

### **PATHFINDER ACADEMY**

**Edition** 



## **CSIR-JRF-NET**

# **General Sciences**



**Research Aptitude | Quantitative Reasoning** 

#### Computer Science

- c. satellite
- d. mail
- 54. In a computer network, a computer that can control a group of other computers for sharing information as well as hardware utilities is known as
  - a. client
  - b. hub
    - c. switch
- d. server
- 55. Which of the following can be used for the internet protocol?
  - a. http
  - b. html
  - c. visual basic
  - d. none of these
- 56. Web site is a collection of
  - a. html documents
  - b. graphic files
  - c. audio and video files
  - d. all of the above
- 57. Which of the following is not a network?
  - a. local area network
  - b. wide area network
  - c. optical fibre
  - d. all are networks
- 58. The network connecting several computers all over the world is
  - a. intranet
  - b. internet
  - c. ARPAnet
  - d. network
- 59. Telnet helps in
  - a. remote login
  - b. connecting to television
  - c. transferring files across net
  - d. all of these

#### Computer languages

A language acceptable to a computer system is called computer language or programming language, and the process of writing instructions in such a language for an already planned program is called programming or coding. All computer languages can be classified broadly into three categories:

1. Machine language: A programming language that a computer understands without using a translation program is called machine language.

- 2. Assembly language: A language that allows instructions and storage locations to be represented by letters and symbols instead of numbers is called assembly language or symbolic language. A program written in an assembly language is called assembly language program or symbolic program.
- 3. High level language: A program written in a high-level language can be ported and executed easily on any computer having a translator software for the high-level language. It is a programming language with strong abstraction from the details of the computers. Since high-level languages are machine independent, a programmer writing a program in a high-level language may not even know on which computer the program is executed. The examples of high-level language are Ada, Algol, BASIC, COBOL, Pascal, and Prolog.

#### Low-level programming languages

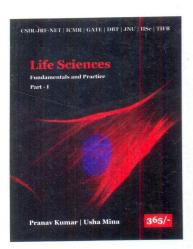
Machine and assembly languages are often referred to as low-level programming languages because they are machine dependent, they require the programmers to have a good knowledge of the internal structure of the computer being used, and they deal with machine-level coding requiring one instruction to be written for each machine-level operation.

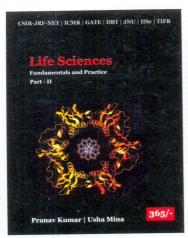
#### High-level languages

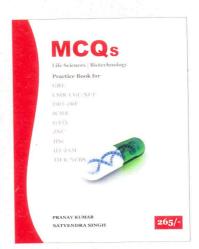
Today many different high-level languages are in use because each one was designed for a different purpose. Some of these are described below:

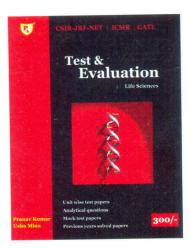
- 1. **FORTRAN**: FORTRAN stands for FORmula TRANslation. It was developed by John Backus and his team at IBM (International Business Machine) Corporation for its 704 computer in 1975. It was designed to solve scientific and engineering problems, and is currently the most popular language among scientists and engineers. It is an algebra-based programming language. Any algebraic expression or mathematical relationship can be expressed easily as a FORTRAN instruction.
- 2. COBOL: COBOL stands for COmmon Business Oriented Language. A COBOL program is constructed from sentences, paragraphs, sections and divisions. It was designed for business data processing applications. Business data processing applications deal with storing, retrieving, and processing corporate accounting information, and they automate such functions as inventory control, billing and payroll. The COBOL 2002 is the latest COBOL standard.
- 3. **BASIC**: BASIC stands for Beginners All-Purpose Symbolic Instruction Code. It was developed in 1964 by Professor John Kemeny and Thomas Kurtz at Darmouth College in the United States. It was designed to use terminals as the primary input/output interface to computers. BASIC was the first high-level languages to be implemented on personal computer when they were introduced. It was designed to use an interpreter as language translator, so that programmers could create, run, test, and debug a program in interactive mode.
- 4. **Pascal**: Pascal is based on the concepts of structured programming. It was designed to enable writing of complete Pascal programs without the use of any GO TO statement. Special control statements for selection and looping structures were provided for this purpose. To make programs structured, Pascal programs are composed of blocks. Each block of statements starts with a *Begin* statement and ends with an *End* statement.
- 5. C and C++: C language was developed in 1972 at At & T's Bell laboratories, USA by Dennis Ritchie and Brain Kernighan. It was developed as a compiled language so that C language programs could be ported easily to other computer having a C compiler. It supports user- defined data types for greater flexibility in programming. It supports modular and structured programming concepts. It is a small and concise language providing only essential features so that a C language program can be translated by a language translator into an efficient machine language code. C++ includes numerous object-oriented programming features. C++ provides a class/ object mechanism which has capability to define and use user-defined classes.

## The books you need most...









**High Performance Guaranteed** 



**PATHFINDER ACADEMY** 

www.thepathfinder.in

Phone: 09818063394



₹ 300/-