

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI – 600 086
(For Candidates admitted during the academic year 2005-06 & thereafter)

SUBJECT CODE: ZL/AC/GZ12

B.Sc. DEGREE EXAMINATION NOVEMBER 2007
BRANCH V.A. PLANT BIOLOGY & PLANT BIOTECHNOLOGY
FIRST SEMESTER

COURSE : ALLIED CORE
PAPER : GENERAL ZOOLOGY-I
TIME : 2 ½ HOURS

MAX. MARKS: 100

SECTION – A

ANSWER ALL QUESTIONS

(10 x 3 = 30)

1. Write the zoological name of the following organisms
a) Prawn b) Frog c) Rabbit
2. Associate the following with respective animal
a) Uropod b) Crop c) Preoral Chamber
3. Relate the structure of the following with their specific function
a) Cilia b) Pedicellaria c) Mammary gland
4. Associate the following larva to their respective adult
a) Mysis b) Brachiolaria c) Rhabditiform
5. Mention the habitat of the following animals
a) *Oryctolagus cuniculus* b) *Columba livia* c) *Hirudinaria granulosa*
6. Name the animal in which the following structure is present
a) Antennule b) Hyoid Apparatus c) Beak
7. **FILL IN THE BLANKS**
a) Paramecium is commonly known as _____
b) In Leech each segment is broken up externally by grooves into rings called _____
c) Water vascular system is otherwise called _____
d) In birds the voice box lies deep down where the trachea divides into two bronchi is known as _____
e) The dental formula of rabbit is _____
f) In frog besides maxillary teeth there are two patches of teeth found one on either side median line of the roof of the bucal cavity called as _____
8. **STATE WHETHER TRUE / FALSE**
a) Ascaris is a hermaphrodite animal.
b) In Leech the secretion of salivary glands contain a substance called hirudin.
c) First maxilla is one of the cephalic appendages of prawn.
d) Male frog has a pair of testis while a female frog has only one ovary.
e) The corpus callosum is characteristic of mammals.
f) Contour feathers on wing and tail are used for flight.
9. **CHOOSE THE CORRECT ANSWER**
a) In Paramecium the rotary streaming movements of endoplasm is
1. Cyclosis 2. Cytosome 3. Cytopharynx
b) Asterias is
1. Ominvorous 2. Carnivorous 3. Herbivorous

- c) In bird the last thoracic vertebra, the lumbar, the sacral and the five caudal vertebrae are fused to form
1. Sternum
 2. Scapula
 3. Synsacrum
- d) In rabbit the space between two lungs is
1. Mediastinum
 2. Pharynx
 3. Bronchus
- e) The inner layer of frog's heart is
1. Pericardium
 2. Epicardium
 3. Serus
- f) In prawn the opening of statocysts is present in
1. Antennule
 2. Antenna
 3. Mandible

10. **MATCH THE FOLLOWING**

- | | | |
|-------------------------|---|----------|
| a) Vermiform Appendix | - | Starfish |
| b) Sanguivorous | - | Prawn |
| c) Bipinaria | - | Leech |
| d) Coprodaeum | - | Rabbit |
| e) Nictitating membrane | - | Pigeon |
| f) Petasma | - | Frog |

SECTION – B

ANSWER ANY FIVE QUESTIONS (ILLUSTRATE WHEREVER NECESSARY)

(5 x 6 = 30)

11. Explain binary fission in Paramecium.
12. Give an account of digestive system in Leech.
13. Explain the reproduction and life history of Ascaris.
14. Briefly describe nauplius and mysis larvae of prawn.
15. Explain the feeding mechanism of starfish.
16. Describe the brain of Frog.
17. Write notes on Air sacs in pigeon.

SECTION – C

ANSWER ANY TWO QUESTIONS (ILLUSTRATE WHEREVER NECESSARY)

(2 x 20 = 40)

18. Describe the water vascular system in starfish and mention its function.
19. Write an essay on the appendages of prawn.
20. Give an account of urinogenital system in rabbit.
21. Write an essay on the flight adaptations in Pigeon.