

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted from the academic year 2008-2009 & thereafter)

SUBJECT CODE: ZL/MC/CR24

B. Sc. DEGREE EXAMINATION APRIL 2010
BRANCH VI.A. – 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. **FILL IN THE BLANKS**
 - a. The _____ ganglion is found at the base of fifth cranial nerve.
 - b. Pecten is comb like structure found in the eye of _____.
 - c. In rabbit only the _____ systemic arch is present.
 - d. Amphioxus _____ feeder.
 - e. Body of scoliodon is covered by _____ scales.
 - f. Ascidian belongs to the subphylum _____.
2. **MENTION THE ZOOLOGICAL NAME OF THE FOLLOWING:**
 - a) Pigeon b) Rabbit c) Viper
 - d) Sea horse e) Lion f) Mid wife toad
3. **GIVE THE COMMON NAME OF THE FOLLOWING:**
 - a) *Anguilla* b) *Balanoglossus* c) *Rhacophorus*
 - d) *Necturus* e) *Rattus* f) *Naja naja*
4. **NAME THE ORDER TO WHICH THE FOLLOWING BELONG:**
 - a) Calotes b) Salamander c) Ascidian
 - d) Bat e) Ostrich f) Owl
5. **GIVE THE FUNCTIONS OF THE FOLLOWING:**
 - a) Nuptialpad b) Brood pouch c) crop

6. **MATCH THE FOLLOWING**

- | | | |
|--------------------|---|---------------|
| a) Cephalochordata | - | Balanoglossus |
| b) Amphioxus | - | Bird |
| c) Acorn worm | - | Autostylic |
| d) Pelvic Girdle | - | Brown funnel |
| e) Synsacrum | - | Wheel organ |
| f) Jaw suspension | - | Ilium |

7. **DISTINGUISH BETWEEN**

- a) Catadromous and Anadromous migration.
 b) Diapsid and Anapsid skull.
 c) Heterocercal and Homocercal caudal fin

8. What are the following?

- a) Syrinx b) Ductus caroticus c) Air bladder.

9. Draw a labeled diagram of brain of frog.

10. Mention the three significant features of chordates.

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

11. With neat-labeled diagrams describe the structure of heart of rabbit.
 12. Comment on retrogressive metamorphosis.
 13. Write a brief account on flight less birds.
 14. Briefly discuss the affinities of amphioxus with invertebrates
 15. Describe the development of placoid scale
 16. Describe different types of feathers in birds.
 17. Describe poison apparatus and biting mechanism of snake.

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

18. Describe the arterial system of shark.
 19. Give an account on parental care in amphibia.
 20. Describe the respiratory system in pigeon.
 21. Write an essay on aquatic mammals.
