

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2025
(Third Semester)

Branch- FOODS AND NUTRITION
NUTRITIONAL BIOCHEMISTRY

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry **EQUAL** marks

$$(10 \times 1 = 10)$$

Module No.	Question No.	Question	K Level	CO
1	1	Which hormone is responsible for lowering blood glucose level? a. Insulin b. Glucagon c. Cortisol d. Adrenaline	K1	CO1
	2	Show the type of test used is to assess long term blood glucose control in diabetic patients. a. Fasting blood sugar b. Random blood sugar c. Oral glucose d. HbA1c	K2	CO1
2	3	What is alkaline phosphatase? a. A digestive enzyme b. A hormone c. A liver enzyme d. A muscle protein	K1	CO2
	4	Select the normal range of alkaline phosphatase in adults. a. 20-70 IU/L b. 30-120 IU/L c. 120-180 IU/L d. 180-250 IU/L	K2	CO2
3	5	Spell which of the following is a symptom of nephrotic syndrome? a. Hypertension b. Edema c. Frequent urination d. Blood in urine	K1	CO3
	6	Site which dietary recommendation is often given to patients with nephrotic syndrome? a. High sodium diet b. Low protein diet c. High fat diet d. Low sodium and moderate protein diet	K2	CO3
4	7	Choose the type of diagnosis test to confirm pancreatitis. a. Blood amylase and lipase level b. BP measurement c. ECG d. Hemoglobin levels	K1	CO4
	8	Trace the condition where chronic pancreatitis may lead to? a. Malabsorption and diabetes b. Hypertension c. Liver cirrhosis d. Asthma	K2	CO4
5	9	Relate what part of brain controls pituitary gland? a. Cerebellum b. Thalamus c. Cerebrum d. Hypothalamus	K1	CO5
	10	Write which hormone is secreted by the anterior pituitary gland? a. Oxytocin b. Growth hormone c. Epinephrine d. Thyroxine	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.	Extend the classification of lipoproteins.	K2	CO1
		(OR)		
	11.b.	Outline the diagnosis of diabetic ketoacidosis.	K2	CO1
2	12.a.	Prepare short notes on retinol binding proteins.	K3	CO2
		(OR)		
	12.b.	Compute the interpretation of the enzyme choline esterase.	K3	CO2
3	13.a.	Write about acute liver failure.	K3	CO3
		(OR)		
	13.b.	Construct a short passage on causes of jaundice.	K3	CO3
4	14.a.	Examine the factors causing malabsorption.	K4	CO4
		(OR)		
	14.b.	Comment on acute pancreatitis.	K4	CO4
5	15.a.	Infer on any one disorder of adrenal cortex.	K4	CO5
		(OR)		
	15.b.	Illustrate on hyperprolactinaemia	K4	CO5

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	Analyse the process of regulation of blood glucose.	K4	CO1
2	17	Simplify the functions of plasma proteins.	K4	CO2
3	18	Differentiate clearance test and dilution test.	K4	CO3
4	19	Focus on biochemical changes, causes and clinical features of hyperthyroidism.	K4	CO4
5	20	Connect the assessment of pituitary function.	K4	CO5

Z-Z-Z END