Basic ICT Skills-I

1. Objectives of Information and communication technology? Advantages and disadvantages of ICT.

Answer – Full form of ICT is Information and communication technology. The goal of ICT is to bridge the gap between parents, educators, and students by encouraging sustainable, cooperative, and transparent communication methods.

Advantages of ICT

- Enhanced the modes of communication
- Independent learning platforms Cost – efficient
- Enhanced data and information security
- Paperless – Eliminate the usage of paper
- Better teaching and learning methods
- Web – based LMS tools

Disadvantages of ICT

- Traditional book and handwritten methods are at risk.
- Managing courses online is difficult
- Teachers require experience to handle ICT
- Risk of cyber-attacks and hacks
- Misuse of technology

2. What are the default apps installed on smartphones?

Answer – Some of the default apps installed on smartphones are

- Camera
- Phone
- Calendar
- Mail
- Maps
- Clock
- Message
- Web Browser
- Music
- Google Play store
- Apple Store

3. Differentiate between smartphone vs. tablet.

Answer – Smartphone – Smartphones are just like a phone with some additional features, Smartphones are compact and easy to use. Operating systems are the main software. Some of the smartphones use Apple iOS, some are using Android

OS or some are using Microsoft OS. editing the videos or photos is difficult on the smartphone.
Tablet – It is a portable personal computer with a touchscreen interface which makes it more user friendly than the notebook computer. Android OS, Apple iOS or Windows OS are the most common operating systems used in the tablet. As compared to smartphones, tablet screens are bigger in size.

4. What are the features of mobile devices?
Answer – Some of the features present in mobile devices are
a. **Bluetooth**: Bluetooth is a wireless technology which connects with other Bluetooth devices within 30 feet, you can send photos, songs or video with the help of the Bluetooth.

b. **Chargeable Battery**: This is a portable power bank which can be recharged. if once the battery is charged you can use this device anywhere.
c. **Wi-Fi**: Wi-Fi stands for Wireless Fidelity, basically it is a wireless network technology that connects your device to the internet or you can connect to the local area network also.
d. **Touch Screen**: Touch Screen is an interface where you can manage your device. Whatever information you want to type in the device you can type using the touch screen.
e. **Cellular network connectivity**: Cellular network connectivity provides the network through which you can make calls.
f. **Global Positioning System**: It is a navigation system which helps you to find the direction of place using a map.
5. What is the purpose of gestures in mobile devices?
Answer – Gestures help users to interact with the touchscreen. for example if you want to open an app instead of clicking you just touch the app the application will be open.

Some of the gestures in mobile phone are

a. **Tap and hold**: Tap and hold is similar to right-clicking on a computer.
b. **Swipe**: Swipe the finger to right, left, up or down on the screen, automatically the page will move to the next page.
c. **Tap**: Touch the screen with your finger, once, to click.
d. **Double tap**: Tap the screen twice time quickly the screen will zoom, it is used to making the word appear bigger.
e. **Drag**: To tap, hold and move your finger across the screen.

f. **Pinch**: To bring your thumb and finger together on the screen automatically the screen will be zoomed in. it is used to making the word appear smaller.

6. What is the basic function of a Computer?

Answer – A computer is an electronic device which can accept data from the user, process the data and generate meaningful results. Computer has a three main units

1. Input Unit,
2. Central Processing Unit (CPU) and
3. Output Unit.

7. What are the different parts of the CPU?

Answer – A computer is made up of multiple parts that work together to perform the processing and effective functioning of the computer.

The CPU performs all the basic arithmetic and logical operations of the computer.

<u>There are three main components of a CPU (Central Processing Unit)</u>

1. Arithmetic and Logic Unit (ALU)
2. Control Unit (CU)
3. Memory Unit (MU)

a. **Arithmetic and Logic Unit (ALU)** – Arithmetic and logical unit performs all arithmetic and logical operations. for example subtraction, addition, division and multiplication.

b. **Control Unit (CU)** – Control Unit instructs the computer system to perform a particular task. It takes instructions from memory and executes them.

c. **Memory Unit (MU)** – Memory Unit used to store data or instructions. there are two type of memory unit

i. **Primary Memory** – Primary memory is also known as main memory. This memory is directly accessed by the microprocessor. Primary memory has two types RAM and ROM

a) **RAM** – RAM stands for Random access memory it is short term memory, RAM is also known as Volatile memory and it stores data temporarily.

b) **ROM** – ROM stands for Read only memory it is long term memory, ROM stores the data permanently.

ii. **Secondary Memory** – The device which is used to store data permanently with the help of external devices is known as Secondary memory. Example – Hard Disk, Flash drive, External drive etc.

8. What is Motherboard?

Answer – A motherboard provides connectivity between the hardware components of a computer. It is also the backbone of the computer and shares the information between them. It is a main circuit board inside a computer that connects input, processing and output devices.

9. How is the data measured in the computer?

Answer – In the memory devices data is stored in the form of bits and bytes. Bit is the smallest unit which represents 0 or 1. combination of eight bits make a one byte. Which store the numerical, letters or symbols value in the memory.

