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 2017 BRANCH VI.A. – ADVANCED ZOOLOGY AND BIOTECHNOLOGY SECOND SEMESTER

COURSE MAJOR – CORE PAPER **CHORDATA** TIME **MAX. MARKS: 100** 3 HOURS SECTION - A **ANSWER ALL QUESTIONS:** $(10 \times 3 = 30)$ 1. FILL IN THE BLANKS: a) Larval form of Petromyzon is . b) Skin of shark contains _____ scales. c) Anura includes _____ amphibians. d) Micrusus is commonly called _ e) Sound producing organ in birds is ____ f) In rabbit, the habit of eating its own faeces is called . 2. MENTION THE ZOOLOGICAL NAME OF THE FOLLOWING: a) Sea horse b) Pearl spot c) South Indian toad d) Common krait e) Pigeon f) Rabbit 3. GIVE THE COMMON NAME OF THE FOLLOWING: a) Branchiostoma b) Petromyzon c) Scolidon d) Alytes e) Naja Naja f) Struthio 4. COMMENT ON THE FOLLOWING: a) Solenocytes b) Glottis c) Metanephric kidney 5. GIVE THE FUNCTIONS OF THE FOLLOWING: a) Hatschek's nephridium b) Ampulla of Lorenzini c) Nuptial pad 6. MATCH THE FOLLOWING: a) Humerus Aquatic mammal Flightless birds b) Femur Fusion of 14 verrtebrae c) Cranium Fore limb d) Synsacrum e) Kiwi Hind limb f) Orcinus Skull 7. DISTINGUISH BETWEEN: a) Systole and Diastole b) Hepatic portal system and renal portal system c) Hemotoxin and neurotoxin

- 8. WHAT ARE THE FOLLOWING?
 - a) Mermaid's purse b) Neoteny c) Pericardium
- 9. Draw a neat labelled diagram of brain of rabbit.
- 10. Comment on Bird ringing.

SECTION - B

ANSWER ANY FIVE QUESTIONS:

 $(5 \times 6 = 30)$

- 11. Briefly explain the feeding mechanism in *Amphioxus*.
- 12. Write a brief note on affinities of *Petromyzon*.
- 13. Write down the salient features of Pisces.
- 14. Write short notes on electric organs in fishes.
- 15. Explain the male and female Urinogenital systems in *Calotes*.
- 16. Write a brief account on respiratory system in Pigeon.
- 17. Briefly explain the types of dentition.

SECTION - C

ANSWER ANY TWO QUESTIONS:

 $(2 \times 20 = 40)$

- 18. Write an essay on parental care in fishes.
- 19. Give an account on poison apparatus and biting mechanism in snakes.
- 20. How are birds adapted for the aerial mode of life?
- 21. Give a detailed account on aquatic mammals.
