Research & P.G. Department of Economics Sacred Heart College, Thevara

Value Added Course: Data Management with Free software GRETL Course Code: 16ECOVAC01

Duration of the course: 30 hours *Course coordinator: Dr. K V Raju*

OBJECTIVE OF THE COURSE

- To familiarize participants about the application and use of a user- friendly free software econometric package, Gretl in the econometric analysis

Module I: Introduction to Gretl

About Gretl, Mode of working, Data File creation and Sub sampling a dataset, Graphs and plots, Joining data sources, Special functions in Genr, Gretl data types, Declaring variables, Defining function, Named lists and strings, Matrix manipulation

Module II: Econometric Methods

Cross sectional data and HCCME, Time series data and HAC covariance matrices, Special issues with panel data, The cluster- robust estimator, Maximum Likelihood Estimation, Univariate time series models, Multivariate models, Discrete and censored dependent variables

Module III: Technical details of Gretl

Gretl and Tex, Gretl and R, Gretl and OX, Gretl and Stata

References

- 1. Baiocchi, G., & Distaso, W. (2003). GRETL: Econometric software for the GNU generation.
- 2. Cottrell, A., & Lucchetti, R. (2015). Gretl: Gnu regression, econometrics and time-series library. *Department of Economics, Wake Forest University*.
- 3. Cottrell, A., & Lucchetti, R. (2012). Gretl user's guide. *Distributed with the Gretl library*.
- 4. Mixon Jr, J. W., & Smith, R. J. (2006). Teaching undergraduate econometrics with GRETL. *Journal of Applied Econometrics*, 21(7), 1103-1107.
- 5. Adkins, L. C. (2014). Using gretl for Principles of Econometrics, Version 1.0411. Oklahoma State University, Oklahoma, USA.

. ...

- 6. Mixon, J. (2010). GRETL: an econometrics package for teaching and research. Managerial Finance.
- 7. Cottrell, A. (2012). Gretl Command Reference. Gnu Regression, Econometrics and Time-series Library.

Sacred Heart College (Autonomous)
Theyara, Kochi-682 013