

## THE CONTROL UNIT – CU

- Controls all functions of the computer, e.g.
  - Controlling operations of input/output (i/o) systems.
  - Controlling flow of data within the processor and between the processor and the peripheral devices.
  - Configuring and optimizing RAM to ensure that it works efficiently.

## THE ALU

- This is the unit that does the actual processing of data.
- It processes data by doing **arithmetic** and **logic** operations.
- Arithmetic means addition, subtraction, multiplication and division.
- Logic is comparing things so as to make appropriate choices.
- The CU and the ALU are made on the same computer chip called the Central Processing Unit (CPU) or the microprocessor.

## RAM

- RAM is temporary storage.
- When power is switched off, everything is erased from RAM.

### Functions of RAM

- Receiving raw data from input.
- Receiving processed data from the ALU.
- Storing instructions required by the CU.
- Holding data awaiting output.
- Holding data awaiting storage.

## A COMPUTER SYSTEM

The basic elements that make up a computer system are as follows:

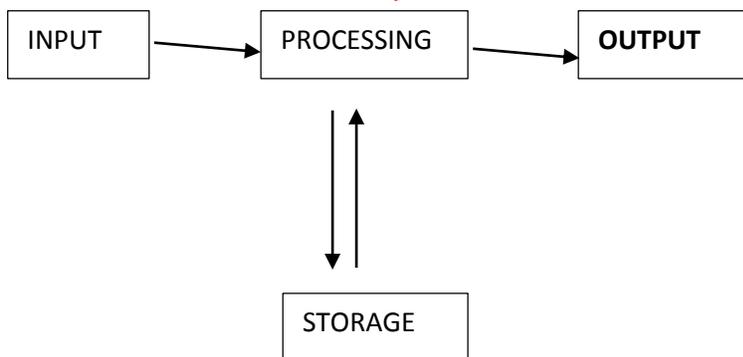
- a. Input: the computer accepts data from outside for processing within. input is primarily performed by typing data using a keyboard or pointing using a mouse



- b. Storage: the computer holds data internally before, during and after processing. Data and instruction enter main storage and are held until need to be worked on. The instruction dictates action to be taken on the data.
- c. Processing: the computer performs operations on the data it holds within. Instructions are obeyed and the necessary arithmetic operations, etc. are carried out on the data.
- d. Output: the computer produces data from within for external use. Results are taken from main storage and fed to an output device.

The elements are shown in the diagram below which shows what is often referred to as “logical structure” of a computer.

