# BASELIUS COLLEGE KOTTAYAM

# SKILL DEVELOPMENT IN APPLIED ZOOLOGY

SUPPORTING DOCUMENTS

- **1. BROCHURE**
- 2. SYLLABUS
- **3. STUDENTS LIST**
- **4. CERTIFICATES**
- **5. ATTENDANCE SHEET**



# Is Conducting a...

# SKILL DEVELOPMENT PROGRAMME IN APPLIED ZOOLOGY







# Duration:-50 hrs (Oct-Dec 2019) Course Includes:-Theory Sessions Field Study Hands'on Workshops

Head of the Department

Principal

Course Coodinator

Dr.Rejitha V

Dr.Biju Thomas

Sany Mary Benjamin Uma Surendran Dr.Anit Mani Thomas

# Skill Development programme in Applied Zoology 50hrs

# **Objectives:**

1. To equip the students with self employment capabilities.

2. To provide scientific knowledge of profitable farming.

3. To make the students aware of cottage industries.

# Module 1. APICULTURE

# 18 Hrs

Definition, Different species of honey bees, Organization of honey bee colony, Social life and adaptation of honey bees. Communication among honey bees. Bee keeping methods and equipments, Management and maintenance of an apiary, Growth period, honey flow period and dearth period Division of the colony, uniting two colonies, , replacing old queen with new queen, swarming management, monsoon management. Enemies of bees. Diseases of bees. Bee pasturage. Uses of honey bees, By-products of honey bees, Honey and wax composition. Testing the quality of honey. Extraction of wax, Uses of honey and wax. Royal jelly, Propolis. Apitherapy, Agencies supporting apiculture.

Activity: Visit to an apiculture unit.

Field visit and report submission - 10 Hrs

Field visit and report submission on any two items are taken for internal evaluation.

# **MODULE: 2. VERMICULTURE**

8 Hrs

Introduction, Ecological classification of earth worms. Species of earth worms used for vermiculture, Reproduction & life cycle, Role of earth worm in solid waste management, in agriculture, in medicine etc. Preparation of vermibed, Maintenance & monitoring, Preparation of vermicompost, Preparation of vermiwash.

Activity: Submission of a report after preparing a vermiculture unit or visiting a vermicomposting unit.

### MODULE: 4. AQUACULTURE.

24 Hrs

Advantages and salient features of aquaculture, Types of Aquaculture, Biotic and abiotic features of water, Importance of algae in aquaculture, Common cultivable fishes of Kerala, Fish diseases, Composite fish culture, Integrated fish culture, Carp culture, Prawn culture Mussel culture Pearl culture. Processing & Preservation. 74 Aquarium management - Setting up of an aquarium, Biological filter & Aeration, Breeding of gold fish, gourami (Osphronemus), fighter and Guppy (live bearer). Nutrition and types of feed for aquarium fishes, Establishment of commercial ornamental fish culture unit. Fish Transportation - Live fish packing and transport Common diseases of aquarium fishes and their management. Aquaponics (a brief introduction only).

Activity – Setting up of an Aquarium Field visit – Visiting an Aquaculture farm

### Department of Zoology

### Skill Development Programme in Applied Zoology

nts list

SL no	Name	Department	
1	Akshay P A	Zoology Department	
2	Aashin Mani Rajan	Botany Department	
3	Sharukh Abbac	Zoology Department	
4	Hariprasad P S	Zoology Department	
5	Nidheesh P P	Maths Department	
6	Dilin Saji	Economics Department	
7	Abanc Thomas P	English Department	
8	Bibeha Mol C B	Zoology Department	
9	Vishnu Shaji	Physics Department	
10	Sarath Babu	Maths Department	
11	Jobin K S	English Department	
12	Vishnu Shibu	English Department	
13	Blessy Elsa Zachariah	Physics Department	
14	Lakshmi K B	Physics Department	
15	Ajith Thomas K	Zoology Department	
16	Kavya P S	Zoology Department	
17	Meenu Parthan	Zoology Department	
18	Reshma Karthik	Zoology Department	
19	Gayathri J	Zoology Department	
20	Ansu P Reji	Zoology Department	
21	Anagha S	Maths Department	
22	Rameesha Rasheed	Zoology Department	
23	Sona Mol Babu	Zoology Department	
24	Hephzibab s	Zoology Department	
25	Akhil Devan	Zoology Department	
26	Sona Philip	Zoology Department	
27	Devika M Nair	Zoology Department	
28	Amrutha Lekshmi	Zoology Department	
29	Sheba Sosa Shaji	Zoology Department	
30	Anjana Elizabeth Koshy	Zoology Department	
31	Nehamol P Raj	Zoology Department	

