

G.G.N.J.Govt.Polytechnic, Jhajjar

Lesson Plan

Name of the Faculty : SHAKTI RAJ SINGH
Discipline : Computer Engineering
Semester : 3rd
Subject : Programming in C (PIC)
Lesson Plan Duration : 15 weeks (04.08.25 to 26.11.25), Periods/Week -L-3, P-4

| Week | Theory | | Practical | |
|-----------------|--------|--|-----------|---|
| | Day | Topic(including assignment/test) | Day | Topic (4 labs /week) |
| 1 st | 1 | Steps in development of a program, | 1 | Program on executing and editing a C program. |
| | 2 | Flowcharts, Algorithm development | | |
| | 3 | Program Debugging ,I/O statements, Constants, variables | 2 | Program on defining variables and assigning values to variables. |
| 2 nd | 4 | datatypes, Operators & Expressions, | 3 | Program on arithmetic and relational operators. |
| | 5 | Unformatted and Formatted IOS, DataType Casting | | |
| | 6 | Decision making with IF –statement, IF– Else and Nested IF | 4 | Hands on Practice |
| 3 rd | 7 | While and do-while loop | 5 | Program on arithmetic expressions and their evaluation. |
| | 8 | for loop, Break, Continue statements | | |
| | 9 | Goto and switch statements | 6 | Program on formatting input/output using printf and scanf and their Return type values. |
| 4 th | 10 | Introduction to pointers, Address operator And pointers | 7 | Hands on Practice |
| | 11 | Declaring and initializing pointers, Single pointer, | | |
| | 12 | Introduction to functions | 8 | Program using if-statement. |
| 5 th | 13 | Function Declaration, calling, definition | 9 | Program using if– Else. |
| | 14 | Parameter Passing, Call-by value/reference, | | |
| | 15 | Global and Local Variables | 10 | Program on switch-statement. |
| 6 th | 16 | Revision | 11 | Hands on Practice |
| | 17 | Revision | | |
| | 18 | Sessional I | 12 | Hands on Practice |
| 7 th | 19 | Introduction to Arrays, Array Declaration, Length of array | 13 | Program on do-while loop |
| | 20 | Single dimensional array | | |
| | 21 | Multidimensional array | 14 | Program on for-loop |

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| 8 th | 22 | Arrays of characters | 15 | Simple program using pointers. |
| | 23 | Introduction of Strings,String declaration and definition | | |
| | 24 | String related functionS i.e. strlen, strcpy, strcmp | 16 | Program on one-dimensional array. |
| 9 th | 25 | Passing an array to function | 17 | Hands on Practice |
| | 26 | Pointers to anarray and strings. | | |
| | 27 | Declaration of structures, Accessing Structure members | 18 | Program on two-dimensional array. |
| 10 th | 28 | Revision | 19 | Hands on Practice |
| | 29 | Revision | | |
| | 30 | Sessional2 | 20 | Hands on Practice |
| 11 th | 31 | Structure Initialization | 21 | Program for putting two strings together. |
| | 32 | Pointer to a structures, | | |
| | 33 | Unions | 22 | Program for comparing two strings. |
| 12 th | 34 | ClassTest | 23 | Simple program using functions |
| | 35 | Opening of File | | |
| | 36 | Closing of File | 24 | Hands on Practice |
| 13 th | 37 | Modes of Accessing Files | 25 | Simple program using structures. |
| | 38 | Reading the File | | |
| | 39 | Writing in the File | 26 | Hands on Practice |
| 14 th | 40 | Class test | 27 | Simple program using union. |
| | 41 | Revision of Unit1 | | |
| | 42 | Revision of Unit2 | 28 | Program on Reading and Writing data to a file. |
| 15 th | 43 | Revision of Unit3 | 29 | Hands on Practice |
| | 44 | Revision of Unit4 | | |
| | 45 | Sessional3 | 30 | Hands on Practice |