

**Anekant Education Society's
Tuljaram Chaturchand College of Arts, Science and
Commerce, Baramati**

**Autonomous
Department of Statistics**

**Certificate Course in
Statistics for Management Studies**

Course Syllabus

Course Objectives:

- Demonstrate their understanding of descriptive statistics by practical application of quantitative reasoning and data visualization.
- To cultivate statistical thinking among students.
- To provide students the knowledge of optimization techniques and approaches.
- To enable the students apply mathematical, computational and communication skills needed for the practical utility of Operations Research.
- To introduce students to research methods and current trends in Operations Research

Course Outcomes:

Students should be able to:

- CO1. demonstrate their ability to calculate and interpret descriptive statistics such as mean, median, mode, variance, and standard deviation.
- CO2. apply quantitative reasoning to analyze and interpret data, using appropriate statistical methods.
- CO3. create and interpret various data visualizations (e.g., histograms, box plots, scatter plots) to represent and analyze statistical data.
- CO4. cultivate statistical thinking, enabling them to approach problems analytically and use data-driven decision-making processes.
- CO5. understand and apply optimization techniques, such as linear programming, to solve real-world decision-making problems.
- CO6. demonstrate their ability to use mathematical, computational, and communication skills to address practical problems in operations research.
- CO7. apply their knowledge of operations research and optimization techniques to real-world applications, improving efficiency and problem-solving skills in various industries.



Unit No.	Contents	Credit: 02	
		No. of Periods/Hours	
I	Population and sample, sampling methods, measures of central tendency, measures of dispersion	8	
II	Correlation and regression	8	
II	Linear programming problem and Assignment problem	8	
IV	Transportation problem	8	
Total		32	

Mode of Evaluation:

1. Written Online Examination

