

**P. G DEPARTMENT OF ZOOLOGY (SF)**  
**DEVA MATHA COLLEGE, KURAVILANGAD**

**Affiliated to Mahatma Gandhi University, Kottayam**



**REPORT**  
**OF**  
**ADD-ON COURSE**  
**Biological Preservation Techniques**  
**Conducted for I MSc Zoology**  
**Academic Year 2021-22**

## **Title- BIOLOGICAL PRESERVATION TECHNIQUES**

Academic year	: 2021-2022
Date(s) on which program conducted :	22/01/2022, 25/01/2022, 26/01/2022, 27/01/2022,28/01/2022, 30/01/2022, 31/01/2022
Collaborating agency inside or outside the institute	:Nil
Beneficiaries	: I MSc Zoology
Number of teachers coordinated the program	:3
Number of students participated in the program	:8

### **A brief report on program**

- 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 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. 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**

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.

## **PRACTICAL**

- 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)

## **Module 2**

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.

## **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


## **STUDENT LIST**


Sl No	Class No	Name
1	501	Amalrag Alex
2	502	Abin Antony
3	503	Amaya K P
4	504	Nischaya V
5	505	Nithara Tom
6	506	S Krishnendu
7	507	Salini Siju
8	508	Shabana Yasmin

# ATTENDANCE

Add on Course offered by P.G Department of Zoology (SF)  
 Biological Preservation Techniques  
 Attendance of participants

Sl.No	Roll No	Name of Student	22/01/2022					25/01/2022					26/01/2022					
			I	II	III	IV	V	I	II	III	IV	V	I	II	III	IV	V	
1	21PG501	Amalrag Alex	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
2	21PG502	Abin Antony	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
3	21PG503	Amalja K.P	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
4	21PG504	Nischaya V	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
5	21PG505	Nithara Tom	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
6	21PG506	S Krishnendu	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
7	21PG507	Salini Siju	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
8	21PG508	Shabana Yasmin	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>


  
 Seal of the Organizing Unit / Agency

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

Add on Course offered by P.G Department of Zoology (SF)  
 Biological Preservation Techniques  
 Attendance of participants

Sl.No	Roll No	Name of Student	27/01/2022				28/01/2022				
			I	II	III	IV	I	II	III	IV	
1	21PG501	Amalrag Alex	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
2	21PG502	Abin Antony	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
3	21PG503	Amalja K.P	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
4	21PG504	Nischaya V	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
5	21PG505	Nithara Tom	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
6	21PG506	S Krishnendu	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
7	21PG507	Salini Siju	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>
8	21PG508	Shabana Yasmin	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>


  
 Seal of the Organizing Unit / Agency

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

Add on Course offered by P.G Department of Zoology (SF)

Biological Preservation Techniques

Attendance of participants

Sl.No	Roll No	Name of Student	30/01/2022				31/01/2022		
			I	II	III	IV	I	II	III
1	21PG501	Amalrag Alex							
2	21PG502	Abin Antony							
3	21PG503	Amayya K.P							
4	21PG504	Nischaya V							
5	21PG505	Nithara Tom							
6	21PG506	S Krishnendu							
7	21PG507	Salini Siju							
8	21PG508	Shabana Yasmin							

Seal of the Organizing Unit / Agency



Ambily K Chandran

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

Photo



CERTIFICATE

**DEVAMATHA COLLEGE KURAVILANGAD**  
Re-Accredited 'A' Grade by NAAC  
Website: www.devamatha.ac.in Email: principaldmck@gmail.com



**CERTIFICATE**

This is to certify that .....**SHABANA YASMIN** .....has successfully completed the Add-on course: DMCK/SFZOO/AD37/2021: *Biological preservation techniques* conducted by Post Graduate Department of Zoology, Devamatha College, Kuravilangad, during the academic year 2021-2022 with '...A...' grade.

  
Ambily K Chandran  
Course Coordinator

  
Dr. Brincy Mathew  
General Coordinator

  
Dr. Sunil C Mathew  
Principal



Kuravilangad  
31-01-2022



Ambily K Chandran  
Add on Course Coordinator  
Department of zoology (SF)



Principal  
Deva Matha College  
Kuravilangad - 686 633