

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted during the academic year 2019 – 2020 & thereafter)

SUBJECT CODE: 19ZL/MC/CH24

B. Sc. DEGREE EXAMINATION, APRIL 2022
BRANCH VIA. ADVANCED ZOOLOGY & BIOTECHNOLOGY
SECOND SEMESTER

COURSE : MAJOR CORE
PAPER : CHORDATA
TIME : 3 HOURS

MAX. MARKS: 100

SECTION – A

ANSWER ALL QUESTIONS:

(10 X 3 = 30)

- 1) Give the zoological name for the following:
Sea Horse b) Tiger Salamander c) Rose-ringed parakeet
- 2) Define retrogressive metamorphosis and provide an example for the same.
- 3) Mention any three functions of electric organs in fish.
- 4) Name the three orders under Class Amphibia and give an example for each.
- 5) Draw and label an Ampulla of Lorenzini.
- 6) Distinguish between ammonotely, uricotely and ureotely.
- 7) Match the following:

a) Holobranch	- Head
b) Angler fish	- Giant Anteater
c) Jugular vein	- Respiration
d) Furcula	- Bioluminescent lure
e) Desmognathous palate	- Clavicle
f) Toothless mammal	- Ducks
- 8) Name any three aquatic mammals.
- 9) What are the functions of the Jacobson's organ?
- 10) Describe the compartments of the cloaca in pigeon.

SECTION – B

ANSWER ANY FIVE QUESTIONS:

(5 X 6 = 30)

- 11) Give the outline classification of Phylum Chordata.
- 12) Summarise the specialised characteristics of *Petromyzon*.
- 13) Draw and label the urinogenital system of *Scoliodon sorrakowah*.
- 14) Discuss parental care in Amphibia with the help of any three examples.
- 15) Draw and describe the poison apparatus of venomous snakes.

- 16) Distinguish between the different types of feathers in *Columba livia*.
- 17) What is heterodont dentition? Elaborate on the dentition of Rabbit.

SECTION – C

ANSWER ANY TWO QUESTIONS:

(2 X 20 = 40)

- 18) Draw and describe the structure of the digestive system in *Amphioxus* and depict the mechanism of digestion in the form of a flowchart.
- 19) Give an account of adaptive radiation in reptiles.
- 20) Describe the various flight adaptations seen in birds.
- 21) With a neat, labelled diagram, describe the structure of the heart of *Oryctolagus cuniculus* and add a note on its working.
