

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

BSc DEGREE EXAMINATION DECEMBER 2022  
(Fifth Semester)

Branch – ZOOLOGY

PHYSIOLOGY

Time: Three Hours

Maximum: 75 Marks

SECTION-A (10 Marks)

Answer ALL questions

ALL questions carry EQUAL marks

(10 x 1 = 10)

- 1 Which enzyme digests the protein in the stomach?  
(i) Pepsin (ii) Trypsin  
(iii) Chymotrypsin (iv) Amylase
- 2 The disaccharides are broken down into monosaccharide by .....enzyme  
(i) Lipase (ii) Pepsin  
(iii) Bile (iv) Maltases
- 3 Which organ is used for the cutaneous respiration?  
(i) Gills (ii) Heart  
(iii) Skin (iv) Lungs
- 4 About 55% of human blood constitute of.....  
(i) Plasma (ii) Erythrocyte  
(iii) Monocyte (iv) Thrombocytes
- 5 The functional unit of mammalian kidney is.....  
(i) Cortex (ii) Medula  
(iii) Nephron (iv) Urinary Bladder
- 6 Which of the following is a ureotelic animal  
(i) Scorpion (ii) Adult frog  
(iii) Pigeon (iv) House lizard
- 7 The liver of human is made by..... muscle  
(i) Smooth (ii) Circular  
(iii) Skeletal (iv) Cardiac
- 8 The tympanic membrane is also called .....  
(i) Ossicular chain (ii) Eardrum  
(iii) Auricle (iv) Pinna
- 9 Which neurons deliver electrical signals from the outer parts of the body to CNS?  
(i) Inter (ii) Motor  
(iii) Receptor (iv) Sensory
- 10 Which gland controls the metabolism of your body ?  
(i) Thyroid (ii) Pineal  
(iii) Hypothalamus (iv) Adrenal

Cont...

**SECTION - B (35 Marks)**

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 7 = 35)

- 11 a How the protein digestion takes place in the stomach of man?  
OR  
b Describe the methods of absorption of digested food in human.
- 12 a Bring out the functions of respiratory pigments with special reference to haemoglobin.  
OR  
b Explain the process of cardiac cycle in man.
- 13 a Highlight the importance of lymphatic system in animals.  
OR  
b Describe the ultra structure of mammalian kidney with a neat diagram.
- 14 a Elucidate the structure of human ear with diagram.  
OR  
b Explain the mechanism of image formation.
- 15 a Describe the ultra structure of neuron with a neat sketch.  
OR  
b What is reflex action? Explain with suitable example.

**SECTION - C (30 Marks)**

Answer any THREE Questions

ALL Questions Carry EQUAL Marks (3 x 10 = 30)

- 16 Describe the process of  $\beta$  oxidation in detail.
- 17 Elucidate the composition of human blood.
- 18 Explain the mechanism of urine formation in man.
- 19 Movement of bone by the contraction of skeletal muscle – justify the statement.
- 20 Why the pituitary gland is called master of endocrine – discuss it.

Z-Z-Z

END