# M.Sc IN CLINICAL NUTRITION AND DIETITICS I-SEMESTER

## EXAMINATION- JUNE 2012 COURSE-III RESEARCH METHODS AND BIOSTATISTICS

Time: 3hours

Max Marks: 80

#### Answer the questions from all parts following their internal choice

#### Part A

### Answer any ten of the following:

3X10=30

- 1. Define Sample space
  - 2. Define mutually independent events
  - 3. Explain measures of dispersion and is use in clinical research
  - 4. What is Confidence interval?
  - 5. Explain the content validity in the context of developing questionnaire.
  - 6. Explain the Internal consistency reliability and its use in developing questionnaire
  - 7. State the different types of sampling errors
  - 8. Explain generalizability and its importance in clinical research
  - 9. List the methods of data collection
  - 10. Write a note on minimum detectable difference in the context of sample size estimation
  - 11. Explain the usefulness of randomization in clinical research.
  - 12. Define Regression and its use in clinical nutrition research.
  - 13. Write short note on graphs.
  - 14. Write on confounding.

#### Part B

## Write briefly on any four of the following:

5X4=20

- 1. Explain one tailed and two-tailed research hypothesis and give two examples in each
- 2. What is sampling? Give the principles of sampling.
- 3. State the different levels of scale development and explain
- 4. Explain Population and sample with examples.
- 5. Explain computerized documentation in detail.
- 6. Explain hypothesis test on difference between two means

#### Part C

# Answer any three of the following questions:

10X3=30

- 1. How do you plan research project in clinical nutrition to formulate specific diet for HIV patients?
- 2. Explain the criteria of good research and define research problem.
- 3. Explain correlation and regression with merits and demerits
- 4. Explain Systematic sampling method and give two merits and demerits.
- 5. Elaborate on genome analysis.

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