SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN
(AUTONOMOUS)
(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)
Chromepet, Chennai - 600 044.
M.A. Economics - END SEMESTER EXAMINATIONS - NOV'2024
SEMESTER - III
22PECCT3009 - Econometric Methods

Total Duration : 2 Hrs. 30 Mins.   Total Marks : 60

Section B

Answer any **SIX** questions $(6 \times 5 = 30$ Marks$)$

1. What are the assumptions of Classical Linear Regression Model?

2. Sketch The Adaptive Expectations Model.

3. Predict the significance of the F-test and t-test in evaluating the overall model fit and individual coefficients, respectively.

4. Show the difference between a stationary and a non-stationary stochastic process.

5. What is the main difference between fixed effects and random effects models in panel data regression?

6. Apply the method of least squares, explaining how it estimates the regression coefficients by minimizing the sum of squared residuals.

7. Describe Partial Adjustment Model, its formulation, how it captures gradual adjustments, and its relevance in econometrics.

8. Examine OLS estimators in the context of multiple linear regressions.

Section C

I - Answer any **TWO** questions $(2 \times 10 = 20$ Marks$)$

9. Describe the scope and methodology of Econometric analysis.

10. Predict the concept of Adaptive Expectations Model, its assumptions, and its implications for economic behaviour.

11. Determine the Gauss-Markov theorem and its implications for the efficiency of OLS estimators under certain assumptions.

12. Examine the methods for testing stationarity, including the Dickey-Fuller (DF) test and the Augmented Dickey-Fuller (ADF) test, and explain their purpose.

II - Compulsory question $(1 \times 10 = 10$ Marks$)$

13. Diagnose the various panel data regression models, focusing on their estimation methods and key differences.

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