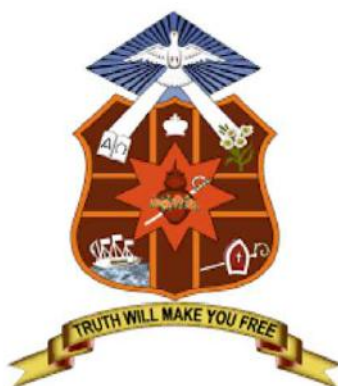


DEVA MATHA COLLEGE KURAVILANGAD

Affiliated to Mahatma Gandhi University, Kottayam



SYLLABUS
OF
ADD-ON COURSE
IN
BIOLOGICAL PRESERVATION TECHNIQUES

Academic Year: 2022-23



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

Title: BIOLOGICAL PRESERVATION TECHNIQUES

Instructional Hours: 30

Duration: 3 months

Mode of Instruction: Both online and off line

Intake Capacity: 12

Eligibility: B Sc Zoology

DEVA MATHA COLLEGE KURAVILANGAD

ADD-ON COURSE FOR THE AY 2022-23

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

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)

References

Roy, R.N. 1996. A Textbook of Biophysics. New Central Book Agency (P) Ltd. Calcutta

Karp, G. 2013. Cell and Molecular Biology (7th edn). John Wiley and Sons, Inc. NJ, USA.

Keith Wilson and John Walker. 2010. Principles and techniques of Biochemistry and Molecular Biology. 7th Edition.

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



Principal
Deva Matha College
Kuravilangad - 686 633