



Class- 6

Sub: I.C.T

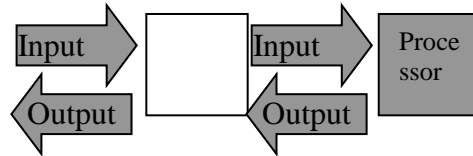
Chapter Two

Instruments related to Information and Communication Technology

Short Questions and Answers for the examination

*** Lesson 1: Instruments related to ICT: Computer

Question-1: Mention with figure how computer works.



Ans. We can see in the picture that it has four parts: input, output, memory and processor. When we give information and data to computer through input, these are stored in the memory of the computer. The processor receives information and data from the memory and uses them and stores the results in the memory. The work being finished, the computer returns us information and data through output. This is the process of work of all computers of the world.

Question-2: Discuss the importance of memory and processor in the working process of computer.

Ans. The important parts in the working process of computer are memory and processor. The information and data that are given by the input device will be preserved in the memory. The processor works with the information and data taking from the memory and preserved it in the memory after finishing the work. It is used as output later. So, the function of memory is to preserve the information and results. And through processor the, according to the direction of the user the supplied inputs are processed and deposited as output in the memory. So to work with information and producing result the functions of processor are.

*** Lesson 2 : Computer-Computer Game

Question-1: What does program mean?

Ans. The instructions which a computer can understand are called program. Every software is a program. Different types of softwares or programs are needed to use for different works. The program which is used to give different services and facilities to the computer is called system program. The language by which the computer is made to understand its works is called the computer's language. In this case, the understandable instructions are given so that the computer provides output by understanding it.

Question-2: What does programs language mean?

Ans. Language is the medium to express the feelings of mind. There are varieties of languages in different countries and nations. Every language has its own alphabet and grammar. Computer does not understand the languages of man; it understands its own language. And we know the digits which are used in computer's language are 0 and 1. Program is written by using some signals and marks which the computer can recognise and arrange. These is special method. These signals and systems altogether to form the program is called the program language. As there are difference of language in human beings; in computer also many kinds of languages are used. But, whatever the languages is computer is designed to understand by the digit 0 and 1.



***** Lesson 3 : Input Device**

Question-1: Describe a difference between the use of keyboard and mouse.

Ans. We can write either in English or Bangla by keyboard. When a button is pressed in the keyboard, a particular letter of that button appears in the screen of the computer. It is not that we always write either letter or word very often we need to do some other things. As for example, if we want to draw a picture, we cannot do it by the keyboard. We can try for it by moving mouse.

Question-2: Write down about some input devices and explain why these are input devices.

Ans. Many times we need to insert a full picture in the computer. If the picture is taken by a digital camera, that picture can be directly inserted into the computer from the camera. If the picture is in print form, we have to scan it by a scanner if we want to insert it in the computer. So, the digital camera and the scanner are also one type of input device. Like digital camera, video camera or web cam are also input device. We can insert video into computer by these. Those who play computer games, they sometimes use joystick: they insert game- information into the computer by this stick; therefore these are also input devices. OMR machine can read the filled circle of the scripts. The instrument that can read these filled circles of the scripts are also input device, because this instrument inserts the information of the exam script into the computer.

***** Lesson 4 : Memory and Storage Device**

Question-1: Which one is the most important storage device and why?

Ans. Hard disc is the most important storage device that preserves the information and data permanently. The information kept in the RAM is temporary; it vanishes the moment the computer will be closed. The information kept in the hard disc does not vanish when the computer is closed. But the information can be erased and kept other if it is needed. The holding capacity of the hard disc is a lot; as a result many programs can be kept here. Besides, many important software including operating systems can be preserved in the hard disc.

Question-2: Mention two systems to take information from a computer to then computer.

Ans. Normally Hard disc is strongly attached with the computer. So the solution to take information from one computer to another computer is CD-Compact Disc. The writing in a CD cannot be normally erased; but another type of CD is also available where it can be again and again or it can be erased. Another solution is Pen drive. The Pen drives are so small that it can be kept in the pocket just like a pen. But its capacity is lot. As for example, it can be said, ten thousand to twenty thousand books can be kept in an 8 Gigabyte pen drive.

Question-3: Write about the five storage devices of a computer.

Ans. Five important storage devices are-

- i. **Hard disc:** Many software are preserved here with the essential operating system's software. Its preserving capacity is much.
- ii. **CD:** The optical disc to preserve the digital information is the Compact Disc or CD.
- iii. **DVD:** The latest version of CD is DVD. Generally its capacity is 4.5 to 5 Gigabyte.
- iv. **Pen drive:** The most popular and easily carrying storage device is pen drive.
- v. **Carrying Hard disc:** It is the storage device with equal capacity of permanent hard disc of computer.

***** Lesson 5 : Processor and Mother board**

Question-1: Write about the processor.

Ans. The most important part of a computer is processor. It is small in size. It is called the brain of a computer. It works as the director of the computer. What to do, when to do, how to do, all these directions are given by the processor. Processor does all the works. The processor is larger



comparatively to any other instruments attached with the motherboard. A fan is connected above processor.

Question-2: Explain the importance of fan above the processor.

Ans. A larger amount of electricity flows through a processor as it does millions of accounting-works in a moment. So, the processor becomes so hot that it needs to be cooled down by a fan otherwise the processor may be burnt down. For this reason a fan is kept over the processor.