Logical Structure



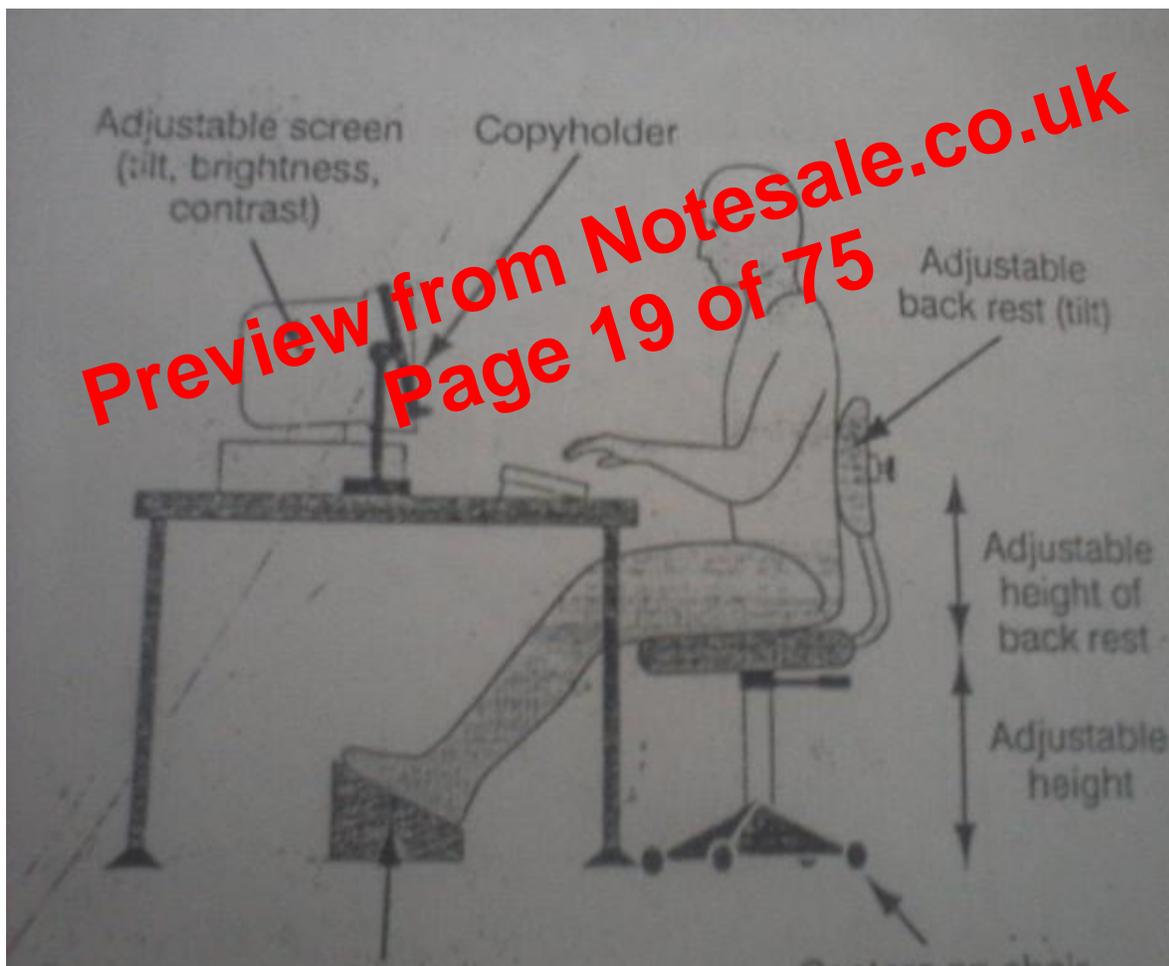
#### A. INPUT DEVICES

Are devices used to capture data into the computer. These are also used for entering commands (commands are instructions that users give to the computer to initiate them into actions).

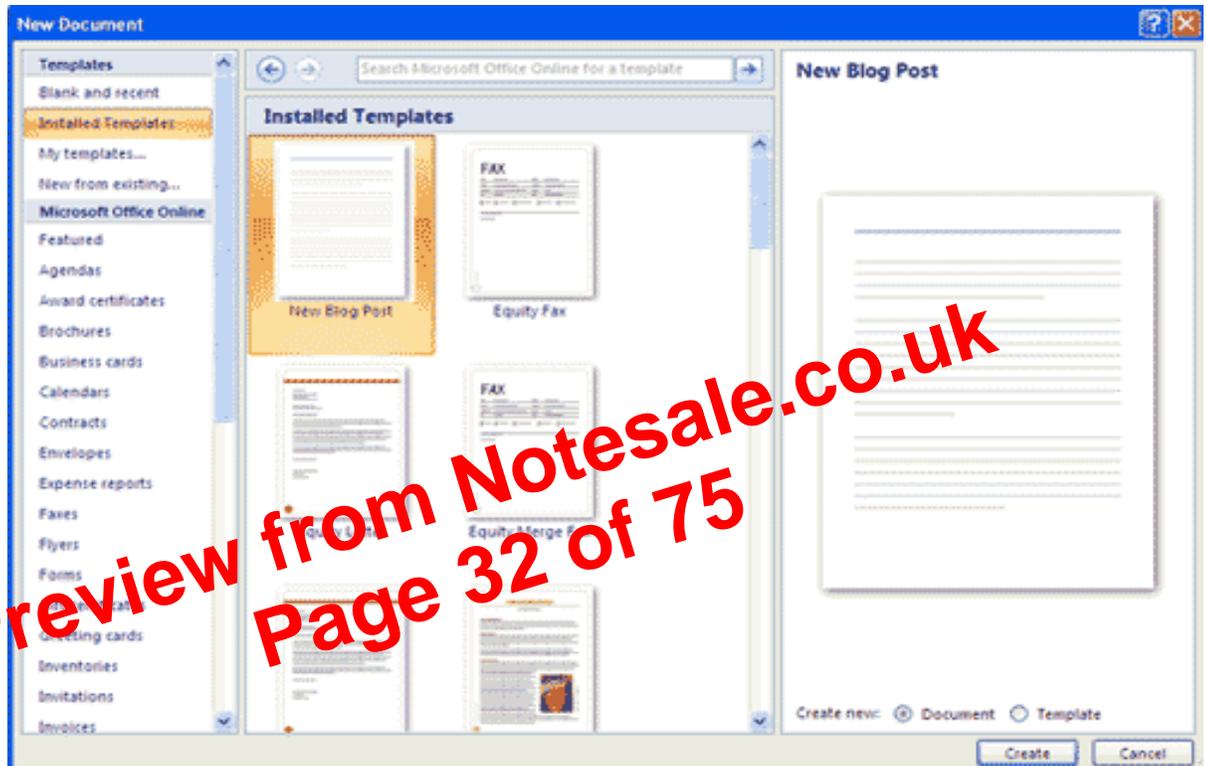


	<p>headaches, etc.</p> <ol style="list-style-type: none"> <li>take regular breaks and do some exercise</li> <li>have eyes tested regularly and use middle-vision glasses if necessary</li> </ol>
Ozone irritation (dry skin, respiratory problems, etc.) – this is caused by laser printers in an office area	<ol style="list-style-type: none"> <li>ensure proper ventilation to remove the ozone gas as quickly as possible</li> <li>house laser printers in a designated printer room</li> <li>change to other types of printer if necessary (e.g. inkjet printers)</li> </ol>

The diagram below shows the correct posture to work efficiently at a computer.



