UNIT - I: HARDWARE

Evolution of Computers – Generations, Types of Computers, Computer System, Characteristics, Basic Components of a Digital Computer – Control Unit, ALU, Input / Output, Functions and Memory, Memory Addressing Capability of a CPU, Binary number system, Binary addition (1’s complement, 2’s Complement), Binary to decimal and Decimal to Binary Conversion, Octal Number, Hexadecimal System, World length of a computer, processing speed of a computer.

UNIT - II: SOFTWARE


UNIT - III: INTRODUCTION TO C PROGRAMMING

Structure of C program, Keywords, identifies, constants, variables, data types, type modifier, type conversion, types of operator and expressions, Input and Output functions in C (printf(), scanf(), getchar(), putchar(), gets(), puts()). Storage class specifiers Header files(stdin.h,math.h,conop.j)

UNIT - IV: C – DECISION / LOOP STATEMENTS

Decision Statement – if-else statement, break, continue, goto, switch() case and nested if statement.

Loop control statements – for(), while(), do-while loop() and nested loops.

LABORATORY TRAINING

Lab 1: Writing algorithms and drawing flowcharts (Input-process-output).
Lab 2: Writing algorithms and drawing flowcharts (Input-decision-process-output).
Lab 3: Writing algorithms and drawing flowcharts (Simple Loops).
Lab 4: Loading a C editor program-Entering and compiling a simple C-program.
Lab 5: C-program to input name-and sales & then print name and commission.
Lab 6: C-program to compute commission, discount etc using if() condition.
Lab 7: Computing income tax based on given criterion.
Lab 8: Printing numbers and summing number using loops.
Lab 9: Printing interest and depreciation tables.
Maximum Marks : 75
Questions to be set : 05
Duration : $1\frac{1}{2}$ Hrs.

All Questions are Compulsory Carrying 15 Marks each.

<table>
<thead>
<tr>
<th>Q.</th>
<th>Type of Question</th>
<th>Marks</th>
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| Q. 1 | Objective Questions  
A. Sub Questions to be asked 10 and to be solved any 08  
B. Sub Questions to be asked 10 and to be solved any 07  
(* Multiple choice / True or False / Match the columns) | 15    |
| Q. 2 | Full Length Question  
OR  
Full Length Question | 15 |
| Q. 3 | Full Length Question  
OR  
Full Length Question | 15 |
| Q. 4 | Full Length Question  
OR  
Full Length Question | 15 |
| Q. 5 | Full Length Question  
OR  
Short Notes  
To be asked 05  
To be answered 03 | 15 |

Note : Full length question of 15 marks may be divided into two sub questions of 08 and 07 marks.