# 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 21/2023 )

Academic Year: 2023-2024



Add On courses offered for students 2023-2024

1.LIFESTYLE MANAGEMENT

DMCK/SF ZOO/AD 20/2023

2. BIOLOGICAL PRESERVATION TECHNIQUES

DMCK/SF ZOO/AD 21/2023

Department Coordinator: Ms. Ambily K Chandran

Academic year: 2024-2025

Title : Biological preservation Techniques :

Instructional Hours : 30 Hours

**Duration** : 3 months

**Mode of Instruction** : Online/Offline

Intake Capacity : 12

Eligibility : B Sc Zoology

**Beneficiaries** : I MSc Zoology

Date(s) on which program was conducted:

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 : 8

The number of students completed the programme : 8

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# Report

P G Department of Zoology offers add on course on 'Biological preservation techniques((DMCK/ SFZOO/AD 21/2023)) for our I PG students. The details of the course and syllabus are attached. This course mainly introduce tools and techniques available for studying biochemical and biophysical nature of life. This course help learners to use the tools and techniques for project work /research in biology. Eight students participated in the program. Ms. Ambily K Chandran Ms. Sandhra Meria Babu and Ms. Ashna Mohan 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.

(10 hours)

## PRACTICAL

- Preparation of temporary and permanent slides. (Demonstration only)
- Preparation of Microtome section & Samp; 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
В	3	3.00 - 3.99
С	2	2.00 - 2.99
D	1	0.01 - 1.99
Е	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

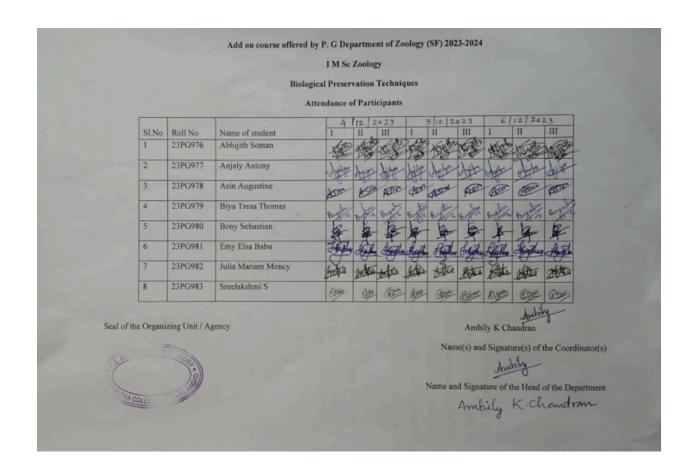
## **List of Resource Persons**

- 1. Ambily K Chandran
- 2. Sandhra Meria Babu
- 3. Ashna Mohan

## **Students List**

Sl.No	Class No.	Name			
1	23PG976	Abhijith Soman			
2	23PG977	Anjaly Antony			
3	23PG978	Asin Augustine			
4	23PG979	Biya Tresa Thomas			
5	23PG980	Bony Sebastian			
6	23PG981	Emy Elsa Babu			
7	23PG982	Julia Mariam Moncy			
8	23PG983	Sreelakshmi S			

#### **Attendance sheet of students**



## Add on course offered by P. G Department of Zoology (SF) 2023-2024

#### I M Sc Zoology

## **Biological Preservation Techniques**

#### Attendance of Participants

			11/12/2023		12 12 2023			13 4 2023			
SI.No	Roll No	Name of student	I	II	III	Ι	H .	III	1	II	III
1	23PG976	Abhijith Soman	N. C.	极	Kart.	(STO	163	Sept.	極	· ESE	一种
2	23PG977	Anjaly Antony	Little	Julie	Juste	hybri	diles	ale se	Auto	of the same	thicker
3	23PG978	Asin Augustine	Ann	BSID	ASID	ASTE	ASTO	ASID	ASP	ATT	And
4	23PG979	Biya Tresa Thomas	Son St.	6th	with	and the	w 8/2	6-4/2	and in	with	enth.
5	23PG980	Bony Sebastian	1	1	B	10	3	1	1	1	12
6	23PG981	Emy Elsa Babu	Faith.	Sept.	And in	和	Buth	But	diate	Frat.	Touch.
7	23PG982	Julia Mariam Moncy	抽	妣	18 Car	Atre	好	MA	Alexander	数位	<b>拉拉</b> 4
8	23PG983	Sreelakshmi S	8 mm	Que.	() ME	Per	But	Chr	8th	200	By

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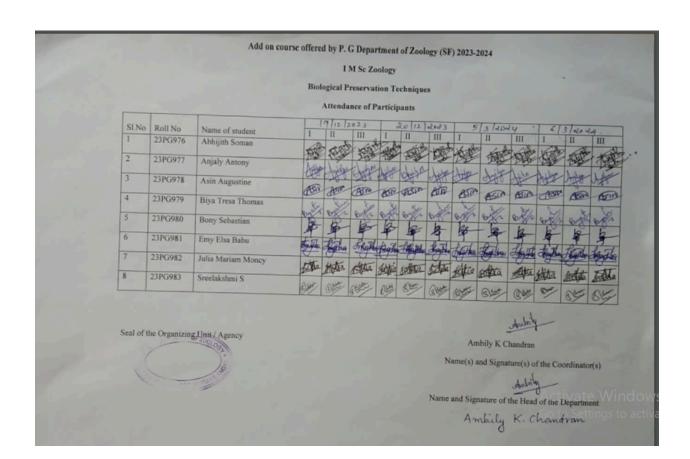
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Ambily K Chandran

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

Name and Signature of the Head of the Department

Ambily K. Chandran



# **Photos**



# **Mark List**

Sl.No	Class No.	Name	Grade
1	23PG976	Abhijith Soman	A
2	23PG977	Anjaly Antony	A
3	23PG978	Asin Augustine	A
4	23PG979	Biya Tresa Thomas	A
5	23PG980	Bony Sebastian	A
6	23PG981	Emy Elsa Babu	A
7	23PG982	Julia Mariam Moncy	A
8	23PG983	Sreelakshmi S	A

Feed Back
Feedback link: https://forms.gle/uE3kFwoF2YSPNH3T6

Email Address	Batch		Have the			
			course met	Was this	Rate your	
			your	course useful	overall	Do you have any
		Course taken	expectations	to you?	experience	suggestions
emybabu27@gmail.com	First year	Biological Preservation Techniques	4	Yes	5	No
mariamjulia30@gmail.com		Biological Preservation			_	
	First year	Techniques	4	Yes	5	No.
antonyanjaly6@gmail.com	First year	Biological Preservation Techniques	5	Yes	5	No
bonyputhussery95@gmail.	First year	Biological Preservation Techniques	5	Yes	5	No .
lachu003@gmail.com	First year	Biological Preservation Techniques	5	Yes	5	No
askpsreeabhijith@gmail.co m	First year	Biological Preservation Techniques	4	Yes	4	Nothing
biyatresathomas512@gmai l.com	First year	Biological Preservation Techniques	5	Yes	5	No suggestions
asinaugustine50@gmail.co m	First year	Biological Preservation Techniques	4	Yes	4	No

#### Model Certificate issued to the students.



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Name of the coordinator: Ambily K Chandran

Department : Zoology (SF)