

Answers

1. Tick True or False next to each of these statements.

	True	False
A mainframe computer can handle vast amount of information at a time	✓	
Supercomputers are the only types computer that can play games		✓
The Minicomputer is much more powerful than the Mainframe computer.		✓
A desktop computer is portable		✓
All computers have the same basic components	✓	

2. A) What is a Personal Digital Assistant (PDA)?

- A personal digital assistant (PDA) is a portable device that functions as a personal information manager. It is more compact and typically has no keyboard using a touchscreen for all data input.

B) 2 differences between a PDA type computer and a desktop computer.

- A PDA is outstanding for its light weight and portability whereas desktop computers are designed for use at a desk or table.
- The PDA has much less memory than a desktop computer

C) Two advantages of a notebook computers over a desktop computer.

- **Mobility:** The lightweight, compact size, the built-in battery in the laptop allowing it to easily move from one place to another.
- **Internet access:** provides the ability to access the Internet through wireless technology Wi-Fi.

D) Two disadvantages of a notebook computer when compared with a desktop computer.

- **Sensitivity:** Laptops are easier to damage as compare to ordinary computers. For example, it is not uncommon for a laptop to drop, fall with rain, sit on it, etc. All this leads to a breakdown of the device.
- **Unpredictable battery:** The battery pack built into the laptop breaks down because it is not eternal, and it needs to be operated according to strict rules.

3.

a) 2 advantages of using ATM

- The customer has the possibility to use the service 24 hours per day
- There are fewer queues since the transaction are performed by the machine therefore faster service.

b) 2 disadvantages of using ATM

- An additional service fee is charged on transactions done through ATM
- Cannot obtain coins or foreign currencies.

c) Arrange the following in the required order for withdrawing money from an ATM

Take money, Enter Pin, Take receipt, Enter amount of money, and Insert the ATM Card

Step 1: **Insert the ATM Card**

Step 2: **Enter Pin**

Step 3: **Enter the amount of money**

Step 4: **Take Money**

Step 5: **Take receipt**

4.

i. The internet is a global network of network .people and organizations connect into the internet so they can access its massive store of shared information.

ii. Two services offered by the internet

- Online Banking
- Electronic Mail

iii. List three items needed to connect to the Internet.

- A computer.
- A modem and telephone line (if you are using dial up access) ...
- An Internet browser (software) and software to connect you to the ISP.

5.

i.State the difference between LAN and WAN?

Differences between LAN and WAN	
LAN	WAN
There is a need to set up a couple of extra devices on the network, so it is not very expensive.	In WAN networks as remote areas have to be connected, hence the set-up costs are higher
The speed of LAN is high.	The speed of WAN is slower than LAN.
LAN has a higher data transfer rate.	WAN has a lower data transfer rate as compares to LAN.

ii. Advantage and disadvantages of LAN

LAN	
Advantages	Disadvantages
Data of all network users can be stored on a single hard disk of the server computer.	In the server-based LAN architecture, if server develops some fault , all the users are affected.
You can easily transfer data and messages over networked computers.	Appearance of virus in one system can spread very fast to all the LAN users very easily

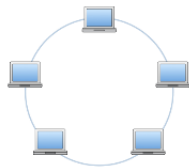
iii. Advantages and disadvantages of WAN.

WAN	
Advantages	Disadvantages
Share information/files over a larger area.	The initial set up cost of is WAN network is high
Shares software and resources by connecting with various workstations.	It requires more time to resolve issues because of the involvement of multiple wired and wireless technologies.

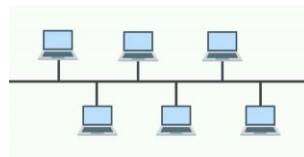
6.

a) Name and draw two common types of network topology.

1) **Ring topology**



2) **Bus Topology**



b) Advantages of bus topology.

- Easy to connect a computer or peripheral to a linear bus.
- Requires less cable length than a star topology.
- Entire network shuts down if there is a break in the main cable.
- Difficult to identify the problem if the entire network shuts down.

c) Disadvantages of ring topology.

- Easy to connect a computer or peripheral to a linear bus.
- Requires less cable length than a star topology.
- Entire network shuts down if there is a break in the main cable.
- Difficult to identify the problem if the entire network shuts down.