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| Subject Code:2SC100224 | Subject Title: Business Mathematics-II |
| Course Type: Subject Elective | |

Course Objective:

This course is designed to enable students to acquire the understanding the application of Co-ordinate Geometry and Reduction formula.

| Teaching scheme (hours) per week | | Credit | | | Theory Marks | | Practical Marks | | Total |
|----------------------------------|-----------|--------|-----------|-------|-----------------|------------------|-----------------|------------------|-------|
| Theory | Practical | Theory | Practical | Total | Uni. Assessment | Cont. Assessment | Uni. Assessment | Cont. Assessment | |
| 2 | -- | 2 | -- | 2 | 35 | 15 | -- | -- | 50 |

| Subject Contents | | | | | | | |
|---|--|--------------|------------------------|---|---------------------------------|----|----|
| Unit No. | Topic | Total Hours | Weight (%) | | | | |
| 1 | Co-ordinate Geometry: Co-ordinate of a point, slope, and intercepts of a line joining two points, equation of a straight line, Derive the different forms of equation of a straight line. <table border="1" style="width: 100%; margin-top: 10px;"> <tr> <td style="text-align: center;">$y = mx + c$</td> <td style="text-align: center;">$y - y_1 = m(x - x_1)$</td> </tr> <tr> <td style="text-align: center;">$\frac{y - y_1}{y_1 - y_2} = \frac{x - x_1}{x_1 - x_2}$</td> <td style="text-align: center;">$\frac{x}{a} + \frac{y}{b} = 1$</td> </tr> </table> | $y = mx + c$ | $y - y_1 = m(x - x_1)$ | $\frac{y - y_1}{y_1 - y_2} = \frac{x - x_1}{x_1 - x_2}$ | $\frac{x}{a} + \frac{y}{b} = 1$ | 15 | 25 |
| $y = mx + c$ | $y - y_1 = m(x - x_1)$ | | | | | | |
| $\frac{y - y_1}{y_1 - y_2} = \frac{x - x_1}{x_1 - x_2}$ | $\frac{x}{a} + \frac{y}{b} = 1$ | | | | | | |
| 2 | Integration: Reduction formula: $\int_0^{\frac{\pi}{2}} \sin^n \theta d\theta, \int_0^{\frac{\pi}{2}} \cos^n \theta d\theta, \int_0^{\frac{\pi}{2}} \sin^m \theta \cos^n \theta d\theta, m, n \in N.$ | 15 | 25 | | | | |

Course Outcome:

- After successfully completion of the course, the student will be able to ...
- Know about the Co-ordinate Geometry.
- Understanding the application of Reduction formula.

List of References:

- 1) Business Statistics, by Sudhir Prakashan, Ahmedabad.
- 2) Hooda R.P.: Statistics for Business and Economics, Macmillan, New Delhi.
- 3) Levin and Rubin: Statistics of Management, Prentice-Hall of India, New Delhi.
- 4) Mathematics, by Nirav Prakashan, Ahmedabad.