

Weekly Planner for BSc I CS (Semester 2) (2017)

Subject: Computer Science

Teacher Incharge: Mr Dalbir Singh

Week	Topics
16-01-17	Paper A: Operating Systems (OS): Introduction, need of operating system and functions of operating system Paper B: Programming Process: Steps in developing of a program, Data Flow Diagram, Decision Table, Algorithm development,
23-01-17	Paper A: Types of OS: Multi-user, Multitasking, Paper B: Flowchart, Pseudo Code, Testing and Debugging
30-01-17	Paper A: Multiprocessing and Real time Operating Systems, Paper B: Fundamentals of C Languages: History of C, Character Set, Identifiers and Keywords, Constants, Types of C Constants,
06-02-17	Paper A: Parallel systems, Distributed systems; Structure of Operating System Paper B: Rules for Constructing Integer, Real and character Constants, Variables, Data Types, rules for constructing variables.
13-02-17	Paper A: Process Management: Introduction to Process, PCB, Process States Paper B: Operators and Expressions: C Instructions, Arithmetic operators, Relational operators, Logical operators, Assignment Operators,
20-02-17	Paper A: CPU Scheduling: Scheduling Criteria and Algorithms Paper B: Type Conversion in Assignments, Hierarchy of Operations, Standard and Formatted Statements, Structure of a C program , Compilation and Execution.
27-02-17	Paper A: Scheduling Algorithms: FCFS, SJF, Priority, Round Robin, Multilevel Queue Scheduling, Paper B: Decision Control Structure: Decision making with IF-statement, IF-Else and Nested IF-Else, The else if Clause.
06-03-17	Paper A: Multilevel Feedback Queue Scheduling Paper B: Loop Control Structure: While and do-while, for loop and Nested for loop. Case Control Structure: Decision using switch, The goto statement.
13-03-17	Paper A: Deadlocks: Introduction, Necessary and sufficient conditions for Deadlocks, Paper B: Functions: Library functions and user defined functions, Global and Local variables,
20-03-17	Paper A: Resource allocation graph, Introduction to methods for handling deadlocks, Paper B: Function Declaration, Calling and definition of function, Methods of parameter passing to functions, recursion, Storage Classes in C.
27-03-17	Paper A: Deadlock prevention, deadlock avoidance: Banker Algorithm, deadlock detection and recovery.

	Paper B: Arrays: Introduction, Array declaration, Accessing values in an array, Initializing values in an array, Single and Two Dimensional Arrays, Initializing a 2-Dimensional Array, Memory Map of a 2-Dimensional Array, Passing array elements to a function.
03-04-17	Paper A: Memory Management: Logical vs Physical address space, Swapping, Paper B: String Manipulation in C: Declaring and Initializing string variables, Reading and writing strings, String Handling functions (strlen(), strcpy(), strcmp(), strcat()).
10-04-17	Paper A: Introduction to Paging, Segmentation, Virtual Memory-Demand paging, Paper B: Structures and Unions: Declaration of structures, Structure Initialization, Accessing structure members,
17-04-17	Paper A: Introduction to Page Replacement algorithms: FIFO, Optimal Page replacement and LRU Paper B: Union, Difference between Structure and Union.