

**2238**

**SECOND YEAR TDC SCIENCE,  
ZOOLOGY  
PAPER-III  
APPLIED ZOOLOGY AND MICROBIOLOGY**

**Duration: 3 hours**

**M.M.: 50**

**UNIT - I**

- 1 History, general account and scope of sericulture. Distribution of mulberry and non- mulberry silkworm.
- 2 Life history of *Bombyx mori*.
- 3 Rearing techniques of silkworm
  - (a) Brief account of environmental conditions of rearing and programming of mulberry cultivation.
  - (b) Rearing of silk worm.
- 4 Reeling of silk yarn.
- 5 Brief idea of diseases of silk worm.

**UNIT-II**

- 6 History, scope and general practices of pearl culture.
- 7 Rearing of pearl oyster:
  - (a) Indigenous methods of pearl culture.
  - (b) Modern methods of pearl culture.
- 8 Economic Importance of pearl and pearl culture.
- 9 Brief idea of diseases and enemies of pearl culture.

**UNIT-III**

- 10 Fin-fish culture and fisheries:
  - (a) Culturable fresh water fishes of India.
  - (b) Inland, marine and estuarine fisheries.
  - (c) Preservation of fishes.
  - (d) Economic importance of fishing industry.

**UNIT-IV**

- 11 Concepts of basic microbiology and its significance, theory of spontaneous generation, gram theory of fermentation and disease, work of Louis Pasteur.
- 12 General account of classification, structural organization, physiology and multiplication of bacteria.
- 13 General account of classification, structural organization, physiology and multiplication of bacteria.
- 14 Brief idea of Industrial, Medical and Environmental microbiology.

**UNIT-V**

- 15 DNA and RNA viruses
- 16 **AIDS and Swine flu:** Causal agents, Transmission, Pathogenicity, Prevention and Laboratory diagnosis of infections and treatment