Name of Faculty :Er. Varsha Rani Discipline :ME,EE,ECE,FT

Semester **:2nd** 

:Programming for Problem Solving :JAN2024-JUNE 2024 **Subject** 

**Lesson Plan Duration** 

Work Load (Lecture/Practical) per week (in hours): Lectures-04hours

|                | Theory   |      | Topic Covered Date and Remarks |                        |  |  |
|----------------|--|------|--------------------------------|------------------------|--|--|
| Lecture<br>Day | Topic (Including Assignment/Test)                          | Date | Hod                            | Director-<br>principal |  |  |
| 1              | Introduction to programming Language                       |      |                                |                        |  |  |
| 2              | Introduction to computer components                        |      |                                |                        |  |  |
| 3              | Disk ,Memory,Processor, where a program store and executed |      |                                |                        |  |  |
| 4              | Operatng system,Compiler / Basic structure of c program    |      |                                |                        |  |  |
| 5              | Number system(binary ,octal,hexadecimal)                   |      |                                |                        |  |  |
| 6              | Tokens ,keywords, identifiers                              |      |                                |                        |  |  |
| 7              | Algorithm and its Representation                           |      |                                |                        |  |  |
| 8              | Flowchart/Pseudocode with example                          |      |                                |                        |  |  |
| 9              | Source code, Variables and its declaration                 |      |                                |                        |  |  |
| 10             | Syntax and logical error                                   |      |                                |                        |  |  |
| 11             | Object and executable code                                 |      |                                |                        |  |  |
| 12             | Airthmatic expressions and precedence                      |      |                                |                        |  |  |
| 13             | Conditional Branching if , else                            |      |                                |                        |  |  |
| 14             | Looping  |      |                                |                        |  |  |
| 15             | Introduction to array                                      |      |                                |                        |  |  |
| 16             | One dimensional array, two dimensional array               |      |                                |                        |  |  |
| 17             | Character Array  |      |                                |                        |  |  |
| 18             | Introduction to String with example                        |      |                                |                        |  |  |
| 19             | Read and write operation on string                         |      |                                |                        |  |  |
| 20             | Basic searching and sorting algorithm                      |      |                                |                        |  |  |
| 21             | linear search with example                                 |      |                                |                        |  |  |
| 22             | Binary search with example                                 |      |                                |                        |  |  |
| 23             | Insertion sort algo with example                           |      |                                |                        |  |  |
| 24             | Selection sort algorithm with example                      |      |                                |                        |  |  |
| 25             | Bubble sort algorithm with example                         |      |                                |                        |  |  |
| 26             | Function(including built in libraries)                     |      |                                |                        |  |  |
| 27             | Parameter passing, in functions                            |      |                                |                        |  |  |
|                | Ist Minor Test   |      |                                |                        |  |  |
| 28             | Call by reference  |      |                                |                        |  |  |
| 29             | call by value  |      |                                |                        |  |  |
| 30             | Recursion example program                                  |      |                                |                        |  |  |
| 31             | Finding factorial and Fibonacci series                     |      |                                |                        |  |  |
| 32             | Merge sort algorithm with example                          |      |                                |                        |  |  |
| 33             | Quick sort algorithm with example                          |      |                                |                        |  |  |
| 34             | Structure introduction                                     |      |                                |                        |  |  |
| 35             | Intalization and declaration of structure                  |      |                                |                        |  |  |
| 36             | Array of structure with programming example                |      |                                |                        |  |  |
| 37             | Pointers, idea of pointers                                 |      |                                |                        |  |  |
| 38             | Defining and declaration pointer                           |      |                                |                        |  |  |
| 39             | Use of pointer in self referential structure               |      |                                |                        |  |  |
| 40             | Notion of linked list                                      |      |                                |                        |  |  |
| 41             | File handling  |      |                                |                        |  |  |
| 42             | Read and write operation on file                           |      |                                |                        |  |  |
| 43             | 2nd Minor Test   |      |                                |                        |  |  |

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