

TM243748J

Reg. No : .....

Name : .....

MASTER'S DEGREE (C.S.S) EXAMINATION, FEBRUARY 2024  
2022 ADMISSIONS SUPPLEMENTARY (SAY)  
SEMESTER III - CORE COURSE Zoology  
ZO3C09TM20 - Animal Physiology

Maximum Weight : 30

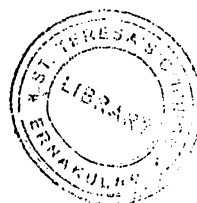
Time : 3 Hours

**Part A**

**I. Answer any Eight questions. Each question carries 1 weight**

**(8x1=8)**

1. Write a note on mechanical digestion.
2. Elaborate on avian digestive system.
3. Differentiate between open and closed circulation.
4. Elaborate on surfactants and its effect on surface tension.
5. Differentiate between phasic and tonic receptors.
6. Explain catch and fibrillar muscles.
7. Point out the significance of protein buffer system.
8. Describe the process of micturition.
9. What are synthetic hormones?
10. Write an account on pancreatic islets and its hormone secreting cells.



**Part B**

**II. Answer any Six questions. Each question carries 2 weight**

**(6x2=12)**

11. Comment on leptin synthesis and its role in adipogenesis.
12. Elaborate on chemical regulation of blood pressure.
13. Point out the important characteristics of myogenic heart.
14. Elaborate on the modifications of synaptic transmission.
15. Summarize the major events in the mechanism of hearing.
16. Explain the adaptations for extreme environments in poikilotherms.
17. Explain the regulation of glucagon and insulin secretion.
18. Elaborate on lactation.

**Part C**

**III. Answer any Two questions. Each question carries 5 weight**

**(2x5=10)**

19. Explain the mechanics of ventilation.
20. Explain synapse with special mention to its excitatory and inhibitory functions.
21. Write an essay on osmoregulation in fresh water and marine animals.
22. Give a detailed account on the process of implantation of developing embryo in the uterine cavity.