

**DEPARTMENT OF ZOOLOGY(S.F)**  
**DEVA MATHA COLLEGE, KURAVILANGAD**

**Affiliated to Mahatma Gandhi University, Kottayam**



**REPORT**  
**ON**  
**ADD-ON COURSE**  
**BIOLOGICAL PRESERVATION TECHNIQUES**  
**(DMCK/ SFZOO/AD 35/2022)**  
**Academic Year: 2022-2023**



**DEVA MATHA COLLEGE KURAVILANGAD**

**DEPARTMENT OF SELF FINANCE ZOOLOGY**

*Add on Courses offered for Students : 2022-2023*

**1. Life Style Management**

**DMCK/ SFZ00/AD 34/2022**

**2. Biological Preservation Techniques**

**DMCK/ SFZ00/AD 35/2022**



*Department Coordinator: Ms. Ambily K. Chandran*

<b>Academic year</b>	<b>: 2022-2023</b>
<b>Title</b>	<b>: Biological preservation Techniques (DMCK/SFZOO/AD 35/2022)</b>
<b>Instructional Hours</b>	<b>: 30 Hours</b>
<b>Duration</b>	<b>: 3 months</b>
<b>Mode of Instruction</b>	<b>:Online/Offline</b>
<b>Intake Capacity</b>	<b>: 12</b>
<b>Eligibility</b>	<b>: B Sc Zoology</b>
<b>Beneficiaries</b>	<b>: I MSc Zoology</b>

**Date(s) on which program was conducted:** 12/12/2022, 14/12/2022, 16/12/2022,  
19/12/2022, 20/12/2022, 22/12/2022,  
4/01/2023, 6/01/2023, 9/01/2023

**Collaborating agency inside/outside the institute :**Nil

**Organizing Dept./Club & Name of the Coordinator :**Zoology (SF)

**Ms. Ambily K Chandran**

**Number of students participated in the programme :** 12

**The number of students completed the programme :** 12

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# Report

P G Department of Zoology offers add on course on 'Biological preservation techniques (DMCK/SFZOO/AD37/2021) for our I PG students. The details of the course and syllabus are attached. This course mainly introduces tools and techniques available for studying biochemical and biophysical nature of life. This course helps learners to use the tools and techniques for project work /research in biology. Eight students participated in the program. Ms. Aparna S., Ms. Ambily K Chandran and Ms. Athira Raveendran has taken the class.

## Course Objectives

1. To introduce tools and techniques available for studying biochemical and biophysical nature of life
2. To equip the learner to use the tools and techniques for project work /research in biology

## Syllabus

### Module 1 (10 hours)

Specimen preparation for light microscopy – wet mount preparation, smears, squashes and sections. Cytochemical and histological methods – microtome techniques, fixation, staining, cytochemistry of nucleic acids, detection of carbohydrates, proteins and lipids.

### Module 2 (10 hours)

Taxidermy, Fixation, preparation of temporary and permanent slides, whole mounts.

Collection and preservation of vertebrates. Preparation of specimens: Preparation of museum specimens, articulated skeletons, Alizarin preparation and resin-embedded specimens, Preparation of sections involving microtome and cryostat.

### PRACTICAL

(10 hours)

- Preparation of temporary and permanent slides. (Demonstration only)
- Preparation of Microtome section & spreading. (Demonstration only)
- Squash preparation of onion root tip. (Demonstration only)
- Collection and preservation of invertebrates. (Demonstration only)

# Assessment Procedure

## Multiple Choice Questions

### Grading

Grade	Grade point	Range
A+	5	4.50 - 5.00
A	4	4.00 - 4.49
B	3	3.00 - 3.99
C	2	2.00 - 2.99
D	1	0.01 - 1.99
E	0	0

## Course outcome

- Familiarize with the equipments used for histological studies
- Implementing temporary and permanent mounting
- Differentiating various stains and chemicals used for each histological procedures

