

19 OCT 2019

M. Sc.(Zoology) Semester - I Examination
October- November - 2019

Zoology Paper: Zoo 03
Time: 2.5 Hours

Code – 20470
Total Marks – 70

Instruction: 1) Attempt all questions
2) Figures on right indicate the marks.
3) Draw labeled diagram wherever required.

- Q. 1 A.** Explain the process of Hematopoiesis. **14**
- OR**
- A 1.** Write a brief account of blood clotting in human. **07**
- A 2.** Explain conduction of heart beat. **07**
- Q. 1 B.** Answer in Brief (any four) **04**
- 1** What is the normal temperature and pH of human blood?
 - 2** _____ atmospheric and _____ alveolar pressure occur during inhalation.
 - 3** Write name of electrolytes found in blood plasma.
 - 4** Define: Homeostasis.
 - 5** Define: Anticoagulants with example.
 - 6** What is conducting zone in context of respiratory system?
- Q. 2 A.** Explain absorption. Write in detail about carbohydrates and lipid absorption in GI tract. **14**
- OR**
- A 1.** Write a short note on major enzyme involve in protein digestion. **07**
- A 2.** Explain Urea Cycle. **07**
- Q. 2 B.** Answer in Brief (any four) **04**
- 1** Write the function of Calcitriol.
 - 2** What is NFP in Kidney?
 - 3** Write the full form of MALT in lamia propria of GI tract.
 - 4** Write down major enzymes present in pancreatic juice.
 - 5** Writethe function of Brunner's gland found in small intestine.
 - 6** What is Haustral churning?

- Q. 3 A.** Explain the coordination of endocrine and nervous system in vertebrates. **14**
- OR**
- A 1.** Write not on types of muscles contraction. **07**
- A 2.** Give the chemical classification of hormones in brief. **07**
- Q. 3 B.** Answer in Brief (any three) **03**
- 1** Define the word Muscle fatigue.
 - 2** Dark band of thick filament of muscles fiber know as _____
A. I – Band **B.** Z – Band **C.** A – Band **D.** All
 - 3** _____ Hormone regulates the process of metabolism.
A. JH **B.** ADH **C.** GH **D.** GTH
 - 4** Hormones which secreted from gonads it is known as _____
A. Protein **B.** Steroid **C.** Peptides **D.** Amines
 - 5** Hormone which secreted from posterior pituitary gland.
A. GH **B.** ADH **C.** MSH **D.** LH
- Q. 4A.** Explain photoreceptor and phonoreceptor in detail. **14**
- OR**
- A 1.** Write a short note on equilibrium receptor. **07**
- A 2.** Explain thermoregulation in poikilotherms. **07**
- Q. 4 B.** Answer in Brief (any three) **03**
- 1** Name the mechanosensitive present in an insect.
 - 2** Define: Olfaction.
 - 3** L cones are also known as _____
 - 4** _____ Lymph is found in the cochlea duct.
 - 5** Write any two type of lateral line mechanoreceptor.