

(6 pages)

Reg. No. : _____

Code No. : 20392 E Sub. Code : AMZO 53

B.Sc. (CBCS) DEGREE EXAMINATION, APRIL 2024

Fifth Semester

Zoology - Core

ANIMAL PHYSIOLOGY AND BIOCHEMISTRY

(For those who joined in July 2020 only)

Time : Three hours Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. Which of the following is known as body building foods?
(a) Fats (b) Carbohydrates
(c) Vitamins (d) Proteins
2. Proteins are composed of which biomolecule?
(a) Fats (b) Aminoacids
(c) Purines (d) Vitamins

7. Nissl's granules are found in
(a) Nerve cells (b) WBC
(c) RBC (d) Platelets
8. A nerve impulse jumps from one _____ to another during salutatory conduction.
(a) Synapse (b) Axon
(c) Node of Ranvier (d) Myelin Sheath
9. This is not a function of insulin
(a) Decreasing glycogenolysis
(b) Lipogenesis
(c) Gluconeogenesis
(d) Glycogenesis
10. Which of the following hormones are involved in the process of Oogenesis?
(a) Estrogen (b) Testosterone
(c) FSH (d) Both (a) and (c)

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3. The enzyme which hydrolyses starch to maltose is _____
(a) Protease (b) Amylase
(c) Lactase (d) Maltase
4. Koshland proposed which model
(a) Fluid mosaic model
(b) Induced fit model
(c) Lock and key model
(d) Reflective index model
5. The tiny air sacs present in human lungs is called _____
(a) Alveoli (b) Bronchus
(c) Bronchioles (d) All the above
6. The wind pipe is also called _____
(a) Larynx (b) Lungs
(c) Trachea (d) Oesophagus

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PART B — (5 × 5 = 25 marks)

Answer ALL questions choosing either (a) or (b).
Each answer should not exceed 250 words.

11. (a) Illustrate the structure and uses of Sucrose.
Or
(b) Describe the structure of Lecithin and Cephalin.
12. (a) Mention the role of enzymes in protein digestion.
Or
(b) Explain Kreb's cycle.
13. (a) Comment on respiratory quotient.
Or
(b) Explain Cardiac cycle.
14. (a) Mention different types of muscles.
Or
(b) Write notes on neuromuscular junction.

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[P.T.O.]

15. (a) Describe the structure and functions of Parathyroid gland

Or

(b) Summarize the role of hormones in pregnancy.

PART C — (5 × 8 = 40 marks)

Answer ALL questions choosing either (a) or (b).

Each answer should not exceed 600 words.

16. (a) Outline the classification of Lipids with examples.

Or

(b) Illustrate the structure and functions of Glycoproteins.

17. (a) Explain Glycolysis.

Or

(b) Describe β -oxidation of fatty acids.

18. (a) Explain Atherosclerosis and its diagnostic method.

Or

(b) Describe mechanism of urine formation.

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19. (a) Summarize the events of muscle contraction.

Or

(b) Explain mechanism of transmission of nerve impulse.

20. (a) Illustrate the structure and functions of pituitary gland.

Or

(b) Discuss the role of hormones in menstrual cycle.

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