Knowledge Alone Liberates
ज्ञानादेव तु कैवल्यम्
Somaiya Vidyavihar

SOMAIYA
VIDYAVIHAR UNIVERSITY

Somaiya School of Humanities and Social Science

QUESTION PAPERS

BRANCH: Bachelor of Science (Economics)	**SEM: IV**
	OCT/NOV-2023

Sr. No.	Subject	Available
1.	131U01C503 – Basic Econometrics (A)	
2.	131U01C503 – Basic Econometrics (B)	
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

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Semester (July 2023 to October 2023) Examination: End Semester Examination October/November 2023 (UG Programmes)		
Programme code: 01 Programme: BSC Eco	Class: SY	Semester: IV
Name of the Constituent College: S K Somaiya College	Name of the Department: Economics	
Course Code: 131U01C503	Name of the Course: Basic Econometrics	
Duration: 2 Hrs.	Maximum Marks: 60	
Instructions: 1)Draw neat diagrams 2)Assume suitable data if necessary 3)		

Question No.		Max. Marks	Co mapping
Q.1	Full-Length Question		
	A) Explain the methodology adopted in econometrics.	8	1
	B) Elaborate nature and sources of data in economic analysis.	7	
	OR		
	Full-Length Question		1
	C) Describe the significance of stochastic disturbance term.	8	2
	D) Explain the co-efficient of determination that is R^2.	7	2
Q.2	Full-Length Question		
	A) Calculate β_1, β_2 R^2 and R from following weekly family consumption expenditure Y ($) and weekly family income X(($).	8	2
		7	2
	B) Elaborate the T test in short.	8 7	3 3
	OR		
	Full-Length Question		
	C) Describe that the log linear model in short		
	D) Explain the difference between multiple co-efficient of determination on R^2 and multiple co-efficient of co-relation R.		3 3
Q.3	Full-Length Question		
	A) Describe the difference between R and adjusted R^2	8	4
	B) What are the uses of dummy variables in seasonal analysis?	7	4
	OR		
	Full-Length Question		
	C) Explain that the dummy variable as alternative to chow test.	8	4
	D) Describe the piece wise linear regression in short.	7	4
Q.4	Conceptual questions (Any 3)	15	
	A) Methods of ordinary least squares		1
	B) Gauss Markov Theorem		2
	C) Hypothesis testing		2
	D) Regression with origin		3
	E) Interaction effects using dummy variables		4

Data for Q.2 A):

Xi	80	100	120	140	160	180	200	220	240	260
Yi	70	65	90	95	110	115	120	140	155	150

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Semester (July 2023 to October 2023) Examination: End Semester Examination October/November 2023 (UG Programmes)		
Programme code:01 Programme: SYBSC Eco	Class: SY	Semester: IV
Name of the Constituent College: S K Somaiya College	Name of the Department: Economics	
Course Code: 131U01C503	Name of the Course: Basic Econometrics	
Duration: 2 Hrs.	Maximum Marks: 60	
Instructions: 1)Draw neat diagrams 2)Assume suitable data if necessary 3)		

Question No.		Max. Marks	CO attainment
Q.1	Full-Length Question A) Explain methodology adopted in basic econometrics. B) Critically examine the population regression function OR Full-Length Question C) What are the assumptions of classical linear regression model? D) Write a note on co-efficient of determination i.e R^2.	 7 8 8 7	 1 1 1 1
Q.2	Full-Length Question A) Explain internal estimation in short B) What is the χ^2 test? Explain OR Full-Length Question C) What is the log linear model? Explain. D) Explain the hypothesis testing with confidence interval approach.	 7 8 8 7	 2 2 2 2
Q.3	Full-Length Question A) What is the difference between R^2 and adjusted R^2 B) What is the chow test? Explain with an example. OR Full-Length Question C) Examine the interaction effect using dummy variable. D) What is the piece wise linear regression? explain	 8 7 8 7	 3 3 3 3
Q.4	Conceptual questions (Any 3) A) Econometrics require separate discipline B) Standard errors of least squares estimates C)Normality assumption D) Levels of significance E) Regressions on standardized variables	15	 1 1 2 3 4