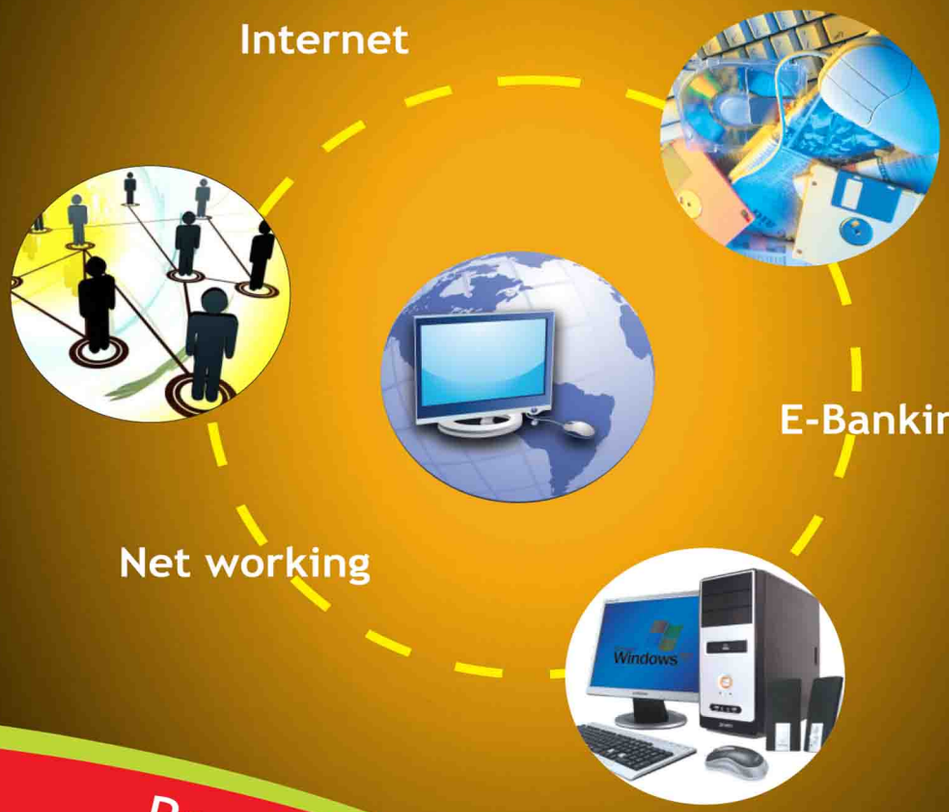
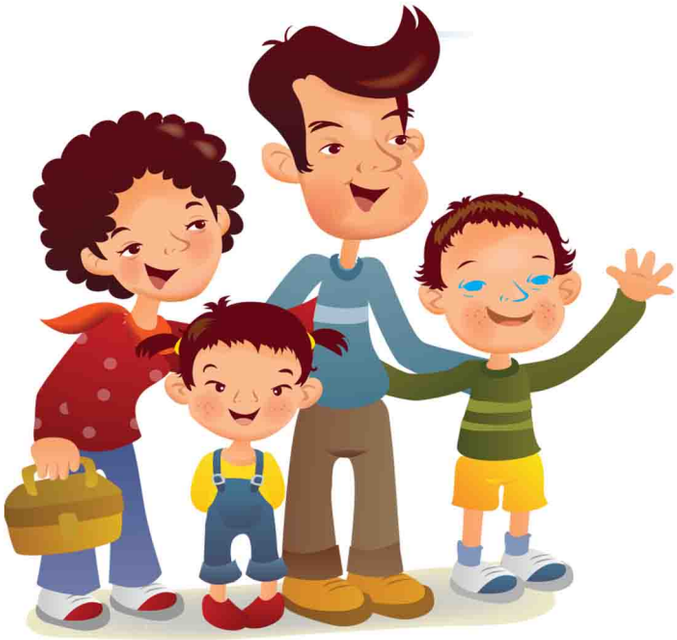


Reach the Unreachable

LEARN WITH COMPUTER



VII

LEARN WITH COMPUTER

Reach the Unreachable

VAPS KNOWLEDGE
SERVICES PVT.LTD.

No.72, MIG 1st Stage, 4th Cross, KHB Colony, Basaveshwaranagar, Bangalore-560079
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LEARN WITH COMPUTER - III

Reach the Unreachable

FIRST Edition in 2010

Price : Rs. 160.00

FOREWORD

Computer education has become, of late , an integral part of early general education . Computer technology has revolutionized our way of life to such an extent that parents desire that their children get exposed to computers from the very early stages of education . In view of this growing indispensability of providing computer education even during the primary stages of education , simple books of computer education which can enable the children to learn the computer skills at an early age, are becoming more and more essential.

VAPS Technosoft (Pvt.) Ltd. Which we know for the past few years, is a software company genially interested in the intellectual development of the young children . it has even incessantly working hard in the direction of providing effective computer education to the children. VAPS Knowledge Services (Pvt.)Ltd. has done a good job in drawing up a meaningful syllabus and developing good learning material suitable to students of class I to X . We sincerely wish that these books help the children to joyfully learn the fundamentals and skills of computer

We congratulate VAPS Knowledge services (Pvt.) Ltd . on their sincere efforts to promote computer education from the very Primary stage of learning .

