



K23U 3454

Reg. No. :

Name :

**III Semester B.Sc. Degree (CBCSS – OBE – Regular/Supplementary/
Improvement) Examination, November 2023
(2019 to 2022 Admissions)
CORE COURSE IN ZOOLOGY
3B03 ZLG : Chordata – 1**

Time : 3 Hours

Max. Marks : 40

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

- I. Essay questions (**Each** question carries **8** marks). Answer **any two**.
- 1) Write an essay on accessory respiratory organs in fishes.
 - 2) Describe the vertebrae of frog with labelled diagrams.
 - 3) Describe the structure and working of heart in frog.
 - 4) Classify Class Reptilia up to subclass, with at least two salient features and one example for each. Add a note on the criterion of classification.
- II. Short Essay (**Each** question carries **4** marks). Answer **any two**.
- 5) Explain retrogressive metamorphosis taking ascidia as an example.
 - 6) List any 8 general characters of Super Class Pisces.
 - 7) Write an account on Stem reptiles.
- III. Short Answer questions (**Each** question carries **2** marks). Answer **any six**.
- 8) Enumerate the primary chordate characters.
 - 9) Distinguish between Urochordata and Cephalochordata.
 - 10) Justify the names 'Sea squirts' and 'Tunicates' for ascidians.
 - 11) Comment on the parasitic adaptations of Lamprey.
 - 12) What is a heterocercal caudal fin ? Give example.
 - 13) Comment on the modifications in Echeneis.
 - 14) Describe the importance of Nasikabatrachus.
 - 15) Write on the uses of snake venom.

P.T.O.



IV. Multiple choice questions (**Each** question carries **0.5** mark). Answer **all**.

- 16) _____ is the South African lung fish.
A) Neoceratodus B) Protopterus
C) Lepidosiren D) Pristis
- 17) Foramen of Panizza is found in
A) Narcine B) Trygon C) Bungarus D) Crocodilus
- 18) _____ is a sea snake.
A) Ptyas B) Daboia C) Echis D) Hydrophis
- 19) _____ is an apodan.
A) Heteropneustus B) Uraeotyphlus
C) Stromaesus D) Philautus
- 20) _____ is the national fish of India.
A) Gangetic dolphin B) Gavialis gangeticus
C) Shark D) Rastrelliger kanagurta
- 21) _____ is a living fossil belonging to Class Reptilia.
A) Chamaleon B) Sphenodon
C) Hylonomus D) Echis
- 22) Tuatara is represented in _____ only.
A) New Foundland B) New Guinea
C) New Zealand D) New York
- 23) Zygodactyly is seen in
A) Chamaleon B) Calotes
C) Typhlops D) Gecko
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K22U 3657

Reg. No. :

Name :

**Third Semester B.Sc. Degree (CBCSS-OBE – Regular/Supplementary/
Improvement) Examination, November 2022**

**(2019 Admission Onwards)
CORE COURSE IN ZOOLOGY**

3B03ZLG : Chordata – I

Time : 3 Hours

Max. Marks : 40

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

- I. Essay questions. (**Each** question carries **8** marks; answer **any 2**) : **(2×8=16)**
- 1) Write an essay on the salient features and classification of Agnatha.
 - 2) Describe the key for the identification of poisonous and non-poisonous snakes.
 - 3) With suitable diagram explain the structure of heart of frog.
 - 4) Write the fundamental and general characters of Chordates and their classification.
- II. Short Essay. (**Each** question carries **4** marks; answer **any 2**) : **(2×4=8)**
- 5) Explain retrogressive metamorphosis.
 - 6) Sketch and label the structure of ear of Shark.
 - 7) Comment on the importance of Ammocoetes larva.
- III. Short answer questions. (**Each** question carries **2** marks; answer **any 6**) : **(6×2=12)**
- 8) Sketch and label the section of skin of frog.
 - 9) Explain the mechanism of cutaneous respiration in frog.
 - 10) Mention temporal fossa in reptiles.
 - 11) Sphenodon is a living fossil – justify this statement.
 - 12) Write any 4 salient features of order Squamata.
 - 13) Define Portal system.
 - 14) Write any 4 salient features of order Anura.
 - 15) What is the evolutionary importance of Latimeria ?

P.T.O.



K22U 3657

IV. Multiple choice questions. (Each one carries $\frac{1}{2}$ mark each; answer all) : (8×0.5=4)

- 16) The rasping organ in *Petromyzon* is
a) Tooth
b) Tongue
c) Mandible
d) None of these
- 17) Excretory structure of *Amphioxus* is
a) Nephridium
b) Green gland
c) Solenocyte
d) None of these
- 18) Division Agnatha includes
a) Cartilaginous fishes
b) Bony fishes
c) Lung fishes
d) Jawless fishes
- 19) The tough nonliving covering of urochordates is
a) Scale
b) Chitin
c) Tunic
d) Carapace
- 20) Which among the following is not an amphibian ?
a) Salamanders
b) Newts
c) Caecilians
d) Ichthyosaurus
- 21) Spot out the non-poisonous snake from the following
a) *Hydrophis*
b) *Enhydrina*
c) *Typhlops*
d) *Krait*
- 22) The uricotelic animal in the group
a) Fish
b) Reptile
c) Mammal
d) Amphibia
- 23) Limbless amphibia belongs to the order
a) Anura
b) Urodele
c) Apoda
d) None of these



