

**Three Day National Workshop on  
Estimation Procedures and Statistical Inferences in Social Science Research**

**Organized by**

**PG Department of Economics Government College Chittur**

**Dates of Seminar:**

**11/12/2019 to 13/12/2019**

**Sponsored by:**

**Directorate of Collegiate Education,**

**Madam,**

Department of Economics, Government College Chittur is organizing a three day national workshop on "Estimation Procedures and Statistical Inferences in Social Science Research" from 11<sup>th</sup> to 13<sup>th</sup> December 2019 at the Directorate of Collegiate Education, Government of Kerala. The present workshop is an effort to enlighten students and teachers of economics towards developing research aptitude and statistical skills. We cordially invite you to be a part of it.

**Dr. R. Varghese**

**Prof. R Anand Viswanath**

**Dr. Veeramani**

**Coordinator**

**HOD**

**Principal**



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Three Day National Workshop on

# ESTIMATION PROCEDURES AND STATISTICAL INFERENCES IN SOCIAL SCIENCE RESEARCH

On 11 to 13<sup>th</sup> December 2019



Organized by  
PG Department of Economics, Govt. College Chittur



Sponsored by  
Directorate of Collegiate Education

## CERTIFICATE

This is to certify that Mr./Mrs./Dr. ....

..... participated in the Three Day National

Workshop on 'Estimation Procedures and Statistical Inferences in Social Science Research'

organized by the PG Department of Economics, Govt. College Chittur, sponsored by the

Department of Collegiate Education Government of Kerala on 11 to 13<sup>th</sup> December 2019.



Chittur  
13.12.2019

Manju Varghese  
Co-ordinator



Anand Viswanath R.  
Head of the Department

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Dr. Veeramanikandan N.  
Principal



# NATIONAL WORKSHOP

Report of three day national work shop on Estimation Procedures and Statistical Inferences in Social Science Research Organized by PG Department of Economics Government College Chittur

The Department of Economics, Government College Chittur has organized a three day national workshop on "Estimation Procedures and Statistical Inferences in Social Science Research" from 11<sup>th</sup> to 13<sup>th</sup> December 2019 sponsored by the Directorate of Collegiate Education, Government of Kerala. The present workshop was an effort to orient the students and teachers of economics towards developing research aptitude and statistical skills. The seminar had 14 sessions including one inaugural session and one valedictory session.

On day 1, December 11, first session inaugural session started with a prayer at 9:30 am. by 9.00 am registration procedure has started and 45 teacher participants and 77 student participants registered for the seminar. Seminar was inaugurated by Dr. Prashobhan Palakeel, Assistant Professor, Department of Economics, Amrita Vishwa Vidhya Peetham, Bangluru. Professor Ananad Viswanath welcomed the gathering and Principal Of Government College Chittur, Dr. Veera Manikandan, N presided over the function. In his key note address Dr Prashobhan Palakeel introduced various statistical methods for data analysis. he provided a thorough introduction to the statistical methods used in the social sciences and to the numerical methods used to implement them. Richard Scaria, PTA Secretary and Divya H union representative offered felicitation for the national seminar. The inaugural session ended with the vote of thanks proposed by the seminar coordinator Manju Varghese, Assistant Professor Department of Economics Government College Chittur.

Technical session 2 from 11.45 am to 1.15 pm was handled by Dr. Mugesh P Assistant Professor, Department Of Commerce, AMC Group of Educational Institutions, Manissery, Ottapalam. In his session he discussed about the basics of research like problem recognition and definition, creating the research design, methods of research sampling data collection techniques and report writing. He was able to provide with fundamentals of research methodology and data collection and also helped to provide necessary steps and guidelines to researchers and postgraduates who are more often faced with the challenges of how to start and what to do at a given stage. This session was highly useful for researchers at various levels of academic endeavour.

Technical session 3 1.45 PM to 3.15 PM and technical session 4 3.15 PM to 4.45 PM was handled by Dr. Mugesh P Assistant Professor, Department Of Commerce, AMC Group of Educational Institutions, Manissery, Ottapalam. In his sessions he discussed about four basic types of data: nominal, ordinal, interval, and ratio. He stated that the kinds of statistical tests that can be performed depend upon the type of data you have. Different statistical tests are used for different types of data. Nominal and ordinal data are nonparametric (non-continuous or categorical). Interval and ratio scale are called parametric (continuous). Some statistical tests are called parametric tests because they use parametric data. Others are called nonparametric tests because they use nonparametric data. All statistical tests are designed to



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is used with a specific kind of data, and may only be performed when you have that kind of data. His class was able to provide a good idea about variables and how to relate with research.

