**Chương 1,2: Computer- Part of computer**

1. **How many types of computers do you knows. What are they ?**

+ There are 4 types of computers : Micro-computer, Mini-computer, Mainframe-computer, Portable-computer

1. **What is difference between a mainframe and PC**

+ Mainfrane :

* Large, powerful, expensive
* Multi user system used by many people at the same time
* Used for processing very large amounts of data
* The most powerful mainframes are called supercomputers

+ Pc

* The most common type of computer
* Smaller, cheaper and less powerful than mainframes and minicomputer

1. **How many main part of a computer? What are they?**

* There are 8 part of a computer :
* Hard disk drive
* Motherboard
* Memory chip
* Powerful supply
* Processor
* Speaker
* Expansion card
* Floppy drive

1. **What is a computer hardware ?**

* The electronic and mechanical parts that make up a computer system are called hardware

1. **What is a computer software**

* Information in the form of data and programs is known as software

1. **What is a motherboard ?**

* Motherboard is a large circuit board which all other PC components connect to tin some way

1. **What does SIMMS stand for ?**

* Single in-line memory module

1. **What is an expansion slot ?**

* The Expansion slot is a socket on the motherboard that used to insert expansion card which provide s additional feature to a computer such as sounds, graphics memories

1. **What is cache memory ?**

* It’s part of the memory store. It has extremely fast access. It’s faster than normal Ram. It can speed up the computer

1. What is ROM ?

* Read only memory – this kind of memory contains all the constructions your computer needs to activate itself when you switch on. Unlink Ram, it contents are retained when you switch off

1. **What is diffirent between Rom and Ram**

* ROM is meant for permanent storage, and RAM is for temporary storage.

1. **How many types of portalbe computer ? What are they ?**

* There are 4 types of portable computer
* Notebook
* Laptop
* Subnotebook
* Handheld or palmtop

1. **Make a list of computer port**

* Keyboard
* Mouse
* Serial port
* COM I
* Parallel
* Video port

1. **Write the instruction for virus checking a disk ?**

- Put the disk into the drive

- Start the virus checking program

- select the drive to be checked

- Click the “ find” button

- Don’t exit the program until the check is complete

- Select “Yes” or “No” for checking another disk

**Chương 3 + 4 : Input & Output devices**

1. How many input devices do you known ? What are they ? Give Vnese meaning for each ?

* There are 8 input devices :
  + - * Joystick – Cần điều khiển
      * Lightpen – Bút quang
      * Scanner – Máy quét
      * Digital Camera – Máy ảnh số
      * Mouse – Chuột máy tính
      * Keyboard – Bàn phím máy tính
      * Microphone – Ống thu thanh hay thường đc gọi là Mic
      * Touch screen – Màn hình cảm ứng

1. What does a scanner do ? Give a definition in your own word ?

* Scanner is an input device that allows a user to take a printed picture or document and convert it into digital file

1. How many type of scanner do you known

* There are 4 types of scanner :
  + - * Flatbed Scanners
      * Handheld Scanners
      * Film Scanner
      * Portable Scanners

1. How many steps to input voice ? What are they ?

* There are five steps in voice input
  + - * The user says a word into a microphone
      * The microphone converts the word form audio signals to electrical signals
      * The speech recognition board converts the signals into binaty numbers
      * The computer compares the binary code with its stored vocabulary
      * The screen displays the correct word

1. What are advantages and disadvantages of film camera ?

* Advantages:
  + - * Film camera is cheap
      * The quality of film camera is much better than digital camera
* Disadvantages:
  + - * Each picture cost a lot because there are processing cost
      * Picture can’t be seen until printed out which can sometimes be inconvenient
      * The pictute has to be scanned to transfer images to PC

1. What are advantages and disadvantages of digital camera ?

* Advantages:
  + - * Digital camera don’t use film
      * The cost for each picture is low
      * It is easy to dowload the pictures
* Disadvantages:
  + - * Digital camera is expensive
      * The quality of digital camera is lower than film camera
      * Maybe lost the data

