

**2023/TDC(CBCS)/EVEN/SEM/
ZOODSC/GE-201T/256**

TDC (CBCS) Even Semester Exam., 2023

ZOOLOGY

(2nd Semester)

Course No. : ZOODSC/GE-201T

**(Comparative Anatomy and Developmental
Biology of Vertebrates)**

Full Marks : 50

Pass Marks : 20

Time : 3 hours

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

SECTION—A

Answer any *fifteen* questions : 1×15=15

1. Integument originates from which germinal layer(s)?
2. Name some dermal derivatives.
3. What is Meckel's cartilage?

(2)

4. Mention the names of two basic layers of digital tips of amniota.
5. Mention the function of air sacs.
6. What is 'crypts of Lieberkuhn'?
7. What is the function of gizzard?
8. Mention the name of different parts of stomach of hervivores.
9. What are aortic arches?
10. What is ureter?
11. What is branchial heart?
12. What are the different modes of respiration found in amphibians?
13. What is conus arteriosus?
14. Mention the name of two basic types of cells found in nervous system.
15. What are the two divisions of nervous system?
16. What is ventricular brain?
17. What is spermiogenesis?
18. What is a fate map?
19. What is morula?
20. Mention the names of different layers present in human ovum.

(3)

SECTION—BAnswer any *five* questions :

2×5=10

21. Mention the functions of integument in vertebrates.
22. Write a short note on digital cornification found in herbivorous mammal.
23. What is Labyrinthine organ? Mention its functions.
24. Mention the functions of swim bladder.
25. What are the different types of uterus found in mammal.
26. What are the different types of kidney found in vertebrates?
27. What are the functions of three regions of rhombencephalon?
28. In which division of brain medulla oblongata is situated? Mention its function.
29. Mention the function of placenta.
30. How is polyspermy prevented?

SECTION—CAnswer any *five* questions :

5×5=25

31. Discuss briefly on the soft epidermal derivatives of vertebrates.

32. Describe briefly the evolution of visceral arches in vertebrate series.
33. Write a short note on the structure and functions of gills in fishes.
34. Describe briefly the different digestive glands found in vertebrate series.
35. Write a note on evolution of male urinogenital ducts in vertebrates.
36. Give a comparative account of heart of reptiles and mamals.
37. What are the main two parts of prosencephalon of vertebrates? Mention the primary function of each part. 1+4=5
38. Discuss the functions of the hypothalamus.
39. Describe the process of oogenesis in mammal with a suitable diagram.
40. Describe different paterrens of cleavage found in vertebrates.

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