

Exam. Code : 107402

Subject Code : 2270

B.Sc. (Bio Technology) 2<sup>nd</sup> Semester

ZOOLOGY—B

Paper—BT-1

Time Allowed—3 Hours]

[Maximum Marks—40

**Note** :— All questions of Section A are compulsory. Attempt any **FIVE** questions from Section B and **TWO** questions from Section C.

**SECTION—A**

1. Give short answers. Each question carries 1 mark.
  - (a) Write the function of thyrotropin.
  - (b) What helps to regulate the level of blood calcium ?
  - (c) Define osmoregulation.
  - (d) What is the role of corpus luteum ?
  - (e) Draw a well labeled diagram of mammalian eye.
  - (f) What are proprioceptors ?
  - (g) Name the proteins associated with actin filaments.
  - (h) What is the function of cerebellum ? 8×1=8

**SECTION—B**

2. Write a note on islets of Langerhans. 4
3. Give an account of evolution of urogenital ducts in males. 4
4. How do mammals maintain water balance ? 4

5. Explain the structure of hind brain. 4
6. How are action potentials conducted along the axon? 4
7. Write a note on adrenal medulla. 4
8. Explain the role of calcium in controlling actin myosin interactions. 4
9. Discuss the various types of jaw suspensions. 4

### SECTION—C

10. Explain the structure and function of anterior pituitary. 6
11. Describe the structure of skeletal muscles. What is the mechanism of muscle contraction? 6
12. Explain the synaptic transmission of nerve impulse with the help of a diagram. 6
13. Discuss the structure and function of mammalian kidney giving a well labeled diagram. 6