You will notice that when you click on the Microsoft Office Button and Click **New**, you have many choices about the types of documents you can create. If you wish to start from a blank document, click **Blank**. If you wish to start from a template you can browse through your choices on the left, see the choices on centre screen, and preview the selection on the right screen.



Opening New Document

### 3. Opening an Existing Document

- Click the **Microsoft Office Button**  and Click **Open**, or
- Press CTRL+O (Depress the CTRL key while pressing the "O") on the keyboard, or
- If you have recently used the document you can click the **Microsoft Office Button** and click the name of the document in the **Recent Documents** section of the window Insert picture of recent docs



- **Saving a Document**

- Click the **Microsoft Office Button**  and Click **Save** or **Save As** (remember, if you're sending the document to someone who does not have Office 2007, you will need to click the **Office Button**, click **Save As**, and Click **Word 97-2003 Document**), or
- Press CTRL+S (Depress the CTRL key while pressing the "S") on the keyboard, or
- Click the **File** icon on the Quick Access Toolbar



#### 4. Renaming Documents

To rename a Word document while using the program:

- Click the **Office Button**  and find the file you want to rename.
- Right-click the document name with the mouse and select **Rename** from the shortcut menu.
- Type the new name for the file and press the **ENTER** key.



**TOPIC: SPREAD SHEET**

**OUTCOMES: - PSBAT:**

- ✓ Demonstrate an understanding of the concept of worksheet and workbook
- ✓ Explain the common features of a spreadsheet
- ✓ Demonstrate an application of a spreadsheet in everyday life
- ✓ Enter and manipulate data using spreadsheets for a specific purpose
- ✓ Illustrate the skill of entering text and numbers in specified cells
- ✓ Enter data ,numbers and apply simple formula with a range not more than ten cell addresses (i.e., addition,subtraction,multiplication and division)
- ✓ Save to specified folder and print a worksheet

## **STARTING MS EXCEL**

1. in the desktop window click on the start button



2. click on program on the pull-up list
3. click on Microsoft Office on the down list
4. click on Microsoft Excel

## **IDENTIFICATION OF SCREEN FEATURES**

### **SCREEN FEATURES**

- Title bar: displays the name of the active program or workbook
- Minimize: is used to reduce the worksheet window
- Maximize: used to enlarge worksheet window
- Close: is used to close the active window
- Menu bar (File, Edit, View, Insert, Format etc.)
- Standard Toolbar: contains buttons for the most commonly used tasks
- Format Toolbar: contains buttons (icons) for making your workbook attractive
- Formula bar: is there to insert formulas and data that you punch in
- Column heading: (A, B, C): These are vertical sections of the excel worksheet
- Row heading (1, 2, 3): These are horizontal sections of the excel worksheet
- Worksheet area is the working area consisting boxes called CELLS
- Status bar: located at the bottom of the screen performs the same function as the title bar
- Horizontal and Vertical scroll bar are used to move the page up and down and side to side respectively

## **THE FOLLOWING TERMS ARE WORTHY NOTING IN EXCEL**

### **WORKBOOK**

A workbook is a collection of worksheets, charts, and related information. Using workbooks is an easy way to keep material for a related work together.

### **WORKS SHEET**



## **TOPIC: POWER POINT**

### **OUTCOMES: - PSBAT:**

1. Getting Started
2. Understand PowerPoint Principles
3. Start PowerPoint
4. Use an Installed Template
5. Recognize the ScreenLayout
6. Understand the Ribbon and Quick Access
7. Toolbar

### **PRESENTATION SOFTWARE:**

**Def:** it is application software used to create an order of words and pictures that tell a story or help to support a speech or public delivery of information.

### **EXAMPLES:**

1. MS PowerPoint
2. Keynote-for MAC
3. Wink-for MS
4. Articulation presenter- for MS

### **PowerPoint**

**Def:** PowerPoint is an application software found in the Microsoft Office package for presentation.

### **ADVANTAGES:**

- It enables one to present information in office meetings, lectures, schools and seminars to create maximum impact in a minimal amount of time.



- Don't set the slide transitions to "Random." This is the mark of true amateurs who don't have a clue what they're doing.
- Don't use colors to indicate emphasis, do that yourself as you're talking.
- Don't use a red font over a blue background.

