

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI 600 086
(For candidates admitted from the academic year 2010 - 2011)

SUBJECT CODE: ZL/MC/CR24

B. Sc. DEGREE EXAMINATION APRIL 2011

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

- Tornaria Larva is seen in the development of _____.
- Scroll valve is present in _____.
- The last cranial nerve in frog is known _____ nerve.
- Reptiles are _____ blooded, terrestrial or aquatic animals.
- In pigeon, the adult female has only the _____ Ovary and left oviduct as their main reproductive organs.
- The brain of Rabbit has a special transverse band of nervous tissue interconnecting the two hemispheres known as _____.

2. MENTION THE ZOOLOGICAL NAME OF THE FOLLOWING:

- Eel b) Flying fish c) Tree frog d) Green turtle
- Garden lizard f) Platypus.

3. GIVE THE COMMON NAME OF THE FOLLOWING:

- Petromyzon* b) *Hippocampus* c) *Ichthyophis*
- Hemidactylus* e) *Struthio* f) *Macropus*

4. NAME THE ORDER TO WHICH THE FOLLOWING BELONG:

- Frog b) Shark c) Snakes
- Pigeon e) Bats f) Whales

5. GIVE THE FUNCTIONS OF THE FOLLOWING:

- Syrinx b) Pace - maker c) Crop

6. **MATCH THE FOLLOWING**

- | | | |
|------------------|---|------------------|
| a) Tibio –fibula | - | Pelvic girdle |
| b) Clavicle | - | Caudal Vertebrae |
| c) Radius | - | Skull |
| d) Ilium | - | Hind Limb |
| e) Cranium | - | fore Limb |
| f) Pygostyle | - | Pectoral girdle |

7. **DISTINGUISH BETWEEN**

- Glottis and epiglottis
- Oviparous and viviparous
- Terrestrial and fossorial

8. What are the following?

- Ductus caroticus
- Blubber
- Diastema

9. Draw a neat labeled diagram of the Internal Structure of the heart of Rabbit.

10. Mention the characteristic features of Dipnoi.

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

- Briefly discuss the affinities of Amphioxus.
- Explain retrogressive metamorphosis.
- Explain the mechanism of pulmonary respiration in Frog.
- Describe the structure of Brain of Shark.
- Describe the urinogenital system of calotes.
- Describe the flight muscles of Pigeon.
- Write an account of Ratitae and their distribution.

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

- Give an account of the accessory respiratory organs in fishes.
- Give an account of the structure and affinities of Petromyzon.
- Write an essay on migration of birds.
- Give a detailed account on dentition in Mammals.
