



K24U 2896

Reg. No. : .....

Name : .....

**V Semester B.Sc. Degree (C.B.C.S.S. – O.B.E.-Regular/Supplementary/  
Improvement) Examination, November 2024  
(2020 to 2022 Admissions)**

**CORE COURSE IN LIFE SCIENCES (ZOOLOGY) AND COMPUTATIONAL  
BIOLOGY**

**5B07 ZCB : Animal Physiology**

Time : 3 Hours

Max. Marks : 40

**PART – A**

Write about **each** of the following in **2 or 3** sentences. **Each** question carries **1** mark.  
**(6×1=6)**

1. Composition of Human Blood Plasma.
2. Role of adrenal gland in urine formation.
3. Neurotransmitters.
4. Muscle fatigue.
5. Any two hormones produced by Placenta and its function.
6. Group the following hormones according to its chemical nature Testosterone, estrogen, T3, Calcitonin, Glucagon, TSH, LH, FSH.

**PART – B**

Explain about **any six** of the following. **Each** question carries **2** marks. **(6×2=12)**

7. Malnutrition.
8. Human Blood composition.
9. Compare anatomy of auricle and ventricle.
10. Differentiate tidal and residual pulmonary volumes.
11. Abnormal constituents of urine.
12. Ornithine Cycle.

P.T.O.



13. Synapse and Synaptic transmission.
14. Neuromuscular junction.

PART – C

Write short essay on **any four** of the following. **Each** question carries **3** marks.

**(4×3=12)**

15. Explain the digestion of carbohydrate, protein at different parts of alimentary canal.
16. Describe about the conducting system of heart.
17. 'Inspiration and expiration is the result of coordinated movement of skeletal muscle and diaphragm'. Explain.
18. Explain the neural regulation of respiration.
19. 'The formation of urine is deeply regulated by hormones'. Give a scientific explanation on the statement.
20. Describe the role of hormones in maintaining the rhythm of menstrual cycle.

PART – D

Write essay on **any two** of the following. **Each** question carries **5** marks. **(2×5=10)**

21. Write an essay on role of exocrine and endocrine secretions of GI tract in the digestion of food we consume.
  22. Describe in detail about the generation and propagation of action potential across the myelinated and non-myelinated nerve fibres.
  23. Explain the mechanism of muscle contraction and relaxation.
  24. With appropriate diagram describe the histology of mammalian testis and ovary. Add notes on hormones producing cells of both.
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