### 2013

#### M.Sc.

# 1st Semester Examination NUTRITION & DIETETICS

PAPER-NUD-104

Full Marks: 40

Time: 2 Hours

The figures in the right-hand margin indicate full marks.

Candidates are required to give their answers in their own words as far as practicable.

Illustrate the answers wherever necessary.

#### Module-I

## (Research Methodology and Computer Application)

[ Marks—20 ]

- **1.** Answer any *five* questions of the following:  $1 \times 5$ 
  - (a) What is formula bar?
  - (b) What is the goal of pilot study?
  - (c) What do you mean by time budgeting in the project?
  - (d) What is information?
  - (e) Write the names of any two types of experimental design.
  - (f) What is 'undo' function?
  - (g) What is operation research?

- 2. (a) What is experimental design? Explain controlled and uncontrolled variables with examples.
  - (b) What do you mean by retrospective method of investigation? (2+4)+2

Or

- (a) State the importance of literature review for formulating research proposal.
- (b) Discuss briefly the types of evaluation of research period and their importances.
- (c) State the basic difference between aims and objectives. 2+(2+2)+2
- 3. (a) State the functions of operating system.
  - (b) What is machine language? Explain op-code.
  - (c) State the difference between compiler and interpreter. 2+3+2

Or

- (a) State the functions of ALU.
- (b) What do you mean by MICR and OCR?
- (c) Write the steps of drawing a pie diagram in MS-EXCEL. 2+2+3

#### Module--II

#### (Biostatistics)

#### [ Marks-20 ]

4. Answer any five questions of the following:

 $1 \times 5$ 

- (a) What is median?
- (b) What do you mean by 'Level of significance'?
- (c) What is central tendency?
- (d) What is co-efficient of variance?
- (e) What is continuous variable?
- (f) Write the general formula of Standard Error.
- (g) What do you mean by Model I-ANOVA.
- (h) What do you mean 'two-tail-t test'?
- 5. (a) In a moderately asymmetrical distribution, the mean and the median are respectively 25.6 and 26.1 kg. What is the mode of the distribution?
  - (b) A certain diet to each of 12 patients resulted in the following changes in blood pressure:

Can it be concluded that the diet will in general be accompanied by an increase in blood pressure?

(Given for 11 d.f.,  $t_{0.05} = 2.2$ )

3+5

#### Or

(a) a random sample of 500 students were classified according to financial condition and nutritional status as shown below:

#### Financial Condition

Nutritional Status	Rich	Middle Class	Poor	Total
Normal	42	137	61	240
Under Nutrition	58	113	89	260

Test whether the two attributes, Nutritional status and financial condition are associated or not.

(Given 
$$\chi^2_{0.05} = 5.99$$
 and  $\chi^2_{0.01} = 9.21$  for df = 2)

- (b) Explain the terms 'Class limits' and 'Class boundaries' with an example. 5+3
- **6.** (a) Discuss mesokurtic, leptokurtic and platykurtic distribution.
  - (b) Mention the application of ANOVA in the field of nutrition and dietetics.

#### Or

- (a) What do you mean by co-rrelation co-efficient?
- (b) Write the properties of co-rrelation co-efficient?
- (c) Discuss the various limitations of co-efficient of co-rrelation.

2+3+2