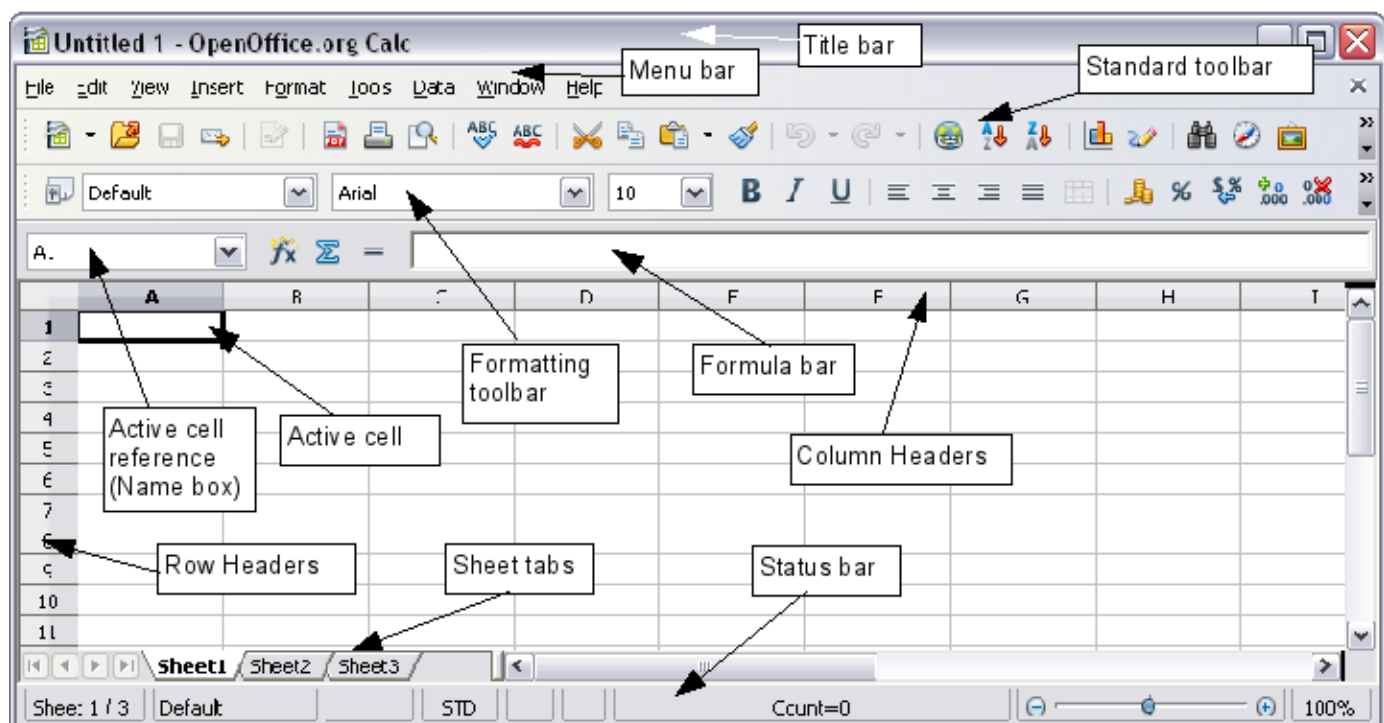
Ans: Refer Qn 2

Qn 4) Name different spreadsheet packages

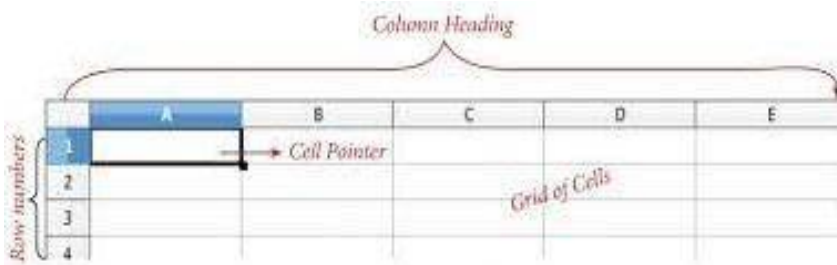**Ans:** Lotus 1-2-3, Quattro Pro, Microsoft Excel, Open Office Calc.

OpenOfice Calc

In LINUX operating system, we can open the spreadsheet LibreOffice Calc using the command sequence Application ⟶ Office ⟶ LibreOffice Calc

Let us see how a worksheet looks like.

Spreadsheet basics

Rows and Columns

Qn 5) Write a short note on rows and columns in a Spreadsheet

Ans: Below the formula bar contains the worksheet of work area which consist of cells. The worksheet has number of rows and columns,where each column is labelled as A,B,C,D..........AA,AB,AC....... and the rows are numbered from 1,2,3.......

Cell

Qn 6) Write a short note on cells in a Spreadsheet

Ans: Intersection of each row and column makes a box which is called as "Cell".Each cell has a unique address. Cell address is the combination of column heading and row number. For example, the intersection of column A and row 5 makes a cell A5.

Cell pointer is the dark rectangular box which can be moved anywhere in the worksheet. The cell in which the cell pointer is currently located is known as "Active cell". When you type any content, it will appear in the active cell.

Range

Qn 7) Write a short note on range in a Spreadsheet

Ans: Range is a group of adjacent cells that form a rectangular area. The smallest range is a single cell and the largest range is the entire worksheet. Range has an address.

Eg: B3:E10, where B3 is the starting cell , E10 is the ending cell and **:** is the range indicator.

Qn 8) How will you define a range of cells in a worksheet **(Jan 2022)**

Ans: Range is a group of adjacent cells that form a rectangular area.

Qn 9) Define cell and range in worksheet **(Sep 2021)**

Ans: Intersection of each row and column makes a box which is called as "Cell".

Range is a group of adjacent cells that form a rectangular area.

Qn 10) In a worksheet .... is formed when a row meets a column.

Ans: Cell

Qn 11) ....is a group of adjacent cells that form a rectangular area.

Ans: Range

Qn 12) ....is the address of the cell at the point of intersection of column D and the third row

Ans: D3

Qn 13) In a worksheet, D10:H25 is called a ....   **Ans:** Range

Qn 14) The cell having a bold boundary is the ....cell

 a) first   b) last   c) current   d) next   **Ans:** Current

Qn 15) The smallest range in a worksheet is.................   **Ans:** Cell

Qn 16) .... is the smallest unit of worksheet in spreadsheet**.**   **(Sept 2016)**

Ans: Cell

Qn 17) The largest range in a worksheet is....................   **Ans:** Entire worksheet

Qn 18) The cell address of the very first cell in a worksheet is.........   **(March 2016)**

Ans: A1

Qn 19) The range indicator symbol in Calc is......

Ans: colon **:**

Components of a spreadsheet window

Qn 20) Name the main components of worksheet window   **(July 2018)**

Ans: 1. Title bar   2. Menu bar   3. Tools bars   4. Formula bar   5. Sheet tab   6.Status bar

Qn 21) Write two components of a spreadsheet window   **(Jan2022)**

Ans: Refer Qn 20

Qn 22) Explain the main components of worksheet window   **(July 2018)**

Ans: 1. Title bar

The top of the window is the "Title Bar". It is used to show the name of the file and name of the application. In OpenOffice calc , the default name for the first unsaved worksheet is " Untitled1". When you save the file, Untitled1 will change to the name in which you saved.

2. Menu bar

The menu bar is at the bottom of the title bar. It contains menu options like   File, Edit, View , Insert etc. Each menu item has a pull down option list.

3. Tools bars

Under the menu bar,there are two toolbars available by default.They are:-Standard toolbar and Formatting toolbar. A standard toolbar consists of icons for save , cut , copy, paste ,print etc. A formatting toolbar consists of icons for changing font, style , size, alignments etc.

4. Formula bar

This is a very important element in a spreadsheet .It contains Name box , Function Wizard ,Sum button, Function button and Input line.

Name box: It display the current cell address

Function wizard: It is used to insert built- in function in to the spreadsheet

Sum button:It is used to quickly insert sum function

Input line: This is used to show the contents of the current cell .It always shows actually what you typed in a cell .It is also used to edit the contents.

5. Sheet tab

At the bottom of the grid of cells are the sheet tabs. By default there are three sheets "Sheet1",,"Sheet2" and "Sheet3". When you open a new worksheet, sheet1 is the default active sheet. Active sheet tab will appear in white colour. We can insert more sheets into a spreadsheet ,if required. Each sheet consists of many rows and columns.

6.Status bar

Below the Sheet tab is the Status bar.This is a horizontal scrolling bar.

Qn 23) The user can move from one sheet to another in a workbook is done using................of spreadsheet window

Ans: Sheet tab

Qn 24)........................... shows the address of the current cell.

Ans: Name box

Qn 25) By default ,.......... number of worksheets are present in a workbook

Ans: 3

Qn 26) The shortcut buttons of important commands are available in......**(March 2018, Dec2020)**

 a) Menu bar   b) Tool bar   c) Status bar

Ans: Tool bar

Entering data in a worksheet

Qn 27) What are the different methods used to edit data in a Cell

Ans: Select the cell and Click   F2   or   Double click in the cell   or   Select the cell and use input line box

The following are the different types of data that can be entered in a Cell

Qn 28) Write the types of data that can be entered in a cell   **(Jan 2022)**

Ans: Numbers ,   Text , Date and time   , Formula

a. Numbers

Qn 29) Write a short note on number data type   in a Spreadsheet

Ans: Worksheets are mainly used for entering and manipulating numeric data. By default, numbers are right aligned.To enter a negative number either type a minus sign to the left of it or enclose it in parentheses.

Qn 30) Another way to enter the number -55 in a cell is.....................

Ans: (55)

Qn 31) The default alignment of the numeric data entered in a Cell is............

Ans: Right

b.Text

Qn 32) Write a short note on text   data type in a Spreadsheet

Ans: Texts are alphanumeric data entered in a worksheet. By default,   text is left -aligned in a cell. To enter a number as text , put a single quote(') to the left side of the number.

Qn 33) The default alignment of the text data entered in a cell is......................

Ans: Left

Qn 34) To enter a number as text, put.............. symbol to the left side of the number.

Ans: Single quote **'**

c. Date and time

Qn 35) Write a short note on date and time data type in a Spreadsheet

Ans: The date elements can be separated using a slash(/) or hyphen (-). Eg: 12/01/2014

Time elements can be separated using colon (:)

Eg: 10:25:15 AM

Qn 36) Time elements in a cell can be separated using....... **Ans:** Colon (**:**)

d.Formula

Qn 37) Write a short note on formula data type in a Spreadsheet

Ans: A formula is an equation that begins with equal (=) sign. It can contain operators. The commonly used operators are + , - , * , / and ^ (exponentiation). A formula can also contain functions.

Qn 38) Write the formula to calculate the sum of the values of the cells A1 and B1

Ans: = A1 + B1

Qn 39) The symbol used in spreadsheet for exponentiation is...... **Ans:** ^

Working with formula

Qn 40) Write the procedure to calculate 40 % of values of column D in the column E(Given that cell address of the first data in the column D is D3)

Ans: Step1: Select the cell E3

Step2: Enter the formula

= D3 * 40%

Step3: Press Enter key

Step4: Select the cell E3 and move the mouse pointer to the right bottom corner of the cell. Note that the mouse pointer turns to a thin + symbol .Click and drag downwards to copy the formula to other cells.

Qn 41) Given below is a Calc worksheet showing the data of three salesmen **(July 2019)**

	A	B	C	D	E	F
1	Salesman Code	Quarter1	Quarter2	Quarter3	Total Sales	Commission
2	S101	4000	3000	5000		
3	S102	5000	4000	3000		
4	S103	3000	2000	4000		

On the basis of the above data write formulas (in Calc) to do the following:

i) Calculate the total sales of each salesman as sum of his sales for all the three quarters

ii) Calculate commission of each salesman of 10% of total sales

Ans: i)   = B2 + C2 + D2   or   = SUM(B2:D2).

ii) = E2 * 10%   or   = E2*10/100

Qn 42) The following worksheet contains the details of some salesmen and their sales .Write the formulae to calculate: **(Sept 2016)**

	A	B	C	D	E	F
1	Salesman Code	Quarter1	Quarter2	Quarter3	Total Sales	Commission
2	S101	4000	3000	5000		
3	S102	5000	4000	3000		
4	S103	3000	2000	4000		
5	TOTAL					

a) Total sales in any one quarter

b) Total sales of anyone salesman

c) Commission for anyone salesman (10% of sales amount)

 Ans: a)   = B2 + B3 + B4   b)   = B2 + C2+ D2   c)   = E2 * 10%

Saving a spreadsheet

Qn 43) What are the three ways of saving   a   spreadsheet in LibreOffice Calc

Ans : i) File ⟶ Save   **or**   ii) Use the short cut key   **Ctrl + S**   **or**

iii) Use   **Save** button on the standard toolbar

Qn 44) Which short-cut key is used for save a spreadsheet in LibreOffice Calc

 (a) Ctrl + S   (b) Ctrl +F12   (c) Shift + F12

Ans : Ctrl + S

Qn 45) The file extension of Calc worksheet file is…….   **(July 2018)**

Ans :   **.** ods

Qn 46) Write the steps to open   an existing spreadsheet in LibreOffice Calc

Ans : File ⟶ open   **or**   Use the short cut key   **Ctrl + O**

Qn 47) Write the steps to close   a current   spreadsheet in LibreOffice Calc

Ans :   File ⟶ Close

Qn 48) Write the steps to exit a spreadsheet application

Ans : File ⟶   Exit

………...……………...*Lenin Pulickal, Ph:9447823334, GHSS Panickankudy ,Idukki*……..………………

Formatting a spreadsheet

Qn 49) What is meant by formatting a spreadsheet

Ans : The general appearance and arrangement of data in a spreadsheet is known as formatting. Formatting makes the worksheet attractive.
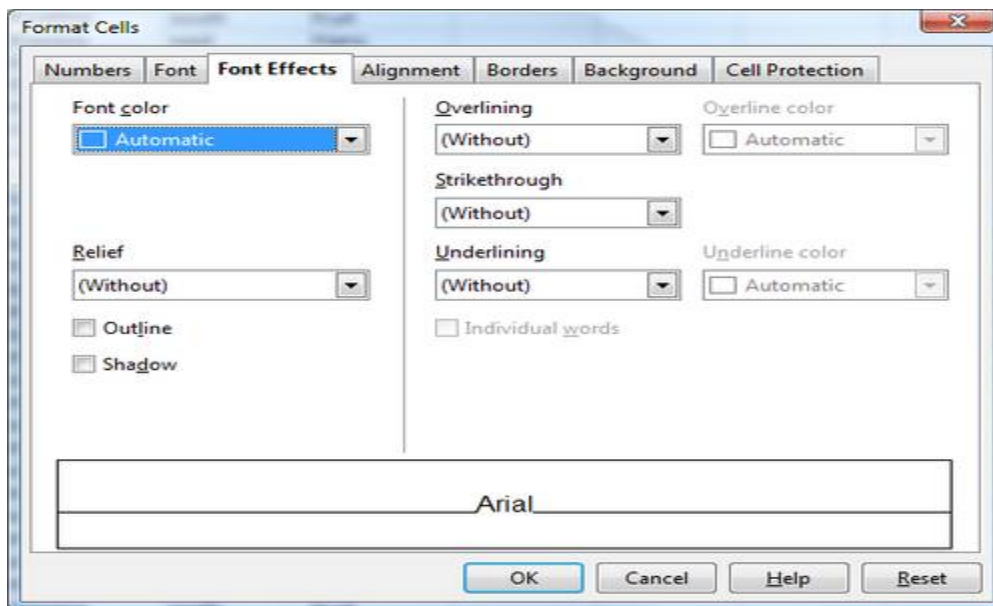
Formatting cells

Qn 50) Write the procedure for formatting cells in a spreadsheet

Ans : Step 1: Format ⟶ Cells

Step 2: Use different tabs in Format Cells dialog box

Note: Different tabs in the Format Cells dialogue box are Numbers , Font, Font Effect , Alignment, Borders ,Background, Cell Protection

Qn 51)   The number formats can be applied to data in the cells using the ....tab of the Format Cells dialogue box.   **Ans :** Number

Qn 52) .... tab of Format Cells dialog box is used to change the font face ,size and style of a cell or a range of cells.   **Ans :** Font

Qn 53)..............tab of Format Cells dialog box is used to make effects like font colour, underline, overline ,strikethrough and shadow.   **Ans :** Font Effects

Qn 54) The contents in a cell can be aligned both horizontally and vertically using the.............tab of Format Cells dialog box.   **Ans :** Alignment

Qn 55) The......... tab is used to set the borders , its style and colour.   **Ans :** Borders

Qn 56) A shadow can be given to cells using the ....option in the Borders tab

Ans : Shadow Style

Qn 57) A background colour can be given to a cell using the ....tab of Format Cells dialog box.

Ans : Background

Qn 58) A background colour set in a cell can be removed by selecting the ....option in Background tab of Format Cells dialog box   **Ans :** No Fill

Formatting columns

Qn 59) Write the step for 'formatting column' in LibreOffice Calc

Ans : Format ⟶ Column

Note:The different options in the Column submenu helps to set the column Width, Optimal Width, Hide or Show columns.

Qn 60) Write the steps to set the width of a Column in spreadsheet

Ans :1. Select the required column

2 Format ⟶ Column ⟶ Width

3. Click OK button

Qn 61)   Write the use of Optimal Width option in the submenu Column

Ans : The Optimal Width option is used to resize the width of the column to the minimum required width that suits the contents of the selected cell.

Qn 62) Write the steps to set the optimal width of a Column in spreadsheet

Ans : 1. Select the required column

2. Format ⟶ Column ⟶ Optimal width

3. Click OK button

        Or

Instead of the three steps above-

Double click on the right border of the required column header.

Qn 63) How can you hide a column in a spreadsheet

Ans : 1. Select any cell in the column to be hide

2. Format ⟶ Column ⟶ Hide

Qn 64)   How to displays a hidden column in a spreadsheet

Ans : 1. Select the adjacent columns of the hide column

2. Format ⟶ Column ⟶ Show

Formatting rows

Qn 65) Write the step for 'formatting rows'   in LibreOffice Calc

Ans : Format ⟶ Row

Qn 66) Write the steps to set the height of a row in spreadsheet

Ans : 1. Select the required row

2 Format ⟶ Row ⟶ Height

3. Click OK button

Qn 67) Write the use of Optimal Height option in the submenu Row

Ans : The Optimal Height option is used to resize the height of the row to the minimum required height that suits the contents of the selected cell.

Qn 68) Write the steps to set the optimal height of a row in a spreadsheet

Ans : 1. Select the required row

2. Format ⟶ Row ⟶ Optimal Height

3. Click OK button

     Or

Instead of the three steps above-

Double-click on the bottom border of the required row header.

Qn 69) How can you hide a row in a spreadsheet

Ans : 1.Select any cell in the row to be hide

2. Format ⟶ Row ⟶ Hide

Qn 70) How to displays a hidden row in a spreadsheet

Ans : 1.Select the rows above and below the hidden row

2. Format ⟶ Row ⟶ Show

Formatting sheets

Qn 71) Write the step for 'formatting sheets' in LibreOffice Calc

Ans : Format ⟶ Sheet

Qn 72) Write the steps to rename a worksheet in a spreadsheet

Ans :1. Format ⟶ Sheet ⟶ Rename
2.Click OK Button

       OR

Right click on the sheet name in the sheet tab and use the rename option

Qn 73) How can you hide a work sheet in a spreadsheet

Ans : 1.Select the worksheet in the sheet tab to be hide

2. Fomat ⟶ Sheet ⟶ Hide

3. Click OK button

Qn 74) How to displays a hidden work sheet in a spreadsheet

Ans : 1. Fomat ⟶ Sheet ⟶ Show

2. Select required worksheet from the dialog box

3.Click OK Button

Merge cells

Qn 75) What is meant by merging of cells

Ans : Combining multiple cells into one cell is called merging of cells.

Qn 76) Write the procedure to combine multiple cells into a single cell

Ans :1. Select the cells to be merged

2. Format ⟶ Merge Cells

Or

1. Select the cells to be merged

2. Use Merge Cell button in the Format toolbar

Qn 77) Define merging of cells in Calc Software. Which menu is used for it. **(March 2019)**

Ans : Refer Qn 75

Format ⟶ Merge Cells

Qn 78) Rahul wants to combine the cells from B5 to B10.How can he do it.? **(March 2016)**

Ans : 1. Select the cells to be merged

2. Format ⟶ Merge Cells

Inserting cells, rows, columns and worksheets

Inserting cells

Qn 79) Write the steps to insert a new cell in a spreadsheet

Ans : 1. Select the cell or cells where the cell is to be inserted

2. Insert ⟶ Cells

Inserting row

Qn 80) Write the steps to insert a new row in a spreadsheet

Ans : 1. To insert a single row , select the row or a cell in the row above where a new row is to be inserted

2. Insert ⟶ Rows

Qn 81) Write the steps to insert multiple rows in a spreadsheet

Ans : 1. To insert multiple rows, select the same number of rows above where the rows are to be inserted

2. Insert ⟶ Rows

Inserting column

Qn 82) How will you insert a column in worksheet **(Sep 2021)**

Ans : 1. To insert a single column , select the column or cell in the column immediately to the right of the new column to be inserted.

