

PUBLIC SCHOOL DARBHANGA



CLASS-9
Computer Science
Working with an operating System Part-1

MICROSOFT WINDOWS

Microsoft Windows is a series of Graphical User Interface (GUI) operating systems, which was developed, marketed, and sold by Microsoft. Windows OS was the first graphical user interface for IBM-compatible PCs, which soon dominated the PC market.

Windows 7 was produced as a part of Windows NT family of operating systems. It was made available for use on October 22, 2009. It became very popular because of its user-friendly environment, noticeable speed improvement, and its modest system requirements. Some of its significant features are discussed below:

EASY TO USE

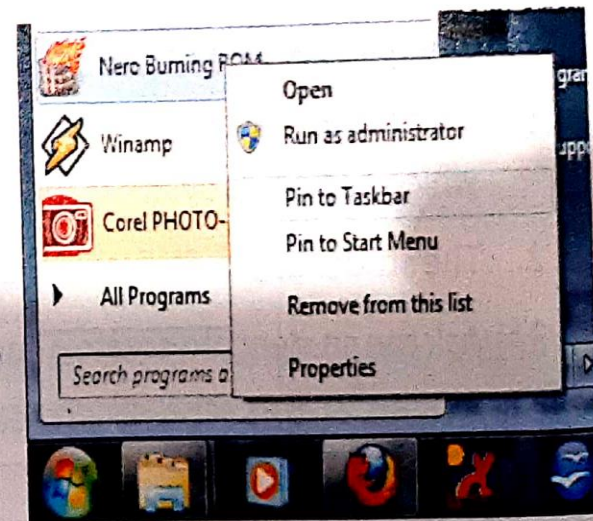
Windows 7 has a very attractive look with colourful themes and slide shows. It is very easy to use. The use of graphics make it quite interactive. It works the way you want and makes new things possible.

MULTITASKING

You can perform more than one task at a time using Windows 7. For example, you can type letters in MS Word while enjoying music using Windows Media Player.

SEARCHING MADE EASIER

Using Windows 7, you can quickly search for more things in more places in your computer.

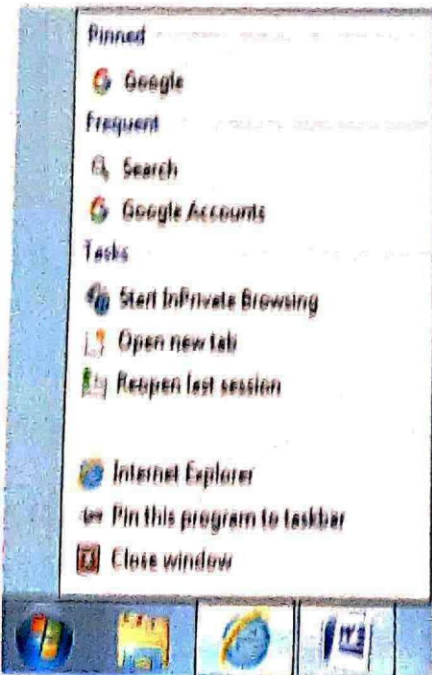


PINNING ON TASKBAR

The taskbar of Windows 7 is more flexible and application oriented. You can **pin** your favourite programs on the taskbar for easy access. Just right-click the program and select **Pin to Taskbar** option.

AERO PEEK

This feature allows you to quickly view the desktop without minimizing the open windows. To do so, just point to the **Show Desktop** button at the right edge of the taskbar.



LIVE TASKBAR PREVIEW

You can move the pointer to a taskbar button to see the live preview of its open window in **full screen**. Move the pointer over a thumbnail to preview the window in **full screen**. Click it to open the window. You can close a window, pause videos, and songs from the thumbnail preview.

JUMP LISTS

This is a new feature which takes us straight to the documents, pictures, songs, or websites you recently visited. If you right-click on a program icon on the Windows 7 taskbar, a list of



files in that program pops up. For example, right-clicking the Jump List for **Internet Explorer** shows the recently opened websites. You can jump to any website by clicking on it in the list. A jump list also appears on the **Start** menu. It provides a quick access to different programs. Simply click the arrow next to a program name.

