

Part-A (Unit: - 3 Basic ICT Skills)

SESSION 1: Information and Communication Skills

Exercise:-

1. How do we use information in various ways?

Answer:- Information is dealt with by us in following ways:

1. Accessing the information: Various means like computers, communication networks, smart phones help us access information through World Wide Web.
2. Creation of information: Computers, digital cameras, digital recorders, smart phones, scanners etc. help us create information in various forms like text, audio-video and image.
3. Sharing and distributing information: The internet, communication networks and tools like video conferencing, video chat platforms, smart phones and computers are the tools to disseminate information.
4. Storing and managing information: Databases, computers, storage devices like disks, pen drives, and online drives are the means to store and manage information.

2. How are computers useful in our daily life?

Answer:- Computers help us in almost all aspects of life be it education, entertainment, travel, our profession, using various services, communication, using social media, health care, doing our business, doing financial transactions etc.

3. How computers help in running various businesses and industries?

Answer:- All kinds of business operations are carried out very easily and accurately by computers. Database of all the business details are maintained by computers. Small shops, supermarkets, big companies, restaurants, small offices use computers for efficient service. People access the services and buy products from businesses online. New technologies like big data and cloud computing provide enormous capabilities to the computers for bright future of industries.

4. Why ICT skills are necessary for us in today's world?

Answer:- World around us is impossible to believe without the presence of computers. To survive in our trade and profession, we must have necessary ICT skills. Information and communication technology skills make our lives easier by easing our tasks up to greater extent. Availing a domestic service, booking travel tickets, hotel room and flights, ordering food, finding a location using GPS, interacting with people, instant communication are the part of our daily life. It also helps us remain competitive in our career.

SESSION 2: - Computer System

Exercise:-

1. What is the role of input and output devices in a computer system?

Answer:- Input devices are used to feed input to the computer in different forms like clicking on command with the mouse, typing data through keyboard, scanning image using scanner, feeding video through a web camera and recording audio with microphone.

Output devices generate result of processing in various forms like text, image and video on monitor, hard copy print by printer, maps by plotter, and audio through speaker.

2. List differences between primary and secondary memory.

Answer:- Primary memory is usually not permanent. It loses data once power is switched off while secondary memory is permanent storage. Storage capacity of primary memory is very less as compared to permanent memory which can store data in bulk form. Primary memory is less expensive than permanent memory.

3. How is RAM different from ROM?

Answer:- RAM is main working memory of the computer. It stores the working data of the user as long as computer is powered on while ROM contains permanent instructions. RAM is Read/Write memory as data can be read and written on it while ROM is Read only memory. Storage capacity of RAM is higher than that of ROM. RAM is upgradable.

4. What do you mean by peripheral devices?

Answer:- In addition to standard devices that form the actual computer system for standard input, output and processing operations there are additional devices which extend the functionality of a computer system such as printing out the content (printer), transmitting messages over network (modem), scanning images (scanner), recording voice and video (microphone and web camera).

5. Describe any 5 peripheral devices.

Answer:- 1. Printer: It prints out the hard copy of the documents and images over variety of medium like paper, plastic sheets etc. Ranging from a simple desk jet printer to industry line printer used to print banners and posters, printers come in a wide variety to cater to various printing needs of various industries.

2. Scanners: This device is used to scan documents and store them in the computer for later use. A flatbed scanner can scan whole sheets of documents while handheld scanners are useful for quick scanning of a part of a document like a few lines or an image.

3. Speakers: Speakers are used to generate sound. They convert analog electric signals into air vibrations. Speakers are used to listen to music and sounds on the computer.

6. Describe the functioning of processing unit.

Answer:- A CPU consists of Arithmetic and Logic Unit (ALU) and Control Unit (CU).

1. Arithmetic Logic Unit (ALU): The ALU performs all arithmetic operations and logic operations. Logic operations test various logical conditions encountered during processing and different actions to be taken.
2. Control Unit (CU): It coordinates the components of a computer system. The control unit manages the execution of program instructions by fetching instructions from memory, parsing those instructions as necessary and then scheduling the appropriate hardware components to act on those instructions.

SESSION 3: Basic Computer Operations

Exercise:-

1. List the steps to switch on and shutdown a computer system.

Answer:- Switching a Computer System On

1. Switch on the UPS by a long press on its power button.
2. Press the power button on the CPU cabinet or system unit.

Shutting down the Computer

1. Click on Start button.
2. In the Start menu, click on Shutdown.
3. Switch off the monitor and then UPS.

2. What is the use of operating system?

Answer:- Operating system controls entire functionality of the computer system. It allows the user to interface with the computer hardware and make use of other software applications on the computer. Common functions are managing hardware devices, managing software and scheduling programs, files and storage management and system security.

3. How CUI is different from GUI?

Answer:- CUI is difficult to learn and operate since commands need to be type in and remembered correctly. In GUI, commands need not to be remembered, we use graphical interface to click on work. It is less interactive than GUI which is very intuitive.

4. What is the use of a file and folder?

Answer:- A file is a collection of related information. In other words, a file is a collection of data stored on a storage device. There are different types of files depending on the types of information they contain, like document, image file, music file, movie file, etc.

Folder contains files and other folders. Folders help us organize our data.

5. List the main components of a GUI desktop.

Answer:- Desktop, icons, Start menu, Taskbar, Program Windows, Dialog boxes and Toolbars etc.