Democratic and Popular Republic of Algeria

Ministry of Higher Education and Scientific Research

Dr. Tahar Moulay University-Saida

Faculty of Technology

Department of Computer Science

Pedagogical Support

Langue Etrangere 2

Cours, exercices et exposes

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English Courses for Computer Science Students- Second Year Licence (First Semester)

Abstract

This pedagigical support is designed to be a helpful guide for both students and teachers. The present support comprises English courses of the first semester addressed to computer science students in the second year licence. The courses are derived from the canva of the ministry of higher education and scientific research. As for the approach, English for Specific Puroses has been adopted because it is appropriate (in this case) in teaching technical English. It is worth noticeable to mention that students have already conducted needs analysis so as to identify their needs, wants and interest and plan the courses on the bases of their demands. As far as the content is concerned, it implies definitions of various devices, illustrations through examples, clarifications using diagrams and figures. All this is done through describing the functions and the characteristics of the computer, input, output and storage devices.

Introduction

The present pedagogical support is designed for second year licence students in the Computer Science department, faculty of Technology at Dr. Tahar Moulay University in Saida. It is important to mention that those students have already studied their first year in the faculty of Mathematics and Computer Science where they studied English as a module.

As second year students, they are supposed to study English as a module, too. Yet, this year they are supposed to study one of the two sub main branches of English for Specific Purposes (ESP) i.e. English for Academic Purposes (EAP). It is worth noticeable that the Computer Science field is deeply interrelated with ESP in matter of terminology of computer hardware and software components such as the input, output and storage devices in addition to the systems and applications which are so far altered in English.

The objective of the current pedagogical support is to provide students and even future teachers with an English program that has long been a target and has required a long time of research, design, plan and at last a support or a guide ready for use. Previously, Computer Science students used to study English for General Purposes such as grammar, study of texts, lexis …etc. which means there were no exact purposes the fact that led students to neglect English and considered it as a secondary module though they were aware of the important role English language played in their studies.

Now, as an ESP teacher, it is an opportunity for me to put this pedagogical support in the hands of our learners taking in consideration their needs, wants and interests. Indeed, before beginning this modest work, there had been a collaboration with different teachers from the Computer Science department who were teaching different modules to second year students in order to gather as much information of their programs as possible. At last, a pre-handout has been written and needed a proof reading.

As far as the content of this pedagogical support is concerned, it comprises two parts ; the first part is devoted to the first semester courses whereas the second is devoted to oral presentation. Each part contains a set of courses, within each course there is the theoretical part which includes definitions, explanations and illustrations using tables, figures and diagrams on the one hand and there is the practical part which includes various tasks. For the second part, students are given topics and are supposed to present them as exposes (oral presentation + written practice) then the teacher should summarize what they have presented in a form of a written course. Throughout the courses, there are tests and quizzes and by the end of the courses, there is a set of final exams samples followed by the correction of all the tasks and the correction of the exams. At the end of

this support, there are further readings which are concerned with the methodological context so as to enrich the students' knowledge in addition to the translation of the common vocabulary of computer science from English to French.

Last but not least, I hope that this support will serve and fulfill learners'needs and help them improve their English level and outcomes.

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First Semester (Courses)

Exposes

First Semester

Course 01 : Texting and Messaging Vocabulary

Common English Abbreviations

Objectives : By the end of this course, students should be able to :

- Know the common abbreviations used in messaging
- Write short messages including some abbreviation

It is now known that using common abbreviations in writing messages is useful in order to avoid making spelling mistakes and gain time. Therefore, common abbreviations may be used when sending a messaage through e-mail or mobile phones. They are as follow :

« AFAIK » : As far as I know (in formal : to the best of my knowledge)

e.g., **AFAIK**, you don't need to book a ticket in advance, you can buy one on the day.

« ASAP » : As soon as possible

e.g., Could you finish that report for me today, please ? I need it ASAP.

« B4 » : Before

e.g., Ilived in Canada B4 I moved to England.

« BFN » : Bye for now

e.g., BFN, see you tomorrow.

« BRB » : Be right back.

e.g., Sorry, but I need to answer the phone. I'll BRB.

« BTW » : By the way

e.g., BTW, I am going on holiday next week.

« CU » : See you !

e.g., I'm off to work, now. CU !

« FYI » : For your information

e.g., FYI, spamming facebook groups with requests to like your page is ban manner.

Please stop doing it !

« GTG » : Got to go

e.g., GTG now, see you later.

« IMO » : In my opinion

e.g., IMO, English is a useful language to learn.

« L8R » : Later

e.g., I ‘ve to leave now, meet you L8R.

« LOL » : Laugh Out Loud i.e that was really funny

e.g., LOL ! Is this you ?

« M8 » : Mate

e.g., Hi ! How are you M8s ?

« MSG » : Message

e.g., Did you get the MSG Isent you, yesterday ?

« OMG » : Oh my God !

e.g., OMG ! You are not going to believe what has just happened !

« PLZ » : Please

e.g., Could you lend me your PC, PLZ ?

« PPL » : People

e.g., There were so many PPL, there !

« TTYL » : Talk to you later

e.g., I have to go now, TTYL.

« U » : You

« UR » : You are.

Practice

Task : Try to write a message and use at least three abbrevations. Work in peer.

Course 02 : Collocations

Objectives : By the end of this course students should be able to :

- know what a collocation means

- When and how to use collocations in meaningful context

1. Definition : A collocation is a pair or a group of words that are often used together. You need to learn them in order to sound natural in English.

For example, in computing we say **« attach a file »** not **« enclose a file ».**

Types of collocations :

1. **Verb + noun** e.g., connect to the internet

   Transmit data

   Install the software

   Access the web

   Send/receive e-mails

   Burn CDs

2. **Verb + particle** e.g., Plug into the PC

   Log onto an account

   Hacking into PCs

3. **Adjective + noun** e.g., High speed networks

   Outgoing mail

   Incoming mail

   Instant messaging

   Electronic commerce (e-commerce)

   Wireless hotspots

   Virtual environment

   Interactive TV

4. **Adjective + adjective** e.g., Highly sensitive information

Freely available information

5. **Phrases** e.g., Real time

Plug and play

Drag and drop

Practice

Task one : Match in pairs

Give	money
Keep	a PIN
Access	databases
Enter	presentations
Trasfer	records

Task two : Match in pairs

High definition	internet radio
Read and write	disc
Play	video and music
Turn into	television
Broad band	data
Optical	your favourite site
Browse	compatible
Fully backward	access

Course 03 : A Typical PC

Objectives : By the end pf this course, students should be able to :

- Know what a computer is
- Identify the different components of a typical computer
- Identify the functions of each component

1. Definition :

a computer is an electronoc machine that accepts, processes, stores and outputs information. A typical computer consists of two main parts hardware and software.

2. Parts of a computer :

a. Harware is any electronic or mechanical part of the computer system that you can see or touch. There are three basic hardware sections.

● The **CPU** is the heart of the computer. It is a microprocessor chip which processes data and coordinates the activities of all the other units.

● The **Main Memory** holds the instructions and data which are being processed by the CPU. It has two main sections : **RAM** (Random Access Memory) and **ROM** (Read Only Memory)

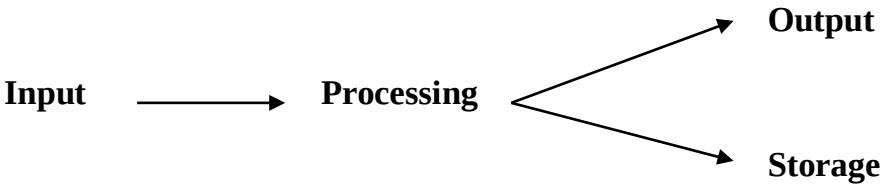
● **Peripherals** are the physical units attached to the computer. They include : input devices which let you enter data and commands e.g. the keyboard and the mouse. Output devices which let you extract the results e.g. the monitor and the printer and storage devices which are used to store data permanently e.g. hard disks and DVD drives.

b. Software is a set of instructions called a program which tells a computer what to do.

- At the back of the computer, there are ports into which you can plug external devices e.g. a scanner or a modem. They allow communication between the computer and the devices.

3. Functions of a computer :

There are four main functions : input, processing, output and storage. Look at the next diagram.



Practice

Task 01 : Fill in the diagram with terms from the course above

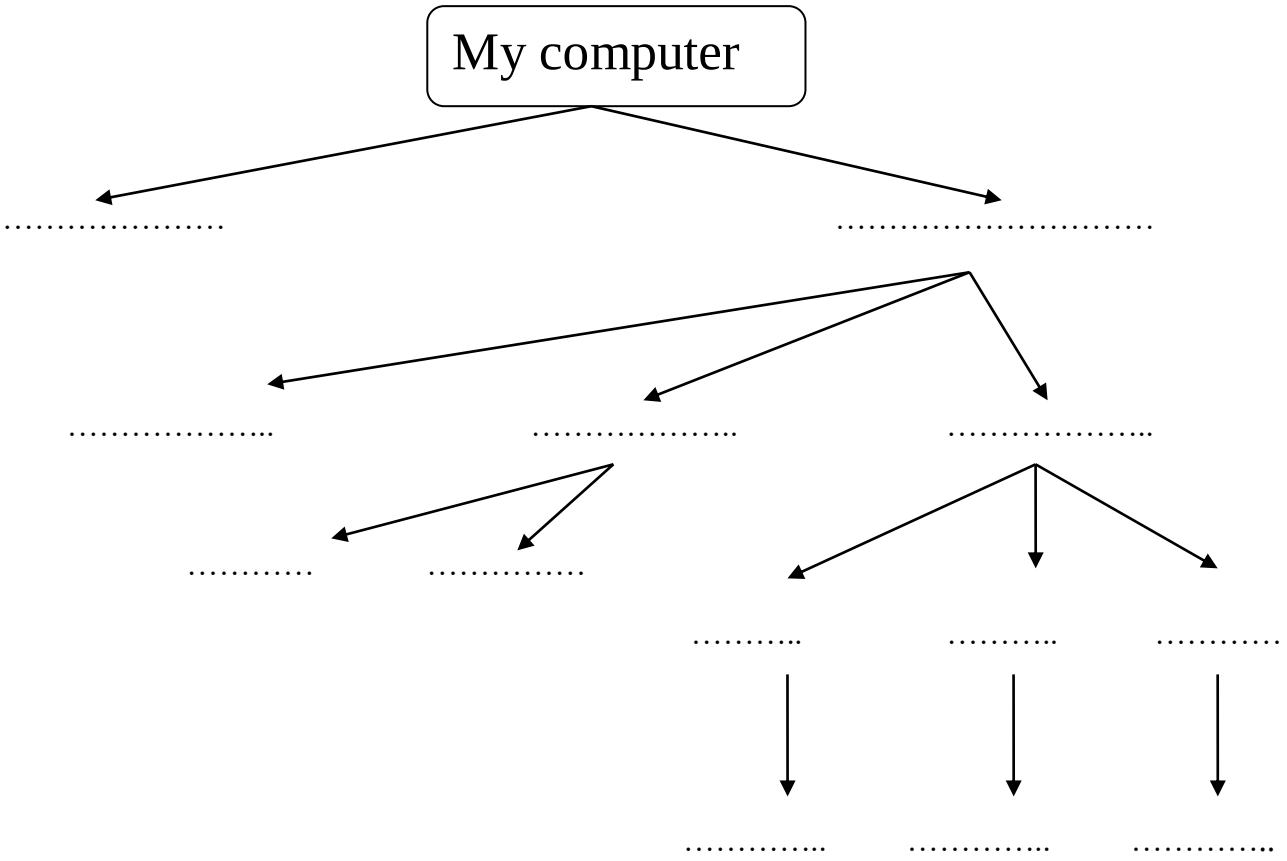


Diagram : A typical PC

Course 04 : Types of computers

From the Mainframe to the Wearable computer

Objectives : By the end of this course, students should be able to :

- Identify the different types of computers
- Know the characteristics of each type
- Know the advantages and disadvantages of each type
- Know the similarities and differences between types

The computer has noticed a continuous progress since its invention till now. There has also been different types that have been invented. Here are some types with the characteristics of each

1. Mainframe : -was the most powerful

- processed and stored large amount of data
- its central system was connected to hundreds of terminals
- was used for large-scale computing in banks, unvesities etc.