SNAP

It is the quicker way to resize the open window.

- ✦ Drag one of the window to the left edge of the screen and another to the right edge. This way you can view two windows side by side.
- ✦ Dragging the window to the upper edge of the screen will take up the entire screen.
- ✦ Dragging the window to the lower edge of the screen will expand it vertically.

SHAKE

Click on the top of a window and without releasing the mouse button, give your mouse a shake. Every open window except the one you are working with will disappear (i.e., they will be minimized). Again shake the mouse and all your open windows will be back.

STARTING WINDOWS

When you switch on the computer, Windows starts automatically and displays a welcome message. It is followed by the first screen of Windows known as **Desktop**. It contains some graphic symbols called **icons**.

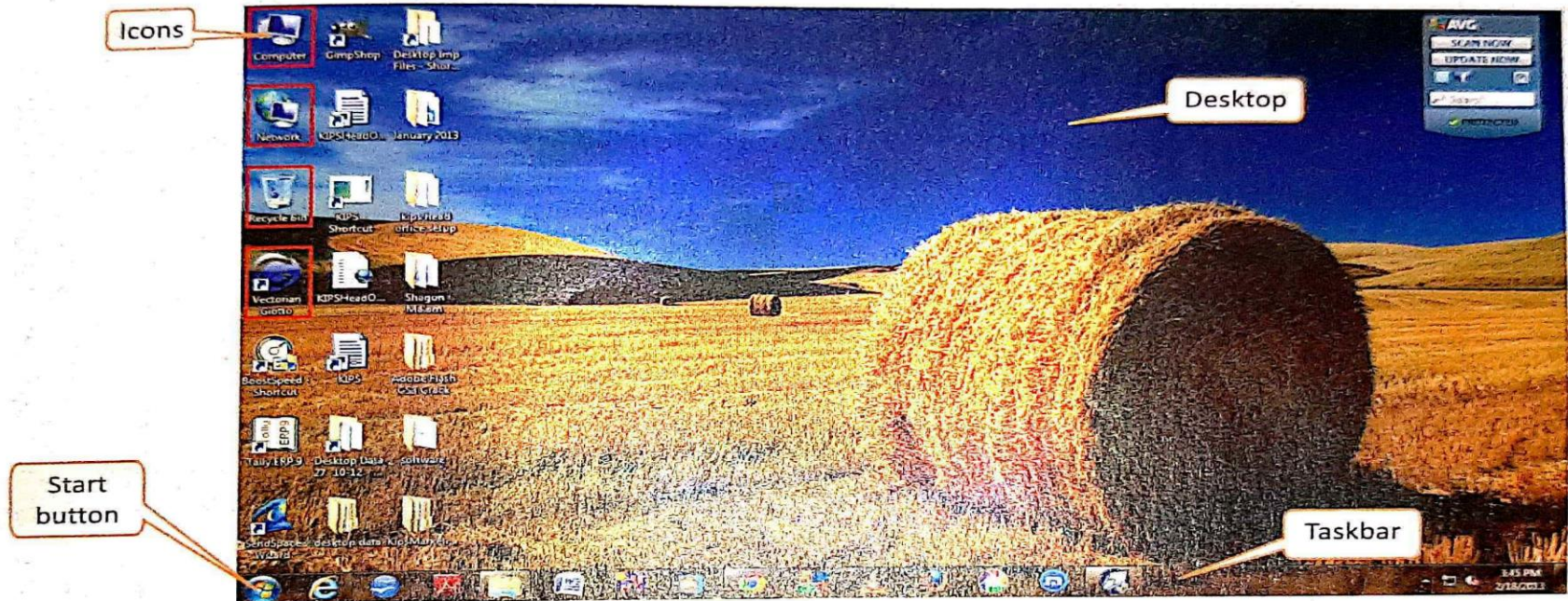


Figure 5.1: Windows Desktop

DESKTOP

The word 'Desktop' is derived from the real life desktop (the top of our working table) where you may find pen stand, notepad, calculator, files, etc. The desktop of Windows also serves the same purpose. You can find various icons like objects, shortcut icons, document icons, disk drive icons, etc. on the desktop.



