



K24U 0753

Reg. No. : .....

Name : .....

**IV Semester B.Sc. Degree (C.B.C.S.S. – O.B.E. – Regular/Supplementary/  
Improvement) Examination, April 2024  
(2019 to 2022 Admissions)  
CORE COURSE IN ZOOLOGY  
4B 04 ZLG : Chordata II and Comparative Anatomy**

Time : 3 Hours

Max. Marks : 40

**Instruction :** Give illustrations and figures wherever necessary.

- I. Essay questions. Answer **any two**. Each question carries **8** marks.
- 1) Describe the adaptations of aquatic mammals.
  - 2) Describe the structure and functioning of heart of *Oryctolagus*.
  - 3) Differentiate Protheria, Metatheria and Eutheria.
  - 4) Elucidate the significance of migratory behaviour of birds, focussing on the types of migration. (2×8=16)
- II. Short essays. Answer **any two**. Each question carries **4** marks.
- 5) Compare aortic arches in amphibians and mammals.
  - 6) Elucidate how birds are adapted for aerial mode of life.
  - 7) Briefly explain the salient features of Superorder Palaeognathae, citing two examples. (2×4=8)
- III. Short answer questions. Answer **any six**. Each question carries **2** marks.
- 8) Differentiate procoelous, amphicoelous and heterocoelous vertebrae.
  - 9) What are the salient features of Order Insectivora ? Cite an example.
  - 10) Comment on the distinctive feature of Jerdon's courser.
  - 11) How chiropterans are adapted for flight ?

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- 12) What is dental formula ? Cite one example.
  - 13) How does birds orient while migrating ?
  - 14) Where is pecten found and what are its functions ?
  - 15) What are the features of baleen whales ? (6×2=12)
- IV. Multiple choice questions. Answer **all**. Each question carries **0.5** marks.
- 16) Pigeons are  
a) Urotelic                      b) Uricotelic                      c) Ammonotelic                      d) Aminotelic
  - 17) *Pavo cristatus* belongs to order  
a) Galliformes                      b) Columbiformes  
c) Cuculiformes                      d) Piciformes
  - 18) The first pair of cranial nerves in birds and mammals is  
a) Optic                      b) Olfactory                      c) Occulomotor                      d) Auditory
  - 19) Cutaneous gland seen at the base of tail of birds is  
a) Sebaceous gland                      b) Green gland  
c) Preen gland                      d) Sudoriferous gland
  - 20) Scientific name of red kangaroo  
a) *Axis axis*                      b) *Sus scrofa*  
c) *Funambulus palmarum*                      d) *Macropus rufus*
  - 21) Which of the following animals belong to Order Carnivora ?  
a) Manis                      b) Physeter                      c) Panthera leo                      d) Ratufa
  - 22) Locomotion in rabbit is  
a) Digitigrade                      b) Plantigrade                      c) Unguligrade                      d) Saltatorial
  - 23) Typical jaw suspension in mammals is  
a) craniostylic                      b) autostylic  
c) amphistylic                      d) hyostylic (8×0.5=4)