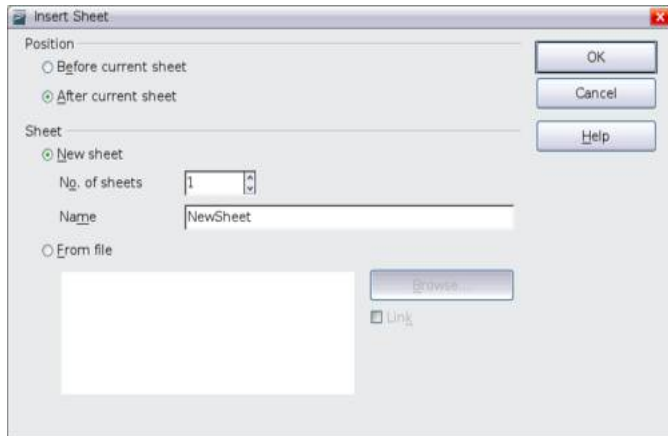2. Insert ⟶ Columns

Qn 83) Write the steps to insert multiple columns in a spreadsheet

Ans : 1. To insert multiple columns, select the same number of columns immediately to the right of the new columns to be inserted

2. Insert ⟶ Columns

Inserting a worksheet

Qn 84) How do you insert a new worksheet   **(Jan 2022)**

Ans :1. Insert ⟶ Sheet

2. Select the position of the worksheet using **Insert Sheet dialog box**

3. Click OK button

Deleting cells, rows, columns and worksheet

Qn 85) Write the steps to delete a cell in a spreadsheet

Ans : 1. Select the cell

2. Edit ⟶ Delete cells

3. Use the options in Delete cells dialog box

4. Click OK button

Qn 86) Write the steps to delete rows or columns in a spreadsheet

Ans :1. Select the rows or columns

2. Edit ⟶ Delete Cells

Qn 87) Write the steps to delete work sheet in a spreadsheet

Ans : Edit ⟶ Sheet ⟶ Delete

Editing features in spreadsheets

Spreadsheets provide various editing features to fill a range with a value or a series of values, copy or move a cell or range of cells, delete the contents of cells etc.

Filling a range

Qn 88) How can you fill the same value in a range of cells?

Ans : 1. Enter the value in the first cell

2. Select cell range

3. Edit ⟶ Fill

4. Choose the appropriate direction

Qn 89) How can you fill series of values in a cell range?

Ans : 1. Enter the value in the first cell

2. Select cell range

3. Edit ⟶ Fill ⟶ Series

4 Use the options in Fill Series dialog box

5. Click OK button

Note: A shortcut way to fill cells is to click on the Fill Handle in the lower right hand corner of the cell and drag it in the direction to be filled.

Qn 90) How will you give continuous numbers from 1 to 100 in a column of Cal worksheet

(July 2019)

Ans :   Edit ⟶ Fill ⟶ Series

or

Type first number , Click and drag the fill Handle

Copying and moving cells

Qn 91) Write the steps to copy content in a Cell or cells and paste it in another cell or cells

Ans : 1. Select required data cells

2. Edit ⟶ Copy

3. Select destination cells

4. Edit ⟶ Paste

Qn 92) Write the steps to move contents of a cell or range of cells to another cell or range of cells

Ans : 1. Select the required data cells

2. Edit ⟶   Cut

3. Select the destination cell

4 . Edit ⟶ Paste

Qn 93) The contents of the cell are copied to the special memory area called ....of the operating system

Ans : Clipboard

Qn 94) What are the two methods of moving a range in a worksheet

Ans : 1. Copy and Paste

2. Cut and Paste

Qn 95) Write the steps to delete contents in a range

Ans: 1. Select the range

2. Edit ⟶ Delete contents   or   Use Delete key on the keyboard

Freezing rows and columns in a worksheet

Qn 96) What is freezing   **(Sep 2021, Jan2022)**

Ans: Freezing is making a selected set of columns, rows immovable while scrolling the worksheet

Qn 97) Write the steps to freeze a row in spreadsheet   **(Dec 2020)**

Ans: 1. Click on the row header below the rows to be frozen

2.Window $\longrightarrow$ Freeze

Qn 98) Write the steps to freeze a Column in spreadsheet

Ans: 1.Click on the column header to the right of the columns to be frozen

2. Window $\longrightarrow$ Freeze

Qn 99) What is freezing? How can we freeze a row and column in a worksheet   **(Dec 2020)**

Ans: Refer Qn 96,97,98

Qn 100) How the following activities are done using spreadsheet   **(March 2020)**

a) Insert a column

b) Merge adjacent cells.

c) Freezing a row

Ans: Insert $\longrightarrow$ Columns.   Or

       Using Standard toolbar   Or

       Right click on the column

     b) Format $\longrightarrow$ Merge cells   Or

        Using standard toolbar

     c) Windows $\longrightarrow$ Freeze

Qn 101) The act of making a row or column immovable in spreadsheet software is called.....

                                                 (March 2019)

Ans: Freezing

Qn 102) Which command is used for freezing rows and columns of worksheet?   **(March 2017)**

a) Format $\longrightarrow$ sheet $\longrightarrow$ freeze

b) Window $\longrightarrow$ freeze

c) File $\longrightarrow$ freeze

d) Data $\longrightarrow$ sheet $\longrightarrow$ freeze

Ans: b) Window $\longrightarrow$ freeze

Qn 103) a) What is meant by freezing of row and column in Calc   **(July 2018, Sep 2021)**

b) Write the advantages of freezing

Ans:

a) Refer Qn 96

b)It allows you to lock your column and /or row headings so that ,when you scroll down or over to view the rest of your sheet,the first column and/or top row remain on the screen.It also helps the printing process.

Qn 104) Mr Asees is creating a pay bill for his office .He wants to make a selected set of rows immovable while scrolling the worksheet. Is it possible in spreadsheet? Justify your answer

(July 2017)

Ans: Yes .For that using Freezing.

1. Click on the row header below the rows to be frozen

2.Window ⟶ Freeze

Qn 105) Yusuf wants to lock the columns A,B,C and make it immovable in his worksheet employee. How can he do this?   **(Sept 2016)**

Ans: 1.Click on the column header D

2. Window ⟶ Freeze

Cell Referencing

There are two types of cell references .They are relative cell references and absolute cell references.

Qn 106) Briefly explain about relative cell references

Ans: Relative cell references are basic cell references that adjust and change when copied (formula etc.) or when using Autofill.

Example: = B5 + B8, changes to, = C5 +C8 when copied across to the next cell

Qn 107) Briefly explain about absolute cell references

Ans: If you do not want cell references to change when you copy a formula , then make those cell references absolute cell references. To make a reference absolute, puts a Dollar($) sign before both the column letter and row number.

To make an absolute reference to cell A3, use A3 in the formula.

Qn 108) Choose the correct absolute reference   **(March 2020)**

a) $B4   b) B4   c) B4 **Ans:** b) B4

Qn 109) Explain the different types of cell referencing in Calc with an example.   **(March 2019)**

Ans: Refer Qn 106,107

Qn 110) Briefly explain the different types of referencing used in spreadsheet   **(March 2018)**

Ans: Refer Qn 106, Qn 107

Qn 111) What is cell reference in spreadsheet? Differentiate between absolute reference and relative reference   **(March 2017)**

Ans: Refer Qn 106, Qn 107

Qn 112) Pick out the correct form of absolute reference from the following   **(July 2019)**

a)$A3   b)$A3$ c)A3   d)A3

Ans: c)A3

………...…………….....*Lenin Pulickal, Ph:9447823334, GHSS Panickankudy ,Idukki*……..………………

Qn 113) Differentiate between relative cell referencing and absolute cell referencing   **(July 2017)**

Ans: Refer Qn 106, Qn 107

Page formatting and printing a worksheet

The different print formatting features of a spreadsheet are Print ranges,Headers and footers, Page breaks, Page style setting ,Printing a spreadsheet and Export as PDF

 Qn 114) Define 'Print range' in spreadsheet   **(March 2020)**

Ans: Print range allows to print only a specific part of data or selected rows or columns on pages

Format ⟶ Print range ⟶ Define

Qn 115) Write the steps to set print range in spreadsheet

Ans: 1. Select the range of cells to be printed

2. Format ⟶ Print Ranges ⟶ Define

Qn 116) Write the steps to remove defined print range in Spreadsheet

Ans: Format ⟶ Print Range ⟶ Remove

Qn 117) If a sheet is printed on multiple pages, we can setup certain rows or columns to repeat on each printed page. Write various steps for this activity.

Ans: 1. Format ⟶ Printe Range ⟶ Edit

2. Use **Shrink** button in the **Edit Print Ranges** dialog box to select the rows or columns to repeat.

3.Select the rows or columns and then press the Shrink button again

Qn 118) Define header and footer

Ans: Headers are text appearing on the top of every page in a document .Footers are text appearing at the bottom of each page.

Qn 119) Write the steps to set headers and footers in a spreadsheet

Ans: Edit ⟶ Headers & Footers

Page breaks

Qn 120) Write the steps to set row page break in a spreadsheet

Ans: 1. Select the cell /row below the row break

2. Insert ⟶ Manuel Break ⟶ Row Break

Qn 121) Write the steps to set column page break in a spreadsheet

Ans: 1.Select the cell /column right the column break

2. Insert ⟶ Manual Break ⟶ Column Break

Qn 122) Write the steps to remove a row page break in a spreadsheet

Ans: 1. Select the cell below the row break

2. Edit ⟶ Delete Manual Break ⟶ Row Break

Qn 123) Write the steps to remove a column page break in a spreadsheet

Ans: 1. Select the cell to the right of the column break

2. Edit ⟶ Delete Manual Break ⟶ Column Break

Page style setting

Qn 124) Write the steps for page style setting in a spreadsheet

Ans: Format ⟶ Page

Qn 125) Distinguish between portrait and landscape page orientation

Ans: Landscape orientation is when the width of the document is greater than the height .Portraits is the opposite, where the height of the document is greater than the width. Landscape orientation has horizontal layout and portrait orientation has a vertical layout.

Printing a spreadsheet

Qn 126) Write the steps for page printing in a spreadsheet

Ans: File ⟶ Print

Export as PDF

Qn 127) Write the steps to export a worksheet to PDF format in a spreadsheet

Ans: File ⟶ Export as PDF

Qn 128) PDF stands for........

Ans: Portable Document Format

Qn 129) What is the advantage of exporting a worksheet to PDF format   **(Dec2020, Sep 2021)**

Ans: i) Alllows to view in any platform

ii) Popular format for transferring files

iii) Not easily editable

Qn 130) a) What is PDF file

b) Wite the advantage of exporting a worksheet to PDF format   **(March 2018)**

.**Ans:** a) PDF stands for Portable Document Format.

   b) Refer Qn 129

Chapter 4
DATA ANALYSIS USING SPREADSHEET

Qn 1) What is function?   **(Dec 2020)**

Ans: Functions are considered as predefined formula in spreadsheets.

Qn 2) What is the difference between function and formulae in spreadsheet   **(July 2018)**

Ans: A function is a predefined formula. A formula is an expression which calculates the value of a cell.

Qn 3) Name different built in function in spreadsheet

Ans: Mathematical functions, Statistical functions, Logical functions ,Text functions

Mathematical functions

Qn 4) Name any five Mathematical functions

Ans: SUM(), ROUND(), ROUNDUP(), ROUND DOWN(), COUNTIF()

Qn 5) Name any four mathematical function used in spreadsheet   **(March 2018)**

Ans: Refer Qn 4

Qn 6) Name any two functions used in calc.   **(Dec 2020)**

Ans: Refer Qn 3 (Any two name)

SUM()

Qn 7) What is the use of SUM() function

Ans: Calculates the total of a set of numbers or adds all numbers in the range of cells.

Qn 8) Name the function used to calculate the total of a set of cells

Ans: SUM()

Qn 9) Write the syntax and example of SUM() function

Ans:

Syntax

= SUM (Number1,Number2,Number3,........)

Example 1:

=SUM (2,3,6) ,which gives the result 11

Example 2:

=SUM(C3:H3) ,which gives the sum of the values in the cells ranging from C3 to H3

Qn 10) Write the result of the following

a)   = SUM(5,2,1)   b)   = SUM (24.6,1.3)

Ans: a) 8   b) 25.9

Qn 11) Write the function to display the total marks of the students in cell F8 for 6 subjects entered in cells F2 to F7 **(Sept 2016)**

Ans: = SUM(F2:F7)

Note:The Sum button Σ **in the formula bar is also used to calculate and display the sum of values.**

ROUND()

Qn 12) What is the use of ROUND() function

Ans: Rounds the given number to a specified number of decimal places

Qn 13) Write the syntax and an example of ROUND() function

Ans:

Syntax

=ROUND (Number ,Count)

Example

= ROUND(43.34735,3) which gives the result 43.347

Qn 14) The syntax of round function is............... **(March 2018)**

Ans: =ROUND (Number ,Count)

An Important note: Rounding Rules for Decimal numbers

i) If that digit is 4, 3 ,2 ,1 or 0 ,simply drop all digits to the right of rounding digit

ii) If that digit is 5 ,6, 7 ,8 or 9 ,add one to the rounding digit and drop all digits to the right of it.

Qn 15) Write the result of the following

a) = ROUND(14.3,0)   b) = ROUND (24.63 ,0)

c) = ROUND (18.754692,3)   d) = ROUND (425.342583,2)

Ans: a) 14   b) 25   c) 18.755   d) 425.34

ROUNDUP()

Qn 16) What is the use of ROUNDUP() function

Ans: Rounds the given number up to a specified number of decimal places

Qn 17) Write the syntax and an example of ROUNDUP() function

Ans:

Syntax

= ROUNDUP(Number ,Count)

Example

= ROUNDUP(89.7145,2) which gives the result 89.72

Qn 18) Write the result of the following

a) = ROUNDUP(47.83,0)   b) = ROUNDUP (47.23,0)   c) = ROUNDUP (18.754692,3)

d) = ROUNDUP (425.342583,2)   e) =ROUNDUP(37.7643,1)

Ans: a) 48   b) 48   c) 18.755   d) 425.35   e) 37.8

ROUNDDOWN()

Qn 19) What is the use of ROUNDDOWN()function

Ans: Rounds the given number down to a specified number of decimal places

Qn 20) Write the syntax and example of ROUNDDOWN() function

Ans:

Syntax

= ROUNDDOWN (Number ,Count)

Example 1:

= ROUNDDOWN(89.7635,2) which gives the result 89.76

Qn 21) Write the result of the following

a)   = ROUNDDOWN (47.83,0)   b)   = ROUNDDOWN (47.23,0)

 c)   = ROUNDDOWN (18.754692,3)   d)   = ROUNDDOWN (425.342583,2)

Ans: a) 47   b) 47   c) 18.754   d) 425.34

Qn 22) Write the function to display the number 67.8675 as 67.86

Ans:

= ROUNDDOWN(67.8675,2)

COUNTIF()

Qn 23) What is the use of COUNTIF() function

Ans: Counts the number of values in the range that meets the specified criteria.

Qn 24) Write the syntax and example of COUNTIF() function

Ans:

Syntax

= COUNTIF (Range, Criteria)

Example

= COUNTIF(B1:B10 , ">40")

Count of numbers >40 in the given range

Qn 25) How do you display the number of students with value 'A' in the range D3:D13

Ans: =COUNTIF(D3:D13, "='A' ")

Qn 26) Differentiate between ROUNDUP() and ROUNDDOWN() functions

Ans: Refer Qn 16 ,19

Qn 27) Write the meaning of the following function in spreadsheet   **(March 2017)**

= COUNTIF(B1:B10,">=40")

Ans:

Count of numbers >=40 in the given range

Qn 28)........... function is used to calculate the total of a set of cells   **(March 2016)**

a)ROUNDUP()   b)ROUND()   c)SUM()   d)COUNTIF()

Ans: SUM()

Qn 29) Briefly explain any three mathematical functions used in Calc software

(July 2019 ,Jan 2022)

Ans: Do Yourself

Statistical functions

Qn 30) Name any four Statistical functions

Ans: AVERAGE(), MAX(), MIN(), COUNT()

Table - STATISTICAL FUNCTIONS

Function	Syntax	Description
AVERAGE()	AVERAGE (Number1, Number2,Number3.............)	It gives the average of a given set of numbers. Eg=AVERAGE(3,2,4) It will return 3
		It can also calculate the average of numbers in a range of cells. Eg:=AVERAGE(D1:D5)
MAX()	MAX (Number1, Number2,Number3.............)	It gives the maximum value in a list of numbers
		It can also return the maximum value in a range of cells. Eg: =MAX(30,20,40) It will return 40
MIN()	MIN (Number1, Number2,Number3.............)	It gives the minimum value in a list of numbers
		It can also return the minimum value in a range of cells. Eg: =MIN(30,20,40) It will return 20
COUNT()	COUNT (VALUE1, VALUE2,VALUE3.............)	Counts the number of values in the list of arguments.
		It can also count the number of values in a range.
		Eg: = COUNT (30,20,40) It will return 3

SAMPLE QUESTIONS FROM THE ABOVE TABLE

Qn 31) Which function is used to find the highest value in a range of cells.

Ans: MAX()

Qn 32) Write the function used in spreadsheet to find the lowest value from a set of given numbers

(March 2017)

Ans: MIN()

Qn 33) Name the function to find number of values in a range of cells.

Ans: COUNT()

Qn 34) Write the function to display the average of 30,50,40,48

Ans: = AVERAGE(30,50,40,48)

Qn 35) What is the use of AVERAGE() function   **Ans:** Refer above table

Qn 36) Write the syntax and example of AVERAGE() function   **Ans:** Refer above table

Qn 37) What is the use of MAX() function   **Ans:** Refer above table

Qn 38) Write the syntax and example of MAX() function   **Ans:** Refer above table

Qn 39) What is the use of MIN() function   **Ans:** Refer above table

Qn 40) Write the syntax and example of MIN() function   **Ans:** Refer above table

Qn 41) What is the use of COUNT() function   **Ans:** Refer above table

Qn 42) Write the syntax and example of COUNT() function   **Ans:** Refer above table

Qn 43) Explain any two statistical functions in worksheet   **(Sept 2016)**

Ans: Refer above table

Logical functions

Qn 44)…………... functions are used for checking a test condition   **Ans:** Logical

Qn 45) Name any four Logical functions

Ans: IF() ,AND(), OR(), NOT()

Table- LOGICAL FUNCTIONS

Function	Syntax	Description
IF()	IF (Test ,Then_value ,Otherwise_value)	If the condition is True, Then_value is returned ; else Otherwise_value is returned Eg: = IF(D3 > 40,"Pass","Fail")
AND()	AND(Logical value1, Logical value2,........)	Returns True if all the conditions are True ;otherwise returns False. =AND(C3>=20,D3>=20,E3 >=20,F3>=20,G3>=20, H3>=20) The result will be True if the scores in the above cells(mark of all subjects)are greater or equal to 20. The score of any cell(subject)is less than 20 ,the function will return False.
OR()	OR(Logical value1, Logical value2,........)	Returns True if any of the condition is True; returns False if all the conditions are False Eg: =OR(C3<20,D3<20,E3<20,F3<20,G3<20,H3<20)
NOT()	NOT (Logical value)	Reverses the value of its argument. That is, if test condition is evaluates to True ,then NOT returns False and if the test returns False ,NOT returns True.

