

DHRUBA CHAND HALDER COLLEGE

(FORMERLY DAKSHIN BARASAT COLLEGE)

ESTD.-1965

A NAAC Accredited Degree College Affiliated to University of Calcutta

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Ref. No. DCHC/ZOO/ADON2/2023

Date 11/01/23 20

NOTICE

The Department of Zoology is organising an add on course in Apiculture through online mode. The duration of the course is 30hrs. Interested students of Sem -2 B.sc Bio General can enroll their names to Dr. Subhasree Thakur on or before 18/01/2023. The course commences from 04/02/23. The classes will be held from 10 A.M. to 12 Noon every Saturday except holidays.

H.O.D. OF ZOOLOGY

S. Thabur 11/1/23

D.C.H. College Dekahin Barasat South 24 Pos

PRINCIPAL
Dhruba Chand Halder College
P.O.-D. Barasat, P.S.-Jaynagar
Dist.-South 24 Parganas



DEPARTMENT OF ZOOLOGY

OBJECTIVE

To Teach the basics of bee-keeping and how it can be used as a means of employment and earning.

REGISTRATION FREE

Interested Students Can Enroll Their Names To Dr. Subhasree Thakur On Or Before 18/01/2023

DATE OF COMMENCEMENT 04/02/2023

> PRINCIPAL Dhruba Chand Halder College P.O.-O. Baracan, P.S.-Jaynagan Dist. South 24 Parganas

ADD ON COURSE ON APICULTURE

RESOURCE PERSON DR. SUBHASREE THAKUR DR. RUPANWITA SARKAR

DEPARTMENT OF ZOOLOGY

ENROLLMENT SIGNATURE SHEET OF ADD-ON COURSE 1: APICULTURE, 2022-23

SI No.	Signature of Enrolled Candidates
1	Rajendra Kuman Mondal
2	Pamba Roy
3	Sudio Paik
4	Rupankan Naskon
5	Soyan Mandal
6	Féraloggi Sekh
7	Amit kumar Mondal.
8	Nation farin Halder
9	Sayan Paul
10	Jelika pal
11	Rajibul Mondal
12	Umech Chandra Baidya
13	Arisib Pante
14	Soumya Pixada
15	Ritika Naskan
16	
17	
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Dist.-South 24 Parganas

ATTENDANCE SHEET OF ADD-ON COURSE 2: APICULTURE, 2022-23

NAME OF STUDENT	ATTENDANCE														
	04/2	11/2	18/2	25/2	04/3	11/3	18/3	25/3	01/4	09/4	20/4	10545			,
RAJENDRA KUMAR MONDAL	P	Р	Р	Р	P	P	D D		_	08/4	29/4	06/5	13/5	20/5	27/5
PAMPA ROY	Р	P	A	P	<u> </u>			Р	Р	Р	Α	P	Р	Р	Р
SUDIP PAIK	P	P	P		A	Р	Р	Р	Α	Р	Р	Р	Р	Р	P
RUPANKAR NASKAR	P	P	P	Α	Р	Р	A	Р	Р	Р	Р	Р	Р	P	P
SAYAN MANDAL	P	P		P	Р	Р	P	Р	Р	Р	Р	P	P	P	P
FIRDOUSI SEKH	P	<u> </u>	Α	Р	Р	Р	Р	Р	Р	Р	Р	P	P	P	P
AMIT KUMAR MONDAL	P	Р	Р	Р	Р	Р	P	Р	Α	Α	Р	P	P	P	P
NAFISA PARVIN HALDER		P	Р	Р	Р	Р	Α	Р	Р	Р	P	P	P	P	P
SAYAN PAUL	Α	Р	Р	A	P	Р	Α	Р	Α	P	P	P	<u> </u>	-	<u> </u>
	Р	Α	Α	Р	Α	Р	Α	A	P	P	· ·	-	Α	Р	Р
TULIKA PAL	P	Р	Р	Α	P	P	P	P			Р	Α	Р	P	P
RAJIBUL MONDAL	Р	Р	P	P	P	P	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	Р	Р	Α	Р	Р	Р	Р
JMESH CHANDRA BAIDYA	P	P	A	P	•	<u> </u>	Α	Р	Р	Р	Α	Р	Р	Р	Р
ARIJIT TANTI	P	P	P	<u> </u>	Α	P	Р	Р	Α	Р	Р	Р	Р	Р	P
SOUMYA PIYADA	P	P	P	A P	P	Р	Α	Р	Р	Р	Р	Р	Р	P	P
RITIKA NASKAR	P	P	·		P	Р	Р	P	Р	Р	Р	Р	P	P	P
	r	Р	Α	Р	Р	P	P	Р	Р	P	Р	P	P	P	P