***** Lesson 6 : Output Device**

Question-1: What are input and output devices called?

Ans. The devices by which the input is given in the computer are called the input devices. Such as-keyboard, mouse, scanner etc. The devices by which the computer gives the result after completing the functions on given input information and data are called the output devices. Such as-monitor, printer etc.

Question-2: Mention the advantages of using printer and projector.

Ans. The advantages of using printer - What appears in the monitor of a computer are not at all permanent-if anything comes, the previous ones will vanish. So printer is needed to preserve it permanently. There is a problem to see the writing on the monitor but it is easier to see after printing. The advantages of using projector- projector is needed to watch at the same time by many people. The projector can show the scenery of the monitor in large screen.

***** Lesson 7 : Software**

Question-1: How many types of software are there and what are these? Describe.

Ans. There are two types of software. Such as-

- i. Operating System or System Software
 - ii. Application Software
- i. **Operating System or System Software:** Computer is kept running by the system software. The moment a computer is made on by switching, the operating system starts working immediately. It examines all the hardwires of the computer, links up one hardware with the others, and activates the input and output systems.
 - ii. **Application Software:** The software by which the user can do many works and application by the help of a computer is called the application software.

Question-2: Write about the “LINUX” operating system.

Ans. There are some operating systems that are needed to buy with money and these are very costly. But the LINUX operating system is free of cost. Many computer scientists of the world have jointly prepared one type of open source operating system which is free of cost. The name of such type of operating system is ‘LINUX’

The LINUX operating system controls all the devices and keeps the computer running. Beside this, it connects the user and the computer. All these qualities are existed in the operating system.

***** Lesson 8 : Application Software**

Question-1: What does application software mean?

Ans. There are different types of software to do many works by the computer such as-writing, accounting, drawing etc. This software is called the application software. The application software is mentioned as the application program. In Bengali this is called practical program. Ready made programs are available for all types of practical works which can be done by computer. These programs are called Application Programm. Microsoft word, Photosession, Auto cad etc. are the examples of application software.



Question-2: What does package software and customised software mean?

Ans. Package software: When any software is prepared for all probable advantages of certain works then it is called the package software.

Customised software: When any special software is prepared for doing a particular work, then it is called 'customised software'.

***** Lesson 9 : Some more Machiner of Information and communication Technology**

Question-1: Write about the mobile phone.

Ans. The advantage of mobile phone is, it can be kept in the pocket. The users can make communication at anywhere and any distance. With the help of mobile phone the call of public network can be received and made call there. In the modern mobile phones, there are the advantages to use new services. Different types of advantages can be got from mobile phone by using internet. Such as- receiving and sending e-mail, advantages of internet banking, the information from the share sites, the important information from any website of any educational institution etc.

Question-2: Write about the modem.

Ans. The word is the short form of the words Modulator Demodulator. The Modulator transfers the digital signal into analogue signal and Demodulator transfers the analogue signal into digital signal. In the modem there is a Modulator and a Demodulator. The modem connected with the sending computer converts the digital signal of the computer into analogue signal and sends data and information to the receivers by the telephone communication. In the way, the process of changing analogue signal to digital signal to make it suitable for telephone line is called modulator. The modem connected with the user compiler again changes the analogue signal to digital signal and makes is useble for the computer.

Practical Wrok

***** Lesson 1: Instruments related to ICT: Computer**

Team Work: 1

1. Make a group of four. One will operate input device and the other output device. Of the remaining two, one will be memory and the other will be processor. Your teacher will supply two numbers to input device. He will inform that to the memory. Processor will collect these two numbers from memory and then send it back to memory after adding these two numbers. Output device will get it known from memory device and then return it to the teacher.

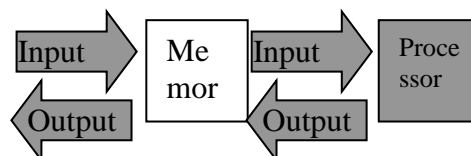
Let's different groups start at the same time and see who can do swiftly,

2. Will this computer (group of four students) be able to set any software in the hardware so that you can perform more complex function?

Solution:

Aim of Work: Gather knowledge about how a computer works.

Method of Work: We will make a group of four according to the teacher's direction. Of the four, one will operate input device and the other will operate output device. Of the remaining two, one will be memory and the other will be processor. The teacher will supply two numbers to input device among us. He will inform that to the memory. The Processor will collect these two numbers from memory and then will send it back to memory after adding these two numbers. Output device will get it known from memory device and then return it to the teacher. The whole procedure will be like the following diagram.





Now this computer (group of four students) will be able to set a software in the hardware so that performance will be easier and it can perform more complex function as well. Because the function of a software is to resolve the necessary complex tasks of human being by making the hardware active and meaningful.

Home work: 1 (Answering Creative Questions)

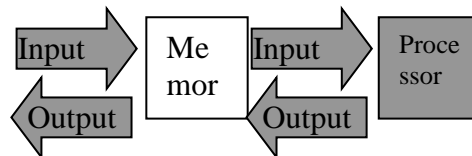
Read the following Stimulus answer to the questions below:

Rahat became attracted to the computer after operating it in the computer lab on his first day, and he became interested in knowing pros and cons of the computer. He studied about the features of different instruments of the computer. He acquired knowledge about how a computer works and quickly brought the operating system of the computer under his control.

