AMHE02 PROGRAMMING IN "C"

UNIT-1 INTRODUCTION TO COMPUTER AND PROGRAMMING
1.1 Basic concepts of computer organization, CPU, Memory. I/O devices, Number Systems,

1.2 Evolution of programming languages, structured programming,

1.3 Compilation process, source code, object code, executable code,

1.4 Operating systems, interpreters, linkers, loaders, Algorithms, flow charts, pseudocode

UNIT-2 PROGRAM CONSTRUCTS
2.1 Character set, Identifiers, Keywords, Data Types,

2.2 Constant and Variables, Operators: Precedence and associativity,

2.3 Expressions, Statements, Input and Output functions,

2.4 Control structures: Branching & Looping.

UNIT-3 FUNCTIONS
3.1 Library and User defined functions,

3.2 Formal and Actual parameters, function prototypes,

3.3 Parameter passing: Call-by- value, Call-by-reference, Recursion, and Storage Classes.

UNIT-4 ARRAYS AND STRINGS
4.1 One dimensional Array,

4.2 Multidimensional Array and their applications, String Manipulation.

UNIT-5 POINTERS
5.1 Pointer variable , Pointer Arithmetic,

5.2 Passing parameters by reference, pointer to pointer, pointers to functions,

5.3 Dynamic memory allocation.

UNIT-6 STRUCTURES, UNIONS
6.1 Structures, Unions, pointer to structure & pointer to union, linked list.

UNIT-7 FILE HANDLING
7.1 Declaration of file pointer, opening and closing files,

7.2 Working with text and binary files.

UNIT-8 ADDITIONAL FEATURES:
8.1 Command line arguments, bit wise operators,

8.2 Enumerated data types, type casting, macros, and Preprocessor directives.

Reference Books:
1. Programming in C – Byron Gottfried,Third Edition, 2OlO, TMH
2. The 'C' programming language, Ritchi, Kernighan, Second Edition, 2Ol2 D.M.Ritchie.
3. Programming in ANSI C – E. Balaguruswami, Sixth Edition, TMH