The **Start** button is probably the most frequently used component of the Windows desktop. When you click on the **Start** button, a menu displaying the major applications appears. These headings provide access to the main programs of your computer. You can start programs, open documents, customize your system, get help, and search for items on your computer through the **Start** button.

Let us have a glimpse at the menu of the **Start** button:

DOCUMENTS opens the Documents folder, where you can store letters, reports, notes, etc.

PICTURES opens the Pictures folder where you can store digital photos, images, and graphic files.

MUSIC opens the Music folder, where you can store music and other audio files.

GAMES folder is more than just the central repository for games on your computer. In Windows 7, the Games folder has been redesigned to offer game updates, statistics, news feeds, and more.

COMPUTER gives access to the disk drives, cameras, scanners, and other hardware devices connected to your computer.

CONTROL PANEL provides options to customize the appearance, configure the functionality, add or remove programs, set up network connections, and user accounts.

DEVICES AND PRINTERS folder displays devices connected externally to your computer, including devices connected wirelessly or over the network. This folder allows you to perform many tasks, which vary depending on the device.

DEFAULT PROGRAMS is used to choose the programs, which you want Windows to use by default to open a particular type of file such as a music file, an image, or a web page. For example, if you have more than one media players installed on your computer, you can choose one of them to be the default player.

HELP AND SUPPORT menu provides tutorials, troubleshooting content, various support services, and help, on any required topic by entering a keyword.



Figure 5.2: Start Menu

SHUT DOWN YOUR COMPUTER

Click on the **Start** button and select the **Shut down** button at the bottom of the right pane. The system gets shutdown.



Figure 5.3: Shut down

ICONS

Small graphic symbols displayed on the desktop are called **icons**. Windows uses many objects that have specific functions such as: Files, Programs, Computer, Folders, Network Neighborhood /Network, Shortcuts, and Recycle Bin. **Icons** play a very important role in Graphical User Interface.

ICONS



APPLICATION ICONS

These graphical images provide a quick access to the related application.



SHORTCUT ICONS

A shortcut is an icon containing a direct route to a specific object. It is indicated with a small jump arrow in the lower left corner. Double-clicking on this icon will activate the related application document or folder, etc.



DOCUMENT ICONS

This is a shortcut icon of a document created by a software application. The active document window of an application window can be minimised to a Document icon, which gets placed on the taskbar.

SYSTEM ICONS

These icons are created when you install the Windows operating system, e.g., Network Neighbourhood, Computer, Recycle Bin, Documents, Internet Explorer, etc.

Network: This icon allows you to access the shared resources, such as files and printers.

Document: It is a folder that a system commonly uses to store documents, music file, pictures, etc. You can access them easily when required.



Internet Explorer: This icon represents the default web browser of Microsoft Windows. Double-clicking on this icon will open the Internet Explorer application, using which you can surf the Internet.

Computer: Complete information regarding the system drives and other peripherals can be viewed under Computer icon. Usually, there are three categories of available information as given below:





Category 1: Hard Disk Drives



[C]: [D]: & [E]: are different partitions of our hard disk drive

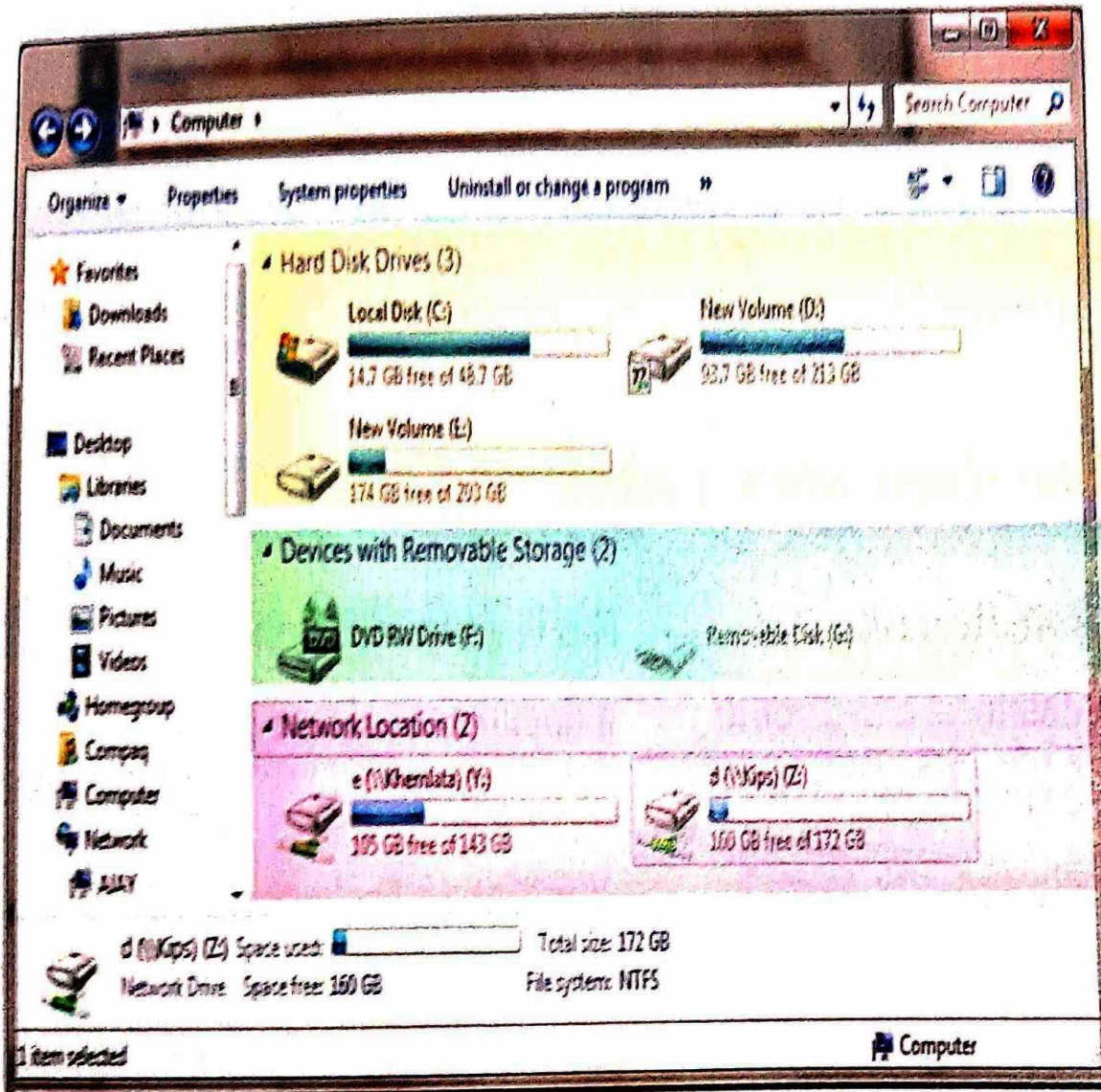
	Local Disk (C:)	Usually C: drive is used to load the Operating System in memory.
	Local Disk (D:) Local Disk (E:)	D: and E: drives are used as other partitions for storing data and other information.

Category 2: Devices with Removable Storage

	DVD RW Drive (F:)	This drive is used to read/write data on a CD ROM using the CD-Drive.
	Removable Disk (G:)	This drive is used to read/write data on a Pen drive/Flash drive.

Category 3: Network Location

	Shared Docs:	This is the folder where you can store any data that you wish to share with other people on a network.
	User's Docs:	The documents that belong to the System Admin are stored in this folder. Until or unless you are also the Admin, you cannot view these files. All files shared in Documents folder can be viewed using this icon.