- a. What is the name of the best and most powerful computer of the world?
- b. What are called the input and output devices of the computer? Clarify it.
- c. Describe the process that Rahat knew about how a computer works.
- d. Analyse the importance of memory and process in the method which Rahat knew about how a computer works.

Ans.

- a. Super computer .
- b. The devices that are used to give input to the computer are called input devices. Such as: Keyboard, Mouse, Scanner etc. And the devices which show the result after finishing the works are called output devices. Such as: Monitor, printer etc.
- c. The working process of almost all the computers of the world are the same. So the process which Rahat knew about how a computer works can be described with the help of the following diagram.



In the diagram above, we can see four main parts, they are: Input, Output, Memory and Processor. When we send data or information to computer by giving input, it is saved in the memory of a computer. Then the processor takes to use the data and sends back the result to the memory. After finishing the works, we get data or information back through output. To say in an easier way, this is the process how all computers work.

- d. The process that Rahat knew about how a computer works, the important parts of that are memory and processor. The information given through the input devices remains saved in the memory. The processor works by taking the information or data from memory and keeps the data saved in memory after finishing the works and getting the results. Later, that is used as output. So preserving information and results is the task of memory. And the given input saved as output being processed by the processor in accordance with the commands of the user. So working with information and producing results are the tasks of the processor.

***** Lesson 2 : Computer-Computer Game**

Lesson 3 : Input Device

Team Work:

- 1. Think and write on other input device excluding the devices that have been discussed.
- 2. Input device only supplies information and data to the computer; no information can come out of input device. Can you think of any other input device that can simultaneously work as output device?

Solution:

Aim of Work: Implement the gained knowledge from lesson about input device.



Method of Work: Think and write on other input device excluding the devices that have been discussed through a discussion with the other students of the class. Then a list is required to be made. The list can be as follows;

- **Finger print scanner:** This device gives an input of the data about fingerprint of human being into the computer.
- **Human voice scanner:** This device enters the input of the data of human voice into the computer.
- **Game controller:** This device controls the operation of games.
- **Musical input device:** Music can be inserted into the computer directly with the help of this device. These can be used in sound recording.
- Digital pen, digital paper, 3D scanner etc. can be used as input devices.

Then in the second part that means we will search for such a device that works as input and output device as well at the same time. This will be very easy. Because, at present there are so many conventional devices like this among which touch screen is very popular and easily available. The screen of a touch screen monitor works as a monitor that means gives output and data can be inserted into that by touching the screen.

Home work: (Answering Creative Questions)

Read the following stimulus and answer to the questions below:

On a holiday Kona and all of her family members went out to visit a place. They captured so many pictures of them there by a digital camera. When they returned home from there her elder brother saved the pictures on the computer. Kona became very surprised by seeing the pictures on the computer. Then her brother showed her the uses of some more input devices and explained the difference between the uses of keyboard and mouse.

- a. What are called the devices which are used to enter data into the computer?
- b. What does programming mean? Explain.
- c. Describe the difference between the uses of keyboard and mouse which Kona's brother clarified to her.
- d. Analyse the uses and importance of the devices which Kona's brother showed the uses of to her.

Ans:

- a. Input device.
- b. Computer cannot understand our language. Computer has a language of its own. The writing of software in computer language is called programming.
- c. Kona's brother clarified the difference between the uses of keyboard and mouse through some examples to Kona. He explained to her, Bengali or English writing can be done by keyboard. That means when a button on keyboard is pressed the related symbol of that enters in to the computer. But we do not always write words or letters, sometimes we need to do some different tasks as well. Such as, when we want to draw a picture we cannot do it by keyboard, we have to do that by mouse.
- d. The analysis of the uses and importance of the input devices the uses of which Kona's brother showed to Kona are as below:

The pictures taken by a digital camera can be inserted into the computer from digital camera. If the picture is in print form, it can also be scanned to insert into the computer by using a scanner. The scanner is a very important input device. Sometimes, joystick is used to play games on computer. The device which can read the answer sheets of the exam containing circles to be filled in for the correct answers of the multiple choice questions, the OMR machine, is also an input device. This device is also a very important input device. Kona's brother nicely explained the uses and importance of these input devices to Kona.



*** Lesson 4 : Memory and Storage Device

Team Work:

Collect a CD. Let sunlight to fall on CD and reflect the light on a wall. You will see wonderful seven colours in the wall. It occurs because of sharp lines on the surface of CD.

Solution:

Aim of Work: Increase the limit of knowledge about CD.

Method of Work: According to the teacher's direction, we will collect a CD. We will let sunlight fall on the CD and reflect the light on a wall. Then we can see wonderful seven colours on the wall. It occurs because of sharp lines on the surface of CD.

Home work: (Answering Creative Questions)

Read the following stimulus and answer to the questions below:

Many new cinemas are preserved on the hard disc drive of Abid's computer. Sharif wants to transfer the preserved cinemas on hard disc of Abid's computer to his own computer.

- a. How many times in a second does a hard disc drive move?
- b. What is RAM? Clarify it.
- c. Why has Abid preserved the cinemas on the hard disc of his computer? Explain it.
- d. How can Sharif transfer Abid's cinemas to his computer?----Give your opinion

regarding this.