2. Desktop : - has its own CPU

- is used for personal interest at home
- can be placed on a desk e.g., IBM PC

3. Laptop : - has light weight/portable

- is as fast as desktop PC
- has a smaller screen (TFT : Thin Film Transistor)
- has a touchpad
- has USB (Universal Serial Bus) ports
- has battery packs

4. Tablet PC : - is like a book

- has LCD (Liquid Crystial Display) screen
- has a special digital pen
- can recognize handwriting and voice

5. PDA : - PDA (Personal Digital Assistant)

- has a keyboard and a stylus

- has a handwriting recognition system

- has a voice recognition software

- can be used as a note storing

- access internet via wireless technology

6. Wearable PC : - runs on batteries

- can be worn on the user's body

- is designed for mobile/hand-free operations

- is equipped with wireless modem

- has a small keyboard and screen

- has a voice activated system

- Practice

Task one : Which type of computer do these descriptions refer to ?

- A hand-held computer which can be used as a telephone, a web explorer and a personal organizer.

- A typical computer used in many businesses and is popular for home use.

- A huge computer used for intensive data processing and is generally linked to hundreds of terminals.

- A very small computer that fits into items of clothing.

- A portable computer that can be closed up like a brief case.

- A full-function PC, though it only weighs 1.2 kg you can go to a meeting and write your notes on it like a paper notpad, its screen can be changed from portrait to landscape.

Course 05 : Input Devices (Part one)

Scanners

Objectives : By the end of this course, students should be able to :

- Identify the scanner as an input devis
- Know the characteristics of the scanner
- Know the different types of scanners

Input devices such as scanners allow you to capture and copy images into a computer. A scanner is a peripharal that reads images and converts them into electronic codes which can be understood by a computer. There are different types of scanners :

- **Flatbed :** is buit like a photocopier and is for use on a desktop ; it can capture text, colour images and even small 3D objects.

- **A film scanner :** is usedto scan film negatives or 35 mm slides – pictures on photographic film, mounted in a frame.

A hand-held scanner : is small and T-shaped, ideal to capture small pictures and logos.

- **Apen scanner :** looks like a pen ; you can scan text, figures, barcodes and handwritten numbers
- **Barcode scanner :** reads barcodes on the products sold in shops and sends the price to the computer in the cash register. Barcodes consist of a series of blak and white stripes used to give products a unique identification number.

The resolution of a scanner is measured in **dpi (dots per inch).** For example a 1200 dpi scanner gives clearer, more detailed images than a 300 dpi scanner.

Most scanners come with **Optical Character Recognition (OCR)** software. OCR allows you to scan pages of text and save them into your word processor, they can then be edited.

Practice :

Task one : Say if the sentences are true or falde. Correct the wrong ones

- The details detected by a scanne are not determined by its resolution.

- A barcode scanner is a computer peripharal for reading barcode labels printed on products

- Scanners cannot handle optical character recognition

Course 06 : Input Devices (Part two)

Digital cameras and Webcams

Objectives : By the end of this course, students should be able to

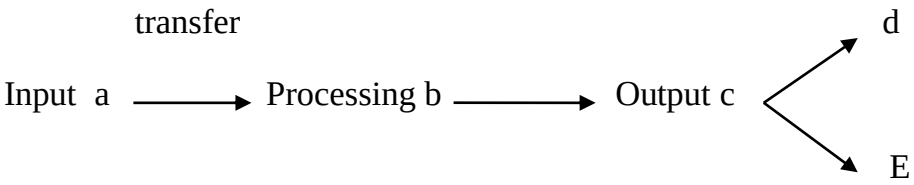
- Make the difference between digital cam and web cam
- Know the process of how a digital cam functions
- Identify the characteristics of digial cams and web cams

1. Digital cameras

A digitl camera doesn't use film. Photos are stored as digital data (bits made up of 1s and 0s), usually on a tiny storage device known as a flash memory card. You can connect the camera or memory card to a PC then alter the images using a program like Adobe Photoshop, or you can view the images on a TV set. Many printers have a special socket so that you can print images directly from a memory card or camera.

2. Digital video cameras and webcams

Look at the following diagram



a. A digital video (DV) camera records moving images and converts them into digital data that can be processed by a pc.
b. You can manipulate video images with video editing softwere. You can cut, paste, add effects, etc.
c. You can store or export the result.
d. Display it on a screen or create a DVD.
e. Email or put your movie on the web.

So,

Webcams (Web cameras) let you send and receive live video pictures through the internet. They are primarily used for video conferences – video calls – but they can be used to record photos and video onto your hard disk.

The resolution of webcams is expressed in megapixels (million pixels). Webcams connect to the PC via a USB (Universal Serial Bus) or Fire Wire port, they display video at 24 to 30 frames (pictures) per second. Some include a headset with a microphone and earpiece.

Practice :

Task one : Say whether the statements are true or false. Correct the wrong ones

►A digital camera uses a light sensitive film instead of a memory card for storing the images.

►A digital video (DV) camera is used to take still photographs.

►Video editing software allows you to manipulate video clips on the computer

Task two : Complete the advertisement from the webcam section

Having …….. with friends and family has never been easier or more enjoyable. You get the highest quality audio and video, no matter which chatting solution you use. With the webcam live ! Ultra, its CCD image sebsor with 640×480 (VGA) resolution produces rich, vibrant colours. Combined with its …… 2.0 Hi-speed connection, the result is top quality, full-function video at 30 …… per second for all your web conversations. The webcam live ! Ultra lets you do more. Let your voice be heard clearer than ever before with the included …… unlike the built-in microphones in most other ……. . Take still pictures at up 1.3 ……. Resolution and enjoy the many great features.

Course 07 : Output Devices (Part one)

Printers

Objectives : By the end of this course, students should be able to :

- Identify the printer as an output device
- Identify the characteristics of the printer
- know the diffrent types of printers, the advatages and disadvantages of each type.

A/ Printers

A printer is a device that prints your texts or graphics on paper.

The output on paper is called printout or hard copy.

The output quality or resolution is measured in dpi or (Dots Per Inch)

A program in your computer called the printer driver converts data into a form that your printer can understand.

The speed of your printer is measured in ppm (Pages per minute)

A print spooler stores files to be printed when the printer is ready. It lets you change the order of documents in the queue and cancel specific print jobs.

In a network, user scan share a printer connected to a print server, a computer that stores the files waiting to be printed.

Types of printers :

1- **Adot-matrix printer** : it uses a group, or matrix, of pins to create precise dots. A print head containing tiny pins strikes an inked ribbon to make letters and graphics. This impact printing technology allows shops, for example, to print multi part forms such as receipts and invoices, so it is useful when self-copying pape ris needed. It has two important disadvantages : noise and a low resolution (from 72 to 180dpi)

2- **An ink-jet (bubble-jet)** : also called bubble-jet printer, it generates an image by spraying tiny precise drops of ink onto the paper. The resolution ranges between 300 to 1.200 dpi suitable for small quantities or home use.

A standard ink-jet has three colour cartridge, plus a black cartridge. Professional ink-jets have five colour cartridges, plus black ; some can print in wide format, ranging from 60cm up to 5 metres.

Some ink-jet based printers can perform more than one task. They are called multi function printers because they can work as a scanner, a fax and a photocopier as well as a printer. Some units accept memory cards and print photos directly from a camera.

3- **A laser printer** : it uses a laser beam to fix the ink to the paper. A laser works like a photocopier ; a powder called toner is attracted to paper by an eleectrostatic charge and then fused on by a hot roller.

Laser printers are fast and produce a high resolution of 1.200 to 2.400 dpi, so they are ideal for business and for proofing professional graphics work

Laser printer uses a page description language PDL which describes how to print the text and draw the images on the page. The best known languages are Adobe Postscript and HP Printer Control Language

4- **A professional imagesetter** : it is a type setting printer that generates very high resolution output (over 3.540 dpi) on paper or microfilm. It's used for high quality publications.

5- **A plotter** : it is a special type of printer which uses ink and fine pens held in a carriage to draw detailed designs on paper. It's used in computer-aided design, 3-D technical illustrations, etc.

Pactice :

Task one : Fill in the gaps with the right words

- The difference in ……. are noticeable, the more dots per inch the clearer the image.

- A print resolution of between 600 …….. and 2400 …… ensured that even text as small as 2pt was legible.

- Passengers with an electronic ticket will need a …… of ticket confirmation or a boarding pass to be admitted to secured gate areas.

- The key advance of recent years is printing speed : the latest generation of ink-jets printers black and white text are 15 …….. …… …… (……)

- With appropriate software, you can view the images on a computer, manipulate them or send them to a ……. And produce excellent quality colour copies

- A ……. …….. is a dedicated computer that connects a printer to a network it enables users to share printing resources

- A ……. …… is a utility that organizes and arranges any documents waiting to be printed

- In computers ……. ……. is a program installed to control a particular type of printers

Task two : what type of printer is decribed ?

- A home use who wants to print text document and family photographs

- Business people who need to print in large quatities at high quality in an office

- Engineers who want to make detailed line drawings

- Professional typesetters in desktop publishing e.g. to publish catalogues and magazines

- A company that wants to print carbon copies of bills and receipts

Course 08 : Output Devices

Display Screens

Objectives : By the end of this course, students should be able to

- Distinguish between CRTs & LCDs screens
- Know the characteristics of each
- Enrich their vocabulary with new abbreviations

CRTs and LCDs

The screen of a computer is often known as the monitor, or VDU (Visual Display Unit). Inside the computer there is a video card which processes images and sends signals to the monitor. When choosing a monitor, you have to take into account some basics.

a. **Type of display :** the choice is between a CRT (Cathode Ray Tube) or an LCD screen (Liquid Crystal Display). The CRT of a monitor is similar to a traditional TV set. It has three electron guns (one for each primary colour : red, green and blue) that strike the inside of the screen, which is coated with substances called phosphors, which glow and create colours. CRTs are cheap, but they are heavy, can flicker and emit radiation.

An LCD is made from flat plates with a liquid crystal solution btween them. The crystals block the light in different quantities to create the image. Active-matrix LCDs use TFT (Thin Film Transistor) technology, in which each pixel has its own transistor switch. They offer better quality and take up less space, sot they are replacing CRTs.

b. **Screen size :** the viewing area is measured diagonally ; in other words, a 17 ” screen measures 17 inches from the top left corner to the bottom right.

c. **Resolution :** the clarity of the image depends on the number of the pixels (Picture elements) contained on a display, horizontally and vertically. A typical resolution is 1.024x768. The sharpeness of images is affected by dot pitch, the distance between the pixels on the screen, so a dot pitch of 0.28 mm or less will produce a sharp image.

d. **Brightness :** the luminance of images is measured in cd/m^2 (Candela per square metre).

e. **Colour depth :** the number of colours a monitor can display, for examplea VGA monitor produces 256 colours enough for home use ; a super VGA can produce up to 16.7 million colours, soi s ideal for photographic work and video games.

f. **Refresh rate :** the number of times that the image is drawn each second. If a monitor has a refresh rate of 75 hz, it means that the screen is scanned 75 times per second. If this rate is slow, you will notice a flicker, which can cause eye fatigue.

Let's practise

Task one : Say whether the statements are true or false. Correct the wrong ones

►The images shown on a monitor are not generated by the video card…….

……

►All visible colours can be made from mixing the three primary coloursof red, yellow and blue. ……

……

►Typical CRT-based displays occupy less space than LCD displays. ……

……

►The size of the screen is measured horizontally. ……..

