2022

B.A./B.Sc.

Fourth Semester

CORE - 9

ZOOLOGY

Course Code: ZOC 4.21

(Animal Physiology: Life Sustaining Systems)

Total Mark: 70 Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

UNIT-I

- 1. (a) Write the functions of gastrointestinal tract and their associated glands.
 - (b) Explain how carbohydrates are absorbed in the body of the animals.

2. Discuss in detail about the hormonal control of secretion of enzymes in gastrointestinal tract.

UNIT-II

- 3. Write notes on: $7\times 2=14$
 - (a) Pulmonary ventilation
 - (b) Mechanism of respiration
- 4. (a) Explain the different types of respiratory pigments in animals. 7
 - (b) Carbon monoxide poisoning.

UNIT-III

5. Describe the mechanism of urine formation.

14

7

7

6. Write notes on: $7 \times 2 = 14$ (a) Regulation of acid base balance (b) The structure of kidney with neat labelled diagram **UNIT-IV** 7. Explain the different components of blood and their functions. 14 8. Write notes on: $7 \times 2 = 14$ (a) ABO blood group (b) Blood clotting system **UNIT-V** 9. Explain the origin and conduction of nerve impulses. 14 10. Write notes on: $7 \times 2 = 14$ (a) Electrocardiogram (b) Blood pressure