CONTENTS COMPUTER SOFTWARE (PAPER-I)

Topic	Scope and Limitation	Page Nos.
1. NUMBER SYSTEMS	Binary Numbers, Decimal, Octal, Hexadecimal numbers, BCD, Conversion from one number system to another, ASCII Code, Binary Addition, Subtraction by One's and Two's complement, Binary multiplication and Division.	T ALC DA
2. PROGRAM ANALYSIS	Analysis of problem, Pseudo Code, design steps, Flow Charts, structured and modular programming.	19-33
3. INTRODUCTION TO C++	Introduction to structure of C++ Program Keywords, Identifiers, Basic Data Types, User Defined data types, Derived data types, constants, type compatibilities, Declaration of variables Operators in C++, memory management operators, manipulators Control Structures - If, Switch, do while, for Functions in C++, Standard C++ Library, I\O functions Prototyping, Call by Reference, Return by reference unformatted I\O operations. Simple Programs in C++.	
4. VISUAL BASIC	Introduction to visual Basic, Visual Basic Environment -Menu Bar, tool Bars, tool box, properties setting form Layout, Visual Basic, Programming-variables, constants, defining variables, arrays, relational operators, control flow statements, loop statements, nesting of loops, use of built in functions, event driven programming. A simple VB project - simple calculator.	95-119
5. NETWORKING & INTERNET	Networking terms and Concepts Centralized, Distributed, Collaborative Network Applications – email, voice mail, FTP,WWW,E-commerce,chat, BBS, user group.	120-127
SPECIMEN PAPER	Specimen Question Paper	128-129

COMPUTER HARDWARE (PAPER-II) Topic Page Scope and Limitation Nos. 131-167 Study of Components-Resistors, capacitors, inductors and transformers. Semiconductor Components-diodes, transistors, zener diode, LED. 1. ELECTRONIC Transistor as switch, single stage amplifier COMPONENTS Regulated Power Supply, Concept of SMPS. Logic Families-TTL and CMOS, their comparative study and input parameters. 168-207 Logic Gates- Study of basic Gates: AND, OR, NOT their truth table. Study of NAND, NOR, 2.LOGIC GATES EXOR gates. AND SEQUENTIAL Sequential Circuits- Flip Flop-KS, D, Toggle, JK, CIRCUITS Flip Flop, Shift Resisters, Counters, Decoders, Multiplexers, De-multiplexers. Study of System board \ motherboard layout. Study 208-220 of CPU Properties with reference to Pentium Chip. PC Memory, Types of Memory-Conventional, extended and expanded, Semiconductor memory and its types. 3. FUNCTIONAL Introduction to PC expansion Buses- What is BUS? HARDWAR Interrupts and Direct Memory Access Channels. PART OF Features of EISA, PCI and USB buses. PC. What is Controller Video adapter, Floppy disk and Hard Disk Controller Video- Video board characteristics, resolution and 221-231 color, Video monitor characteristics- Dot pitch, Horizontal Scan frequency, Multi-Sync. 4. **FERIPHERAL** DEVICES Keyboard-Keyboard Working. Mouse-types, scanner, printers-their use and types. Modem, Multimedia. SPECIMEN PAPER Specimen question Paper 232-234 PRACTICAL Guidelines, Specimen Practical 236-272