SAMPLE QUESTIONS FROM THE ABOVE TABLE

Qn 46) Write the syntax and example of IF() function   **Ans:** Refer above table

Qn 47) Write the syntax and example of AND() function   **Ans:** Refer above table

Qn 48) Write the syntax and example of OR() function   **Ans:** Refer above table

Qn 49) Write the syntax and example of NOT() function   **Ans:** Refer above table

Qn 50)   The function used to test a condition is.......   **Ans:** IF

Qn 51)   Multiple test conditions can be combined with........ functions   **Ans:** AND, OR

Qn 52)   Which function is used while combining more than one test conditions and the result will be true if any of the condition is true

Ans: OR

Qn 53)   Name the category of functions which returns either TRUE or FALSE as result

Ans: Logical functions

Text functions

Qn 54) Name any three Text functions

Ans: UPPER () , LOWER (), LEN()

Table -   TEXT FUNCTIONS

Function	Syntax	Description
UPPER()	UPPER(Text)	Converts the given text into uppercase Eg=UPPER(Lenin) It will return LENIN
LOWER()	LOWER(Text)	Coverts the given text into lowercase Eg:=LOWER(LENIN) It will return lenin
LEN()	LEN(Text)	Calculate the number of characters in a text. Eg: LEN(Ethal) It will return 5

SAMPLE QUESTIONS FROM THE ABOVE TABLE

Qn 55) What is the use of UPPER() function   **Ans:** Refer above table

Qn 56) Write the syntax and example of UPPER() function   **Ans:** Refer above table

Qn 57) What is the use of LOWER() function   **Ans:** Refer above table

Qn 58) Write the syntax and example of LOWER() function   **Ans:** Refer above table

Qn 59) What is the use of LEN() function   **Ans:** Refer above table

Qn 60) Write the syntax and example of LEN() function   **Ans:** Refer above table

Qn 61) Which function converts an input to text into capital letters

Ans: UPPER()

Qn 62) Name the function that converts an input text into small letters

Ans: LOWER()

Qn 63) The function used to find number of characters in a cell is .... **(Dec 2020)**

Ans: LEN ()

Qn 64) Write the use of the following text functions **(March 2020)**

a)UPPER()   b)LEN()

Ans: Refer above table

Qn 65) Write the name of functions in Calc Software for the following purposes: **(March 2019)**

a) to find the largest value in a set of numbers

b) to convert a text into capital letters

c) to find the number of characters in a word

Ans: a) MAX()   b) UPPER()   c)LEN()

Qn 66) Pick the odd one out **(July 2017)**

a)MAX()   b)MIN()   c)LEN()   d)COUNT()   **Ans:** LEN()

Nested Functions

Qn 67) Define nested functions

Ans: Placing a function inside another function is called nested functions.

Eg:=ROUND(AVERAGE (C3:C7),0)

Data manipulation

Qn 68) It is not practical to scroll through the entire worksheet each time to find a particular record.......... and ....are two powerful features available in spreadsheet that can be applied in these situations.

Ans: Sorting, Filtering

Sorting, Filtering

Qn 69) Name two data manipulation methods in spreadsheet

Ans: Sorting, Filtering

Qn 70) What is sorting **(July 2019, March 2016)**

Ans: Arranging data based on ascending or descending order of one or more column is known as sorting

Qn 71) Arranging data based on ascending or descending order of one or more column is known as............   **Ans:** Sorting

Qn 72) Write down the steps for sorting in Calc Software **(March 2019)**

Ans: i) Select the entire table

ii) **Data ➝ Sort**

iii) Select the column from the Sort by list

iv) Choose either Ascending or Descending option

v) Click OK

Qn 73) What is sorting? How do you sort a table of data based on a column.

(March 2016, July 2019)

Ans: Refer Qn 70,72

Qn 74) If there are more than one rows with the same data in the column specified for sorting,............ is used to specify which column is to be considered next for sorting.

Ans: Then by

Qn 75) What is Filtering

Ans: Filtering allows us to display only data that meets some criteria.

Qn 76) How can we display the data in a table that meets a specified condition

Ans: Filtering

Qn 77) What is the use of filtering in Calc . **(Dec2020)**

Ans: When a sheet contains a large amount of data, it can be difficult to find information quickly. In that cases Filters can be used to view only the information you need.

Qn 78) Name two type of filtering

Ans: Auto filter, Standard filter

Qn 79) What is meant by auto filter

Ans: Displays a drop down list from which users can select rows based on column values.

Here filter condition is tested for equality(=).

Qn 80) Write down the steps for 'Auto filter' in Calc Software

Ans: i) Select the entire table

ii) Data ⟶ Filter ⟶ AutoFilter

Qn 81) Explain autofilter facility available in spreadsheet **(March 2017)**

Ans: Refer Qn 79 ,Qn 80

Qn 82) How to cancel Auto Filter and display all datas in Spread sheet

Ans: Data ➜ Filter ➜ Auto Filter
Qn 83) What is meant by Standard filter

Ans: Data filtered based on range of values .Also used to filter data based on multiple conditions.

These multiple conditions can be combined using AND or OR operator.

Qn 84) More than one condition can be specified in.......... filter

Ans: Standard

Qn 85) Write down the steps for 'Standard filter' in Calc Software

Ans: i) Select the entire table

ii) Data ⟶ Filter ⟶Standard Filter

Qn 86) How to remove standard filter and display all datas in Spreadsheet

Ans: Data ⟶ Filter ⟶ Remove Filter

Qn 87) What do you mean by ' filtering ' in spreadsheet ?Name the two types of filters.

(July 2017,March 2020)

Ans: Refer Qn 75 ,78

Qn 88) Distinguish between auto filter and standard filter   **(July 2018, Jan 2022)**

Ans: Refer Qn 79,83

Qn 89) 'Sort' option is available in .... menu in Calc   **(July 2017,July 2018 ,July 2019)**

Ans: Data

Qn 90) Differentiate between Standard filter and Auto filter   **(Dec2020)**

Ans: Refer Qn 83,79

Qn 91)   Briefly explain the two types of filtering used in spreadsheet.   **(March 2018)**

Ans: Refer Qn 79,80,83,85

Charts

Qn 92)..................... are graphical representation of numeric data

Ans: Chart

Qn 93) What is the use of charts in spreadsheet?   **(March 2017)**

Ans:A chart is a tool you can use in Spreadsheet to communicate data graphically. Charts allow your audience to see the meaning behind the numbers, and they make showing comparisons and trends much easier.

Qn 94) Write the steps for creating a chart in spreadsheet   **(March 2018)**

Ans: i) Select data range

ii) Insert ➔ Chart

iii) Select Chart type

iv) Click Data Range

v) Click Chart Elements

vi) Clik Finish

Qn 95) List standard chart elements   **(July 2019,March 2017,March 2020)**

Ans: 1) Chart Area   2)Chart Title   3) X- Axis Title   4)Y- Axis Title   5) X-Axis Category

6) Y- Axis value   7)Data Labels   8)Legends

Qn 96) Write any four chart elements in Calc Software.   **(March 2019)**

Ans: Refer Qn 95

Qn 97) Briefly explain different chart elements in spread sheet

1) Chart Area : It includes the entire chart.

2)Chart Title : It is the descriptive text for a chart.

………....……………....*Lenin Pulickal, Ph:9447823334, GHSS Panickankudy ,Idukki*…….………………

3) X- Axis Title : A title given to the X-axis data range

4)Y- Axis Title : A title given to the Y-axis data range

5) X-Axis Category: These are the categories of the data which have been plotted. These are taken from the first column or first row of our data range.

6) Y- Axis value : This is the data range marked to plot the data series.

7)Data Labels : The values of the data series plotted.

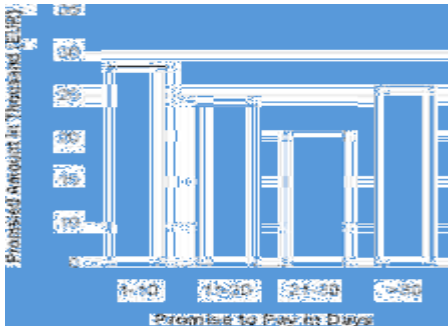**8)Legends :** A legend is a box that specifies the colour ,symbol or pattern assigned to the data series

Qn 98) Name the different types of charts in calc**.**

(July 2018,March 2017, Dec2020, Jan 2022, Sep 2021)

Ans: 1) Column charts   2) Bar Charts   3)Line charts   4) Pie Charts
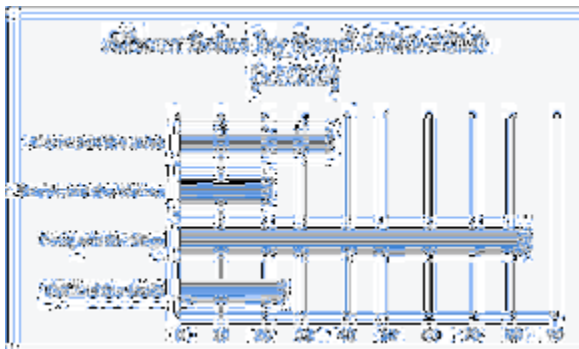
Qn 99) Explain different types of charts used in Spreadsheet
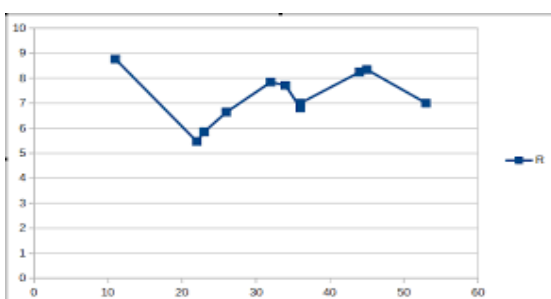
Ans: i)Column chart

They represent data in vertical columns.

ii) Bar chart

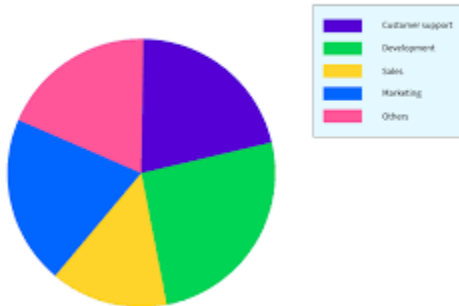Bar charts are used to show comparison between individual items.

iii)Line charts

Line charts can be used to display continuous data over time with respect to a common scale. Line chart is used to show the upward or downward trends in value over time. Line charts are the best for viewing data trends at equal intervals of time.

iv) Pie Chart

The type of chart that supports only one data series is Pie chart.

Qn 100) Which chart is used to show the upward or downward trends in value over time

Ans: Line Chart

Qn 101) What is the use of charts in spreadsheet? Explain the elements of chart and different types of charts used   **(March 2017)**

Ans: Refer Qn 93,97,99

Qn 102) Explain any three types of charts used in a spread sheet.   **(July 2019)**

Ans: Refer Qn 99

Qn 103) Explain any two charts in spreadsheet software   **(Sept 2016)**

Ans: Refer Qn 99

Chapter 5

PRESENTATION   SOFTWARE

Qn 1) What is presentation   **(Dec 2020)**

Ans: Presentation is the process of display information in the form of a 'slide show' with the help of graphs, pictures, sounds , videos etc

Qn 2) What are the uses of presentation softwares   **(Jan 2022)**

Ans: Presentation software is used to display information in the form of a slide show with the help of graphs , pictures, sounds , videos etc.

Qn 3) Name any two electronic presentation software   **(July 2017)**

Ans: Microsoft PowerPoint , Open Office Impress

Qn 4) Name the software available for preparing a presentation in Windows or Linux **(March 2018)**

Ans: Microsoft Power Point , Open Office Impress

Qn 5) Which of the following is not a presentation software   **(March 2020)**

a) Power points   b) GIMP   c) Impress   **Ans:** GIMP
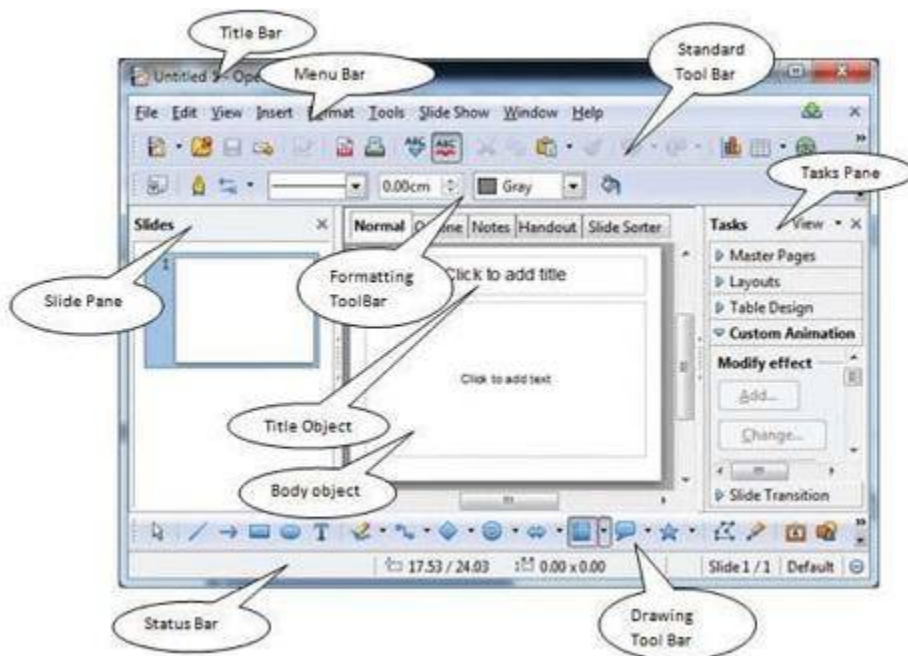
OpenOfice Impress

Qn 6) Name three options available in Presentation Wizard dialog box

Ans: Empty presentation , From template, Open existing presentation

Qn 7) Write the command to display Presentation Wizard dialog box

Ans: Application ⟶   Office ⟶ Libre Office Impress

IDE Components of presentation software

Qn 8) IDE stands for.......   **(March 2016)**

Ans: Integrated   Development Environment

Qn 9) Give the names of different components of presentation software IDE

Ans: i)Title Bar ii) Menu Bar iii) Tool Bars iv) Slides Pane v) Tasks Pane vi) Working Area

vii) Status Bar

Qn 10) Name any three toolbars in the presentation software Impress

Ans: Standard toolbar , Formatting toolbar, Drawing toolbar

Qn 11) Different slide layouts , master pages, table designs ,custom animation, slide transitions ,etc. are available in..............panes   **Ans:** Tasks Pane

Qn 12)…….. pane shows the different slides used in the presentation   **Ans:** Slides pane

Qn 13) Write the steps to create a presentation

Ans: Application ⟶ Office ⟶ Libre Office Impress ⟶ Empty presentation

Qn 14) What are the three ways of saving a presentation in LibreOffice Impress

Ans :i) File ⟶   Save

ii) Use the short cut key   **Ctrl + S**

iii) Use   **Save** button on the standard toolbar

Qn 15) Write the shortcut key to save a presentation in Impress Software   **(March 2019)**

Ans: **Ctrl + S**

Qn 16) What are the three ways of opening a presentation in LibreOffice Impress

Ans :i) File   ⟶ Open

ii) Use the short cut key   **Ctrl + O**

iii) Use   **Open** button on the standard toolbar

Qn 17) Write the short cut key to open a file in Libre Office Impress   **Ans:**   Ctrl + O

Qn 18) Write the steps to create ,open and save a file in presentation software   **(Sept 2021)**

Ans: *For create*

Application ⟶ Office ⟶ Libre Office Impress ⟶   Empty presentation

For open

File ⟶   Open

For save

File ⟶   Save

Qn 19) Write the command used to   add a new slide into a presentation

Ans: Insert ⟶   Slide

Qn 20) How do you add new slides to your presentation

Ans: Insert ⟶ Slide

Entering text in a slide

Qn 21) There are .... ways to add text in a slide

   a) 1   b) 2   c) 3   d) 4   **Ans:** 2

Qn 22) What are the different ways of inserting a text into a slide in Impress Software

(March 2019)

Ans: i) Text can be typed directly in the text element in a slide.

ii) Using the Text tool in the Drawing toolbar.

Qn 23) The text tool is available in the ....toolbar   **Ans:** Drawing toolbar

Qn 24) The file extension of Impress file is……………   **Ans :** **.** odp

Formatting a slide

Qn 25) What is meant by ' formatting a slide'

Ans : Formatting a slide is a way in which it contents are arranged and presented.

Text formatting

Qn 26) Applying effects to the text in a slide is called ……………..   **Ans :**Text formatting

Qn 27) Name three types of text formatting

Ans : Character formatting , Paragraph formatting , List formatting.

Qn 28) Write down the steps for character formatting in a presentaion

Ans : 1.   Select the text

2.   Format $\longrightarrow$ Character

Qn 29) Name the tabs available in character dialogue box

Ans : Font, Font Effects, Position

Qn 30) The ....tab of Character dialog box can be used to select the desired font face, style and the size of the font.

Ans : Font

Qn 31)………. tab of Character dialog box used to specify a font colour ,gives effects like embossed, engraved, outlined, shadow etc.

Ans : Font Effects

Qn 32) The..... tab of character dialog box provides facility to make a text superscript or subscript

Ans : Position

Qn 33) Write down the steps for paragraph formatting in a presentaion

Ans : 1. Select the paragraph

2. Format $\longrightarrow$ Paragraph

Qn 34) Name the tabs present in the paragraph dialog box

Ans : Indent & Spacing, Alignment, Tabs

Bullets and numbering

Example

- RAM
- ROM
- CPU

Qn 35) Write the steps to insert bullets and numbers in a slide

Ans : Format ⟶ Bullets and Numbering

Qn 36) Name 5 tabs available in the Bullets and Numbering dialog box

Ans : Bullets , Numbering type, Graphics ,Position, Customize

Setting the background of a slide

Qn 37) What are the different ways of setting slide background   **(March 2020)**

Ans : Format ⟶ Page ⟶ Page Setup ⟶ Background

The background tab has **Fill** drop down list.There are four options available in the Fill drop down box They are Colour, Gradient ,Hatching and Bitmap

Colour: It is used to set a uniform colour as a background of a slide.

Gradient fill: A gradient fill provides a smooth transition from one colour to another.

Hatching : Fine lines are used in graphic arts to show shading. The process of decorating a slide using fine lines is called hatching.

Bitmap: An image can be used to fill the background of a slide.

Qn 38) Differentiate between hatching and gradient fill in Impress Software

(March 2019 July 2019)

Ans : Refer Qn 37

Qn 39) Which menu in Impress software is used to give gradient fill and hatching pattern to a presentation slide   **(July 2019)**

Ans : Format

Setting background of an object

Qn 40) Write the steps to set background of an object in a slide

Ans :   Format ⟶ Area

Note: The tabs Colour, Gradient, Hatching, Bitmap,Area and Shadow are available in the Area dialog box.

Slide masters

Qn 41) What is slide master   **(March 2020, July 2017, Sept 2016)**

Ans :A slide master controls the basic formatting of all the slides in a presentation. A slide master is also called a template.

Qn 42) The basic formatting of slides in a presentation is done by using ……….   **(July 2018)**

Ans : Slide master

Qn 43) Which one of the following controls the basic formatting of all the slides in a presentation

(March 2016)

a) Gradient   b)Hatching Pattern   c)Slide Master   d) Bitmap fill

Ans : Slide Master

Qn 44) How can we apply slide masters in our presentation   **(July 2017)**

Ans : 1. Insert $\longrightarrow$ Slide

2. View $\longrightarrow$ Master slide (or select slide master in the Master Page section of the Tasks pane)

3. Select a suitable slide master from the available list.

Loading additional slide master

Qn 45) How to mix multiple slide masters in a presentation

Ans : i). Format $\longrightarrow$ Slide Design.

ii) Select suitable template and click on **Load** button

Qn 46) Name the different text formatting options in presentation software

Ans : Character formatting , Paragraph formatting

Qn 47) How do you add new slides to your presentation?

Ans : Insert $\longrightarrow$ Slide

Duplicating and deleting slides

Qn 48) What is meant by duplicate of a slide

Ans : Duplicating a slide means making a copy of the same slide

Qn 49) Write the steps to make duplicate of a slide

Ans :   1. Select the icon of the required slide in the Slides pane

2. Right Click

3. Choose **Duplicate slide**

Qn 50) How can you delete a slide in your presentation

Ans :   1. Select the icon of the required slide in the Slides pane

2. Right Click

3. Choose **Delete Slide**

Inserting a table in a slide

Qn 51) How can you insert a table in a slide

Ans : i) Insert $\longrightarrow$ Table.

ii) Select the number of rows and columns

iii) Click OK button

iv) Modify the table using Table tool bar

Qn 52) Write the command used to insert a sound file into a presentation

Ans : Insert ⟶   Movie and Sound

Qn 53) How can you play music in a slide presentation

Ans :   Step1: Insert a sound file in to a slide using the command

Insert ⟶ Music and Sound

Step 2: If we do not want the sound icon to appear on the screen, you can drag it off the slide.

Step 3: Use the menu **Slide Show**

Qn 54) How can you insert a video clip in a slide.

Ans : Insert ⟶   Movie and Sound

Qn 55) How can you insert an image into a presentation   **(March 2016, Dec 2020)**

Ans : Insert ⟶   Picture from File

Qn 56) How can you insert image and audio/ video files in a presentation file   **(March 2018)**

Ans : Insert audio   Insert ⟶ Movie and Sound

Insert video   Insert ⟶ Movie and Sound

Insert Image   Insert ⟶   Picture from File

Qn 57) How will you insert an audio and video in a presentation file   **(Sept 2021)**

Ans : Refer Qn 56

Qn 58) How can you insert a table in a presentation file

Ans : Insert ⟶ Table

Qn 59) How to send a picture in the presentation to the back of other objects.

