RESEARCH DEGREE PROGRAMME IN ECONOMICS

Term-End Examination

December, 2015

REC-001 : RESEARCH METHODOLOGY

Time : 3 hours   *Maximum Marks : 100*

Note : *Answer the questions from each section as per instructions.*

SECTION A

*Attempt any **two** questions from this section in about 700 words each.*   *2×20=40*

1. In the light of the statement, 'If A, then B.' – explain the true nature of generalisation in economics. Give illustrations from economic theory in support of your answer.

2. What is the distinction between falsification and confirmation ? Formulate a research proposal from your area of interest using methodology of falsification and hypothetico-deductive model.

3. How will you make a choice of an appropriate sampling method ? What are the alternative approaches of determining a sample size ? Explain.

4. What different types of data are compiled by NSSO on employment ? How are the different types of data on employment useful for policy formulation ?

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SECTION B

*Attempt any **five** questions from this section in about 500 words each.*   *5×12=60*

5. Distinguish between case study method and experimental method. Explain the different steps involved in case study method.

6. Explain the difference between any ***three*** of the following :

    (a) Epistemology and Ontology

    (b) Research Design and Research Method

    (c) Realism and Instrumentalism

    (d) Abduction and Retroduction

    (e) Methodological Monism and Methodological Dualism

    (i) Parameter and Statistic

7. Given the following results :

    TFR = 4·180 – 0·031 FLIT + 0·013 POV – 0·009 URBAN
         (0·619) (0·0009)   (0·0008)   (0·011)

    R^2 = 0·637 F= 9·36 n = 20.

    (the figures in brackets are standard error)

where

TFR = Total Fertility Rate in India in 2005-06

FLIT = Female Literacy Rate in 2001

POV = Head Count Poverty Ratio in 2004-05

URBAN = Percentage of Urban Population in Major States of India in 2001.

(a) Interpret the above results.

(b) Would you like to drop any of the explanatory variables from the above regression ? If yes, which variable and why ?

8. Given the following results of two Regression Models :

(a) $\hat{W} = 7.5 + 0.009 \, N$

$t = \text{n.a.} \quad (16.10) \qquad R^2 = 0.90$

(b) $\hat{W}/N = 0.008 + 7.8 \, (1/N)$

$t = (14.43) \quad (76.58) \qquad R^2 = 0.99$

where

W = Average wage in rupees

N = Number of employees

Sample size = 30 firms

(a) Are the R^2 of the two models comparable ? Explain.

(b) What is the economic and statistical importance of the size of firms (as measured by size of employment) in the two models ?

9. Do you agree that different methodological approaches are required in economics ? Explain Amartya Sen's contribution in this regard.

10. Frame a research proposal of your own choice for conducting the study from interpretivism perspective.

11. What is the importance of computing compound growth rate and simple average growth rate ? Explain the form of regression models to estimate the two types of growth rates over a period of time.

12. Explain the various steps involved in computation of compound growth rate and multiple regression models using SPSS software.