

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: Basic Econometrics (807)
Level: M.Sc.

Semester: Spring, 2014
Total Marks: 100
Pass Marks: 40

ASSIGNMENT No. 1

(Units 1–4)

- Q.1 Discuss in detail the essential difference between OLS and ML estimators. Also discuss their properties. (20)
- Q.2 What do you know about hypothesis testing? Also discuss its importance in regression analysis. (20)
- Q.3 What is R^2 and $\overline{R^2}$? Derive formulas for both allurgically. Also discuss their difference with the help of examples. (20)
- Q.4 Discuss in detail the assumptions of classical linear regression model in matrix notation. (20)
- Q.5 What is correlation matrix? Discuss the concept of hypothesis testing and coefficient of determination in matrix notations. (20)

ASSIGNMENT No. 2

(Units 5–9)

Total Marks: 100

Pass Marks: 40

- Q.1 Discuss in detail the theoretical and practical consequences of multicollinearity?(20)
- Q.2 What is heteroskedasticity? Discuss in detail various methods of its detection. (20)
- Q.3 What is the role of lags in economics? Also discuss in detail the Koyck approach to distributed lag models. (20)
- Q.4 What is autocorrelation? Also discuss various methods of detection of autocorrelation. (20)
- Q.5 What is the nature of dummy variables? Also discuss the use of dummy variable in regression analysis. (20)