Ans : 1. Right click on the image

2. Arrange ⟶ Send to Back

Inserting hyperlinks

Qn 60) What do you mean by hyperlink ?   **(March 2016, July 2018)**

Ans : Hyperlink is a text or an object which is used to link a slide to internet , document or an email address.

Qn 61) How do you insert a hyperlinks in a slide?   **(March 2016, July 2018)**

Ans : Insert ⟶   hyperlink

Qn 62) Name four types of hyperlinks in Presentation

Ans : i) Internet   ii) Mail & News   iii) Document   iv) New document

Qn 63) Explain four types of hyperlinks in presentation.

Ans : i). **Internet :** Used to hyperlink to a web page in the internet

ii)Mail & News: Create or edit hyperlink for email or news address.

iii) Document: The hyperlink points to a document, sections of a document or to another slide in the presentation.

iv) New document: The hyperlink creates a new document of the selected type.

Qn 64) Write the procedure for the following operation in presentation software   **(Jan 2022)**

i) insert an image   ii) insert a hyperlink

Ans : i) Insert ⟶   Picture from File

   ii) Insert ⟶   hyperlink

Adding action objects

Qn 65) What is an action objects   **(March 2017)**

Ans : In the presentation we can add actions ,such as going to another slide ,play audio or video,etc. to an object in a slide .The object may be a text box or an image.These objects are called action objects. When the user clicks on it, the action will be applied.

Qn 66) Explain how to create an action object in presentation   **(March 2017)**

Ans :1. Slide ⟶   New Slide

2. Draw a rectangle using a rectangle tool

3 .Right click on the rectangle and select the option **Interaction**

4. Select suitable item from the drop down box for **Action at mouse click**

5. Click OK button

Drawing figures in the slide

We can draw different figures using drawing tools available in the Drawing toolbar.

Views of the slides

Qn 67) Name five views of the slides in presentation   **(March 2020,Dec 2020,March 2018)**

Ans :i) Normal View (Slide View) ii) Outline view   iii) Notes view iv) Handout view

v) Slide Sorter view

Qn 68) Name any three types of slide views   **(Jan 2022)**

Ans : Refer Qn 67

Qn 69)Briefly explain different slide views   **(Sept 2021, March 20, Dec 2020, March2018)**

Ans : i) Normal view (slide view)

It is the main view for creating individual slides. It is used to design and format various objects in the slide .This is the default view in a presentation.

ii) Outline view

Outline view contains all the slides of the presentation in their number sequence. It shows only the text in the slides .No graphs or tables can appear in this view. We can edit the text in the slides using this view.

iii) Notes view

 Notes view allow us to add notes to each slide . This notes will not be displayed in the presentation but appear in the printout.

iv) Handout view

Handout view is for setting up the layout of a printed handout. Here we can rearrange the position of the slides by dragging.

v) Slide sorter view

Slide Sorter view shows a thumbnail of each slide in the order they are to be displayed at the time of the slide show .This view is used to rearrange the order of slides . Using slide sorter view we can add new slide , delete or rename a slide.

Qn 70) …….........is the default view in a presentation

Ans : Normal view

Qn 71)…………. view is used to design and format various objects in the slide.

Ans : Normal View

Qn 72)……….......view shows only the text in the slides

Ans : Outline view

Qn 73)…,…. view allows us to add notes to each slide.

Ans : Notes view

Qn 74)……………...view is for setting up the layout of a printed handout

Ans : Handout view

Qn 75) Which one of the following view shows thumbnail of each slide   **(March 2017)**

a) Normal view   b) Outline view   c) Slide sorter view   d) Handout view

Ans : Slide Sorter view

Qn 76)……. view of slides in a presentation is used to re-arrange the order of slides

(July 2019)

Ans : Slide sorter view / Handout view

Qn 77) Write the steps to change the order of slides in a presentation using Slide Sorter view

Ans :

1. Click on the slide

2. Drag and drop it to the required position

Qn 78) Write the steps to select and move group of slides using Slide Sorter view

Ans : Click on the first slide, then hold the **Ctrl** key pressed and then click other slides. Then drag it to the needed position.

Using slide animation effects

Qn 79) Write the steps to apply animation effect in presentation software

Ans : i) Select the normal view

ii) Choose the desired slide

iii) Select the text or object to animate

………...…………….....*Lenin Pulickal, Ph:9447823334, GHSS Panickankudy ,Idukki*……..…………………

iv) Choose **Custom Animation** from the Task pane

v) Click the Add button

vi) Choose an effect

Slide transitions

Qn 80)"Slide transitions creates attractive effects in presentation"

What is slide transition? Give two examples   **(March 2017)**

Ans : Add special effects to slides in a presentation during the slide show.

Eg: Roll down from top, Fly from left

Qn 81) What is meant by slide transition   **(Jan 2022, Dec 2020, July 2019, July 2018)**

Ans : Refer Qn 80

Note: i)Slide transition is available in the Task pane

 ii) We can add transitions, in Slide Sorter view or in Normal view.

Qn 82) Name the two slide transition settings.   **(Dec 2020)**

Ans : Automatic slide transition ,Rehearse timings

Qn 83) What are the two methods to add slide transition to a presentation file   **(July 2018)**

Ans : Automatic slide transition ,Rehearse timings

Qn 84) Briefly explain automatic slide transition

Ans : We can arrange the slide show in such a way that it happens automatically without waiting for our order while we are talking. For that we use the option

Slide Transition pane ⟶ Advance slide ⟶ Automatically after

The user can set a time and click **Apply to All Slides** button

Qn 85) Briefly explain Rehearse timing in slide transition

Ans : The timing for each slide can be determined only after taking a rehearsal. For that we use the option in the Menubar

Slide Show ⟶ Rehearse Timing

Qn 86) How will you set different timing for showing different slides in Impress Software

                                                                                   (July2019)

Ans : Rehearse timing

Qn 87) Write the steps to insert a transition effect to slide of a presentation you have created

Ans : Refer Qn 84,85

More presentation settings

Qn 88) Write the step for auto repeat presentation

Ans : Slide Show ⟶ Slide Show Settings ⟶ **Auto** from **Type**

Qn 89) How can you play background music in a presentation

Ans :

Slide Transition pane $\longrightarrow$ Modify transition $\longrightarrow$ **Other Sound** from the **Sound** dropdown box

Note: Do not select the **Apply to all slides** button as it will re-start the music at every slide change.

Qn 90) How can you take a print in presentation

Ans : File $\longrightarrow$ Print

Qn 91) To remove a transition effect select .... item in the list on the slide transition page in the task pane.

Ans : None

Qn 92) Give any three items present in the slide transition pane

Ans : Modify transition, Advance slide, Apply Transition to All slides, Slide transition

Chapter 6

GETTING STARTED WITH GIMP

Qn 1) What is image editing   **(Sep 2021, March 2018)**

Ans: Image editing is the editing or manipulating of an image or a graphic.

Qn 2) Define image editor

Ans: Image editor is a software which is used for image editing.

Qn 3) What is image editing software? Give example   **(Jan 2022)**

Ans: Refer Qn 2.

Eg: GIMP

Qn 4) Write the use of image editing software   **(Sep 2021)**

Ans: Tasks that can be done with image editing software include resizing, cropping ,colouring ,combining and altering digital images to suit the imagination of its creator. Image editors can also be used to remove scratches, wrinkles, dirt and imperfections from images.

Qn 5) Name three type of image editors   **(July 2019)**

Ans: Raster graphics editor, Vector graphics editors, 3D modelers

Qn 6) Name any two types of image editors   **(Sep 2021, March 2018)**

Ans: Refe Qn 5

Qn 7) Give three examples of raster graphics editors

Ans: GIMP, Photoshop, gThumb Image Viewer

Qn 8) Give any three examples of vector graphics editor

Ans: Adobe Illustrator, Corel DRAW, Inkscape.

Qn 9) Write an example of 3D modelers

Ans: K- 3D

Qn 10) Give one example each for each type of image editor   **(July 2019)**

Ans: Refer Qn 7,8,9

Qn 11) Classify the following into Raster Software and Vector Software   **(March 2019)**

Inkscape , Photoshop , GIMP, CorelDraw

Ans:

Raster	Vector
Photoshop	CorelDraw
GIMP	Inkscape

Qn 12) Image editors are broadly classified into raster graphic editors and vector graphic editors. Differentiate between these two.

(Jan 2022,March 2020,Dec 2020,July 2018,March 2017, March 2016)

Ans:

Raster	Vector
Raster image is made up of pixels	Vector image is created mathematically using formulas
Quality of raster images decreases as they are scaled	Vector images can be scaled to any size without losing quality of image
Raster images are capable of displaying any colour	Vector images do not permit colour editing to the extent as possible with the raster images
Raster images are often large files	Vector images are relatively smaller in size
Raster images are used in web and print	Vector images are converted to raster images before they are used for web and printing

Qn 13) Compare Raster and Vector graphics **(March 2016,March 2020,Dec 2020)**

Ans: Refer Qn 12

Qn 14) Write any four differences between raster and vector graphics **(July 2018)**

Ans: Refer Qn 12

Qn 15) What is scaling in GIMP

Ans: Resizing of an image is called scaling

Qn 16) What are the uses of 3D modelers

Ans: They used to create 3D images. The medical industry uses them to create detailed models of organs. In movies they are used to create and manipulate characters and objects. 3D modeling software is used to create objects for video games.

Qn 17) GIMP stands for........

Ans: GNU Image Manipulation Program

Qn 18) Obseve the following two statements **(July 2017)**

i) GIMP is a raster graphic editor

ii) GIMP is the acronym for GNU Image Manipulation Program

Choose the correct option

a) Only statement (i) is CORRECT   b) Only statement (ii) is CORRECT

c) Both are WRONG   d) Both are CORRECT

Ans: d) Both are   CORRECT

Qn 19) Name the person/persons who developed the first edition of GIMP

Ans: Peter Matis and Spenser Kimpel

Qn 20) Write the features of GIMP **(Jan 2022, Dec 2020, March 2018,July 2018,March 2017)**

Ans: i.   Painting tools are available

ii.   Multiple undo/ redo

iii. Selection tools are available

iv. Transformation tools are available

v. Supports multiple layer facility

vi. Supports file formats like GIF, JPEG, PNG, TIFF, BMP

Qn 21) Write any three features in GIMP   **(March 2018,July 2018)**

Ans: Refer Qn 20

Qn 22) List any four features in GIMP Image Editor   **(Dec 2020)**

Ans: Refer Qn 20

Qn 23) Write any two features of GIMP   **(Jan 2022)**

Ans: Refer Qn 20

Canvas creation

Qn 24) The .... is the container part of the GIMP to hold and manipulate pictures

Ans: Canvas

Qn 25) Write the steps to create a canvas in GIMP   **(Sep 2021)**

Ans: Step 1:   File ⟶ New

Step 2 : Setting suitable size using the **Create a New Image** dialog box

Step 3: Click **OK** button

Qn 26) Write the steps to set the background colour of a Canvas

 Ans: Step 1: Click on the background colour icon in the Tool Box

Step 2: Select the suitable colour

Step 3: Select Bucket Fill tool from the Toolbox

Step 4: Click on the Canvas to fill the background colour

Qn 27) Write the command to save GIMP image file

Ans: File ⟶ Save   or   Use the short cut key   **Ctrl + S**

Qn 28) Which short-cut key is used for save a GIMP image file

 (a) Ctrl + S   (b) Ctrl +F12   (c) Shift + F12

Ans : Ctrl + S

Qn 29) The default extension of GIMP image file is ……………..   **(July 2017)**

Ans: . xcf

Qn 30) xcf stands for …………

Ans: Experimental Compact Facility

………...……………...*Lenin Pulickal, Ph:9447823334, GHSS Panickankudy ,Idukki*…….…………………

Layers in GIMP

Qn 31) Write a short note on Layers in GIMP

Ans :Every layer contains a part of the image. The layers are used to manipulates a part of the image without affecting the other part.The bottom layer is the background of the image. **Layers enable us to stack images on top of other images- all within the same image. Therefore, we can have multiple layers of images, stacked on top of each other.**

Qn 32) What is the need for creating layers in GIMP   **(Sept 2016)**

Ans :Refer Qn 31

Qn 33) Explain the advantage of using layers in GIMP   **(March 2017)**

Ans: Layers enable us to stack images on top of other images- all within the same image. Therefore, we can have multiple layers of images, stacked on top of each other.

Qn 34) Write the name of icons present in the Layer dialog box using various operations on layers

Ans :1.Create new layer 2.Move layer up 3.Move layer down 4. Create duplicate copy of a layer 5.Anchor the floating layer 6. Delete a layer

Qn 35) Briefly explain any two operations on layers in GIMP software   **(Sept 2016)**

Ans :

 i) Delete a layer

We can delete an existing layer using **Delete a layer** button in the Layer dialog box

ii) Move layer up

We can move the position of a layer upwards using **Move layer up** button in the Layer dialog box

Qn 36) What do you mean by anchoring a layer? Write steps to anchor a layer in GIMP**(July 2019)**

Ans : Attaching Floating layer to Normal layer is called anchoring.

For anchoring:-

Select anchor button in the Layer dialog box

Qn 37) Write the steps to create a new layer

Ans :

 Layer dialog box $\longrightarrow$ Create new layer

    ii) Give layer name and set the size of the layer.

    iii)Select the option **Transparency** in Layer Fill Type

Qn 38) How to display Layer dialog box in GIMP

Ans : Windows $\longrightarrow$ Dockable dialogs $\longrightarrow$ Layers

                              or

      Use the shortcut key **Ctrl + L**

Qn 39) Write the shortcut key used to display Layer dialog box

Ans : Ctrl + L

Selection tools

Qn 40) What is the use of the selection tool

Ans : Selection tools are designed to select regions from the active layer so that we can work on them without affecting the unselected areas.

Qn 41) What is selection tool?   **(Dec 2020)**

Ans :Refer Qn 40

Qn 42) Name the selection tools available in GIMP   **(Jan 2022, Sep 2021, Dec 2020,July 2018)**

Ans: 1) Rectangle Select   2) Ellipse Select   3) Free Select   4) Foreground Select

5) Fussy Select   6) By Colour Select   7) Intelligent Scissors

Qn 43) List any four selection tools in GIMP   **(Sep 2021,Jan 2022)**

Ans: Refer Qn 42

Qn 44) Explain different selection tools in GIMP

Ans : **1. Rectangle select**

It is used for selecting rectangular region in an image.

Tools ⟶   Selection Tools ⟶ Rectangle Select

or   use Toolbox

2. Ellipse select

It is used for selecting circular or elliptical region in image.

Tools ⟶ Selection Tools ⟶ Ellipse Select

or use Toolbox

3. Free Select(Lasso tool)

It is used to draw free hand selection in an image.

Tools ⟶ Selection Tools ⟶ Free Select

or use Toolbox

4. Forground select

It is used for finer selection of pixels in an image.

Tools ⟶ Selection Tools ⟶   Forground Select

or use Toolbox

5. Fuzzy Select (Magic Wand)

It is used to select continuous region in an image based on colour similarity.

Tools ⟶   Selection Tools ⟶   Fuzzy Select

or use Toolbox

6. By Colour Select   ബൈ കളർ സെലക്ട്

It is used to select different regions in an image based on colour similarity ,regardless to where they are located.

Tools $\longrightarrow$ Selection Tools $\longrightarrow$ By Colour Select

or use Toolbox

7. Intelligent Scissors

It is useful when you are trying to select a region defined by strong color - changes at the edges. It has some features common to Lasso Tool and Path Tool.

Tools $\longrightarrow$ Selection Tools $\longrightarrow$ Intelligent Scissors

or use Toolbox

Qn 45) Mr. John is editing an image. He wants to select regions from active layer without affecting unselected areas. Explain to him, the different selection tools available in GIMP.   **(July 2017)**

Ans : Refer Qn 44

Qn 46) Explain any five selection tools available in GIMP   **(March 2016)**

Ans : Refer Qn 44

Qn 47) What is the difference between Fuzzy select and By Colour select   **(March 2019)**

Ans :Refer Qn 44

Qn 48) How does Fuzzy select tool differ from By Color select tool in GIMP   **(Sept 2016)**

Ans :Refer Qn 44

Qn 49) Briefly explain any two selection tools in GIMP   **(March 2020, Dec 2020)**

Ans :Refer Qn 44

Qn 50) GIMP has a variety of selection tools. Name the selection tool to select circular areas in an image   **(March 2019)**

Ans : Ellipse

Qn 51) Which one of the following tool perform selection based on colour similarities **(March 2017)**

a)Lasso tool   b)Magic wand   c)Ellipse select   d)All of these   **Ans** : b)Magic wand

Adding text to images in GIMP   GIMP ൽ ഇമേജിലേക്ക് ടെക്സ്റ്റുകൾ ആഡ് ചെയ്യുന്ന വിധം

Qn 52) The ....tool is used to add text to an image in GIMP

Ans : Text

Qn 53) How to add text to image in GIMP

Ans : Tools $\longrightarrow$ Text   or   Use Toolbox

Exporting images in GIMP

Qn 54) How to export images in GIMP

Ans :   File $\longrightarrow$ Save As

or   File $\longrightarrow$ Export To

Qn 55) A GIMP image can be exported to png format using ....option

Ans : File $\longrightarrow$ Export To

Transform Tools

Qn 56) What is the use of Transformation Tool in GIMP?   **(Dec 2020, March 2018)**

Ans :Transform tools are mainly used to alter the appearance of an image .Transform tools change the size ,position and angle of the image.

Qn 57) List the transform tools   **(Jan 2022 , Sep 2021,Dec 2020)**

Ans: 1. Align   2. Move   3. Crop   4. Rotate   5. Scale   6. Shear   7. Flip

Qn 58) Name two transformation tools   **(Dec 2020)**

Ans: Refer Qn 57

Qn 59) List any three transform tools in GIMP   **(Sep 2021,Jan 2022)**

Ans: Refer Qn 57

Qn 60) Write a short note on Transformation tools

Ans: i) Align

The Align tool is used to align the image layers with various image objects. Arrangement of objects can be done in two ways:-

i)   Align relative to an object or a selection
ii)   Distribute according to an offset value

The option for selection of align tool is

Tools ⟶ Transform Tools ⟶ Align

or   Use Tool box

ii) Move

The Move tool is used to move layers or selections.

The option for selection of Move tool is

Tools ⟶ Transform Tools ⟶   Move

or   Use Tool box

iii) Crop

The Crop tool is used for cropping or clipping an image.It works on all the visible and invisible layers of the image.

The option for selection of Crop tool is

Tools ⟶ Transform Tools ⟶   Crop

or   Use Tool box

v) Scale

The Scale tool is used to scale layers or selection on the image.This tool changes the size of the image.

The option for selection of Scale tool is

Tools ⟶ Transform Tools ⟶   Scale

or Use Tool box

vi) Shear The Shear tool is used to shift one part of an image to one direction and the other part to the opposite direction .

The option for selection of Shear tool is

Tools ⟶ Transform Tools ⟶ Shear

or   Use Tool box

vii) Flip

Flip tool is used to create a mirror image.

The option for selection of Flip tool is

Tools ⟶ Transform Tools ⟶ Flip

or Use Tool box

Qn 61) Explain any two transform tools in GIMP**(March 2019, July 2019,March2018,Sept 2016)**

Ans: Refer Qn 60

Qn 62) Write short notes on any three transform tools in GIMP   **(July 2018)**

Ans: Refer Qn 60

Qn 63) Describe the following transform tools in GIMP   **(March 2020)**

i) Crop   ii) Rotate   iii) Shear

Ans: Refer Qn 60

Qn 64) The ....tool is useful to align the image with various image objects

Ans: Align

Qn 65) The................ tool is used to move layers or selections

Ans: Move

Qn 66) The .... tool is used for cropping or clipping an image

Ans: Crop

Qn 67) ………….. tool is used to rotate an entire layer or only selected portion of an image

Ans: Rotate

Qn 68) The .... tool is used to scale layers or selection on the image

Ans: Scale

Qn 69) The tool used to shift one part of an image to one direction and the other part to the opposite direction is..................

Ans: Shear

Qn 70)............ tool is used to create a mirror image   **Ans:** Flip

Qn 71) Identify the transform tools used for the activities given below   **(Sep 2021,March 2020)**

i) To create a mirror image   ii) To move layers or selections

Ans : i) Flip   ii) Move

…………..………..…....……...*Lenin Pulickal, Ph:9447823334, GHSS Panickankudy ,Idukki*……..…………………

Chapter 7

ADVANCED TOOLS FOR IMAGE EDITING

Path tool

Qn 1) Which is the tool used to create straight lined or curved path

Ans: Path tool

Qn 2) Define 'Paths' in GIMP   **(Sep 2021)**

Ans: In GIMP , path tool is used to create straight lined and curved paths.

