School of Liberal Education

Master of Arts in Economics
Semester End Examination - Jun 2024

Duration : 180 Minutes
Max Marks : 100

Sem II - K1PN204T - Econometrics

General Instructions
Answer to the specific question asked
Draw neat, labelled diagrams wherever necessary
Approved data hand books are allowed subject to verification by the Invigilator

1)	Explain the meaning of partial regression coefficients.	K1(2)
2)	Show the Drivation of the formula of β1.	K2(4)
3)	Illustrate the confidance interval of β2	K2(6)
4)	How do you interpret the intercept term in a regression model that includes dummy variables?	K3(9)
5)	When should you use a dummy variable for a qualitative variable with two categories, and when is it appropriate to use more than one dummy variable?	K3(9)
6)	Using any hypothetical data of X and Y with 10 observation, calculate the value of r2	K5(10)
7)	Discuss the Interaction Effects Using Dummy Variables.	K4(12)
8)	In the regression $Yi = \beta_1 + \beta_2 X_i + u_i$ suppose we multiply each X value by a con⌐stant, say, 2. Will it change the residuals and fitted values of Y? Explain. What if we add a constant value, say, 2, to each X value?	K5(15)
9)	Show that $\beta_{YX}\beta_{XY} = r^2$ where r is the coefficient of correlation between X and Y.	K5(15)
10)	Illustrate the Practical Consequences of Multicollinearity.	K6(18)