Uma Surendran



# This is to certify that **Akshay PA** Department of Zoology

has successfully completed the certificate course on '**Skill Development Programme in Applied Zoology**' organized by the Department of Zoology, Baselius College, Kottayam during the academic year 2019–20





Dr.Rejitha V Ilead of the Department

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Dr. Biju Thomas

Principal



# BASELIUS COLLEGE, KOTTAYAM

This is to certify that

# Aashin Mani Rajan Department of Botany





Dr.Rejitha V Ilead of the Department

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Dr. Biju Thomas Principal

This is to certify that

# Sharukh Abbac Department of Zoology





Dr.Rejitha V Head of the Department

Dr.Shaju M J IQAC Convener



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Dr. Biju Thomas Principal

This is to certify that

# Hariprasad. P. S Department of Zoology





Dr.Rejitha V Head of the Department

Dr.Shaju M J IQAC Convener



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Dr. Biju Thomas Principal

This is to certify that

# Nidheesh P. P Department of Maths





Dr.Rejitha V Head of the Department

INI.

Dr.Shaju M J IQAC Convener



C. C.S.MURAN

Dr. Biju Thomas Principal

This is to certify that

# Dilin Saji Department of Economics





Dr.Rejitha V Head of the Department

Dr.Shaju M J IQAC Convener



CLOCHUMAN

Dr. Biju Thomas Principal

# This is to certify that **Abanc Thomas P** Department of English





Dr.Rejitha V Head of the Department

Dr.Shaju M J IQAC Convener



Dr. Biju Thomas Principal

This is to certify that

# Bibeha Mol C. B Department of Zoology





Dr.Rejitha V Head of the Department

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Dr.Shaju M J IQAC Convener



CLOCHIMAN

Dr. Biju Thomas Principal

This is to certify that

# Vishnu Shaji Department of Physics





Dr.Rejitha V Head of the Department

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Dr.Shaju M J IQAC Convener



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Dr. Biju Thomas Principal

This is to certify that

# Sarath Babu Department of Maths





Dr.Rejitha V Head of the Department

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Dr.Rejitha V Head of the Department

Dr.Shaju M J IQAC Convener



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Dr. Biju Thomas Principal

# This is to certify that Vishnu Shibu Department of English





Dr.Rejitha V Head of the Department

Dr.Shaju M J IQAC Convener



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Dr. Biju Thomas Principal

# Affiliated to Mahatma Gandhi University.NAAC accredited a A Grade

# Blessy Elsa Zachariah



Dr.Rejitha V Head of the Department

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Dr.Shaju M J IQAC Convener



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Dr. Biju Thomas Principal

# This is to certify that Lakshmi K.B. Department of Physics



Dr.Rejitha V Head of the Department

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Dr.Shaju M J IQAC Convener





Dr. Biju Thomas Principal





# BASELIUS COLLEGE, KOTTAYAM

This is to certify that

# Ajith Thomas V Department of Zoology



has successfully completed the certificate course on '**Skill Development Programme in Applied Zoology**' organized by the Department of Zoology, Baselius College, Kottayam during the academic year 2019–20



Dr.Rejitha V Head of the Department

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Dr.Shaju M J IQAC Convener

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Dr. Biju Thomas Principal

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This is to certify that

# Kavya P.S. Department of Zoology





Dr.Rejitha V Head of the Department

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Dr.Shaju M J IQAC Convener



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Dr. Biju Thomas Principal



# This is to certify that Meenu Parthan Department of Zoology



has successfully completed the certificate course on '**Skill Development Programme in Applied Zoology**' organized by the Department of Zoology, Baselius College, Kottayam during the academic year 2019-20