1. What is input divices

* Input divices is a peripheral device used to provice data and control signals to an information processing system

1. What is an output device ? What are they ?

* An output device is a peripheral used to show the result of the data after processing
* There are 6 output device : headphone, a projector, a printer, a speaker, an earphone and a monitor

1. How many types of printer ? What are they ?

* There are 3 types of printer
* They are : dot – matrix printer , ink-jet printer and laser printer

1. What is a printer

* Printer is an output device used to print texts or pictures onto the paper

1. What are advantages and disadvantages of dot-matrix printers

| Advantages | Disadvantages |
| --- | --- |
| * The dot matrix printer are cheap * They use paper continously unlike other printer that require frequent change of paper * The maintenance cost is low as compare other printers | * The output is not high resolution. Color printout is limited * The printer creates great deal of noise |

1. What are advantages and disadvantages of ink-jet printers

| Advantages | Disadvantages |
| --- | --- |
| * Greate for photos and image – heavy document * Ink-jet printes have low start-up cost * Inkjet can print onto many types of paper * Almost no warm-up time is needed before printing * Inkjet printers tend to smaller. Lighter and easierto maintain than laser printer | * Inkjet is more expensive * Inkjet is water-based, so prints are susceptible to water damage and fading * Ink cartriged need frequent cleaning * Inkjet printers are getting faster, but still very slow compared to laser printer |

1. Advantages and disadvantages of laser pinters

| Advantages | Disadvantages |
| --- | --- |
| * Print faster than inkjet printer * Laser printer produce perfect sharp black and text better than inkjet | * Need time to warm-up * Laser printer can’t handle a variety of paper or printing material like ink-jet * Bigger and heavier than inkjet printes |

1. How many main section of keyboard ? What are they ?

* There are 4 main section of keyboard
* They are : main keyboard key, function key, Editing key and Numeric keyboard

1. What is computer crimes:

* Computer crimes include :
  + - * Hacking – anauthorized access to computer systems and tampering with other users data
      * Pirating illegally copying and selling programs
      * Intentionally attemping to spread viruses

**Chương 5 storage device**

**What are storage devices ?**

Storage devices is a hardware.

Storage devices are used on the computers to store the data.

| Types of storage device  ( 6 types ) | advantages | disadvantages |
| --- | --- | --- |
| Floppy disk | - cheap easy to transport  - can be used many times | - don’t have much storage capacity  - can be affected by heat  -slow |
| Fixed hard disk | - faster and more storage capacity than floppy disk | - fixed inside |
| Removable hard disk | - fast and have high capacities | - not very common , expensive  - not all conform to one standard |
| CD - ROM disk | - very common , comfort to a standard, removable  - can hold a large amount of data | - read-only  - slow |
| Magneto - optical disk | - removable, have large capacities, last for a long time  - can write data on to them  - provide faster data access and data transfer | - more expensive than magnetic hard drive not all common conform to one standard  - not very common |
| Magnetic tape | - cheap, have a large capacity  - suitable for doing backups  - no complicated software is required for file handling | - slow data transfer rate  - data are arranged in sequential order, so specific data cannot be retrieved randomly  - larger in size than floppy disk |

**Chương 7: Networks**

1. **What is a network ?**

A network is simply two or more computers linked together. It allow us to share not only data files and software applications but also hardware like printers and other computer resources.

1. **How many types of network do you know ?**

Three

1. **What are they ?**

They are LAN (Local Area Network), MAN (Metropolitan Area Network) and WAN (Wide Area Network)

1. **What are the network’s hardware components ?**

NIC, Server, hub , router , switch , modem , cable , bridge, PC , printer , access points

1. **Which type of network is common and why ?**

LAN , because it is used by many people in small places.

