

GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

REPORT ON FIELD PROJECT UNDERTAKEN BY DEPARTMENT OF Zoology

2018 to 2019

Class : II M.Sc., ZOOLOGY

Department of Zoology organized a one-day field project at **Kumbakonam Municipality solid waste Management plant** on 18.02.2019. Field study for observing the separation of degradable and nondegradable waste collected and to give awareness for avoiding the use of plastic materials.



Syllabus
APPLIED ECOLOGY, BIODIVERSITY, AND CONSERVATION

Subject code : PZCD14P4

APPLIED ECOLOGY

1. Maintenance of microcosms.
2. Determination of pH, dissolved oxygen, salinity, and free CO₂ in water.
3. Determination of carbonates and bicarbonates in water.
4. Estimation of chlorides in water.
5. Estimation of dissolved solids in water, plankton and Insects.
6. Visit to drinking water treatment, and solid waste management plants.
7. Visit to nearest Forest ecosystem.
8. Study of a Pond ecosystem - Mahamaham tank and write a report on its biodiversity.
9. Effect of pollutants on primary productivity.

SPOTTERS

Secchi disc, Water analyzer.

BIODIVERSITY and CONSERVATION

1. calculation of shanon index.
2. calculation of plankton biodiversity.

2019 to 2020

Class: II M.Sc., ZOOLOGY

The Department of Zoology organized a one-day field project at the Water Resource Department –Valaiyapettai in Kumbakonam on 20.02.2022. It is a Practical-related Field study for Applied Ecology.



Syllabus

ECOLOGY AND ETHOLOGY P18ZC414P4

ECOLOGY

1. Maintenance of microcosms.
2. Determination of pH, dissolved oxygen, salinity, and free CO₂ in water.
3. Determination of carbonates and bicarbonates in water.
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5. Estimation of dissolved solids in water, plankton and Insects.
6. Visit to drinking water treatment plants.
7. Visit to nearest Forest ecosystem.
8. Study of a Pond ecosystem - Mahamaham tank and write a report on its biodiversity.
9. Effect of pollutants on primary productivity.

SPOTTERS

Secchi disc, Water analyzer.

ETHOLOGY

1. Observation of habituation in Pila.
2. Observation of taxis in earthworms.

From

Dr. S. Venkatalakshmi,
Head of the Department,
Department of Zoology,
Government College for Women (Autonomous)
Kumbakonam.

To

Tmt. K. Uma Maheswari M.Sc., M.Phil.,
Commissioner,
Kumbakonam Municipality,
Municipal Office,
Dr. Murthi Road,
Kumbakonam- 612001

Through: Proper Channel

Respected Madam,

Subject: Permission for visiting Solid Waste Management site.

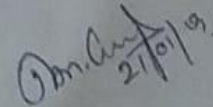
Our Students of II M.Sc Zoology are studying a paper on Applied Ecology. In order to great awareness on waste disposal by giving an exposure to the solid waste management system of our town Municipality, we have planned to take them to the site of solid waste management. I request you to kindly permit us to visit the site and also to make arrangements for having an explanation about the system on the site on 01.02.2019.

Thanking you.

Yours faithfully

Place: Kumbakonam

Date: 21.01.2019


HOD OF ZOOLOGY

Enclosed: List of students and accompanying staff Members.

Forwarded for consideration.
in light of
22.01.19.

2020 to 2021

Class : II M.Sc., ZOOLOGY

Department of Zoology organized a one-day field project at Sri Vittal Rukkmani Samastan, Govindapuram 20.02.2021. Observation of Indian cattle breeds and bird Biodiversity.(20)



Syllabus

ECOLOGY AND ETHOLOGY P18ZC414P4

ECOLOGY

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SPOTTERS

Secchi disc, Water analyzer.

ETHOLOGY

3. Observation of habituation in Pila.
4. Observation of taxis in earthworms.

2021 to 2022

Class: II M.Sc., Zoology and willing students from all Departments

The Department of Zoology organized a one-day field project to watch birds within the (GCWK) College Campus on 01.04.2022. Birds were identified, counted and Recorded.



Class : II M.Sc., ZOOLOGY

Department of Zoology organized a one-day field project at Sei Pond in Kumbakonam on 20.04.2022. This was a practical related Field Trip. We got knowledge for Identification of plankton and plankton diversity.





அனுப்புகிறேன்

மாணவியல் அறிவியல் அ.க.க.ய.,
மாணவியல் அறையு
இதற்கான கீழ்க்கண்ட மாதிரி,
அமைச்சர் மகமீத் கான் (ஆ), இயக்குகிறேன்.

மாணவியல்

இதற்கான அமைச்சர்
அமைச்சர் மகமீத் கான் (ஆ) இயக்குகிறேன்.

மாணவியல் அறையு

அமைச்சர் மகமீத் கான் (ஆ),
மாணவியல் அறையு
அமைச்சர் மகமீத் கான் (ஆ) இயக்குகிறேன்.