We wish them success in their endeavours.

Swami Muktidananda

(Swami Muktidananda)
Correspondent
Sri Ramakrishna Vidyashala
Residential Composite Pre-University College
Mysore

ABOUT THE BOOK

In this electronic age, a knowledge of computers and skills to use this wonderful machine has become indispensable. It is hardly necessary to emphasize the importance and the significant role this wonder machine plays in every walk of life. There is a craze for computer education and it is natural that parents want their children to have a practical knowledge of working with computers at the earliest possible stage.

LEARN WITH COMPUTER Series has 3 books from Volume I to III and these books have been designed with the sole purpose of making learning computers an enjoyable experience to learners. The Series of books is preferred with great care. The books are based on a syllabus draw with meticulous care. VAPS Knowledge Services Pvt.Ltd. is an established firm with more than five years of experience in the field. The syllabus is prepared by renowned computer professionals and academicians. The book has pictures and illustrations at appropriate places and they aid understanding . As we know one illustration is worth a thousand words it can explain facts more clearly.

Examples given with books are drawn from every day life experience which they express. Purpose of aiding better understanding of the subject matter. We have also included variety of activities and exercises keeping in mind the fact that children's are very active and they hate receiving information in a passive manner.

We hope this series of books are going to catch the imagination of young learners and they will take keen interest in this exciting field. This is what we hope to happen and we would feel our selves lucky if we succeed in making learning an enjoyable activity that would give us a sense of fulfillment of our cherished goal.

Editors

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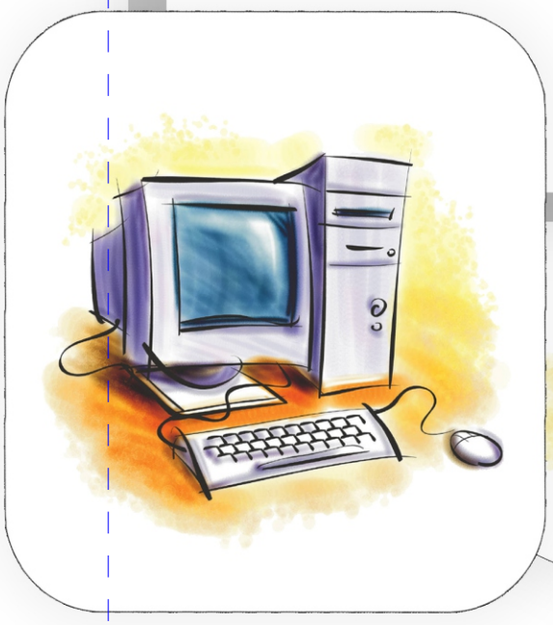
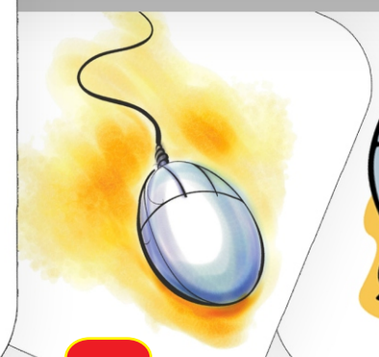
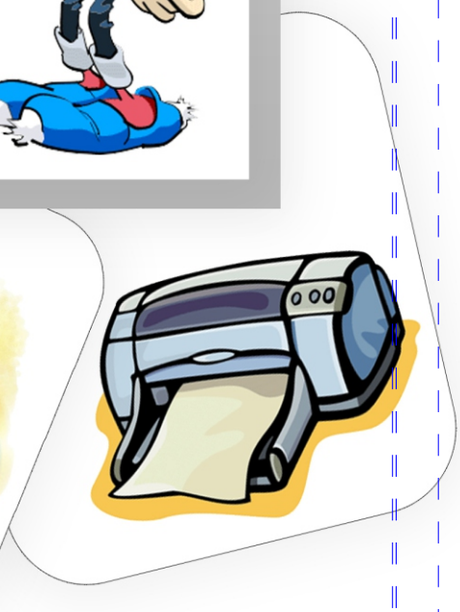