……

Task two : Match each term with the correct definition

Phosphors	the frequency at which a monitor renews its image
LCD screen	a flat-panel display which works by emitting light through a liquid
Pixel	the space between a displays's pixels
Dot pitch	the smallest element in a displayed image
Refresh rate	materials that emit light and produce colours when they are Activated by an electron beam.

Written Test

Text

Computers make the world smaller and smarter

The ability of tiny computing devices to control complex operations has transformed the way many tasks are performed, ranging from scientific research to producing consumer products. Tiny 'computers on a chip' are used in medical equipment, home appliances, cars and toys. Workers use handheld computing devices to collect data at a customer site, to generate forms, to control inventory, and to serve as desktop organisers.

Not only is computing equipment detting smaller, it is getting more sophisticated. Computers are part of many machines and devices that once required continual human supervision and control. Today, computers in security systems result in safer environments, computers in cars improve energy efficiency, and computers in phones provide features such as call forwarding, call monitoring and call answering.

The smart machines are designed to take over some of the basic tasks previously performed by people ; by so doing, they make life a little easier and a little more pleasant.

Eric H. Glendinning & John McEwan

« Oxford English for Information Technology »

STUDY OF THE TEXT
REDING COMPREHENSION

Task one : Say whether the statements are true or false

1. Tiny computers are used in surgery cases.
2. Continuous supervising and controlling are required for good use of computing.
3. Tiny computers are considered as smart devices.

Task two :

a. Find in the text words that are closest in meaning to

gather = various =

b. Find in the text words that are opposite in meaning to

huge = much =

Task three : Read the text then answer the following questions

1. Name some types of devices that use computers on a chip ?
2. What uses of handheld computers are mentioned in the text ?
3. What are the benefits of using computers with the following items ?

a. Security systems
b. Cars c. Phones

Course 09 : Processing (Part one)

Objectives : By the end of this course, students should be able to

- Know what the processor is and what it comprises
- Enrich their vocabulary with new terms

A/ The processor

The processor, also called the CPU or Central Processing Unit, is the brain of your computer. In PCs, it is built into a single chip – a small piece of silicon with a complex electrical circuits, called an integrated circuit that executes instructions and coordinates the activities of all the other units.

There are three typical parts :

a. The Control Unit, which examines instructions from memory and executes them.

b. The Arithmetic and Logic Unit (ALU), which performs arithmetic and logical operations.

c. The Registers, are high speed units of memory used to store and control data.

The speed of a processor is measured in gigahurtz (GHz). Thus, a CPU running at 4 GHz can make about fout thousand million calculations a second. An internal clock sends out signals at fixed intervals to measure and synchronize the flow of data.

The main circuit board is known as the motherboard. This contains the CPU, the memory chips, expansion slots and controllers of peripherals, connected by internal buses, or paths, that carry electronic signals. For example, the front side bus carries all data that passes from the CPU to other devices.

Expansion slots allow you to install expansion cards which provide extra functions, e.g. a video card or a modem. Laptops have PC cards, the size of a credit card, which add features like sound, memory and network capabilities.

Practice :

Task one : Match in pairs

1. The CPU processes data and

2. The control unit is the part of the CPU that

3. The arithmetic and logic unit is able to make

4. The registers are high- speed storage

5. Data contained in RAM is lost when

6. ROM memory can only be read

a. Areas within the CPU

b. You can't make changes to it

c. Controls the way the instructions are executed

d. The computer is turned off

e. Coordinates the other parts of the computer

f. Calculations : add, sbtract, mutiply and divide.

Course 10 : Processing (Part two)

Objectives : By the end of this course, students should be able to

- Distinguish between RAM and ROM
- Identify the different units of memory
- Know the measure of each unit

B/ RAM and ROM

When you run a program, the CPU looks for it on the hard disk and transfers a copy into the RAM. RAM (Random Access Memory) is temporary or volatile, that is, it holds data while your PC is working on it, but loses this data when the power is switched off.

However, ROM (Read Only Memory) is permanent and contains instructions needed by the CPU ; the BIOS (Basic Input Output System) uses ROM to control communication with peripherals, e.g. disk drives.

The amount of RAM determines the number of programs you can run simultaneously and how fast they operate. It can be expanded by adding extra RAM chips.

C/ Units of Memory

The electronic circuits in computers detect the difference between two states : ON (the current passes through) or OFF (the current doesn't) ; they represent these states as 1 or 0. Each 1 or 0 is called a binary digit or bit.

Bits are grouped into eight-digit codes that typically represent characters (letters, numbers and symbols). Eight bits together are called a byte. For example, 01000001 is used for the character A. Computers use a standard code called ASCII for the binary representation of characters.

In order to avoid complex calculations of bytes, we use bigger units :

A kilobyte (KB) = 1.024 bytes

A megabyte (MB) = 1.024 kilobyte

A gigabyte (GB) = 1.024 megabyte

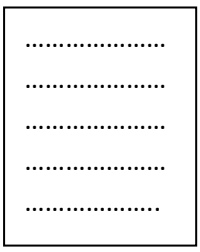
A terabyte (TB) = 1.024 gigabyte

We use these units to describe the RAM mamory, the operating capacity of disks and the size of a program or document.

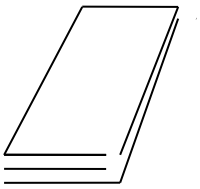
Practice

Task one : Fill in the blanks with the right unit of memory

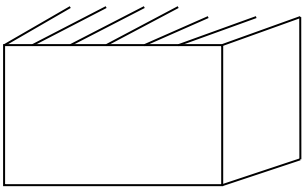
English ⟶ one …… represents one character



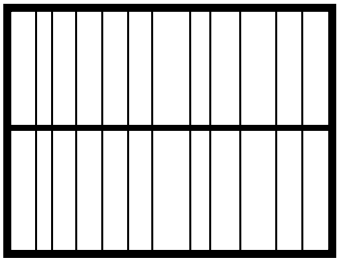
⟶ One …… represents 1.024 character (a page of text)



⟶ one …… represents one million character (small book)



⟶ One …… represents 1000000000 character (1000 book)



⟶ One ……. represents 1000000000000 character about (one million book)

Course 11 : Health and Safety (Part one)

Objectives : By the end of this course, students should be able to

- Identify the problems that result from computer use
- Learn about abdiction
- Know how to use PCs safely

Computer Ergonomics

There are a number of health and safety problems that may result from continuous use of computers :

►Typing constantly at high speed may provoke repititive strain injury (RSI), which causes pain in the neck, arms, wrists, hands and fingers.

►Bad work postures and sitting in unconfortable chair may cause backache and stress

►Looking at the screen for long periods of time and light reflecting off the screen can cause headaches and eye strain, pain and fatigue of the eyes.

►Carthode Ray Tube monitors can emit electromagnetic radiation which can be dangerous to health.

The study of people how to interact safely and efficiently with machines and their work conditions is called ergonomics. In computing, ergonomics is about designing computer facilites sot hey are safe and confortable. Here are some tips

1. Get an adjustable chair so you can change its height and angle.
2. Make sure your feet rest firmly on the ground or on a foot rest.
3. Ensure you have enough leg room under the desk.
4. Put the monitor at eye level or just below.
5. Sit at arms' lenght from the monitor (40 – 80 cm). Don't sit near the sides or back of CRT monitors, or use LCD screens which are free from radiation.
6. Use a document holder in line with the screen to reduce awkward neck and eye movements between the document and the screen.

7. Position of the keyboard at the same height of your elbows with your arms parallel to the work surface. Try to keep yourwrists straight and flat when typing.

8. Take regular breaks from the computer and look away from the screen at regular intervals.

Course 12 : Health and Safety (Part two)

Objectives : By the end of this course, students should be able to

- Identify the different health problems that may occur from PCs use
- Improve their learning tips in real context (use of picture)

Electronic Rubbish

Irresponsible disposal of electronic waste, from old computers and mobile phones to hi-fi and video systems, can cause severe environmental and public health problems. For example, children or workers who come into contact with the toxic components of electronic products may suffer from skin and breathing problems.

►We should recycle or treat ICT equipment (e.g. plastics from mobiles could be used to make pens and rulers).

►Manufacturers should pay to finance recycling programs.

1. The risks of using mobiles and in-car computers

Frequent use of mobile phones has been the cause of concern and there is ongoing research into whether radiation emitted causes health problems.

A serious risk is the use of mobiles and navigation systems in cars, this can distract the driver and cause accidents.

►Don't use your mobile while driving.

Another health problem is internet addiction, including obsessive game playing, gambling, etc.

►If you are an internet addict, you should ask for help from specialists.

Practice

Task one : Match the numbers in the picture to the correct tips in the checklist

a. Consistent chair support for the lower back. Seat height and angle adjustable.

b. Feet flat on the floor.

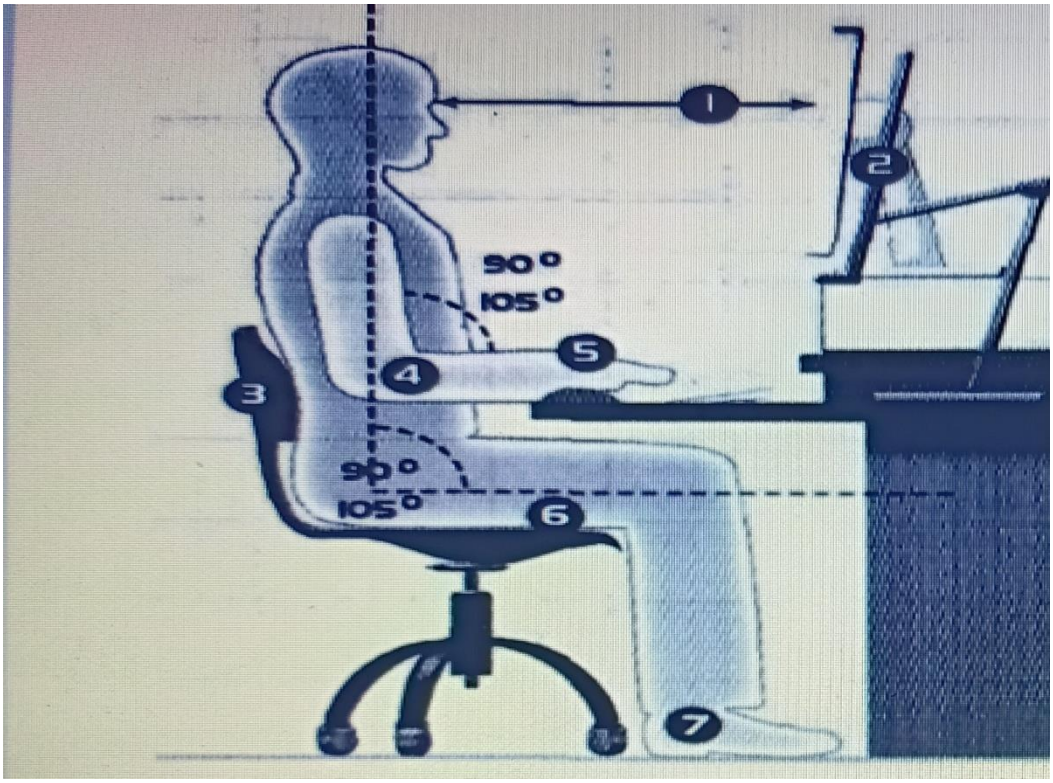
c. Document holder beside the screen, at the same height and distance as the screen.

d. Text on the screen in line with the eyes.

e. Thighs horizontal, with feet on the floor.

f. Keyboard height at a confortable open angle for the elbows and arms

g. Wrists and hands in a neutral position, in line with the forearms. Optional rest for wrists at the same height as the keyboard



Part two

Topics

What are the main objectives of part two ?

Indeed, the main target from preparing exposes is to

- practise the four skills of English (listening, reading, speaking and writing)

- Improve their communicative competencies (written & oral)

- Improve their linguistic knowledge

- Increase their interaction in order to be motivated

Hence, the four English skils may be practised through the following practices :

Listening Skill

- Students are supposed to listen to their mate when presenting his/her work and take notes

Reading Skill

- Students should read the example that their mate writes on the board.