Ans:

- a. From 5400 to 7200 times.
- b. RAM stands for Random Access Memory. It is a device which is connected to the motherboard. The information kept in the RAM are temporary while using the data from storage device, and the data being vanished in a moment when computer is closed.
- c. Abid has stored his cinemas on hard disc because the most important storage device of the computer is hard disc which stores the data and information permanently. The information kept in the RAM are temporary and the data being vanished in a moment when computer is closed. The information kept in the hard disc does not vanish when computer is closed. But we can erase one information and keep the other if we want to. The capacity of storage of hard disc is also much more for that reason a lot of information, programmas etc. can be stored on it. Besides, many important software including computer operating system software are kept on this storage.
- d. The hard disc is normally permanently attached with the computer. So another method is needed to transfer information from one computer to another. Sharif has to take help of any portable storage device to transfer Abid's cinemas to his own computer. A most popular solution in this respect is CD (compact disc).The writing in a CD cannot be normally erased; but another type of CD is available where we can write again and again or we can erase the written information. Sharif can use any CD of them at his convenience. Besides, another easiest solution is pen drive which is so small that anyone can carry it in his pocket. But its storage capacity is too much. But as for example, we can enter ten thousand to twenty thousand books in one pen drive having storage capacity of 8 GB. So by following any of the method mentioned above, Sharif can transfer Abid's cinemas to his own computer.

*** Lesson 5 : Processor and motherboard

Team Work:

A processor needs to be cooled down by a fan when it becomes too hot. There are thousands of processors in a super computer which cannot be cooled down only by fan. Give a solution of your own how that can be kept cold.

Solution:



Aim of Work: Acquire knowledge about maintenance of computer.

Method of Work: We have to know about super computer by discussing with others of the class and by reading books or discussing with our elders. The probable answer of this task is an air-conditioned room. We know that there are thousands of processors in a super computer which covers a spacious place. In this case it is not possible to fix a fan over each of the processors. If we keep the super computer in an air-conditioned room, the computer can be protected from being too hot by the heating produced by the processor.

Home work: (Answering Creative Questions)

Read the following stimulus and answer to the questions below:

Ayesha's elder brother did his masters' in computer science. As his computer was not in order, her brother repaired it by opening it. At that time, Ayesha asked her brother indicating the fan inside the computer that why the fan was there. Her brother clarified the fact to her. He also made her known about motherboard and processor and told her some information regarding those parts.

- a. Which is the largest and most significant part of a computer among the innumerable tips of electronics attached to motherboard?
- b. Describe the works of processor.
- c. Explain the reason which Ayesha's brother told her why a fan is fixed over processor in the computer.
- d. Analyse what Ayesha's brother told her about the important role that motherboard plays for the computer.

Ans:

- a. Processor
- b. The processor gives to and takes information from the memory and then does processing.
- c. The reason which Ayesha's brother told her why a fan is fixed over processor in the computer has been explained below- A large amount of electricity flows through a processor as it does millions of accounting- works in a moment. So, the processor becomes so hot that it needs to be cooled down by a fan otherwise that processor may be burnt down. That is why a fan is fixed over processor.
- d. Ayesha's brother told her that/ The most significant part of a computer is motherboard. He opened the computer for fixing it up. He showed a board there to Ayesha. There was a board with innumerable tips of electronics attached to it. The name of this board is motherboard and it is the most significant part of a computer. This board holds and protects all the parts of the computer as a mother does for all of her children. So this board has been named "Motherboard".

*** Lesson 6 : Output Device

Team Work

Can you imagine of a new output device by which we can do something else other than seeing or listening.

Solution:

Aim of work: To know about the new invented instruments related to Information and communication Technology.

Method of work: According to the teacher's direction, we completed the work by discussing among the students of the class. The "speaking device" can be such an device by which people can do something else other than seeing or listening, people can express through this device what they want to say without using their mouth. The device needs to be connected to the human brain and there is be a speaker with other facilities involved in it. If we seriously think of a matter that we want to say or



express, the same will happen to ring on the speaker. Everything starting from speaking to laughing, crying or singing song can be done through this device.

Home work: 1 (Answering Creative Questions)

Read the following stimulus and answers to the questions below:

Ratul's computer was not in order. It even did not take start. When Ratul showed it to a hardware engineer, he told Ratul after a careful examination, as the fan of his computer had been out of order so the processor in the motherboard had burnt down. When Ratul wanted to know in details to him (the engineer), he gave Ratul a basic idea about motherboard and processor.

- a. Which is the most important part of all electronics in a motherboard?
- b. Which device does act as both input and output device at the same time? Explain.
- c. What was the reason behind the processor of Ratul's computer becoming damaged?
- d. Analyse what basic idea Ratul might get about motherboard and processor.

Ans:

- a. The Processor.
- b. The name of the device which acts as both input and output device at the same time is touch screen. The touch screen works like a monitor and we can enter information inside that screen by touching it.
- c. According to the examination of the engineer, the reason behind the processor of Ratul's computer becoming damaged was the fan over the processor getting damaged. We know that the most important part of a computer is the processor. The processor gives and takes information from the memory and then does processing. A large amount of electricity flows through a processor as it does millions of accounting works in a moment. So, the processor becomes so hot that it needs to be cooled down by a fan fixed separately. Otherwise, that processor may be burnt down. As the fan fixed separately in Ratul's computer became damaged, so the processor in it was burnt down.
- d. The basic idea which Ratul might get about motherboard and processor from the engineer is-If we open a computer, we will normally find a board with innumerable tips of electronics attached to it. The name of this board is motherboard and it is the most significant part of a computer. This board holds and protects all the parts of the computer as a mother does for all of her children. So this board has been named "Motherboard".

