

Reg. No

Name

17P3609

MSc DEGREE END SEMESTER EXAMINATION- OCTOBER-NOVEMBER 2017

SEMESTER 3 : ZOOLOGY

COURSE : 16P3ZOOT09 ; ANIMAL PHYSIOLOGY

(For Regular - 2016 admission)

Time : Three Hours

Max. Marks: 75

Section A

Answer any 8 (2 marks each)

1. Distinguish between open and closed circulatory system.
2. Comment on the structure and functions of Haemoglobin.
3. Write a brief note on Peritoneal dialysis.
4. Mention the factors influencing Glomerular Capillary Colloid Osmotic Pressure.
5. Define the following terms: Neuromuscular Junction, End plate Potential, Motor unit.
6. Bipolar cells with two opposing actions are present in the retina. Comment on its relevance.
7. How are the olfactory signals transmitted to the brain?
8. What is the role of muscles in the body? Name the different types.
9. What is meant by Daily torpor?
10. Comment on any three aminoacid derivatives which have hormone actions in human body.
11. What are the functions of mineralocorticoids?
12. What is meant by puberty?

8 x 2 (16)

Section B

Answer any 7 (5 marks each)

13. Describe neuronal and hormonal regulation of nutritional intake.
14. Write notes on the different types of hearts.
15. Briefly outline the factors affecting ventilation of lungs.
16. Draw a neat sketch depicting the physiologic anatomy of the Neuromuscular Junction.
17. Explain phototransduction with the help of suitable diagrams.
18. Describe the structure and function of Molluscan catch muscle.

19. Derive the equation that relates temperature and equilibrium constant.
20. Explain hypothalamic control of pituitary function.
21. Discuss the physiology of parturition.

7 x 5 (35)

Section C

Answer any 2 (12 marks each)

22. Describe the process of respiration at 'High altitude' and during 'Deep sea diving'.
23. Explain the physiology of Urine formation in humans. What are the regulatory mechanisms involved ?
24. Describe the physiology of hearing.
25. Explain the masculinizing effects of testosterone.

2 x 12 (24)