

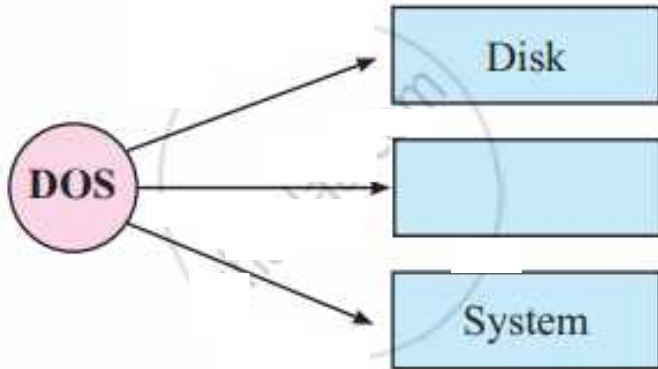
Chapter 1: Basics of Information Technology

EXERCISE [PAGES 18 - 19]

Exercise | 1.1 | Page 18

QUESTION

Complete the following activity



SOLUTION

Operating

Exercise | 1.2 | Page 18

QUESTION

Tick the appropriate box

Internet is a _____ network connecting millions of computer.

- Regional
- Global
- Local

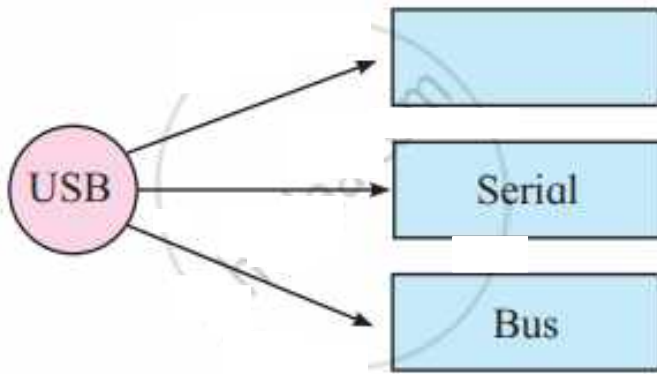
SOLUTION

Internet is a **global** network connecting millions of computer.

Exercise | 1.3 | Page 18

QUESTION

Complete the following activity



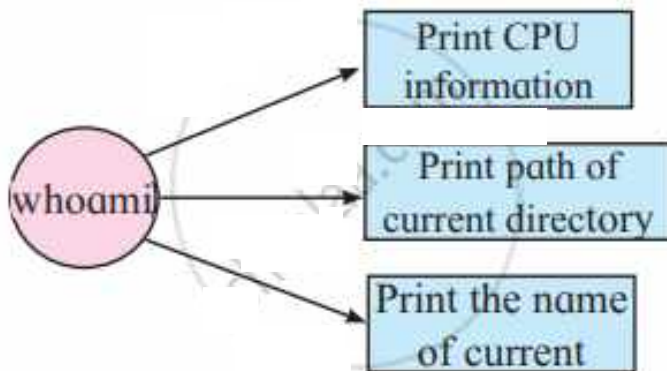
SOLUTION

Universal

Exercise | 1.4 | Page 18

QUESTION

Tick the appropriate box



- Print CPU information
- Print path of current directory
- Print the name of current user

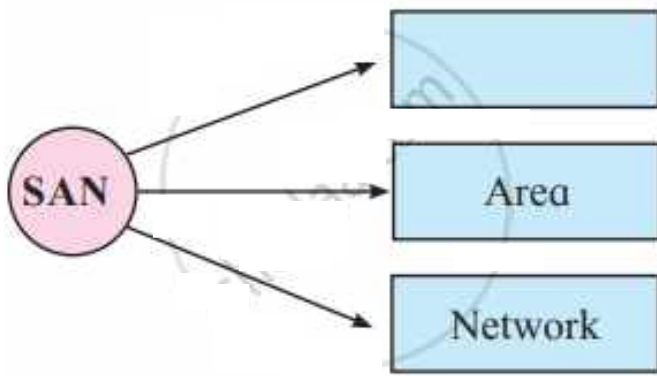
SOLUTION

Print the name of current user

Exercise | 1.5 | Page 18

QUESTION

Complete the following activity



SOLUTION

Storage

Exercise | 2.1 | Page 18

QUESTION

Divide the following device into appropriate categories.

