

C LEARNING E CONTENT MODULE

SYLLABUS

FOR

B. SC. ELECTRONICS, S-VI

PREPARED BY

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Unit-I

Arrays and User Defined Function : One-dimensional arrays, Two-dimensional arrays, Initialization of two dimensional arrays, Concept of Multidimensional arrays.

Need for User Defined Functions, Concept Associated with Functions, Return Values and Their Types. Category of functions: No arguments and no return values, arguments but no return values, arguments with return values.

Nesting of functions, recursion, Scope and Lifetime of Variables in Function. 12 L

UNIT-II:

Structure: Basic Concept of Structure, Operations on Structure, Array of Structure,

Unions : Difference in union and Structure.

Pointers : Basic Concept of pointers, Pointer Expression, Pointers and arrays, Pointer and Character String, Pointer to Function.

UNIT-III:

File management: Introduction, Defining and Opening File, Closing a File, I/O Operations on File. Error Handling, Random Access to Files, Command Line Arguments.

Unit-IV:

Principle of Object Oriented Programming: Software evolution, Oop paradigm. Basic concept of Oop, Benefits of Oop, Application of Oop.

Introduction to C++, Applications of C++, Difference between C and C++. Tokens, Keywords, Identifiers, Constants, Variables, Basic data types.

Operators in C++ : cin, cout, new, delete, Manipulators, Operators overloading, Simple C++ programs. 12 L

Ref. Books:

1. ANSI C- Programming By Balagurusamy
2. Let us C By Kanetkar
3. C and C++ Kanetkar
4. Programming in “C” and “C++” by, Mahapatra
5. Programming in “C” by Rajaraman.