2021 M.Sc. First Semester CORE – 02

ZOOLOGY

Course Code: MZOC 1.21 (Animal Physiology)

Total Mark: 70 Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

UNIT-I

1. Describe the different types of digestive hormones and enzymes of vertebrates.

2. Describe the process of digestion of carbohydrates. Add a note on the process of absorption of fats. 9 + 5 = 14

UNIT-II

- 3. Define membrane potential. How does ions carry current? Describe the structure of cation permeable channels. 2 + 4 + 8 = 14
- 4. Explain the different types of synaptic transmission

14

UNIT-III

- 5. Define respiratory acidosis. Explain how respiration is regulated. Add a note on respiratory function of blood. 2 + 7 + 5 = 14
- 6. What is respiratory buffering? Explain Bohr effect and Root effect.

$$2 + 6 + 6 = 14$$

UNIT-IV

7. Define acid—base balance. Explain counter current mechanism of urine formation. 2 + 12 = 14

8. Describe osmoregulation in aquatic animals. Add a note on neural regulation of body temperature. 10 + 4 = 14

UNIT-V

- 9. Define haemopoesis. Explain the different pathways of blood coagulation. 2 + 12 = 14
- 10. Describe neuromuscular junction. Explain how contraction of muscle is regulated. 7 + 7 = 14