

Unit 1: Computer Fundamentals

Evolution of computers; Basics of computer and its operation: Functional Components and their inter-connections, concept of Booting, Use of Operating System for directory listing, hierarchical directory structure, renaming, deleting files/folders, formatting floppy, copying files, concepts of path and pathname, switching between tasks, installation/removal of applications; Internal Storage encoding of Characters: ASCII, ISCII (Indian scripts Standard Code for Information Interchange), UNICODE; Types of Memory: Cache (L1, L2), Buffer, RAM (DRAM, SDRAM, RDRAM, DDRAM), ROM (PROM, EPROM), Access Time; Concepts of Accumulator, Instruction Register, and Program Counter

Unit 2: Ms- Office

Word Processing

Word processing concepts: saving, closing, Opening an existing document, Selecting text, Editing text, Finding and replacing text, printing documents, Creating and Printing Merged Documents, Character and Paragraph Formatting, Page Design and Layout. Editing and Profiling Tools: Checking and correcting spellings. Handling Graphics, Creating Tables and Charts, Document Templates and Wizards.

Spreadsheet Package

Spreadsheet Concepts, Creating, Saving and Editing a Workbook, Inserting, Deleting Work Sheets, entering data in a cell / formula Copying and Moving from selected cells, handling operators in Formulae, Functions: Mathematical, Logical, statistical, text, financial, Date and Time functions, Using Function Wizard. Formatting a Worksheet: Formatting Cells – changing data alignment, changing date, number, character or currency format, changing font, adding borders and colors, Printing worksheets, Charts and Graphs – Creating, Previewing, Modifying Charts. Integrating word processor, spread sheets, web pages.

Unit 3: Network Computing

WWW and Web Browsers: Web Browsing software, Surfing the Internet, Chatting on Internet, Basic of electronic mail, Using Emails, Document handling, Network definition, Common terminologies: LAN, WAN, Node, Host, Workstation, And bandwidth, Network Components: Servers, Clients, Communication Media.

Unit 4: Introduction to Programming in C++

C++ character set, C++ Tokens (Identifiers, Keywords, Constants, Operators), Structure of a C++ Program (include files, main function); Header files – iostream.h, iomanip.h; cout, cin; Use of I/O operators (<< and >>), Use of endl and setw(), Cascading of I/O operators, Error Messages; Use of editor, basic commands of editor, compilation, linking and execution; standard input/output operations from C language: gets(), puts() of stdio.h header file.

Unit 5: Java Fundamentals

Types of Programming language and Paradigms; Java – what, where and why? Platform independency; Comparison in Java with C and C++; Role of Java Programmer in Industry; Java Evolution and History ; Features of Java Language.; The Java Virtual Machine (JVM); Java's Magic Byte code; JDK , JRE and JIT; Data types; Operators; Control Statements; Arrays; Enhanced for-loop; Enumerated types; C-style formatted I/O ; Variable arguments

This test is designed to assess the test takers' general proficiency in the use of English language as a means of self-expression in real life situations and specifically to test the test takers' knowledge of basic grammar, their vocabulary, their ability to read fast and comprehend, and also their ability to apply the elements of effective writing.

UNIT 1: Grammar

Agreement, Time and Tense, Parallel construction, Relative pronouns, Determiners, Prepositions, Modals, Adjectives, Voice, Transformation, Question tags, Phrasal verbs.

UNIT 2: Vocabulary

Synonyms, Antonyms, Odd Word, One Word, Jumbled letters, Homophones, Spelling, Contextual meaning, Analogy.

UNIT 3: Reading Comprehension

Content/ideas, Vocubular, Referents, Idioms/Phrases, Reconstruction (rewording).

UNIT 4: Composition

Rearrangement, Paragraph Unity, Linkers/Connectives.