

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2025
(Third Semester)

Branch NUTRITION, FOOD SERVICE MANAGEMENT AND DIETETICS

HUMAN PHYSIOLOGY

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	The cell organelle responsible for energy production is _____ a) Endoplasmic reticulum b) Mitochondria c) Golgi apparatus d) Lysosome	K1	CO1
	2	The epithelial tissue that lines blood vessels is called _____ a) Squamous epithelium b) Cuboidal epithelium c) Columnar epithelium d) Ciliated epithelium	K2	CO1
2	3	The heart is enclosed by a double-layered membrane called _____ a) Pleura b) Peritoneum c) Pericardium d) Perichondrium	K1	CO2
	4	The condition of reduced oxygen supply to tissues is called: a) Hypoxia b) Anoxia c) Apnea d) Hypercapnia	K2	CO2
3	5	The liver secretes _____ a) Gastric juice b) Pancreatic juice c) Bile d) Intestinal juice	K1	CO3
	6	The process of urine formation includes _____ a) Filtration, reabsorption, secretion b) Absorption, excretion, oxidation c) Secretion, defecation, filtration d) None of these	K2	CO3
4	7	The structural and functional unit of the nervous system is _____ a) Brain b) Neuron c) Spinal cord d) Synapse	K1	CO4
	8	Cones in the retina are responsible for _____ a) Night vision b) Color vision c) Peripheral vision d) Depth perception	K2	CO4
5	9	The "master gland" of the endocrine system is _____ a) Thyroid b) Pituitary c) Adrenal d) Pancreas	K1	CO5
	10	The functional unit of the ovary is _____ a) Graafian follicle b) Corpus luteum c) Zona pellucida d) Ovum	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.	Identify and differentiate between innate and acquired immunity with examples. (OR)	K3	CO2
	11.b.	Construct the functions of WBC.		
2	12.a.	Sketch the structure of heart and label it. (OR)	K4	CO1
	12.b.	Classify and explain hypoxia and anoxia		
3	13.a.	Examine the functions of the liver. (OR)	K4	CO3
	13.b.	Inference the process of micturition.		
4	14.a.	Explain the rhodopsin cycle and its role in vision. (OR)	K2	CO4
	14.b.	Illustrate the mechanism of equilibrium in the ear.		
5	15.a.	Develop the regulatory roles of endocrine glands in growth and metabolism. (OR)	K3	CO5
	15.b.	Construct the structure of graffian follicle with illustration.		

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	Plan and discuss the blood groups, tissue fluid, and their physiological significance.	K3	CO5
2	17	Explain the structure of the respiratory tract and mechanism of breathing with a neat diagram.	K2	CO4
3	18	Catagorize the movement of human alimentary canal in detail with illustration.	K4	CO4
4	19	Appraise the structure and function of brain in detail.	K5	CO1
5	20	Construct the menstrual cycle and its phases in detail.	K3	CO2