**PG.GOVT COLLEGE FOR GIRLS, SECTOR-42, CHANDIGARH**

**Teaching Plan Session Odd Semester**

**(2018-19)**

**Class: BCA 1ST SEM Name of the Teacher: Sonika**

**Subject: Problem solving through C Period :**

**Paper : Room No :**

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| **S. No** | **Date From** | | **Date Upto** | **Topics to be covered** |
| Week 1 | **(For ongoing classes)** | | | Steps in developing of a program, Data Flow Diagram, Decision  Table, Algorithm development, Flowchart, Pseudo Code, Testing and Debugging. |
| July 24, 2018 | | July 28, 2018 |
| Week 2 | July 30, 2018 | August 4, 2018 | | History of C, Character Set, Identifiers and Keywords, Constants, Types of C Constants, Rules for Constructing Integer, Real and character Constants, Variables, Data Types, rules for constructing variables. |
| Week 3 | August 6, 2018 | August 11, 2018 | | C Instructions, Arithmetic operators, Relational operators, Logical operators, Assignment Operators, Type Conversion in Assignments, Hierarchy of Operations, Standard and Formatted Statements, Structure of a C program , Compilation and Execution. |
| Week 4 | August 13, 2018 | August 18, 2018 | | Decision making with IF-statement, IF-Else and Nested IF-Else, The else if Clause. Loop Control Structure:  While and do-while, for loop and Nested for loop, |
| Week 5 | August 20, 2018 | August 25, 2018 | | Decision using switch, The goto statement. Functions:Library functions and user defined functions, Global and Local variables. |
| Week 6 | August 27, 2018 | September 1, 2018 | | Function Declaration, Calling and definition of function, Methods of parameter passing to functions, recursion, Storage Classes in C. |
| Week 7 | September 3, 2018 | September 8, 2018 | | Introduction, Array declaration, Accessing values in an array, Ini  tializing values in an array |
| Week 8 | September 10, 2018 | September 15, 2018 | | Single and Two Dimensional Arrays  Initializing a 2-Dimensional Array,  Memory Map of a 2-Dimensional Array, Passing array elements to a function: Call by value and call  by reference |
| Week 9 | September 17, 2018 | September 22, 2018 | | Arrays of characters, Insertion and deletion operations, |
| Week 10 | September 24, 2018 | September 29, 2018 | | Using matrices in arrays, Passing an Entire Array to a Function  . |
| Week 11 | October 1, 2018 | October 8, 2018 | | Pointer declaration, Address operator “&”, Indirection operator “\*”,  Pointer and arrays. |
| **MID SEMESTER EXAMINATION (October 11, 2018 to October 17, 2018)** | | | | |
| Week 12 | October 20, 2018 | October 27, 2018 | | Pointers and 2-Dimensional Arrays,  Pointer to an Array |
| Week 13 | October 29, 2018 | November 3, 2018 | | malloc(), calloc(), realloc(), free() functions. |
| Week 14 | November 5, 2018 | November 10, 2018 | | Declaring and Initializing string variables, Reading and writing  strings,StringHandlingfunctions(strlen(), strcpy(), strcmp(), strcat()). |
| Week 15 | November 12, 2018 | November 17, 2018 | | Declaration of structures, Structure Initialization, |
| Week 16 | November 19, 2018 | November 22, 2018 | | Arrays of structure, Nested structures, Structure with pointers |
| Week 17 | November 26, 2018 | December 1, 2018 | | Introduction,Opening and Closing files, Basic I/O operation on files. |