

**MASTER OF SCIENCE (DIETETICS AND
FOOD SERVICE MANAGEMENT)**

Term-End Examination

June, 2013

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

Time : 3 hours

Maximum Marks : 100

*Note : Question No. 1 is compulsory. Answer five questions
in all.*

- 1. (a) Define the following : 10**
- (i) Research
 - (ii) Hypothesis
 - (iii) Validity
 - (iv) Qualitative Data
 - (v) Epidemiology
- (b) Give one example for each of the following : 5**
- (i) Null Hypothesis
 - (ii) Structured Question
 - (iii) Total population
 - (iv) Ratio scale
 - (v) Purposive Sample

- (c) Fill in the blanks : 5
- (i) Probability sampling is based on _____ selection.
 - (ii) Hypothesis should be started as _____ and _____ .
 - (iii) Chi - square is an example of _____ test.
 - (iv) Correlational studies are used to look _____ between variables.
 - (v) Case studies are conducted with _____ purpose.

2. "Malnutrition in children of age group one to five is a major problem in India". You are asked to study this problem in your city. Develop a research proposal with the following points.

- (a) Title of the Research study 2
- (b) Research objectives 3
- (c) Sample and Sampling Technique 5
- (d) Research Method 3
- (e) Research Tools 5
- (f) Method of Data Collection 2

3. Explain the following briefly giving suitable examples :

- (a) Usability of tool 5
- (b) Ordinal scale 5
- (c) Characteristics of good sample 5
- (d) Standardized test 5

4. (a) Differentiate between the following research tools giving appropriate examples : 6+6
- (i) Structured questionnaire and unstructured questionnaire.
 - (ii) Documents and Records.
- (b) Differentiate between the following research methods with appropriate examples : 4+4
- (i) Participant observation and Non-participant observation.
 - (ii) Structured Interview and unstructured Interview.
5. Find out the product moment co-relation for the following two variables at 0.05 level of significance. 20
- Age : 46 50 52 49 35 45
Weight : 50 45 44 60 42 36
6. (a) Explain how will you ensure the quality of data in research studies ? 6
- (b) Explain how will you observe the behaviour of a person to collect data for research. 6
- (c) Describe the limitations of the Interview method for collecting data. 8
7. Calculate mean, median, mode and standard deviation for the following ungrouped data. 20
- 20, 25, 16, 3, 10, 5, 9, 21, 14, 7

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

- (a) True Experimental Design 5+5+5+5
 - (b) Characteristics of case study
 - (c) Cross sectional study
 - (d) Non - parametric tests
 - (e) Incidental sample
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