25NDP103/22NDP103N

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2025
(First Semester)

Branch – **FOODS AND NUTRITION**

NUTRITION THROUGH LIFE CYCLE

Time: Three Hours Maximum: 75 Marks

SECTION-A (10 Marks)
Answer **ALL** questions
ALL questions carry **EQUAL** marks (10 × 1 = 10)

Question No.	Question	K Level	CO
1	The nutrient transfer between mother and foetus primarily occurs through: a) Amniotic sac b) Placenta c) Umbilical cord d) Ovary	K1	CO1
2	A twin pregnancy requires increased caloric intake mainly due to: a) Increased maternal renal excretion b) Greater placental mass and foetal growth c) Reduced basal metabolic rate d) Decreased maternal fat deposition	K2	CO1
3	Despite adequate milk secretion, an infant fails to gain weight. Which factor is the most critical to assess? a) Fat content of breast milk b) Feeding frequency and technique c) Vitamin D supplementation d) Mother's protein intake	K1	CO1
4	The hormone responsible for milk ejection during lactation is: a) Prolactin b) Estrogen c) Oxytocin d) Progesterone	K2	CO1
5	"Food jags" in preschoolers refer to: a) Repeated preference for one food b) Refusal of all food c) Overeating at night d) Eating only liquid foods	K1	CO1
6	A school child with frequent dental caries and obesity is most likely consuming excess: a) Vitamin D b) Simple sugars c) Iodized salt d) Fiber-rich foods	K2	CO1
7	Which of the following is the most critical in delaying the onset of osteoporosis in postmenopausal women? a) Increased body water intake b) Adequate calcium and weight-bearing exercise c) Vitamin C supplementation d) Avoidance of simple sugars	K1	CO5
8	Early menarche is strongly associated with: a) Low body fat b) High body fat and rapid growth c) Protein-energy malnutrition d) Zinc deficiency	K2	CO1
9	During high-intensity anaerobic exercise, ATP is primarily derived from: a) Fatty acid oxidation b) Glycolysis c) Ketone body utilization d) Protein catabolism	K1	CO5
10	Glucose homeostasis during and after exercise is regulated mainly by: a) Insulin and Glucagon b) Estrogen and Progesterone c) Vitamin A and D d) Cortisol alone	K2	CO5

Cont...

SECTION - B (35 Marks)

Answer **ALL** questions

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

Question No.	Question	K Level	CO
11.a.	Explain the general principles of deriving RDA for Indians.	K2	CO1
	(OR)		
11.b.	Describe the maternal physiological adjustments during pregnancy.		
12.a.	Explain the physiology of lactation and hormonal regulation.	K3	CO1
	(OR)		
12.b.	Illustrate the feeding problems in premature infants.		
13.a.	Discuss the nutritional status and requirements of preschool children.	K3	CO2
	(OR)		
13.b.	Explain the role of nutritional assessment tools for preschoolers.		
14.a.	Analyze the nutritional problems faced during adolescence.	K3	CO1
	(OR)		
14.b.	Summarize the dietary requirements of elderly people.		
15.a.	Explain the components of an exercise session.	K3	CO4
	(OR)		
15.b.	Discuss the nutritional requirements for mountaineering.		

SECTION -C (30 Marks)

Answer **ANY THREE** questions

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

Question No.	Question	K Level	CO
16	Discuss the importance of nutrition before and during pregnancy, with reference to complications and dietary management.	K4	CO1
17	Explain infant feeding practices, including breastfeeding, bottle feeding, complementary feeding, and modification of cow's milk.	K4	CO2
18	Describe the physiological development and common nutrition problems in preschool and school children. Suggest preventive measures.	K5	CO3
19	Critically evaluate the physical, psychological, and nutritional challenges during adolescence, and propose strategies for healthy adult transition.	K5	CO3
20	Assess the nutritional requirements of athletes and analyze the role of sports supplements.	K4	CO4

Z-Z-Z END