MSc DEGREE EXAMINATION MAY 2026

(Second Semester)

Branch – **FOODS AND NUTRITION**

ADVANCED NUTRITION - II

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	Vitamin A is primarily stored in the (i) Kidney (ii) Liver (iii) Pancreas (iv) Bone	K1	CO1
	2	The active hormonal form of Vitamin D is (i) Calcitriol (ii) Calcitonin (iii) Cholecalciferol (iv) Ergosterol	K2	CO1
2	3	Thiamine deficiency causes_____ (i) Beriberi (ii) Scurvy (iii) Osteomalacia (iv) Pellagra	K1	CO2
	4	Niacin deficiency results in the three Ds of pellagra, except (i) Dermatitis (ii) Dementia (iii) Diahorrea (iv) Dysphagia	K2	CO2
3	5	Calcium absorption is enhanced by (i) Oxalates (ii) Phytates (iii) Vitamin D (iv) Fibre	K1	CO3
	6	Hypocalcemia may result in_____ (i) Tetany (ii) Anemia (iii) Goitre (iv) Fluorosis	K2	CO3
4	7	Iron deficiency anemia is characterized by (i) Macrocytic RBC (ii) Microcytic RBC (iii) Increased hemoglobin (iv) Polycythemia	K1	CO4
	8	Iodine deficiency leads to_____ (i) Goitre (ii) Osteoporosis (iii) Pellagra (iv) Scurvy	K2	CO4
5	9	Phytochemicals mainly provide_____ (i) Energy (ii) Protective health effects (iii) Structural proteins (iv) Electrolytes	K1	CO5
	10	Postbiotics are_____ (i) Live microbes (ii) Microbial metabolites (iii) Enzymes only (iv) Fibres	K2	CO5

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.	Discuss antioxidant mechanism of Vitamin E.	K3	CO1
		OR		
	11.b.	Explain nutrient interactions affecting fat-soluble vitamin absorption.		
2	12.a.	Discuss folate and Vitamin B12 interaction.	K5	CO5
		OR		
	12.b.	Compare deficiency symptoms of riboflavin and niacin.		
3	13.a.	Discuss phosphorus metabolism.	K5	CO5
		OR		
	13.b.	Explain mineral–nutrient interactions affecting absorption.		
4	14.a.	Explain iron metabolism and transport.	K5	CO4
		OR		
	14.b.	Describe zinc deficiency manifestations.		
5	15.a.	Explain role of phytosterols in health	K4	CO3
		OR		
	15.b.	Explain gene–environment interaction in nutrition.		

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	Evaluate mechanisms of action and nutrient interactions of Vitamins A and D.	K3	CO1
2	17	Critically analyze deficiency disorders and biochemical basis of B-complex vitamins.	K4	CO2
3	18	Evaluate calcium–phosphorus balance and its clinical significance.	K5	CO4
4	19	Discuss physiological functions, metabolism and regulation of macro minerals.	K4	CO2
5	20	Explain phytochemicals, gut microbiome, SHIME model and postbiotics in health promotion.	K5	CO5

Z-Z-Z END