



**2022/TDC (CBCS)/EVEN/SEM/
ZOOHCC-401T/088**

TDC (CBCS) Even Semester Exam., 2022

ZOOLOGY

(Honours)

(4th Semester)

Course No. : ZOOHCC-401T

(Comparative Anatomy of Vibrants)

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* of the following questions : $2 \times 10 = 20$

1. What is cornification? Explain briefly.
2. Differentiate between monocondylic and dicondylic skulls with examples.
3. What is meant by visceral arches? How many visceral arches are found in mammals?



(2)

4. What is gastric gland? Name the types of cells and their secretions in the gastric juice.
5. How many air sacs are associated with the respiratory system of modern birds? What is syrinx?
6. What is meant by accessory respiratory organs in fishes? Explain briefly.
7. What is pericardium? Name two additional chambers in amphibian heart.
8. What is meant by portal system? Explain briefly.
9. What are the types of uteri in mammals?
10. What is meninges? Name the membranous layers of meninges.
11. Differentiate between cerebrum and cerebellum.
12. What is spinal cord? How many pairs of spinal nerves are found in human?

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(Continued)

(3)

13. Classify receptors in higher vertebrates.
14. What are the functional significances of ear?
15. What is meant by mechanoreceptors? Cite some examples of cutaneous receptors.

SECTION—B

Answer any *five* of the following questions : 6×5=30

16. Discuss various epidermal derivatives of the integument in vertebrates.
17. Give a comparative account of girdle bones of Reptilia, Aves and Mammalia.
18. Name the salivary glands of mammals. What are the uses of saliva? Describe the structure of alimentary canal of mammals with labelled diagram. 2+4=6
19. Describe the structure of lungs in carinate birds and the mechanism of double respiration in them. 3+3=6
20. Give a comparative account of aortic arches in the vertebrate series with necessary diagrams.

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(Turn Over)



(4)

21. Discuss the modifications of uriniferous tubules and evolution of kidney in vertebrate series.
22. Give a comparative account of the brain of birds and mammals.
23. What are cranium and cranial nerves? Discuss cranial nerves of mammals.
24. Describe the structure of human eye with necessary diagram.
25. Write short notes on gustatoreceptor of man and lateral line system in fishes. 3+3=6

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