

STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI – 600 086  
(For Candidates admitted during the academic year 2019 – 2020)

SUBJECT CODE: 19ZL/MC/IV14

B.Sc. DEGREE EXAMINATION - NOVEMBER 2019  
BRANCH V.I.A. ADVANCED ZOOLOGY AND BIOTECHNOLOGY  
FIRST SEMESTER

COURSE : MAJOR CORE  
PAPER : INVERTEBRATA  
TIME : 3 HOURS

MAX. MARKS: 100

SECTION A

ANSWER ALL QUESTIONS:

(10 X 3 =30)

1. What is gemmule?
2. Comment on scolex.
3. What is Amoebiasis?
4. **STATE WHETHER THE FOLLOWING ARE TRUE OR FALSE:**
  - a) *Plasmodium* has micro and macro nucleus.
  - b) Radial symmetry is the characteristic feature of the Phylum Coelenterata.
  - c) *Wuchereria bancrofti* is a malarial pathogen.
  - d) *Peripatus* is the connecting link between Arthropoda and Annelida.
  - e) Bipinnaria is the larval form of *Pila globosa*.
  - f) Ctenophores are also known as comb jellies.
5. **FILL IN THE BLANKS:**
  - a) *Leucosolenia* has \_\_\_\_\_ type of canal system.
  - b) Zoological name for leech is \_\_\_\_\_.
  - c) ----- is the secondary host for *Taenia solium*.
6. **DISTINGUISH BETWEEN:**
  - a) Atoke and Epitoke.
  - b) Pleuropod and Uropod.
7. Comment on leech therapy.
8. What is Pseudocoelomate animal?
9. Write short notes on Madreporite.
10. **MATCH THE FOLLOWING:**

a) Malaria	- Hypnotoxin
b) Cnidoblasts	- <i>Anopheles</i> mosquito
c) <i>Ascaris</i>	- Hirudin
d) Leech	- Nauplius
e) Prawn	- Haemocyanin
f) <i>Pila</i>	- Rhabditoid larva

SECTION B

ANSWER ANY FIVE QUESTIONS:

(5 x 6 = 30)

11. Briefly explain nutrition in *Paramecium caudatum*.
12. Write the salient features of the phylum Porifera.

13. Write short notes on the following
  - a) *Ascaris lumbricoides* b) *Ancylostoma duodenale*
14. Describe the thoracic appendages in *Penaeus indicus*.
15. Explain the digestive system in *Pila globosa*.
16. Give a brief account on metamerism in annelids.
17. Write an account on social life in honey bees.

### SECTION C

**ANSWER ANY TWO QUESTIONS:**

**(2 x 20 = 40)**

18. Discuss in detail locomotion in protozoa.
19. Describe the alternation of generation in *Obelia geniculata*.
20. Give an account on mouthparts and their modification in insects.
21. Write an essay on larval forms of Echinoderms and their significance.

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