

**Exam. Code : 211201**

**Subject Code : 3869**

**M.Sc. Zoology 1<sup>st</sup> Semester**

**FUNCTIONAL ORGANIZATIONS OF ANIMALS-I**

**Paper—ZOOC-501**

Time Allowed—Three Hours] [Maximum Marks—100

**Note :—**The candidates are required to attempt **ONE** question each from Sections A, B, C and D carrying **20** marks each. The **Fifth** question may be attempted from any section.

**SECTION—A**

- I. Describe the process of digestion and absorption of carbohydrates and fat in mammalian alimentary canal. 20
- II. Explain the mechanism of digestion in invertebrates with special reference to crustaceans and molluscs. 20

**SECTION—B**

- III. Give an account of evolution of heart in vertebrates. 20
- IV. Differentiate between myogenic and neurogenic heart. Explain conduction of heart beat in mammals. 20

**SECTION—C**

- V. Give an account of respiratory organs in fishes. 20
- VI. Describe the evolution of Müllerian ducts in chordates. 20

**SECTION—D**

- VII. Give an account of physiological anatomy of mammalian kidney along with suitable diagram. 20
- VIII. Discuss salinity adaptations in marine invertebrates and vertebrates. 20