S-1072

Total Pages: 3 Roll No.

ZO-503

Animal Physiology & Physiological Chemistry

M.Sc. Zoology (MSCZO)

1st Year Examination, 2022 (Dec.)

Time: 2 Hours] 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.

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.

 $(2 \times 19 = 38)$

- 1. Describe the respiratory mechanisms in different animals.
- **2.** What is absorption? Explain the mechanisms involved in it.

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- **3.** Discuss the concept of immunity and immune response in animals.
- **4.** What are enzymes? Describes the general properties of enzymes.
- **5.** Describe proteins with suitable examples.

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. (4×8=32)

- **1.** Write short notes on the following :
 - (a) Hibernation.
 - (b) Cold resistance and cold death.
- **2.** Write an account on origin and propagation of nerve impulse.
- **3.** Explain fat soluble vitamins with example.
- **4.** Write short notes on :
 - (a) Antigen.
 - (b) Lymphocytes.

- **5.** Define the polysaccharides and describe the structure and functions.
- **6.** Describe the synthesis of various steroid hormones.
- **7.** Give an account on molecular mechanism of muscle contraction.
- **8.** What is thyroxin? Explain the source of its synthesis and its metabolic action.

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