

SARDAR PATEL UNIVERSITY
Vallabh Vidyanagar
Bachelor of Computer Application
Semester – II
US02CBCA21 : Advanced C Programming
(w.e.f June 2018)

Credits : 4

Lectures per week : 4

All units carry equal weightage.

UNIT-1 : User-Defined Functions

- Introduction and need of User Defined Functions
- Components of User Defined Functions
- Categories of User Defined Functions
- Recursion

UNIT-2: Structures and Unions

- Introduction of structures
- Structures and arrays
- Structures within structures
- Structures and functions
- Unions

UNIT-3: Usage of Pointers

- Introduction, usage and understanding of pointers
- Declaration and initialization of pointer variable
- Accessing Variable through Pointer
- Chain of Pointers (Pointer to Pointer)
- Pointer arithmetic expression
- Pointers and arrays
- Pointers as function arguments
- Pointer and Structure
- Dynamic memory allocation

UNIT-4: Usage of File Handling

- Introduction to File Handling
- File Access Modes
- Input Output Operations on files
- Error Handling during I/O operations

MAIN REFERENCE BOOKS :

1. **Balaguruswami : Programming in ANSI C., Tata McGraw Hill Publication.**
2. Kernighan B., Ritchie D. : The C Programming Language, Prentice Hall, 1988
3. Cooper H. & Mullish H : The Sprit of C, Jaico Publication House, New Delhi.