18U616 (Pages: 2) Name: ……..…….

Reg. No……..……

SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2021

(CUCBCSS-UG)

(Regular/Supplementary/Improvement)

CC15U ZO6 B11 - PHYSIOLOGY AND ENDOCRINOLOGY

(Zoology - Core Course)

(2015 Admission onwards)

Time: Three Hours Maximum: 80 Marks

A. Answer ***all*** questions. Each question carries 1 mark.

1. Hormone secreted by kidneys to stimulate re-absorption of Na in kidney tubules.
2. The contractile protein present in the thick myofilament.
3. Give two examples for neurotransmitters.
4. Name any two glial cells.
5. Name the moulting hormone in insect.
6. The process of red blood cell production.
7. Jumping of nerve impulses in myelinated nerve fibres is called.
8. Name two hormones that are catecholamines.
9. Name a method to determine ESR.
10. The respiratory pigment in skeletal muscles.

(10 × 1 = 10 Marks)

B. Answer any ***ten*** questions in two or three sentences each. Each question carries 2 marks.

11. Importance of fibers in diet.
12. Write a note on steroid hormone with example.
13. What is muscle twitch?
14. Comment on glucagon.
15. Importance of oxytocin.
16. Describe any one respiratory problems of newborns.
17. Write on compatibility in blood transfusion.
18. Comment on enteric nervous system.
19. Significance of fasting.
20. What is obesity? Give two reasons for it.
21. Briefly explain ECG.
22. Write an account on GH.

(10 × 2 = 20 Marks)

C. Answer any ***five*** questions. Each question carries 6 marks.

23. Explain urine formation.
24. Describe the constituents of human blood.
25. Explain bioluminescence.
26. Give an account of ruminant digestion.
27. Role of hormones in female sexual cycle.
28. Explain energy sources in muscle. Add a note on Cori cycle.
29. Give a brief description of endocrine system of crustaceans.
30. Explain osmotic regulation in marine and freshwater fishes.

(5 × 6 = 30 Marks)

D. Write essays on any ***two*** of the following. Each question carries 10 marks.

31. Give an account of transport of respiratory gases.
32. Write an essay on mechanism of hormone action.
33. Explain nerve impulse transmission. Add a note on chemical synapse.
34. Describe the ultrastructure of skeletal muscle fiber. Explain the biochemical changes associated with muscle contraction.

(2 × 10 = 20 Marks)

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