

SHRIMATHI DEVKUNVAR NANALAL BHATT VAISHNAV COLLEGE FOR WOMEN
(AUTONOMOUS)

(Affiliated to the University of Madras and Re-accredited with 'A+' Grade by NAAC)
Chromepet, Chennai - 600 044.

M.Sc. FSND- END SEMESTER EXAMINATIONS - APRIL 2025

SEMESTER - II

20PNDCT2004 - Research Methods in Nutrition

Total Duration : 2 Hrs. 30 Mins.

Total Marks : 60

Section B

Answer any **SIX** questions ($6 \times 5 = 30$ Marks)

1. Explain the different steps followed in a research process.
2. Explain the differences between primary and secondary data sources in research.
3. A nutritionist conducted a study on the daily calorie intake (in kcal) of 10 individuals to analyze their dietary patterns. The recorded calorie intake values are as follows: 2200, 1800, 2500, 1900, 2100, 2300, 2000, 2400, 1800, 2250. Calculate the mean, median, and mode for the given calorie intake data. Interpret the results and explain what these measures of central tendency indicate about the dietary habits of the individuals in the study.
4. Explain the key guidelines and precautions that should be followed when writing a nutrition research report.
5. Illustrate how comparative scales might be applied in nutrition research.
6. Classify the different tools used for primary data collection in nutrition research.
7. Explain the key differences between parametric and non-parametric tests. Provide examples when each type of test would be appropriate in nutrition research.
8. Critically evaluate the use and limitations of plagiarism checkers (Turnitin and Scribbr) in maintaining research integrity within the field of nutrition.

Section C

I - Answer any **TWO** questions ($2 \times 10 = 20$ Marks)

9. Classify the types of research design.
10. Classify the types of non-comparative scales.
11. Infer on the data preparation process including editing, coding, classification, and tabulation.

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12. A researcher investigates whether a high-protein diet leads to greater weight loss (in kg) compared to a regular diet in 8 participants at the end of 8 weeks. Control group (regular diet): 2.3, 1.8, 2.0, 2.1, 1.7, 2.5, 2.2, 1.9. Experimental group (High protein diet): 3.5, 4.2, 3.8, 4.5, 3.9, 4.1, 4.3, 3.7. Perform an independent sample t-test on the given data at a 0.05 significance level.

II - Compulsory question (1 × 10 = 10 Marks)

13. Infer on the role of computer applications (such as Microsoft Excel, SPSS, and Minitab) and reference management tools (like Mendeley) in nutrition research.