## List of Resource Persons

1. Ambily K Chandran
2. Aparna S.
3. Athira Raveendran

## Students List

Sl.No	Class No.	Name
1	951	Adithya G
2	952	Akshara G
3	953	Alphonsa Thomas
4	954	Aneena Sibi
5	955	Anjaly G P
6	956	Ardra M Nair
7	957	Avani Anil
8	958	Diya S Ashok
9	959	Jannet Jaqueline John F
10	960	Joel Jose
11	961	Maria Baby
12	962	Parvathy Babu

# Attendance sheet of students

Add on course offered by P.G Department of Zoology (SF) 2022-2023


I MSc Zoology

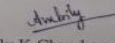
Biological Preservation Techniques


Attendance of Participants

Sl. No	Roll No	Name of the student	12/12/22				14/12/22			16/12/22		
			I	II	III	IV	I	II	III	I	II	III
1	22PG951	Adithya G										
2	22PG 952	Akshara G										
3	22PG 953	Alphonsa Thomas										
4	22PG 954	Aneena Sibi										
5	22PG 955	Anjaly G.P										
6	22PG 956	Ardra M Nair										
7	22PG 957	Avani Anil										
8	22PG 958	Diya S Ashok										
9	22PG 959	Jannet Jaqueline John F										
10	22PG 960	Joel Jose										
11	22PG 961	Maria Baby										
12	22PG 962	Parvathy Babu										

Seal of the Organizing Unit / Agency



  
Ambily K Chandran  
Name(s) and Signature(s) of the Coordinator(s)

  
Aparna S  
Name and Signature of HOD

Add on course offered by P.G Department of Zoology (SF) 2022-2023


I MSc Zoology

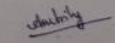
Biological Preservation Techniques


Attendance of Participants

Sl. No	Roll No	Name of the student	19/12/22				20/12/22			22/12/22			
			I	II	III	IV	I	II	III	I	II	III	IV
1	22PG951	Adithya G											
2	22PG 952	Akshara G											
3	22PG 953	Alphonsa Thomas											
4	22PG 954	Aneena Sibi											
5	22PG 955	Anjaly G.P											
6	22PG 956	Ardra M Nair											
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8	22PG 958	Diya S Ashok											
9	22PG 959	Jannet Jaqueline John F											
10	22PG 960	Joel Jose											
11	22PG 961	Maria Baby											
12	22PG 962	Parvathy Babu											

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Ambily K Chandran  
Name(s) and Signature(s) of the Coordinator(s)

  
Aparna S  
Name and Signature of HOD

Add on course offered by P.G Department of Zoology (SF) 2022-2023

I MSc Zoology

Biological Preservation Techniques

Attendance of Participants

Sl. No	Roll No	Name of the student	4/01/23			6/01/23			9/01/23		
			I	II	III	I	II	III	I	II	III
1	22PG951	Adithya G									
2	22PG 952	Akshara G									
3	22PG 953	Alphonsa Thomas									
4	22PG 954	Aneena Sibi									
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Seal of the Organizing Unit / Agency

