

Trimester: Sep-Dec 24		
Maximum Marks: 50	Examination: End Term Examination	Date: 15 Jan 2025
Duration: 3 hours		
Computer Lab: 203		
Programme code: 01 Programme: MBA-BE- Minor	Class: SY	Trimester: V
College: K. J. Somaiya Institute of Management	Name of the department/Section/Center: Economics	
Course Code: 217P01M534	Name of the Course: Econometrics	
Instructions: a) Download and keep with you all data files ready to answer questions. b) Keep e-views software ready to be used to answer questions. c) Estimate and “copy paste” output and write the interpretation as per the question in MS Word. Name the Word file as per the format given by the examination department. Write the question numbers properly, and upload as a single file containing all the five answers. Note: Answer any FIVE of the following questions. All questions carry equal marks (10).		

Question No.		Max. Marks
Q.1	Estimate the equation Consumption and Savings Functions using data file Q1 by taking Consumption and Savings as dependent variable and GDP as independent variable. Interpret the results. a) $Y_1 = \beta_0 + \beta_1 \text{ GDP} + \epsilon_i$ b) $Y_2 = \beta_0 + \beta_1 \text{ GDP} + \epsilon_i$ $Y_1 = \text{Consumption} \quad Y_2 = \text{Saving}$	10
Q.2	Estimate three functions linear, lin-log, log-lin using data (passenger cars, LCV and two wheeler) given in Q2 data file. Interpret the results of the equations, Estimate descriptive statistics and plot graphs for each variable. a) $Y = \beta_0 + \beta_1 \text{ Trend} + \epsilon_i$ b) $\text{Log } Y = \beta_0 + \beta_1 \text{ Trend} + \epsilon_i$ c) $Y = \beta_0 + \beta_1 \text{ Log (Trend)} + \epsilon_i$ Y - Passenger cars - Dependent Variable Trend - Independent Variable	10
Q.3	Estimate AR 3 model using sales and advertisement data file Q3 $Y = \beta_0 + \beta_1 X + \epsilon_i$ Y Sales = Dependent Variable X Advt exp = Independent Variable	10
Q.4	Estimate equation to find out the relationship between the Covid-19 cases and Stock Market returns and test for Autocorrelation using Q4 data file $Y = \beta_0 + \beta_1 X_1 + \beta_2 DV + \epsilon_i$ $Y = \text{BSE/NSE}$ $X_1 = \text{Covid Cases}$ $DV = \text{Dummy Variable}$	10
Q.5	Taking the data of Q5 estimate double log function using GDP as dependent variable and GFD as independent variable. $\text{Log } Y = \beta_0 + \beta_1 \text{Log } X + \epsilon_i$ $Y = \text{GDP Dependent Variable}$	10

	X = GFD Independent Variable	
Q.6	Using the data given in Q6 data file on stock market indices, plot graphs, compute return and estimate correlations and descriptive statistics.	10