

Subject: Discriptive Statistics & Probability Paper code: ST121

Month	No. of Teaching days	Topics to be covered	No. of classes per topic
JULY	18	UNIT II	
		Introduction of Statistics	1
		Measures of Central Tendency	7
		Measures of dispersion	5
		Moments and their inter relation	3
		Skewness, Kurtosis & Sheppard's correction	2
AUGUST	14	UNIT III	
		Introduction to Probability and basic concepts of probability	2
		Simple theorems on Probability	2
		Addition theorem for 2 and n events	1
		Conditional Probability	2
		Multiplication theorem for 2 and n events	1
		Simple problems	3
		Baye's theorem	2
Boole's inequality	1		
SEPTEMBER	18	UNIT IV	
		Definition of r.v. and types of r.v.	1
		Properties of distribution function	1
		Functions of r.v.	1
		transformation of r.v.s	3
		Mathematical Expectations introduction	1
		Properties of mathematical expectations	2
		Properties of variances	2
		M.G.F. and its properties	1
		P.G.F. and its properties	1
		C.F. and its properties	1
		C.G.F. and its properties	1
Tscheby chev's inequality	3		
OCTOBER	15	Cauchy Schwartz inequality	1
		UNIT I	
		Types of collection of data	2
		Concept of Population and sample, quantitative and qualitative data	2
		Questionnaire and Schedule	1
		Tabulation and Classification	1
		Univariate and bivariate Frequency distribution	2
		Measurement of scales	1
		Diagrammatic and Graphical presentation	2
		Revision	3
TOTAL	65		65

(Handwritten Signature)



Bharatiya Vidya
Bhavan

Academic Organiser 2015-16

Department of Mathematics & Statistics

B.Sc. I year Semester II

Subject: Probability distributions

Paper code: ST122

Month	No. of Teaching days	Topics to be covered	No. of classes per topic
DECEMBER	16	UNIT I	
		Introduction to bivariate r.v. and notations	2
		Joint marginal and conditional distributions	2
		distribution and statements of its properties, independence of random variables	1
		Statement and applications of W.L.L.N.	2
		C.L.T. for i.i.d. r.v.s with finite variance	3
		UNIT II	
Discrete Uniform distribution	1		
Bernoulli distribution	1		
Binomial distribution	4		
JANUARY	13	UNIT II	
		Poisson distribution	5
		Negative Binomial distribution	3
		Geometric distribution	3
Hyper geometric distribution	2		
FEBRUARY	17	UNIT III	
		Rectangular distribution	3
		Normal distribution	9
		UNIT IV	
Exponential distribution	3		
Gamma distribution of first kind	2		
MARCH	14	UNIT IV	
		Gamma distribution of first kind	1
		Gamma distribution of second kind	3
		Beta distribution of first kind	2
		Beta distribution of second kind	2
		Cauchy distribution	4
Revision	2		
TOTAL	60		60



NAAC Accredited by A grade

Academic planner 2015-16

Department of Statistics

Paper II Inferential Statistics @ 4 hrs per week

Month	No. of Possible Teaching days	Topics to be covered	No. of classes Per topic	Remarks
June	17	Unit I		
		Fitting of Curves	4	
		Correlation Coefficient	7	
		Rank Correlation Coefficient	4	
July	22	Regression Analysis	2	
		Theory of Attributes	5	
		Unit II	9	
		Exact Sampling distribution χ^2 & t	8	
August	16	Unit II		
		Exact Sampling distribution F & Relation b/w t & F and F & χ^2 distribution	8	
		Theory of Estimation	8	
September	16	Unit II		
		Theory of Estimation	7	
		Unit III		
October	04	Testing of hypothesis (Concept)	4	
		NP lemma Theorem and its applications	5	
November	20	Unit III		
		NP lemma Theorem and its applications (Problems)	4	
December	18	Unit III		
		Large Sample tests	14	
January	10	Unit IV		
		Small Sample tests	6	
		Small Sample tests	7	
Total	123	Order statistics	3	
		Non Parametric tests	8	
		Unit IV		
		Non Parametric tests	6	
		Revision		
			4	
			123	

NAAC Accredited by A grade

Academic planner 2015-16

Department of Statistics

Paper III Applied statistics @ 3 hrs per week

Month	No. of Possible Teaching days	Topics to be covered	No. of classes Per topic	Remarks
June	14	Unit II Introduction of ANOVA, ANOVA for one-way and two way classification & D.O.E., C.R.D.	1 13	
July	15	Unit II R.B.D., L.S.D. Unit I Introduction of Sample Survey Principles of Sample Survey Sampling and Non-sampling errors Methods of sampling	9 1 2 1 2	
August	14	Unit I Estimation of mean, proportion and their variances using S.R.S., St.R.S., Sys.R.S.	14	
September	12	Unit I Comparison of relative efficiency. Unit III Time Series and its components Determination of trend by Least squares and Moving Averages methods. Growth curves.	4 1 4 3	
October	03	Unit III Determination of Seasonal Indices by Semi Averages and Ratio to trend method.	3	
November	15	Unit III Determination of Seasonal Indices by Ratio to Moving Averages and L.R. method. Index Numbers. Indian Official Statistics	5 9 1	
December	14	Unit IV Demand Analysis. Introduction and Sources of Vital Statistics.	9 5	
January	08	Unit IV Vital Statistics	3	
Total	95	Revision	5 95	





**BHAVAN'S VIVEKANANDA COLLEGE OF SCIENCE,
HUMANITIES AND COMMERCE**

(Accredited with A grade by NAAC)
Autonomous College - Affiliated to Osmania University

**Department of Statistics
Academic planner 2015-16**

Paper IV- Quality, Reliability and OR @ 3 hrs per week

Month	No. of Possible Teaching days	Topics to be covered	No. of classes Per topic	Remarks
June	14	Unit III		
		Introduction of OR	1	
		Formulation of LPP	3	
		Graphical Solution to an LPP	3	
		Simplex Method	4	
July	15	Big M Method	4	
		Two Phase Method	6	
		Duality	5	
August	14	Unit IV		
		Transportation Problem	4	
		Transportation Problem	7	
September	12	Assignment Problem	5	
		Maximization of AP	2	
		Travelling Salesman Problem	3	
October	3	Sequencing Problem	3	
		n Jobs 2 Machines & 3 Machines	6	
		Unit I		
November	15	SQC- Introduction	3	
		Process Control Chart	2	
		Xbar, SD, R Chart	6	
		No. of defective Chart (d Chart)	3	
		Fraction defective Chart (p Chart)	2	
December	14	No. of defects Chart (C and U Chart)	2	
		Unit II		
		Acceptance Sampling Plan	4	
January	8	Single Sampling Plan	6	
		Double Sampling Plan	6	
January	8	Reliability Theory	3	
		Revision	5	
Total	95		95	