In Day 2, December 12 Technical Session 5 (9.30 am to 11 am) and Technical Session 6 (11.15 am to 12.45 pm) was handled by (Assistant Professor, Department of Economics, St. Aloysius College, Elatthuruthu). In Technical Session 5 he discussed about quantitative and qualitative research and in technical session he discussed about parametric tests. In technical session 5 he stated that Qualitative Research is primarily exploratory research. It is used to gain an understanding of underlying reasons, opinions, and motivations. It provides insights into the problem or helps to develop ideas or hypotheses for potential quantitative research. Quantitative Research is used to quantify the problem by way of generating numerical data or data that can be transformed into useable statistics. It is used to quantify attitudes, opinions, behaviors, and other defined variables – and generalize results from a larger sample population. Quantitative Research uses measurable data to formulate facts and uncover patterns in research. In technical session 6 he introduced parametric tests to the audience. He stated Parametric tests are used only where a normal distribution is assumed. The most widely used tests are the t-test (paired or unpaired), ANOVA (one-way non-repeated, repeated; two-way, three-way), linear regression and Pearson rank correlation.

In day 2, technical session 7 (1.30 pm to 3.00 pm) and technical session eight (3 pm to 4.30 pm) was led by Dr. Pradeep P Assistant Professor, Department of Economics, Kerala Varma College, Thrissur. In his session he spoke about non-parametric test and correlation analysis. He demonstrated Non-parametric tests are used when continuous data are not normally distributed or when dealing with discrete variables. Most widely used are chi-squared, Fisher's exact tests, Wilcoxon's matched pairs, Mann-Whitney U-tests, Kruskal-Wallis tests and Spearman rank correlation. He also brought out significance of correlation. Correlation analysis is performed to identify the strength of relationships between a pair of variables. When the data are parametric and normally distributed, Pearson-moment correlation is used. Linear regression is similar to linear correlations, but it is assumed that one variable (dependent) depends on another independent variable.

In day 3, December 13, technical session 9 and technical session 10 was handled by Dr. Prasanth C B, Assistant Professor, Department of Statistics, Kerala Varma College, Thrissur. He dealt with Regression Analysis and dummy variable model. He stated Use regression analysis to describe the relationships between a set of independent variables and the dependent variable. Regression analysis produces a regression equation where the coefficients represent the relationship between each independent variable and the dependent variable. You can also use the equation to make predictions. He pointed out the importance of dummy variable. He illustrated dummy variable is a numerical variable used in regression analysis to represent subgroups of the sample in your study. Dummy variables are useful because they enable us to use a single regression equation to represent multiple groups.

In day 3, technical session 11 and 12 was handled by Dr. Rinu Jose, Assistant Professor, Department of Economics K.B. College Mannanam. She handled the topics Logistic





Regression and Multinomial Logistic Regression. Logistic regression is a statistical method for analyzing a dataset in which there are one or more independent variables that determine an outcome. The outcome is measured with a dichotomous variable. It is used to predict a binary outcome for given a set of independent variables. Multinomial Logistic Regression is the regression analysis to conduct when the dependent variable is nominal with more than two levels. Similar to multiple linear regression, the multinomial regression is a predictive analysis. she stated Multinomial logistic regression is a simple extension of binary logistic regression that allows for more than two categories of the dependent or outcome variable. Like binary logistic regression, multinomial logistic regression uses maximum likelihood estimation to evaluate the probability of categorical membership.

The day and work shop ended with the last session Valedictory Session: (4.30 pm to 5pm).the certificates were distributed and reviews were collected from the participants. The workshop was able to instill an understanding about various data analysis tools with a deep theoretical and practical understanding about the concepts behind each tool that is being used. The workshop was highly useful and fruitful especially to get an over all idea about components of research.



  
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Photos of Three Day National Workshop on  
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## REGISTRATION FORM: FACULTIES

National Workshop  
On  
"Estimation Procedures & Statistical Inferences in Social Science Research"  
December 11, 12 and 13<sup>th</sup> 2019

Organised by  
Post Graduate Department of Economics  
Govt. College Chittur

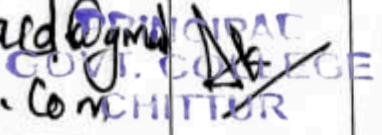
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