**Mathematics Practical**
**[CORE COURSE]**

| Semester: I | Credits:1.5 | Subject Code: BSP12010 | Lectures: 36 |
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| Course Outcomes: |
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**At the end of this course, the learner will be able to:**
- Construct a solid foundation in the field of programming handling various mathematical concepts using 'C' Programming.
- Write C- Programs more efficiently with the help of various mathematical problems.

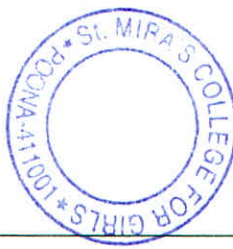| Unit 1: Practical 1 | 4 |
|---|---|
| • C- Program <br> Sorting of points w.r.t an oblique line in the plane. | |

| Unit 2: Practical 2 | 4 |
|---|---|
| • C- Program <br>   o Intersection of two line segments. | |

| Unit 3: Practical 3 | 4 |
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| • C- Program <br>   o Area of convex polygon. | |

| Unit 4: Practical 4 | 4 |
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| • C- Program <br>   o Problems based on Euclidean Algorithm. (Find GCD and using GCD <br>   o formula find LCM) | |

| Unit 5: Practical 5 | 4 |
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| • C- Program <br>   o Problems based on Fermat's Theorem. | |

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| Chairperson (HoD) | Ms. Gitanjali Phadnis | G.M.Phadnis |

| Unit 6: Practical 6 | 4 |
|---|---|
| • C- Program<br>     o Sorting of points w.r.t rectangle whose sides are parallel to the coordinate axes.. | |

| Unit 7: Practical 7 | 4 |
|---|---|
| • C- Program<br>     o Sorting of points w.r.t. parallelepiped whose sides are parallel to the co- ordinate axes | |

| Unit 8: Practical 8 | 4 |
|---|---|
| • C- Program<br>     o Sorting of points w.r.t a convex polygon. | |

| Mini Project. |
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| Board Of Studies | Name | Signature (in white cell) | |
|---|---|---|---|
| Chairperson (HOD) | Ms. Gitanjali Phadnis | G.M.P.Phadnis 01/8/2020 | |
| Faculty | Ms. Vrushali Paranjpe | | Paranjpe 1/8/2020 |
| Subject Expert (Outside SPPU) | Dr. Machchhindra Gophane | 1/8/2020 | |
| Subject Expert (Outside SPPU) | Dr. Prashant Malavadkar | | 01-08-2020 |
| VC Nominee | Dr. Vinayak Joshi | Joshi 1/8/2020 | |
| Industry Expert | Mr. Anup Manakeshwar | | Manakeshwar AB 01-08-2020 |
| Alumni | Ms.Jyoti Sharma | Jyoti 01/08/2020 | |

| Board Of Studies | Name | Signature |
|---|---|---|
| Chairperson (HoD) | Ms. Gitanjali Phadnis | G.M.P.Phadnis |