Qn 3) What are the uses of path tool **(Jan 2022,July 2019,March 2020,Dec 2020,March 2017)**

Ans: i) In GIMP , path tool is used to create straight lined and curved paths

ii) This tool is very much useful to create different types of patterns.

iii) It is used to select a portion of an image in different shapes from an already existing picture, etc.

iii) We can align a text along a path using path tool

Qn 4) How to select path tool in GIMP

Ans: Tools ⟶ Paths   or   Use Toolbox

Qn 5) Write the steps to create 'path' in GIMP   **(Sep 2021)**

Ans: Tools ⟶ Paths   or   Use Toolbox

Qn 6) Define anchor point   **(March 2020)**

Ans: In GIMP ,path tool is used to create straight lined and curved paths**.**Each point in the path is called anchor point.

Qn 7) In GIMP ,path tool is used to create straight lined and curved paths**.**Each point in the path is called………………....   **(March 2019)**

Ans: Anchor point

Qn 8) Name the square symbols appear at the end of the direction line

Ans: Handle

Qn 9) To create a closed path, click on the first point while holding the …………………key down

Ans: Ctrl key

Qn 10) Each anchor point has ……......number of direction lines

Ans: 2

Qn 11) How to select the drawn path created by path tool

Ans: Select ⟶ From Path   or

Right click on the Canvas and use the option   Select ⟶ From Path

Qn 12) We can draw a closed region using path tool.Which tool is used to fill a colour in the selected region .   **Ans:** Blend Tool

……….………..….....……....*Lenin Pulickal, Ph:9447823334, GHSS Panickankudy ,Idukki*…....…………………

Qn 13) Which tool is used to change the size of a flower created by path tool   **Ans:** Scale tool

Adding and removing anchor points from a path

Qn 14) How can you add or remove an anchor point in a path   **(July 2019)**

Ans: *Add anchor point*

Ctrl + Mouse click

Remove anchor point

Ctrl + Shift + Mouse Click

Qn 15) How to remove a direction line

Ans: Ctrl + Shift + Mouse click on the handle

Qn 16) To remove an anchor point or handle ,click on it,while keeping the........... and ....keys down

Ans: Ctrl, Shift

Selecting a portion of an image using Path tool

Qn 17) Write the steps to select a portion of an image using path tool and paste the portion in a new Canvas

Ans: i) Tools ⟶ Paths

ii) Use the Paths tool to draw the path along the boundary of the portions to be copied to the new Canvas.

iii) Right click this path and select the menu item   **Select ⟶ From path**

iv) Edit ⟶ Copy

v) Create a new Canvas (Layer)

vi) Edit ⟶ Paste

Paths dialog box

Qn 18) What can be used to make a path visible or invisible.

Ans: i) Select the menu item

Windows ⟶ Docable Dialogs ⟶ Paths

ii) If the eye icon in the Paths Dialog box is visible ,then the path is also visible.

 If the eye icon in the Paths Dialog box is invisible ,then path is also invisible.

Qn 19).............. dialog box is used to make a path visible or invisible

Ans: Path

Note: The path is invisible when select any tool from the Tool box.

Qn 20) In GIMP ,path tool is used to create straight lined and curved paths. Which tool can be used to make a path invisible   **(March 2019)**

Ans: By selecting any tool from Tool box.

Aligning text to a path

Qn 21) Explain how path tool is used for aligning a text line to the path.**(March 2019,March 2017)**

Ans:

i) Select the Text tool from the Toolbox and type a text on the Canvas

ii) Draw a path on the canvas using Paths tool

iii) Select the text typed and use the menu item   Layer $\longrightarrow$ Text Along Path

Managing colours in GIMP

Qn 22) The colour dialog box in GIMP can display the colours in five different ways. Write their names.

Ans: i) GIMP   ii) CMYK   iii)Water Color   iv)Wheel   v) Palette

Qn 23) Explain five ways of displaying colours in GIMP

Ans:

i) GIMP

To use this ,click the first button in the colour dialog box. We can select a colour by clicking on the vertical color bar. The left side square region shows the various shades of the selected colour.

ii) CMYK

To use this, click the second button in the colour dialog box.This model uses four colour components to represent a colour. They are Cyan, Magenta, Yellow and Key(Black).CYMK colour method is used in colour printing.

iii)Water Color

To use this ,click the third button in the colour dialog box.This style can be used to mix one colour with another colour.

iv)Wheel

To use this ,click the fourth button in the colour dialog box.Here ,all the colours will be displayed in the form of a circular wheel. We can select a colour from this wheel by clicking it. The triangle at the center of the wheel shows various shades of the selected colour.

v) Palette

To use this ,click the fifth button in the colour dialog box.Palette option offers a wide range of colours. For more colour palette, we use the menu item

Windows $\longrightarrow$ Dockable Dialogs $\longrightarrow$ Palettes

Qn 24) Explain any three ways of displaying colours in GIMP   **(July 2018, July 2017)**

Ans: Refer Qn 23

Qn 25) How to pick a colour from an image

Ans: Use **Color Picker** tool in the Color dialog box   or

Use **Colour Picker** tool in the Toolbox

Colour Schemes

Qn 26) Name two types of colour schemes

Ans: Subtractive colour scheme, Additive colour scheme

Qn 27) When an artist paints a picture, he may mix a number of colours to make new colours. Here he is using the.................colour method

Ans: Subtractive

Qn 28) When an artist uses a computer to create a picture, he is using the........... colour method to create a colours.

Ans: Additive

Qn 29) CMYK is ....colour method

Ans: Subtractive

Qn 30) The ....colour is called the Key colour

Ans: Black

Qn 31) CMY colour method is used in..............

Ans: Photography

Qn 32) CMYK colour scheme is used in ....purpose

Ans: Colour printing

Qn 33) Which subtractive colour method is used in colour printing   **(July 2019)**

Ans: CMYK

Qn 34) The letter **K** in CMYK represents .... colour

Ans: Black

Qn 35) In CMY method.......... colours are used to generate all other colours.

Ans: Cyan, Magenta, Yellow

Qn 36) RGB is used in ....colour method

Ans: Additive

Qn 37) Distinguish between subtractive colour scheme and additive colour scheme

(July 2017,March 2019, March 2020, Dec 2020, Jan 2022)

Ans:

Subtractive Colour Sheme	Additive Colour Scheme
Used in colour printing	Used in computer and Television screens
Mixing begins with white and ends with black	Mixing begins with black and ends with white
Use Cyan, Magenta and Yellow colour components to create colours	Use Red, Green and Blue components to create colours
Absence of colours is white	Absence of colours is black
Presence of all the colours is black	Presence of all the colours is white

Qn 38) Write short notes on the following colour schemes   **(Dec 2020)**

a) Subtractive   b) Addictive   **Ans:** Refer Qn 37

Qn 39) Describe additive and subtractive colour schemes   **(March 2020)**

Ans: Refer Qn 37

Qn 40) There are two types of colour schemes- subtractive colour scheme and additive colour scheme .Compare them by giving any three points.   **(March 2019)**

Ans: Refer Qn 37

Qn 41)   Differentiate between subtractive colour and additive colour   **(March 2018)**

Ans: Refer Qn 37

Qn 42) In ' Additive colour scheme' presence of all colours gives ....   **(March 2017)**

a) Black colour   b) White colour   c) Red colour   d)No   colour

Ans: White colour

Qn 43) In 'Subtractive colour scheme' presence of all colours gives ....

a) Black colour   b) White colour   c) Red colour   d)No   colour

Ans: Black colour

Qn 44) In the subtractive colour method,the absence of all the colours is…………..colour

a) Black colour   b) White colour   c) Red colour   d) No   colour

Ans: White colour

Setting the brightness and contrast of an image

Qn 45) Write the menu option to set the brightness and contrast of an image

Ans: Tools ⟶ Colour Tools ⟶   Brightness - Contrast

Qn 46) Joseph opens the photo of Maradona in GIMP .But it appears to be too dark .He wants to make it bright .How can he achieve that?   **(Sept 2016)**

Ans: Tools ⟶ Colour Tools ⟶   Brightness - Contrast

Colour balancing

Qn 47) How to change the colour balance in an image

Ans: Use the menu item

Colours ⟶   Colour Balance

Qn 48) What are the uses of Shadows ,Midtones and Highlights options in the Colour Balance dialog box

Ans: Selecting **Shadows** affects darker pixels ,**Midtones** affects medium range of pixels and **Highlights** affects bright pixels.
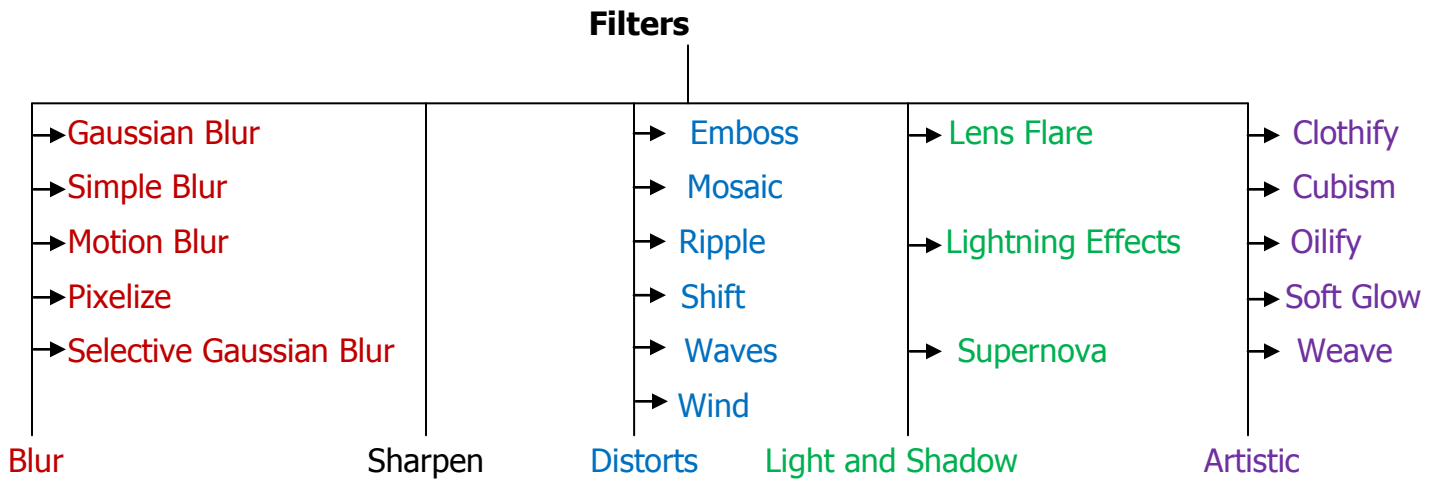
Filters

Qn 49) Define filters

Ans: Filter is a very powerful tool that can modify an image in different ways

Qn 50) List the different types of filters in GIMP

Ans: 1. Blur   2. Sharpen   3. Distorts   4. Light and Shadow   5. Artistic

Filters

Blur	Sharpen	Distorts	Light and Shadow	Artistic
→ Gaussian Blur		→ Emboss	→ Lens Flare	→ Clothify
→ Simple Blur		→ Mosaic		→ Cubism
→ Motion Blur		→ Ripple	→ Lightning Effects	→ Oilify
→ Pixelize		→ Shift		→ Soft Glow
→ Selective Gaussian Blur		→ Waves	→ Supernova	→ Weave
		→ Wind		

1.Blur

Qn 51) Name different types of blur filters

Ans: a. Gaussian Blur   b. Simple Blur   c. Motion Blur   d. Pixelize   e. Selective Gaussian Blur

Qn 52) Explain any five Blur filters in GIMP   **(July 2018, March 2017)**

Ans: These filters blur images in a variety of base.

a. Gaussian

When you use this filter ,the image will have an out of focus effect. It will blur the sharp edges with the background.

Use the menu item Filters ⟶ Blur ⟶ Gaussian Blur

b. Simple Blur

This can be used to blur the image a little bit.

Use the menu item Filters ⟶ Blur ⟶ Blur

c. Motion Blur

It blurs the image in a specific direction at each point.

Filters ⟶ Blur ⟶ Motion Blur

d. Pixelize

It will blur the image into a set of large squares.

Filters ⟶ Blur ⟶ Pixelize

e. Selective Gaussian Blur

In this method, only pixels that are similar to each other are blurred.

Filters ⟶ Blur ⟶ Selective Gaussian Blur

Qn 53) Define Gaussian Blur   **(Sep 2021)**

Ans: Refer Qn 52

2. Sharpen

Qn 54) Write a short note on Sharpen Filter

Ans: This filter is used to sharpen the edge of an image. When we sharpen an image, we will get a better clarity in the image. This is the reverse of blur filter.

Filters ⟶ Enhance ⟶ Sharpen

Qn 55) In GIMP, the filter that can be used to give more clarity to edges of an image is........

(March 2019)

Ans: Sharpen

3. Distorts

Qn 56) Name different types of distorts filters

Ans: a. Emboss   b. Mosaic   c. Ripple   d. Shift   e. Waves   f. Wind

Qn 57) Briefly explain distorts filters in GIMP

Ans: These filters transform the image in different ways.

a. Emboss

This filter stamps and carves the image, giving it an appearance of a relief with bumps and hollows. The bright areas in the image are raised and the dark ones are carved.

Filters ⟶ Distorts ⟶ Emboss

b. Mosaic

This filter cuts the image into many polygons which are slightly raised and separated by joints to create the appearance of a mosaic.

Filters ⟶ Distorts ⟶ Mosaic

c. Ripple

This filter displaces the pixels of the image to create waves or ripples as on a reflection on disturbed water.

Filters ⟶ Distorts ⟶ Ripple

d. Shift

This filter shifts all pixels horizontally or vertically.

Filters ⟶ Distorts ⟶ Shift

e. Waves

With this filter we can get an image similar to the concentric waves created when a stone is thrown into water.

Filters ⟶ Distorts ⟶ Waves

f. Wind

This filter will generate thin black and white lines in the image to create a windy effect.

Filters ⟶ Distorts ⟶ Wind

4. Light and Shadow

Qn 58) Name different types of Light and Shadow filter

Ans: a. Lens Flare   b. Lightning Effects   c. Supernova

Qn 59) Name any two light and shadow filters used in GIMP   **(Sep 2021)**

Ans: Refer Qn 58

Qn 60) Briefly explain Light and Shadow filters in GIMP

Ans: These filters effectively use light and shadow to produce various effects in the image.

a.   Lens Flare

This filter gives the effect of the presence of a sun in the image.

Filters ⟶   Light and Shadow ⟶   Lens Flare

b. Lightning Effects

This filter simulates the effect when we light up an image with a spot.

Filters ⟶   Light and Shadow ⟶   Lightning Effects

c. Supernova

This filter creates a big star reminding a Supernova.

Qn 61) Write the use of the filters Lensflare and Supernova   **(July 2019)**

Ans: Refer Qn 60

5. Artistic

Qn 62) Name different types of artistic filters

Ans: a. Clothify   b. Cubism   c. Oilify   d. Soft Glow   e. Weave

Qn 63) Name any two artistic filters   **(Jan 2022)**

Ans: Refer Qn 62

Qn 64) Briefly explain artistic filters in GIMP   **(Dec 2020, March 2018)**

Ans: These filters are used to create artistic effects in the image.

a. Clothify

This filter adds a cloth like texture to the image.

Filters ⟶   Artistic ⟶   Clothify

b. Cubism

This filter modifies the given image in such a way that it is made up of small cubes.

Filters ⟶   Artistic ⟶   Cubism

c. Oilyfy

This filter modifies the image like an oil painting.

Filters ⟶   Artistic ⟶   Oilyfy

d. Soft Glow

This filter lights the image with soft glow.

Filters ⟶ Artistic ⟶ Soft Glow

e. Weave

This filter modifies the image as if it were printed over woven ribbons of paper.

Filters ⟶ Artistic ⟶ Weave

Qn 65) Amal has a digital photo with him. He wants to make it look like an oil painting .How can he do it using GIMP **(July 2017)**

Ans: Use Oilyfy Filter

Filters ⟶ Artistic ⟶ Oilyfy

Qn 66) Explain any two artistic filters in GIMP **(Sept 2016)**

Ans: Refer Qn 64

Qn 67) Cubism filter is available in .... category of filters. **Ans:** Artistic

Qn 68) Explain various categories of filters available in GIMP **(Sep 2021)**

Ans: Refer Qn 52,54,57,60,64

Qn 69) .... filters blur images in a variety of ways **Ans:** Blur

Qn 70) ....filter transform the image in different ways **Ans:** Distorts

Qn 71) .... filters effectively use light and shadow to produce various effects in the image

Ans: Light and Shadow

Qn 72) .....filters are used to create artistic effects in the image **Ans:** Artistic

Qn 73) Match the following **(March 2020)**

	A		B
(a)	Distorts	(i)	Lens Flare
(b)	Blur	(ii)	Clothify
(c)	Artistic	(iii)	Ripple
(d)	Light and Shadow	(iv)	Pixelize

Ans: Distorts ……………………………….. Ripple

Blur ……………………………………. Pixelize

Artistic ……………………………………. Clothify

Light and Shadow …………………….   Lens Flare

Qn 74) Match the following **(Sep 2021)**

a)Pixelize   a) Distorts

b)Mossaic   b) Light and shadow

c) Supernova   c) Blur

Ans: Pixelize ....Blur

   Mossaic .... Distorts

   Supernova .... Light and shadow

Qn 75) Give 2 example each for the following type of filters   **(July 2019)**

i) Blur filter   ii)Distort filter   iii) Artistic filter

Ans: i) Refer Qn 51   ii) Refer Qn 56   iii) Refer Qn 62

Creating simple animation using GIMP

Qn 76) Name two type of animation in GIMP

Ans: i) Rippling   ii) Burn - In

Qn 77) To save an animation in GIMP,it must be saved in ....format

Ans: **.** gif

Giving Rippling animation

Qn 78) Write the steps to create Rippling animation in GIMP

Ans:

1. Open an image

2. Filters ⟶ Animations ⟶ Rippling

3. Set different parameters for the animation using dialog box

4. Click **OK** button.

5. To play this animation ,select the menu

Filters ⟶ Animation ⟶ PlayBack

6. Click **Play** button

Giving Burn-In animation

This animation requires an image with two layers.

Qn 79) Write the steps to create Burn-In animation in GIMP

Ans:

 1. Open the image

2. Create a layer with white colour

3. Filters ⟶ Animations ⟶ Burn- In

4. Click **OK** button.

5. Filters ⟶ Animation ⟶ PlayBack

6. Click **Play** button

Qn 80)   Explain the steps to create an animation in GIMP   **(March 2016)**

Ans: Refer Qn 78   or   Refer Qn 79

Qn 81) How to save animation file in GIMP

Ans:

1. File ⟶ Save As

2. Name the file with **.gif** extension

3. Save

4. Select **Save As Animation** option in the **Export dialog box**

5. Click on **Export** button

Chapter 8

COMPUTER NETWORKS

Computer networks

Qn 1) Define computer network   **(March 2020)**

Ans: Computer network is a group of computers and other computing hardware devices connected to each other electronically through a communication medium.

Eg: Internet

Qn 2) What are the advantages of using a network   **(March 2018, Sep 2021)**

OR Briefly explain the need or advantages of using a network

Ans: i)Resource sharing

 The sharing of available hardware and software resources in a computer network is called resource sharing.

 ii) Price- performance ratio

Sharing of hardware and software instead of purchasing ,saves a lot of money.

iii) Communication

Computer network helps user to communicate with any other user of the network through its services like e-mail , chatting ,video conferencing etc.

iv) Reliability

All files can have copies on one or two computers, even if one of them is not available due to some

hardware error, the other copy can be used. This is called reliability.

v) Scalability

Network capacity can be increased easily by adding computers to the network.

Some key terms

Qn 3) Define Bandwidth   **(Sep 2021)**

Ans: Bandwidth describes the maximum data -transfer rate between computers in a network.

Qn 4) Write the unit of bandwidth

Ans: bps

Qn 5) bps stands for........

Ans: bits per second

Qn 6) ....is unwanted electrical or electromagnetic energy that lowers the quality of data signals.

Ans: Noise

Qn 7) Any device which is directly connected to a computer network is called a.........

Ans: Node

Data communication system

Qn 8) Define data communication

Ans: Data communication is the exchange of digital data between any two devices

Qn 9) " Data communication is the exchange of digital data between two devices"   **(Dec 2020)**
What are the elements of data communication?

Ans : Sender, Receiver, Message, Medium, Protocols

Qn 10) Write the name of five basic elements for building any data communication system

Ans :Sender, Receiver, Message, Medium, Protocols

Qn 11) Write a short note on data communication system .List out the basic elements for building any data communication system   **(July 2017)**

Ans :Refer Qn 8 ,Qn 10

Qn 12) …………….. is the information to be communicated

Ans :Message

Qn 13) A computer or a device that sends data is called................