Monitor

- Input Device
- Output Device

SOLUTION

Exercise | 2.2 | Page 18

QUESTION

Divide the following device into appropriate categories.

Barcode reader

- Input Device
- Output Device

SOLUTION

Input Device

Exercise | 2.3 | Page 18

QUESTION

Divide the following device into appropriate categories.

Printer

- Input Device
- Output Device

SOLUTION

Output Device

Exercise | 2.4 | Page 18

QUESTION

Divide the following device into appropriate categories.

Keyboard

- Input Device
- Output Device

SOLUTION

Input Device

Exercise | 2.5 | Page 18

QUESTION

Divide the following device into appropriate categories.

Optical character reader

- Input Device
- Output Device

SOLUTION

Input Device

Exercise | 2.6 | Page 18

QUESTION

Divide the following device into appropriate categories.

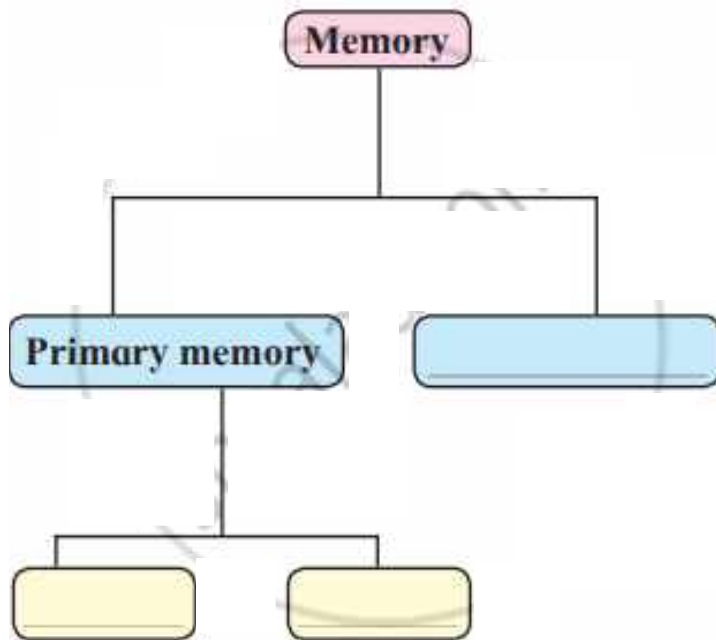
Speaker

- Input Device
- Output Device

SOLUTION

QUESTION

Complete the Tree Diagram.



SOLUTION

Memory

- > Primary memory

- > **RAM (Random Access Memory)**

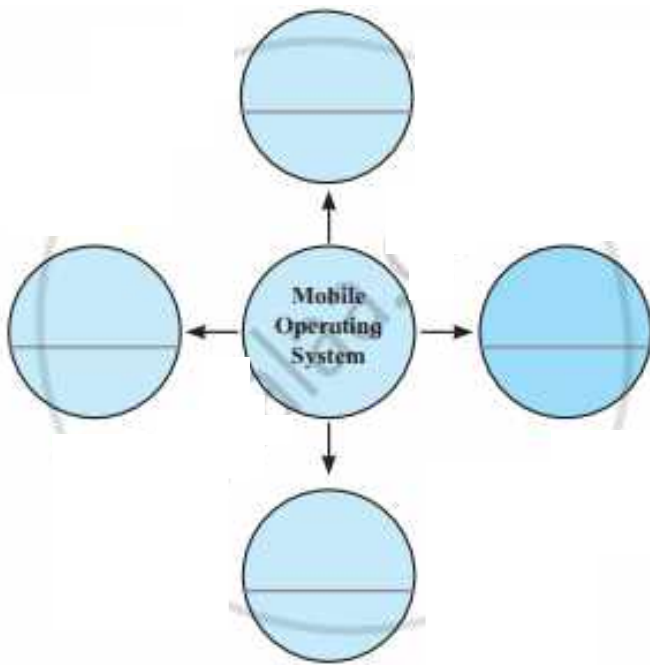
- > **ROM (Read Only Memory)**

Memory

- > **Secondary Memory**

QUESTION

Name the following and complete the diagram.



