Zoology – First Year – MARCH 2009

SECTION - A

 $10 \times 2 = 20$

- 1. Define Biotechnology and write about its applications.
- 2. Distinguish between protostomes and deuterostomes
- 3. What is Aristotle's lantern? Name an echinoderm that possess it.
- 4. What is Schizocoelom? Name the phylum in which schizocoelom is the functional body cavity in adults.
- 5. What are myonemes?
- 6. A person is suffering from bowel irregularity, abdominal pain, blood and mucus in stools. Based on these symptoms, name the disease and its causative organism.
- 7. Distinguish between a facultative parasite and an obligate parasite.
- 8. What is meant by Apiculture?
- 9. Distinguish between perichaetine and octochaetine arrangements.
- 10. What are biosphere reserves?

SECTION - B

6 X 4 = 24

- 11. Write a short notes on the salient features of anthozoans.
- 12. Describe the structure of a multipolar neuron.
- 13. Explain the Sol-gel theory a amoeboid locomotion.
- 14. Describe the process of transverse binary fission in paramecium
- 15. Describe the structure of microfilaria larva of Wuchereria bancrofti
- 16. Write the physiology of digestion in cockroach.
- 17. Draw a neat labelled diagram of the mouthparts of a housefly
- 18. Describe the thermal stratification of water.

SECTION - C

2 X 8 = 16

- 19. Give an account of the reproductive organs in pheretima. Draw a neat labelled diagram of the reproductive system.
- 20. Describe the life cycle of plasmodium vivax in a mosquito with the help of diagrams.
- 21. What is a food Chain? Explain the various types of food chains in a community. Add a note on food web.