M.Phil. / Ph.D. Coursework Examination, 2016
Semester-I
ECONOMICS
Course-I
(Research Methodology and Techniques)

Time: 4 Hours **Full Marks: 80**

Questions are of values as indicated in the margin
Answer ***any four*** questions

(You may use and attach your own data tables, charts and graphs for writing these answers. However, you are not allowed to use any pre-written analysis on these data)

1. Outline the different steps that a researcher should follow to carry out an empirical research project. Elaborate your answer with examples. 20

2. Contextualise your own proposed research question, given the empirical evidence on India. 20

3. Discuss the international experiences pertaining to the issue of your own proposed research. 20

4. Set up a policy oriented research question that you can answer through a primary survey of sample units. Describe briefly the major characteristics of your (hypothetical) population and unit of analysis. Describe in details our sample selection procedure from your population with a logical justification of your sample size. 20

5. What do you understand by a close-ended questionnaire? Set up a research question that you might answer through a primary survey of sample units. Construct a model questionnaire for your research question that can be administered for your survey units. 20

6.(a) What is meant by the stationarity of a given time series? Why are stationary time series so important? Explain the steps involved in the Unit Root Test for examining stationarity of time series. 2+2+6
(b) When the two series are said to be cointegrated? State and explain Engle-Granger two step method of cointegration. 3+7

7. Explain the following concepts: 5×4=20
   (a) Adjusted R^2
   (b) Standardized regression coefficients
   (c) Dummy Variable Trap
   (d) Test of significance of an individual regression coefficients

8. What is a binary variable? Give examples using economic data. Specify the Logit Model and state the procedure to estimate such a model by using the method of Maximum Likelihood. How are the marginal effects computed in a Logit Model? 2+2+12+4=20

9. Discuss in detail your own research proposal. 20