

Applied biology for sustainable livelihood-II



Department of Zoology



CMS COLLEGE KOTTAYAM (AUTONOMOUS)

The Department of Zoology is offering value added course on **'Applied biology for sustainable livelihood II'**

Who can apply: **4th semester B.Sc. Zoology students**

Course coordinator:

Dr. Jobin Mathew
9946900983



Course outcome

- Understand different honey bee species, bee products and its applications
- Understanding bee keeping techniques and instruments
- Understanding bee diseases, pests and control measures
- Construct and maintain bee hives and raise apiculture as hobby or as an additional income



Course structure:

18hours Theory + 18 hours practical

Course commences:

January 2022



Report on Value added programme Applied biology for sustainable livelihood-II

Course offered by- Department of Zoology, CMS College Kottayam (Autonomus)

Course offered to- Fourth semester B.Sc. Zoology students



The value added program offered by the Department of Zoology ‘Applied biology for sustainable livelihood II’ to fourth semester B.Sc. Zoology students began on 4th January 2022. The course was designed with 18 hours of both theory and practical to develop expertise in the field of apiculture. The students were given classes on the identification of different bee species available for rearing, their colony structure, diseases, pests and its control measures. The students were also introduced to various bee products and its applications. The course also gave a hands-on training on bee keeping techniques and its instruments. Overall the course helped to develop an interest in apiculture and its practice as a hobby as well as self employment opportunity.



Classes were conducted mainly on Saturdays as well as during zero hours.

Power point presentation, videos and pictures were used for conveying the main concept of the course. Students were also asked to participate in game-based questions using the platform Kahoot. All these helped the students to understand the concepts and reach the objective of the course.

Attendance

Sl	Name of the Student	4/1/2022	3/1/2022
		Sign	Sign
1	Alakananda S		
2	Ajara S.		
3	Amudhathy V.S.		
4	Begum. Aunni		
5	Gayathri V.S.		
6	Manisha K. Aswathy J		
7	Menakshi C.K.		
8	Midhiya A. Varghese		
9	Praveen Thomas		
10	Reshmanol. K.R.		
11	Sashaika Sajun		
12	Sesin Deena Sabu		
13	Sueha P.P.		
14	Sruthi Nair		
15	Aashen Sajun		
16	Abhirami Baiju		
17	Aleni Jane Talent		
18	Anala Suresh		
19	Aujala Rachel Shaji		
20	Aru Priya Ratheshaan		
21	Ajuna M. Madhu		
22	Christeena Ann. Heervarghese		
23	Fathima Farida C.		
24	Fathima N.		
25	Fazila Saij		
26	Hadha Aqth		
27	Godwin Joseph Baiju		
28	Govindkrishna L.		
29	Greena Suban Manoj		
30	Haritha Krishnan		
31	Megha Mariya Jacob		
32	Meghana George		
33	Nile Jiji Thomas		

4/11/2022

5/11/2022

30

Name

34

Sethulakshmi P.M.

35

Sona Maria Sabu

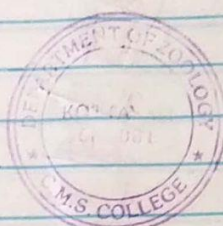
36

Isathi Saniel

Sign
Sh. S.
Dm. S.

Sign
Sh. S.
Dm. S.

Tab




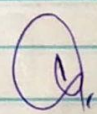
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Head of the Department Zoology
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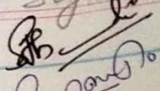
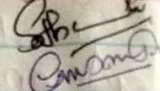
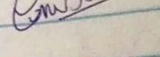
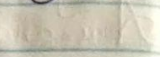
8/1/2022

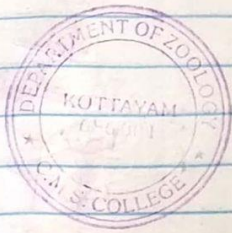
Sl	Name of the student	RN	sign	RN	sign
1	Alakazanda S.				
2	Anjana S				
3	Arunthathy V.S				
4	Beegam Anna				
5	Gayathri V.S				
6	Asunthy J				
7	Meenalekhi C/c				
8	Nidhiya A Varghe				
9	Praames Theemais				
10	Reshima M/ GR				
11	Sasbaila Sajon				
12	Seethideena Sabu				
13	Sneha PP				
14	Saathi Nair				
15	Aashir Sajin				
16	Abhirami Baiju				
17	Alen Sam Talent				
18	Anaalu Suross				
19	Anjala Rachel shaji				
20	Anupriya Radheesan				
21	Asjoni M Madhu				
22	Christeena Ann Gaevarghese				
23	Fadima Faida-L				
24	Fathima N				
25	Fazila Saji				
26	Gadha Ajith				
27	Isidura Joseph				
28	Gowshi Krishna L				
29	Greena Susan Manoj				
30	Haritha Krishnan				
31	Megha Maria Jacob				
32	Meghana George				
33	Nice Jiji Thomas				

