

Exam. Code : 107402

Subject Code : 2111

B.Sc. (Bio-Technology) Semester—II

ZOOLOGY-B

Paper—BT-I

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) How does metanephric kidney differ from mesonephric kidney ?
  - (b) What is diabetes mellitus ?
  - (c) What is the function of leydig cells ?
  - (d) Differentiate between myelinated and unmyelinated nerve fibers.
  - (e) Draw a well labeled diagram of cardiac muscle.
  - (f) Define the term hormone.
  - (g) Name the different types of jaw suspensions.
  - (h) What is the function of cerebellum ?  $8 \times 1 = 8$

**SECTION—B**

2. Write a note on visceral arches. 4
3. Discuss the structure of skeletal muscle. 4
4. Write a note on structure of middle ear. 4
5. Explain the synaptic transmission at neuromuscular junction. 4
6. Give an account of various hormones secreted by adrenal gland along with their functions. 4
7. Write a note on structure of pancreas. 4
8. Explain the role of hormones in water balance in mammals. 4
9. Discuss the structure of mammalian testes. 4

**SECTION—C**

10. Discuss in detail the molecular basis of muscle contraction. 6
11. Write notes on :
  - (a) Adenohypophysis
  - (b) Oogenesis. 6
12. Explain the structure of mammalian kidney. Discuss the process of urine formation. 6
13. Discuss in detail the structure and function of mammalian brain. 6