Category-1:
Hard Disk
Drives

Category-2:
Devices with
Removable
Storage

Category 3:
Network Location

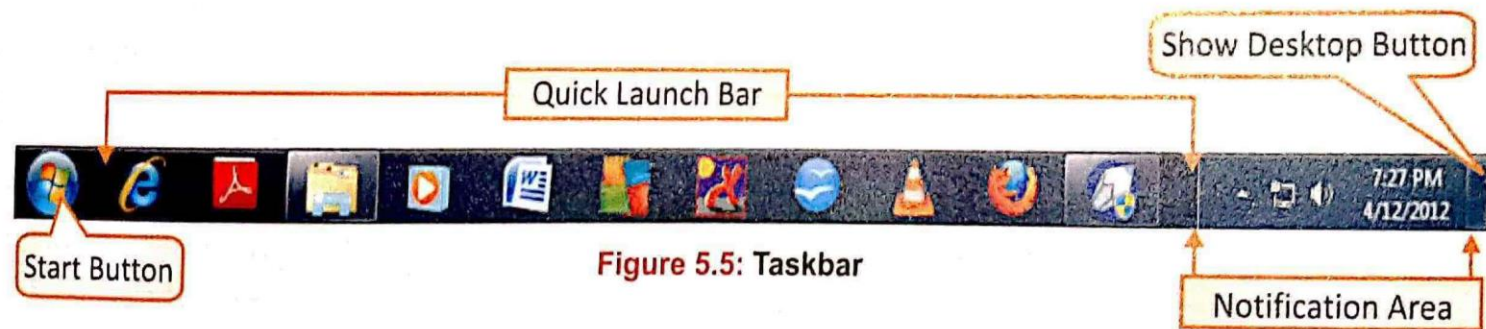
Figure 5.4: Computer Window

TASKBAR

Taskbar is a long horizontal bar at the bottom of the desktop. It has the **Start** button  on the extreme left side. The middle section of the bar shows buttons with a label for each of the opened applications and allows us to quickly switch between them. You can activate the application window by clicking on its taskbar button. When an application is active, its button is highlighted in a lighter shade.

Quick Launch Bar is present on the right side of the **Start** button on the taskbar. The icons displayed on this bar help in quickly accessing programs/applications.

The right side of the taskbar is known as **Notification Area**, which includes a clock and group of icons that provide status and notifications about things like updates, network connectivity, incoming mails, battery, volume, etc. The **Show Desktop** button is present on the extreme right of the taskbar. Simply placing cursor on this button minimizes all the open windows and shows the desktop.



ACTIVATING WINDOWS

Most programs place a button on the taskbar when they are opened. Clicking on one of these buttons makes that application's window active. Clicking on the button again will minimize the application window. When an application is active, its button is highlighted in a lighter shade and appears to be pushed in. The Windows Taskbar provides the easiest method to switch between the open programs.

ADDING PROGRAM TO QUICK LAUNCH BAR

- ✦ Click on the icon of the program that you want to add (You can find most program icons on the Start menu or the desktop) and then drag it to the Quick Launch bar.
- ✦ The new icon is now available as a shortcut for starting the program that you have selected.

SWITCHING APPLICATIONS

The Windows taskbar provides the easiest method to switch between open programs.

Open multiple applications like CorelDraw, MS Word, and MS Paint. Maximize the current application to expand your work over the entire desktop.

To switch to the other application, hold down **Alt** key and press **Tab** key once. Windows will open the other application.

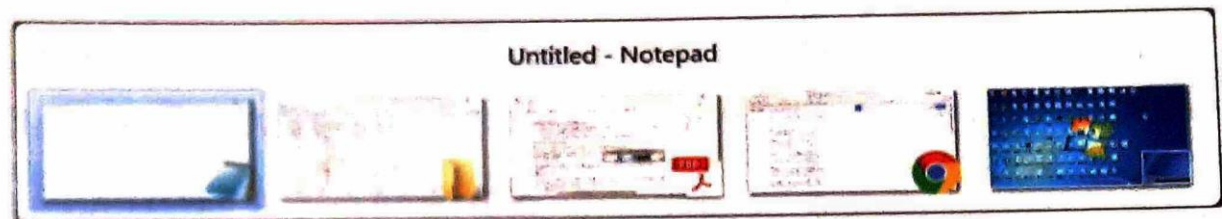


Figure 5.6: Switching Between Programs

Today we have discussed about:

Microsoft windows

Starting Windows

Desktop

Shut down your computer

Task bar

In next class we will study:

- ▶ Windows element
- ▶ File system