Speaking Skill

- After the oral presentation is done, students should debate about the whole work through asking or answering questions, adding information …etc.

Writing Skill :

- Students should practise writing skill through doing the tasks given by their mate.

- Next, the courses are summarised by the teacher.

Topic one

Course : **Common Prefixes (Part one)**

Objectives : By the end of this course, students should be able to :

- Know common prefixes
- Use them in apprpriate contexts
- Enrich their vocabulary with new ICT terminology (prefiw + root)

Common prefixes : We can form new words by using prefixes and suffixes

e.g., micro – process – or

prefix – root - suffix

Prefixes come before the root word and usually change its meaning. Here are some common ones in ICT :

- **Negative prefixes** (meaning not)

Non- **Non-volatile** memory retains its content when the power is turned off.

Un- An **unformatted** disk has not been intialised ; it doesn't allow data to be stored.

- **Prefixes of location**

Trans- (=across) Data **transmission** can be wired or wireless

Inter- (=between) The internet consits of millions of computers **interconnected** in a global network.

Intra- (=within) An **intranet** is a private network, restricted to a company's internal use.

Extra- (=outside, in addition to) An **extranet** links a company with its customers and suppliers

Tele- (=over a distance) **Teleconferencing** enables users in different places to talk to and see each other.

Here a figure that demonstrates the use of the previous prefixes as an illustration

Pay attention that the numbers in the figure refer to

1 ⟶ **Intranet**

2 ⟶ **Extranet**

3 ⟶ **Internet**

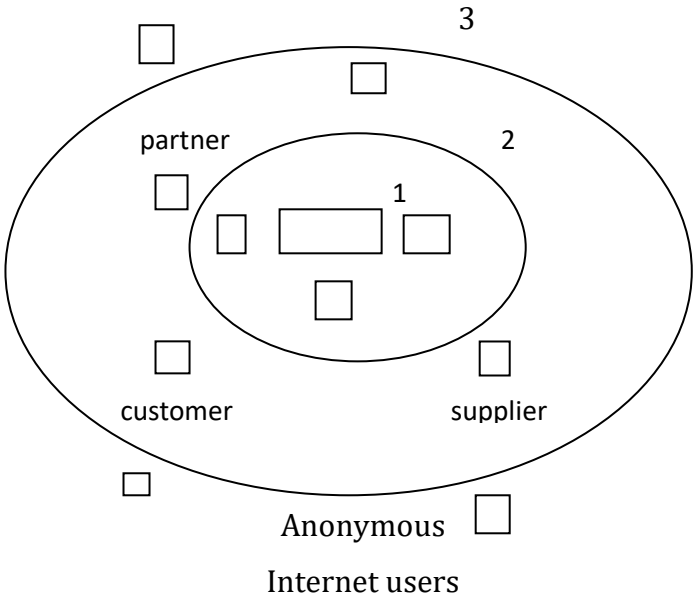


Figure : Different nets used in a company

Topic two

Course : Common Prefixes (Par two)

Objectives : the same objectives as the previous course

A/Verb Prefixes :

1. Prefixes used to form verbs which means to cause to be something :

En- encrypt : to change data into a secret code so that only someone with a key can read it.

Up- update : to modify data in a file and thus ensure the file reflects th latest situation

Upgrade : to add or replace hardware or software in order to expand the computer's power.

Upload : to send files to a central, often remote computer ; compare with download

2. Prefixes that mean « the opposite of an action or to reverse an action :

De- decrypt : to convert secretly coded (encrypt) data back into its original from

Decompress : to restore compressed data back into its original size

Debug : to correct errors in a program or system

Defragment : to reorganize data stored on disk by putting files order

Un- uninstall : to remove hardware or software from a computer system

B/The prefixes e- and cyber-

The **e-** prefix means electronic ; **cyber** describes things relating to computer networks

e- the term **e-learning** refer to the use of ICT to provide education and training

An **e-zine** is a magazine or newsletter published online

E-commerce is the bying and selling of products or services over the internet

Cyber- the electronic space in which online communication takes place is called **cyberspace.**

Cyberslacking means using a company's internet access for activities which are not work-related e.g., e-mailing friends, playing games etc. it is also called **cyberloafing**

Topic three

Course : Common Suffixes

Objectives : By the end of thiss course, students should be able to

- Know the common suffixes used in ICT
- Use common suffixes in meaningful contexts

A / Suffixes change the class of the root word. For example, by adding the suffix –er, the verb publish becomes the noun publisher. Suffixes can tell you if a word is a noun, adjective,verb or adverb.

- Suffixes for jobs :

-er	manufacturer	The two manufacturers of processor chips are the Intel and AMD.
	Webmaster	
-eer	engineer	Greg is a software engineer ; he writes computer programs
	auctioneer	
-or	animator	He worked as a computer animator on Toy Story
	operator	
-ant	IT consultant	She's a computer consultant and specializes in e-commerce, data protection and IT strategies.
	IT assistant	
-ian	technician	A computer technician installs, troubleshoots and upgrades Hardware.
	electrician	
-ist	typist	Anyone who works as a typist may develop a problem with their

Hands.

Scientist

- Other common suffixes in ICT :

Nouns	-ion, -ment, -ics, -ity	compression, management, robotics electricity
Adjectives	-able, -ible	programmable, convertible
	-ful, -less	colourful, colourless
Verbs	-ize, -ise	synthesize

Topic four

Course : Common Suffixes (Part two)

Objectives : The same objectives as the previous course

B/ Word Families

It is useful to know how to build up word families by adding suffixes. Look at these examples :

Nouns	Verbs	Adjectives
Magnet, magnetism	magnetize	magnetic, magnetized
Recorder, recording	record	recordable, recorded
Digitizer, digitizing	digitize	digital, digitized

Adding a suffix may change the pronunciation. Look at the stress changes (in yellow) in these words :

photograph photographer photographic photographically

C/ We love « WARES »

The suffix **–ware** refers to products of the same type. In computing, software refers to programs executed by a computer, as opposed to the physical devices on which they run in the hardware. It is commonly used to form jargon terms for classes of software.

Freeware : available free of charge, but protected by copyright ; it differs from 'free software', which can be changed and distributed subject to licence.

Shareware : distributed similarly to free ware, except that it requires payment after a trial period.

Malware : designed to infiltrate or damage a computer (e.g., viruses, trojan horses, spyware)

Spyware : designed to monitor the actions of a computer and send data via the Net

Adware : devised to display advetisements, some include spyware

Groupware : enables a group of people connected to a network to work on the same project.

Topic five

Course five : Qualifying and Comparing

Objectives : By the end of this course, students should be able to

- Know the expressions of qualifying and comparing
- Use these expressions in meaningful contexts

1/ Choosing a computer

How to make the right decision

What to look for in a computer ? How much do Ineed to spend ? Where should I start ?

The personal computer hopes to help you make the right decision.

The first question you have to ask yourself is what you'll use the computer for. Then you can decide what system will fit your needs by considering the following factors :

► The quality you need and the price you are willing to pay ; you can buy a low-end, mid-range or high-end computer.

► Three basic features make a big difference : the CPU speed, the amount of RAM and the size of the hard drive. To run highly demanding applications, you'll need a fast processor, plentiful RAM and a spacious disk.

► If you already have peripheral and software , you'll have to ensure they are compatible and can be used with the new computer.

► If you want to use the system for some time, it should be expandable i.e. it should allow you to add on new peripherals.

► Most standard computers offer integrated, built-in, sound cards. If you are keen on music you should also buy seperate, external speakers.

► Finally, make sure that the system you buyis reliable i.e. it's not likely to go wrong.

Check that you will receive a warranty and good technical support.

Topic six

Course six : Qualifying and Comparing

Objectives : The same objectives as the previous course

2/ Comparing qualities

Comparing and finding diferrences and similarities are common functions in ICT. When you want to buy a new device, or you read articles about the latest computer or mobile phone, or need to make a decision about the most suitable ICT system for you, you may have to use and understand expressions like the one in these examples :

a. Comparison

A flat-panel monitor is slimmer than a CRT.

A PDA is more manageable than a laptop.

Laser printers offer higher quality than ink-jet but

Ink-jet printers cost less money

You can type more easily than with a seperate keyboard

Free programs are as good as proprietary ones

A broadband line is the best option to down load multiùedia

The more memory you have, the faster you'll be able to load your files

b. Contrast

While a dial-up connection is usually cheap, it is very slow.

A scanner can be useful but it isn't an essential peripheral.

Unlike CRT monitors, TFT ones are light.

c. Similarity

Both brand names and clone comuters have similar features.

Online shops are as well as local retailers offer good value hardware.

Topic seven

Course seven : Describing Technical Process

Objectives : By the end of this course, students should be able to :

- Describe a process in English
- Use the expressions of description appropriately

When describing a technical process, we often use the present simple passive e.g., is digitized / are converted / is set up ...etc. to explain how something is made or used. The agent is not important as the process.

Examples may be as follow

Active	Passive
Someone sets up a session	A session is set up
The ATA receives packets	Packets are received by the ATA

ATA (Analogue Telephone Adapter)

-The Use of the Passive

The passive is often used to describe areas of computing. Look at the following examples :

Input, process, output

The data is fed into the PC system

Instructions are processed by the CPU

The results are displayed on the monitor

PC components and configuration

The icons and task-bar can be customised, configured to cater for your needs. Your PC system may need to be upgraded, improved by adding devices/ updating software

Storage

Today, a lot of information is held, where

Internet

Messages are posted, sent to a newsgroup

Kept on optical discs. The data on the be

Hard disk should be defragmented so

It can be accessed more quickly

they are treated, grouped by subject. Files can

uploeded, transmitted to another computer by

using FTP (File Transfer Protocol)

- Sequencing a process

The use of time and sequence connectors means we can show the different stages of a process.

Typical connectors :

First, … then, /Next, …. Finally	First, the computer is switched on. Then, the OS is Booted. Finally, the application is run
As ……	As the laser printer drum rolls, the toner gets stuck To it and reproduces the original image
After/once ……	After you've had a program for a while, it may have To be updated.
	Once a CD-R has been written, you cn't alter the data
Before …… deleted,	Before you can recover the files that have been
	You must unformat the hard disk.

Topic eight

Course : Compounds

Objectives : By the end of this course, students should be able to

- Identify the types of compounds
- Use compounds in meaningful contexts

1/ Compound nouns

Compound nouns consist of two or more words used together as a single word e.g. hard drive. In a compound noun, there is a headword and one or more modifiers

ink – jet ***printer***
modifier head

Modifier scan refer to different things :

A – Material e.g. silicon chip = a chip made of silicon

B- Use or function e.g. search engine = a program used to find information on the web.

C- Activity or profession e.g. software engineer = a person who designs software.

D- Place e.g. web portal = a site on the web that acts as a gateway to other sites

Compound nouns are written indifferent ways :

A- As two seperate words e.g. control panel = a utility that lets you configure and adjust a system

B- As two words joined with a hyphen e.g. self-test = an automatic examination of a device.

C- As one word e.g. clipboard = a holding place for text or graphics you've just cut or copied.

Unfortunately, there are no rules, for example you may see clip art, clip-art and clipart.

Some compounds change over time, for example two words web site become hyphenated after a time, and then eventually end up as one word website.

The two parts may be :

A- noun +noun address bus = a set of wires that identifies locations, addresses in

the main memory.

Bandwidth = the rate at which data flows through a cable or network

Mailmerge = a tool that combines a standard letter with a mailing list To create personalised letters.

B- Adjective + noun Broadband = high speed connection e.g. cable or ADSL internet Access.

Shortcut = a small file , IKB in size that links to real file stored Elsewhere.

Smart card = a plastic card that contains a small chip.

C- Verb/verbal noun + noun scrollbar = part of the window that lats you move through a document.

Recording head = a mechanism that transfers data to a disk.

