

(6 pages)

Reg. No. :

Code No. : 10033 E Sub. Code : CMZO 53

B.Sc. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2025.

Fifth Semester

Zoology – Core

Major – ANIMAL PHYSIOLOGY

(For those who joined in July 2021 and 2022 only)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. An example of _____ is carnauba wax.
(a) Soft wax
(b) Liquid wax
(c) Hard wax
(d) Archaeobacterial wax

2. This is an example of derived lipids
(a) Terpenes (b) Steroids
(c) Carotenoids (d) All of the above
3. Which of the following is a common nitrogen acceptor for all reaction involving transaminases?
(a) α -ketoglutarate (b) pyruvate
(c) oxaloacetate (d) acetoacetate
4. _____ acts as coenzyme for transamination reaction.
(a) Coenzyme A
(b) Pyridoxal phosphate
(c) Folic acid
(d) Cobalamine
5. How the majority of oxygen gets transported?
(a) In dissolved form
(b) Oxyhaemoglobin
(c) Methaemoglobin
(d) Carbamino haemoglobin

6. Which is the most important factor to describe the affinity of oxygen towards haemoglobin?
- (a) Partial pressure (b) Temperature
(c) pH (d) BPG
7. In the striated muscles, the functional unit of contractile system is _____.
- (a) Z band (b) Cross bridges
(c) Sarcomere (d) Myofibril
8. In muscle contraction, this ion is essential
- (a) Cl (b) Ca
(c) K (d) Na
9. Which of these is a male sex hormone?
- (a) Aldosterone (b) Androgens
(c) Pheromones (d) Insulin
10. This is not a function of insulin
- (a) Decreasing glycogenolysis
(b) Lipogenesis
(c) Gluconeogenesis
(d) Glycogenesis

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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) Describe the structure and functions of sucrose.
Or
(b) Evaluate the structure and functions of cephalin.
12. (a) Write the classification of enzymes.
Or
(b) Discuss the role of enzymes in protein absorption.
13. (a) Briefly explain the exchange of carbon dioxide in Lungs.
Or
(b) Describe the structure of nephron with diagram.
14. (a) Explain the structure of skeletal muscle.
Or
(b) Write the structure of neuron.

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[P.T.O.]

15. (a) Analyse the role of hormones in Lactation.

Or

(b) Describe the structure of adrenal gland.

PART C — (5 × 8 = 40 marks)

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

Each answer should not exceed 600 words.

16. (a) Explain the classification of Lipids.

Or

(b) Give a detailed account on classification of carbohydrates.

17. (a) Write the role of enzymes in lipid digestion.

Or

(b) Explain glycogenesis.

18. (a) Give a detailed study on exchange of oxygen in tissues.

Or

(b) Explain the formation of urine in human.

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19. (a) Analyse the conduction of nerve impulse through neuron.

Or

(b) Describe contraction of muscles.

20. (a) Describe the structure of thyroid gland with diagram.

Or

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

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