மாணவியல் அறையு

மாணவியல் அறையு : மாணவியல் அறையு கீழ்க்கண்ட மாதிரி மாணவியல்
20.04.22 அன்று மாணவியல் அறையு
மாணவியல் அறையு மாணவியல் அறையு மாணவியல் அறையு
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மாணவியல்

மாணவியல் அறையு

(மாணவியல் அறையு)

(மாணவியல் அறையு)

தேதி: 18.04.2022

இடம்: இயக்குகிறேன்

இயக்குகிறேன்: மாணவியல் அறையு

மாணவியல் அறையு

மாணவியல் அறையு (மாணவியல் அறையு)

மாணவியல் அறையு 18/04/2022

மாணவியல் அறையு

**P21ZC414P ECOLOGY, ETHOLOGY, BIODIVERSITY AND CONSERVATION
APPLIED ECOLOGY**

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SPOTTERS

Secchi disc, Water analyzer.

ETHOLOGY

1. Observation of habituation in Pila.
2. Observation of taxis in earthworms.

BIODIVERSITY

1. Calculation of shanon index.
2. Calculation of plankton biodiversity.

COURSE OUTCOMES:

- CO1: Student has ability to simulate a pond ecosystem within the laboratory and analyses different water quality parameter so they get real practical knowledge about it.
- CO2: Students get experience, knowledge about awareness related to ecosystem through a visit of sewage treatment plant, and forest ecosystem.
- CO3: Practical knowledge to measure primary productive of an ecosystem.
- CO4: Obtain skills to study animal behaviour
- CO5: Awareness about animal diversity and hands on experience to calculate its indices.

2022 to 2023

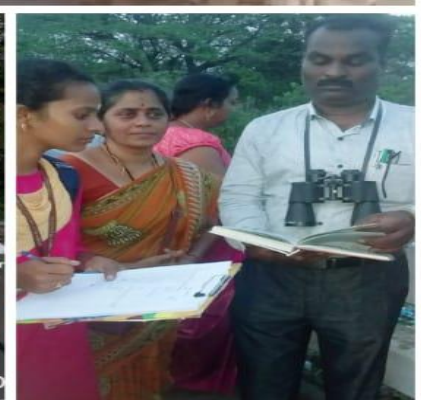
Class : II M.Sc., ZOOLOGY

1. Department of Zoology organized a one-day field project at Mahamaham Tank in Kumbakonam on 28.02.2023. This was a practical related Field Trip. We observed biodiversity of animals in and around Mahamaham Tank, we also recorded plankton diversity.



Class : II M.S., Zoology and All Department students

2. The department of Zoology organized a one-day field project to watch birds at the Arasalar Riverbank in Kumbakonam on 16.03.2023. students got idea for Identification of birds by the coacher and Recorded the birds near the Arasalar Riverbank.



Syllabus

P21ZC414P ECOLOGY, ETHOLOGY, BIODIVERSITY AND CONSERVATION APPLIED ECOLOGY

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GOVERNMENT COLLEGE FOR WOMEN (A), KUMBAKONAM

REPORT ON FIELD PROJECT UNDERTAKEN BY DEPARTMENT OF Zoology

2018 to 2019

Class: III B.Sc., ZOOLOGY EM & TM

Department of Zoology organized a one-day field Project in **Thattai-Himalayan fish form water technology in Thanjavur** on 30.01.2019. Students gained practical learning experience in freshwater ecosystems and aquaculture techniques.



Syllabus

Subject Title: ECOLOGY, BIOTECHNOLOGY, AND MICROBIOLOGY Practical

Subject Code: UZC13P4

Ecology

1. Estimation of salinity.
2. Estimation of Dissolved oxygen.
3. Observation of freshwater or marine planktons.
4. Estimation of soil pH and moisture.
5. Spotters - Secchi disc, Animal associations.
6. Visit to a local polluted area /solid waste sewage treatment plant.
7. Construction of a food web diagram based on a local visit.

BIOTECHNOLOGY

1. Isolation of DNA, Southern blotting method. Spotters: Vectors, Polymerase Chain Reaction (PCR)

MICROBIOLOGY

1. Bacterial sterilization
2. Simple staining, Gram staining of bacteria,
3. Bacterial mobility.
4. Counting of bacteria by serial dilution method,
5. Bacterial growth
6. Bacterial isolation.
7. Laboratory safety measures.

Spotters: Autoclave, Micropipette, Bac5teriophage

2019 to 2020

Class : III B.Sc., ZOOLOGY EM & TM

Department of Zoology organized one-day field project in **Arasalar in Kumbakonam on 06.03.2020**. Students gained practical knowledge through observation of pollution in the lotic ecosystem and habitat characteristics and fauna and its adaptation in rivers.



Syllabus

Subject Title: ECOLOGY, BIOTECHNOLOGY, AND MICROBIOLOGY Practical

Subject Code: UZC13P4

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