Dr.Rejitha V Ilead of the Department

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Dr. Biju Thomas

Principal



This is to certify that

# Reshma Karthik Department of Zoology





Dr.Rejitha V Ilead of the Department

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# Affiliated to Mahatma Gaudhi University.NAAC accredited at A Grade

This is to certify that

# Gayathri J Department of Zoology





Dr.Rejitha V Head of the Department

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Dr.Shaju M J IQAC Convener





Dr. Biju Thomas Principal



# BASELIUS COLLEGE, KOTTAYAM

# This is to certify that **Ansu P Reji** Department of Zoology

has successfully completed the certificate course on '**Skill Development Programme in Applied Zoology**' organized by the Department of Zoology, Baselius College, Kottayam during the academic year 2019–20





Dr.Rejitha V Ilead of the Department

n my Sho



Dr. Biju Thomas

Principal

Dr.Shaju M J IQAC Convener

# Affiliated to Mahatma Gandhi University.NAAC accredited a A Grade

# This is to certify that **Anagha. S** Department Of Mathematics



Dr.Rejitha V Head of the Department

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Dr.Shaju M J IQAC Convener



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Dr. Biju Thomas Principal

# BASELIUS COLLEGE.KOTTAYAM





Dr.Rejitha V Head of the Department

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Dr.Shaju M J IQAC Convener



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Dr. Biju Thomas Principal



# Miliated to Mahatma Gandhi University, NAAC accredited a A Grade

This is to certify that

# Sona Mol Babu Department of Zoology

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Dr.Rejitha V Head of the Department

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Dr.Shaju M J IQAC Convener





Dr. Biju Thomas Principal

# Affiliated to Mahatma Gandhi University. NACA ceredited at A Grade

# This is to certify that Hephzibab. S Department Of Zoology





Dr.Rejitha V Head of the Department

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Dr.Shaju M J IQAC Convener



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Dr. Biju Thomas Principal



# BASELIUS COLLEGE, KOTTAYAM

# This is to certify that Akhil Devan Department of Zoology



has successfully completed the certificate course on '**Skill Development Programme in Applied Zoology**' organized by the Department of Zoology, Baselius College, Kottayam during the academic year 2019-20



Dr.Rejitha V Ilead of the Department

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Dr.Shaju M J IQAC Convener

Dr. Biju Thomas Principal

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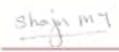






Dr.Rejitha V

Head of the Department



Dr.Shaju M J IQAC Convener



C CONFIRMAN

Dr. Biju Thomas Principal

# BASELIUS COLLEGE.KOTTAYAM

This is to certify that

Devika M. Nair Department of Zoology





Dr.Rejitha V Head of the Department

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Dr.Sinju M J IQAC Convener



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Dr. Biju Thomas Principal

# BASELIUS COLLEGE, KOTTAYAM

This is to certify that Amrutha Lekshmi Department of Zoology





Dr.Rejitha V (lead of the Department

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Dr,Shaju M J IQAC Convener



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Dr. Biju Thomas Principal

# BASELIUS COLLEGE, KOTTAYAM

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# Sheba Sosa Shaji Department of Zoology has successfully completed the

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Dr.Rojitha V Head of the Department

