

**SCNM GOVERNMENT DEGREE COLLEGE
NARAYANPET, Dist. NARAYANPET**

A FIELD TRIP TO

**"GOLLA GUEDEM-POND" FOR OBSERVING POND
ECOSYSTEM**

DEPARTMENT OF ZOOLOGY

BY

B.SC (BZC) STUDENTS



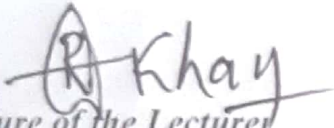
Under The Supervision of

Dr. Md. Riyaz Khan

CERTIFICATE

Date: 09-02-2021

This is to certify that the bonafide record of the Field Trip "Golla Gudem Pond for observing pond Ecosystem" . It is a part of curricular activity of the BSC (BZC) students by the Department of Zoology, during the academic year 2020-2021.



Signature of the Lecturer

(Dr. Md. Riyaz khan)



Principal

(Dr. Mercy Vasantha)

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NARAYANPET, NARAYANPET(DIST)

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Field trip done by the Department of Zoology,
Government Degree College, Narayanpet ,
Narayanpet(dist) during the academic year
2020-2021.*



PRINCIPAL

Under the guidance of

1. Dr. Md. Riyaz khan

PURPOSE AND IMPORTANC OF FIELD TRIP

1. Observation is the basic pillar to develop scientific temper & knowledge.
2. The field trip gives the student an opportunity to practically observe the nature and understand the subject better than normal lectures.
3. Apart from understanding the subject field trips provides an opportunity to the students, to interact among themselves and with their lectures, which ultimately leads to the spread of knowledge.
4. Knowledge acquired through practical observation lasts longer than normal process of learning.

The department of Zoology organised the field trip on **9 February, 2021**, to study the pond ecosystem of Gollagudem pond, which is located 3 km away from the college campus.

The field trip was successfully organised under the leadership of Dr. Md. Riyaz khan, lecturer in Zoology. The students of I & III & V Semesters actively participated in the field trip. The students showed great enthusiasm and actively participated in the field trip to Gollagudem pond.

" Pond Ecosystem" is a part of Ecology, in the syllabus of Bsc (Bzc) II year, Zoology, students of second year Bsc (Bzc), participated the field trip to have a practical, experience by watching, observing pond Ecosystem.

The Fresh water pond ecosystem have unique diversification of both phytoplankton and zooplankton. The growth of primary productivity is the availability of pond nutrients like nitrates, phosphates, oxygen, carbon dioxide and other micro and macro nutrients.

The biotic and a biotic factors are essential for life , light Temperature is one of the Major factors for the growth of phytoplankton primary productivity, it produces food through photosynthesis.

Students observed that same portions of the pond are overcrowded by floating hydrophytes like nymphaea and other plant and they noticed that this increase in organic malts may limit the availability of light and dissolved O_2 in the pond.

The pond colour is mainly depending upon the growth of phytoplankton of the pond. This is mainly used by the zooplankton like copids, rotiphers, mysis, snails, fish fingerlings and other big fishes.

These planktons are primary and secondary producer, here we can see the food web, food chain and energy flow. The hydrophytes play an important role for production of O_2 and CO_2 ratio in the pond Ecosystem. The hydrophytes consumed by herbivores animal like grass carp etc.

DECOMPOSERS

Various types of bacteria and fungi act as decomposers they decompose the organic matters present in the pond. In this context student came to know the concept of Biological oxygen demand (BOD).

The students also observed the human activity across the pond. The human activity include washing clothes, animal grazing, fishing etc.

The students also came to know the threats of pond Ecosystem like overgrazing of animals, fishing, overcrowding of pond with hydrophytes like pistia, valisnaria, nymphaea, chara etc..

Student keenly observed the tank, they enquired the quality of water with villagers and got some details of its usage as drinking water source for agriculture.

The villagers told the importance of the pond for their irrigation and drinking purposes and use of the crops. This tank is also used for culturing some fishes like catla catla.

The student were calculated algal pistia, wolfia, lemna etc., and water for observing protozoan like Euglena, paramecium etc., and for testing P^H of water and salinity

CONCLUSION

Finally, this field trip gave the chance to explore the vegetation of " Gulla gudem pond Ecosystems" .The students with the help of the lectures studied several aspects of Ecosystem.

Apart from their academic studies, This fieldtrip created an excellent opportunity to interact among themselves & their lecturers, for the lecturers also it a fine occasion to know the behaviour and attitude of their students beyond the walls of the class room.

This held trip is successful one as the purpose of field trip met.



❖. FIELD TRIP TO "GULLA GUDEM POND
ECO SYSTEM"

➤ INTERACTION BETWEEN LECTURER AND
STUDENTS



❖. FIELD TRIP TO " GULLA GUEDEM
POND ECOSYSTEM"

➤ STUDENT OBSERVING THE POND ECOSYSTEM



❖. FIELD TRIP TO " GULAA GUEDEM
POND ECO SYSTEM"

➤ EXPLAINING ABOUT THE POND ECOSYSTEM



❖. OVER VIEW OF THE GULLA GUEDEM
POND ECO SYSTEM