

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

**SUBJECT CODE: 15ZL/MC/EZ14**

**B.Sc. DEGREE EXAMINATION - NOVEMBER 2017**  
**BRANCH VI.A. ADVANCED ZOOLOGY AND BIOTECHNOLOGY**  
**FIRST SEMESTER**

**COURSE : MAJOR CORE**  
**PAPER : ECONOMIC ZOOLOGY**  
**TIME : 3 HOURS**

**MAX. MARKS: 100**

**SECTION A**

**ANSWER ALL QUESTIONS:**

**(10 X 3 =30)**

1. Write a short note on the following tools used in Apiculture:  
(i) Queen Excluder (ii) Honey Extractor (iii) Uncapping Knife
2. State the zoological nomenclature for the following:
  - a. Spotted boll-worm
  - b. Sugarcane Leafhopper
  - c. Rice Gandhi bug
3. State how microarthropods contribute to the fertility of the soil.
4. Differentiate between freezing and freeze-drying.
5. Why do pearl oysters form the pearl inside their shell? List the three layers that are seen on taking a vertical section of the shell. Which layer secretes the pearl?
6. What is Bundh breeding? Mention the three types of Bundh breeding.
7. Name three culturable species of feed animals that are used as live fish feed in the aquaculture industry.
8. How does the technique of eyestalk ablation help in aquaculture?
9. What is the Ranikhet Disease? What are the symptoms of the disease? State one prophylactic method adopted to prevent the spread of the disease.
10. Explain the two methods of pasteurization used in the dairy industry. What is the advantage of pasteurization?

**SECTION B****ANSWER ANY FIVE QUESTIONS:****(5 x 6 = 30)**

11. Write a brief note on the different species of Silkworm used to produce silk in the sericulture industry.
12. Discuss the various steps taken to prevent and control the pink bollworm (*Platyedra gossypiella*), a pest in cotton crops.
13. State the ecological basis for Integrated Pest Management. Justify the necessity for the same.
14. Give a detailed account on the products of economic value produced from piggery?
15. Explain the method of hypophysation and the dose for hypophysation employed in induced breeding of fishes.
16. What are the preferred breeds of indigenous fowls for the poultry industry in India?  
Discuss the specifications of the fowl house used in the poultry industry.
17. Describe any two methods for extracting and sampling soil microarthropods.

**SECTION C****ANSWER ANY TWO QUESTIONS:****(2 x 20 = 40)**

18. Explain the step wise processes involved in the cultivation of mulberry and rearing of silkworms in the sericulture industry. Add a note on the post cocoon processing methods employed in sericulture industry.
19. Define Vermitechnology. What are the advantages of applying vermicompost over the use of fertilizers? Give a detailed account of the methods adopted in setting up of the vermipit and production of vermicompost.
20. Give a detailed account on the various by-products of the fishing industry.
21. Elaborate on the economic usefulness of mammals and mammalian products. Discuss the harmful aspects of some mammals on humans and human resources.

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