We will find a pretty big device in all motherboards with a big fan attached over it. A large amount of electricity flows through a processor as it does millions of accounting-works in a moment. So, the processor becomes so hot that it needs to be cooled down by a fan otherwise that processor may be burnt down. That is why a fan is fixed over processor. The processor is the biggest and important of all electronics in a motherboard.

Home work: 2 (Answering Creative Questions)

Read the following stimulus and answers to these questions below:

Lyna goes to a college. Her computer teacher instructed her to write some answers to questions on output devices on the computer and to bring a printed copy of the same to him in the class. On the following day, the teacher asked her to present the printed copy of her writing to the class with the help of a projector.

- a. Write the name of a device that is used as both input and output device at the same time?
- b. Describe for what plotters are used.
- c. Explain, why the computer teacher instructed Lyna to bring a printed copy of the writing.
- d. Analyse the reason why the teacher asked Lyna to present the printed copy of her writing through a projector to everyone in the class.

Ans:



The touch screen

- b. We cannot use general printer when we need to print poster, banner, big size advertisement or the map of a house. For these, we need to use plotter.
- c. The computer teacher instructed Lyna to bring a printed copy of her writing, so that the writing could be read easily. When anything appears on the computer monitor, it does not store permanently. The previous one does not remain if anything new appears on it. So, printer is needed to preserve something on permanent basis. There will be problems in showing the writing on the computer but it will be easier to see if it is being printed by the printer and brought in the class.
- d. The teacher asked Lyna to present the printed copy of her writing through a projector to everyone in the class. Because, one can see in the small monitor of a computer at a time. It will take a significant length of time to show the writing to so many students. Therefore, it will be convenient to use projector. A projector is required for many people to watch together. A projector can make the picture in the monitor much bigger and show the same on its screen.

***** Lesson 7 : Software**

Team Work:

Debate among yourselves about which one is better. To buy windows software with much money, or to use it by managing it illegally, or to use Linux software free of cost.

Solution:

Aim of Work: Acquire an idea about operating system software.

Method of Work: After taking permission from the teacher, we will be divided into three groups and debate among ourselves with original windows software, illegal windows software and Linux software. The reasons which the three groups might deliver in support of three software are presented in the following list.

Original Windows software	Illegal Windows Software	Linux Software
Original windows software does not make any trouble during working on the computer.	Can be managed for a very cheap price. Which is very much less in compared to that of the original windows software.	Linux software can be collected from internet at free of cost.
This operating system usually does not create any problem. So frequent installment is not required.	It is needed in such a poor country like ours for much popularity of the computer.	This software is usually not attacked by virus.
The speed of work in windows operating system is very good.	If damaged in any case, it can be collected again by spending a little amount of money.	The users can change any part of this software if they want.
The usage of this software is easy.	The usage of this software is easy.	The usage of this software is little bit more difficult than that of windows.

Home work: 1 (Answering Creative Questions)

Read the following stimulus and answer to the questions below:

Arif has installed an operating system on his computer newly. He has chosen the operating system in such a way so that he could feel convenient using it. He has got the operating system at free of cost which he has installed.

- a. By the help of what do hardwares in the computer become active and meaningful?
- b. How many types can softwares of a computer generally divided into and what are they? Describe.
- c. Explain how Arif has used operating system software at free of cost.



d. Analyse the reasons behind Arif has chosen operating system software before installing in computer.

Ans:

- a. Software
- b. Generally softwares of a computer can be divided into two types. They are: (1) Operating system or system software, (2) Application software
- c. Arif has used Linux operating system. Linux operating system software is free of cost but others operating system softwares are expensive. Many computer scientists of the world jointly prepared one type of open source operating system which is free of cost. The name of such type of operating system is "LINUX" which is very popular operating system in the world. Arif has used this software. That is why, he has been able to use it at free of cost.
- d. Before installation, Arif has chosen good quality operating system software. Because the function of operating system is easy to operate the programmes of the users and to give easier solution to the problems. It examines all hardwares of the computer, links up one hardware with the other and activates the input and output systems. Besides it also maintains a link between the computer and the user. And in these works, a good quality operating system software is required. And all these qualities remain in Linux operating system.

***** Lesson 8 : Application Software:**

Team Work

- Make a list of works that can be done by using application software.
- All of you of the class try to include minimum one hundred application softwares in the list.

Solution:

Aim of Work: Acquire an idea about application software and know some names of application softwares.

Method of Work: We will try to make the list by discussing with all the students of the class. The works for which application softwares can be made:

Listening to music	Operating computer
Watching cinemas	Doing programming
Talking to someone	Preserving information
Chatting	Sending and receiving e-
Writing	mail
Presenting a report	Accounting-works
Making a cinema	Composing music
Editing	Editing pictures
Video editing	Making animation
Sound editing	Editing graphics
Playing games	Preserving picture
Drawing pictures	managing office works
Browsing internet	Preventing virus
Doing graphics design	Operating mobile phone
Making webpage	Solving mathematical problems
Recording sound	Observing and exploring the space

Application softwares can be made for various types of works. Besides these works, there are also application softwares for innumerable works.