	Name	8/1/2022 FN	AN
34.	Sebulakshari P.M	<u>Sethu</u> <u>do</u>	<u>Sethu</u> <u>do</u>
35.	Sona Maria Sabu	<u>Samson</u> <u>do</u>	<u>Samson</u> <u>do</u>
	<u>Tab</u>		
		<p>Dr. Jobin Mathew Research Guide Department of Zoology CMS College, Kottayam Kerala, Pin-686 001</p>	
			
		<p>Dr. J.S. Head of the C.S.C. Kerala Pin-686 001</p>	

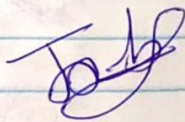
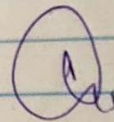
10/11/2022 11/11/2022

	Name of the student	Sign	Sign
1.	Alakananda S.		
2.	Anjana S.		
3.	Aroundhathy V. S.		
4.	Beegeen Amma		
5.	Gayathri V. S.		
6.	Aswathy J.		
7.	Meeraleshi Ck.		
8.	Nidhiya A. Jarghe		
9.	Pooreen Thomas		
10.	Reshma Mol GR		
11.	Sasanka Saja		
12.	Serindeena Sabu		
13.	Sneha PP		
14.	Sruithi Nair		
15.	Aashler Saja		
16.	Abhiram Baiju		
17.	Alan Sam Palent		
18.	Anzalu Suresh		
19.	Anjala Rachel Shaji		
20.	Anupriya Radheesan.		
21.	ARJUN - M. Madhu		
22.	Christleena Ann Geerevghose		
23.	Fathima Farida C		
24.	Fathima N		
25.	Fazila Syji		
26.	Gradha Anitha		
27.	Isodwin Joseph		
28.	Groupi Krishna L		
29.	Greene Susan Manoj		
30.	Haritha Krishnan		
31.	Megha Maria Jacob		
32.	Meghana George		
33.	Nile Jiji Thomas		

	10/1/2022	11/1/2022
Name	Sign	Sign
34. Seetalakshmi P.M		
5. Sena Nazia Sabu		



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		12/1/2022 AN	14/1/2022
	Name of the Student	sign	sign
1.	Alakanda S.		
2.	Anjana S		
3.	Chundkathy P.S.		
4.	Beegum Amma		
5.	Gayathri V.S.		
6.	Aswathy J		
7.	Meeraleshi C.K.		
8.	Nidhiya A. Varghese		
9.	Praveen Thomas		
10.	Reshma Nidhi		
11.	Sasibaila Sajan		
12.	Semin deena Sabu		
13.	Sneha P P		
14.	Saathi Nair		
15.	Aashir Sajan		
16.	Abhirami Baiju		
17.	Alen Sam Talent		
18.	Amalu Suresh		
19.	Anyela Rachel Shaji		
20.	Anupriya Padheesan.		
21.	Arun M. Madhu		
22.	Christleena Ann George		
23.	Fathima Faeida C		
24.	Fathima N		
25.	Fazila Saji		
26.	Gadha Ajith		
27.	Godwin Joseph		
28.	Gowrikashree L		
29.	Greene Susan Manoj		
30.	Haritha Krishnam		
31.	Megha Maria Jacob		
32.	Meghana George		
33.	Alice Tiji Thomas		

12/1/2022 14/1/2022
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24 Subalakshmi P.M
25 Sonu Maria Sahu