D- Verb +particle add-on = a hardware or software module that can be added to A computer.

Set-up/setup = the way in which a program or device can be Configured.

Compound nouns normally have the main stress on the first part and the secondary stress on the second part

Screen saver /'skri :n seivə /

Topic nine

Course : Collocations

Objectives : By the end of this course, students should be able to

- Know different combinations of collocations
- Use them appropriately

1/ What is a collocation ?

A collocation is a pair or group os words that are often used together. You need to learn them in order to sound natural in English. For example, in computing we say

Attach a file not enclose a file

New collocations are particularly common in ICT. Notice the combinations that are worth learning from these reviews.

a/With the Nokia 770 Internet Tablet you can browse your favourite sites and catch up on your e-mail from right where you are. Whether you are relaxing on the sofa or enjoying the moment at your favourite cafe, if you have broadband access over wifi the Nokia 770 Internet Tablet gives you instant wireless access to the Web. You can also stream files, tune into the internet radio and News reader, or play your favourite videos and music.

b/A Blu-Ray Disc is a new optical disc that provides five times more data storage than a DVD, with a capacity of 25 GB (single- layer), 50 GB (dual-layer) and 100 GB (four layer). Unlike current DVDs, which use a red laser to read and write data, Blu-ray uses a blue laser (which is where the format gets its name). Blu-ray discs can rcord and play back high definition television and digital audio, as well as computer data.

Blu-ray Disc players are fully backward compatible with CD/DVD formats. They also lat you go online and download subtitles.

2/ Types of collocations :

Verb = noun The easiest way to connect to the internet is by using a DSL modem.

A DSL modem can transmit data at high speed.

Your ISP will give you a CD with instructions on how to install the Software on your PC.

Once you are online, you can access the web or send and receive emails

You may like to burn CDs.

Verbs + particles Can you show me where the microphone plugs into the computer ?

If you want to log onto your account you will need your password.

Computer criminals are getting better at hacking into people's PCs.

Adjective + noun

High-speed networks and multimedia phones allow customers to view live TV

To send outgoing mail and receive incoming mail, you need to configure your Email setting.

Most teenagers use instant messaging to chat with friends.

Wireless hotspots provide WIFI Internet access in airports, hotels, etc.

Adverb + adjective

Don't send highly sensitive information via email or fax unless it is encrypted.

This movie is freely available on the internet.

Phrases When you chat in a chat room, you are interacting in real time.

A USB device is a good example of plug and play ; you install and use.

To drag and drop, just click on the object and drag it to a different location.

Topic ten

Course : Defining and Classifying

Objectives : by the end of this course, students should be able to

- Know how to define and classify
- Use the expressions appropriately

1/ Describing function

We define an object by describing its function and properties. For example, we can define a 'router' like this :

A router is a device used to transmit data between two computers or networks

There are other ways of decribing its function :

♣ for + ing = for transmiting

♣ relative pronoun + verb = which /that transmits

♣ relative pronoun + is used to + infinitive = which/that is used to transmit

We can define people and places like this :

A blogger is a person who keeps a web log or publishes an online diary

An address bar is the area in your browser display where the web address is displayed

♣ We use which or that to refer to things.

♣ We use who or that to refer to people

♣ We use where (at which) to refer to places

B/ Classifying from general to specific

Classifying means putting things into groups or classes. We can classify types of music, parts of comuter, classes of software, etc.

Typical expressions :

a. Are classified into x categories

b. Can be divided into x types

e.g. Storage media are often classifies into three categories : magnetic, optical and falsh memory .

a. include

b. consists of

c. is made up of

d. is composed of

e. comprise

e.g. Magnetic stoage media include tape cartridges, floppies and hard disks

A hard disk consists of several disks and their read-write heads.

Optical storage media comprise CDs, DVDs and high definition videos discs, which include two competing formats ; HD-DVD and Blu-ray.

a. There are x classes of …..

b. There are x categories of ……..

c. There are x types of ……..

e.g. There are two basic types of flash memory : flash memory card and USB flash drives.

C/ Classifying from specific to general

We can also classify from the specific to the more general. We can say, for example, that

A word processor (specific) is a type of software (general)

Typical expressions :

a. Is a type of ……

b. …….. are parts/components of

c. ……. Constitute ……

d. ……make up …….

e.g. OCR is a type of software which recognizes charaters

The RAM and the ROM constitute the main memory

The System and Finder programs make up the Mac OS.

Topic eleven

Course : Email

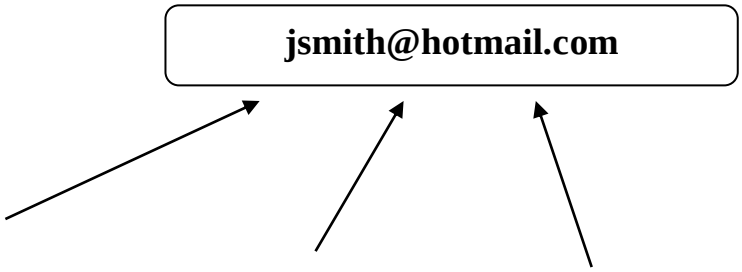
Objectives : By the end of this course, students should be able to

- Know the different parts oft an email
- Know types of emails
- Create a personal and a professional email

1/ What an email is

An email is an electronic message sent from one computer to another that can also include attachments : documents, pictures, sounds and even computer programs.

Although it's much faster and easier to use than the post, snail mail, the two have many things in common ; you send an email to a mail server (an electronic post office) where it is stored in a mail box which holds incoming mails until the recipient downloads it. Users are given an email address and a password by an Internet Service Protocol (ISP). Look at this example



Username « **at** » **The domain name** or network address

A person's name

Or nickname

the mail server where the account is located

The final part of it e.g., com = company

Org = non profit institution/

Co.uk = company in the UK, es = Espana

etc

2/ Anatony of an email

Emails have generally two main parts :

a. The header generally includes these :

TO (name and address of the recipient)

CC (carbon copy sent to another addressee)

BCC (blank/blind carbon copy)

SUBJECT (topic of the message)

b. The body (the message itself)

Some email programs also include a signature, with added information about the sender at the end of the message.

You can make your message look more expressive or attractive by using smileys (emoticons) ; little pictures either made with characters from the keyboard such as for happy /surprised /sad …etc.or downloaded images and animations.

3/ Spam

Spam or junk email is the name given to unwanted messages, mainly commercial advertising. Some companies, spammers, use it extensively because it's cheaper than other types of advertising ; you or your ISP pay for it.

4/ Mailing Lists and Newsgroups

A mailing list is a basic type of discussion group that uses email to communicate. The messages are distributed to all the subscribers i.e. everyone who belongs to the list.

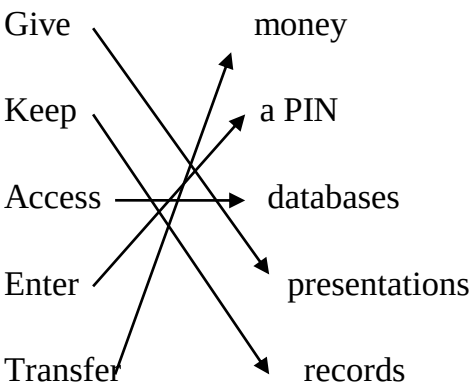
Newsgroups are similar. The main difference is that the message is not sent to someone's mail server but to a bulletin board where everybody can read and answer th message.

Answer Keys

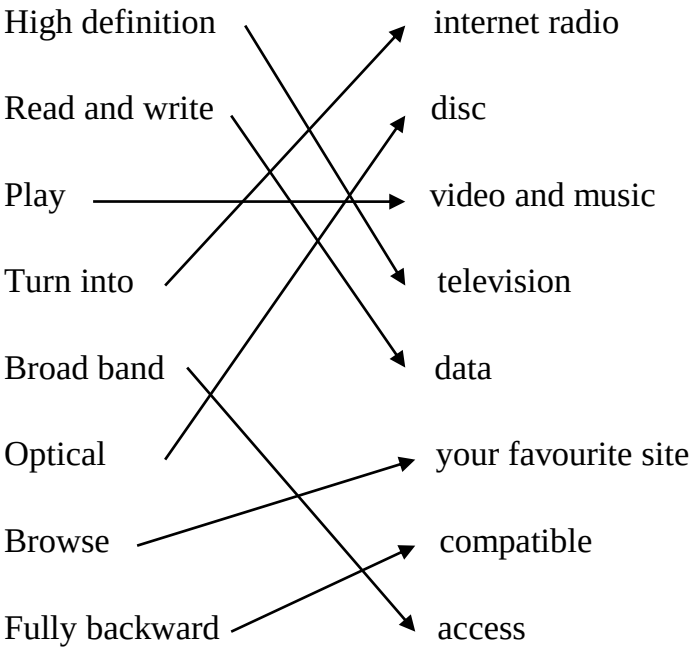
- **Course 01** : students are asked to write a paasage in which they are supposed to include at least three abbrevations from the course.

- Course 02

Task one : students are asked to match in pairs to get collocations



Task two : Match in pairs



Course 03 : students are asked to fill in the diagram about the different components of a PC

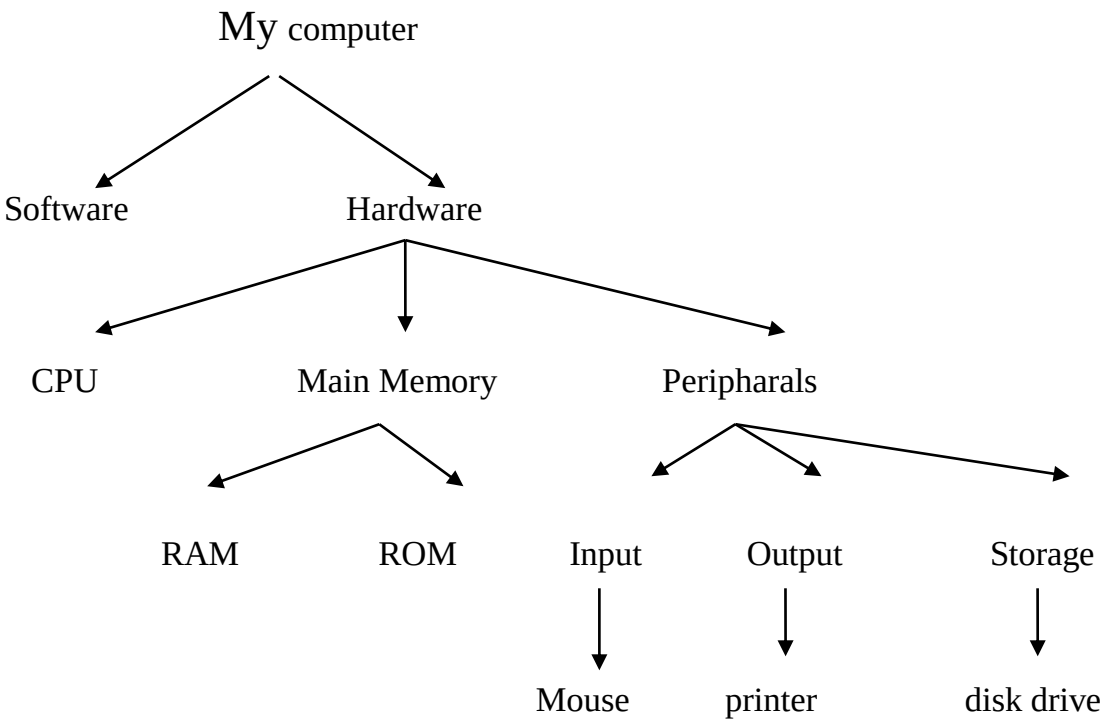


Diagram : A Typical PC

Course 04 : students should identify the type of computer for each description

1 ⟶ Personal Digital Assistant (PDA)

2 ⟶ Mainframe

3 ⟶ wearable computer

4 ⟶ PDA

5 ⟶ Tablet PC

Course 05 : Say whether the following statements are true or false

1. False

2. True

3. False

Course 06

Task one : students should identify whether the statements are true or false

1. False

2. True

3. True

Task two : students should fill in the gaps with the right word

Having ***chats*** with friends and family has never been easier or more enjoyable. You get the highest quality audio and video, no matter which chatting solution you use. With the webcam live ! Ultra, its CCD image sebsor with 640×480 (VGA) resolution produces rich, vibrant colours. Combined with its ***USB*** 2.0 Hi-speed connection, the result is top quality, full-function video at 30 ***Frames*** per second for all your web conversations. The webcam live ! Ultra lets you do more. Let your voice be heard clearer than ever before with the included ***headsets*** unlike the built-in microphones in most other ***webcamss*** Take still pictures at up 1.3 ***megapixels*** Resolution and enjoy the many great features.

