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

SUBJECT CODE: 15ZL/MC/IV14

# **B.Sc. DEGREE EXAMINATION - NOVEMBER 2015** BRANCH VI.A. ADVANCED ZOOLOGY AND BIOTECHNOLOGY FIRST SEMESTER

: MAJOR CORE **COURSE PAPER** : INVERTEBRATA TIME **: 3 HOURS MAX. MARKS: 100 SECTION A ANSWER ALL QUESTIONS:**  $(10 \times 3 = 30)$ 1. Distinguish between: a) Sporocyst and trophozoite b) hydrorhiza and hydrocalus 2. Match the following a) spicule Obelia b) peristome sponge c) pneumatophores Paramecium 3. Give the functions of: a) Gonozooids b) Radula c) Nephridia 4. Give the Zoological name for: a) Blood fluke b) Apple snail c) House fly 5. Give the common names of the following: c) Asterias. a) Megascolex maurutii b) Ascaris lumbricoides 6. Draw a neat labelled diagram of *Obelia* colony. 7. Define: a) Polymorphism b) Conjugation 8. Give an example of organisms exhibiting the following: b) Radial symmetry c) Bilateral symmetry

a) Asymmetry

9) Mention any three economic importance of molluscs.

10) Comment on: a) Choanocytes b) Pedicellaria

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#### **SECTION B**

#### **ANSWER ANY FIVE QUESTIONS:**

 $(5 \times 6 = 30)$ 

- 11. Give an account of locomotion in Protozoa.
- 12. Explain the types of coral Reefs and add a note on Conservation.
- 13. Discuss the phylogenetic significance of *Peripatus*.
- 14. Explain the Water Vascular system in star fishes.
- 15. Draw and describe the cephalic appendages in prawn.
- 16. Give an account on the life cycle of *Taenia solium*.
- 17. Define Metamerism and add a note on its types.

### **SECTION C**

## **ANSWER ANY TWO QUESTIONS:**

 $(2 \times 20 = 40)$ 

- 18. Give a detailed account on the Canal System of Sponges. Add a note on its significance.
- 19. Describe the life cycle of Human Malarial Parasite.
- 20. Give an account on Torsion in Gastropods.
- 21. Draw and describe the mouth parts of the insects. Add a note on its significance.

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