

ESTD: 1992

## MILLI AL-AMEEN COLLEGE

(For Girls)

Affiliated to CALCUTTA UNIVERSITY  
A Minority Educational Institute  
ESTABLISHED BY MILLI QUR'ANIYE MANDALATION

43, Dwar Krishna Kanoi Road, Kolkata - 700 014

Ref. No. \_\_\_\_\_

Dated: 21.05.2022

### NOTICE

The excursion of Sem-II students of Geography Department will take place on June 2, 2022 (Thursday). The students are requested to assemble in the College at 9.30 am Sharp.

*Sunanda Haldar*  
DR SUNANDA HALDAR  
(PRINCIPAL)  
PRINCIPAL  
MILLI AL-AMEEN COLLEGE (For Girls)

*Qadria H.  
16/5/2022*  
*for last of 2022  
Jewel party  
16/5/2022  
16/5/2022  
Sunanda  
21/05/2022*

## **A Report on College Excursion by the Department of Geography**

Date: 2<sup>nd</sup> June, 2022

Time: 10am

Place: Kalikapur and Sonarpur

A departmental excursion was organized by the Geography department of Milli Al-Ameen College (For Girls). The purpose of this excursion was to explore the flora and fauna of these locales in order to incorporate the findings in the project work of students. Overall the visit proved to be a fruitful one.







Map.....

## LOCATION

Across the vidya sagar seki in shibpur  
the country's largest and the world famous  
scientist and botanical garden spread out on the  
west bank of river Hooghly. Our respected pro-  
fessor selected this spot as the right place form  
our Botanical excursion. We observed a lot  
of valuable lessons.

## INTRODUCTION

This is situated at Shibpur area of Howrah district. It was laid out in 1786. This is the oldest of the Botanical Gardens in India. Its cover area is 240 acres. Inside is an imcredible variety of about 50,000 trees. The main attraction here is the Giant Banyan tree, which covers about 1.4 m of land. It has 157 off shoots hanging down from the original tree. There are innumerable orchids and colourful flowers. There is a precious library in the garden which comprises of a rare collections of books on Botany. It has the largest garden of Herbaria in Asia called "National Herbarium".



Water Tank  
Water Tank  
Water Tank

## OBJECT OF EDUCATIONAL EXCURSION

- ★ For excursion to end environmental surrounding.
- ★ For being introduced to the varied plant ecosystem.
- ★ For gaining information about the features of different plants.
- ★ For knowing the reasons due to which different plants cannot lie in the same environment.
- ★ For occurring knowledge regarding classification of plants into phylum, class, sub-class etc.



## FIELD NOTE Book

According to the course of curriculum of the graduation in science streams, prescribed by "Milli al-ameen college" (For Girls) have Krishna Kaner road under "CALCUTTA UNIVERSITY" an excursion tour is required.

A "field note book" is a part of an excursion tour in which records of the visited field are maintained, date of observation, name of locality, associated, habitat, species of characters etc.

*Bijallia longifolia*.

(Annonaceae)



## CLIMATIC COMPOUND OF YAMTHUNG

ALTITUDE: 11,803 ft

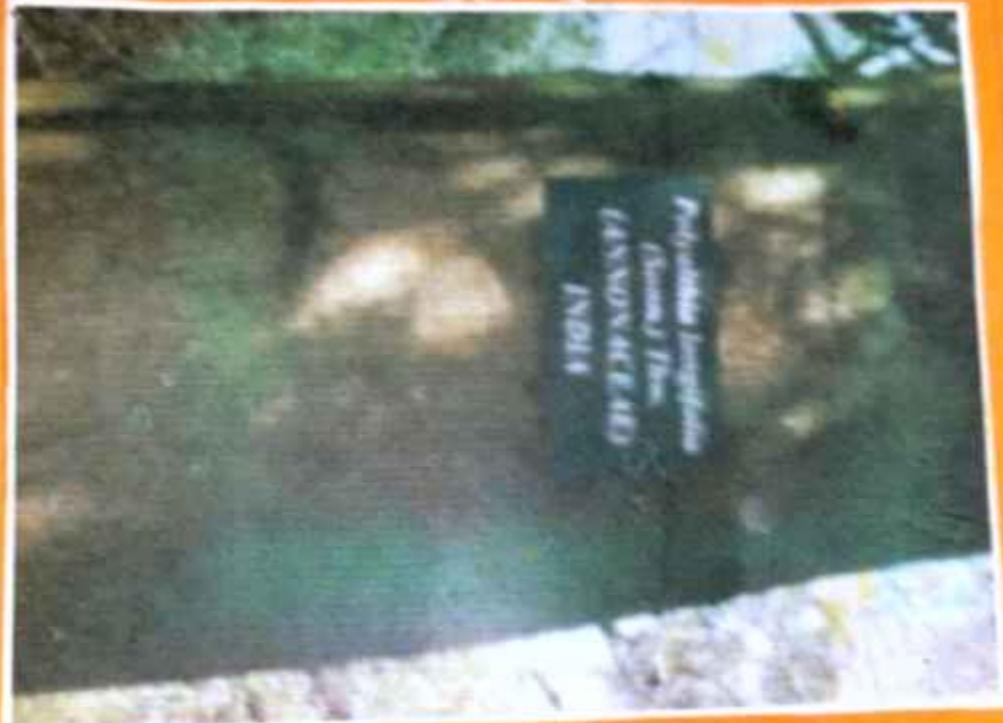
HUMIDITY: 95%

RAINFALL: Traces

SOIL : Stony

The weather is very closely  
clouded and snowfall is present

*Petrospermum acerifolium*  
(Shorea Jhoola)