SOLUTION

Asha

Android

iOS

Windows Phone

Exercise | 5.1 | Page 19

QUESTION

Complete the following with Linux commands with their use.

pwd

SOLUTION

[Print Working Directory] Prints the path to the current directory.

Exercise | 5.2 | Page 19

QUESTION

Complete the following with Linux commands with their use.

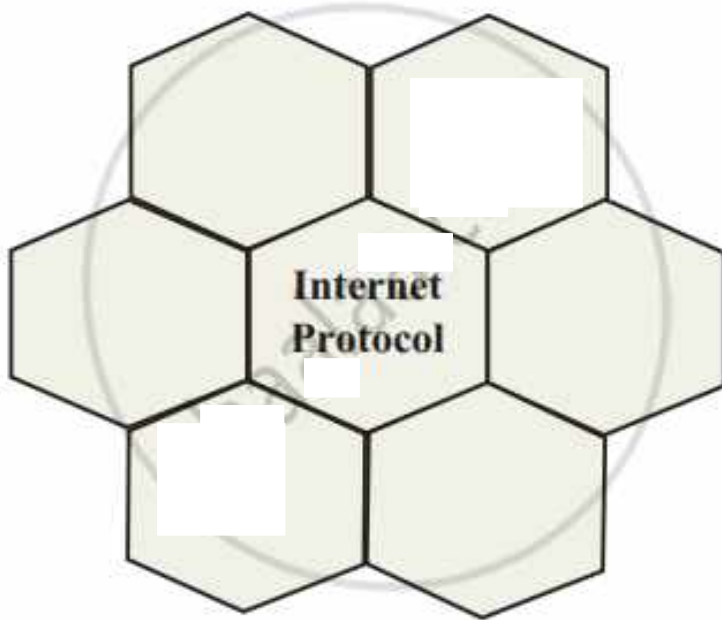
ls

SOLUTION

[List Directories] Prints the list of directories in the current one.

QUESTION

Complete the list of following protocols.



SOLUTION

TCP/IP

DNS

IMAP

DHCP

HTTP

FTP

QUESTION

Complete the following Long form.

LAN - Local _____ Network.

SOLUTION

LAN - Local **Area** Network.

QUESTION

Complete the following Long form.

GUI - _____ User Interface.

SOLUTION

GUI - **Graphical** User Interface.

Exercise | 7.3 | Page 19

QUESTION

Complete the following Long form.

OSS - Open Source _____.

SOLUTION

OSS - Open Source **Software**.

Exercise | 8 | Page 19

QUESTION

Identify the following activity.

You are typing a letter using a computer and suddenly there is a power failure. Which type of Memory does this activity deal?

SOLUTION

RAM

Exercise | 9.1 | Page 19

QUESTION

What is Data and Information?

SOLUTION

Data: Information in raw or unorganized form such as alphabets, numbers, or symbols that refer to, represent, condition, ideas, or objects. Data is a limitless and present processed by a computer, for output as usable information.

Information: Processed data is known as information. It is formatted in a manner that allows to utilize to persons in significant way. When the data is interpreted, organized and formatted one can collect proper information.

Exercise | 9.2 | Page 19

QUESTION

Explain functional units of a computer system.

SOLUTION

Computer system has following three basic components:

Input unit

As input device is any hardware device that sends data to a computer, allowing you to interact with and control it. Data can be in the form of words, symbols, number etc. The function of the input device is to direct commands and data into computer. For example keyboard, mouse, scanners, digital cameras, joysticks, and microphones.