Ans :Sender

Qn 14)A computer or a device that receives data is called …………………..

Ans : Receiver

Qn 15)….. …………….is the physical path through which a message travels from the sender to the receiver.

Ans : Communication channel or Communication medium.

Qn 16) What is protocol   **(July 2018 ,March 2019)**

Ans :A protocol is a set of rules and regulations to transfer data from one location to another.

Communication medium

Qn 17) The medium for data transmission over a computer network is called ....

Ans :Communication channel or Communication medium.

Qn 18) Name the two classification of communication channels between computers in a network.

Ans :Guided medium and unguided medium.

Qn 19) Distinguish between guided medium and unguided medium

Ans :In guided medium or wired medium ,physical wires or cables are used and in unguided or wireless medium radio waves ,microwaves or infrared signals are used for data transmission.

Guided medium (wired medium)

Qn 20) Write the name of any three wired medium

Ans :Twisted pair cable (Ethernet cable) ,Coaxial cable ,Optical fibre cable.

Qn 21) Write short notes on twisted pair cable

Ans :This is the most widely used media in small computer networks .It consists of four twisted pairs which are enclosed in an outer shield .These pairs are colour coded. Twisted pair cables are of two types:i) Unshielded Twisted Pair (UTP)cables and ii) Shielded Twisted Pair (STP) cables.
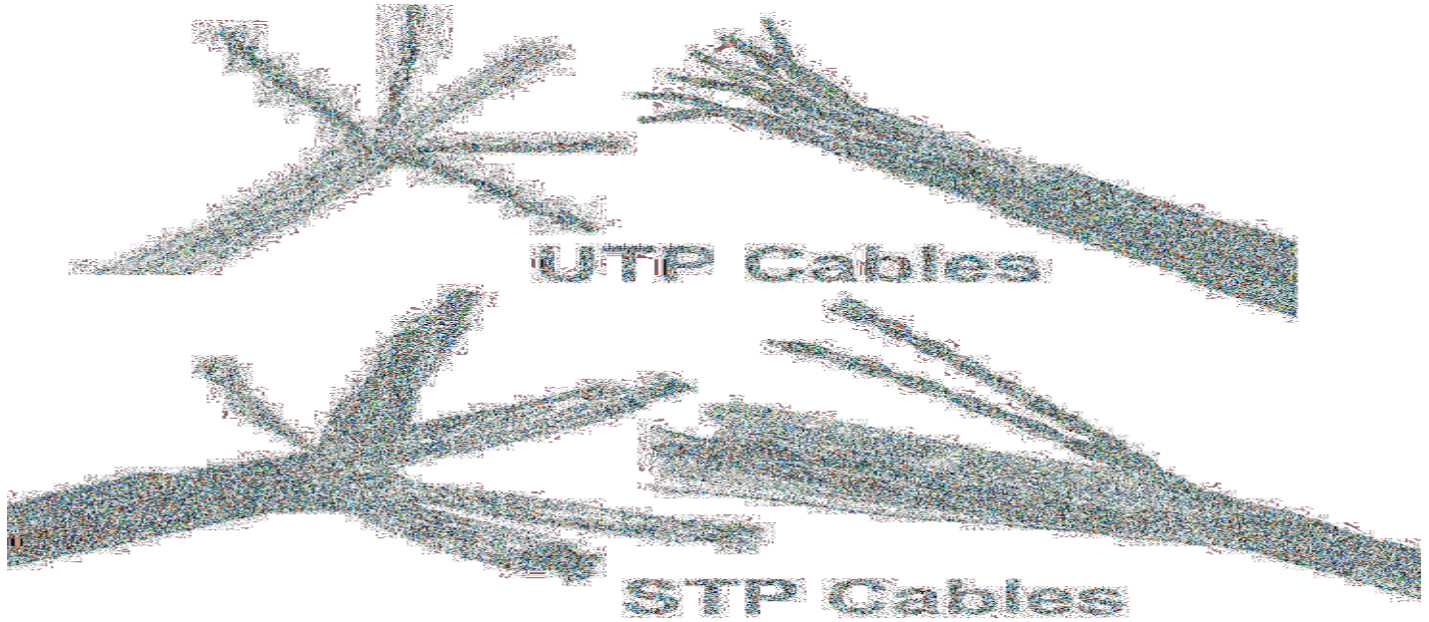
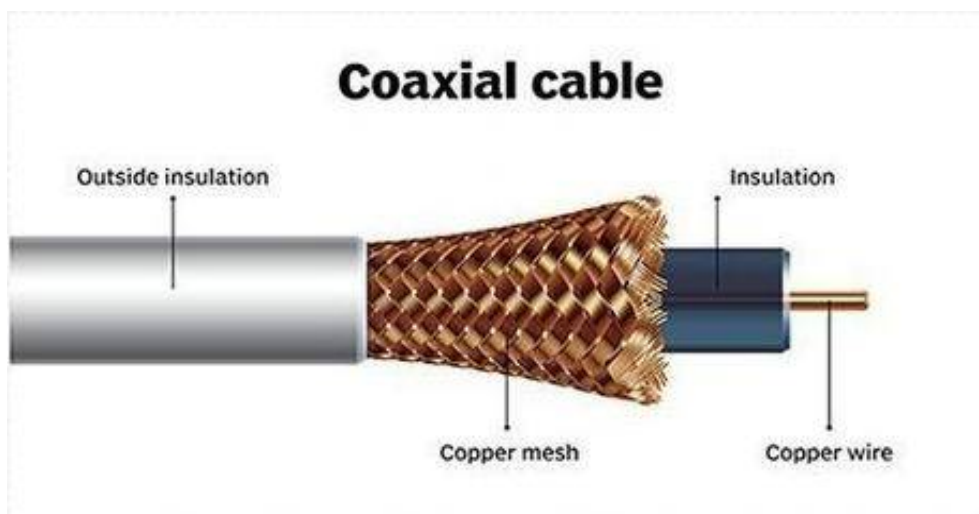**Qn 22)**Distinguish between UTP and STP cables

Ans :

UTP	STP
Individual pairs are not shielded	Individual pairs are shielded
Low cost cable	Expensive cable
Installation is easy	Installation is difficult
Noise occur	Reduce noise

Qn 23) Name the connector used to connect UTP /STP cable to a computer.

Ans :RJ-45 Connector

Qn 24) Write short notes on Coaxial cable

Ans :

A coaxiall cable consists of an inner conductor (copper wire) surrounded by a tubular insulating layer which is further covered by a tubular conducting shield(copper mesh). It has an outer insulation to protect the cable too.

i)   It is expensive.
ii)   It has high bandwidth.
iii)   It is less flexible and difficult to install.

Qn 25) Write short notes on Optical fibre cable

Ans :
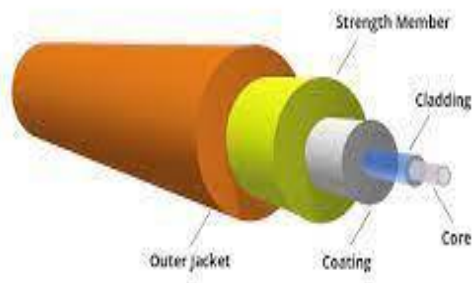
Optical fibres are long glass fibres through which data is transmitted as light signals. It's main parts are Core, Cladding, Coating,Strengthening fibres,Outer jacket

Characteristics:-

i)   High Speed
ii)   High bandwidth
iii)   Carries data over a very long distance at a stretch.
iv)   High expensive
v)   Installation and maintenance are difficult

Qn 26) The transmission media that carries information in the form of light signals is.................

(Dec 2020, March 2016)

 a) Coaxial   b) Wi Fi   c) Optical fibre

Ans :Optical fibre

Qn 27) What are the characteristics of optical fibre cable that makes it a good medium for long distance data transmission   **(July 2019)**

Ans :Refer Qn 25

Unguided medium (wireless)

Qn 28) ....waves are used for wireless communication on computer networks.

Ans :Electromagnetic

Qn 29) Write the name of 3 electromagnetic waves used in wireless communication.

Ans :Radio waves, Microwaves, Infrared waves

Qn 30) Write the characteristics of radio wave transmission

 Ans : i)Not a line of sight transmission

ii)Inexpensive than wired media

iii)Can penetrate through most objects

iv)It can affected by electrical equipments like motor.

v)Less secure mode of transmission

Qn 31) Write the characteristics of microwaves

Ans : i)Inexpensive than wired media.

ii)Offers ease of communication over difficult terrain.

iii)Transmission is in straight line

Qn 32) Write the characteristics of infrared wave transmission.

Ans : i)A line of sight transmission

ii)Only two devices can communicate at a time.

iii)The waves cannot cross solid objects.

iv) Short distance communication.

Qn 33) ……………waves used in remote control and cordless mouse

Ans : Infrared

Qn 34)…………. waves used in cordless phones, AM and FM radio broadcast and mobile phones

Ans :Radio

Wireless communication technologies using radio waves

Qn 35) Write the name of different wireless communication technologies using radio waves.

Ans :Bluetooth , Wi-Fi , Wi- MAX , Satellite link

Qn 36) Write the characteristics of bluetooth transmission

Ans : i)Not a line of sight communication

ii)Bluetooth can connect upto 8 devices at a time.

iii) Slow data transfer rate(upto 1Mbps)

Qn 37) Write the characteristics of Wi-Fi transmission

Ans : i)Not a line of sight communication

ii)Data transmission speed is up to 54Mbps

iii)Can connect more devices at a time

iv) Range upto 114 m

Qn 38) Write the characteristics of Wi- MAX transmission.

Ans : i) Line of sight between communicating devices is not required

ii) Hundreds of users can connect to a single station

iii) Data transmission speed is up to 70 Mbps

iv) Range up to 45 km

v)Weather conditions like rain ,storm etc. could interrupt the signal.

vi) High cost of installation

vii) Very high power consumption

Qn 39) Write the characteristics of transmission using satellite link

Ans : i)Satellites cover a large area of the earth

ii)This system is expensive

iii)Requires legal permission and authorisation

Qn 40) A communication system that is very expensive ,but has a large coverage area when compared to other wireless communication system is............   **Ans** :Satellite link

Qn 41) Transmission of signals from the earth to satellite is called...........   **Ans** :   Uplink

Qn 42) Transmission of signals from satellites to the earth is called..........   **Ans** :   Downlink

Qn 43) Name the satellites used in satellites link communication   **Ans** :Geostationary satellites

Qn 44)A short range communication technology that does not require line of sight between communicating devices is............   **Ans** :Bluetooth

Qn 45) Explain any three communication media   **(Dec 2020)**

Ans :Explanation of any three wired or wireless communication media

Refer Qn 21,24,25,30,31,32 (Any three)

Qn 46) Explain the different communication media used in data communication   **(March 2017)**

(Draw the necessary diagrams)

Ans : Refer Qn 21,24,25,30,31,32

Data communication devices

Qn 47) What is meant by data communication devices

Ans :A data communication device provides an interface between computer and the communication channel.

Qn 48) List the communication devices used in computer networks   **(March 2018)**

Ans :Network Interface Card, Hub ,Switch, Repeater, Bridge, Router ,Gateway.

Qn 49) List any three data communication devices   **(Jan 2022)**

Ans : Refer Qn 48

Qn 50) Briefly explain Network Interface Card(NIC)

Ans :Network Interface Card(NIC) is a device that enables a computer to connect to a network and communicate.It provides hardware interface between a computer and a network.NIC can prepare, send ,receive and control data on the network.NIC can transfer data at a speed of 1Gbps.

Qn 51) Briefly explain Hub

Ans :Hub is a data communication device. It is a small, simple and inexpensive device.If a computer wants to transmit data to another computer ,first it sends data to the hub, the hub retransmits this data to all other computers . Each and every computer gets with the data and check

whether it is for them or not. The computer for which is the data packets are intended accepts it. Other computers on the network discards these data packets.The main disadvantage of hub is that it increases the network traffic and hence reduces the transmission speed.

Qn 52) Briefly explain Switch

Ans :Switch is an intelligent data communication device. It is an expensive device. Unlike hub,switch transmit data not to all computers ,it transmits data only to the intended computer in the network.So the traffic is less and speed is high.

Qn 53) Distinguish between hub and switch   **Ans** :Refer Qn 51,52

Qn 54) Compare Hub and Switch   **Ans** :Refer Qn 51,52   **(July 2016)**

Qn 55) Briefly explain Repeater

Ans :This is a data communication device. It receives incoming data signals ,amplifies the signals to their original strength and retransmits them to the destination.

Qn 56) Name the device, which regenerate incoming signals through a communication medium

Ans : Repeater   **(July 2017)**

Qn 57) Briefly explain Bridge

Ans :Usually used to interconnect same networks with the same protocol.A bridge is a device used to segmentise a network. An existing network can be split into different segments and can be interconnected using a bridge. This reduces the amount of traffic on a network.When a data packet arrives in a bridge it checks the address of the data packet.If the address belongs to a computer on the other side of the bridge, then it will allow to pass through it.Otherwise it will be discarded.

Qn 58) Write short notes on Router   **(Jan 2022)**

Ans :A router is a device that can interconnect two networks of the same type using the same protocol. Find optimal path to destination because it is intelligent.

Qn 59) Briefly explain Gateway

Ans : Different network with different protocols are connected using gateway.Translate one protocol to another protocol.It can check the device address and the network address and can use algorithms to find the best path for packets to reach the destination.

Qn 60) Compare Router and gateway   **Ans** :Refer Qn 58,59   **(Sep 2021)**

Qn 61) Different network with different protocols are connected using...........   **(March 2017)**

Ans : Gateway

Qn 62) Different networks with different protocols are connected by a device called......

(March 2016)

a)Router   b)Bridge   c)Switch   d)Gateway   **Ans** : Gateway

Qn 63) What is the use of the following devices in data communication   **(July 2019)**

i) Switch   ii)Repeater   iii) Bridge

Ans :i) Refer Qn 52   ii) Refer Qn 55   iii) Refer Qn 57

Qn 64)   Name and explain any two data communication devices   **(March 2019, March 2018)**

Ans : Refer Qn 50,51,52,55,57,58,59 (Any Two)

Qn 65) Differentiate between Router and Bridge.   **Ans** : Refer Qn 58,57   **(Dec 2020)**

Data terminal equipments

Qn 66) What is meant by data terminal equipments

Ans :A data terminal equipment(DTE) is a device that controls data flowing to or from a computer.

Qn 67) Write the name of any two data terminal equipments   **Ans** : Modem ,Multiplexer

Qn 68) Write short notes on Modem

Ans :Modem is a data terminal equipment.It is used for communication between computers through telephone lines .It converts digital signals into analogue signals and vice versa.

Qn 69) Write short notes on multiplexer

Ans :Multiplexer is a data terminal equipment.

Multiplexing is sending multiple signals on a physical medium at the same time in the form of a single, complex signal and then recovering the separate signals at the receiving end .The device used for multiplexing is called multiplexer.
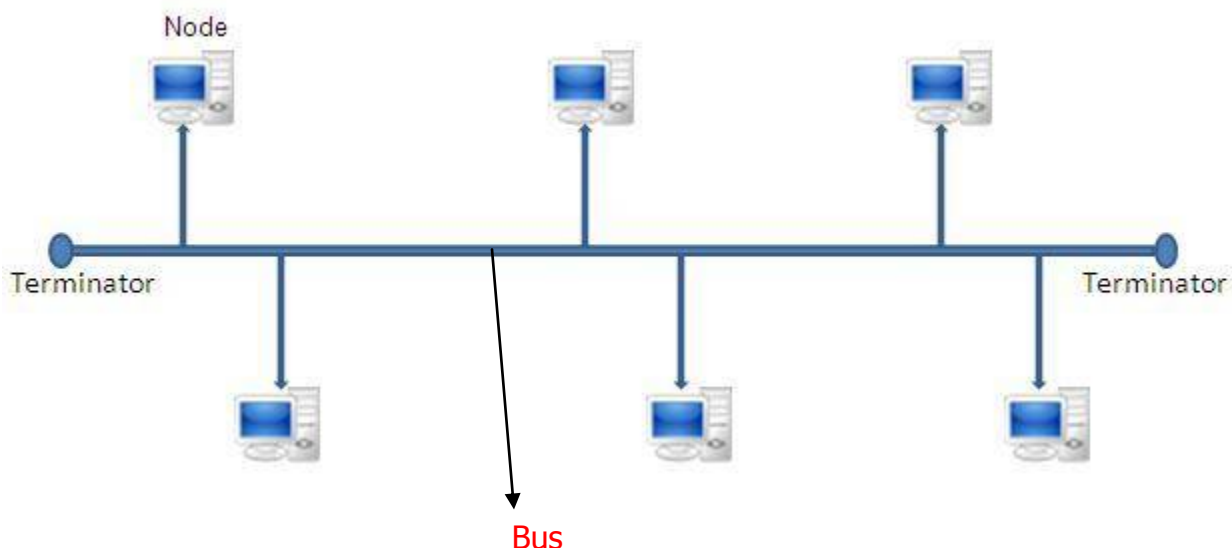
Network topologies

Qn 70) Define topology   **(July 2017, July 2018, July 2019, Sep 2021)**

Ans : The way in which the nodes are physically interconnect to form a network is called a topology.

Qn 71) Briefly explain bus topology

Ans :

Bus

In bus topology all the nodes are connected to a main cable called bus. Nodes broadcast messages along the whole bus. All others receive the message, but only one with the correct address accepts it.Open end of the cable connected to terminators.

Advantages

i)Easy to install   ii) Need less cable   iii) Inexpensive

iv) Failure of a node does not affect the network

Disadvantages

i)Difficult to troubleshoot   ii)Only one node can transmit data at a time

Qn 72) Briefly explain star topology

Ans :

In star topology each node is directly connected to a hub or switch.If any node has to send some information to any other node, it sends the signal to the hub or switch. The hub or switch retransmits the information to the destination.
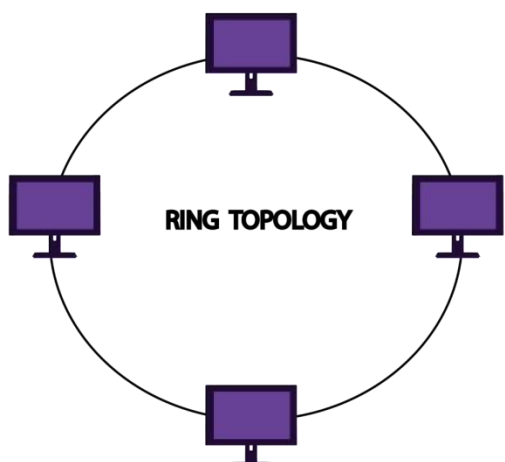
Advantages

i)More efficient compared to bus topology.   ii)Easy to install   iii) Easy to troubleshoot

iv) Failure of a node does not affect the network.

Disadvantages

i)Need more cable   ii) Expensive

iii)The hub/ switch fails, the whole network fails to operate.

Qn 73) Briefly explain ring topology

Ans :

RING TOPOLOGY

Here all the nodes are connected in a ring.Data travels only in one direction in a ring.After travelling through each node, the data reaches the correct destination.
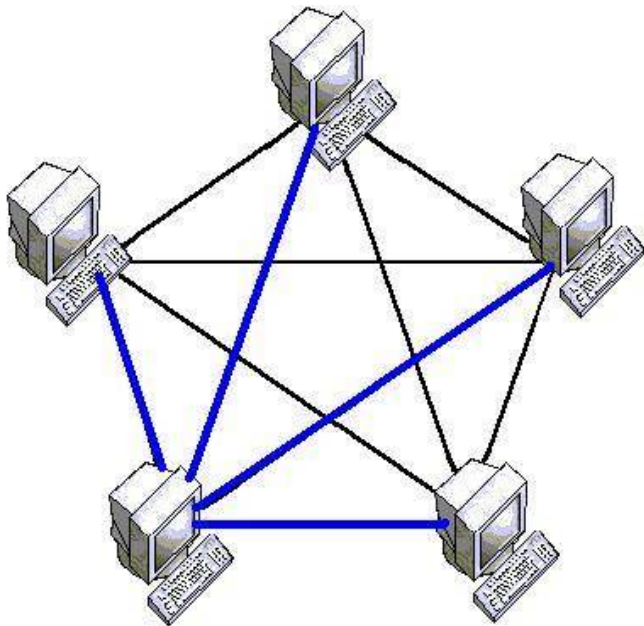
Advantages

i)Need less cable   ii)Inexpensive

iii)No signal amplification is required as each node amplifies the signal.

Disadvantages

i)If one node fails, entire network will fail.   ii)Addition of nodes to the network is difficult.

