

Course Code	Course Name	Credits
26ZY110	ECONOMIC ZOOLOGY	04

### Course Objectives

- To understand the economic importance of animals and animal products.
- To study beneficial and harmful animals in relation to humans.
- To develop knowledge on sericulture, apiculture and lac culture.
- To understand pest management and animal resource utilization.
- To enhance awareness on sustainable use of zoological resources.

### Learning Outcomes

- Explain the economic importance of different animal groups.
- Identify useful and harmful animals affecting human welfare.
- Demonstrate knowledge of sericulture and apiculture practices.
- Analyze pest management and resource utilization methods.
- Apply economic zoology concepts in agriculture and industry.

#### Unit 1 - Introduction to Economic Zoology (12 Hrs.)

Definition, scope and importance of economic zoology; beneficial and harmful animals; animal resources and their utilization; role of zoology in agriculture and industry.

#### Unit 2 - Sericulture and Apiculture (12 Hrs.)

Life cycle and rearing of silk worms; silk production and processing; species of honey bees; bee keeping methods; honey and bee products; economic importance.

#### Unit 3 - Lac Culture and Pearl Culture (12 Hrs.)

Biology of lac insect; lac production and processing; pearl oyster culture; pearl formation; economic importance of pearls and lac.

#### Unit 4 - Pest Management (12 Hrs.)

Agricultural pests and stored grain pests; pest control methods; biological control of pests; integrated pest management; vertebrate pests and their management.

#### Unit 5 - Animal Products and Sustainable Utilization (12 Hrs.)

Animal by-products; fisheries and poultry; leather and dairy industries; wildlife products and conservation; sustainable utilization of animal resources.

### Reference Books:

1. Shukla, G.S. and Upadhyay, V.B. (2018). Economic Zoology. Bastogi Publications.
2. Srivastava, K.P. (2017). Economic Zoology and Animal Resources. Scientific Publishers.
3. Chapman, R.F. (2019). The Insects: Structure and Function. Cambridge University Press.
4. Pedigo, L.P. (2016). Entomology and Pest Management. Waveland Press.
5. Atwal, A.S. (2015). Agricultural Pests of India. Kalyani Publishers.

### Websites and eLearning Sources:

1. <https://www.icar.org.in>
2. <https://www.fao.org/>
3. <https://www.easybiologyclass.com/>

