22NDP207N/22NDP207

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2025
(Second Semester)

Branch – **FOODS AND NUTRITION**

NUTRITION RESEARCH METHODS

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	A hypothesis in nutrition research is best described as___ a) A proven fact b) A statistical outcome c) A testable statement or prediction d) A review of literature	K1	CO1
	2	The first step in conducting a nutrition research study is ____ a) Data collection b) Hypothesis formulation c) Literature review d) Identifying the research problem	K2	CO2
2	3	The findings through rat studies are applied to humans, this process is called_____ a) Extrapolation b) Translation c) Replication d) Correlation	K1	CO2
	4	The Institutional Animal Ethics Committee (IAEC) in India operates under which organization? a) FAO b) ICMR c) CPCSEA d) WHO	K2	CO3
3	5	The portion of food taken for testing from a larger group is called____ a) Population b) Sample c) Unit d) Standard	K1	CO3
	6	The most commonly used sampling method in food quality control is____ a) Random sampling b) Judgmental sampling c) Systematic sampling d) Cluster sampling	K2	CO4
4	7	The crude birth rate (CBR) is calculated as___ a)Number of births / Mid-year population × 100 b) Number of births / Total deaths × 100 c) Number of births / Mid-year population× 1000 d) Number of births / Total population × 10	K1	CO2
	8	The neonatal mortality rate includes deaths of infants____ a) Below 28 days of age b) Below 1 year of age c) Below 6 months of age d) Below 5 years of age	K2	CO3
5	9	A positive balance in a metabolic study indicates___ a) Excretion equals intake b) Intake exceeds excretion c) Excretion exceeds intake d) No absorption occurs	K1	CO3
	10	The nitrogen balance equation is: a) N intake – N excretion b) N excretion – N intake c) Protein intake / excretion d) N intake × N excretion	K2	CO4

Cont...

SECTION - B (35 Marks)

Answer **ALL** questions

ALL questions carry **EQUAL** Marks (5 × 7 = 35)

Module No.	Question No.	Question	K Level	CO
1	11.a.	Explain the general principles of cross-sectional studies.	K2	CO1
		(OR)		
	11.b.	Explain the methods of identification of animals for nutrition research.		
2	12.a.	Interpret the principles and application of radio immune assay methods.	K3	CO2
		(OR)		
	12.b.	Relate the uses of stable isotopes in nutrient assessment and metabolism.		
3	13.a.	Outline the guidelines for the use of food composition data in nutrition research.	K3	CO3
		(OR)		
	13.b.	Review the sampling protocol for nutrition research.		
4	14.a.	Explain the components of growth chart.	K4	CO4
		(OR)		
	14.b.	Analyze the functional assessments of nutritional status.		
5	15.a.	Explain the Bioelectric impedance method.	K3	CO5
		(OR)		
	15.b.	Comprise the General principles of metabolic balance studies in nutrition research.		

SECTION -C (30 Marks)

Answer **ANY THREE** questions

ALL questions carry **EQUAL** Marks (3 × 10 = 30)

Module No.	Question No.	Question	K Level	CO
1	16	Apply the ethical issues for conducting nutrition-based research.	K4	CO1
2	17	Explain the techniques of protein quality evaluation in nutrition-based research.	K3	CO2
3	18	Design the sampling method to evaluate the nutrition-based research.	K4	CO3
4	19	Evaluate the assessment of nutritional status.	K5	CO4
5	20	Appraise the basic concepts in assessing body composition.	K6	CO5

Z-Z-Z END