PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2023
(Third Semester)

Branch – FOODS AND NUTRITION

RESEARCH METHODOLOGY AND STATISTICS

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)
Answer ALL questions
ALL questions carry EQUAL marks   (5 x 1 = 5)

1   Find the sampling that is a further development of the principle of cluster sampling.
(i)   Area sampling   (ii) Systematic sampling
(iii) Multistage sampling   (iv) Regional sampling

2   Which is a standard method used for hand coding in data collection?
(i)   To code in the margin with a coloured pencil
(ii) To code in the margin with black pen
(iii) Not assigning numerals by coloured pencil
(iv) Not assigning symbols by black pen

3   Name the measure of flat –toppedness of a curve
(i)   Skewness   (ii) Kurtosis
(iii) Dispersion   (iv) central tendency

4   Indicate the test used for comparing two related samples involving small values of sample.
(i)   Chi-square test.   (ii) paired t -test
(iii) Correlation   (iv) Regression

5   Two or more events are said to be independent when the outcome of one does not affect it
(i)   Dependent events   (ii) Independent events
(iii) equally likely events   (iv) Compound events

SECTION - B (15 Marks)
Answer ALL Questions
ALL Questions Carry EQUAL Marks   (5 x 3 = 15)

6   a.   Explain basic research.
         OR
    b.   Show the Systematic method of sampling with example.

7   a.   Prepare schedule for data collection.
         OR
    b.   Prepare a data with continuous frequency distribution.

8   a.   Choose the objectives of Averaging.
         OR
    b.   Evaluate regression lines of X and Y variables.

9   a.   State the term Probability.
         OR
    b.   Produce assumptions in Analysis of Variance.

10 a. Compare Tabular presentation with Diagrammatic presentation.

OR

b. Discuss on popular report.

SECTION -C (30 Marks)
Answer ALL questions
ALL questions carry **EQUAL** Marks   (5 x 6 = 30)

11 a. Elucidate on conceptual and empirical Research.

OR

b. Categorize sampling Errors.

12 a. Construct the advantages of using secondary data.

OR

b. Predict the types of classification of Data.

13 a. Enumerate the concept of standard deviation and mention the difference between mean deviation and standard deviation.

OR

b. Create Correlation Coefficient for the following data.

X	1	2	3	4	5	6	7	8	9	10
Y	13	14	15	17	16	20	18	19	22	21

14 a. Categorize the two important theorems of Probability.

OR

b. In an experiment on immunization of cattle from tuberculosis, the following results were obtained.

	Affected	Not affected
Innoculated	12	26
Not Innoculated	16	6

Calculate Chi-Square value and write the results.

15 a. Elucidate on pie diagram and write its limitations.

OR

b. Determine the significance of Plagiarism.

Z-Z-Z   END