



DANTULURI NARAYANA RAJU COLLEGE

(Autonomous)

BHIMAVARAM, W.G.DIST, ANDHRA PRADESH, INDIA, PIN- 534202.

(Accredited at 'B⁺⁺' level by NAAC)

(Affiliated to Adikavi Nannaya University, Rajamahendravaram)

STATISTICS

SEMESTER –I

COURSE-I: DESCRIPTIVE STATISTICS

CO	COURSE OUTCOMES	LEVEL
CO1	Students can categorize the various areas such as Medical, Engineering, Agricultural and Social Sciences.	L4
CO2	Distinguish various types of data, their organization and evaluation of summary measures.	L4
CO3	Identify different forms of quality characteristics including concept of independence and association between two attributes.	L4
CO4	Summarize General characters preliminary exploration of different types of data .	L5
CO5	Identify general characters, Describe the regression analysis, partial and multiple correlation	L3

COURSE-I: DESCRIPTIVE STATISTICS –PRACTICAL

CO	COURSE OUTCOMES	LEVEL
CO1	Identify different types of data.	L2
CO2	Point out various areas in collection of data.	L4
CO3	Differentiate reflecting quality characteristics.	L4
CO4	Draw/Sketch measures of graphical data.	L3
CO5	Demonstrate preliminary exploration of data.	L3

SEMESTER –II

COURSE-II: PROBABILITY THEORY AND DISTRIBUTIONS

CO	COURSE OUTCOMES	LEVEL
CO1	Discriminates various types of random variables and their Probability distributions.	L4
CO2	Describe characteristics of random and non random experiments including their concepts.	L2
CO3	Construct discrete and continuous random variables and their distribution .	L3
CO4	Describe the characteristics and recognize the distribution importance.	L3
CO5	Classify different types of Binomial, Poisson, Geometric, Negative Binomial and Normal distribution.	L4



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COURSE-II: PROBABILITY THEORY AND DISTRIBUTIONS –PRACTICAL

CO	COURSE OUTCOMES	LEVEL
CO1	Sketch diagrams of random experiments.	L3
CO2	Prepare probability distributions.	L3
CO3	Relate discrete with continuous distributions .	L3
CO4	Survey Various probability distributions.	L4
CO5	Discriminates standard discrete and continuous probability distributions.	L5

SEMESTER –III

COURSE-III: STATISTICAL INFERENCE

CO	COURSE OUTCOMES	LEVEL
CO1	Explain different aspects of estimation and hypothesis.	L4
CO2	Summarize the development of inferences from Binomial, Poisson and Normal distributions.	L5
CO3	Construct parametric and non parametric tests..	L3
CO4	Measure inferential aspects of estimation and hypothesis.	L5
CO5	Explain and Recognize the importance of parametric tests.	L4

COURSE-III: STATISTICAL INFERENCE –PRACTICAL

CO	COURSE OUTCOMES	LEVEL
CO1	Differentiate discrete and continuous distributions.	L4
CO2	Identify parametric and non parametric tests.	L2
CO3	Categorize tests of hypothesis.	L4
CO4	Select important aspects of estimation.	L3
CO5	Write the uses of central limit theorem.	L6

SEMESTER –IV

COURSE-IV: SAMPLING TECHNIQUES AND DESIGN OF EXPERIMENTS

CO	COURSE OUTCOMES	LEVEL
CO1	Explain sampling schemes.	L4
CO2	Construct the design of experiment..	L3
CO3	Compare one way and two way analysis of variance.	L4
CO4	Classify various designs.	L4
CO5	Generalize various design of experiments.	L6



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COURSE-IV: SAMPLING TECHNIQUES AND DESIGN OF EXPERIMENTS –PRACTICA

CO	COURSE OUTCOMES	LEVEL
CO1	Calculate values of variance ratio .	L3
CO2	Measure various sampling schemes	L5
CO3	Separate ANOVA tables.	L4
CO4	Estimate sampling schemes	L5
CO5	Survey samples.	L4

COURSE-V: APPLIED STATISTICS

CO	COURSE OUTCOMES	LEVEL
CO1	Distinguish components of time series.	L2
CO2	Explain problems of index numbers.	L2
CO3	Identify different types of index numbers.	L2
CO4	<i>Illustrate</i> various demographic concepts .	L3
CO5	Discuss various mortality and fertility rates.	L2

COURSE-V: APPLIED STATISTICS –PRACTICA

CO	COURSE OUTCOMES	LEVEL
CO1	Solve trend problems.	L3
CO2	Experiment process of various mortality and fertility rates.	L3
CO3	Point out populations projections.	L4
CO4	Identify simple and weighted index numbers.	L2

SEMESTER –V

COURSE-VI: OPERATIONS RESEARCH - I

CO	COURSE OUTCOMES	LEVEL
CO1	Identify real life problems.	L2
CO2	Construct mathematical problems.	L3
CO3	Identify solutions to the problems.	L4
CO4	Relate logical thinking.	L3
CO5	Explain business environment.	L4



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COURSE-VI: OPERATIONS RESEARCH – I –PRACTICAL

CO	COURSE OUTCOMES	LEVEL
CO1	Analyze feasible solutions.	L3
CO2	Identify mathematical problems.	L2
CO3	Explain techniques with business.	L4
CO4	Prepare primal and dual models.	L3

COURSE-VII: OPERATIONS RESEARCH - II

CO	COURSE OUTCOMES	LEVEL
CO1	Understand the problems in logistics.	L2
CO2	Explain problems having space constraints.	L2
CO3	Explain adequate usage of human resources.	L3
CO4	Prepare most plausible solutions.	L6
CO5	Identify various problems in industry.	L2

COURSE-VII: OPERATIONS RESEARCH - II-PRACTICAL

CO	COURSE OUTCOMES	LEVEL
CO1	Understand the process of transportation problems.	L2
CO2	Construct sequencing problems.	L3
CO3	Discriminate different game strategies..	L2
CO4	Prepare net work - critical path.	L3