

DEPARTMENT OF STATISTICS
DATA ANALYSIS USING STATISTICAL TECHNIQUES

OBJECTIVE

This course is meant for students who do not have sufficient background of Statistical Methods. The students would be exposed to concepts of statistical methods and statistical inference that would help them in understanding the importance of statistics. It would also help them in understanding the concepts involved in data presentation, analysis and interpretation. The students would get an exposure to presentation of data, probability distributions, parameter estimation and tests of significance, regression and multivariate analytical techniques. This course is meant for exposing the students in the usage of various statistical packages for analysis of data. It would provide the students, hands on experience in the analysis of their research data. This course is useful to all disciplines.

UNIT I

Concepts of statistical population and sample from a population; qualitative and quantitative data; nominal, ordinal, ratio, interval data; cross sectional and time series data; discrete and continuous data. Collection and scrutiny of data: Primary data; designing a questionnaire and a schedule; secondary data and sources of secondary data. Presentation of data: Diagrammatic and graphical representation of data; Descriptive statistics: Concepts of central tendency or location, Absolute and relative measures of dispersion; Box plot, Lorenz curve; skewness and kurtosis. (8hours)

UNIT II

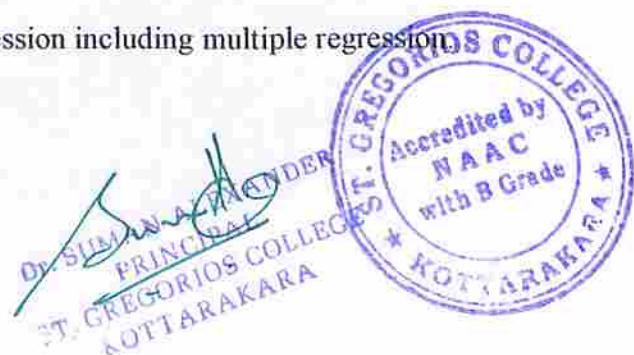
Fitting and testing the goodness of fit of discrete and continuous probability distributions; Testing of hypothesis based on large sample test statistics; Testing of hypothesis using chi-square, t and F statistics. (10 hours)

UNIT III

Concept of analysis of variance and covariance of data for single factor, multi-factor, one-way and multi-classified experiments, contrast analysis, multiple comparisons, Analyzing crossed and nested classified designs. (10 hours)

UNIT IV

Testing the significance of contrasts; Correlation and regression including multiple regression. (2hours)



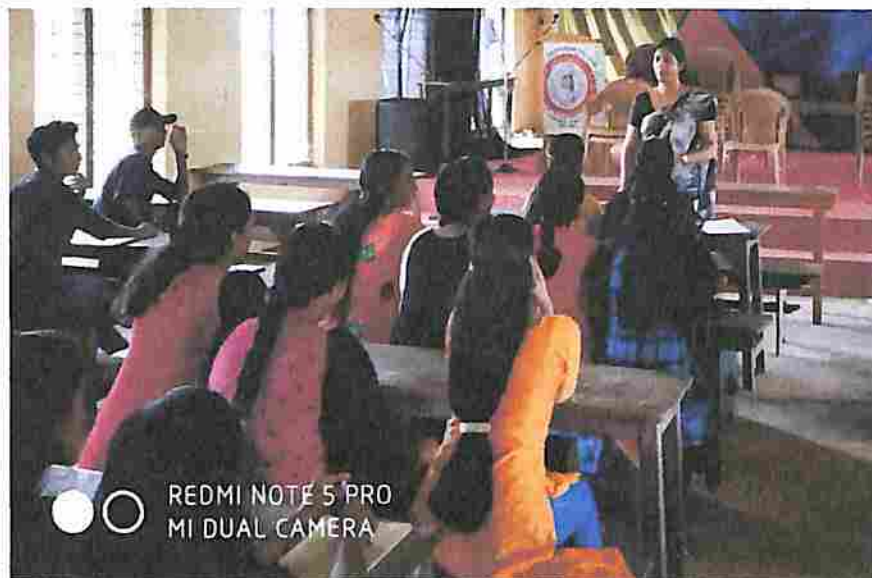
References:

1. Dutta, N. K. (2004). Fundamentals of Biostatistics, Kanishka Publishers.
2. Sundaram, K.R.(2010) Medical Statistics-Principles & Methods, BI Publications, New Delhi
3. Hogg R.V. and Tanis E.A.(2001). Probability and Statistical Inference, Prentice Hall International Inc.
4. Rohatgi, V.K. and Saleh, A.K.Md.(2001). An Introduction to Probability and Statistics, John Wiley & Sons.
5. Das M.N. & Giri N.C. (2006). Design and Analysis of Experiments, New Age Publications
6. Des Raj and Chandhok (1998). Sampling Theory, Narosa.



DEPARTMENT OF STATISTICS
Add-On Course Report 2018-19

During the academic year the course commenced on 11-07 2018 with an introductory session which deal with the objectives and outcome of the course. Twelve students from Zoology and Botany stream were enrolled for the course. There were practical sessions followed by the theory. After the course we conducted an exam on 6-03-2019 and distributed certificates to those who successfully completed the course.



Explaining the objectives of the course-an introductory session



Dr Seema S. Naiv *Seema*



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DEPARTMENT OF STATISTICS

Add-On Course Report 2019-20

This academic year the course initiated on 12-07-2019. A preliminary session was conducted to describe the aim and application of the course. Fourteen students were enrolled from Zoology and Botany departments. Practical and theory sessions were incorporated in the course curriculum. The course was effective so that the students could do the statistical analysis of their degree project easily. Because of the pandemic situation we conducted an online exam and distributed certificates to those who successfully completed the course.



Explaining the course structure and objectives of the course



Dr Seema S. Nair *Seema*



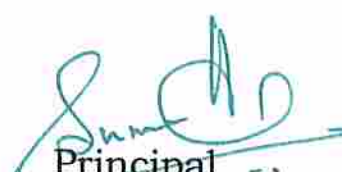
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DEPARTMENT OF STATISTICS

Add-On Course Mark Sheet 2018-19

SI No	Name	Attendance	Assignment	Test Paper	Total
1	Sisira Prasad	10	8	75	93
2	Sreelekshmi B.S.	10	7	78	95
3	Sreelekshmi R.S.	10	9	79	98
4	Gopika Ajayan	10	10	75	95
5	Harikuttan	10	7	75	92
6	Sreekuttan	10	7	74	91
7	Indu k.S.	10	9	78	97
8	Lekshmi J. Sivan	10	7	79	96
9	Aromal Suresh	10	8	80	98
10	Arshi Nubaiyya R	10	9	79	98
11	Anjana Prathap	10	10	80	100
12	Ardra S.B.	10	10	79	99

Dr Seema S. Naiv 
Teacher in charge


Principal
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DEPARTMENT OF STATISTICS

Add-On Course Mark Sheet 2019-20

SI No	Name	Attendance	Assignment	Test Paper	Total
1	Jaidrupath K.J	10	9	80	99
2	Pooja S	10	10	77	97
3	Shalima S.	10	8	77	95
4	Rejina A	10	5	78	93
5	Geethu Prasannan	10	8	80	98
6	Surya A	10	6	78	94
7	Hanna Sharaf	10	9	76	95
8	Meenu A	10	8	78	96
9	Sree Vijay	10	8	75	93
10	Arya U.P.	10	9	78	97
11	Kavya Prabhakaran	10	6	76	92
12	Anjali Krishna	10	9	75	94
13	Shamna Shams	10	9	77	96
14	Jyothika T.K.	10	9	79	98

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