

Reg. No .....

Name .....

20P3009

**MSc DEGREE END SEMESTER EXAMINATION - OCT/NOV 2020: JAN 2021**

**SEMESTER 3 : ZOOLOGY**

**COURSE : 16P3ZOOT09 : ANIMAL PHYSIOLOGY**

*(For Regular - 2019 Admission and Supplementary - 2016/2017/2018 Admissions)*

Time : Three Hours

Max. Marks: 75

**PART A**

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

1. Define 'haemopoiesis'.
2. Discuss the role of CO<sub>2</sub> and H<sup>+</sup> in the activation of chemosensitive areas of the respiratory centre.
3. Explain the effect of arterial pressure on Urine output.
4. Differentiate between electrolyte balance and acid base balance.
5. Define the term 'neuromodulators' with examples
6. Write an explanatory note on Stereocilia.
7. Briefly explain the anatomy of cones.
8. What is the role of muscles in the body? Name the different types.
9. Distinguish between hibernation and aestivation.
10. What is the role of Hypothalamus in the overall growth of a human being?
11. What are local hormones? Give examples.
12. Mention the significance of Lactation.

**(2 x 8 = 16)**

**PART B**

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

13. Discuss the health issues related to overeating and obesity.
14. Elucidate the principle and significance of ECG.
15. Distinguish between Acute and Chronic Mountain sickness.
16. Distinguish between electrical and chemical transmission.
17. Write an explanatory note on the primary sensations of taste.
18. Explain the nature and function of Myosin and Actin.
19. Explain the role of hypothalamus in regulating the body temperature.
20. What are the different modes of hormone action?
21. Discuss the physiology of parturition.
22. Mention the impact of senescence on reproduction.

**(5 x 7 = 35)**

**PART C**

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

23. Discuss the mechanics of pulmonary ventilation. Briefly explain the process involved in inspiration and expiration.
24. Outline the various aspects relating to kidney transplantation. Add a note on dialysis and also the significance of artificial kidney.
25. Discuss the physiology of vision.
26. Explain the masculinizing effects of testosterone.

**(12 x 2 = 24)**