19U313 (Pages: 2) Name: .....

Reg.No: .....

THIRD SEMESTER B.A. DEGREE EXAMINATION, NOVEMBER 2020

(CBCSS - UG)

CC19U ECO3 B03 - QUANTITATIVE METHODS FOR ECONOMIC ANALYSIS

(Economics - Core Course)

(2019 Admission - Regular)

Time : 2.5 Hours Maximum : 80 Marks

Credit : 4

Part A (Short answer questions)

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

1. Simplify $\frac{4^2}{4^5}$?
2. Solve $x^2 = 4$
3. What is a quadratic function?
4. Find the slope of the line joining $(4, 5)$and $(2, 3)$?
5. Define a unit matrix
6. Find the value of the determinant $\begin{vmatrix} 2 & 4 \\ 8 & 2 \end{vmatrix}$
7. What will be the minimum rank of a non zero matrix?
8. Explain the demerits of Sampling.
9. Explain the features of a good average.
10. Explain quartile deviation.
11. What do you mean by bar diagrams?
12. Explain correlation graph.
13. What is the relevance of Karl pearsons coefficient of correlation?
14. What is least square?
15. Explain regression line.

(Ceiling: 25 Marks)

Part B (Paragraph questions)

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

16. Solve $log_5(x-7)=1$?

17. What is the equilibrium price and quantity given by $Q_d = 2 - .2p$ and $Q_s = .2 + .07p$?

18. Solve $2x - 3y = 3; \quad 4x - y = 11$ using matrix method.

19. Solve using Crammers' Rule $2x - 3y = 3; \quad 4x - y = 11$

20. What is standard deviation?

21. Write a note on Kurtosis.

22. Differentiate correlation and causation.

23. Write a note on rank correlation.

(Ceiling: 35 Marks)

Part C (Essay questions)

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

24. Solve $9x + 3y - 4z = 35; \quad x + y - z = 4; \quad 2x - 5y - 4z + 48 = 0$

25. Calculate median by the following data by using ogives Marks : 0-10 10-20 20-30 30-40 40-50 50-60 Frequency: 4 8 12 25 16 9

26. Draw Lorenz curve for 2 groups of individuals (A & B) based on the following data and compare the inequality of the groups A & B Income : 1000-1500 1500-2000 2000-2500 2500-3000 3000-3500 Frequency A : 60 120 300 80 40 Frequency B : 150 250 100 70 30

27. Write a detailed explanation of regression analysis.

(2 × 10 = 20 Marks)

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