Netaji Subhash Chander Bose Memorial Govt. College, Hamirpur, Himachal Pradesh

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School of Computer Applications

Teaching Plan Odd Semester Session (2024-2025)

Class: PGDCA -1st Semester **Name of the Teacher: Prof. Sushil Kumar**
Subject: Fundamentals of Programming Using C **Period: 1st (09:30AM-10:10AM)**
Course Code: DCS 101 **Room No: PGDCA**

S. No	Aims to be completed	Topics to be covered
Week 1	10-08-2024	Orientation and introduction about the subject
	12-08-2024 to 17-08-2024	Programming Tools: Problem analysis, Program constructs (sequential, decision, loops), Algorithm, Flowchart, Pseudo code
Week 2	19-08-2024 to 24-08-2024	Decision table, Modular programming, Top Down and Bottom up approaches, Concept of High Level Languages, Low Level
Week 3	26-08-2024 to 31-08-2024	Languages, Assembly Languages, Compiler, Interpreter, Type of errors
Week 4	02-09-2024 to 07-09-2024	General structure of C Program. Data types, Operators and expressions: Constants and Variables
Week 5	09-09-2024 to 04-09-2024	Data types, Declaring Variables, Storage Classes, Different types of expressions and their Evaluation, Conditional Expression, Assignment statement
Week 6	16-09-2024 to 21-09-2024	Enumerated data type, Redefining/ Creating data types, Library functions, Type casting. Input/Output: Unformatted and formatted I/O Functions (Character and strings I/O, Scanf ( ), Printf ( ))
Week 7	23-09-2024 to 28-09-2024	Control Statements: Decision making using if, if-else, elseif and switch statements, Looping using for, while and do-while statements
Week 8	30-09-2024 to 05-10-2024	Transferring Program controlling break and continue statements, Programming examples to illustrate the use of these control statements
Week 9	07-10-2024 to 12-10-2024	Pointers: Definition, Need of pointers, declaring Pointers, Accessing Values via Pointers, Pointer arithmetic, Types of pointers. Array & strings: Introduction to arrays, Declaring arrays, Initializing arrays
Week 10	14-10-2024 to 19-10-2024	Processing arrays, Pointers to arrays, Passing arrays as arguments to functions, Introduction to strings, Pointers to strings, Passing strings and Arrays of strings as arguments to a function, Programming examples to illustrate the use of arrays and strings

Week 11	21-10-2024 to 28-10-2024	Functions: Defining a function, Local variables, return statement, invoking a Function, specifying and passing arguments to a function
Week 12	29-10-2024 to 02-11-2024	**Diwali Break**
Week 13	04-11-2024 to 09-11-2024	Functions returning non Integer, External, static, and register variable, block structure, initialization and recursion
Week 14	11-11-2024 To 16-11-2024	Structures: Declaring a structure type, Declaring Variables of structure type, Initializing Structures
Week 15	18-11-2024 To 23-11-2024	Accessing Elements of structures, arrays of structures, nested structures, Pointers to structures
Week 16	25-11-2024 To 30-11-2024	Revision round and overview of entire syllabus of C