



DOON UNIVERSITY, DEHRADUN
Mid Semester Examination, 2014
Department of Economics
M.Sc. Seventh Semester
SSEI-512: Econometric Theory

Time Allowed: 2 hrs.

Max. Marks: 30

Note: Attempt All Questions from Sections A,B,C.

SECTION : A

All questions are compulsory and carry equal marks.

Answer TRUE or FALSE

(Marks: 1x6=6)

1. Greater the standard deviation, higher is the normal curve.
2. If the estimated coefficient of the price variable in the demand model is positive we can say that our model under study follows the law of demand.
3. The second moment about the mean of any distribution is the variance of the distribution.
4. By autocorrelation we mean that the residuals of a regression model are related with one or more of the regressors.
5. A white noise error term is a random term that has multiple variances
6. In regressing a time series variable on another time series variable, one often obtains a very high R^2 even though there is no meaningful relationship between the two variables.

SECTION : B

Answer any THREE.

(Marks: 3x4=12)

1. Discuss any two important purpose of an econometric research.
2. Using suitable equations explain a dynamic regression model.
3. Define autocorrelation. What are the consequences of autocorrelation?
4. Define Logit Regression Model. Discuss its features.

SECTION : C

Answer any ONE.

(Marks: 1x12=12)

1. Assume a two variable linear regression model. Show what happens to the variance of the OLS estimators (for any one estimator) in the presence of heteroscedasticity. (the disturbance term follow all the other standard OLS assumptions).
1. Using matrix algebra, obtain the estimates of the parameters of a k-variable linear regression model. Also show that the estimators are BLUE.