

ALLAMA IQBAL OPEN UNIVERSITY, ISLAMABAD
(Department of Economics)

WARNING

1. **PLAGIARISM OR HIRING OF GHOST WRITER(S) FOR SOLVING THE ASSIGNMENT(S) WILL DEBAR THE STUDENT FROM AWARD OF DEGREE/CERTIFICATE, IF FOUND AT ANY STAGE.**
2. **SUBMITTING ASSIGNMENTS BORROWED OR STOLEN FROM OTHER(S) AS ONE'S OWN WILL BE PENALIZED AS DEFINED IN "AIOU PLAGIARISM POLICY".**

Course: Applied Econometrics (2703)
Level: M. Phil Economics

Semester: Autumn, 2012
Total Marks: 100
Pass Marks: 50

ASSIGNMENT No. 1
(Units: 1–4)

- Q. 1 Prove mathematically the properties of OLS estimator? (20)
- Q. 2 What is the nature of heteroscedasticity. How it can be detected? Also give its remedial measures in brief. (20)
- Q. 3 Explain in details the difference between the models with qualitative explanatory variables and models with qualitative dependent variables. Also explain the methods of estimation of these models? (20)
- Q. 4 Differentiate among 2SLS, GMM and 3SLS methods of estimation? (20)
- Q. 5 Explain in details the concept of seemingly Unrelated regression? (20)

ASSIGNMENT No. 2
(Units: 5–9)

Total Marks: 100

Pass Marks: 50

- Q. 1 What is Koyck transformation? How the problem of infinite number of lags is solved in Koyck distributed lag model? (20)
- Q. 2 Explain in details various methods of estimating the non-linear equations? (20)
- Q. 3 Which one of these models you will prefer for estimation of lag models and why?
a) Method of Instrumental Variables
b) Almond Polynomial Distributed Lag Model (10+10)
- Q. 4 Explain the concept of stationarity, ARIMA models and ARCH models. Also explain the methods of estimating ARCH models? (20)
- Q. 5 What is co-integration in time series econometrics? Also explain the Johanson and Joselious approach of co-integration? (20)