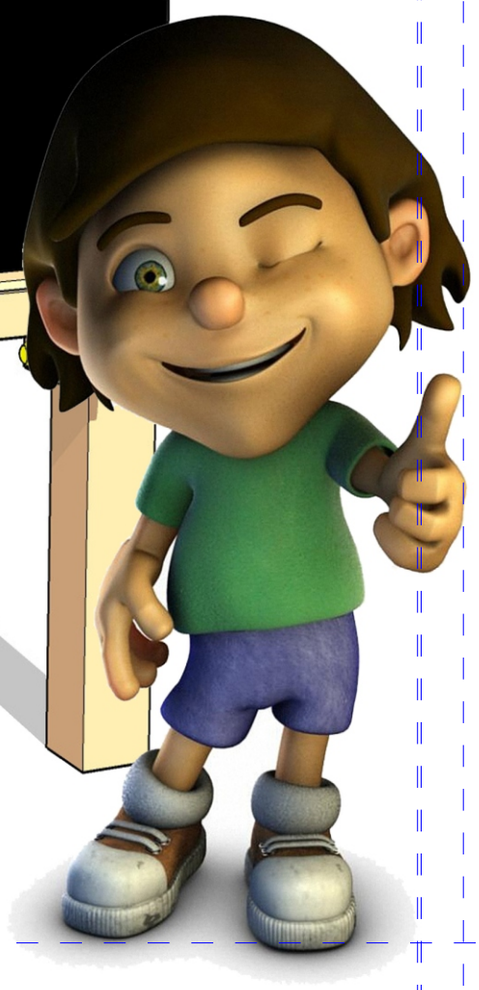




Objectives

I MEMORY ORGANIZATION

- INTRODUCTION
- TYPES OF MEMORIES
- FLOPPY DISK
- HARD DISK
- CD ROM



1 MEMORY ORGANIZATION

INTRODUCTION

The Memory of a Computer holds (stores) program instructions (what to do), data **(information)**, operands (affected, manipulated, or operated upon data), and calculations (ALU results). The CPU controls the information stored in memory. Information is fetched, manipulated (under program control) and/or written (or written back) into memory for immediate or later use. **The internal memory of a computer is also reffered to as main memory**, global memory, main storage, or primary storage. Do not confuse it with secondary or auxiliary memory (also called mass storage) provided by various peripheral devices.

The storage capacity of memory is shown below:

8 bits	1Byte
1024 Bytes	1 Kilo Byte (KB)
1024 KB	1 Mega Byte (MB)
1024MB	1 Giga Byte (GB)
1024GB	1 Tera Byte (TB)

MAINLY THERE ARE 2 TYPES OF MEMORIES

1) PRIMARY MEMORY
2) SECONDARY MEMORY

PRIMARY MEMORY: Primary Memory is the only one directly accessible to the CPU. The CPU continuously reads instructions stored there and executes them as required. Any data actively operated. It is also stored there in uniform manner.

Example: Random Access Memory (RAM)
Read Only Memory (ROM).

Read Only Memory (ROM): There is another memory in computer, which is called **Read Only Memory (ROM)**. It is the IC's inside the PC that form the ROM. The storage of program and data in the ROM is permanent. The ROM stores some standard processing programs supplied by the manufacturers to operate the personal computer.

SECONDARY MEMORY: You are now clear that the operating speed of primary memory or main memory should be as fast as possible to copy up with the CPU speed. These high-speed storage devices are very expensive and hence the cost per bit of storage is also very high

Hard disk on which you can store computer data. The term hard is used to distinguish it from a soft, or floppy, disk. Hard disks hold more data and are faster than floppy disks. A Hard disk, for example, can store anywhere from 10 to more than **100 Gigabytes**, whereas most floppies have a maximum storage capacity of **1.4 Megabytes.**

A single hard disk usually consists of several platters. Each Platter requires two read/write heads, one for each side. All the read/write heads are attached to a single access arm so that they cannot move independently.

A soft magnetic disk. It is called Floppy because it flops if you wave it **(at least, the 5¼-inch variety does)**. Unlike most hard disks, floppy disks (often called floppies or diskettes) are portable, because you can remove them from a disk drive. Disk drives for floppy disks are called floppy drives. Floppy disks are slower to access than hard disks and have less storage capacity, but they are much less expensive.

FLOPPY'S COME IN THREE BASIC SIZES

8-inch: The first floppy disk design, invented by IBM in the late 1960's and used in the early 1970's as first a read-only format and then as a read-write format. The typical Desktop/Laptop computer does not use the **8-inch** floppy disk.

5¼-inch: The common size for PCs made before 1987 and the predecessor to the 8-inch floppy disk. This type of floppy is generally capable of storing between **100K and 1.2MB (Megabytes)** of data. The most common sizes are **360K and 1.2MB.**

3½-inch: Floppy is something of a misnomer for these disks, as they are encased in a rigid envelope. Despite their small size, micro floppies have a larger storage capacity than their cousins -- from **400K to 1.4MB** of data. The most common sizes for PC's are 720K (double-density) and 1.44MB (high-density). Macintoshes support disks of 400K, 800K, and 1.2MB

Compact Disc-Read-Only Memory, a type of optical disk capable of storing large amounts of data -- up to 1GB, although the most common size is **750MB (megabytes)**. A single **CD-ROM** has the storage capacity of **700MB**, enough memory to store about 300,000 text pages.

DVD-ROM: Players are capable of playing audio CD's, which share the same technology. DVD-ROM's are particularly well-suited to information that requires large storage capacity. This includes large software applications that support color, graphics, sound, and especially video. **Capacity of DVD is 4.7GB**

Hints
Show the parts of the memory devices to the Students.

Learn With Computer 7TH STD