

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2023
(First Semester)

Branch - CLINICAL NUTRITION AND DIETETICS

PHYSIOLOGY IN HEALTH AND DISEASE

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	Name the organelle that is responsible for producing energy in a cell. a) Nucleus b) Mitochondria c) Golgi apparatus d) Endoplasmic reticulum	K1	CO1
	2	Identify the type of immunity that is acquired through vaccination. a) Innate immunity b) Passive immunity c) Active immunity d) Natural immunity	K2	CO1
2	3	What is the name of the largest artery in the human body? a) Pulmonary artery b) Coronary artery c) Aorta d) Carotid artery	K1	CO2
	4	Infer the name of the tiny air sacs in the lungs where gas exchange between air and blood occurs. a) Alveoli b) Bronchioles c) Alveolus d) Capillaries	K2	CO2
3	5	Which hormone is responsible for stimulating the release of digestive enzymes from the pancreas and bile from the gallbladder? a) Insulin b) Glucagon c) Cholecystokinin (CCK) d) Ghrelin	K1	CO3
	6	Interpret the condition that is characterized by the formation of solid mineral deposits in the kidneys or urinary tract. a) Nephrotic syndrome b) Renal cell carcinoma c) Kidney stones (renal calculi) d) Glomerulonephritis	K2	CO3
4	7	Which gland is often referred to as the "master gland" because it regulates many other endocrine glands in the body? a) Thyroid gland b) Adrenal gland c) Pituitary gland d) Pancreas	K1	CO4
	8	Show the name of the tough connective tissue that connects muscles to bones. a) Tendons b) Ligaments c) Cartilage d) Synovium	K2	CO4
5	9	Which part of the neuron is responsible for receiving signals from other neurons or sensory receptors? a) Axon b) Dendrite c) Cell body (soma) d) Synapse	K1	CO5
	10	Show the part of the brain that processes visual information received from the eyes. a) Cerebellum b) Hippocampus c) Occipital lobe d) Temporal lobe	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.	Analyze the clinical manifestation of cancer and write a note on it.	K4	CO1
	(OR)			
	11.b.	List and explain about the alterations in haematological system.		
2	12.a.	Examine the blood flow through the cardio vascular system.	K4	CO2
	(OR)			
	12.b.	Discover and explain about obstructive pulmonary disease in detail.		
3	13.a.	Explain about the mechanism of secretion of digestive juices.	K5	CO3
	(OR)			
	13.b.	Determine the pathophysiology of renal disease.		
4	14.a.	Evaluate the role and regulation of hormone secretions.	K5	CO4
	(OR)			
	14.b.	Explain the disorders of muscular system.		
5	15.a.	Discuss the role of neurotransmitter in detail.	K6	CO5
	(OR)			
	15.b.	Construct and elaborate on the structure and mechanism of vision.		

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	Discover about the importance of immune system in the body.	K4	CO1
2	17	Analyze about the pathophysiology of cardiovascular diseases.	K4	CO2
3	18	Explain in detail about the formation, micturation and excretion of urine.	K5	CO3
4	19	Evaluate in detail about the alteration of hormonal regulation.	K5	CO4
5	20	Elaborate and write a detailed note on neurological dysfunction.	K6	CO5

Z-Z-Z

END