***Types of computers***

A computer is a device that can be programmed to manipulate symbols. It replies to a specific set of instructions and can perform a pre-recorded list of instructions, say a program. Also, it can instantly store and recover large amounts of data. Computers are primarily arranged according to purpose, size, and data handling functionalities.

Through this article, we shall learn about the different types of computers and their uses with some sample questions in preparation for the approaching government/ banking exams.

Bank, RRB, Insurance, SSC, are amongst the popular exams in which questions based on the types of the computer are asked. Aspirants can effortlessly obtain marks as these questions are usually straightforward and provide ample opportunities to score.

**Types of Computers**

There are different types of computer technology available these days. The functionality and data processing of each type of computer is distinct and so are the output results.

Though, the methods/techniques, size, capacity, characteristics, and data handling aspects of each computer may be different as well. Let us understand the different types of computers one by one:

Learn about  [Computer Abbreviations](https://testbook.com/computer-awareness/computer-abbreviations) here.

* **Types of Computers: Size**

**Micro Computers**

The microcomputer is also recognized as a personal computer, these are comparatively economical. Microcomputers are small computers incorporating a microprocessor, Central Processing Unit (CPU), memory, storage area, an input unit, and an output unit.

It is a general-purpose computer that is outlined for personal use. Such computers are made with minimum circuitry mounting over a single circuit board. They are fit for personal work that may be making an assignment, at the office for office work, watching a movie, etc. Examples include Desktop, Laptop, tablets, smartphones, etc.

#### ****The Mini Frame or Mini Computer****

Minicomputers are comparatively smaller than mainframe computers or can say a minicomputer lies within the mainframe and microcomputer as it is smaller than the mainframe but larger than a microcomputer.

Minicomputers are digital and multi-user computer systems with the connection of more than one CPU. Thus, multiple users can work on these computers simultaneously. Mini-frame computers are employed in institutes and work units for tasks such as billing, accounting, and record management.

#### ****Mainframe Computer****

Computers utilized by large organisations to manage bulk data are designated as Mainframe computers. Mainframe computers are multi-programming, high-performance and multi-user computers, which implies they can manage the workload of more than 100 users at a time on the computer.

The storage capability of the mainframe is enormous, with a high-speed data process as well. The main purposes of such a type of computer include managing customer statistics, census, and other heavy data in a single device.

Mainframe computers, therefore, are mainly employed by departmental and commercial organizations like Banks, Scientific research centres, companies, and governmental departments like railways, paying employees, ticket booking, maintaining details of purchases by users, keeping detailed tax details, etc.

Learn about the [Computer Shortcut Keys](https://testbook.com/computer-awareness/computer-shortcut-keys) here.

#### ****Supercomputer****

Supercomputers come under the biggest, fastest, powerful, and most expensive type of computer for processing data type; they are designed to process an immense amount of data. A supercomputer can treat trillions of instructions/directions in a second. It has thousands of interconnected processors.

Supercomputers are especially used in scientific and engineering applications such as weather forecasting, quantum mechanics, climate research, scientific simulations, nuclear energy research, etc where a high level of performance is required.

Examples: IBM Roadburner, INTEL ASIC RED. PARAM-1000, BM Blue Gene, and CRAY-XMP-14.

### ****Types of Computers: Working Principle and Data Handling Abilities****

#### ****Analog Computer****

Analog computers are outlined to process analog data. Analog data is continuous data that varies continuously and cannot have discrete values. Analog computers are utilized primarily to measure physical units like the voltage, electric current, pressure, temperature and convert them into digits. Such computers are mostly used for scientific, technology, research, engineering, and industrial applications.

Speedometer, mercury thermometer, thermometer, operational amplifiers, electric integrators, etc. are examples of analog computers.

#### ****Digital Computer****

The digital computer is outlined to execute calculations and logical operations at a high pace. Such computers are proficient in solving problems in discrete formats. It acquires the raw data as input is in the form of digits/binary numbers (i.e 0 and 1) and processes it with programs stored in its memory to produce the output.

It can implement arithmetic operations such as addition, occurrence, subtraction, multiplication and division, and all sorts of logical/mathematical operations as well. All modern computers like laptops, desktops including smartphones, calculators, tablets, digital watches, accounting machines, workstations, digital clocks etc that we use at home or office are digital computers.

#### ****Hybrid Computer****

Hybrid computers as the name signify exhibit features of both Analog and Digital computers. It is fast like an analog computer and has memory and accuracy like those of digital computers. It can process both continuous and discrete data. It takes analog signals and transforms them into digital form before processing them.

These types of computers are extensively used in specialized applications where both analog and digital data are processed. For example, a processor is applied in petrol pumps that converts fuel flow measurements into quantity and price. Furthermore, they are used in aeroplanes, hospitals, and scientific applications.

Also, learn about [Microsoft Office](https://testbook.com/computer-awareness/microsoft-office) here.

### ****Types of Computer: Purpose****

#### ****General Purpose****

General computers are designed to perform various everyday tasks such as;

* Document preparation
* Financial analysis
* Printing documents
* Basic Input/Output functions
* Creating databases
* Data Saving on a smaller scale
* Calculations with accuracy and consistency.
* General performing activities

The size, storage capacity, and cost of such computers are essentially less. The capacity of these computers is limited in completing specialized tasks. These may include basic calculators, laptops, desktop computers, mobile phones, etc., which can help individuals to meet their basic essential functions.

Know more about the [Generations of Computers](https://testbook.com/computer-awareness/generations-of-computer) here.

**Special Purpose**

When a computer is outlined specifically to perform a certain function, such type of computer is identified as a Special Purpose computer. The size, storage capacity, and cost of such computers principally depend on the nature and size of the work. The function of these computers is consistent with any particular task, that is these computers are designed to perform a particular or specialized task.

These types may include:

* Thermometers to test temperature
* Devices used for examining climate change
* Generators to manage electricity
* Large computers for IT Companies

**Examples of special-purpose computers**

* Automatic teller machines (ATM)
* Traffic-control computers
* Surveillance equipment
* Weather-forecasting simulators
* Washing machines
* Military planes controlling computers
* Defence-oriented applications
* Oil-exploration systems