

No. of Printed Pages : 5

MFN-009

**MASTER OF SCIENCE
DIETETICS AND FOOD SERVICE
MANAGEMENT
[M. SC. (DFSM)]**

Term-End Examination

June, 2024

**MFN-009 : RESEARCH METHODS AND
BIostatISTICS**

Time : 3 Hours

Maximum Marks : 100

Note : *Question No. 1 is compulsory. Answer **five** questions in all. All questions carry equal marks.*

1. (a) List the *three* components of Epidemiology. 3
- (b) Write any *four* demographic and social variables for the health of the community. 4
- (c) Define Research. 1

P. T. O.

- (d) Describe the strengths of analytic studies. 4
- (e) Explain probability sampling. 4
- (f) Name *two* types of Interview. 2
- (g) Name the *four* measures of central tendency. 2
2. You have to conduct a research study to determine the prevalence of Vitamin A deficiency in children of the age group one to five years. Develop a research proposal under the following heads :
- (i) Title of the study 2
- (ii) Research questions 2
- (iii) Research objectives 3
- (iv) Sample and sample size 2
- (v) Research Design 3
- (vi) Research Instruments 3
- (vii) Method of data collection 2
- (viii) Statistical tools to be used for analysis. 3
3. (a) Describe what is Experimental Research. 4

- (b) Explain the *three* characteristics of experimental research. 4
- (c) State the steps involved in conducting an experimental research. 4
- (d) Describe the characteristics of a good research tool. 8
4. (a) Describe the various methods of probability sampling. 10
- (b) Explain the scope of research in nutrition. 10
5. Explain the following briefly : 5 each
- (a) Describe the characteristics of a good research questionnaire.
- (b) Describe the types of interview.
- (c) Describe how the process the quantitative data.
- (d) Differentiate between numerical scale and graphic scale.
6. (a) Explain what is systematic error. 5

- (b) Describe the advantages of formulating a research design. 5
- (c) Explain the level of confidence. 5
- (d) Enumerate various groups of analytic studies. 5
7. (a) Describe any *two* methods of data collection in educational research. 10
- (b) Write a short note on frequency distribution. 5
- (c) Given are the weight of the children (M&F) in kg : 5

Male (kg)	Female (kg)
25	22
28	16
33	33
36	29
28	33
25	30

- (i) Calculate the mean, median and mode of the male and female children.
- (ii) Calculate the standard deviation score of the male and female children.

8. Write short notes on any *four* of the following :

5 each

- (a) Explain the processes involved in research.
- (b) Describe the strengths of descriptive studies.
- (c) What are cohort studies ?
- (d) Write the characteristics of experimental research.
- (e) Differentiate between stratified sampling and cluster sampling.