



K22U 0262

Reg. No. : .....

Name : .....

VI Semester B.A. Degree (CBCSS – OBE – Regular)  
Examination, April 2022  
(2019 Admission)  
CORE COURSE IN ECONOMICS/DEVELOPMENT ECONOMICS  
6B12 ECO/DEV. ECO : Basic Tools For Economic Analysis – II

Time : 3 Hours

Max. Marks : 40

PART – A

Answer **all** questions. **Each** carries **one** mark :

1. Define limit.
2. What is slope ?
3. What is correlation ?
4. Define regression.
5. What is meant by trend ?
6. What is marginal cost ?

(1×6=6)

PART – B

Answer **any six** questions. **Each** carries **two** marks :

7. What do you mean by production function ?
8. Find the rank of the matrix A from its echelon matrix and comment on the question of on singularity

$$A = \begin{vmatrix} 1 & 5 & 1 \\ 0 & 3 & 9 \\ -1 & 0 & 0 \end{vmatrix}$$

P.T.O.



9. What is scatter diagram ?
10. What is saving function ?
11. Define moving average.
12. What do you mean by index number ?
13. What is inverse of a matrix ?
14. What do you mean by time series data ?

(2×6=12)

## PART – C

Answer **any four** questions. **Each** carries **three** marks :

15. What is elasticity of demand? Explain various types of elasticity.
16. Describe the relation between correlation and regression coefficients.
17. Explain simple linear regression model.
18. Explain the idea of time reversal and factor reversal tests.
19. Given the total cost function  $TC = 3Q^2 + 7Q + 12$ , Find MC and AC.
20. From the following data fit a regression line of X on Y :

X	12	10	8	6	4	2
Y	10	8	6	5	4	1

(4×3=12)

## PART – D

Answer **any two** questions. **Each** carries **five** marks :

21. What is Cobb-Douglas production function ? Explain the properties of Cobb-Douglas production function.



22. Using Cramers rule, solve

$$11p_1 - p_2 - p_3 = 31$$

$$-p_1 + 6p_2 - 2p_3 = 26$$

$$-p_1 - 2p_2 + 7p_3 = 24.$$

23. Calculate Karl Pearson's correlation coefficient for the following data :

X	22	20	18	14	10	7	6	4	1
Y	10	12	16	17	19	21	24	26	27

24. Explain various types of Index numbers. Differentiate between Laspyer's and Paasche's index number. (5x2 =10)

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