



LAKSHYA INSTITUTE OF TECHNOLOGY

BCA, BSc ITM and BSc CS

Affiliated to Utkal University

SUSHANT K. ROUT

Ph - 9861093732



BASIC C Detail Syllabus

(Duration 60 hours)

Introduction

- Why C
- C standards: C89/C99
- C compiler, Operating system
- Structure of C program
- Program/Software
- Compilation and linking process
- Header files and libraries

Linux Essential

- C & Linux Relation
- Basic Linux commands
- Vi overview
- Linux installation-GCC overview
- Overview of Data types

Data types in C89/99.

- Use of each data types.
- Modifiers, qualifiers, format specifiers for C89/C99 standards
- Rules for Identifiers and symbol tables
- Memory representation of each data types with different storage class
- Memory cycle for data types.
- Constant and variables in C





LAKSHYA INSTITUTE OF TECHNOLOGY

Affiliated to Utkal University

SUSHANT K. ROUT

Ph - 9861093732

BASIC C Detail Syllabus

(Duration 60 hours)

Overview of Operators

- Rules: Precedence and associativity
- Dealing with all 45 operators and their application
- Operator notation

Overview of Control Structure

- Jump Control structure , goto
- Repetition Control structure ,for, while, do while
- Selection Control structure, switch, case
- Decision Control structure, if , else
- Sequence Control structure

Pointer

- Pointer and address
- Pointer in 16 bits and 32 bits
- How pointer works
- Application of pointer
- Function pointer, null pointer
dangling pointer, core dump

Array

- Single dimensional array
- Double dimensional array
- Array implementation

Dynamic Memory Allocation

- Implementation of heap and break pointer
- Implementation malloc, calloc, realloc





LAKSHYA INSTITUTE OF TECHNOLOGY

Affiliated to Utkal University

SUSHANT K. ROUT

Ph - 9861093732

BASIC C Detail Syllabus

(Duration 60 hours)

Function-Why function

- Function types
- Function calling conventions
- Function recursion

Storage class

- Properties and environment of storage class
- Scoping : block,function,file and program scoping
- Implementation of static, extern in extended

Preprocessor

- CPP the C preprocessor
- Application of CPP
- Types of Directives: File inclusion, macro, conditional compilation preprocessor and miscellaneous Directives

Structure and union

- Use of structure and union
- Balance structure and slack bytes
- Byte offset and Bit field of structure
- Creating message format

File

- Handling of low and high level files
- Standard libraries for File handling.

Programming I/O

- I/O Operations
- Formatted and unformatted IO
- Std.library functions for IO Devices





LAKSHYA INSTITUTE OF TECHNOLOGY

Affiliated to Utkal University

SUSHANT K. ROUT

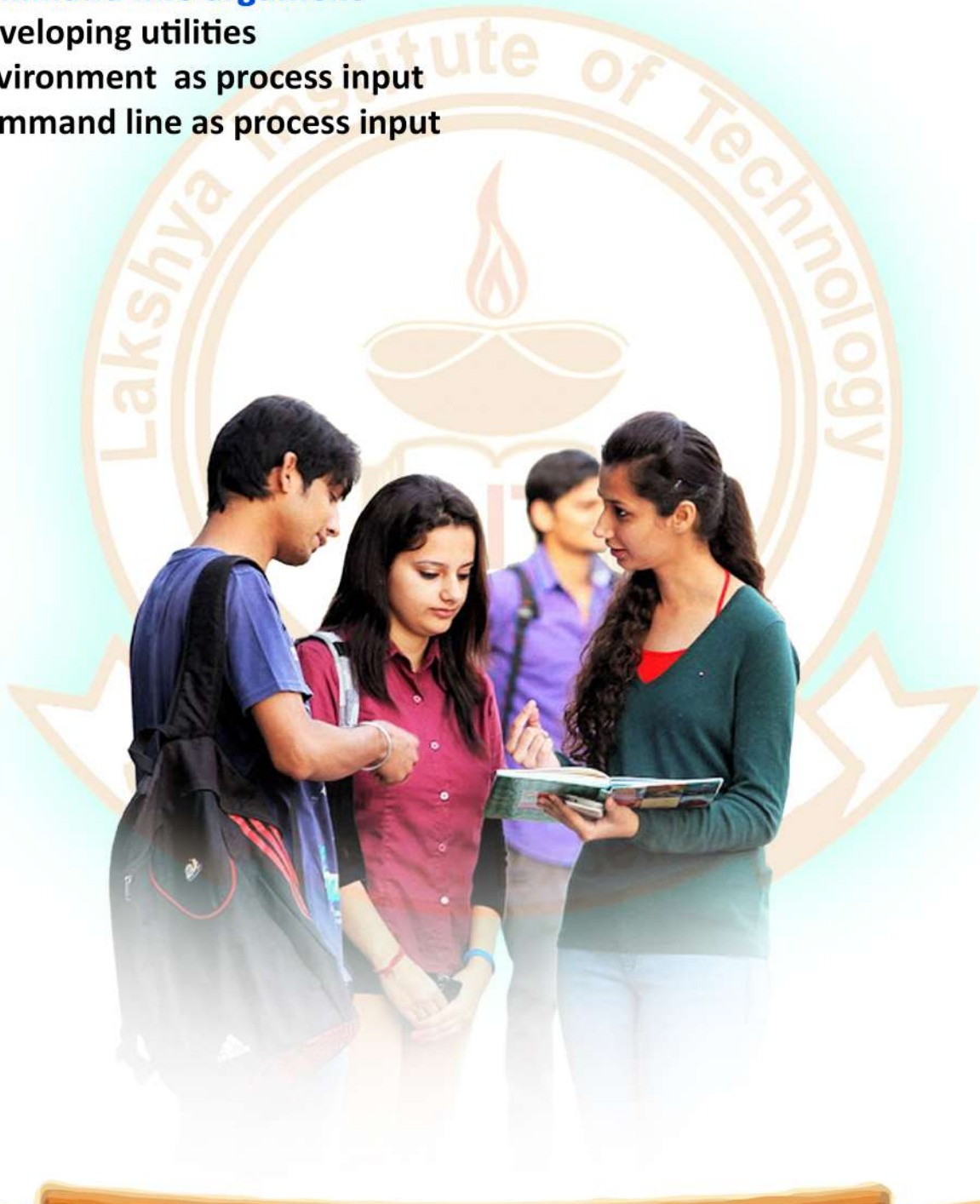
Ph - 9861093732

BASIC C Detail Syllabus

(Duration 60 hours)

Command line argument

- Developing utilities
- Environment as process input
- Command line as process input



Address: M4/46, Acharya Vihar, Bhubaneswar-751013, Odisha
Ph – 0674-2544690 , www.litindia.ac.in