PANIPAT INSTITUTE OF ENGINEERING AND TECHNOLOGY PANIPAT DEPARTMENT OF CYBER SECURITY LESSON PLAN

Subject: Subject code: PC-CS-CYS-209A

Programming

Language

Semester 3rd

Sr.	Lecture No	Topics To BeCovered	Mode of Teach
1	L 1	A brief history Characteristics of a good programming language	White Board
2	L 2	Programming language translator's compiler and interpreters	White Board
3	L 3	Elementary data types – data objects, variable and constants	White Board
4	L 4	data types. Specification and implementation of elementary data types,	Smart Board
5	L 5	Assignment and initialization, Numeric data type enumerations Boolea	Smart Board
6	L 6	Structured data objects and data types, specification and implementatio	White Board
7	L 7	Declaration and type checking of data structure, vector and arrays	Smart Board
8	L 8	records Character strings, variable size data structures, Union, pointer	Smart Board
9	L 9	programmer defined data objects, sets, files.	White Board
10	L 10	Evolution of data type concept abstraction, encapsulation and informat	White Board
11	L 11	Subprograms, type definitions, abstract data types	White Board
12	L 12	Over loaded subprograms, generic subprograms.	Smart Board
13	L 13	Implicit and explicit sequence control,	Smart Board
14	L 14	sequence control within expressions	White Board
15	L 15	sequence control within statement,	Smart Board
16	L 16	Subprogram sequence control: simple call return	Smart Board
17	L 17	Recursive subprograms, Exception and exception hzndlers	Smart Board
18	L 18	Co-routines, sequence control	Smart Board
19	L 19	Concurrency – subprogram level concurrency, synchroniz through sem	White Board
20	L 20	Monitors and message passing.	White Board
21	L 21	Data Control: Names and referencing environment,	White Board
22	L 22	static and dynamic scope	White Board
23	L 23	block structure, Local data and local referencing environment	Smart Board
24	L 24	Shared data: dynamic and static scope	Smart Board
25	L 25	Parameter and parameter transmission schemes.	White Board
26	L 26	Storage Management and Programming Languages:	White Board
27	L 27	Major run time elements requiring storage	Smart Board
28	L 28	programmer and system-controlled storage management and phases	Smart Board
29	L 29	Static storage management	White Board

30	L 30	Stack based storage management	White Board
31	L 31	Heap storage management, variable and fixed size elements	White Board
32	L 32	Introduction to procedural, non-procedural	Smart Board
33	L 33	structured, logical	Smart Board
34	L 34	functional and object-oriented programming language	Smart Board
35	L 35	Comparison of C and C++ programming languages	White Board

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