



Avinashilingam Institute for Home Science and Higher Education for Women
 (Deemed to be University under Category 'A' by MHRD, Estd. u/s 3 of UGC Act 1956)
 Re-accredited with A++ Grade by NAAC. Recognised by UGC Under Section 12B
 Coimbatore - 641 043, Tamil Nadu, India

Continuous Internal Assessment II -April, 2025
II Semester

Class: I M.Sc

Time: 2 Hours

Major: Food Service Management and Dietetics

Max. Marks: 60

23MFDC13 Research, Statistical Methods and Computer Applications

Course Outcomes:

1. Acquire in-depth knowledge in research techniques relating to dietetics and food service management.
2. Identify research problems and define research hypothesis/research questions relating to food, dietetics and food service operation.
3. Formulate appropriate research design pertaining to dietetics and food service management.
4. Perform Statistical analysis and interpret research findings
5. Communicate documented research findings to the community.

Part A

6 x 1 =6

Choose the Correct Answer

1. A study of only presence or absence of a characteristic is called statistics of
 a. Variables b. Attributes c. Numbers d. Descriptions CO1K3
2. Which one of the following is a non-parametric test CO4K3
 a. 't' test b.F test c. Chi Square d. Z test
3. Estimates can be made of the values of a variable from the known values of other
 Variables through CO4K2
 a. Chi square tests b. Correlation analysis c. Regression analysis d. Variance analysis
4. A hypothesis is accepted only when the p value for significance is CO5K2
 a. < 0.1 b. < 0.05 c. < 0.15 d. < 0.2
5. A suitable diagram to represent percentage breakdown is CO2K4
 a. Bar chart b. Pie chart c. Circles d. Squares
6. Given $r=0.6$, $\sigma_x=4$ and $b_{xy} = 0.8$, σ_y will be CO4K2
 a. 5 b. 3.5 c. 4 d. 3

Part B

3 x 6 = 18

Answer ALL questions

Each answer should not exceed 400 words or two pages

- 7.a. What methods can be adopted to study the association of attributes. CO3K2
 or
- 7.b. What are the limitations of tests of significance. CO3K3
- 8.a. Brief on degrees of freedom. CO2K3
 or
- 8.b. Explain the uses of chi square test. CO4K4
- 9.a. Illustrate application of multivariate analysis in the field of dietetics. CO1K5
 or
- 9.b. Write a note on skewed distributions. CO5K3

Part C

3 x 12 = 36

Answer ALL questions

Each answer should not exceed 800 words or four pages

- 10.a. From the following data find out whether there is any relationship between sex and
 Choice of food. ($d.f = 2$; $X^2 0.05 = 5.99$) CO3K4

Food	Males	Females	Total
Non vegetarian	10	40	50
Vegetarian	70	30	100
Vegan	30	20	50
Total	110	90	200

or

- 10.b. Explain the procedure for testing a hypothesis. CO1K4
- 11.a. Explain the technique of analysis of variance with the rationality of the test. CO3K3
 or
- 11.b. Detail on the diagrammatic representation of data. CO5K2
- 12.a. Elaborate on the importance and properties of normal distribution. CO3K5
 or
- 12.b. Find two regression equations for the following two series. What is the
 Value of X when Y=20 and the value of Y when X=22. CO4K5

X	35	25	29	31	27	24	33	36
Y	23	27	26	21	24	20	29	30

Number of copies: 23

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