Central processing unit

After receiving data and commands from the user, a computer system has to process the instructions provided using Central Processing Unit (CPU). It has three elements:

- (a) Arithmetic and Logic Unit: An arithmetic logic unit (ALU) is a major component of the central processing unit of a computer system. It does all processes related to arithmetic and logic operations like add, subtract, multiply etc.
- (b) Control Unit: The control unit (CU) is a component of a computer's central processing unit (CPU) that directs the operation of the processor. It tells the computer's memory, arithmetic and logic unit and input and output devices how to respond to the instructions that have been sent to the processor.
- (c) Memory Unit: Memory unit is the amount of data that can be stored in the storage unit. Once the data has been entered using input devices, the system stores the data in the memory unit.

Types of Memory. 'Primary Memory & Secondary Memory.

- Primary Memory: It is internal memory of the computer also known as main memory'. ' It is of two types RAM and ROM
- RAM (Random Access Memory) 'RAM stands for Random Access Memory also known as read/write memory. Information stored in this memory is lost as the power supply to the computer is switched off; it is also called as "Volatile Memory".
- ROM(Read Only Memory) :ROM stands for Read Only Memory. ROM is a permanent Type memory. The contents are not lost as the power supply to the computer is switched off. ROM cannot be overwritten by the computer. It is also called "Non Volatile Memory".
- Secondary Memory: It is external memory of the computer which is used to store large amount of data. The secondary storage devices are: Hard disk, Pen drive,

CD, DVD etc.

Output Unit

An output device is any device used to send data from a computer to another device or user. Most computer data output that is 'meant for humans is in the form of audio or video. Thus, most output devices used by humans are in these categories. Examples include monitors, projectors, speakers,

Exercise | 9.3 | Page 19

QUESTION

What is a storage unit?

SOLUTION

When a user enters data using input devices, the computer system stores this data in memory unit i.e. storage unit. The storage unit uses a set of pre-programmed instructions to further transmit this data to other parts of CPU. There are two types of memory

- Primary memory
- Secondary memory

Exercise | 9.4 | Page 19

QUESTION

Explain how Linux is different from Windows.

SOLUTION

1. Linux is open sources system whereas window operating system is commercial.
2. Linux has access to source code and alters the code as per user need whereas a window does not have access to-source code.
3. Linux distribution don't collect user data" whereas Windows collects all the user details which lead to privacy concerns.
4. As the software is open to public, it constantly updates, improves and expands as more people can work on its improvement.

Exercise | 9.5 | Page 19

QUESTION

Write down the difference between LAN, MAN and WAN.

SOLUTION

LAN (Local Area network)

1. LAN Stands for Local Area Network
2. A LAN is a network of connected devices that exist within a specific location.
3. LANs may be found in homes, offices, educational institution, or other areas
4. LAN is easy to setup.
5. Data transmits at a very fast rate.

MAN (Metropolitan Area network)

1. MAN stands for Metropolitan Area Network
2. A public or private network used to connect various locations including suburbs in metropolitan cities.
3. A MAN is a network, which covers an entire city, but uses LAN topology.
4. MANs are formed by connecting multiple LANs
5. Examples of a MAN are the cable TV network in a city

3) WAN (Wide Area network)

1. WAN stands for Wide Area Network
2. A WAN is any network that crosses metropolitan, regional, or national boundaries
3. Most networking professionals define a WAN as any network that uses routers and public network links (for e.g. Telephone lines).
4. Due to long distance transmission, the noise and errors are more in WAN.
5. The best example of WAN is Internet.

Exercise | 9.6 | Page 19

QUESTION

Give examples of data and information.

SOLUTION

Example of Data : Umbar, 1234, Xyz, MG Road, Calcutta, 9111111111, 84084

Example of Information : Xyz, 1234, MG Road, Umbar 84084, Calcutta, 9111111111