Qn 74) Briefly explain mesh topology

Ans :

In mesh topology, every node is connected to other node.So there will be more than one path between two nodes. If one path fails, the data will take another path and reach the destination.

Advantages

i)Network will not fail even if one path between the nodes fails.

Disadvantages

i) Need more cable

ii)Expensive

iii)Very complex and difficult to manage

Qn 75) Briefly explain any three network topologies   **(March 2020)**

Ans: Refer Qn 71,72,73,74 (Any three)

Qn 76) Explain any three LAN topologies   **(Jan 2022)**

Ans: Refer Qn 71,72,73,74 (Any three)

Qn 77) Explain the characteristics of any two topologies with diagram   **(July 2019)**

Ans: Refer Qn 71,72,73,74 (Any three)

Qn 78) Explain the different topologies in a network with diagram   **(July 2018, March 2017)**

Ans: Refer Qn 71,72,73,74

Qn 79) Explain any two topologies with diagram   **(Sep 2021)**

Ans: Refer Qn 71,72,73,74 (Any two)

Qn 80) Compare different network topologies   **(July 2017)**

Ans: Refer Qn 71,72,73,74

Qn 81) The nodes in a computer network can be inter connected in different ways .Identify the name given to the way of connecting these nodes. Explain any four of them with suitable block diagrams.   **(July 2016)**

Ans: Topology.   Refer Qn 71,72,73,74

Types of networks

Qn 82) What are different types of computer networks?   **(Sep 2021)**

Ans: PAN,LAN,MAN , WAN

Qn 83) PAN stands for........   **Ans:** Personal Area Network

Qn 84) LAN stands for........   **Ans:** Local Area Network

Qn 85) MAN stands for........   **Ans:** Metropolitan Area Network

Qn 86) WAN stands for........   **Ans:** Wide Area Network

Qn 87) Briefly explain PAN

Ans: PAN is a network of communicating devices(Computer, mobile ,tablet etc) in the proximity of an individual. It can cover an area of radius with few meter . It has high speed and very low expensive.

Eg: When we transfer songs from one cell phone to another or from a PC to an MP3 player ,a PAN is set up between the two.

Qn 88) What is LAN?   **(Jan 2022)**

Ans: Network used to interconnect computers in a single room, rooms within a building or buildings of one site are normally called local area network (LAN) .It can cover an area of radius with a few metres to a few kilometres.LAN can be set using wired media or wireless media(WLAN). Speed is high.Inexpensive.

Qn 89) Briefly explain MAN

Ans: MAN is a network spread over a city.It can cover an area of a few Kilometres to a few hundred Kilometres radius.For example ,a cable TV Network that spread over the city is a MAN. It has moderate speed. Moderately expensive.

Qn 90) Briefly explain WAN

Ans: WAN spans across a large geographical area such as countries and continents. It is the largest network. Internet is an example of WAN.Internet is considered as the largest WAN in the world. A network of ATMs,banks , international organisations etc are examples of WAN. It has low speed. High expensive.

Qn 91) Explain the classification of computer networks on the basis of size **(March 2020)**

Ans: Explain PAN, LAN, MAN, WAN(Refer Qn 87,88,89,90)

Qn 92) Briefly explain the different types of networks **(March 2018)**

Ans: Explain PAN, LAN, MAN, WAN(Refer Qn 87,88,89,90)

Qn 93) Which one of the following network crosses the limits of continents ? **(March 2017)**

 a) WAN b)LAN c)PAN d)MAN **Ans:** WAN

Qn 94) How is a WAN different from a LAN **(March 2016)**

Ans: Refer Qn 90, 88

Logical classification of networks

Qn 95) Name the different logical classification of networks

Ans: i)Peer-to-Peer network ii)Client- Server network

Qn 96) Briefly explain Peer-to-Peer network

 Ans: It has no dedicated server. In this network, all the computers are considered equal .This network is suitable for small networks like home network or small shop's network.

 Qn 97) Briefly explain Client- Server network

 Ans: In this network ,a computer is powerful (called Server) and all others are clients. A server provides clients with specific services(responses) upon client's request.

 Qn 98) Distinguish between peer- to -peer network and client -server network.

Ans: Refer Qn 96,97

Classification of Servers

The different servers are File server , Web server, Print server and database server.

Qn 99)A computer that stores and manages files for multiple users on a network is called.............

Ans: File Server

Qn 100) A computer dedicated to responding to requests for web pages is called................

Ans: Web server

Qn 101)A computer that redirects print jobs from clients to specific printers is called...........

Ans: Print Server

Qn 102)A computer that allows authorised clients to view, modify and delete data in a common database is called ....

Ans: Database server

Identification of computers over a network

MAC address and IP address are used to identify computers in a network.

Qn103) Write a note on MAC address **(March 2017)**

Ans: Media Access Control(MAC) address is a universally unique address (12 digit hexadecimal number) assigned to each NIC (Network Interface Card) by its manufacturer .This address is known as the MAC address.

Qn 104) What is an IP address? **(Jan 2022)**

Ans: An IP address has 4 parts numeric address. Each part contains 8 bits. Each part is separated by dot. On a network, the IP address of a computer is used to identify it.

Qn 105) The unique address assigned to each NIC card is.............. **(Jan 2022)**

i)MAC   ii)IP   iii)TCP   **Ans:** MAC

Qn 106) MAC stands for........   **Ans:** Media Access Control

Network protocols

A protocol is a set of rules and regulations to transfer data from one location to another.

Different network protocols

TCP/IP, HTTP, FTP and DNS are different types of network protocols

Qn 107) TCP/IP stands for........   **Ans:** Transmission Control Protocol/ Internet Protocol.

Qn 108) HTTP stands for........   **Ans:** Hyper Text Transfer Protocol

Qn 109) FTP stands for........   **Ans:** File Transfer Protocol

Qn 110) DNS stands for........   **Ans:** Domain Name System

Qn 111) Briefly explain TCP/IP

Ans: TCP/ IP stands for Transmission Control Protocol / Internet Protocol. The protocol for internet communication is TCP/IP.

When data is to be sent from one computer to another over Internet, it is first broken into smaller packets by TCP and then sent. Delivery of each of these packets to the right destinaion is done by internet Protocol (IP)

Qn 112) Briefly explain HTTP

Ans:HTTP stands for Hyper Text Transfer Protocol. It was designed for communication between web browsers and web servers.

Qn 113) Briefly explain FTP

Ans: FTP stands for File Transfer Protocol.FTP is the easiest way to transfer files between computers through the internet.

Qn 114) Briefly explain DNS

Ans: DNS stands for Domain Name System. DNS returns the IP address of the domain name, that we type in our web browser's address bar.

Qn 115) Explain any four network protocols briefly **(March 2019)**

Ans: Explanation TCP/IP, HTTP, FTP, DNS (Qn 111,112,113,114)

Qn 116) The protocol used in Internet Communication is .... **(March 2018)**

Ans: TCP/IP

Qn 117) The protocol for internet communication is .... **(March 2016)**

a) TCP/IP   b) HTTP   c) FTP   d) UDP
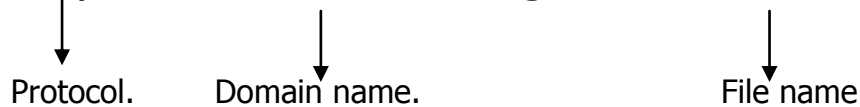
Ans: TCP/IP

Qn 118) Briefly explain any two communication protocol in Computer network   **(July 2018)**

Ans: Explanane any two- TCP/IP, HTTP, FTP, DNS (Qn 111,112,113,114)

Qn 119) Briefly explain URL

Ans: URL stands for Uniform Resource Locator. It is the address of the website. It consists of letters, numbers and punctuations.URL has three parts. They are protocol ,domain name and filename.
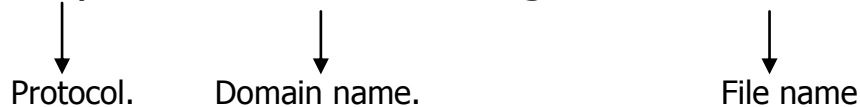
Eg: http://www.dhsekerala.gov.in/ index.html

        Protocol.   Domain name.   File name

Qn 120) Write the different sections of URL

Ans: Protocol,   Domain name,   File name

Eg: http://www.dhsekerala.gov.in/ index.html

        Protocol.   Domain name.   File name

Qn 121) Consider the URL

"http://www.dhsekeraka.gov.in/index.html"   **(March 2019)**

Find the following from the URL

a) domain name   b) protocol   c) file name

Ans:a) domain name -   www.dhsekeraka.gov.in   b) protocol -   http c) file name - index.html

Qn 122) Observe the following URL

http://www.dhsekerala.gov.in/index.html

Explain the different parts in the above URL   **(July 2016)**

Ans: protocol -   http

domain name -   www.dhsekeraka.gov.in

file name - index.html

Qn 123) Write the protocol and domain name from the URL http://www.dhsekerala.gov.in

                                                                                        (Jan 2022)

Ans: protocol -   http

domain name -   www.dhsekeraka.gov.in

Qn 124) URL stands for........

Ans: Uniform Resource Locator

Qn 125) Briefly explain Domain name

Domain name usually has more than one part: top level domain name and sub - domain name.In the above example **in** is the top level domain name and **gov** is the sub-domain name.

Table :Informations from a URL (Generic and country specific domain names)

Generic Domain Names	
.com	Commercial business
.edu	Educational Institutions
.gov	Government agencies
.mail	Military
.net	Network organisations
.org	Organisations(nonprofit)

Country Specific Domain Names	
.in	India
.au	Australia
.ca	Canada
.ch	China
.jp	Japan
.us	United States of America

Chapter 9

INTERNET

Qn 1) Who is the father of internet   **Ans:**Vinton Gray Cerf

Qn 2) Expand WWW   **(Sep 2021)**

Ans: World Wide Web

Qn 3) Who proposed the idea of WWW   **Ans:**Tim Berners Lee

Qn 4) ARPANET stands for..........   **Ans:** Advanced Research Projects Agency Network.

Qn 5) Define Internet

Ans: It is a network of networks. The Internet is a public network. It is accessible by anyone.

Qn 6) Define intranet

Ans: A private network inside an organisation is called intranet.

Qn 7) Define extranet

Ans: When an intranet is made accessible to some computers that are not part of a company's private network is called an extranet. It allows vendors and business partners to access the company resources.

Qn 8) Compare intranet and extranet   **(Marh 2019)**

Ans: Refer Qn 6,7

Qn 9) What is the difference between Internet and extranet   **(July 2018)**

Ans: Refer Qn 5,7

Connecting the computer to the internet

Qn 10) What are the software and hardware requirements for connecting a computer to the internet.   **(March 2018)**

Ans: 1. A computer with NIC and an operating system that supports TCP/ IP

2. Modem

3.Telephone connection

4.An Internet account given by an Internet Service Provider (ISP)

5. Software for internet services like browsing.

Qn 11) ISP stands for...........   **Ans:** Internet Service Provider.

Types of connectivity

The speed or data transfer rate of the internet is an important aspect. Internet connectivity is classified based on the speed of the connection and the technology used.

Qn 12) ....is the average number of bits transferred between devices in unit time.

Ans: Data Transfer Rate

Qn 13) Name the three types of Internet connectivity

Ans: 1. Dial-up connectivity

2. Wired broadband connectivity

3. Wireless broadband connectivity

Qn 14) Write a note on Dial-up connectivity

Ans: Dial- up refers to an Internet connection that is established using a modem. The modem connects the computer to standard telephone lines, which serve as the data transfer medium. As the connection is made by dialling, it takes time to connect to the server at the ISP. After the dial-up connection has been established, it is active until the user disconnects from the ISP. It is less expensive.

Disadvantages

i)Low speed

ii)Requires exclusive use of the telephone line.(While accessing internet ,we cannot make or receive telephone calls)

Wired broadband connectivity വയേർഡ് ബ്രോഡ്ബാൻഡ് കണക്റ്റിവിറ്റി

Qn 15) Write a short note on Wired broadband connectivity

Ans: Wired broadband connections are 'always on' connections that do not need to be dialled and connected.

Qn 16) Name the different wired broadband connectivity technologies.

Ans: i)Integrated Services Digital Network (ISDN)   ii) Cable Internet

iii) Digital Subscriber Line (DSL)   iv) Leased Lines   v) Fiber to the Home(FTTH)

Qn 17) Write a short note on ISDN

Ans: ISDN stands for Integrated Services Digital Network. ISDN is a broadband service capable of transporting voice and digital data. Speed up to 2 Mbps.

Qn 18) Write a short note on Cable internet

Ans: Cable internet access provides Internet access using coaxial cables laid for television signal transmission to our homes. Here a cable modem is used. Speed upto to 10 Mbps.

Qn 19) Write a short note on DSL

Ans: DSL stands for Digital Subscriber Line .It provides connection to the Internet through standard telephone lines .DSL allows the user to use copper telephone lines for both Internet communication and for making voice calls simultaneously.Speed upto 24 Mbps.

Qn 20) Write a short note on Leased line

Ans: It is very costly and is used by large organisations .Speed upto 100 Mbps.

Qn 21) Write a short note on FTTH

Ans: FTTH stands for Fiber to the Home .Here optical fibres are used for data transmission. FTTH technology has been accepted worldwide to implement high speed internet to the home.

Qn 22) Distinguish between dial- up connection and wired broadband connection

Ans:

Dial- up connection	Wired broadband connection
Slow connection	High speed connection
Requires dialing to connect to ISP	Always on connection
Uses telephone line exclusively	Simultaneous use of voice and Internet
Uses dial -up modem	Uses broadband modem

Wireless broadband connectivity

Qn 23) Name any three wireless broadband connectivities.

Ans: i) Mobile broadband

ii)Wi-MAX

iii) Satellite broadband

Qn 24) Write a short note on Mobile broadband

Ans: It is the wireless internet access using mobile phones, tablets etc. The modem is built inside the mobile phone, tablet etc. Mobile broadband offers the freedom to allow the user to access the Internet from anywhere on the move. The mobile technology for data transmission are 2G ,3G and 4G .

Qn 25) Write a short note on Wi- MAX

Ans: Wi-MAX offers a Metropolitan Area Network which can provide wireless Internet up to a distance of 50 Kilometre. Here radio waves are used for data transmission. Speed up to 70 Mbps.

Qn 26) Write a short note on Satellites broadband

Ans: Satellite broadband technology is a method by which Internet connectivity is provided through a satellites. They are used by banks,stock exchanges etc. and also for Internet access in remote areas. Speed up to 1Gbps.

Internet access sharing methods

Qn 27) What are the different ways by which we can share an Internet connections among several computers.   **(July 2019)**

Ans: a. LAN   b. Wi-Fi network   c. Li- Fi network

Qn 28) Write a short note on Li-Fi

Ans: Li- Fi is a fast optical version of Wi-Fi ,which uses visible light for data transmission. It can be used in aircrafts ,hospitals ,underwater etc. Speed up to 100 Mbps.

Qn 29) Explain the following in connection with Internet   **(March 2017)**

Li-Fi network

Ans: Refer Qn 28

Services on internet

Qn 30) Write a short note on WWW

Ans: The World Wide Web (WWW) is a system of interlinked hypertext documents accessed through the Internet. WWW is a huge client -server system consisting of millions of clients and servers connected together. Each server maintains a collection of documents and they can be accessed using a reference called Uniform Resource Locator (URL) . Most of WWW documents are created using Hyper Text Markup Language(HTML) tags and are called web pages.

Browser

Qn 31) Define browser   **(Sep 2021)**

Ans: Web browser or browser is an application software for accessing web pages in WWW.

Qn 32) Name any two browsers   **(Sep 2021)**

Ans: Google Chrome, Internet Explorer ,Mozilla Firefox ,Opera and Safari.

Qn 33) Which of the following is not a browser software   **(Jan 2022)**

i)Opera   ii)Yahoo   c) Chrome

Ans: Yahoo

Qn 34) What is meant by web browsing

Ans: Searching the Internet for web pages using the browser software is called web browsing.

Qn 35) Differentiate the terms a web browser and web browsing   **(March 2016)**

Ans: Refer 31,34

Qn 36) Write the different steps takes place to display a web page in web browsing

Ans: 1. The browser determines the URL entered.

2. The browser asks the DNS for URLs corresponding IP address.

3. The DNS returns IP address.

4. The browser makes a TCP connection using the IP address.

5. The browser sends a GET request to get the webpage to the web server.

6. The server returns the file.

7. The TCP connection is released.

8.The browser displays the web page.

Search engines

Qn 37) Write a short note on search engine

Ans: A search engine is a website that allows users to look up information on the the WWW.

Search engine websites use programs called web crawlers or spiders or robots to search the web.

Qn 38) Name any four search engines

Ans: Google, Bing ,Yahoo Search ,Ask

Qn 39) Which of the following is not a Search Engine?   **(Sep 2021)**

i) Google   ii) Facebook   iii)Bing

Ans: Facebook

Qn 40) What is meant by search engine? Give example   **(Jan 2022)**

Ans:A search engine is a website that allows users to look up information on the the WWW.

Eg: Google, Bing ,Yahoo Search ,Ask

Qn 41) Name any one search engine available on the internet   **(July 2018)**

Ans: Refer Qn 38 (Any one)

Qn 42) What is a search engine? Give two examples   **(July 2019)**

Ans: Refer Qn 40,38 (Any two)

Qn 43) Give an example for a search engine   **(July 2017)**

Ans: Refer Qn 38 (Any one)

Qn 44) Which one of the following is NOT a search engine   **(March 2016)**

 a) Google   b)Bing   c)Facebook   d)Ask   **Ans:** Facebook

E- mail(Electronic mail)

Qn 45) Write a short note on e- mail

Ans: Email is a method of exchanging digital messages between computers over internet. The structure of an e-mail addresses is username@ domain name

Eg: leninpulickal@gmail.com

An e-mail address consists of two parts separated by @ symbol.

Qn 46) For receiving messages ,e-mail client applications usually use either ……………………. or the …………………………….

Ans: POP or IMAP

Qn 47) POP stands for........   **Ans:** Post Office Protocol

Qn 48) IMAP stands for........   **Ans:** Internet Message Access Protocol

Qn 49) Name the different sections of an e-mail   **(March 2020)**

Ans: To , Cc , Bcc ,Subject ,Content

Qn 50) Briefly explain the different sections of an e-mail

Ans:

To -   Recepient Address

Cc -   Carbon Copy

Bcc - Blind carbon copy

Subject - Meaningful subject for the email

Content - Type your message here

Qn 51) Name the protocol used for email communication

Ans: SMTP

Qn 52) SMTP stands for........

Ans: Simple Mail Transfer Protocol

Qn 53) What are the benefits of using email?   **(Jan 2022)**

Ans: 1. High speed   2. Easy to use   3. It is cheap   4. Available anywhere anytime

5. Environment friendly

Qn 54) What are the disadvantages of email

Ans: 1. E-mail may carry viruses   ]

2. Junk mails

Checking and deleting unwanted mails consume a lot of time.

Social media

Qn 55) What is social media?   **(July 2018)**

Ans: Social media refers to the use of mobile and web- based technologies through which individuals and communities can create , share ,discuss and modify content.

Classification of social media

Qn 56) Name the different types of social media

Ans: a) Internet forums   b) Social blogs   c) Microblogs

d) Wikis   e) Social networks   f) Content communities

Qn 57) Write down any four social media platforms   **(Sep 2021)**

Ans: Refer Qn 56

Qn 58) Write a short note on Internet forums

Ans: An internet forum is an online discussion website where people can engage in conversations in the form of posted messages .Each discussion on a topic is called a thread.

Eg: Ubuntu Forum

Qn 59) Write a short note on Social blogs

Ans: A blog(web log) is a discussion or informational website consisting of posts displayed in the reverse chronological order (that is, the most recent post appear first)

Eg: Blogger. com,WordPress.com

Qn 60) Write a short note on Micro blogs

Ans: It allows users to exchange short sentences ,individual images or video links.

Eg: Twitter.com

Qn 61) Write a short note on Wikies

Ans: Wiki is a type of content management system.Wikies allow pupil to add content or edit existing

information in a web page ,to form a community document. Editing done by users is very closely monitored by other editors.wikipedia.org- free online encyclopaedia is a most popular wiki on web. The Malayalam edition of Wikipedia is available at ml.wikipedia.org

Qn 62) Write a short note on Social network

Ans: Social networking sites allow people to build personal web pages and then connect with friends to communicate and share content.We can share text, pictures ,videos etc. and comment to the posts.

Eg: facebook.com ,   linkedin.com

Qn 63) Write a short note on Content communities

Ans: Content communities are websites that organise and share contents like photos, videos etc.

Youtube.com is a popular video sharing site and flickr.com shares pictures.

Qn 64) What are the advantages of social media

Ans: 1.Bring people together

Social networking allows people to find their childhood friends and make new ones

2. Plan and organize events

These sites help users to organize and participate in events.

