24U314S (Pages: 2) Name: ....

Reg.No: ....

THIRD SEMESTER B.A. DEGREE EXAMINATION, NOVEMBER 2025
(CBCSS - UG)
CC19UECO3B03 - QUANTITATIVE METHODS FOR ECONOMIC ANALYSIS - I
(Economics - Core Course)
(2019 to 2023 Admissions - Supplementary/Improvement)

Time : 2.5 Hours   Maximum : 80 Marks

Credit : 4

Part A (Short answer questions)

Answer *all* questions. Each question carries 2 marks.

1. Solve $x + 3 = 6$.

2. What is a function?

3. What is meant by market equilibrium?

4. Give the equation of X axis.

5. What will be the graph of a linear equation?

6. What is deliberate sampling?

7. Explain the concept of organizing the data.

8. Explain the absolute measures of dispersion.

9. What is standard deviation?

10. What is Gini-Coefficient?

11. Define Kurtosis.

12. What is Histograms?

13. Explain negative correlation.

14. What are the properties of correlation co efficient?

15. What is least square?

(Ceiling: 25 Marks)

Part B (Paragraph questions)

Answer *all* questions. Each question carries 5 marks.

16. Solve $2^{x+7} = 4^{x+2}$?

17. If $x = log2$ $y = log3$ $z = log5$, find the logarithm of 150?

18. Solve $4x^2 - 9 = 0$

19. Define the trace of a matrix with an example.

20. Find the value of the determinant $\begin{vmatrix} 1 & 2 & -3 \\ 2 & -1 & 2 \\ 3 & 2 & 4 \end{vmatrix}$

21. Solve using Crammers Rule $2x + 3y = 1; \quad 3x + y = 5$

22. Write a note on degree of correlation.

23. Write a note on rank correlation.

(Ceiling: 35 Marks)

Part C (Essay questions)

Answer any *two* questions. Each question carries 10 marks.

24. Find the inverse of $A = \begin{bmatrix} 3 & 5 & 7 \\ 2 & -3 & 1 \\ 1 & 1 & 2 \end{bmatrix}$

25. Find the rank of $A = \begin{bmatrix} 1 & 2 & 0 & 5 \\ 3 & 1 & 2 & 2 \\ 2 & 4 & 0 & 10 \end{bmatrix}$

26. Discus the relative merits and demerits of mean, median and mode, and examine the application of the same in the field of economics

27. What is regression? Explain the use of regression equations in an economy?

(2 × 10 = 20 Marks)

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