**Lesson Plan**

**Name ofFaculty : Ms. ArushiBansal, Assistant Professor ofCSE**

**Discipline : Computer Science andEngineering**

**Semester : 1st(ODD)**

**Subject : Programming for Problem Solving (ESC/3-T)**

**LessonPlanDuration : 15 weeks**

**Work Load (Lecture/Practical) per week (in hours): Lectures-03hours**

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| **Week** | **Theory** | | **Topic Covered Date and Remarks** | | |
| **Lecture- Day** | **Topic (Including Assignment/Test)** | **Date** | **HOD** | **Director- Principal** |
| 1 | Introduction to component of Computer System |  |  |  |
| 2 | Idea of Algorithm |  |  |  |
| 4 | Representation of Algorithm |  |  |  |
| 2nd | 5 | Algorithm to programs, Expressions |  |  |  |
| 7 | Arithmetic precedence |  |  |  |
| 8 | Conditional branching |  |  |  |
| 3rd | 9 | Conditional loops |  |  |  |
| 11 | Iteration and loops |  |  |  |
| 12 | Introduction of Arrays |  |  |  |
| 4th | 13 | 1-D array |  |  |  |
| 14 | 2 – D array |  |  |  |
| 16 | String |  |  |  |
| 5th | 17 | Basic searching |  |  |  |
| 18 | Sorting algorithm |  |  |  |
| 20 | Finding roots of equation |  |  |  |
| 22 | Functions |  |  |  |
| 23 | Parameter passing in function |  |  |  |
| 24 | Call by value, Call by reference |  |  |  |
| 7th |  | **1stMinor Test** | | |  |
| 8th | 26 | Recursion |  |  |  |
| 27 | Finding factorial |  |  |  |
| 28 | Fibonacci series |  |  |  |
| 9th | 29 | Number System |  |  |  |
| 31 | Number System |  |  |  |
| 32 | Structures |  |  |  |
| 10th | 33 | Defining structure |  |  |  |
| 35 | Array of structure |  |  |  |
| 36 | Problem and solution |  |  |  |
| 11th | 37 | Idea of pointers |  |  |  |
| 38 | Defining pointer, Use of pointer in structure |  |  |  |
| 40 | Notion of linked list |  |  |  |
| 12th | 41 | Problem and solution |  |  |  |
| 43 | File handling |  |  |  |
| 44 | Program with help of pointer |  |  |  |
| 13th | 45 | Program on searching |  |  |  |
| 46 | Program on sorting |  |  |  |
| 47 | Program on array |  |  |  |
| 14th |  | **2ndMinor Test** | | |  |
| 15th | 49 | Problem on unit 1 |  |  |  |
| 50 | Problem on unit 2 |  |  |  |
| 51 | Problem on unit 3 |  |  |  |