A-922

MZO-506

Animal Physiology

M.Sc. Zoology (MSCZO)

2nd Semester Examination 2024 (June)

Time: 2:00 hrs   Max. Marks: 35

Note : This paper is of Thirty Five (35) marks divided into Two (02) Section A and B. Attempt the questions contained in these sections according to the detailed 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 Nine and Half (9½) marks each. Learners are required to answer any Two (02) questions only.

[2x9½=19]

Q.1.   What are water soluble vitamins? Explain the role of water soluble vitamin in cellular organisms.

Q.2.   What is resting membrane potential? Elaborate the physiological and molecular events involved in origin of action potential.

Q.3.   What do you understand by ECG? Give an account of cardiac cycle.

Q.4.   What is resting membrane potential? Elaborate the physiological and molecular events involved in origin of action potential.

Q.5.   Give an account of molecular mechanism of muscle contraction.

Section-B (Short-Answer-Type Questions)

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

[4x4=16]

Q.1.   Write a note on urea cycle.

Q.2.   Write short note on any two the following:

    a.   Oxygen toxicity

    b.   Transport of carbon dioxide

    c.   Myogenic and neurogenic hearts

    d.   Ammonia toxicity

Q.3.   Give a detail account of neurotransmitter.

Q.4.   Write an account on the enzymes involved in the process of digestion of protein.

Q.5.   Write a note on

    a.   Bioluminescence

    b.   Role of calcium ion in muscle contraction

Q.6.   Write a note on

    a.   Hormones secreted by cortex of adrenal gland

    b.   Cell mediated immunity

Q.7.   Give an account on cells of immune system.

Q.8.   Explain the synthesis and metabolic action of thyroxine.

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