

**PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)**

**BSc DEGREE EXAMINATION MAY 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. Choose the correct sequence
  - (i) Ptyalin → starch → Soluble starch → Erythrodextrin → Achrodextrin → Maltose
  - (ii) Ptyalin → starch → Soluble starch → Achrodextrin → Erythrodextrin → Maltose
  - (iii) Starch → Ptyalin → Soluble starch → Achrodextrin → Erythrodextrin → Maltose
  - (iv) Starch → Soluble starch → Ptyalin → Erythrodextrin → Achrodextrin → Maltose
2. Which of the following secrete the hydrochloric acid?
  - (i) Argentaffin cells
  - (ii) Parietal cell
  - (iii) Stem cell
  - (iv) Mucous cell
3. Holothurians have.....for respiration.
  - (i) Epipodites
  - (ii) Book lungs
  - (iii) Water lungs
  - (iv) Gills
4. Pinnaglobin is a .....coloured blood pigment.
  - (i) Green
  - (ii) Brown
  - (iii) Red
  - (iv) Reddish-violet
5. Which of the following animal have the lymph heart?
  - (i) Rabbit
  - (ii) Pigeon
  - (iii) Human
  - (iv) Frog
6. The excess amino acid of *Unio* excreted as.....
  - (i) Amino acid
  - (ii) Ammonia
  - (iii) Urea
  - (iv) Uric acid
7. Biceps are example for.....muscles.
  - (i) Cardiac
  - (ii) Unstriped
  - (iii) Skeletal
  - (iv) Smooth
8. The eye is protected in a socket of bones called.....
  - (i) Retina
  - (ii) Cornea
  - (iii) Orbit
  - (iv) Sclera
9. Complex inborn reflexes are called.....reflexes.
  - (i) Superficial
  - (ii) Instincts
  - (iii) Deep
  - (iv) Conditioned
10. The axon ends in branches called.....
  - (i) Axoplasm
  - (ii) Axolemma
  - (iii) Telodendria
  - (iv) Internode

**SECTION - B (35 Marks)**

Answer ALL Questions

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

11. a) State the composition and importance of gastric juice in digestion.

OR

- b) Describe the role of insulin in glucose metabolism.

**Cont...**

12. a) Describe the integumentary respiration with example.

**OR**

b) Explain the structure of human heart with suitable picture.

13. a) What is ammonotelism? Explain with example.

**OR**

b) Describe the structure and functions of lymph nodes.

14. a) How the image is formed in a eye? Explain it.

**OR**

b) Bring out the structure of skeletal muscle and mentions its role.

15. a) Give an account on thyroid gland and state its importance.

**OR**

b) Describe the mechanism of nerve impulse conduction.

**SECTION - C (30 Marks)**

Answer any **THREE** Questions

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

16. What is beta oxidation and explain the process in detail.

17. Describe the composition of human blood.

18. How the urine is formed in man? Explain in detail.

19. Describe the process of muscle contractions with special reference to man.

20. Explain the structure and types of neurons explain them.

**Z-Z-Z**

**END**