1. **What is the difference between LAN and WAN ?**

LAN stands for Local Area Network

Operates in small/ limited area/ location / plance

WAN stands for Wide Area Network

Operates in wide/ large area/ location/ plance

1. **What are advantages of LAN ?**

In LAN computers can exchange data and messages in the easy and fast way. It also saves time and makes our work fast. Every user can share messages and data with any other user on LAN.

1. **What are advantages of WAN ?**

The principal advantage of a WAN is its size. By linking multiple sites together, LANs allow communication between entities on different sides of the country of even the other side of the world.

1. **What are servers/ clients**

The main computers that provide a service on the network are called servers, and the other computers that use the services are called clients.

1. **How many types of network topology are there ? what are they ?**

There are 5 types of network topology

There are Bus topology, Ring topology, Star topology, Extended Star topology and Mesh topology.

1. **What is a ring topology ?**

In a ring topology, each computer is connected to its neighbour in a circle. The data flows in one direction round the ring

1. **What is a bus topology ?**

The bus topology has all the computers connected to a common cable, the data travels in both directions along the cable.

1. **What is a star topology ?**

A star topology has a server computer at the centre and a separate cable connecting the server to each of the other computers in the network. The central server controls the flow of data in the network.

1. **What are the most common topology ? why ?**

That is Star topology.

In a Star Network the best advantage is when there is a failure in cable then only one computer might get affected and not the entire network.

1. **What are the advantages of passwords ?**

It helps to prevent unauthorized users or hackers from breaking into the system

1. **What are the rules of good passwords ?**

Be at least 6 characters long

Have mixed of numbers and letters

Have mixed of capital and small letters

Be easy to remember

1. **Why shouldn’t we use words in dictionary and common names as passwords ?**

Because hackers can use special computer programs which automatically try all the works and combination words in a computerized dictionary to try to discover or crack other users’ passwords

**Chương 8: Internet**

**What is Internet?**

* Cách 1 :a global computer network providing a variety of information and communication facilities, consisting of interconnected networks using standardized communication protocols.
* Cách 2: The Internet is a **global network**of billions of computers and other electronic devices

**What does TCP and IP stand for?**

* Cách 1:TCP/IP stands for Transmission Control Protocol/Internet Protocol. **TCP**/**IP** is a set of standardized rules that allow computers to communicate on a network such as the internet
* Cách 2:

- Client:

o This is the desktop computer or notebook computer on your desk. It’s linked

to the server and can access file and application on it

- Server:

o Most network have at least 1 central computer which all the desktop

computers connect to

o This is the most important computer on your net work

o It stores the data file and application software programs that the users need to

access or share with others

**What does TCP and IP mean in Vnese?**

**What is the Internet protocol suite?**

The ***Internet protocol suite*** is the conceptual model and set of communications ***protocols*** used in the ***Internet*** and similar computer networks. It is commonly known as TCP/***IP*** because the foundational ***protocols*** in the ***suite*** are the Transmission Control ***Protocol*** (TCP) and the ***Internet Protocol*** (***IP***).

**How can we make use of the security of the Internet?**

* **Security on the Web**
* **Email privacy**
* **Network security**
* **Virus protection**

**How do you protect a message in email privacy?**

The only way to protect a message is to put it in a sort of “envelope”, that is, to encode it with some form of encryption

**What do you do avoid risks in security on the Web?**

To avoid risks, you should set all security alerts to high on your Web browser. Netscape Communacation and IE display a lock when the web page is secure and allow you to disable or delete “cookies”

**What does SET stands for?**

Secure electronic transactions

**What are the most popular method of protection in the network security?**

To protect crucial data, companies hire security consultants who analyse the risks and provide security solutions. The most common methods of protections are passwords for access control, encryption and decryption systems and firewalls.

**How can you protect your PC from viruses?**

Viruses can enter a PC through files from dicks, the Internet or buletin board systems. If u want to protect your system, don’t open email attachments from strangers and take care when dowloading files form web(Plain text email alone can’t pass a virus)

Remember to update your anti virus software as often as possible, since new viruses are being created all the time