

SYLLABUS

for

Value-added Course

Apiculture & Melisopalinology

(BOTVAC 003)

(w.e.f. 2022-2023)



Offered by:

Department of Botany

Panskura Banamali College

(AUTONOMOUS)



Panskura R.S., Purba Medinipur
West Bengal – 721152

COURSE INFORMATIONIN BRIEF

Course Name:	<u>Apiculture & Melisopalinology</u>
Course Contents:	Apiculture techniques and floral calendar
Course Type:	Value-added Course (Optional, additional, and not a part of the CBCS curriculum)
Medium:	Bengali, English
Mode:	Offline/Online
Intake:	Minimum 20; Maximum 40
Eligibility:	+XII, Any interested candidate
Duration:	30 hours (to complete within a time span of 2 months)
Course Fees:	Rs. 300
Coordinator:	Mr. Krishnendu Bera and Mr. Palash Shit
Contact:	Department of Botany, Panskura Banamali College (Autonomous) krishnendu7193@gmail.com 8389874966 (WhatsApp only)

Structure & Contents

●Objective: To develop strategies for management of bee colonies round the year for income generation. To investigate scientifically the diversity of pollen and nectar sources for apicultural practices in natural forest ecosystems elucidating the potentiality of the available resources in honey and pollen industry in the study area.

●Outcome: To imbibe the importance of Bee keeping and honey processing in relation with entrepreneurship development.

Course Instructor: Mr. Krishnendu. Bera&Mr. Palash Shit

Theory (12 hrs)

Unit 1: Introductory idea about Apiculture - possibility and importance (02)

History of bee keeping: Definition, Bee keeping in worldwide, In India.Traditional bee keeping, Modern beekeeping, Urban or backyard beekeeping. Bee colony life and Social organization

Unit 2:Honey – Production, Properties and Application (02)

Honey - its medicinal properties - application in various fields - other valuable byproducts of honey bees. Value added honey products. Properties of honey products, Nutrients

Unit 3: Honeybee Plants and Floral Calendar (03)

Bee flora - importance propagation - congenial conditions for starting up of apiculture.Migratory Bee Keeping - designing floral Calendar; Improved Agricultural practices - crop pollination - Pesticides impact on Honey bees

Unit 4. Bee keeping: Tools and Equipment. (02)

Basic requirements of Tools for starting bee keeping: Getting Started in Beekeeping - Land and Buildings, Equipment and supplies.Bee keeping equipment - introduction to types of bee boxes - BIS standard Tools used inapiculture.Bee breeding multiplication of colonies - Queen reaching technique.

Unit 5. Honey Processing and Bee Hive Products (03)

Honey extraction & handling - Quality control standards - Honey testing kit; Processing of honey. Other valuable by products of honey bees; Bee venom & Royal jelly extraction.

Practical content

(18 hrs)

1. Identification of locality to place bee hives and studying local flora
2. Setup of bee box and queen bee
3. Managements step-s upto honey extraction
4. Visit to Apiary

Suggested Reading:

1. R. C. Mishra: Prospecting in Indian Apiculture
2. G.K. Ghosh: Beekeeping in India