22ECU515N

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BA DEGREE EXAMINATION MAY 2026
(Fifth Semester)

Branch – **ECONOMICS**

ECONOMETRICS

Time: Three Hours | Maximum: 75 Marks

SECTION-A (10 Marks)

Answer **ALL** questions
ALL questions carry **EQUAL** marks (10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	The word "Econometrics" was first introduced by a) Ragnar Frisch b) Tinbergen c) Keynes d) Samuelson	K1	CO1
	2	Which step comes after estimation in econometric methodology? a) Forecasting b) Hypothesis testing c) Policy formulation d) Data collection	K2	CO2
2	3	Interval estimation provides a) Single value estimate b) Biased estimate c) Range of values d) Forecast error	K1	CO1
	4	The F-test in regression is used for a) Overall significance b) Individual significance c) Error term test d) Multicollinearity	K2	CO2
3	5	The null hypothesis in the Durbin–Watson test is a) No heteroskedasticity b) No autocorrelation c) No multicollinearity d) Normal distribution	K1	CO1
	6	The most common test for detecting autocorrelation is: a) Breusch–Pagan test b) Chow test c) Durbin–Watson test d) Jarque–Bera test	K2	CO2
4	7	In linear regression model, the relationship between variables is assumed to be a) Logarithmic b) Straight line c) Quadratic d) Exponential	K1	CO1
	8	When a dummy variable represents two categories, it is known as a) Binary dummy b) Trinary dummy c) Continuous dummy d) Multiple dummy	K2	CO2
5	9	One common reason for lag in economics is a) Adjustment costs b) Perfect foresight c) No error terms d) Multicollinearity	K1	CO1
	10	The 'I' in ARIMA refers to a) Inflation b) Integration c) Interdependence d) Interval	K2	CO2

Cont…

SECTION - B (35 Marks)

Answer **ALL** questions
ALL questions carry **EQUAL** Marks (5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Classify the main divisions of econometrics.	K2	CO2
		(OR)		
	11.b.	Explain the nature of econometrics.		
2	12.a.	Show the main assumptions of the OLS method.	K2	CO3
		(OR)		
	12.b.	Illustrate the use of the 'F' test in ANOVA in regression analysis.		
3	13.a.	Identify the consequences of autocorrelation.	K3 & K4	CO3
		(OR)		
	13.b.	Examine the role of testing procedures for detecting heteroskedasticity.		
4	14.a.	Analyze the main uses of dummy variables in regression analysis.	K4	CO4
		(OR)		
	14.b.	Critically examine the assumptions of the Linear Regression Model.		
5	15.a.	Analyze how an ad hoc estimation of a distributed lag model is performed.	K4	CO4
		(OR)		
	15.b.	Examine the role of lag in Economics.		

SECTION -C (30 Marks)

Answer **ANY THREE** questions
ALL questions carry **EQUAL** Marks (3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Explain the basic steps in the methodology of econometrics.	K2	CO4
2	17	Summarize the principles of the Ordinary Least Squares (OLS) method.	K2	CO4
3	18	Explain the consequences of multicollinearity.	K5	CO5
4	19	Analyze the role of dummy variables in regression with one quantitative and one qualitative variable.	K4	CO5
5	20	Examine the nature of a Simultaneous Equation Model (SEM).	K4	CO6

Z-Z-Z END