Reg. No.:

Name :

V Semester B.A. Degree (C.B.C.S.S. - O.B.E.- Regular/Supplementary/ Improvement) Examination, November 2024 (2019 to 2022 Admissions)

CORE COURSE IN ECONOMICS/DEVELOPMENT ECONOMICS 5B07 ECO/DEV ECO: Basic Tools for Economic Analysis - I

Time: 3 Hours

Max. Marks: 40

PART - A

Answer all questions. Each carries one mark.

- 1. What do you mean by a sample survey?
- 2. Solve 4x + 2y = 6 and 5x + y = 6.
- 3. Explain the chief features of an average.
- 4. What do you mean by equality of sets ?
- 5. Find A B, if $A = \{1, 2, 3, 4, 5\}$ and $B = \{2, 4, 5, 6, 7\}$.
- 6. What are deciles and percentiles ?

 $(6 \times 1 = 6)$

PART-B

Answer any six questions. Each carries 2 marks.

- 7. Find the sum of 'n' terms of an A.P. whose 7th term is 30 and 13th term is 54.
- 8. Explain the merits and demerits of census method.
- 9. Explain the desirable properties of a good measure of variation.
- 10. Solve the equation $2x^2 + 8x + 8 = 0$.
- 11. Distinguish super set and proper subset.
- 12. Find the equilibrium price and quantity. S = 20 + 3p and D = 160 - 2p (p is the price).
- 13. Find the quartile deviation for the following values : 28, 32, 25, 42, 55, 82, 10, 25, 40, 38, 39
- 14. Bring out the difference between mean deviation and standard deviation.

 $(6 \times 2 = 12)$

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PART - C

Answer any four questions. Each carries 3 marks.

15. Define a histogram. Represent the following data in a histogram.

Marks	10 - 15	15 - 20	20 - 25	25 – 30	30 - 35
No. of Students	10	25	50	40	15

- 16. What is simple random sampling? Explain its merits and demerits.
- 17. Solve:

$$4x + 3y = 2x + 7$$

 $3x = 3y + 2x - 1$

- 18. What is Lorenz curve? What are its uses?
- 19. Find the median from the following data:

Wage	40	45	50	52	58	60
No. of Workers	3	12	20	15	10	8

20. Distinguish cost function and revenue function.

PART - D

Answer any two questions. Each carries 5 marks.

21. Calculate mean for the following data.

Age	0-10	10 - 20	20 - 30	30 - 40	40 - 50	50 - 60	60 - 70	70 - 80
No. of Persons	15<	30	53	75	100	110	115	125

22. What is skewness? What are its measures?

23. What are the measures of dispersion? Distinguish between absolute and relative measures of dispersion. 24. Solve 7x - 4y - 20z = 0

10x - 13y - 14z = 0

3x + 4y - 9z = 11