

## Syllabus for CA-I

**Unit I: Random Variables and Probability Distributions:** Discrete and continuous random variables and their distribution functions, Joint probability distributions, Mean, variance and covariance of random variables, Chebyshev's theorem (without proof).

**Unit II: Correlation and Linear regression:** scatter plots, correlation coefficient and its properties, Karl Pearson's correlation coefficient, Spearman's rank correlation coefficient, Linear regression and its properties.

### ***Read the instructions:***

1. CA-I will be on 19 Feb (Group 1)(Time 09-10pm), 20 Feb, 2025 (Group 2)(Time 12-01pm) in the regular scheduled tutorial class.
2. Time duration will be 45 minutes.
3. It will be objective in nature containing 15 MCQs (2 mark each).
4. 25% negative marking will be there.
5. *During the CA, no one is allowed to keep mobile, smartwatch with him or herself. Failing so, CA will be cancelled and zero marks will be awarded.*
6. Bring your own calculator. No sharing is allowed.