#### **4. Use simple, clear, and consistently applied fonts, slide transitions, and animations.**

Following up on #3, here are tips to always follow:

- Use clean, easy to read fonts, such as Arial, Helvetica, Calibri, Cambria, Century Gothic, Lucida, and Tahoma. Avoid smaller fonts, such as Garamond, Georgia, and Book Antiqua.
- Use one font for slide headings and another for bullet text.
- Make sure your font color has enough contrast to make it stand out against the background.
- Make slide transitions and animations subtle. The idea is to get the audience to focus on what you're saying, not on how cool the animations are. I recommend Fade, Shape, or just plain Appear.

#### **5. Let graphics work for you, not against you.**

- Keep graphs simple, each one offering one key point. Cramming too much data on a slide, particularly through the use of stacked bar graphs and scatter plot graphs, won't do you or your audience any good. Put them in a handout, making them large enough to read easily.
- Remember that when you project your show on screen that the colors will wash out a bit, meaning they'll lose contrast. So what looks vibrant on your monitor won't appear quite that vibrant on the screen. So give your overall design lots of contrast with either a dark background or really light text or a light or white background and dark text.



- Use cartoons sparingly, and when you use them, don't be afraid to let them take up the entire screen.

### GETTING STARTED PowerPoint Document

To start Microsoft PowerPoint

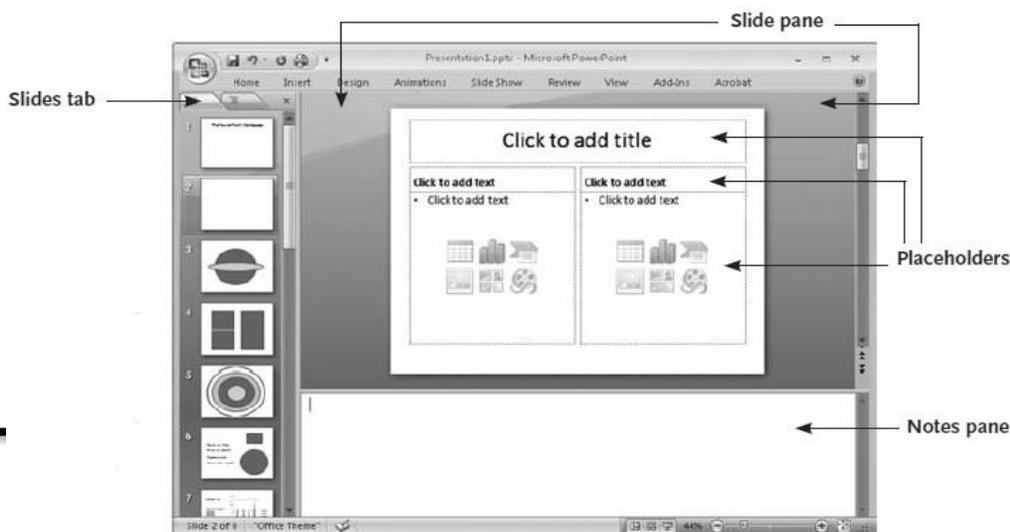
1. Click start
2. Point to programs
3. Click Microsoft office
4. Then Microsoft PowerPoint

When you first open PowerPoint you will see what's called the **Normal** view.



Figure1.0: Normal view in office 2010

### FEATURES:



➤ **To share tasks**

- Co-workers can collaborate on tasks to speed up processing.

➤ **Increased Storage Capacity:**

- As there is more than one computer on a network which can easily share files, the issue of storage

➤ **Increased Cost Efficiency:**

- There are many types of software available in the market which are costly and take time for installation. C
- Capacity gets resolved to a great extent. A standalone computer might.

## **WIRELESS AND WIRED NETWORK.**

### **Wireless Network.**

In simple terms it is the connection between two or more devices without cables. Networks do not use any form of cables. The transmission of data (your files, music, printing to the printer, etc.) occurs over radio waves. The following are the examples of wireless network devices:

- Radio
- Mobile Phone
- Television Set Etc.

### **Wired Network.**

This simply means the connection between two or more devices via cables. Examples of wired network devices are:

- Telephone
- Cable television
- Fiber-optic etc.

### **How can computers be linked?**

- There are many ways in which computers can be networked.

NOTE: The type of computer network formed is generally determined by the **distance** which the network will cover.

- On the basis of distance, there are three basic computer networks:



## Multimedia files

Multimedia file; a file capable of holding two or more multimedia elements eg text, images, audio, animation, graphics etc.

Types of media

- Video
- Audio
- Graphics
- Animations
- text

## Introduction To Media File

What is a media file?

A media file is a file which contains either video, audio, animations or graphics Media files

### 1. Graphics

Graphics are visual images or designs on some surfaces such as a wall, screen, paper or stone to inform, illustrate, or entertain.

Examples of graphic file images