K21U 1855

Reg. No. :

Name :

**III Semester B.Sc. Degree (CBCSS – OBE – Regular/Supplementary/
Improvement) Examination, November 2021
(2019 and 2020 Admissions)
CORE COURSE IN ZOOLOGY
3B03ZLG : Chordata – 1**

Time : 3 Hours

Max. Marks : 40

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

- I. Essay questions (**Each** question carries **8** marks). Answer **any two**. (2×8=16)
- 1) Outline the key for the identification of poisonous snakes.
 - 2) Describe the respiratory system in *Euphlyctis hexadactylus*.
 - 3) Write an essay on the structure of heart and arterial system of shark.
 - 4) Write an essay on accessory respiration in fishes.
- II. Short Essay (**Each** question carries **4** marks). Answer **any two**. (2×4=8)
- 5) Describe the parental care in Amphibia.
 - 6) Explain the retrogressive metamorphosis in Ascidia.
 - 7) Describe the urino-genital system of male shark.
- III. Short answer questions (**Each** question carries **2** marks). Answer **any six**. (6×2=12)
- 8) Write salient features of Apoda. Give an example.
 - 9) Briefly explain the characteristics of order Crocodilia.
 - 10) Write a short note on atrium of Amphioxus.
 - 11) Describe the structure of poison apparatus of snake.
 - 12) Mention the features of Chelonia.
 - 13) Describe the distribution of lung fish.
 - 14) What is paedogenesis ?
 - 15) Write down the salient features of Cephalochordata.

P.T.O.



IV. Multiple choice questions (**Each** question carries **0.5** marks). Answer **all**. ($8 \times 0.5 = 4$)

- 16) Amphibian which shows parental care
a) Hyla b) Ichthyophis c) Rhacophorus d) All of these
- 17) A non-poisonous snake is
a) Bangarus b) Viper c) Python d) Sea-snake
- 18) Which of the following is a lung fish ?
a) Trygon b) Mugil c) Protopterus d) Channa
- 19) Which of the following is a limbless amphibian ?
a) Anguilla b) Ichthyophis c) Pheretima d) Bufo
- 20) Cartilaginous fishes do not have
a) Operculum b) Scales c) Gill slits d) Pelvic fins
- 21) Calotes belongs to the sub-order
a) Chelonia b) Lacertilia c) Ophidia d) Rhynchocephalia
- 22) Jaw of shark contains
a) Thecodont teeth b) Acrodont teeth
c) Pleurodont teeth d) None of these
- 23) Which of the following has exoskeleton of scales and paired copulatory organ or penis ?
a) Sharks b) Lizards c) Urodela d) Urochordata

K20U 1854

Reg. No. :

Name :

**III Semester B.Sc. Degree CBCSS (OBE) – Regular
Examination, November 2020
(2019 Admission Only)
CORE COURSE IN ZOOLOGY
3B03 ZLG : Chordata – 1**

Time : 3 Hours

Max. Marks : 40

Instruction : Give illustrations and figures *wherever* necessary.

- I. Essay questions (**Each** question carries **8** marks). Answer **any two** :
- 1) Describe the structure and metamorphosis of Ascidia larva.
 - 2) Write an essay on the structure of heart and arterial system of shark.
 - 3) Write an essay on the classification of class reptilia up to order with examples.
 - 4) Write an essay on accessory respiration in fishes. (2×8=16)
- II. Short essay (**Each** question carries **4** marks). Answer **any two** :
- 5) Write an essay on migration of fishes.
 - 6) Describe the chordate and non chordate affinities of Amphioxus.
 - 7) Describe the structure of the brain of *Euphlyctis hexadactylus*. (2×4=8)
- III. Short answer questions (**Each** question carries **2** marks). Answer **any six** :
- 8) Comment on Sphenodon.
 - 9) Describe the poisonous apparatus of snake.
 - 10) Briefly explain the aquatic adaptations of fish.
 - 11) Write notes on Oikopleuran house.
 - 12) What is notochord ?
 - 13) Mention the characters of Dipnoi.
 - 14) Mention the salient features of Chimera.
 - 15) Mention the features of Axolotl larva. (6×2=12)

P.T.O.



IV. Multiple choice questions (Each question carries 0.5 marks). Answer all :

- 16) Cartilaginous fishes do not have
a) Operculum b) Scales c) Gill slits d) Pelvic fins
- 17) Skull is present in
a) Urochordata b) Cephalochordata
c) Vertebrata d) None
- 18) Which of the following animal is reptile ?
a) Toad b) Salamander c) Newt d) Turtle
- 19) _____ shows catadromous migration.
a) Anguilla b) Salmon c) Lamprey d) Sturgeon
- 20) Venous heart is found in
a) Amphibians b) Reptiles c) Fishes d) Birds
- 21) Disappearance of tadpole tail during metamorphosis is brought about by
a) Golgi bodies b) Lysosomes
c) Peroxisomes d) Endoplasmic reticulum
- 22) Scientific name of king cobra is
a) *Naja naja* b) *Bungarus coeruleus*
c) *Naja hannah* d) *Vipera russelli*
- 23) How many pairs of cranial nerves are found in frog ?
a) 10 b) 08 c) 12 d) 16

(8×0.5=4)