**19CS11P1 - PROGRAMMING FOR PROBLEM SOLVING LABORATORY**

(Common to all Branches)

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| **Course Category:** | | Program Core | | **Credits:** | 1.5 |
| **Course Type:** | | Practical | | **Lecture-Tutorial- Practice:** | 0 - 0 - 3 |
| **Prerequisite:** | | Basic mathematical knowledge to solve problems and computer fundamentals | | **Sessional Evaluation:**  **External Evaluation :**  **Total Marks:** | 40  60  100 |
| **Course**  **Objectives** | Students undergoing this course are expected: | | | | |
| To learn the C programming constructs and its implementation | | | | |
| **Course Outcomes** | Upon successful completion of the course , the students will be able: | | | | |
| CO1 | | To Solve problems using C programming concepts | | |
| **Course**  **Content** | **LIST OF EXPERIMENTS**   1. To evaluate expressions. 2. To implement if constructs. 3. To implement Switch statement. 4. To implement all iterative statements. 5. To implement Arrays. 6. To implement operations on Strings without using Library functions. 7. To implement arithmetic operations using pointers. 8. Implement both recursive and non-recursive functions. 9. To implement parameter passing techniques. 10. To implement Structures. 11. To implement basic File operations. | | | | |
| **Text Books and Reference Books** | **TEXT BOOK(S):**   1. Programming with ANSI & TURBO C by Ashok N.Kamthane, Pearson Education 2007   **REFERENCE BOOKS:**   1. A Book on C by Al Kelley/Ira Pohl, Fourth Edition, Addison-Wesley.1999 2. Let Us C by [Yashavant Kanetkar,](http://www.amazon.in/s/ref=dp_byline_sr_book_1?ie=UTF8&field-author=Yashavant+Kanetkar&search-alias=stripbooks) BPB Publications. 3. Programming in ANSI C by Balaguruswamy 6th Edition, Tata McGraw Hill Education, 2012 | | | | |

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| Contribution of Course Outcomes towards achievement of Program Outcomes (3-High, 2-Medium, 1-Low) | | | | | | | | | | | | | | |
|  | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 |
| CO1 | 3 | 3 | 2 | - | 3 | 3 | - | - | - | - | 3 | 2 | 3 | 3 |
| CO2 | 3 | 3 | 2 | - | 3 | 2 | - | - | - | - | 3 | 3 | 2 | 3 |
| CO3 | 3 | 3 | 3 | - | 3 | 2 | - | - | - | - | 2 | 3 | 3 | 2 |
| CO4 | 3 | 3 | 2 | - | 3 | 3 | - | - | - | - | 2 | 2 | 3 | 2 |
| CO5 | 3 | 3 | 2 | - | 2 | 2 | - | - | - | - | 3 | 2 | - | 3 |
| CO6 | 3 | 3 | 2 | - | 2 | 2 | - | - | - | - | 3 | 2 | 3 | 2 |