

**FOR THE CANDIDATES ADMITTED
DURING THE ACADEMIC YEAR 2020 ONLY**

REG.NO _____

NGM COLLEGE (AUTONOMOUS) POLLACHI

END-OF-SEMESTER EXAMINATIONS: MAY-2023

B. Sc-ZOOLOGY

MAXIMUM MARKS: 70

VI SEMESTER

TIME: 3 HOURS

PART III

ANIMAL PHYSIOLOGY & ENDOCRINOLOGY

SECTION – A (10 X1 = 10 MARKS)

ANSWER THE FOLLOWING QUESTIONS

MULTIPLE CHOICE QUESTIONS

(K1)

1. Which of the following is a green coloured pigment -----?
(a) Haemoglobin (b) Pinnaglobin (c) Haemocyanin (d) Chlorocruorin
2. The blood vessels that carry blood from the heart to various parts of the body are called as -----
(a) Capillaries (b) Veins (c) Arteries (d) Septum
3. ----- requires very less amount of water for excretion
(a) Urea (b) Ammonia (c) Uric acid (d) Creatinine
4. Which of the following system is unlikely to have stable homeostasis mechanisms?
(a) Redundancy (b) Positive feedback
(c) Negative feedback (d) Complexity
5. Diabetes is caused due to _____
(a) Insulin produced not enough (b) Ketone bodies increased in urine
(c) Reduction of beta cells (d) All the above

ANSWER THE FOLLOWING IN ONE (OR) TWO SENTENCES (K2)

6. Define chyme.
7. Where does Phonoreceptor occur?
8. How many molecules are needed to produce a thyroxine?
9. Expand FSH and LH
10. What are circulating hormones?

SECTION – B (5 X 4 = 20 MARKS)

ANSWER EITHER (a) OR (b) IN EACH OF THE FOLLOWING QUESTIONS. (K3)

11. (a) Briefly describe the role of digestive enzymes.
(OR)
(b) Explain the various respiratory structures in animals.

(CONTD....2)

12. (a) Elaborate the process of pacemaker cell and its electrical activity.
(OR)
(b) Give a short account of Photoreceptor.
13. (a) Write a note on the types of muscles and its properties.
(OR)
(b) Draw and explain the ultra structure of mammalian kidney.
14. (a) Why is pituitary gland also called as “Master Gland”? Justify
(OR)
(b) What is endocrinology and its scope?
15. (a) Describe in detail the scope of endocrinology hormone act comment on the hormonal actions and their mechanism.
(OR)
(b) Enumerate the structural features of
a) Gigantism b) Dwarfism.

SECTION – C**(4 X 10 = 40 MARKS)****ANSWER ANY FOUR OUT OF SIX QUESTIONS.****(16TH QUESTION IS COMPULSORY AND ANSWER ANY THREE QUESTIONS FROM Q.NO: 17 TO 21)****(K4) OR (K5)**

16. Describe the methods of CO₂ transport and explain the Haldane effect.
17. Give an account of the osmotic and ionic regulation of fresh water and marine water fishes.
18. Explain sliding filament theory and the mechanism of muscular contraction.
19. How is urine formed after filtration and reabsorption? Add a note on hormonal regulation in urine formation.
20. Discuss the counter current mechanisms of hormones and its types in detail with suitable Examples.
21. Critically comment on hormonal disorders.
