

Reg. No. : .....

Name : .....

Second Semester M.A. Degree Examination, May 2020

Economics

EC 224 : ECONOMETRICS AND RESEARCH METHODOLOGY

(2018 Admission Onwards)

Time : 3 Hours

Max. Marks : 75

PART A

Define the following in 1 or 2 sentences :

1. Stochastic error term
2. The coefficient of determination
3. GLS
4. Multicollinearity
5. Concurrent regression
6. Non Stationary Process
7. The DF test
8. Spurious Regression
9. Exploratory research
10. Sequential sampling

(10 × 1 = 10 Marks)

P.T.O.



## PART B

Answer any **seven** questions. Each question carries **5** marks.

11. Why do we need a subject econometrics when we have a well-developed mathematical economics and statistics?
12. For a 10 sample observations.  $Cov(X, Y) = 2060$ ,  $Var(X) = 3666.66$  and  $Var(Y) = 1274.44$ . Then find out  $r^2$ ,  $t$  and  $F$ .
13. Discuss the major assumption of Ordinary Least Square with respect to the random error term?
14. Discuss the procedure of Durbin Watson test?
15. How dummy variable can be used to incorporate the effect of qualitative variable in a regression model? How and when the dummy variable trap occurs and how to remove it?
16. What are the various types of specification error?
17. What are the various Non-stationary Stochastic Processes?
18. Research methods and methodology.
19. Need and importance of a research design.
20. Major difference between reference and bibliography.

**(7 × 5 = 35 Marks)**

## PART C

Answer any **three** questions. Each question carries **10** marks.

21. Discuss the steps and methodologies to be followed in verifying Keynesian Consumption Hypothesis.
22. Discuss Heteroscedasticity, its consequences, various detection methods and remedial measures.
23. What are the uses of dummy variable models in economics?
24. Discuss the ARIMA model of forecasting.
25. Discuss the structure and layout of a research report.

**(3 × 10 = 30 Marks)**

