# 20CS11P1 - PROGRAMMING FOR PROBLEM SOLVING LABORATORY

(Common to all Branches)

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| **Course Category:** | Professional Core | **Credits:** | 1.5 |
| **Course Type:** | Practical | **Lecture - Tutorial - Practical:** | 0-0-3 |
| **Prerequisite:** | Basic mathematical knowledge to solve problems and computer fundamentals. | **Sessional Evaluation:****Univ. Exam Evaluation:****Total Marks:** | 4060100 |
| **Objectives** | Students undergoing this course are expected:* To learn the C programming constructs and their implementation.
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| **Course Outcomes** | Upon successful completion of the course, the students will be able: |
| CO1 | To solve problems using C programming concepts. |
| **Course Content** | Note: Implement all in Windows & Linux environments.LIST OF EXPERIMENTS1. To evaluate expressions.
2. To implement if constructs.
3. To implement Switch statement.
4. To demonstrate 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. Demonstrate parameter passing techniques.
10. To implement Structures.
11. To implement basic File operations.
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| **Text Books and References** | Text Books:1. Programming with ANSI & TURBO C by Ashok N. Kamthane, Pearson Education 2007.
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| Reference Books:1. A Book on C by Al Kelley/Ira Pohl, Fourth Edition, Addison-Wesley.1999
2. Let Us C by Yashavant Kanetkar, BPB Publications.
3. Programming in ANSI C by Balaguruswamy 6th Edition, Tata McGraw Hill Education, 2012
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**CO-PO Mapping:** 3-High Mapping, 2-Moderate Mapping, 1-Low Mapping, - -Not Mapping

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|   | **PO1** | **PO2** | **PO3** | **PO4** | **PO5** | **PO6** | **PO7** | **PO8** | **PO9** | **PO10** | **PO11** | **PO12** |
| **CO1** | - | - | 3 | - | - | - | 1 | 3 | - | - | - | 3 |