



**2021/TDC/CBCS/ODD/
ZOOHCC-302T/029**

**TDC (CBCS) Odd Semester Exam., 2021
held in March, 2022**

ZOOLOGY

(3rd Semester)

Course No. : ZOOHCC-302T

**(Animal Physiology : Controlling and
Coordinating System)**

Full Marks : 50

Pass Marks : 20

Time : 3 hours

*The figures in the margin indicate full marks
for the questions*

SECTION—A

Answer any *ten* questions :

2×10=20

1. What are the different types of bones found in mammals?
2. Mention different types of cartilages.



(2)

3. Write the characteristics of striated muscles.
4. What is resting membrane potential?
5. Mention the differences between myelinated and non-myelinated nerve fibres.
6. What is neuromuscular junction?
7. What are isotonic and isometric contractions?
8. Mention the characteristics of muscle twitch.
9. Write a short note on tetanus.
10. Write a short note on estrous cycle.
11. Mention the hormones secreted by placenta.
12. What is feedback mechanism of hormone action?
13. Name the hormones secreted by pancreas.
14. What are hypothyroidism and hyperthyroidism?
15. Mention the functions of oxytocin.



(3)

SECTION—B

Answer any *five* questions :

6×5=30

16. Define epithelial tissue. Give the classification of epithelial tissue with proper diagram. Mention the important functions of epithelial tissue. 1+3+2=6
17. Describe the structure of nervous tissue with suitable diagram. 6
18. Define action potential. Describe the propagation of nerve impulse through myelinated nerve fibre with suitable illustration. 1+5=6
19. Define synapse. Describe the mechanism of transmission of impulse through synapse with diagram. 1+5=6
20. Describe the histology of different types of muscle fibres with diagram. 6
21. Discuss the molecular basis of muscle contraction with suitable illustration. 6
22. Describe the histological structure of testis with suitable diagram. Write the hormones secreted by testis. 3+2+1=6



(4)

23. Describe the histological structure of ovary with neat diagram. Mention the hormones secreted by ovary. 3+2+1=6
24. Describe the histological structure of thyroid gland with suitable diagram. Write the functions of hormones secreted by thyroid gland. 4+2=6
25. Define hormone. Describe the mechanism of protein hormone action with proper illustration. 1+5=6