Course 07

Task one : students are asked to complete with the right word

1. Resolution
2. dpi / dpi
3. printout
4. pages per minutes (ppm)
5. printer
6. printserver
7. printspooler
8. Printer driver

Task two : students should identify what type of printer is described

1. Ink-jet printer
2. Laser printer
3. Plotter
4. Imagesetter
5. Dot-matriw printer

Course 08

Task one : students should say whether the statements are true or false then correct the wrong ones

1. False. The images shown on a monitor are generated by the video card
2. False. All visible colours can be made from mixing the three primary coloursof red, green and blue
3. False. Typical CRT-based displays occupy more space than LCD displays
4. False. The size of the screen is measured diagonally

Task two : students are adked to match in pairs

Phosphors ⟶ . materials that emit light and produce colours when they are Activated by an electron beam

LCD screen ⟶ . a flat panel display which works by emtting light through A liquid

Pixels ⟶ . the smallest element in a displayed image

Dot pitch ⟶ . the space between a displayed pixels

Refresh rate ⟶ . the frequency at which a monitor renews its image

Course 09

Task one : students are asked to match in pairs

1. The CPU processes data and	a. Areas within the CPU
2. The control unit is the part of the CPU that	b. You can't make changes to it
3. The arithmetic and logic unit is able to make	c. Controls the way the instructions Are executed
4. The registers are high- speed storage	d. The computer is turned off
5. Data contained in RAM is lost when	e. Coordinates the other parts of The computer
6. ROM memory can only be read	f. Calculations : add, sbtract, mutiply And divide

1/c 2/e 3/f 4/a 5/d 6/b

Course 10

Task one : students should fill in the blanks with the right unit of memory

1. One byte
2. One kilobyte
3. One megabyte
4. Gigabyte
5. One terabyte

Course 11 & 12

Task one : students are supposed to match numbers in the picture with the correct tips in the checklist

1. Text on the screen in line with the eyes.

2. Document holder beside the screen, at the same height and distance as the screen.

3. Consistent chair support for the lower back. Seat height and angle adjustable.

4. Keyboard height at a confortable open angle for the elbows and arms

5. Wrists and hands in a neutral position, in line with the forearms. Optional rest for wrists at the same height as the keyboard

6. Thighs horizontal, with feet on the floor.

7. Feet flat on the floor.

Samples of Exams

Ministry of Higher Education and Scientific Research
Faculty of Technology
Department of Computer Science
2018/2019 First Semester English Exam

Licence 2

Task one : What do these acronyms refer to ? (0.50 pts each)

RAM …….. ROM ……..

CPU ……... PDA ……..

Task two : Match verbs (1 – 5) with nouns (a – e) to make collocations (1 pts each)

1- Give	a. money
2- Keep	b. a Pin
3- Access	c. databases
4- Enter	d. presentations
5- Transfer	e. records

Task three : Give a short definition to each (1 pts each)

Hardware : ……..

Printer : ……...

Software : ……

Task four : Fill in the gaps with one word (6 pts)

Scanners are …… devices that read images and convert them. The resolution of the scanner is measured in …… (….. ….. …..). Most scanners have (…. ….. ……) …… software that allows to scan pages of text and save them into the word processor.

Full-name : …….

Group : ……..

Good luck

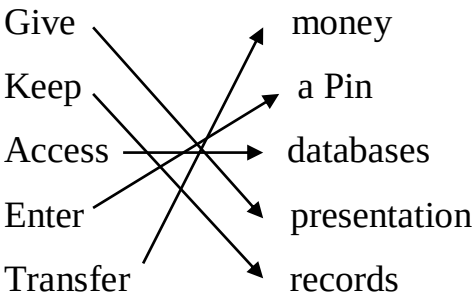
Correction

Task one :

RAM Random Access Memory **ROM** Read Only Memory

CPU Central Processing Unit **PDA** Personal Digital Assistant

Task two :



Task three :

Hardware : is the physical part of the computer that we can see and touch. (any other correct answer may be accepted)

Printer : is an output device. It prints texts and graphs on paper. (any other correct answer may be accepted)

Software : is a set of instructions called a program which tells a computer what to do. (any other correct answer may be accepted)

Task three :

Scanners are input devices that read images and convert them. The resolution of the scanner is measured in dpi (dote per inch). Most scanners have (Optical Character Recognition) OCR software that allows to scan pagesof text and save them into the word processor

Ministry of Higher Education and Scientific Research
Faculty of Technology
Department of Computer Science
2020/2021 First Semester Exam

Second year licence (1hour and a half)
<u>Task one</u> : What do these abbreviations refer to ? (0.25 pts each)

RAM …….. ROM ……..

PDA …….. TFT ……..

PPM …….. OCR ……..

<u>Task two</u> : Which input device would you use ? (04 pts)

- To play computer games. ……..

- To read price labels in a shop. ……..

- To select text and click on links on web pages. ……

- To enter drawings and sketches into a computer. ……

Task three : Which components in the printer is described here ?(4 pts)

- A container that holds the ink in an ink-jet printer. ……..

- Powdered ink used in laser printer. ……

- A language that tells a printer how to print a document. ……

- A peripheral that combines a printer, a fax machine, a photocopier and scanner in one

device. ……..

Task four : Read the interview with Adam Hawkins ; an IT manager then complete it (07.50 pts)

Interviewer : What are the features of a PDA ?

Adam : Well ! A typical PDA is a ……. device that runs on batteries and combines computing, phone and NET capabilities.

Interviewer : And how do you enter information ?

Adam : For input, you use a …… or a pen to write. Some models have a small keyboard. They may have a …… …… system that reacts to the user's voice.

Interviewer : Do they need special software ?

Adam : Yes, most of them run on windows mobile. Palmtops supported by Palm Inc use Palm OS. Pen based systems include …… …… …… So, you write on the screen and the computer recognizes your handwriting and inserts the appropriate letters.

Interviewer : What sort of things can you do with a PDA ?

Adam : You can store personal information, take notes and make calculations. Many PDA scan access the Net via …….. technology.

Interviewer : Thank you very much, sir !

Adam : You are welcome !

Full-name : ……..

Group : ……..

Correction

Task one :

RAM Random Access Memory **ROM** Read Only Memory

PDA Personal Digital Assistant **TFT** Thin Film Transistor

PPM Pages Per Minute **OCR** Optical Character Recognition

Task two :

- To play computer games **joystick**

- To read price labels in a shop **barcode scanner**

- To select text and click on links on web pages **mouse**

- To enter drawings and sketches into a computer **tablet PC**

Task three :

- A container that holds the ink in an ink-jet printer **cartridge**

- Powdered ink used in a laser printer **toner**

- A language that tells a printer how to print a document **PDL**

- A peripheral that combines a printer, a fax machine, a photocopier and a scanner in one device **multifunction printer**

Task four :

Interviewer : What are the features of a PDA ?

Adam : Well ! A typical PDA is a **portable** device that runs on batteries and combines computing, phone and NET capabilities.

Interviewer : And how do you enter information ?

Adam : For input, you use a **stylus** or a pen to write. Some models have a small keyboard. They may have a **voice recognition** system that reacts to the user's voice.

Interviewer : Do they need special software ?

Adam : Yes, most of them run on windows mobile. Palmtops supported by Palm Inc use Palm OS. Pen based systems include **handwriting recognition system** So, you write on the screen and the computer recognizes your handwriting and inserts the appropriate letters.

Interviewer : What sort of things can you do with a PDA ?

Adam : You can store personal information, take notes and make calculations. Many PDA scan access the Net via **wireless** technology.

Interviewer : Thank you very much, sir !

Adam : You are welcome !

People's Democratic Republic of Algeria
Ministry og Higher Education and Scientific Research
University of Saida – Dr. Moulay Tahar
Faculty of Technology
Computer Science Department

2018/2019 Second Semester Exam

Level : 2nd year

Task one : What do the following abbreviations refer to ? (6 pts)

TFT …….. ROM ……..
RAM ……... … PDA …….

Task two : Say whether the statements are true or false (03 pt)

- We should recycle electronic rubbish**. ……..**

- If you are an internet addict, you should ask for help of specialists …….

Task three : Fill with Desktop publishing/ Computer-aided Design/ Business Graphic / computer manipulation (06 pts)

Design/ Image manipulation program

a. *A person who wants to edit photos at home. ……..*
b. *An economist who wants to present statistics ……*
c. *A company which needs to design and publish a magazine. ……..*
d. *Engineers who need to design the interior and exterior of an aeroplane …….*

Task four : Match in pairs (05 pts)

1- *Phosphors* *a- the frequency at which a monitor renews its image*

2- *LCD screen* *b- a flat-panel display which works by emitting light through a liquid*

3- *Pixel* *c-the space between a displays's pixels*

4- *Dot pitch* *d-the smallest element in a displayed image*

5- Refresh rate *e- materials that emit light and produce colours when they are*

Activated by an electron beam.

Full name : ……..

Group : …… **Good Luck**

Correcttion

Task one :

TFT Thin Film Transistor **DPI** Dots Per Inch
CPU Central Processing Unit **PDA** Personal Digital Assistant

Task two : Say whether the statements are true or false

- We should recycle electronic rubbish **True**

- If you are an internet addict, you should ask for help of specialists **True**

Task three : Fill with **Desktop publishing/ Computer-aided Design/ Business Graphic / computer manipulation**

Design/ Image manipulation program

a. *A person who wants to edit photos at home* **Computer manipulation**
b. *An economist who wants to present statistics* **Business Graphic**
c. *A company which needs to design and publish a magazine* **Desktop publishing**
d. *Engineers who need to design the interior and exterior of an aeroplane*
Computer aided Design

Task four : Match in pairs

1- *Phosphors* *a- the frequency at which a monitor renews its image*

2- LCD screen *b- a flat-panel display which works by emitting light through a liquid*

3- Pixel *c-the space between a displays's pixels*

4- Dot pitch *d-the smallest element in a displayed image*

5- Refresh rate *e- materials that emit light and produce colours when they are*

Activated by an electron beam.

1 /e 2/b 3/d 4/c 5/a

Ministry of Higher Education and Scientific Research
Faculty of Technology
Department of Computer Science
2019/2020 **Second Semester Exam**

Second year licence **Timing : 1hour**

Task one : What do these abbreviations refer to ? (03 pts)

RAM …… ROM ……

USB …… PDL ……

Task two : Give a short definition to the following terms (02 pts)

Debug :……

Cyberloafing :……

Task three : Give examples with the following prefixes (03 pts)

Cyber → …….. ; ……... ; ……..

e- → …… ; …… ; ……

Task four : Identify the different tools (06 pts)

Figure : Window Paint Tool Box

Task five : Here is an ad. Fill in the gaps so that it make sense (06 pts)

Having ……. with friends has never been easier or more enjoyable. You get the highest quality audio and video, no matter which chatting solution you use. With the webcom live ! Ultra, its CCD image sebsor with 640-480 (VGA) resolution produces rich, vibrant colours. Combined with its ……. 2.0 Hi-speed connection, the result is top quality, full-function video at 30 …… per second for all your web conversations. The webcom live ! Ultra lets you do more. Let your voice be heard clearer than ever before with the included …….. unlike tha built-in microphones in most other ……. Take still pictures at up 1.3 …… Resolution and enjoy the many great features.