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Dr.Shaju M J IQAC Convener



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Dr. Biju Thomas Principal

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This is to certify that

Anjana Elizabeth Koshy Department of Zoology



Dr.Rejitha V Head of the Department

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Dr.Shaju M J IQAC Convener

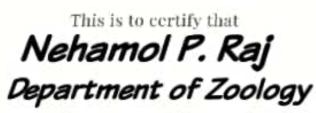


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Dr. Biju Thomas Principal



# BASELIUS COLLEGE, KOTTAYAM







Dr.Rejitha V Head of the Department

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Dr.Shaju M J IQAC Convener



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Dr. Biju Thomas Principal

#### Dep artment of Zoology Skill Development Progr amme in Applied Zoology-(2019-

Students atten 2020)

dance- Oct 2019

SL no	Name	1/10	3/10	4/10	5/10	11/10	15/10	19/10	21/10	23/10	25/10	26/10	29/10	30/1/
1	Akshay P A	х	х	х	х	х	х	х	х	х	х	х	х	х
2	Aashin Mani Rajan	х	х	а	х	х	х	х	х	х	х	х	х	х
3	Sharukh Abbac	х	х	х	х	х	х	х	х	х	х	х	х	х
4	Hariprasad P S	х	х	х	х	х	х	х	х	х	х	х	х	х
5	Nidheesh P P	х	х	а	х	х	х	х	х	х	а	х	х	х
6	Dilin Saji	х	х	х	х	х	х	х	х	х	х	х	х	х
7	Abanc Thomas P	х	х	х	х	х	х	х	х	х	х	х	х	х
8	Bibeha Mol C B	х	х	х	х	х	х	х	х	х	х	х	х	х
9	Vishnu Shaji	х	х	х	х	а	х	х	х	а	х	х	х	х
10	Sarath Babu	х	х	х	х	х	х	х	х	х	х	х	х	х
11	Jobin K S	х	х	х	х	х	х	х	х	х	х	х	х	х
12	Vishnu Shibu	х	х	х	х	х	х	х	х	х	х	х	х	х
13	Blessy Elsa Zachariah	х	х	х	х	х	х	х	х	х	х	х	х	х
14	Lakshmi K B	x	х	х	а	х	х	х	х	х	х	х	х	х
15	Ajith Thomas K	х	х	х	х	х	х	х	х	х	х	х	х	х
16	Kavya P S	х	х	х	х	х	х	х	х	х	х	х	х	х
17	Meenu Parthan	х	а	х	х	х	х	х	х	х	х	х	х	х
18	Reshma Karthik	х	х	х	х	х	х	х	а	х	х	х	х	х
19	Gayathri J	х	х	х	х	х	х	х	х	х	х	х	х	х
20	Ansu P Reji	х	х	х	х	а	х	х	х	х	х	х	х	х
21	Anagha S	х	х	х	х	х	х	х	х	х	х	х	х	х
22	Rameesha Rasheed	x	х	х	х	х	х	х	х	х	х	х	х	х
23	Sona Mol Babu	х	х	х	х	х	х	х	х	х	х	х	х	х
24	Hephzibab s	х	х	х	х	х	х	х	х	х	х	х	х	х
25	Akhil Devan	х	х	х	х	а	х	х	х	х	х	х	х	х
26	Sona Philip	х	х	х	х	х	х	х	х	х	х	х	х	х
27	Devika M Nair	х	х	х	х	х	х	х	х	а	х	х	х	х
28	Amrutha Lekshmi	х	а	х	х	х	х	х	х	х	х	х	х	х
29	Sheba Sosa Shaji	х	х	х	х	х	х	х	х	х	х	х	х	х
30	Anjana Elizabeth Koshy	х	х	х	х	а	х	х	х	х	х	х	х	х
31	Nehamol P Raj	x	х	х	х	х	х	х	х	х	х	а	х	х

Uma Surendran

Department of Zoology Skill Development Programme <u>n Applied Zoology-(2019-2020)</u> i

Students attend ance- Nov 2019

SL no	Name	2/11	5/11	8/11	9/11	13/11	16/11	18/11	20/11	23/11	25/11	27/11	30/11
1	Akshay P A	х	х	х	х	х	х	х	х	х	х	х	х
2	Aashin Mani Rajan	х	х	х	х	х	х	х	х	х	х	х	х
3	Sharukh Abbac	х	х	х	х	х	х	х	х	х	х	х	х

