

Reg. No .....

Name .....

18P3609

**MSc DEGREE END SEMESTER EXAMINATION - OCTOBER 2018**  
**SEMESTER 3 : ZOOLOGY**  
**COURSE : 16P3ZOOT09 : ANIMAL PHYSIOLOGY**  
*(For Regular - 2017 Admission & Supplementary - 2016 Admission)*

Time : Three Hours

Max. Marks: 75

**Section A**

**Answer any 8 (2 marks each)**

1. Write notes on the role of purkinje fibres in heart beat.
2. Explain how CO<sub>2</sub> is transported by the blood.
3. Comment on the determinants of peritubular capillary physical forces.
4. Write a brief note on Peritoneal dialysis.
5. Outline the parts of the Peripheral and Autonomous nervous system.
6. Bipolar cells with two opposing actions are present in the retina. Comment on its relevance.
7. What are Y cells? Mention its features.
8. Mention the importance of Asynchronous Flight muscle.
9. Distinguish between hibernation and aestivation.
10. Describe the major neuro-endocrine axes in human body.
11. What are local hormones? Give examples.
12. Distinguish between FSH and TSH. Note down their roles.

**(2 x 8 = 16)**

**Section B**

**Answer any 7 (5 marks each)**

13. Comment on the health issues related to overeating and obesity.
14. Elucidate the principle and significance of ECG.
15. Discuss the various pressures regulating ventilation of lungs.
16. Differentiate between electrical and chemical transmission.
17. Write an explanatory note on the primary sensations of taste.
18. Illustrate the relationship between Actin, Troponin, Tropomyosin and Ca ions.
19. Discuss how body temperature is regulated on a cold day. How is it different on a hot day?
20. What are the different modes of hormone action?
21. Discuss the physiology of parturition.
22. Describe the physiology of implantation.

**(5 x 7 = 35)**

**Section C**

**Answer any 2 (12 marks each)**

23. Discuss the mechanics of pulmonary ventilation. Briefly explain the process involved in inspiration and expiration.
24. Explain water, salt, ionic balance and acid base balance in man.
25. Give a detailed description of the physiology of taste.
26. Discuss the functions of Adrenocortical hormones.

**(12 x 2 = 24)**