## Tourney To the Garden

We made the excursion to the Indian Botanic Garden by bus. we The Students of B.Sc (general) met together in our College Milli Al Ameen College (for Girls) along with our Subject Teachers, non-Teaching Staff also Participate in this of excursion, After facing several different- Places we Reached Botanical Garden by 4:00 pm.

NAME: AFIREEN JAHAN

ROLL NO: 12

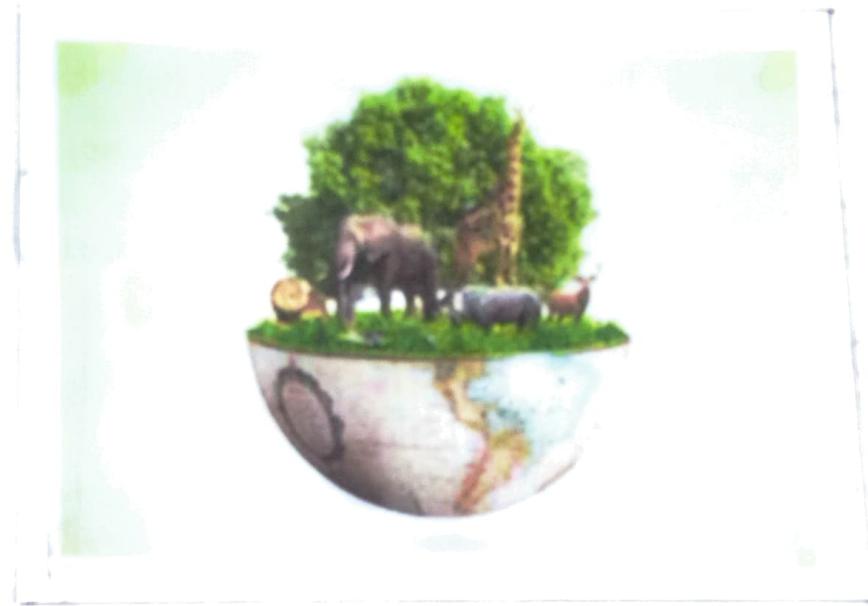
B.A.GENERAL (SEM-2)

MILLI-AL-AMEEN COLLEGE (FOR GIRLS)

CU.ROLL NO: 222147-12-0008

CU.REGISTRATION NO: 147-1211-0147-22

YTDV 2023



## BIODIVERSITY

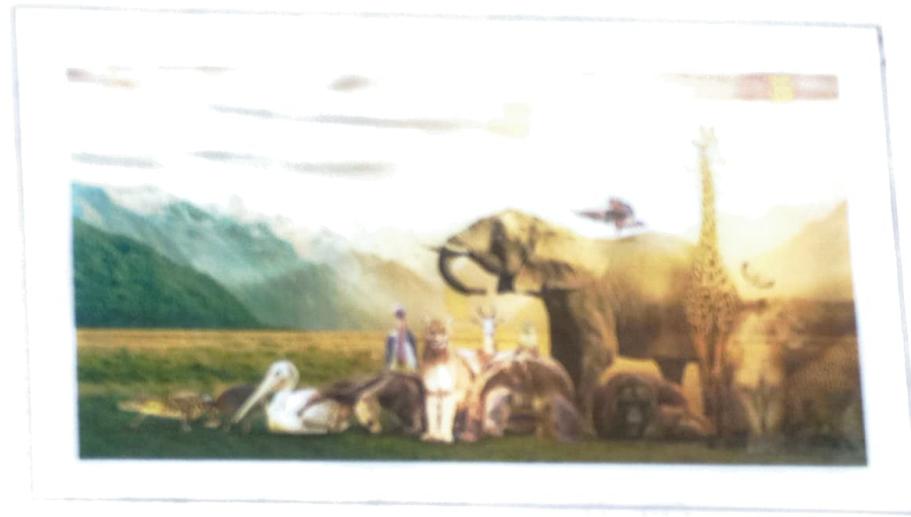
# PREPARATION OF PEOPLES BIODIVERSITY REGISTER (FLAURAL DIVERSITY)

