

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

**MSc DEGREE EXAMINATION MAY 2022**  
**(Second Semester)**

Branch – ZOOLOGY

**ANIMAL PHYSIOLOGY AND BIOCHEMISTRY**

Time: Three Hours

Maximum: 50 Marks

**SECTION-A (5 Marks)**

Answer ALL questions

ALL questions carry EQUAL marks

$(5 \times 1 = 5)$

1. Neutrophils is otherwise called as
 

(a) Scavenger cells	(b) Phagocytes
(c) Antivirus	(d) Allergic cells
2. The separation and elimination of the nitrogenous metabolic wastes remove from the body is
 

(a) Digestion	(b) Circulation
(c) Excretion	(d) Agglutination
3. An electrochemical change occurring in the membrane of a nerve fibre when the nerve is stimulated
 

(a) Nerve impulse	(b) Stimulation
(c) Nerve conduction	(d) Neurotransmitter
4. Maltose is
 

(a) Monosaccharide	(b) Disaccharide
(c) Polysaccharide	(d) Hexose
5. Enzyme is discovered by
 

(a) John	(b) Kuhne
(c) Watson	(d) Martin

**SECTION - B (15 Marks)**

Answer ALL Questions

ALL Questions Carry EQUAL Marks

$(5 \times 3 = 15)$

6. (a) Write a note on blood clotting mechanism.  
 (OR)  
 (b) Give a detailed account on respiratory pigments.
7. (a) List out the types of excretory products.  
 (OR)  
 (b) Describe the significance of bioluminescence.
8. (a) Illustrate the synapsis.  
 (OR)  
 (b) Write short note on phono receptors.

Cont...

9. (a) Describe the structure of lipids.

(OR)

(b) Add a note on glycogenolysis.

10.(a) Write a note on oxidoreductases of enzymes.

(OR)

(b) Explain the coenzyme with suitable examples.

**SECTION -C (30 Marks)**

Answer **ALL** questions

**ALL** questions carry **EQUAL** Marks

**(5 x 6 = 30)**

11. a) Explain the circulatory system and their functions.

(OR)

b) Write an essay on transport of gases.

12. a) Describe the mechanism of urine formation.

(OR)

b) Give a detailed account on biological rhythms.

13. a) Illustrate the mechanism of muscle contraction.

(OR)

b) Explain the physiology of photo receptor.

14. a) Explain the metabolism of carbohydrates.

(OR)

b) Describe the structure of proteins.

15. a) Write an essay on mechanism of enzyme action.

(OR)

b) Elaborate note on isoenzymes with suitable examples.

Z-Z-Z

**END**