

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 2025
(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	Which cellular organelle is responsible for energy production? a) Nucleus b) Mitochondria c) Ribosomes d) Lysosomes	K1	CO1
	2	Anemia is primarily related to which component in blood? a) Platelets b) Red blood cells c) Plasma d) Leukocytes	K2	CO1
2	3	The cardiac cycle starts with which event? a) Atrial contraction b) Ventricular filling c) Ventricular contraction d) Atrial relaxation	K1	CO2
	4	Hypoxia refers to: a) Lack of water b) Lack of oxygen c) Excess carbon dioxide d) High blood pressure	K2	CO2
3	5	Which organ is directly involved in urine formation? a) Liver b) Kidney c) Pancreas d) Heart	K1	CO3
	6	The hormone responsible for promoting digestion in the stomach is: a) Insulin b) Gastrin c) Adrenaline d) Thyroxine	K2	CO3
4	7	Menopause is due to decrease of which hormone? a) Estrogen b) Testosterone c) Growth hormone d) Insulin	K1	CO4
	8	The principal neurotransmitter released at neuromuscular junction is: a) Acetylcholine b) Dopamine c) Serotonin d) GABA	K2	CO4
5	9	Which disorder is characterized by progressive loss of memory? a) Dementia b) Epilepsy c) Stroke d) Parkinson's disease	K1	CO5
	10	The structure responsible for vision in the eye is: a) Retina b) Cornea c) Lens d) Iris	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.	Point out the clinical manifestations of cancer.	K4	CO1
		(OR)		
	11.b.	Classify the types of hypersensitivity.		
2	12.a.	Interpret on mechanism of respiration.	K5	CO2
		(OR)		
	12.b.	Explain the origin and transmission of impulses through heart muscle.		
3	13.a.	Summarize on any two gastro intestinal disorders.	K5	CO3
		(OR)		
	13.b.	Predict the pathophysiology of chronic kidney disease.		
4	14.a.	Depict the impact of hypo & hyper thyroidism.	K6	CO4
		(OR)		
	14.b.	Explain the disorders of muscular system.		
5	15.a.	Outline the neurological dysfunction in Epilepsy and Parkinson's disease.	K6	CO5
		(OR)		
	15.b.	Summarize the clinical disorders of eye.		

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	Outline about the types of auto immune diseases.	K4	CO1
2	17	Illustrate about obstructive pulmonary diseases.	K4	CO2
3	18	Summarize about the sources and action of gastro intestinal hormones.	K5	CO3
4	19	Evaluate the implications of hormonal imbalance due to estrogen and progesterone.	K5	CO4
5	20	Explain the structure of ear and mechanism of hearing.	K6	CO5

Z-Z-Z END