

ALLIED PRACTICAL - MATHEMATICAL STATISTICS

Semester	Subject Code	Category	Lecture		Theory	Practical		Credits
I & II	21CAST21	Allied	Hrs/week	Hrs/Sem	0	Hrs/week	Hrs/Sem	2
		Practical	3	45		3	45	

COURSE OBJECTIVES:

The students will be able to

- Apply statistical methods to solve mathematical problems
- Use statistical test in testing hypothesis on data.

SYLLABUS

1. Measures of location and Dispersion (absolute and relative).
2. Computation of Correlation Coefficient for Raw and Grouped data, Rank correlation coefficient.
3. Computation of Regression Equations for Raw and Grouped data.
4. Curve Fitting by the method of Least Square
 - a. $y = ax + b$
 - b. $y = ax^2 + bx + c$
 - c. $y = ae^{bx}$
 - d. $y = ax^b$
5. Fitting of Binomial, Poisson, Normal Distributions and Test of Goodness of fit.
6. Large Sample tests with regard to population, mean, proportion, standard deviation.
7. Exact test with respect to mean, variance and coefficient of correlation.
8. Test of Independence of attributes based on chi – square distribution.
9. Confidence Interval based on Normal, t and chi – square and F distribution.
10. Problems based on ANOVA – One way and Two way classification.
11. Completely Randomized Design.
12. Randomized Block Design.

DISTRIBUTION OF MARKS: PROBLEMS 100%

TEXT BOOKS

S.NO	AUTHORS	TITLE	PUBLISHERS	YEAR OF PUBLICATION
1.	S.P.Gupta	Statistical Methods	S Chand & Company	2013
2.	R.S.N. Pillai Bagavathi	Practical Statistics	S Chand & Company	2010

REFERENCE BOOKS

S.NO	AUTHORS	TITLE	PUBLISHERS	YEAR OF PUBLICATION
1.	Hogg, R.V. & Craig.A.T	Introduction to Mathematical Statistics	Macmillan	1998
2.	Mood.A.M Graybill.F.A. & Boes.D.G	Introduction to Theory of Statistics	McGraw Hill	1974
3.	Snedecor. G. W & Cochran.W.G	Statistical Methods	Oxford and IBH	1967
4.	Hoel,P.G	Introduction to Mathematical Statistics	Wiley Eastern	1971
5.	S. C. Gupta & V.K Kapoor	Fundamentals of Mathematical Statistics	Sultan & Chand Sons	2011
6.	Wilks S.S	Elementary Statistics Analysis	Princeton University Press	2016

WEB RESOURCES

1. <http://en.wikipedia.org/wiki/statistics>.
2. <http://en.wikipedia.org/wiki/mathematics>

TEACHING METHODOLOGY

1. Class room Teaching
2. Assignments
3. Seminars
4. Discussions
- 5 .PPT Presentations

SYLLABUS DESIGNER

1. Mrs. G. VinuPriya, Head and Assistant Professor of Mathematics
2. Mrs. R. Ramya , Assistant Professor of Mathematics

ALLIED PRACTICAL - MATHEMATICAL STATISTICS
SCHEME OF VALUATION FOR PRACTICAL EXAMINATIONS

Internal assessment: 40 Marks

External assessment: 60 marks

Total: 100 marks

External assessment: 60 marks

Record : 10 Marks

Practical : 50 Marks