# D.K.M COLLEGE FOR WOMEN (AUTONOMOUS) VELLORE-1 DEPARTMENT OF FOODS AND NUTRITION RESEARCH METHODOLOGY AND STATISTICS

Class: II M.Sc Subject Code: 15CPFN3D

#### Unit -I (6 Marks Questions)

- 1. Define variables.
- 2. Give types of variables and its use.
- 3. How will you identify research problems?
- 4. Write the detailed steps in proposal writing.
- 5. What are the roles of Review of literatures?
- 6. Define hypothesis.
- 7. Define research design.
- 8. Discuss on tools of research.

#### Unit -I (15 Marks Questions)

- 1. Discuss on different types of sampling.
- 2. Write a model research proposal.
- 3. Discuss on types and basic principles of research variables.
- 4. What is null hypothesis? Explain types of hypothesis.
- 5. Elaborate research and give its objectives.
- 6. List out the types of research and explain in detail.

#### Unit -II (6 Marks Questions)

- 1. Define quantitative research.
- 2. Differentiate qualitative and quantities research.
- 3. Discuss on sources of data.
- 4. Define tabulation representation with examples.

5. Define graphical representation.

# Unit -II (15 Marks Questions)

- 1. Elaborate the quantitative methods in research and their uses.
- 2. Describe in detail about the data analysis for specific type of data.

# Unit -III (6 Marks Questions)

- 1. Define report writing.
- 2. Define format of thesis.
- 3. The steps to be followed in research presentation.
- 4. Differentiate oral and written presentation.
- 5. Role computer on research.

#### Unit -III (15 Marks Questions)

- 1. Write a brief note on designs, methods and techniques involved in research.
- 2. Describe in detail about format of thesis.
- 3. Write a brief note on application of computer in research.
- 4. Elaborate about the communication and evaluation of research.
- 5. Write a brief note on associations and institutions involved in nutrition research.

# Unit -IV (6 Marks Questions)

1. Draw a histogram and frequency polygon from the following data

Marks	No.of.Students	Marks	No.of.Students	
0-10	4	50-60	14	
10-20	6	60-70	8	
20-40	14	70-90	16	
40-50	16	90-100	5	

2. Find the quartiles from the following distribution.

Age in	No.of	Age in	No.of	
years	Employees	years	Employees	
15-20	13	35-40	112	
20-25	29	40-45	94	
25-30	46	45-50	45	
30-35	60	50-55	21	

3. Calculate coefficient of correlation from the following

X	100	200	300	400	500	600	700
Y	30	50	60	80	100	110	130

- 4. State and prove Baye's theorem.
- 5. A bag contains 7 red and 5 blue balls 2 balls are drawn at random. What is the probability that
  - i. Both are red balls
  - ii. Both are blue balls
  - iii. 2red and 2 blue balls
- 6. Discuss on Mean, Median and Mode.
- 7. Write the advantages and Disadvantages of Mean and Mode.

# Unit -IV (15 Marks Questions)

- 1. Elaborate the details about the deviation.
- 2. Pros and cons of median.
- 3. Details about measures of central tendency.
- 4. Details about the co-relation and their importance.
- 5. Write a detail note on probability.
- 6. Elaborate the test of significance.

# Unit -V (6 Marks Questions)

1. Define binominal Poisson distribution.

- 2. Define probability.
- 3. Define "t" test.
- 4. Define Chi-square test.
- 5. Define dimple "f" test.

# Unit -V (15 Marks Questions)

- 1. Discussion in general the application of probability in research.
- 2. Discuss on different theorems of probability.