

**2022/TDC(CBCS)/EVEN/SEM/
ZOODSC/GEC-201T/087**

TDC (CBCS) Even Semester Exam., 2022

ZOOLOGY

(2nd Semester)

Course No. : ZOODSC/GEC-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. Define integument.
2. What are the derivatives of integument?
3. What are the two types of sweat glands?
4. What are the two layers of integument?

(2)

5. What is the only integumentary gland in birds?
6. Name two mammals that do not possess teeth.
7. Name the enzyme secreted by liver.
8. Name two digestive glands of mammal.
9. What is a branchial or venus heart?
10. What is the lumen of conus arteriosus called?
11. What is meant by double circulation?
12. What is meant by urinogenital system?
13. Where is the Bowman's capsule found?
14. What are the two divisions of nervous system?
15. In which group of mammal cerebral hemisphere is largest?
16. Which nerve is responsible for sensation in face?
17. Name the two divisions of autonomic nervous system of mammal.

(3)

18. Name the hormone responsible for spermatogenesis.
19. Name the hormones secreted by the placenta.
20. What is the name of the cavity of blastula?

SECTION—BAnswer any *five* questions :

2×5=10

21. What are the digital tips present in vertebrates?
22. Write a short note on hoofs.
23. Mention the functions of liver as digestive gland.
24. Write the functions of swim bladder.
25. What are aortic arches?
26. Name the male genital ducts.
27. Mention the functions of spinal cord.
28. Which nerves transmit signals from the brain?
29. Write a short note on spermatogenesis.
30. Write two functions of human placenta.

SECTION—C

Answer any *five* questions : 5×5=25

31. Describe the general structure of vertebrate integument and mention its functions. 3+2=5
32. Describe the digital tips of vertebrates.
33. Describe the regions of alimentary canal of mammal.
34. What are air sacs? What are their types? Mention its functions. 1+2+2=5
35. Give a comparative account of heart of birds and mammal.
36. Describe the evolution of kidney in vertebrate series.
37. Give a comparative account of brain in vertebrates.
38. Describe the brain of a reptile and compare it with that of a mammal.
39. Describe the process of internal fertilization in mammals.
40. Write about the types of placenta on the basis of histology.

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