- 8 Bits = 01 Byte
- 1024 Bytes = 01 Kilobyte (KB)
- 1024 Kilobyte (KB) = 01 Megabyte (MB)
- 1024 Megabyte (MB) = 01 Gigabyte (GB)
- 1024 Gigabyte (GB) = 01 Terabyte (TB)

10. Where are the different ports in the computer system?

Answer – A port is a physical docking point using which an external device can be connected to the computer. We can connect our keyboard, mouse, printer and scanner through the port

There are several types of ports that you can use to connect a computer to external devices.

a. **Universal serial bus or the USB port** – USB port is used to transfer data, It also works as an interface for peripheral devices. It connects, such as a mouse or a keyboard or a printer to a computer using the cable.

b. **Display port** – Separate video connector is used for transmitting only video signals. Display port connects the monitor to the display unit. Different types of video connector are available, like High Definition Multimedia Interface (HDMI) and Video Graphics Array depending on the requirement.

c. **Audio ports** – Audio ports are used to connect speakers or other audio devices with the computer. like headphones, speakers or microphone. headphones and speaker port is known as line out port and microphone port is known as line in port.

d. **Ethernet** – Ethernet port is used for connecting computers to the network, with the Ethernet port we can transfer data from one computer to another or we can transfer high speed internet.

e. **Power port** – Power port is used for connecting the computer system to the power supply.

11. Difference between Hardware and Software?
Answer – A computer system consists of two main parts – the hardware and the software.
a. **Hardware** – The physical parts of the computer are hardware, hardware devices can be touch and feel. for example Mouse, Keyboard, Monitor, CPU, etc.

b. **Software** – Software is made by programs; it is a set of instructions used to execute specific tasks. for example Microsoft Office, Operating System, Photo editing software.

12. In computer systems, what is the function of the BIOS?
Answer – BIOS stands for Basic Input/ Output System, Computer automatically runs a basic program called BIOS as soon as it is switched on or the power button is pushed on.
The BIOS first does a self-test. If the self-test shows that the computer is fine, the BIOS will load the Operating System.

13. What are the different types of keys in Keyboard?
Answer –
a. **Function keys** – F1 to F12 are function keys in the keyboard, function keys are used for specific purposes.
b. **Control keys** – SHIFT, CONTROL (CTRL),ALT, SPACEBAR, TAB AND CAPS LOCK are known as a control key, these keys are used as per the demand.
c. **Enter key** – ENTER or RETURN keys are known as Enter key, depending on the brand of computer that you are using.

d. **Punctuation keys** – It includes keys for punctuation marks, such as colon (:), semicolon (;), question mark (?), single quotation marks (‘ ’), and double quotation marks (“ ”).
e. **Navigation keys** – END, HOME, PAGE DOWN, PAGE UP and Arrow keys are known as navigation keys, these keys are used to move up, down, left or right in the document.

f. **Command keys** – BACKSPACE, INSERT (INS) and DELETE(DEL) are known as command keys. INSERT key allows you to overwrite characters to the right side. The DELETE command key and BACKSPACE key are used to remove typed text, character, or any other objects from the right and left side of the cursor.
g. **Windows key** – Windows key is used to open the Start menu.

14. What are files and folders in a computer system?
Ans. a. **File** – File is a collection of information different types of files store different types of information. Every file has a file name and extension that identifies the type of file.
b. **Folder** – Folder is a collection of files or a group of files.

15. What is Bandwidth?
Answer – Bandwidth is the amount of data that can be transferred or received every second. and it is measured by bps (Bite per second).
For example, In the water pipe the amount of water transmitted in a certain time is known as bandwidth. The maximum amount of water that can flow through the pipe is maximum bandwidth. Similarly, the amount of data that can be sent or received in the network depends on the bandwidth.

Bits per second are the unit of measurement for bandwidth (bps) in computer networks and in analog devices it is measured as a cycle per second.

Data transfer speed measured by the bits per second.

- 1 Kbps (kilo bits per second) = 1,000 bits per second
- 1 Mbps (megabits per second) = 1,000 kilobits per second
- 1 Gbps (gigabits per second) = 1,000 megabits per second

16. What is the World Wide Web?
Answer – WWW stands for World Wide Web, it is also known as a Web. Web is a collection of websites and a website is a collection of web pages. All websites and webpages are stored in the web server. The Web is a vast network interlinked with each other.

It is made up of
- A web page
- A web browser

- A system to transfer information between the web browser and the web pages

17. What is email?
Answer – An electronic communication invented in the 1970s to do communication faster, Email is fast and easy to use and it can be sent to multiple people at the same time, Email containing videos, documents, spreadsheets etc. can be sent along with the email as attachments.

18. Differentiate type of email provider?
Ans– If you want to create an email account, you can follow any one of the provider

- Gmail (run by Google)
- Yahoo mail (run by Yahoo)
- Outlook mail (run by Microsoft)

19. Differentiate between CC & BCC?

Answer –

a. **CC** – When you want the email list to be visible to all recipients, and you want to include all the recipients.
b. **BCC** – When you want to include additional recipients but don't want the recipient to know who else is receiving the email.

20. What are the different types of folders in email?
Answer – There are different folders that could help you manage and organize your emails.
a. **Inbox** – By default email is received in the inbox.
b. **Send** – Send folder store emails that you have sent to other peoples.
c. **Drafts** – When you are writing an email and you have not sent the email to any other user, that time email will be stored in draft by default.

d. **Trash** – Trash holds deleted email from the inbox. To delete an email, you select an email and then click on the Delete button for it to be moved from inbox to trash folder

21. In email, what is the difference between reply and forward?
Ans. Reply – Replying to an email means that you are answering the mail you have got.

Forward – Forwarding an email is sending the mail to someone else the way you have got.