Signature
Date

Signature
Date

Signature

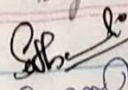
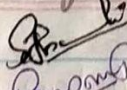
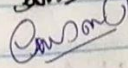
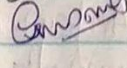
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	18/1/2022 AN	19/1/2022
Name of the student	Sg	Sg
1 Ansa Alakananda S.	Ansa	Ansa
2 Anjana S	Anjana	Anjana
3 Arundhathy V.S	Arundhathy	Arundhathy
4 Beegums Anina	Beegums	Beegums
5 Gayathri V.S.	Gayathri	Gayathri
6 Aiswathy J	Aiswathy	Aiswathy
7 Muralidharan Ck	Muralidharan	Muralidharan
8 Nidhiya A. Varadhar	Nidhiya	Nidhiya
9 Praveen Thomas	Praveen	Praveen
10 Reshma Mel Ck	Reshma	Reshma
11 Lakshmi Sajan	Lakshmi	Lakshmi
12 Serio deena Sabu	Serio deena	Serio deena
13 Sneha P P	Sneha	Sneha
14 Sathi Nair	Sathi	Sathi
15 Aashir Saju	Aashir	Aashir
16 Abhirami Baiju	Abhirami	Abhirami
17 Alen Sam Talent	Alen	Alen
18 Anaslu Suresh	Anaslu	Anaslu
19 Anyola Rachel shaji	Anyola	Anyola
20 Anupriya Partheesan	Anupriya	Anupriya
21 Aron m mbbu	Aron	Aron
22 Cheisteena Ann Geervarghese	Cheisteena	Cheisteena
23 Faisma Faida C	Faisma	Faisma
24 Fatima N	Fatima	Fatima
25 Fazila Saji	Fazila	Fazila
26 Gadhya Ajith	Gadhya	Gadhya
27 Gadevan Joseph	Gadevan	Gadevan
28 Georzi Krishnak	Georzi	Georzi
29 Geena Susan Manoj	Geena	Geena
30 Haritha Krishnan	Haritha	Haritha
31 Megha Maria Jacob	Megha	Megha
32 Meshana George	Meshana	Meshana
33 Nive Jiji Thomas	Nive	Nive

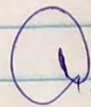
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	Name of the student	18/1/2022 AN Sign	19/1/2022 Sign
34.	Sathulakshmi P.M.		
35.	Sona Masia Sabu		

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20/1/2022

21/1/2022

Name of the student	20/1/2022	21/1/2022
Alakananda S.	Alakananda	Alakananda
edryana S.	edryana	edryana
edmundkathy P.S.	edmundkathy	edmundkathy
Beegum Amina	Beegum	Beegum
Gajathri V.S.	Gajathri	Gajathri
Acionthy J	Acionthy	Acionthy
Meenaleshi Ck	Meenaleshi	Meenaleshi
Nidhiya A Varghese	Nidhiya	Nidhiya
Pravara Thomas	Pravara	Pravara
Redina Mol C	Redina	Redina
Sasbaila Sajan	Sasbaila	Sasbaila
Seemideena Saibu	Seemideena	Seemideena
Sneha P P	Sneha	Sneha
Saathi Nais	Saathi	Saathi
Aashir Saju	Aashir	Aashir
Ashvini Baiju	Ashvini	Ashvini
Alan sam Talent	Alan	Alan
Analu Suresh	Analu	Analu
Anya Rachel Shaji	Anya	Anya
Anupriya Radheesan	Anupriya	Anupriya
Arjun M Mathu	Arjun	Arjun
Chirleena Ann Geewarghese	Chirleena	Chirleena
Fathima Faeida C	Fathima	Fathima
Fathima N	Fathima	Fathima
Kathana Fazila Saji	Kathana	Kathana
Radha Ajith	Radha	Radha
Gowri Krishna L	Gowri	Gowri
Greene Susan Manoj	Greene	Greene
Harikha Krishnan	Harikha	Harikha
Megha Maria Jacob	Megha	Megha
Meghana George	Meghana	Meghana
Nice Jiji Thomas	Nice	Nice

20/1/2022

21/1/2022

34. Subulakshmi P.M

35. Sona Nisha Sabu

36. Meghana George

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Cousin

L. S. S.

Sign

L.

