NS-3470 (N)

B.Sc. (Biotechnology) Examination,

June-2022

ANIMAL PHYSIOLOGY

(B-207)

(New)

(B.Sc. Biotech.)

Time : Three Hours] *[Maximum Marks : 50*

Note : Attempt any **five** questions. **All** questions carry equal marks.

1. What are the important components of food? Describe the process of digestion of these compounds in any mammal. 10

2. Discuss the unique properties of haemoglobin. How is the oxygen transported by blood? 10

P.T.O.

3. Write detailed notes on any **two** of the following: 5×2=10

   (a) Buffer systems of the blood

   (b) Habituation in animals

   (c) Mechanism of blood clotting

4. Describe the structure and physiology of a mammal. 10

5. Draw well labelled diagram of any two of the following: 5×2=10

   (a) Structure of human heart

   (b) Structure of ovary showing progressive stages of follicle maturation.

   (c) Structure of a neuron.

6. Explain the mechanism of urine formation. Describe the role of aldosterone and antidiuretic hormones. 10

7. Explain the following: 2½×4=10

(a) Acidosis and alkalosis

(b) Hypoxia

(c) Reproductive health

(d) Nerve impulse

8. Differentiate between chemical and electrical synapses with the process of neurotransmission across them. 10

9. Explain the following: 2½×4=10

(a) Homeostasis

(b) Absorption of sugar in mammals

(c) Growth hormones

(d) Cercadian rhythm

10. Illustrate the process of oogenesis in a mammalian ovary. 10