

SECOND YEAR TDC SCIENCE, 2018-19

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:** Causative agents, Transmission, Pathogenicity, Prevention and Laboratory diagnosis of infections and treatment