Cousin

L. S. S.



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21/1/2022

34. Subulakshmi P.M

35. Sona Nisha Sabu

36. Meghana George

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NAME OF THE STUDENT	21/1/23	22/1/23	22/1/23
	AN	AN	AN
Gowri Krishna L	Gowri	Gowri	Gowri
Christeena Ann George	Christeena	Christeena	Christeena
Praveen Thomas	Praveen	Praveen	Praveen
Arundhathy V.S	Arundhathy	Arundhathy	Arundhathy
Reshma Mol E.R	Reshma	Reshma	Reshma
Greena Susan Manoj	Greena	Greena	Greena
Neelha Maria Jacob	Neelha	Neelha	Neelha
Sathi Nair	Sathi	Sathi	Sathi
Alakumaran S	Alakumaran	Alakumaran	Alakumaran
Anshu Suvesh	Anshu	Anshu	Anshu
Meenakshi C.K	Meenakshi	Meenakshi	Meenakshi
Sasbika Sano.	Sasbika	Sasbika	Sasbika
Fatima Farida C	Fatima	Fatima	Fatima
Anjana S	Anjana	Anjana	Anjana
Serin Deena Sabu	Serin	Serin	Serin
ARJUN M. MADHU	Arjun	Arjun	Arjun
Anupriya Padheeran	Anupriya	Anupriya	Anupriya
Haritha Krishnan	Haritha	Haritha	Haritha
Gayathri VS	Gayathri	Gayathri	Gayathri
Gadha Ajith	Gadha	Gadha	Gadha
Ashwani Balaji	Ashwani	Ashwani	Ashwani
Alex Sam Talent	Alex	Alex	Alex
Fazila Saji	Fazila	Fazila	Fazila
Sneha P P	Sneha	Sneha	Sneha
Nidhiya A Varghese	Nidhiya	Nidhiya	Nidhiya
Aswathy J	Aswathy	Aswathy	Aswathy
Anjali Rachel Shaji	Anjali	Anjali	Anjali
Satbulakshmi P.M.	Satbulakshmi	Satbulakshmi	Satbulakshmi
Sona Haria Sabu	Sona	Sona	Sona

NAME OF THE STUDENT	24/1/2023 A N	27/1/23
1. Geena Susan Manoj	Geena	Geena
2. Gouri Kaishna L	Gouri	Gouri
3. Paveen Thomas	Paveen	Paveen
4. Aumdhathy V.S	Aumdhathy	Aumdhathy
5. Christena Ann Gananaghere	Christena	Christena
6. Reshma Mol E.R	Reshma	Reshma
7. Megha Maria Jacob	Megha	Megha
8. Sathi Nair	Sathi	Sathi
9. Alakunada S	Alakunada	Alakunada
10. Annu Suresh	Annu	Annu
11. Meenakshi C.K	Meenakshi	Meenakshi
12. Snehaika Suresh	Snehaika	Snehaika
13. Fatima Faida C	Fatima	Fatima
14. Anjana S	Anjana	Anjana
15. Serin Deena Sabu	Serin	Serin
16. Arjun M. Madhu	Arjun	Arjun
17. Anupriya Radheesan	Anupriya	Anupriya
18. Haritha Krishnam	Haritha	Haritha
19. Gayathri V.S	Gayathri	Gayathri
20. Gadhya Ajith	Gadhya	Gadhya
21. Abhirami Baiji	Abhirami	Abhirami
22. Alen Sam Talent	Alen	Alen
23. Fazila Saji	Fazila	Fazila
24. Nidhiya A. Varghese	Nidhiya	Nidhiya

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29/1/23

NAME OF THE STUDENT

1. Chaisteena Ann GeeVaughese
2. Geena Susan Manoj
3. Reshma Mol E.R
4. Anandhathy V.S
5. Praveen Thomas
6. Gauri Kaishna L
7. Megha Maria Jacob
8. Sathi Nais
9. Alakrnanadan S
10. Anandusuresh
11. Meenakshi C.K
12. Sushmita Sugun
13. Fathima Farida C
14. Anyana S
15. Serin Deena Sabu
16. Arjun m madhu
17. Anupriya Radheesan
18. Haritha Krishnan
19. Gayathri V.S.
20. Nici Iji Thomas
21. Meghna George
22. Sethulakshmi P.M
23. Angala Rachel Shaji
24. Ananthwathy J.J.
25. Sonu Maria Sabu
26. Beegum Amina
27. Alen sam Talent
28. Abhirami Bajji
29. Radha Ajith
30. Fazila Saji
31. Nidhya A.Varghese

RN

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AN

[Handwritten signatures and initials for AN column]

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