3. Business promotion

Social media offers opportunities for business to connect with customers.

4. Social skills.

These sites allow people to express their views over a particular issue.

Qn 65) What are the disadvantages or limitations in the use of social media

Ans: 1. Intrusion to privacy   2. Addiction   3. Spread rumours

Qn 66)   Write the advantages and disadvantages of using social media   **(Dec 2020)**

Ans: Refer Qn 64,65

Qn 67) Briefly explain advantages and disadvantages of social media   **(July 2018, Dec 2020)**

Ans: Refer Qn 64,65

Qn 68) Social media is the modern trend of communication. Explain the advantages and risks that a person face in the social media   **(March 2017)**

Ans: Refer Qn 64,65

Qn 69) What are the guidelines for using social media

Ans:1.Avoid unnecessary uploading of personal data like e-mail address ,telephone number, address, pictures and videos

2. Setting time schedule for using these sites can save wastage of time.

3. Avoiding posting content you may regret later

4. Share your personal information only with those you know well.

Qn 70) "Mrs.Sunitha spends many hours daily in social media.Her mother feels that she is addicted to social media ".Does social media has negative impact? List out the limitations of social media **(July 2017)**

Ans: Yes. Refer Qn 65

Qn 71) Briefly explain any two internet services   **(Jan 2022)**

Ans: Refer Qn 30(www), Qn 37(Serch Engine), Qn 45(e-mail), Qn 55 (Soial media)

Cyber security   സൈബർ സുരക്ഷ

Here we discuss the common threats that affects a computer network

Qn 72) Define cyber security   **(Sep 2021)**

Cyber security is the application of technologies , processes and controls to protect systems, networks,programs,devices and data from cyber attacks.

Qn 73) Name the common threats that affects a computer network

Ans: Computer virus , Worm , Trojan horse , Spams , Hacking, Phising , Denial of Service

(DoS) attack , Man- in- the- Middle attack

Qn 74) Write a short note on Computer virus

Ans: A computer virus is a malicious software program loaded onto a user's computer without the user's knowledge and perform malicious actions .It can self -replicate .Computer viruses never occur naturally .They are always induced by people.

Qn 75) Write a short note on Worm

Ans: A computer worm is a stand alone malware program that replicates itself in order to spread to other computers. Worms spread from computer to computer on its own. Worms always slow down the network traffic. Mainly it spread from one computer to another through E-mail.

Qn 76) Write a short note on Trojan horse

Ans: A Trojan horse ,will appear to be a useful software but will actually do damage once installed or run on the computer. When a Trojan is activated on a computer ,they can cause serious damage by deleting files and destroying information on the system. Some Trojans create a backdoor on the computer .This gives malicious users access to confidential or personal information in the computer through the network. Trojan horse will not replicate itself.

Qn 77) Write a short note on Spams

Ans: Spams or junk mails are unwanted e-mails send by the companies for the sales promotion of their product or service. It contains virus.

Qn 78) Write a short note on Hacking

Ans: Hacking is the process of gain unauthorised access to data in a computer or control computer network .The person who involved in hacking is called hacker .There are three type of hackers .They are white hats, black hats and gray hats.

Qn 79) A.......... hacker is an ethical computer hacker who test the security of the computer network.   **Ans:** White hats

Qn 80)A ....hacker is a hacker (criminal) who violates computer security for their personal profit or make the network unusable.   **Ans:** black hat

Qn 81) A .... hacker is a hacker who may sometimes violate laws or typical ethical standards ,but does not have the malicious intent typical of a black hat hacker.   **Ans:** grey hats

Qn 82).......... ..hackers who fall between white and black hackers.

Ans: Gray hat hackers   or gray hackers

Qn 83) Write a short note on Phising

Ans: Phishing is an attempt to acquire information such as usernames, passwords and credit card details by posing a fake website.Phishing website looks like orginal website. The act of creating such a misleading website is called spoofing.

Qn 84) Write a short note on Denial of Service (DoS)attack

Ans: A Denial of Service(DoS) attack is usually aimed at a web server. Such an attack forces the server to restart.An attack   in which the attackers goal is to shut down the target server   rather than stealing data is called DoS attacks.This attack can be done using a single computer called Denial of Service (DoS)attack or using more than one computer called Distributed Denial of Service (DDoS)attack. This infected computers due to DDoS attack are called 'zombies'.

Qn 85) Write a short note on Man- in- the- Middle attack

Ans:A man- in -the -Middle attack is a form of attack in which an attacker secretly intercepts electronic messages between the sender and the receiver and then captures,inserts and modifies messages during message transmission. Encrypted connections such as HTTPS(HTTP Secure), SFTP (Secure FTP) etc. should be used for secure transmissions, so that intruders cannot modify the messages.

Qn 86) Briefly explain any two cyber attacks   **(Sep 2021)**

 Ans: Refer Qn 74,75,76,77,78,83,84,85

Qn 87) Briefly explain any three threats that affect computer network   **(March 2018, Dec 2020)**

Ans: Refer Qn 74,75,76,77,78,83,84,85 (Any three)

Qn 88) Explain any two threats that affect the security of a computer network**.**

(July 2019 , Jan 2022)

Ans: Refer Qn 74,75,76,77,78,83,84,85   (Any two)

Qn 89)   Define the following terms   **(Marh 2019)**

a) Hacking   b)Phishing

Ans: a) Refer Qn 78   b) Refer Qn 83

Qn 90) Explain the following in connection with Internet   **(March 2017)**

Phishing

Ans: Refer Qn 83

Preventing network attacks

Qn 91) How to prevent network attacks

Ans: We can prevent network attack using **Firewall, Antivirus scanners and Cookies**.

Qn 92) Write a short note on Firewall

Ans: A firewall is a system of computer hardware and software. Firewall is a security barrier between two networks that control the incoming and outgoing network traffic by analysing the data and determining whether they should be allowed through or not, based on a set of rules.

Qn 93) Write a short note on Antivirus scanners

Ans: Antivirus software scans files in the computer system for known viruses and removes them if found. Viruses ,worms and Trojan horses are all examples of malicious software (malware). When an anti virus program found a malware in a file ,the antivirus program stops the file from running ,and puts it into 'quarantine'. Quarantine is a special area for storing files probably infected with viruses. These files can later be deleted or the virus can be removed.

Qn 94) Write a short note on Cookies

Ans: Cookies are small text files that are created when we use a browser to visit a website. Cookies stores information like usernames ,passwords,e-mail address, name of websites visited etc. Cookies are not viruses ,but it is always possible for a hacker to use it for malicious purposes.

Qn 95) .... is a text file created during browsing that collects private information about a user

(March 2017)

a) Spam   b) Cookie   c) Worm   d)Dos

Ans: Cookie

Qn 96) What is meant by sandboxing

Ans: Sandboxing is a technique through which programs that are suspected to be infected with a virus can be run. Through sandboxing such programs are run in a separate memory area and therefore cannot damage our operating system.

Qn 97) Write a short note on cyber security   **(July 2017)**

Ans: Refer Qn 92,93,94,96

Guidelines for using computer over Internet.

Qn 98) Write the guidelines for using computers over Internet.

Ans: 1. Download files only from reputed sources.

2. Use strong passwords

3. Updates antivirus program periodically.

4. Make sure the firewall is set and attend on

5. Be careful about giving personal data online

Chapter 10

IT APPLICATIONS

Qn 1) ICT stands for…….. **Ans:** Information and Communication Technology

I) e-Governance

Qn 2) Define the term e –Governance

Ans : e-Governance is the application of ICT for delivering Government services to citizens in a convenient , efficient and transparent manner .

Qn 3) Name the application of Information and Communication Technology (ICT) for delivering government services to the citizens in a convenient, efficient and transparent manner

Ans : e-Governance

Types of interactions in e- Governance

Qn 4) Briefly explain the different types of interactions in e-Governance

Ans : a. Government to Government (G2G)

It is the electronic sharing of data among different government departments.

b. Goverment to Citizens (G2C)

It creates an interface between the government and citizens.

c. Government to Business (G2B)

Here, e- Governance tools are used to aid the business community to interact with the government.

d. Government to Employees (G2E)

It is used to interact between the government and the employees.

Qn 5) List the various types of interactions in e-Governance   **(March 2020)**

Ans : G2G, G2B, G2C, G2E

Qn 6) What are the different types of interactions used in e- governance   **(Sep 2021)**

Ans : G2G, G2B, G2C, G2E

Qn 7) Explain three interaction types of e-governance   **(Jan 2022)**

Ans : Refer Qn 4

e-Governance infrastructure

Qn 8) List the various types of infrastructure in e-Governance

Ans : SDC , KSWAN , CSC

a. **State Data Centre (SDC)**

Qn 9) Write a short note on State Data Centre (SDC)

Ans : State Data Centres (SDC) are multiple data centres setup in various **states** of India to provide fundamental IT infrastructure for various e- Governance programs being run as part of National e-Governance plan of India.

Qn 10) SDC stands for………….   **Ans :** State Data Centre

Qn 11) NeGP stands for………….   **Ans :** National e- Governance Plan

Qn 12) SWAN stands for………….   **Ans :** State Wide Area Network

b. Kerala State Wide Area Network (KSWAN)

Qn 13) Write a short note on Kerala State Wide Area Network (KSWAN)

Ans : It has been set up as a backbone of the State Information Infrastructure(SII).It connects Thiruvananthapuram ,Kochi and Kozhikode as its hubs and extends to all the 14 districts linking each of the 152 Block Panchayat.

Qn 14) KSWAN stands for………….   **Ans :** Kerala State Wide Area Network

c. Common Service Centre (CSC)

 Qn 15) Write a short note on Common Service Centre (CSC)

Ans : CSC are the front - end delivery points of the government, private and social sector services for the rural citizens of India . A highlight of the CSCs is that it offers web - enabled e-Governance services in rural areas. In Kerala Akshaya centres are working as Common Service Centres.

Qn 16) Write a short note on Akshaya centres

Ans : Akshaya centres were initially launched in the year 2002 in the Malappuram district in Kerala. It's intention was to impart e-Literacy to the citizens. It provides various services to the public.

Qn 17) In Kerala ………are working as common service centres   **(July 2019)**

Ans : Akshaya centres

Qn 18)………….. is one of the 12 digit identification document issued to each citizen by the Unique Identification Authority of India (UIDAI) under the Government of India.

Ans : Adhar Card

Qn 19) Write any three   benefits of e-Governance

Ans : 1. Speed   2. Saves time and money   3. Transparency

4. Reduce corruption   5. Strengthens the democracy

Qn 20) Write any three   Challenges(disadvantages) of e-governance

Ans : 1. Loss of interpersonal communications   2. High setup cost   3. Lower e-Literacy

4. Leakage of personal information   5. Cyber attack

Qn 21) Briefly explain the advantages of e-Governance   **(March 2019)**

Ans : Refer Qn 19

Qn 22) What is e- Governance? Explain the benefits and challenges of e-Governance

(March 2017)

Ans : Refer Qn 2,19,20

Qn 23) Briefly explain e- Governance   **(Dec 2020)**

 Ans : Refer Qn 2,19,20

………..……….…....…….....*Lenin Pulickal, Ph:9447823334, GHSS Panickankudy ,Idukki*…….…………………

Qn 24) Give an example for an e- Governance website

Ans : www.dhsekerala.gov.in

Qn 25) The official site of the Department of Higher Secondary Education ,Government of Kerala is…………………..

Ans : www.dhsekerala.gov.in

Qn 26)   What is e- District

Ans : Kerala e -District project intend to provide Government services to citizens through Common Service Centres (CSC) which are easily accessible.

Qn 27) Briefly explain e- Governance   (**March 2018)**

Ans : Refer Qn 2,19,20

II)   e- Business

Qn 28)   Define e –Business

Ans : e-Business is the sharing of business information ,maintaining business relationships and conducting business transactions by means of the ICT application.

Qn 29)   Write the differences between e-Commerce and e-business   **(July 2018)**

Ans :

e- Commerce

e-Commerce covers business transaction (buying and selling of goods) through internet.

e- Business

e-Business refers to performing all type of business activities through Internet.

Electronic Payment System(EPS)

Qn 30) Define electronic payment system(EPS)

Ans : A system of financial exchange between buyers and sellers in an online environment is called an Electronic Payment System.

Qn 31) A system of financial exchange between buyers and sellers in an online environment is called an…………………

Ans : Electronic Payment System (EPS)

Qn 32)EPS stands for………….   **Ans :** Electronic Payment System

Qn 33) The financial exchange in an online environment is called…….   **(Jan 2022)**

   a) ICT   b) EPS   c) ATM   **Ans :** EPS

Qn 34) Define e –Banking

Ans : e- Banking or electronic banking is defined as the automated delivery of banking services directly to customers through electronic channel.

Qn 35) What are the differences between EPS and e- Banking   **(March 2018)**

Ans : Refer Qn 30,34

Qn 36) Write any three   benefits of e -Business

Ans : 1. Speed   2. It overcomes geographical limitations   3. It reduces the operational cost

4. Saves time and money   5. It remains open all the time   6. Huge selection is available

Qn 37) Write any three   Challenges(disadvantages) of e -Business

Ans : 1. Lack of personal touch   2. Delivery time   3. Cyber attack   4. Lower e- Literacy

Qn 38) Identify and briefly explain the advantages of e- Business   **(July 2017)**

Ans : Refer Qn 36

Qn 39) What are the advantages of e business   **(Jan 2022)**

Ans : Refer Qn 36

Qn 40) e- Business has many benefits .At the same time there are some challenges too . Justify

.   **(Sept 2016)**

Ans : Refer Qn 36,37

Qn 41) Give an example for an e-Business website   **Ans :** www.amazon.com

Qn 42) Business through mobile phone, PDA etc is called ……… **Ans :** M- Business

Qn 43) The website of Indian railway is ………………… **Ans :** www.irctc.co.in

III.   e-Learning

Qn 44) Define e- Learning

Ans : The use of electronic media and ICT in education is termed e- Learning

e-Learning tools

Qn 45) Name any five e- Learning tools

Ans : Electronic Book Reader (e- Books), e-Text, Online chat, e- Content, Educational TV channels

Qn 46) List any two e -Learning tools   **(March 2017)**

Ans : Refer Qn 45

Qn 47) Write any two tools of e-learning   **(Jan 2022)**

Ans : Refer Qn 45

Qn 48) Write a short note on electronic books reader

Ans : e- Book reader is a device that can store a lot of books in digital form. An electronic books reader is a device designed as a convenient way to read e-books.

Qn 49) Define e- Text

Ans : Textual information available in electronic format is called e- Text

Qn 50) Write the use of online chat in education

Ans : In the virtual class environment ,online chatting is used to discuss the topics with teachers and other students. Video chatting facility is also available. This facility can also be used to deliver and transfer live lectures given by the faculty. Students can login from the remote locations and attend the lecture.

Qn 51) Real-time exchange of text messages between two or more persons over internet is termed..............

Ans : Online chat

Qn 52) Define e –Content

Ans : The different multimedia formats like videos ,presentations, graphics, animation etc. used for e-Learning is called e-Content

Qn 53) Write the use of Educational TV channels

Ans: There are many telecasting channels which are dedicated for the e-Learning purpose.These chnnels broadcast recorded classes on various subjects ,interviews with experts,lab experiments ,etc.

Some of these channels can be watched in the Internet also.

Qn 54) Name any two Educational TV channels

Ans : VYAS, VICTERS

Qn 55) Explain any two e- learning tools   **(Sep 2021)**

Ans : Refer Qn 48,49,50,52,53

Qn 56) Mention an example for educational TV channel   **(March 2019)**

Ans : VYAS, VICTERS

Qn 57) Pick the odd one out. Give the reason   **(March 2019)**

a) e-Book reader   b) e-Text   c) e-Business   d) Educational TV channels

Ans : e-Business

All others are e-learning tools

Qn 58) Name the different types of tools available in e-Learning   **(July 2018)**

Ans : Refer Qn 45

Qn 59) Discuss any two e- Learning tools   **(July 2017)**

Ans : Refer Qn 48,49,50,52,53 (Any two)

Qn 60) Sheela wants to study a degree course by e- Learning system. Explain any two tools available for e- Learning   **(Sept 2016)**

Ans : Refer Qn 48,49,50,52,53 (Any two)

Qn 61) Write any three   benefits of e - Learning

Ans : i)   Speed   ii) Saves time and money   iii) No need for textbook

iv) Online learning could solve teacher scarcity   v) Time and place is not a constraint for e- Learning

Qn 62) Write any three   Challenges(disadvantages) of e - Learning

Ans :i)Face to face contact between students and teachers is not possible   ii)Lack of motivation

iii) Cyber attack   iv) Computer (Smart phone) and high speed internet connection is required

v) Lower e- Literacy

Qn 63) " Through e- Learning we can overcome many limitations of conventional teaching learning process" Give any two reasons that justify this statement. **(July 2019)**

Ans : Refer Qn 61 (ii,iii,iv,v)

Qn 64)……….. is an open University under Government of India

Ans :IGNOU

Qn 65) Distinguish between e -learning and e- commerce **(Sep 2021)**

Ans : Refer Qn 44,29

ICT applications in healthcare

Qn 66) Write various ICT applications in healthcare

Ans :i) Medical equipments   ii) Electronic medical record   iii) Web-based support/ diagnosis

iv) Telemedicine   v) Research and development

Qn 67) Briefly explain ICT application in medical equipments

Ans : Computers are used for CT scans and MRI scans. Many surgeries are performed using a computer controlled laser. Some hand-held devices are also available that help patients to lead normal life.

Qn 68) Write a short note on Electonic Medical Record(EMR)

Ans : An EMR is a digital version of patients paper chart.

Advantages of EMR

i)It is more economical way of storing data.

ii)Access to medical history of patients will be easier and quicker.

iii) Transfer of records will be quicker between doctors and hospitals.

Qn 69) EMR stands for………….

Ans : Electronic Medical Record

Qn 70) Write a short note on web support /diagnosis

Ans : Symptoms and treatment of diseases are available on the internet .But the diagnosis does not have to be accurate. Misdiagnosis can lead to stress.

Qn 71) What is mean by telemedicine

Ans : The remote diagnosis and treatment of patients by means of telecommunication technology is called telemedicine. A doctor who can see and treat a critically ill patient at home use telemedicine facility. It reduces cost and time.

Qn 72) Write ICT applications in research and development

Ans : Computers are used for research for new vaccines and diagnosis of diseases.Use of IT may radically alter the cost associated with the discovery of drug over the coming years. Thus IT helps in diagnosis ,treatment of patients and better running of hospitals.

ICT enabled services

Qn 73) Write any five ICT enabled services

Ans : i) BPO (Business Process Outsourcing)

ii) KPO(Knowledge Process Outsourcing)

iii) Call Centre

iv) Teleconferencing

v) Video conferencing

Qn 74) Write a short note on BPO

Ans :BPO is a method of subcontracting various business- related operations to third party vendors. It include human resource management, customer care services, payroll,erc.

Qn 75) BPO stands for.............   **Ans :** Business Process Outsourcing

Qn 76) Write a short note on KPO

Ans : Here knowledge and information related work is carried by another company or subsidiary with in the same organisation.It is like BPO.It include data search, data integration, market research,fraud analytics,etc.

Qn 77) In ICT enabled services KPO stands for…………….....   **(March 2016)**

Ans : Knowledge Process Outsourcing

Qn 78) Write short notes on BPO and KPO   **(Dec 2020, March 2018)**

Ans : Refer Qn 74,76

Qn 79) Write a short note on Call Centre

Ans :A call centre is a telephone service facility setup to handle a large number of both incoming and outgoing calls for an organisation.

Qn 80) The service facility used to handle large amount of calls in an organization   **(Dec 2020)**

 a) Teleconferencing   b) Call center   c) Video conferencing   **Ans :** Call center

Qn 81) Distinguish between in-bound calls and out-bound calls

Ans : In-bound calls are usually meant to seek assistance, help ,or to order ,while out-bound calls are meant for sales promotion or other messages

Qn 82) Define teleconferencing

Ans : Teleconferencing is a meeting or conference held between two or more parties in remote locations using ICT.

Qn 83) Define video conferencing

Ans : Video conferencing is a type of teleconferencing where in we can include the video of the parties involved in the conference. A video camera and a speakerphone are connected to the computer and the computer is connected to the Internet.

Qn 84) Write a note on any three ICT enabled services   **(March 2020)**

Ans : Refer Qn 74,76,79,82,83

Qn 85) Discuss any two ICT enabled services   **(July 2017)**

Ans : Refer Qn 74,76,79,82,83

Qn 85) Write short notes on the following ICT enabled services   **(July 2019)**

a)BPO b) Call Centre   c) Video Conferencing

Ans : Refer a)Qn 74   b) Refer Qn 79   c) Refer Qn 83