*** Lesson 9 : Some more Machinery of Information and Communication Technology

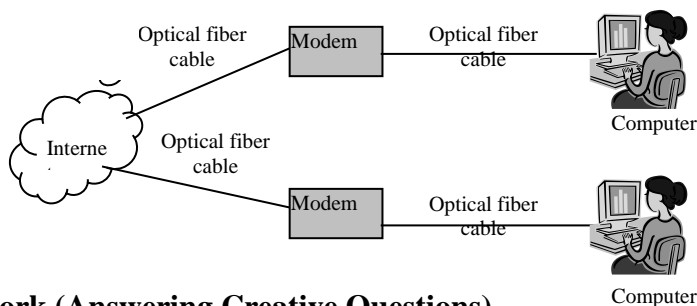
Team Work

Draw a picture of how information can be sent from one computer to the other by using optical fibre, modem and computer.

Solution:

Aim of Work: Know the usage of optical fibre, modem, computer etc.

Method of Work: We draw a picture, how information can be sent from one computer to the other by using optical fibre, modem and computer under the supervision of the teacher. The picture might be as follows:



Home work (Answering Creative Questions)

Read the following stimulus and answer to the questions below:

Motin's brother lives in the USA. He often sends many things from there for Motin. The smart phone which he sent for Motin last year is working like a computer. Motin now can watch different channels of the different countries on the LCD television sent by his brother in America this year.

- Which device does connect a computer with the telephone?
- Clarify the reason of naming the mobile phone device.
- Describe how Motin's mobile phone is working like a computer.
- Analyse how Motin can watch programmes of different countries with the help of ICT machine.

Ans:

- Modem.
- Due to the advancement of the technology we now can send our talking as wireless signals through using the mobile phone. We can move here and there keeping this phone in our pocket as this phone has no connection with the wire. That is why we call this phone "mobile phone".
- The smart phone which Motin's brother sent for Motin was a smart phone. Motin can take pictures, listen to songs, listen to radio, can move with GPS, can play computer games, even can use internet by this mobile phone. That means by this smart phone he can do many of the works which can be done by a computer. So it can be said that though in a small periphery, Motin's mobile phone works like a computer.
- The ICT machine by the development and help of which Motin can watch different programmes of different countries is satellite. Satellite is sometimes used for sending information from one surface to the other surface of the world. We can very often see different antennas on top of the very high buildings. Especially on the top of the TV channel office, buildings, we can see some types of big round antennas. Antenna towards the space sends information and the data to the satellite. Satellite receives the signal and sends it to another direction. Unlimited numbers of TV channels are distributed



in the whole world by this process. Through this procedure, we can watch different programmes in different countries.

MCQ

1. **At present, which one of the following is the most important wireless means of communication?**
(a) Radio (b) Television (c) Mobile ✓ (d) Land phone
 2. **Processor is called the brain of a computer, because**
i. it is connected with motherboard
ii. it acts as the indicator of computer
iii. it processes information
which one of the following is correct?
(a) I (b) ii (c) iii (d) i, ii and iii ✓
 3. **Suppose you want to save your written poems in the computer for a long time. Which device will you use for this?**
(a) RAM (b) Hard disc drive ✓ (c) Processor (d) Pen drive
 4. **Which one act as both input device and output device?**
(a) Monitor (b) Touch screen ✓ (c) Keyboard (d) Motherboard
 5. **The main work of the operating system is --**
(a) Input-output operation (b) Controlling file system
(c) To make system of conducting Programme ✓ (d) To detect mistakes of other devices
- Read the following passage and answer question nos. 6 and 7:**
- Mr. Hasan was talking to his grand sons and daughters about various scientific inventions. He said, "Many things have now been invented; interesting programmes can be watched, heard, recorded to be enjoyed later on by the same instrument. It has now become very easy to send any news anywhere at any time. There was a time when we did not have any of such things. It took several months to get any urgent news.**
6. **In the talk of Mr. Hasan, which development of science has been given importance on ---**
i. Satellite television ii. Postal development
iii. Information and communication
which one of the following is correct?
(a) i (b) ii (c) i and ii ✓ (d) i, ii and iii
 7. **Which means will Mr. Hasan use to send any new information anywhere at anytime?**
(a) Internet ✓ (b) Land phone (c) Radio (d) Mobile phone
 8. **Which technology is used to send information from one place to the other place of the world?**
(a) Optical fibre (b) Internet (c) Mobile phone (d) Satellite
 9. **How do the computers function?**
(a) Automatically (b) With the help of microprocessor
(c) As per the direction of users ✓ (d) Digitally
 10. **Which one of the following is the version of computer?**
(a) Super computer ✓ (b) Washing machine (c) Oven (d) Digital camera
 11. **Which are the classification of micro-computers?**
(a) Desktop (b) Laptop (c) Super computer (d) a and b ✓
 12. **What are the main parts in the working process of a computer?**
(a) Input, output (b) Input, output, memory
(c) Input, output and processor (d) Input, output, memory and processor ✓
 13. **How many main are there in a computer?**
(a) 4 ✓ (b) 3 (c) 5 (d) 2



