

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted from the academic year 2015 – 2016 & thereafter)

SUBJECT CODE: 15ZL/MC/CH24

B. Sc. DEGREE EXAMINATION APRIL 2019
BRANCH VIA. – ADVANCED ZOOLOGY AND BIOTECHNOLOGY
SECOND SEMESTER

COURSE : MAJOR – CORE
PAPER : CHORDATA
TIME : 3 HOURS

MAX. MARKS: 100

SECTION – A

ANSWER ALL QUESTIONS:

(10 X 3 = 30)

1. What is notochord?
2. Write a brief note on electric organs.
3. What is coprophagy?
4. **STATE WHETHER THE FOLLOWING ARE TRUE OR FALSE:**
 - a) Petromyzon is popularly known as sea lamprey.
 - b) Shark has cycloid type of scales.
 - c) *Natrix* is a poisonous snake.
 - d) Birds are uricotelic animals.
 - e) Mammary glands are modified sebaceous glands.
 - f) Ductus caroticus is present in fishes.
5. **FILL IN THE BLANKS**
 - a) Jawless vertebrates are known as _____.
 - b) Heterocercal tail is seen in _____.
 - c) Zoological name of king cobra is _____.
 - d) Migration of birds during day time is called _____.
 - e) _____ type of dentition is seen in Dolphin.
 - f) Pigeon's milk is secreted by _____.
6. **DISTINGUISH BETWEEN**
 - a) Poisonous and non- poisonous snakes
 - b) Acrodont and pleurodont.
7. Comment on synsacrum.
8. What is mermaid's purse?
9. Write a short note on wheel organ.
10. **MATCH THE FOLLOWING**
 - a) Nephridium - Herbivores
 - b) *Petromyzon* - Sound box
 - c) *Scoliodon* - Sea snake
 - d) *Hydrophis* - Cartilaginous fish
 - e) Syrinx - Solenocytes
 - f) Diastema - Ammocoetes larva

SECTION – B**ANSWER ANY FIVE QUESTIONS:****(5 X 6 = 30)**

11. Explain the structure of *Petromyzon* with a neat diagram.
12. Describe the process of retrogressive metamorphosis in Urochordates.
13. Write short notes on neoteny in Urodela.
14. Give a brief account on air sacs in pigeon.
15. Explain the structure of brain of rabbit with a neat sketch.
16. Describe the arterial system of shark.
17. List the general characters of Aves.

SECTION – C**ANSWER ANY TWO QUESTIONS:****(2 X 20 = 40)**

18. Give an account on accessory respiratory organs in fishes.
19. Write an essay on parental care in Amphibia.
20. Explain how birds are adapted to aerial mode of life.
21. Write a detailed account on aquatic mammals.