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ADD- ON COURSE, 2022-23 IN ZOOLOGY

Add-On Course Summary

Name of the Course: APICULTURE

Course Coordinators: Dr. Subhasree Thakur

Syllabus covered:

3 1

Day 1 : Introductory class

Day 2-6 : Biology of Bees - Types of Honey bees, Biology of Honey Bees. General

Morphology of Apis Honey Bees. Social organization of Bee colony.

Day 7-10 : Rearing of Bees – Artificial Bee rearing, Beehives- Newton and Langstroth

box, Bee Pasturage. Selection of Bee species for Apiculture.

Day 11-15: Rearing of Bees - Modern Bee Keeping Equipment, Methods of Extraction of

Honey (Indigenous and Modern).

Day 16-18: Diseases and Enemies – Bee Diseases and Enemies. Control and preventive

measures.

Day 19-20: Economy- Products of Apiculture and its Uses – Honey, Bees Wax, Propolis,

Pollen etc.

Day 21-23: Entrepreneurship in Apiculture – Bee keeping Industry- Recent Efforts

Day 24-27: Entrepreneurship in Apiculture- Modern Methods in employing artificial

Beehives for cross pollination in horticultural gardens.

Day 28-29: Doubt clearing.

Day 30 : Course Evaluation

Resource Person(s): Dr. Subhasree Thakur,

Dr. Rupanwita Sarkar

Duration: 30 classes (2 x 15 days)

Focal Theme of the Course: Teaching the basics of bee- keeping and how it can be used as a

means of employment and earning.

Evaluation: Through Online MCQ Examination

PR(NCIPAL Dhruba Chand Halder College P.O.-D. Barasat, P.S.-Jaynagar Dist.-South 24 Parganas No. of students taking up the course- 15

No. Of students completing the course- 15

Outcome:

The honey bees occur all over India. These are social insects and live in large colonies. Since 1928, Union Government Agricultural Department has developed bee-keeping as a cottage industry all over India. It is the agro-industrial small scale management which deals with the bee keeping (Apiary). In recent days, it is widely adapted by large number of people in most o the part of the world. People are earning money by developing their projects in rural areas and also many people acquire self-employment. It is also helpful in increasing the yield of cultivated crops as the bees are the best pollinators. The prime commercial products are the honey and bees wax.

The Khadi and Village Industries Commission (KVIC) promoted the traditional forest beekeeping industry. The people of rural areas trained with modern bee keeping management, methods of collection and processing of honey, pollen, wax and other bee products and their marketing. Now local people and farmers are acquainted with the seasonal management, flow management death management, provision of feeding, and control and cure of bee disorders, bee diseases, pests and enemies of bee colonies according to their environmental conditions and beside these management strategies some special management techniques like queen rearing, migration of honey production or for colony multiplication, to make them in handling bee colonies properly. Now-a-days, apiaries are earning a large part of income from production and supply of package bees, queen bees and nucleus colonies. State governments have come forward to grant subsidiary financial assistance to popularize the apiculture among rural population and it is now a sustainable source of income for the farmers and rural people.

We in our college adopted the topic 'Apiculture' as our Add-on course for students to give them an idea of how it can be used for earning revenue both from honey and other bee products by selling them through cooperatives or in the market. Ours' being a rural college, where most of the students come from families whose main source of income is agriculture, the produce mainly comprising of fruits, mustard, etc, honey bee rearing also increases the yield of such crops as bees are the most important pollinators.

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CERTIFICATE OF PARTICIPATION

DHRUBA CHAND HALDER COLLEGE

This is to certify that Sri Sayan Paul of Semester-2 Bio General, Dhruba Chand Halder Tollege, Dakshin Barasat, South 24 Parganas, attended an Add on Tourse on Apiculture of 30 hours duration, conducted by the Department of Zoology and has successfully completed this short course in the academic session 2022-23.

COURSE COORDINATOR Dhruba Chand Halder College P.O.-D. Barasat, P.S.-Jaynagar

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