Full-name : ……..

Group : ……

Pride makes us artificial

Humility makes us real

Good luck

Correction

Task one :

RAM Random Access Memory **ROM** Read Only Memory

USB Universal Serial Bus **PDL** Page Description Language

Task two : Give a short definition to the following terms

Debug : to correct the errors in a program

Cyberloafing : to get profit from the company's service (stealing)

Task three : Give examples with the following prefixes

Cyber → Cyber crime, cyber cafe, Cyber culture

e- → e-cash, e-book, e-signature

Task four : Identify the different tools

Students should name each part of the paint box tools such as rubber, pencil, picker, triangle, magnifier … etc. Any correct ter mis accepted

Task five :

Having **video chats** with friends has never been easier or more enjoyable. You get the highest quality audio and video, no matter which chatting solution you use. With the webcom live ! Ultra, its CCD image sebsor with 640-480 (VGA) resolution produces rich, vibrant colours. Combined with its **USB** 2.0 Hi-speed connection, the result is top quality, full-function video at 30 **frames** per second for all your web conversations. The webcom live ! Ultra lets you do more. Let your voice be heard clearer than ever before with the included **headset** unlike tha built-in microphones in most other **webcams** Take still pictures at up 1.3 **megapixel** Resolution and enjoy the many great features.

People's Democratic Republic of Algeria
Ministry og Higher Education and Scientific Research
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2020/2021 **Second Semester Exam**
Level : 2nd year

Task one : What do the following abbreviations refer to ?

TFT …….. LCD ……..
RSI ……... … CAD …….

Task two : Give a short definition to the following terms

- **Bitmapped graphics** : ……

- **Vector graphics** : ……

Task three : Say whether the statements are true or false and correct the wrong ones

- A digital camera uses a light sensitive film instead of a memory card for storing the images.
……

- All visible colours can be made from mixing the three primary coloursof red, yellow and blue.
……

- Keyboard height at a confortable open angle for the elbows and arm is harmful.
……

- There is only one type of graphics software.
……..

Task four : Fill in the following diagram

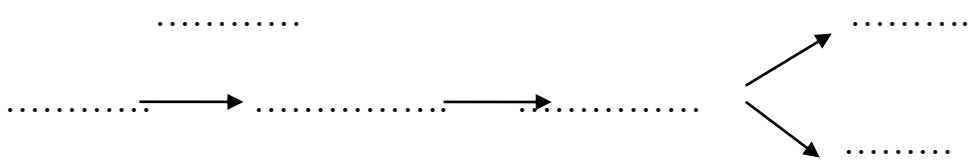

Diagram of *Digital video cameras and webcams*

Full name : …….. **Good Luck**

Correction

Task one :

TFT Thin Film Transistor **LCD** Liquid Crystal Display

RSI Repititive Strain Injury **SMS** Short Message Service

Task two : Give a short definition to the following terms

- **Bitmapped graphics** : represent images as bits when they are manipulated

- **Vector graphics** : represent images as mathematical formulae

Task three : Say whether the statements are true or false and correct the wrong ones

- A digital camera uses a light sensitive film instead of a memory card for storing the images. **False**

A digital cam uses a memory card

- All visible colours can be made from mixing the three primary colours : red, yellow and blue. **False**

Correction : Three primary colour : red, green and blue

- Keyboard height at a confortable open angle for the elbows and arm is harmful.

False

Correction : It is harmless

- There is only one type of graphics software. **False**

Correction : There are two types.

Task four : Fill in the following diagram

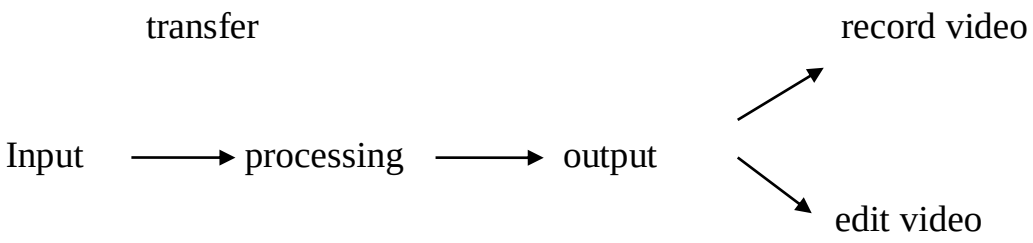

Diagram of *Digital video cameras and webcams*

Further Reading

In Methodology Context

How to conduct a scientific research

1. *Data collection phase*

We are all aware that we live in an information age. It is said that information is doubling every month. Data is another word for bits of information. Research uses data as the raw material in order to come to conclusions about the selected issue.

Data are part of hierarchy of information going from the general to the particular, from abstract to concrete. This hierarchy is expressed this way

Theory → concepts → indicators → variables → values

Example ;

***Theory** : poverty leads to poor health*

***Concepts** : poverty, poor health*

***Indicators** : low income, poor living conditions*

***Variables** : overcrowding, levels of litter, etc.*

***Values** : number of people per room*

Look at the next figure for more illustration

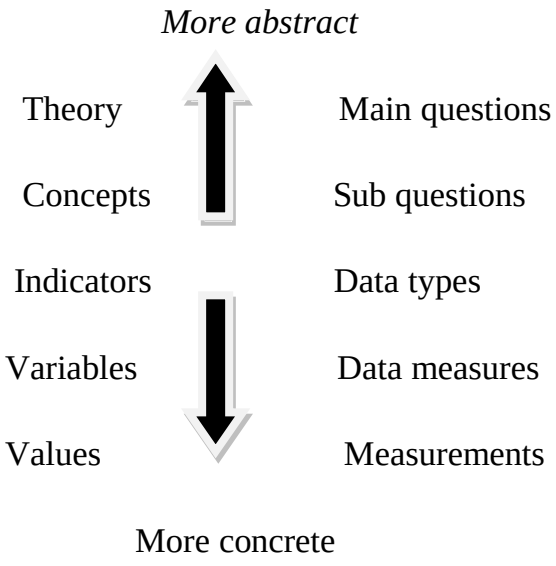

Figure 1 : Diagram of levels of abstraction

2. *Primary and Secondary Data*

Data comes in two main forms : primary data and secondary data. This depends on the closeness of the collected data to the selected issue.

a. *Primary data : There are four basic types of primary data distinguished by the way thay are collected :*

►***Measurement*** *– collection of numbers indicating amounts e.g. exam results, car mileages, oven temperature etc.*

►***Observation*** *– records of events, situations or things experienced with the help of an instrument, e.g. camera, PC, microscope, etc.*

►***Interrogation*** *– data gained by asking and probing, e.g. information about people's convictions*

►***Participation*** *– data gained by experiences of doing things e.g. using data mining to provide value-added information.*

b. *Secondary data : are data that have been interpreted and recorded. They come in different forms such as news bulletins, magazines, newspapers, documentaries, advertising, internet etc. The data are wrapped, packed and spun into pithy articles or digestible sound bites. The quality of the collected data depends on the source and the methods of presentation. For example, some magazines can contain useful and reliable information. The same goes for books, they include the most erudite and deeply researched information and the same for the internet.*

N.B *: dear students, as we used to interprete passages we searched first for the key-words. Here the key-words are in yellow so when you read try to focus on them so that to grasp their meaning.*

How to conduct a scientific research

3. Data collection tools

In the age when « information is the power » how we gather that information or collect data should be one of the major concerns when conducting a scientific research.

a. Why collect data ?

Data collection means « the process of gathering and measuring information … in an established systematic fashionthat enables one to answer queries, stated research questions, test hypotheses and evaluate outcomes ». There are set of reasons behind data collection some of which are :

►*It facilitates decision making and improves the quality of decision made.*

►*It helps resolve issues and improve the quality of the product or service based on the feedback obtained.*

b. Quantitative vs Qualitative data

There are two fundamental approaches adopted in data collection ; quantitative approach and qualitative approach and sometimes both are used as mixed method.

In contrast to qualitative approach which is based on gathering data in a form of information, the quantitative approach is based on collecting data in the form of numbers and statistics. Our concern is more quantitatively than qualitatively.

c. Quantitative data

This type of data deals with things that are measurable and can be expressed in numbers or figures, or using other values that express quantity. Quantitative research is most likely to provide answers to questions such as who ?When ?Where ?What ? and how many ?One of the tools used for data collection in this approach is survey questions which are in most cases closed-ended and demand making the answers easily transformable into numbers, charts, graphs and tables.

As quantitative data collection methods are often based on mathematical calculations, the data obtained that way is usually seen as more objective and reliable.

An example to be taken may be about software engineering. The next table demonstrates the most suitable data collection techniques for data collection

Category	*Techniques*
First degree *(direct involvement of software engineers)*	*- Brainstorming and Focus Groups* *- Interviews* *- Questionnaires* *- Conceptual Modeling* *- Work Diaries* *- Think-aloud Protocols* *- Shadowing and Observation Synchronized Shadowing* *- Participant Observation*
SecondDegree *(indirect involvement of software engineers*	*- Instrumenting System* *- Fly on the Wall (Participants taping their work)*
Third degree (Study of work artifatcs only)	*- Analysis of Electronic Databases of Work Performed* *- Analysis of Tool Use Logs* *- Documentation Analysis* *- Static and Dynamic Analysis of a System*

Table1 : Data Collection Techniques Suitable for Quantitative Method

N.B : dear students try to focus more on the words and phrases in yellow because they are key-words and phrases. Read and understand their meaning in the context. If you have any question, suggestion or remark, please send it to me.

Research in Computer Science and AI

1. *Research in Computer Science and AI (Artificial Intelligence) falls into five main categories, with different types of aims, and different success /failure criteria. Although, it is important to mention that each type contributes to the others this means that each type completes the other types :*

   a. ***The study of what is possible – and its scope and limits :*** *this includes both mathematical and less formal modes of theory.*

   b. ***The study of existing (naturally occuring) information processing systems :*** *for example animals, societies, brains, minds, etc. And sometimes described as « Natural computation »*

   c. ***Research involving creation of new useful information processing systems :****This means research directly related to engineering applications.*

   d. ***The creation and evaluation of tools, formalisms and techniques to support all these activities.***

   e. ***Research on social and economic issues :*** *This includes studies of the social and economic impact of computing and AI, ethical issues, changing views of humanity, etc.*

2. ***Using LaTeX in writing research papers***

Nowadays, many researchers are using Microsoft Word for writing their papers. Yet, Microsoft Word has many problems and limitations that is why LaTeX has been used instead as an alternative to Microsoft Word.

Definition of LaTeX : *a document preparation system proposed in the 1980s. It is used to create documents such as research papers, books, or even slides for presentations.*

The difference between LaTeX and software like Microsoft Word lies in that Microsoft Word lets you directly edit your document and immediately see the result whereas LaTeX is a bit like programming to write a research paper that is to mean you have to write a text file with the ***.tex*** *extension using a formatting language to roughly indicate how your paper should*

look like. Then, you can run the LaTeX engine to generate a PDF file of your research paper.

