

Exam. Code : 107402

Subject Code : 2211

B.Sc. Bio-Technology Semester—II

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) What is opisthonephric kidney ?
  - (b) How do tropic hormones influence endocrine system ?
  - (c) What is the function of corpus luteum ?
  - (d) Differentiate between sacculus and utriculus.
  - (e) Write the function of epinephrine.
  - (f) What is hyoid apparatus ?
  - (g) Write the similarities and differences between skeletal and cardiac muscles.
  - (h) Glial cells are important component of nervous system. Justify the statement. 8×8

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## SECTION—B

2. Write a note on different type of jaw suspensoria. 4
3. Explain the role of calcium in muscle contraction. 4
4. Write a note on structure and function of inner ear. 4
5. Explain the synaptic transmission at neuromuscular junction. 4
6. Give an account of various hormones secreted by thyroid gland along with their functions. 4
7. Write a note on structure of adrenal gland. 4
8. Explain the evolution of genital ducts in females. 4
9. Discuss the role of kidney in regulation of acid base balance. 4

## SECTION—C

10. Discuss in detail the structure and function of pituitary gland. 6
11. Write notes on :
  - (a) Transmission of nerve along axon
  - (b) Photoreceptors. 6
12. Explain how the countercurrent mechanism of nephron makes it possible for the kidney to form concentrated urine. 6
13. Give a detailed account of structure of skeletal muscle. Explain the sliding filament model of muscle contraction. 6