

21U348

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Name:

Reg. No:

THIRD SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2022

(CBCSS - UG)

(Regular/Supplementary/Improvement)

CC19U FTL3 A11B - BASIC NUMERICAL SKILLS

(Food Technology - Common Course)

(2019 Admission onwards)

Time: 2.5 Hours

Maximum: 80 Marks

Credit: 4

Part A (Short answer questions)

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

1. Define power set.
2. What are the symbols used in Venn Diagram?
3. Find the value of the determinant of the matrix B.

$$B = \begin{bmatrix} 1 & 0 & 0 \\ 0 & 1 & 1 \\ 0 & 0 & 1 \end{bmatrix}$$

4. Solve $5x + 7x = 72$
5. Write the general form of second degree polynomial.
6. Write profit function.
7. For the following AP Write the first term and the common difference (i) -5, -1, 3, 7,
(ii) .6, 1.7, 2.8, 3.9,
8. Define geometric mean
9. Find the total interest and amount at the end of 5 years for Rs. 5000 at 10 % p.a, simple interest.
10. Define sampling error.
11. What is bar diagram?
12. What is less than ogive? Give an example.
13. Write any two demerits of harmonic mean.
14. Difference between Standard deviation and Mean deviation.
15. What is Skewness?

(Ceiling: 25 Marks)

Part B (Paragraph questions)

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

16. Solving of simultaneous equations with the help of matrices (Cramer's Rule)
 $2X + 3Y = 1$
 $3X + Y = 5$
17. What are the factors of (i) $6x^2 - 2x = 0$? (ii) What are the factors of $2x^2 + 7x + 3$?
18. Find three numbers in A.P whose sum is 9 and the product is -165.

