

A-1066

Total Pages : 03

Roll No. -----

MSCZO-504

Bio-Chemistry

M.Sc. Zoology (MSCZO)

Examination 2026(Feb.)

Time: 2:00 hrs

Max. Marks: 70

Note: This paper is of Seventy (70) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein. Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.

Section-A

(Long-Answer-Type Questions)

Note: Section 'A' contains Five (05) long-answer-type questions of Nineteen (19) marks each. Learners are required to answer any two (02) questions only.

[2x19=38]

P.T.O.

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- Q.1. Discuss the structure, classification, sources, and deficiency disorders of fat-soluble vitamins.
- Q.2. Explain glycolysis and its regulation in carbohydrates metabolism.
- Q.3. Write an essay on high-energy compounds with special reference to ATP.
- Q.4. Describe the electron transport chain and oxidative phosphorylation.
- Q.5. Explain the concept of the buffering mechanism and its physiological importance.

Section-B

(Short-Answer-Type Questions)

Note: Section 'B' contains Eight (08) short-answer-type questions of Eight (08) marks each. Learners are required to answer any Four (04) questions only.

[4x8=32]

- Q.1. What are coenzymes? Give examples.
- Q.2. Differentiate between oxidation and reduction with examples.

- Q.3. Name two water-soluble vitamins and mention their deficiency diseases.
- Q.4. What is the function of cholesterol in the body?
- Q.5. Define transamination and name the enzymes involved.
- Q.6. What are ketone bodies? Mention their physiological importance.
- Q.7. What is enzyme specificity?
- Q.8. Explain Gibbs free energy and enthalpy.
