Programming and Data Structure

(Autumn 2018)

Week No	Week	Theory	Lab
1	July 30-Aug 3	Introduction, data types, variables and constants, operators, basic I/O, assignment	Introduction to System: Terminals, Editors, Compilers, Linux, File and directory operation
2	Aug 6-Aug 10	Expression, flowcharts, programming examples, Condition statement (if-else etc)	Introduction to Basic Programming (Assignment starts) Evaluation of expressions
3	Aug 13- Aug 17	Loop	Condition and branching: if-else, switch
4	Aug 20 – Aug 24	Arrays 1D, simple examples of searching & sorting	Iteration: for, while, do loops
5	Aug 27 – Aug 31	Functions, using arrays (1D) with functions	Arrays 1D
6	Sep 3-Sep 7	Recursion, Call by value	**Lab Test 1**
7	Sep 10 – Sep 14	Number systems	Functions, Recursive functions
8	Sep 17 – Sep 21	Mid sem	Mid sem
9	Sep 24 – Sep 26	Mid sem	Mid sem
10	Oct 1-Oct 5	Structures, array of structures, Union, Pointers Basics	Searching, Sorting
11	Oct 8-Oct 12	Pointers, parameter passing, Dynamic Memory Allocation (1D), Strings	Structures
12	Oct 15 – Oct 19	DP break	DP break
13	Oct 22 – Oct 26	Array 2D, Dynamic Memory Allocation (2D)	Pointers, Dynamic Allocation, Array 2D, Strings
14	Oct 29 – Nov 2	Linked List	**Lab Test 2**
15	Nov 5 – Nov 9	Stack, Queue, more on sorting	Linked list, stack, queue
16	Nov 12 – Nov 16	Files, Command Line Parameters,	File handling, Command line arguments