Next course, We'll carry on studying LaTeX in details

LaTeX (Font size, Families & styles)

As we have already mentioned last week, LaTeX is the most preferable and adopted style in conducting scientific research papers particularly for Computer Science students. Here are the characteristics of this style.

a. ***Font sizes*** *are identified by special names, the actual size is not absolute but relative. The followng table indicates all the type sizes*

Command	*Type Size*
Tiny size	*text*
Scriptsize	*text*
Footnotesize	*text*
Small size	*text*
Normalize size	*text*
large size	*text*
Large size	*text*
LARGE size	*text*
Huge size	*text*

As it is mentioned in the above table ***tiny*** *is the smallest while* ***huge*** *is the largest one.*

b. ***Font families :*** *the common font families are listed in the table below*

Font Families	*Full Form*
Cmm	*Computer Modern Italic*
Cmsy	*Computer Modern Symbols*

Cmex	*Computer Modern Extension*
Cmr	*Computer Modern Roman*
Cmss	*Computer Modern Sans*
Cmtt	*Computer Modern Typewriter*
Ptm	*Adobe Times*
Phv	*Adobe Helvetica*
Pcr	*Adobe Courier*

The standard supported for the weight and width for the font series are listed below

***Sb**- Semi Bold / **ub**- Ultra Bold / **b**- Bold /**eb**- Extra Bold /**ul**- Ultra Light /**el**- Extra Light /**l**- Light /**sl**- Semi Light /**m**-Medium.*

c. ***Styles :*** *the styles are categorised into family, series and shape. The typestyle in the output is composed of these three characteristics :*

1. ***Style :*** *Roman / Typewriter / Sans serif*
2. ***Series :*** *Boldface / Medium*
3. ***Shape :*** *Italic / Slanted / Upright / Small Cap*

Bibliography with LaTeX

There are two ways of producing the bibliography. You can either produce a bibliography by manually listing the entries of the bibliography or producing it automatically using the BibTeX program of LaTeX. Both types are detailed below.

a. Manually Creating a bibliography

The bibliography is produced manually with the environment. This environment adds bibliography into table of contents and sets up the style of thebibliography pages.. Label is an optional argument and cite-key is a mandatory argument. The mandatory argument cite-key is a reference keyword that does not appear in the bibliography but it is used to as a quick name to cite a reference.

Without the optional argument label, /bibtem produces a running number in square brackets as the label for the reference in the text. The citation numbers are defined by the order in which the keys appear on the /bibitem commands inside « the bibliography », soi t is the responsibility of the student to sort the bibliography entries alphabetically when a bibliography is created manually. With label, you can give whatever indicator you wish to see when you cite a reference, that is to mean an abbreviation of the authors name and last two digits of the year.

For the standard application with running numbers, widset entry is a dummy number with as many digits as the largest. The citation in the text itself is made with the command cite-key where it is the reference keyword that appear in the bibitem command. Look at the example below :

Bibliography with LaTeX (2)

Last time, we dealt with manual bibliography. Here are some examples as a revision

1. *Goossens, M., Mittelbach, F., Samarin, A LaTeX Companion, Addison Wesley, Reading, MA, 1994.*
2. *Kopka, H., Daly P.W., A Guide to LaTeX, Addison-Wesley, Reading, MA, 1999.*
3. *Pan, D., « A Tutorial on MPEG/Audio Compression » IEEE Multemedia, Vol2, pp.60-74, Summer 1998.*

b. Creating a Bibliography Automatically using BibTex

Why should we use BibTex ? There are some difficulties of manually creating the bibliography :

►*It is difficult to make entries consistent that is to mean variation in the use of full fornames versus abbreviation, italicization, or quoting of titles, spelling, etc …*

►*A bibliography laid out in one style (e.g., alphabetic by author and year) is extremely difficult to convert to another (e.g., numeric citation order) if requested.*

►*It is difficult to maintain one large database of bibliographic references that can be reused in different documents.*

►*It is difficult to manage sorting manually, whereas, some bibliography styles sort entries in alphabetical order automatically.*

Authors and researchers often find that they refer to the same set of papers in most of their publications. Thus, it is very useful to create a bibliography database and to use the database from one work to the next. A database is possible with BibTeX program supplied by LaTeX. The information about the various publications is stored in one or more files with the extension of ***.bib.*** *For each publication there is a cite-key that identifies it which may be used in the text to refer to it. This kind of file is called a bibliography database.*

Bibliography with LaTeX (3)

Bibliography Database

You can use one or more databases to construct a bibliography. To create a bibliography, LaTeX file must contain the command ***/bibliography database1, database2, database3, …/*** *at the point where the bibliography is to appear. Here database1, and database2 are root names and they have the extension of* ***.bib*** *However, the extension* ***.bib*** *is not written explicitly.*

Reference can be made to a publication in one of the databases at any time in the text with the command ***/cite/*** *as explained before. After the Bib TeX paogram is run, all of the database entries won't appear in the output. Only the publications cited in the text with* ***/cite/*** *command will appear in the bibliography output.*

As for the entry types, the standard entry types are article, book, booklet, conference, inbook, incollection, inproceedings, manual, masterthesis, ***,*** *phdthesis, techreport, unpublished and some of the fields that are used with entries are author, address, title, month, year, nunmber, volume, publisher, etc. Each entry type has some required fields and some optional fields. For example, for article entry, author, title, journal, year fields are required, and volume, number, pages, month, note fields are optional.*

Test Yourself

People's Democratic Republic of Algeria
Ministry of Higher Education and Scientific Research
University of Saida – Dr. Moulay Tahar
Faculty of Technology
Computer Science Department
Second Semester Make up Exam
Micr, Sic & Ris **2019/2020**

Task one : What do these abbreviations refer to ?

LCD …….. TFT ……

ROM …… RAM …….

Task two : Fill in the gaps with : information/data/general/particular

We are all aware that we live in an information age. It is said that …….. is doubling every month. ……..is another word for bits of information. Research uses data as the raw material in order to come to conclusions about the selected issue.

Data are part of hierarchy of information going from the …….. to the ……., from abstract to concrete.

Task three : Put true or false

1. Interviews are one technique of data collection. ……..

2. Times New Romans is a style used in writing papers. ……..

3. LaTeX is an alternative to Microsoft Word. ……..

4. The size 12 is best used in writing scientific research. ……

5. Consistency between chapters is not important. ……..

Good Luck

Correction

Task one :

LCD Liquid Crystial Display **TFT** Thin Film Transistor

ROM Read Only Memory **RAM** Random Access Memory

Task two :

Information – data – general – particular

Task three :

1. True

2. True

3. False

4. True

5. False

Translation of Common Vocabulary in Computer Science

access the Internet, to | **accéder (v.) à Internet**

adware | **un logiciel publicitaire**

app | **une appli**

applet | **une applet**

application | **une application**

attached file | **un fichier joint**

avatar | **un avatar**

back-up, save, to | **sauvegarder (v.)**

bias | **le biais**

blog | **un blogue**

blog, to | **bloguer (v.)**

blogger, a | **un blogueur, une blogeuse**

blogging | **le blogage**

bookmark | **un signet**

bookmark, to | **ajouter (v.) aux signets (m.)**

browse, to | **naviguer (v.)**

browser | **un navigateur**

cable | **un câble**

cache | **le cache**

Canadian Internet Registration Authority [CIRA] | **[ACEI] L'Autorité canadienne pour les enregistrements Internet**

CD or DVD writer | **un graveur**

central processing unit, cpu | **une unité centrale de traitement**

chat | **le bavardage, le clavardage**

chat room | **le clavardoir, le bavardoir**

columns | **les colonnes (f.)**

computer information services/systems | **une informatique**

computer, the | **un ordinateur**

cookie | **un témoin**

cyberbullying | **la cyberintimidation**

database | **une base de données**

delete, to | **supprimer (v.)**

directory | **un répertoire**

disk | **un disque**

disk drive | **un lecteur de disquettes**

display | **un affichage**

document reader | **un lecteur de document**

domain name | **le nom de domaine**

download, a | **un téléchargement**

download, to | **télédécharger (v.)**

drag and drop, to | **glisser-déposer (v.)**

drive | **un lecteur**

e-mail | **un courriel, le courrier électronique**

editing | **une édition**

electronic bulletin board | **un babillard électronique**

emoticon | **une binette**

export, to | **exporter (v.)**

file, a | **un fichier**

firewall | **un coupe-feu**

folder | **un dossier**

forum | **un forum**

freeware | **un gratuiciel**

graphic | **graphique (m. ou f.)**

hacker | **un pirate de l'internet**

handheld video game | **une console de poche**

harassment | **un harcèlement**

hard disk drive | **un disque dur**

hard drive | **un lecteur de disques**

hide, to | **masquer (v.)**

high-speed Internet access | **un accès à haut débit à Internet**

home page | **une page d'accueil**

hosting | **un hébergement**

hyperlink | **un hyperlien**

icon | **une icône**

identity theft | **le vol d'identité, le piratage d'identité**

illegal downloading | **le téléchargement illégal**

import, to | **importer (v.)**

instant messaging [IM] | **[MI] la messagerie instantanée**

Internet | **un Internet**

Internet access | **un accès à Internet**

internet safety | **la sécurité sur internet**

Internet site | **un site Internet**

intranet | **un intranet**

IP address | **une adresse IP**

key | **une touche**

keyboard | **un clavier**

keyboard cable | **un câble de clavier**

laptop computer | **un ordinateur portatif**

lines | **les lignes (f.)**

link | **un lien**

list | **une liste**

mailbox | **la boîte de courriel**

memory | **la mémoire**

merge, to | **fusionner (v.)**

message board | **le babillard électronique**

meta tag | **un marqueur méta**

monitor | **un moniteur**

mouse | **une souris**

mouse pad | **un tapis de souris**

multimedia | **le multimédia**

online | **en ligne (adv.)**

online multiplayer game | **un jeu multi-joueurs en ligne**

online posting | **la mise en ligne**

online predator | **un prédateur en ligne**

open existing file, to | **ouvrir (v.) un document existant**

open new file, to | **créer (v.) un nouveau document**

optical character reader scanner | **un lecteur optique**

password | **un mot de passe**

peer-to-peer network [P2P] | **[P2P] le poste-à-poste, le pair-à-pair**

personal computer, micro computer | **un micro-ordinateur**

phishing | **un appâtage, un hameçonnage par courriel**

pie chart | **un graphique secteur**

plagiarism | **le plagiat**

platform | **une plate-forme**

podcast, to | **baladodiffuser (v.)**

podcaster | **un baladodiffuseur, une baladodiffuseuse**

podcasting | **une baladodiffusion**

pop-up window | **une fenêtre contextuelle**

print, to | **imprimer (v.)**

printed document | **un document imprimé**

printer | **une imprimante**

privacy settings | **les paramètres (m.) de confidentialité**

reboot, to | **redémarrer (v.)**

restart, to | **relancer (v.)**

save as, to | **enregistrer (v.) sous**

save, to | **enregistrer (v.)**

scan, to | **numériser (v.)**

scanner | **un numériseur**

screen | **un écran**

scroll bar | **la barre de défilement**

scroll down, to | **défiler (v.) vers le bas**

scroll up, to | **défiler (v.) vers le haut**

search engine | **un moteur de recherche**

secure access | **un accès sécurisé**

select, to | **sélectionner (v.)**

selection | **une sélection**

shortcut | **les raccourcis clavier (m.)**

slash (/) | **la barre oblique**

smart phone | **un téléphone intelligent**

social medium | **les médias sociaux**

social networking | **le réseautage social**

software | **un logiciel**

sort, to | **trier (v.)**

spam | **le pourriel**

spreadsheet | **un tableur**

text | **un texte**

texting or text messaging | **le texting ou l'envoi de message texte**

thread | **un fil**

title | **un titre**

touch pad | **une tablette tactile**

trojan | **un cheval de Troie**

tweet | **un tweet, un gazouillis**

Twitter | **le microblogage**

type, to | **dactylographier (v.)**

underscore | **le soulignement**

upload, to | **télécharger (v.)**

USB stick | **une clé USB**

video chat | **un vidéoclavardage**

videoblog | **un vidéoblogue, un blogue vidéo**

viewer | **un afficheur**

virtual world | **un monde virtuel**

virus | **un virus**

Web browser | **un butineur**

Web browser | **un navigateur Web**

web conferencing | **la cyberconférence**

Web page | **une page Web**

Webcam | **une webcaméra**

webcasting | **la webdiffusion**

webinar | **un webinaire**

Website | **un site Internet**

Wi-Fi | **la technologie Wi-Fi**

wireless Internet | **un Internet sans fil**

word processor | **le traitement de texte**

worm | **un ver informatique**

write | **écrire (v.)**

zine | **un fanzine**

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