

**PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)**

**MSc DEGREE EXAMINATION DECEMBER 2025
(Third Semester)**

Branch - FOODS AND NUTRITION

RESEARCH METHODOLOGY & STATISTICS

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** marks

(10 × 1 = 10)

Module No.	Question No.	Question	K Level	CO
1	1	Which type of research includes surveys and fact-finding enquiries of different kinds? a) Fundamental research b) Applied research c) Action research d) Descriptive research	K1	CO1
	2	Which sampling method involves grouping the population and then selecting the groups or clusters, rather than individual elements, for inclusion in the sample? a) Cluster sampling b) Simple random sampling c) Multi-stage sampling d) Systemic sampling	K2	CO1
2	3	Which type of <i>data are</i> those that are collected afresh and for the first time, and thus happen to be original in character? a) Secondary data b) Primary data c) Collection of data d) Experimental data	K1	CO2
	4	This type of method involves collecting data involving the presentation of oral-verbal stimuli and a reply in terms of oral-verbal responses a) Observation method b) Questionnaire method c) Interview method d) Case study	K2	CO2
3	5	_____ is an attempt to find one single figure to describe whole of figures a) Average b) Dispersion c) Deviation d) Correlation	K1	CO3
	6	The standard deviation concept was introduced by a) Kerlinger b) S.P. Gupta c) Karl Pearson d) Fisher	K2	CO3
4	7	Which means a mere assumption or some supposition to be proved or disproved. a) Correlation b) Mean c) Deviation d) Hypothesis	K1	CO4
	8	Analysis of variance is a statistical method of comparing the _____ of several populations. a) Standard deviation b) Means c) Correlation d) Regression	K2	CO4
5	9	When a mass of data has been assembled, it becomes necessary for the researcher to arrange the same in some kind of concise and logical order. This procedure is referred to as a) Graph b) Tabulation c) Figures d) Data	K1	CO5
	10	The main purpose of graphical representation is to a) Collect data b) Calculate statistical values c) Present data in visual form d) Increase data size	K2	CO5

Cont...

SECTION - B (35 Marks)

Answer ALL questions

ALL questions carry EQUAL Marks $(5 \times 7 = 35)$

Module No.	Question No.	Question	K Level	CO								
1	11.a.	Explain the objectives of research. (OR)	K5	CO1								
	11.b.	Evaluate the cluster sampling method.										
2	12.a.	Construct the features of the interview method. (OR)	K5	CO2								
	12.b.	Organize the types of classification of data.										
3	13.a.	Solve the arithmetic mean from the following data	CO3	K3								
		<table border="1"> <thead> <tr> <th>S.No</th> <th>Marks</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>14</td> </tr> <tr> <td>2</td> <td>36</td> </tr> <tr> <td>3</td> <td>45</td> </tr> <tr> <td>4</td> <td>70</td> </tr> <tr> <td>5</td> <td>105</td> </tr> </tbody> </table> (OR)			S.No	Marks	1	14	2	36	3	45
S.No	Marks											
1	14											
2	36											
3	45											
4	70											
5	105											
13.b. Construct the importance of correlation in research.												
14.a. Identify the features of research. (OR)												
4	14.b.	Explain the features of probability sampling.	K3	CO4								
	15.a.	Discuss the human ethical committee. (OR)										
	15.b.	Elaborate on the process of reference citation.										

SECTION C (30 Marks)

Answer ANY THREE questions

ALL questions carry EQUAL Marks $(3 \times 10 = 30)$

Module No.	Question No.	Question	K Level	CO
1	16	Explain any two types of random sampling methods.	K5	CO1
2	17	Organize different types of tables and its preparation.	K3	CO2
3	18	Calculate the standard deviation of the following test data. data points: 0, 2, 3, 5, 7, 10, 12, 15, 16, 19.	K3	CO3
4	19	Elaborate the importance and applications of the chi-square test.	K3	CO4
5	20	Formulate the format of thesis writing.	K6	CO5