STELLA MARIS COLLEGE (AUTONOMOUS), CHENNAI – 600 086 (For Candidates admitted during the academic year 2015–2016 & thereafter)

SUBJECT CODE: 15ZL/MC/IV14

B.Sc. DEGREE EXAMINATION - NOVEMBER 2016 BRANCH VI.A. ADVANCED ZOOLOGY AND BIOTECHNOLOGY FIRST SEMESTER

COURSE : MAJOR CORE PAPER : INVERTEBRATA

TIME : 3 HOURS MAX. MARKS: 100

SECTION A

ANSWER ALL QUESTIONS:

 $(10 \times 3 = 30)$

- 1. Give the function of the following: a) Trichocyst b) Pedicellaria c) Green gland
- 2. Give the causative organism for the following:
 - a) Amoebiasis
- b) Malaria
- c) Taeniasis
- 3. Connect the larval form with adult:
 - a) Bipinnaria
- b) Nauplius
- c) Amphiblastula
- 4. Differentiate between polyp and medusa
- 5. Comment on the medicinal significance of leech.
- 6. Define the following: a) Metamerism
- b) Polymorphism
- 7. Draw a neat labeled diagram of a mature porglottid.
- 8. Mention any three economically important molluscs.
- 9. Give any three adaptations of polychaetes.
- 10. Draw and a label a typical appendage of Prawn.

SECTION B

ANSWER ANY FIVE QUESTIONS:

 $(5 \times 6 = 30)$

- 11. With the help of a neat labeled diagram explain the structure of *Paramecium*
- 12. Write the economic importance of Porifera (any 6).
- 13. Explain the life cycle of Wucheria bancrofti.
- 14. Comment on the phylogenetic significance of *Peripatus*.
- 15. Draw and explain the nervous system of Pila.
- 16. Draw and explain the modification of mouth parts in house fly.
- 17. Write the impact of environment on Coral reefs.

SECTION C

ANSWER ANY TWO QUESTIONS:

 $(2 \times 20 = 40)$

- 18. Give an account of locomotion in Protozoa.
- 19. Describe the canal system of sponges.
- 20. Discuss the social life of insects.
- 21. Draw and describe the water vascular system of starfish.