4	Hariprasad P S	х	а	х	х	а	х	х	х	х	х	х	х
5	Nidheesh P P	х	х	х	х	х	х	х	х	х	х	х	х
6	Dilin Saji	х	х	х	х	х	х	х	х	а	х	х	х
7	Abanc Thomas P	х	х	х	х	х	х	х	х	х	х	х	х
8	Bibeha Mol C B	х	х	а	х	х	х	х	х	х	х	х	х
9	Vishnu Shaji	х	х	х	х	х	х	х	х	х	х	х	х
10	Sarath Babu	х	х	х	х	х	х	х	х	х	х	а	х
11	Jobin K S	х	х	х	а	х	х	х	х	х	х	х	х
12	Vishnu Shibu	х	х	х	х	х	х	х	х	х	х	х	х
13	Blessy Elsa Zachariah	х	х	х	х	х	х	х	х	х	х	х	х
14	Lakshmi K B	х	х	х	х	а	х	х	х	х	х	х	х
15	Ajith Thomas K	х	х	х	х	х	х	а	х	х	х	х	х
16	Kavya P S	х	х	х	х	х	х	х	х	х	х	х	х
17	Meenu Parthan	х	х	х	х	х	х	х	х	х	х	х	х
18	Reshma Karthik	х	х	х	х	х	х	а	х	х	х	х	х
19	Gayathri J	х	а	х	х	х	х	х	х	х	х	х	х
20	Ansu P Reji	х	х	х	х	а	х	х	х	х	х	х	х
21	Anagha S	х	х	х	х	х	х	х	х	х	х	х	х
22	Rameesha Rasheed	х	х	х	х	х	х	х	х	х	х	а	х
23	Sona Mol Babu	х	а	х	х	х	х	х	х	х	х	х	х
24	Hephzibab s	х	х	х	х	х	х	х	х	х	х	х	х
25	Akhil Devan	х	х	х	х	х	х	х	х	а	х	х	х
26	Sona Philip	х	х	х	х	х	х	х	х	х	х	х	х
27	Devika M Nair	x	x	х	х	х	х	х	х	х	х	х	х
28	Amrutha Lekshmi	x	x	х	х	х	х	х	х	х	х	х	х
29	Sheba Sosa Shaji	x	х	х	х	х	а	х	х	х	х	х	х
30	Anjana Elizabeth Koshy	а	х	х	х	х	х	х	х	х	х	х	х
31	Nehamol P Raj	х	x	х	х	х	х	х	а	х	х	х	х

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Uma Surendran

# Departmen Skill t of Zoology Development Program me in Applied Zoology-(2019-2020)

Students attendance- Dec 2019

SL no	Name	2/12	7/12	10/12	12/12	14/12	17/12
1	Akshay P A	x	х	х	х	х	х
2	Aashin Mani Rajan	x	х	х	х	х	х
3	Sharukh Abbac	x	х	х	х	х	х
4	Hariprasad P S	x	а	х	х	а	х
5	Nidheesh P P	х	х	х	х	х	х
6	Dilin Saji	x	х	х	х	х	х

7	Abanc Thomas P	x	х	х	х	х	x
8	Bibeha Mol C B	x	х	а	х	х	x
9	Vishnu Shaji	x	х	х	х	х	х
10	Sarath Babu	x	х	х	х	х	х
11	Jobin K S	x	х	х	а	х	х
12	Vishnu Shibu	x	х	х	х	х	х
13	Blessy Elsa Zachariah	x	х	х	х	х	х
14	Lakshmi K B	x	х	х	х	а	х
15	Ajith Thomas K	x	х	х	х	х	х
16	Kavya P S	х	х	х	х	х	х
17	Meenu Parthan	х	х	х	х	х	х
18	Reshma Karthik	х	х	х	х	х	х
19	Gayathri J	х	а	х	х	х	х
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26	Sona Philip	х	х	х	а	х	х
27	Devika M Nair	х	х	х	х	х	х
28	Amrutha Lekshmi	x	х	х	х	х	х
29	Sheba Sosa Shaji	x	х	х	х	х	а
30	Anjana Elizabeth Koshy	а	х	х	х	х	x
31	Nehamol P Raj	x	х	х	х	х	х

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Uma Surendran