- 14. With the help of what do we insert data or information into the computer?**
(a) Input ✓ (b) Output (c) Memory (d) Processor
- 15. Where is the data or information given by us stored in the computer?**
(a) Input (b) Output (c) Memory ✓ (d) Processor
- 16. What is the full form of CPU?**
(a) Central processing unit ✓ (b) Center processing unit
(c) Control processing unit (d) Confirm processing unit
- 17. Which one is much more powerful than super computer?**
(a) Tablet PC (b) Smart phone (c) Mini computer (d) Human brain ✓
- 18. Through which the same computer is sometimes used to draw pictures, sometimes to listen to songs and again sometimes to do difficult accounting-works?**
(a) Hardware (b) Software ✓ (c) Memory (d) Processor
- 19. What is the function of software?**
(a) give instruction on how different works will be performed ✓
(b) command the instruments to work
(c) preserve the memory
(d) give input of information
- 20. Which is the working sequence of a laptop computer?**
(a) Input → Memory → Output → Processor ✓
(b) Memory → Input → Output → Processor
(c) Input → Memory → Processor → Output
(d) Input → Processor → Memory → Output
- 21. What are the first and last steps of the functioning of a computer?**
(a) Input and output ✓
(b) Input and memory
(c) Memory and output
(d) Input and processor
- 22. What is the main difference between human brain and computer?**
(a) Thinking power of human being is much more than that of a computer ✓
(b) Thinking power of human being is much less than that of a computer
(c) Human being can solve mathematical problems, but a computer cannot do the same
(d) Human being can analyse but a computer cannot
- 23. The works for which computer is used are--**
i. accounting-works
ii. recreation
iii. education
which one of the following is correct?
(a) i and ii (b) i and iii (c) ii and iii (d) i, ii and iii ✓
- 24. In case of computer it is true ----**
i. It has no tiredness
ii. It can be used as long as we want
iii. It operates according to the commands of the user
which one of the following is correct?
(a) i and ii (b) i and iii (c) ii and iii (d) i, ii and iii ✓
- 25. The things that can be done with the Destop of your school are ----**
i. doing according works



- ii. preparing the results
- iii. diagnosing the diseases

which one of the following is correct?

- (a) i and ii ✓
- (b) i and iii
- (c) ii and iii
- (d) i, ii and iii

26. Your elder brother has printed a page of writing after composing it in the computer. He has used ----- as input the device.

- i. keyboard
- ii. mouse
- iii. printer

which one of the following is correct?

- (a) i and ii ✓
- (b) i and iii
- (c) ii and iii
- (d) i, ii and iii

Read the following stimulus and answer questions 27 and 28:

Monir bought a new computer. When his younger brother wanted to know, Monir introduced the different hardware to his younger brother.

27. By describing what will Monir introduce the computer device like television screen to his younger brother?

- (a) Keyboard
- (b) Mouse
- (c) Monitor ✓
- (d) CPU

28. Which part of the computer will Monir mention as the most important part to his brother?

- (a) CPU
- (b) Keyboard
- (c) Printer ✓
- (d) Speaker

29. Which one is correct sequence?

- (a) Input → Memory → Processor → Output
- (b) Input → Memory → Processor → Memory → Output ✓
- (c) Output → Memory → Processor → Input
- (d) Output → Processor → Memory → Input

30. Where does the processor sends the works after processing it ?

- (a) Input
- (b) Output ✓
- (c) Memory
- (d) Internal

31. What is the reason behind the revolution caused by the computer?

- (a) Capability to do a lot of works ✓
- (b) Ability to do any particular work
- (c) Easy availability
- (d) Affordable

32. When can a hardware work?

- (a) When some new hardwares are fixed
- (b) When software is installed ✓
- (c) When some hardwares are removed
- (d) When the computer is restarted

33. Which one is the new version of computers?

- (a) Oven
- (b) Optical fibre
- (c) Tablet PC ✓
- (d) Mobile phone

34. Which input device is used to write on computer?

- (a) Monitor
- (b) Printer
- (c) Mouse
- (d) Keyboard ✓

35. Which input device can be used to draw pictures on computer?

- (a) Monitor
- (b) Printer
- (c) Mouse ✓
- (d) Keyboard

36. Which one is input device?

- (a) Webcam ✓
- (b) Monitor
- (c) Printer
- (d) Sound box

37. What is used insert pictures into computer?

- (a) Printer
- (b) Monitor
- (c) Keyboard
- (d) Scanner ✓

38. Why OMR is called an input device?

- (a) Because the device recognizes the information of the answer sheets from the computer



- (b) Because the device inserts the information into the computer ✓
- (c) Because the device itself assesses the information of the answer sheets
- (d) Because the device fills in the circles on the answer sheets

39. What kind of device is a digital camera?

- (a) Input device ✓
- (b) Output device
- (c) Storage device
- (d) None

40. Masud's brother has bought a scanner. What is the feature of a scanner?

- (a) Pictures can be scanned by this device ✓
- (b) Songs can be listened to by this device
- (c) E-mail can be sent by this device
- (d) SMS can be sent by this device

41. Masum's mother has bought some goods from a big shopping mall. By the help of what was a receipt of price list of commodities prepared there?

- (a) Barcode reader ✓
- (b) Joystick
- (c) Microphone
- (d) OMR

42. An input device is ----

- i. Mouse
- ii. Keyboard
- iii. Printer

which one of the following is correct?

