



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) + C	
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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. B) Elaborate nature and sources of data in economic analysis. OR Full-Length Question C) Describe the significance of stochastic disturbance term. D) Explain the co-efficient of determination that is R^2.	8 7 8 7	1 1 2 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(\$). <table border="1"><tr><td>X_i</td><td>80</td><td>100</td><td>120</td><td>140</td><td>160</td><td>180</td><td>200</td><td>220</td><td>240</td><td>260</td></tr><tr><td>Y_i</td><td>70</td><td>65</td><td>90</td><td>95</td><td>110</td><td>115</td><td>120</td><td>140</td><td>155</td><td>150</td></tr></table> B) Elaborate the T test in short. 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.	X_i	80	100	120	140	160	180	200	220	240	260	Y_i	70	65	90	95	110	115	120	140	155	150	8 7 8 7	2 2 3 3 3 3
X_i	80	100	120	140	160	180	200	220	240	260															
Y_i	70	65	90	95	110	115	120	140	155	150															
Q.3	Full-Length Question A) Describe the difference between R and adjusted R^2 B) What are the uses of dummy variables in seasonal analysis? OR Full-Length Question C) Explain that the dummy variable as alternative to chow test. D) Describe the piece wise linear regression in short.	8 7 8 7	4 4 4 4																						
Q.4	Conceptual questions (Any 3) A) Methods of ordinary least squares B) Gauss Markov Theorem C) Hypothesis testing D) Regression with origin E) Interaction effects using dummy variables	15	1 2 2 3 4																						





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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.	7	1
	B) Critically examine the population regression function	8	1
	OR		
Q.2	Full-Length Question		
	A) Explain internal estimation in short	7	2
	B) What is the χ^2 test? Explain	8	2
	OR		
Q.3	Full-Length Question		
	A) What is the difference between R^2 and adjusted R^2	8	3
	B) What is the chow test? Explain with an example.	7	3
	OR		
Q.4	Full-Length Question		
	C) Examine the interaction effect using dummy variable.	8	3
	D) What is the piece wise linear regression? explain	7	3
	OR		
Q.4	Conceptual questions (Any 3)	15	
	A) Econometrics require separate discipline		1
	B) Standard errors of least squares estimates		1
	C) Normality assumption		2
	D) Levels of significance		3
	E) Regressions on standardized variables		4



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Semester (July 2023 to October 2023)		
Examination: End Semester Examination October/November 2023 (UG Programmes)		
Programme code:01	Class: SY	Semester: IV
Programme: BSC Eco		
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 nature and sources of data for economic analysis. B) Examine the significance of stochastic disturbance term. OR Full-Length Question C) Explain the co-efficient of determination that is R^2. D) Discuss sample regression function.	8 7 8 7	1 1 1 2																																										
Q.2	Full-Length Question A) Explain hypothesis testing with confidence interval approach B) Calculate β_1, β_2, R^2 and R from following weekly family consumption expenditure Y (\$) and weekly family income X(\$). <table border="1"><tr><td>X</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>17</td><td>18</td></tr><tr><td>Y</td><td>4.4</td><td>5.7</td><td>5.9</td><td>7.3</td><td>7.3</td><td>6.5</td><td>7.8</td><td>7.8</td><td>11.</td><td>10.</td><td>10.</td><td>13.</td><td>13.</td></tr><tr><td></td><td>5</td><td>7</td><td>7</td><td>3</td><td>1</td><td>8</td><td>1</td><td>3</td><td>02</td><td>67</td><td>83</td><td>61</td><td>53</td></tr></table> OR Full-Length Question C) Write note on F test? D) What is the reciprocal model? explain	X	6	7	8	9	10	11	12	13	14	15	16	17	18	Y	4.4	5.7	5.9	7.3	7.3	6.5	7.8	7.8	11.	10.	10.	13.	13.		5	7	7	3	1	8	1	3	02	67	83	61	53	8 7 8 7	2 2 3 3
X	6	7	8	9	10	11	12	13	14	15	16	17	18																																
Y	4.4	5.7	5.9	7.3	7.3	6.5	7.8	7.8	11.	10.	10.	13.	13.																																
	5	7	7	3	1	8	1	3	02	67	83	61	53																																
Q.3	Full-Length Question A) Describe the polynomial regression model B) Explain the cautions in use of dummy variable OR Full-Length Question C) What are the uses of dummy variable in seasonal analysis? D) Describe piece wise linear regression in short.	8. 7 8 7	3 3 4 4																																										
Q.4	Conceptual questions (Any 3) A) Measurement scales of variables B) Gauss Markov Theorem C) Interval estimation D) Normality test E) Regression on standardized variables	15	1 1 2 3 4																																										

