

2011**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 (Marks : 20)**(Research Methodology & Computer Applications)**

1. Answer any five questions of the following : 1×5
- (a) What are the advantages of operation research (OR) for decision making.
 - (b) Write the full forms of PERT & CPM.
 - (c) Write any two major headings of budget estimation under project proposal.
 - (d) Write any two main features for minimizing the cost of food product ?
 - (e) Write any two points focussing that review control the appropriate determination of aims & objectives of the Project Proposal.

(Turn Over)

- (f) What do you mean by pilot project?
- (g) What do you mean by hybrid computer?
- (h) Write the full form of RAM and ROM.

2. (a) State the importance of literature reviews on Project formation.

(b) What is Bibliography and write about any one to cite the bibliography of an edited book, a journal and a text book. 3+

Or

(a) How PERT is designed in project formation and what are advantages of PERT?

(b) State the impact of PERT in connection with project implementation, conduction and completion. (3+2)

3. (a) Differentiate between application & system software

(b) State the two forms of translators.

(c) Write the different types of High Level Language 2+

Or

(a) State the name of few important peripheral devices used in computer.

(d) What is ALU?

(c) Mention few applications of MS-Excel in the field of nutritional science briefly. 3+

Module—II (Marks : 20)
(Biostatistics)

4. Answer any *five* questions of the following : 1×5
- (a) Why ANOVA is more powerful than student 't'-test?
 - (b) What do you mean by $M \pm 2.58 SE$?
 - (c) Distinguish between 'Finite & Infinite' population with examples.
 - (d) What are their importances of degree of freedom (df)?
 - (e) Write basic difference between Positive & Negative correlation with examples.
 - (f) What are the different types of sampling with example?
 - (g) What are the basic difference between graph and diagram with examples?
 - (h) What is CV?
5. (a) How will you draw a frequency 'Histogram' from group sample in continuous nutritional variable citing with example?
- (b) How do you compute the mean, standard deviation & standard error from group data mention with an example of a nutritional variable? 4+4

Or

- (a) How do you compute student t-test for *Pair* and *unPair* observation of small sample in a variable?
- (b) What is the significance of normal distribution curve? 3+3+2

6. (a) State the assumptions that should be justifiable for the chi-square test to be worked out.
- (b) Find whether or not there is a significant association between diabetes & hypertension, where out of 60 diabetics 40 are hypertensive while out of 70 nondiabetic 30 are hypertensive.

$$\text{Critical } \chi^2_{0.02(3)} = 9.84, \quad \chi^2_{0.02(2)} = 7.82,$$

$$\chi^2_{0.02(1)} = 5.41.$$

2+3

Or

- (a) How do you draw a Pie-diagram? Describe with a suitable example.
- (b) To find whether or not there is a significant product moment correlation between the following nutritional data's of two variables :

Height : 172 173 174 175 172 171 175 174 175 171
(cm.)

Age : 18 20 24 25 19 22 48 22 29 20
(yr.)

Critical 't' scores :

$$t_{0.05(10)} = 2.228, \quad t_{0.05(9)} = 2.262,$$

$$t_{0.05(8)} = 2.308, \quad t_{0.05(7)} = 2.365. \quad 3+4$$