- (a) i and ii ✓
- (b) i and iii
- (c) ii and iii
- (d) i, ii and iii

43. It is possible to insert pictures directly into computer if the pictures are ----

- i. taken by a traditional camera
- ii. taken by a digital camera
- iii. taken by a mobile phone

which one of the following is correct?

- (a) i and ii
- (b) i and iii ✓
- (c) ii and iii
- (d) i, ii and iii

44. Sohan's father has introduced Sohan to some devices of a computer. Among these, the output devices are ---

- i. Printer
- ii. Microphone
- iii. Sound box

which one of the following is correct?

- (a) i and ii
- (b) i and iii ✓
- (c) ii and iii
- (d) i, ii and iii

45. Mouse is an input device because ---- by mouse in computer.

- i. information can be inserted
- ii. commands can be given
- iii. pictures can be drawn

which one of the following is correct?

- (a) i and ii
- (b) i and iii
- (c) ii and iii
- (d) i, ii and iii ✓

Read the following stimulus and answer to questions 46 and 47:

Mamun's brother lives abroad. Today, Mamun talked to his brother face to face in the computer by using internet and two special input devices. Mamun orally communicated with his brother instead of written communication.

46. What input device did the two brother use to talk while seeing each other?

- (a) Joystick
- (b) Scanner
- (c) Webcam ✓
- (d) OMR



47. Which input device did they use to send and receive their conversations directly?
(a) Joystick (b) Scanner (c) Webcam (d) Microphone ✓
48. What is the device called in which information are kept permanently?
(a) RAM (b) ROM (c) Flash memory (d) Hard disc ✓
49. Which one is a storage device?
(a) RAM (b) ROM (c) Flash memory (d) Storage device ✓
50. Which one of the following plays an important role in processing information?
(a) Memory (b) Input (c) Output (d) Result
51. Which one of the following is a process of transferring information from one computer to another?
(a) CD ✓ (b) Printer (c) Scanner (d) Microphone
52. What is the main or central part of a computer?
(a) Monitor (b) Motherboard (c) Processor ✓ (d) Hard disc
53. What performs all works in a mathematical process?
(a) Motherboard (b) Hard disc (c) Processor ✓ (d) RAM
54. In which process does the processor do all works?
(a) Mathematical process ✓ (b) Geometrical process
(c) Usual process (d) Algebraic process
55. To what is the processor connected?
(a) Motherboard ✓ (b) RAM (c) Disc drive (d) Power Supply
56. Where is the Operating System software stored?
(a) RAM (b) Hard disc ✓ (c) CD (d) Pen drive
57. If we keep any data in the RAM, why will the previously- stored one be erased?
(a) As Ram is a temporary storage device ✓
(b) As Ram has less storage capacity
(c) As Ram has less energy
(d) As the importance of the previous data decreases
58. What is the main difference between CD and Pen drive?
(a) As compared to CD, Pen drive has more storage capacity ✓
(b) Writing can be done on CD, but not on Pen drive
(c) In comparison to CD, Pen drive is easily available
(d) Pictures can be seen with CD, but cannot be with Pen drive
59. What types of device is a Pen drive?
(a) Input (b) Output
(c) Storage ✓ (d) Both input and output at the same time
60. What does CD stand for?
(a) Compound disc (b) Compact disc ✓
(c) Complen disc (d) Common disc
61. A very important part of the computer is memory, the work of which is ---
i. preserving the information and data
ii. supplying information during processing
iii. helping in processing the data
which one of the following is correct?
(a) i and ii ✓ (b) i and iii (c) ii and iii (d) i, ii and iii
62. The data or information which are stored in hard disc are ---
i. permanent



ii. usable at a later time

iii. temporary

which one of the following is correct?

(a) i and ii ✓

(b) i and iii

(c) ii and iii

(d) i, ii and iii

63. Sumon can give the pictures of his Sylhet visit to his friends by using ----

i. CD

ii. Pen drive

iii. RAM

which one of the following is correct?

(a) i and ii ✓

(b) i and iii

(c) ii and iii

(d) i, ii and iii

64. CD is used for ----

i. Listening to songs

ii. Watching cinemas

iii. Taking information

which one of the following is correct?

(a) i and ii

(b) i and iii

(c) ii and iii

(d) i, ii and iii

Read the following stimulus and answer to questions 65 and 66:

Jony has downloaded a recently released movie from internet. After a few days, Ratul transferred the movie from Jony's computer to his computer.

65. What did Ratul use to transfer the movie from Jony's computer to his computer?

(a) RAM

(b) Hard disc

(c) Pen drive ✓

(d) Mouse

66. Where did Jony store the movie in his computer after downloading it?

(a) RAM

(b) Hard disc ✓

(c) ROM

(d) Flash memory

67. What is the most important part of a computer?

(a) Memory

(b) Processor ✓

(c) Input device

(d) Output device

68. What is the board called to which innumerable tips of electronics are attached?

(a) Electronics board

(b) Computer board

(c) Motherboard ✓

(d) Memory board

69. Which one of the following is the permanent memory of the computer?

(a) RAM

(b) ROM

(c) Flash memory

(d) Hard disc ✓

70. In which opening system software is stored?

(a) Hard disc ✓

(b) CD

(c) DVD

(d) Pen drive