# **National Workshop**

On

# RESEARCH METHODS & QUANTITATIVE TECHNIQUES

 $1^{st}$  and  $2^{nd}$  April 2014



# Organized by

Department of Economics School of Management Pondicherry University Puducherry-605014 Phone: 0413-2654669

#### **About Us**

### **Pondicherry University**

The Pondicherry University was established in 1985 by the Government of India through an Act of Parliament. The University has several unique features such as dissemination and promotion of knowledge by providing instructional and research facilities. The campus is located in salubrious and sprawling areas spread over seven hundred and eighty acres of land, facing the Bay of Bengal. The University is a member of the Association of Commonwealth Universities and has signed MOU with several foreign Universities and Institutions. A recent survey report by the UGC (University Grants Commission) and the NAAC (National Accreditation and Assessment Council) ranked the institution as one of the best in the country.

## **Department of Economics**

The Department of Economics offers M.Sc (Integrated Economics) and M.Sc (Economics) Ph.D Programme with a total placement focus. Continuous research activities are also going on in the department in the related areas. Every year the Department is producing several rank holders at PG level. Besides every year the Department is conducting national level seminars and conferences in the economics related areas and also invites experts in the related field to participate in the panel discussion. Further, every year about 20 students are selected and join the Three Months Free Practical Training Program in the Planning and Research Department, Pondicherry to prepare Plan Documents, as Thrust Area. Project from State government and from UGC, New Delhi are credit to the department. The department of Economics is a constituent of the School of Management. The School of Management, Pondicherry University is one of the popular Schools of Excellence in the campus primarily focusing in the business related courses, since the very inception of this University.

#### **Resource Persons**

- Dr. G. Shanmuga Sundaram, Associate Professor, Department of Commerce, Pondicherry University
- Mr. K. S. Bharath Kumar,
  Research Manager,
  MAMTA Health Institute for Mother and Child,
  B-5, Greater Kailash Enclave-II
  New Delhi 110048
- 3. Dr. Lusome Raman Assistant Professor, Department of Economics, Pondicherry University

#### Registration

Registration fee of Rs. 500 will be collected from each participant to meet the expenses of the workshop. Registration fee covers two working lunch, snacks and the learning materials. Cash/Cheque/DD in favor of **The Head, Department of Economics, Pondicherry University** should reach the convener on or before **24/03/2014**.

**Accommodation:** Limited accommodation on 'first come first serve' basis would be provided at the expense of the participants, starting from Rs. 200/- per night. No travelling allowance would be provided.

## Who can Apply

M. Phil. and Ph.D. scholars in any recognized universities/colleges are eligible for the workshop. There will be a limited intake of participants based on 'first come first serve' basis.

To register online, click on the following link:

## **Registration Form**

**Organizer:** 

Dr. P Muthaiyan Professor & Head Dept. of Economics Pondicherry University head.eco@pondiuni.edu.in

Convener:

Dr. Lusome Raman Assistant Professor Dept. of Economics Pondicherry University <u>lusome.raman@gmail.com</u>

# **Schedule and Content of the Course**

DAY	TIME	PROGRAMME
Day- 1	9.00 am to 11.10 am	Research – Basic Of Research, Research Methods-Research Problems, Developing Research Questions. Introduction to variables, attributes, Scale, sizes. Strategies for determining sample size, What is "normal distribution" and why is it important? What are outliers and do I need to worry about them? How do I tell if my data is normally distributed? What is the power of a test and why is it important? Data coding and entry in the SPSS
Day- 1	11.10 am to 11.20 am	Morning tea and Networking break
Day- 1	11.20 am to 1.20 pm	Univariate Analysis, Bivariate Analysis, Simple descriptive statistics, Graphs, Cross tabulation analysis, How does hypothesis testing work, Null hypothesis, One-tailed and Two tailed tests, What are type1 and type2 errors? What is P and what does P<0.05 mean? Why is 0.05 so important? What is Confidence level? What are Parametric and Non- Parametric tests? What are the assumptions that underlie Parametric tests?
Day- 1	1.20 pm to 2.30 pm	Lunch cum Networking break
Day- 1	2.30 pm to 4.30 pm	When should we use one sample "t" test? Comparative statistics: Two sample "t" test, paired t test, Comparing three or more levels under one factor using parametric statistics – one-way ANOVA, Post-hoc tests, Two –way ANOVA. How to frame hypothesis and testing of hypothesis in all the above cases. How to write the report in the entire above test? Exercise with SPSS
Day - 2	9.00 am to 11.10 am	Comparing two groups using non parametric statistics, Mann Whitney U test, Wilcoxin Test, What is Kruskol Wallis test and Friedman test? How to frame hypothesis and testing of hypothesis in all the above cases? How to write the report in the above tests? Exercise with SPSS
Day - 2	11.10 am to 11.20 am	Morning tea and Networking break
Day - 2	11.20am to 1.20 pm	Chi-square test, Goodness of fit, Test of Independence, How to frame hypothesis and testing of hypothesis in all the above cases? How to write the report in the above tests? Exercise with SPSS
Day - 2	1.20 pm to 2.30 pm	Lunch cum Networking break
Day - 2	2.30 pm to 4.30 pm	Correlation: How to perform a simple and multiple correlation, Interpreting correlation output, Regression: What, How, When and Terminology used. Performing simple and multiple regression, Interpreting multiple regression, How to frame hypothesis and testing of hypothesis and how to write the report in all the above cases? Exercise with SPSS