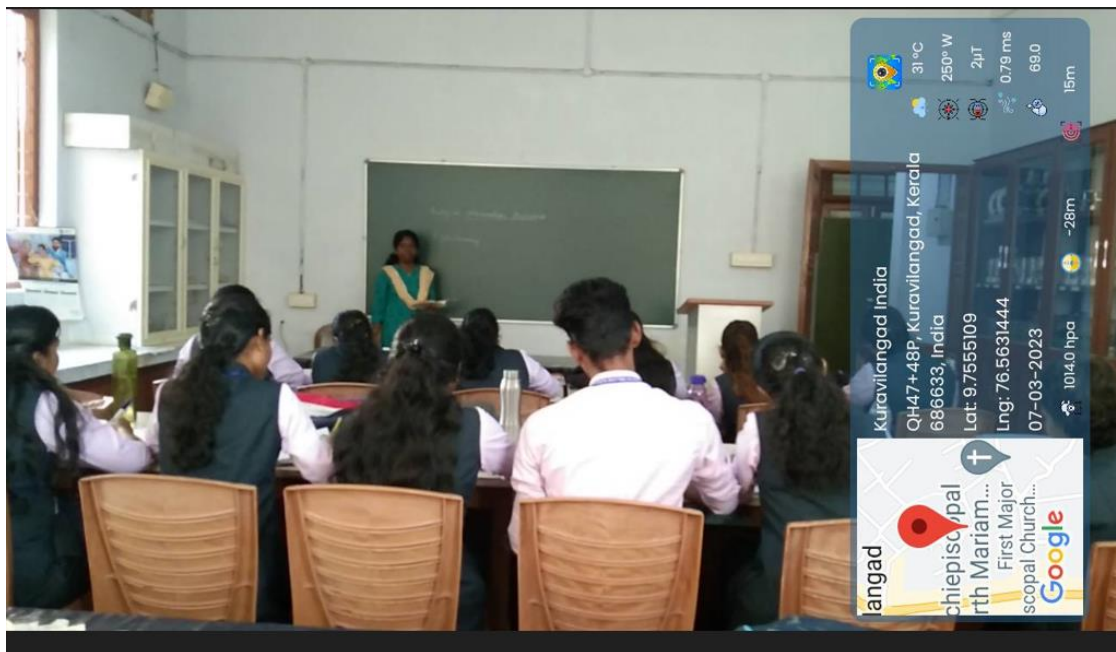


Ambily K Chandran

Name(s) and Signature(s) of the Coordinator(s)

Aparna S  
Name and Signature of HoD

## Photos







## Mark List

Sl.No	Class No.	Name	Grade
1	951	Adithya G	A
2	952	Akshara G	A
3	953	Alphonsa Thomas	A
4	954	Aneena Sibi	A
5	955	Anjaly G P	A
6	956	Ardra M Nair	A
7	957	Avani Anil	A
8	958	Diya S Ashok	A
9	959	Jannet Jaqueline John F	A
10	960	Joel Jose	A
11	961	Maria Baby	A
12	962	Parvathy Babu	A

## Feed Back

Email Address	Batch	Course taken	Have the course met your expectations	Was this course useful to you?	Rate your overall experience	Do you have any suggestions
mariababy2310@gmail.com	First year	Biological Preservation Techniques	5	Yes	5	Nothing
gaksharaachu2002@gmail.com	First year	Biological Preservation Techniques	5	Yes	5	No suggestions .
diyasashok2018@gmail.com	First year	Biological Preservation Techniques	5	Yes	5	It was good , Nothing to add
parvathybabukk002@gmail.com	First year	Biological Preservation Techniques	4	Yes	4	No suggestions.
gadithyaadi2002@gmail.com	First year	Biological Preservation Techniques	5	Yes	5	Course was good.. No specific suggestions.
ardramnair20@gmail.com	First year	Biological Preservation Techniques	4	Yes	4	No such suggestions
jannetcyrilangel@gmail.com	First year	Biological Preservation Techniques	5	Yes	5	Nothing
alphonsathomaskj@gmail.com	First year	Biological Preservation Techniques	4	Yes	5	Nothing
aneenasibi26@gmail.com	First year	Biological Preservation Techniques	5	Yes	5	Nothing
joeljosek8@gmail.com	First year	Biological Preservation Techniques	5	Yes	5	Nothing
anjaligeethajose98@gmail.com	First year	Biological Preservation Techniques	5	Yes	5	Nothing , Overall good and useful course
avaniail2000@gmail.com	First year	Biological Preservation Techniques	5	Yes	5	No

## Model Certificate issued to the students.



*Ambily*

Name of the coordinator : **Ambily K Chandran**

Department : **Zoology (SF)**

*Brincy Mathew*

Dr. Brincy Mathew  
Add-on Course General Coordinator



*Annie Mathew*

Principal  
Deva Matha College  
Kuravilangad - 686 633