## P-227

Total Pages: 3 Roll No. .....

# **MZO-506**

### **Animal Physiology**

M.Sc. Zoology (MSCZO)

2nd Semester Examination, 2023 (June)

Time: 2 Hours] [Max. Marks: 35

**Note:** This paper is of Thirty Five (35) 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 Nine and Half (9½) marks each. Learners are required to answer any Two (02) questions only.

 $(2 \times 9\frac{1}{2} = 19)$ 

**1.** Explain the movement of water and Solutes across Cell membrane.

- **2.** Describe the mechanism of survival in poikilotherms and homeotherms.
- **3.** Short note any *two*:
  - (a) Freezing tolerance.
  - (b) Thermogenesis.
  - (c) Air Bladder.
  - (d) Oxygen Toxicity.
  - (e) Ammonia Toxicity.
- **4.** Explain the antibodies structure of antibodies and immune responses in animals.
- **5.** Explain the description of important neurotransmitter of Actylecholine and Glutamate .

#### **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. (4×4=16)

- **1.** Explain the taste receptors.
- 2. Describe the general mechanism of muscle contration.

- **3.** Explain the general mechanism and thyroid hormone with Example.
- **4.** Explain the sex hormones.
- **5.** Describe the photoreception.
- **6.** Describe the mechanisms of osmotic regulation.
- 7. Explain the cold death and cold resistance.
- **8.** Describe the Hibernation and Aestivation.