**THIRD SEMESTER M.A. DEGREE EXAMINATION, OCTOBER 2017**
(Regular/Supplementary/Improvement)
(CUCSS - PG)
**CC15P ECO3 C12 - BASIC ECONOMETRICS**
(Economics)
(2015 Admission Onwards)

Time : Three Hours                                    Maximum : 36 Weightage

**Part A**
(Objective Type Questions. Answer *all* questions)

1. In the construction of an econometric model ,the formation of maintained hypothesis means:
   (a) Specification                          (b) Estimation
   (c) Evaluation                             (d) Forecasting

2. The reliability and precision of a sample is given by
   (a) Mean                  (b) Standard error
   (c) Variance              (d) Correlation

3. The overall significance of regression equation can be verified with the help of
   (a) F test                  (b) Chi square test
   (c) t test                  (d) Anova

4. The error term in an econometric model takes into consideration the influence of :
   (a) Left out variables              (b) random behaviour of individuals
   (c) Errors in observation           (d) all the above

5. The value of adjusted $R^2$ will be always :
   (a) Less than $R^2$                    (b) Greater than $R^2$
   (c) Equal to $R^2$                     (d) Unrelated to $R^2$

6. Goldfeld Quandt is a method to detect the presence of
   (a) Autocorrelation                 (b) Heteroscedasticity
   (c) Multicollinearity               (d) Structural stability

7. The peculiar problem that arises in multiple regression analysis is
   (a) Non availability of data        (b) errors in measurement
   (c) Multi collinearity              (d) auto correlation

8. $U_t = P_{Ut-1} + v_t$ is
   (a) Second order autocorrelation    (b) First order autocorrelation
   (c) Third order autocorrelation     (d) Zero order autocorrelation

9. Chow Test is a method to detect the presence of
   (a) Autocorrelation                 (b) Heteroscedasticity
   (c) Multicollinearity               (d) Structural stability

10. In the case of Homoscedasticity the variance of u is
    (a) Zero                  (b) One
    (c) Constant              (d) Not constant

11. Accepting a wrong hypothesis leads to
    (a) Type I error           (b) Type II error
    (c) Standard error      (d) None of the above.

12. t test is more appropriate for testing
    (a) Large samples       (b) Small samples
    (c) Medium samples    (d) None of the above.

$$(12 \times \tfrac{1}{4} = 3 \text{ Weightage})$$

## Part B

(Very short answer type questions. Answer *any five* questions)

13. Explain the scope of econometrics
14. Explain the coefficient of determination
15. Explain the properties of stochastic error term
16. Differentiate between $R^2$ and Adjusted $R^2$
17. Explain Heteroscedasticity and its consequences
18. Explain Double log model?
19. What are the assumptions of multiple linear regression model?
20. Explain the application of t test in an econometric model

$$(5 \times 1 = 5 \text{ Weightage})$$

## Part C

(Short Answer Type Questions. Answer *any eight* questions)

21. What are the reasons for applying lags in an econometric model
22. Explain reciprocal models
23. What are the remedies of Heteroscedasticity?
24. Explain Durbin Watson test
25. Explain Koyck model
26. Explain the process of regression through the origin.
27. What is weighted least square method? When is this method used for estimation?
28. Outline the steps involved in econometric research.
29. Explain Gauss Markov theorem.
30. Explain the methods of detecting auto correlation
31. Discuss dummy variable trap

$$(8 \times 2 = 16 \text{ Weightage})$$

## Part D

(Essay Type Questions. Answer *any three* questions)

32. Show that the OLS estimates of a regression model are BLUE
33. Discuss multi collinearity, sources, consequences, detection and remedial measures.
34. Explain auto regressive and distributed lag models.
35. Discuss the assumptions underlying in ordinary least square method.
36. Discuss the role and importance of statistical methods in econometrics giving suitable examples.

$$(3 \times 4 = 12 \text{ Weightage})$$

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