S/No	Local Name	Scientific Name	Habitat	Characteristic	Uses
1.	Banyan Tree	<i>Ficus Benghalensis</i>	Terrestrial	Banyans are strangler figs. They grow from seeds that landed on other trees.	The Barks Seeds can be used as tonic to maintain temperature and treat diabetes.
2.	Coconut Tree	<i>Cocos Nucifera</i>	Tropical & coastal areas	Coconut trees does not have any branches. Their leaves are very long and very thin spines in it.	The leaves are used for thatching nuts. The rib of its fond is used to make brooms.
3.	Neem tree	<i>Azadirachta indica</i>	Semi-Tropical	Neem tree is related to Mahogany. The leaves are very small. Neem trees are easy to grow and maintain.	Neem leaves are very useful to purify the blood, remove toxins, treat insects bites and Ulcers.
4.	Rose	<i>Rosa rubiginosa</i>	In sunny area, well-drained soil.	Their stems are usually prickly and their green leaves have toothed edges.	Rose are used for commercial perfumery, Enhances mood, soothes skin irritation, it also have a anti-aging properties.

## (FLAURAL DIVERSITY)

Sl.No	Local Name	Scientific Name	Habitat	Characteristic	Uses
51.	Aloe vera	<i>Aloe barbadensis</i> Miller	Arid & Semi Arid	Aloe vera is a stemless or very short stemmed plant. The leaves are very thick and fleshy.	It improves digestive health, Promotes oral health, relieve anal pressures & fissures.
52.	Cactus	Cactaceae	Desert	In cactus, the stem is the only part of most cacti where this vital process take place. Almost all cacti are succulents.	Cactus are used for humans food and fodder for animals, Usually after burning off their spines.
53.	Holy basil (Tulsi)	<i>Ocimum tenuiflorum</i>	Temperate	The holy basil plant is a small annual or short-lived perennial shrub. The stems are hairy and the fragrant leaves are green.	Holy basil is commonly used by mouth to help with anxiety and stress. It is also used for diabetes and high cholesterol.
54.	Lotus	<i>Nelumbo nucifera</i>	Warm temperate to Tropical climates	It is a beautiful flower which has an appealing fragrance and colour. Its usually white or light pink in colour.	Lotus are used to make medicine. <i>Tulsi</i> <i>medicines</i>

## FAUNAL DIVERSITY



FAUNAL DIVERSITY

# ( FAUNAL DIVERSITY )

Sl. No	Local Name	Scientific Name	Habitat	Description	Special Features
1.	Dog	<i>Canis lupus familiaris</i>	Coastal, artic, forest, desert, etc	The Dog is domesticated carnivorous of the family Canidae. It is a part of the wolf-like canids.	Dogs can smell disease they can read our emotions. Dogs are awesome stress busters in the workplace.
2.	Cat	<i>Felis catus</i>	Savannas, Tropical rain forest, etc	Cats are small carnivorous mammals, of the family Felidae. It is a domestic small species.	Cats have acute sense of hearing. The toes & paws, as well as the tips of nose are also very sensitive to touch. cats have the largest eyes of any mammals. They can see even in dark place.
3.	Cow	<i>Bos taurus</i>	Grassland	A cow is a domestic animal, and also a herbivorous animal. They are a prominent modern member of the subfamily.	Cows have an acute sense of smell and can detect odours upto 6 miles away. Cows are gentle animals.
4.	Deer	<i>Cervidae</i>	Forested habitats	Deer has four long legs, a small white tail, horns on its head	Two hooves on each foot, a four chambered stomach, short tails.

## ( FAUNAL DIVERSITY )

Sl. No.	Local Name	Scientific name	Habit.	Description	Special features
5.	Rat	Rattus	woodlands	Rats are generally slender with a pointed head, large eyes, and prominent, thinly funnel ears.	Rats take care of injured and have excellent memories. Rats can swim for 3-4 days before it's drowns.
6.	Goat	Capra aegagrus hircus	Terrrestrial	Goats have very thick and rough fur, which generally is white, red, black or grey.	Goats have rectangular pupils. They don't have teeth on their upper jaws. They have four stomachs. Goats have incredible agility and balance.
7.	Horse	Equus caballus	Semi-arid	Horses are ungulates - mammals with hooves. They also have long tails, short hair, long thick necks and elongated heads.	Horses can live to be 30 to 40 years of age. They have an acute sense of smell and hearing and can look forward and backward with another.

Date : 11/08/23

NAME - SANA SABIR

STREAM - ENGHONS BA 2<sup>ND</sup> SEM

CUROLL NO - 212147-11-0019

REG NO - 147-1211-0020-21

COLLAGE ROLL NO - 61

COLLAGE NAME - MILLI - AL - AMEEN

COLLAGE

SUBJECT - GEOGRAPHY GENERAL

PROJECT

# BIODIVERSITY

The term 'biodiversity' refers to variety of life on Earth at all its levels from genes to ecosystem and can encompass by the evolutionary ecological and cultural processes that sustain life. Biodiversity boosts ecosystem productivity where each species matters. Even if a species has small role it has an important role to play. For eg - a larger no. of natural species a greater variety of groups. Greater species diversity ensures natural sustainability for all life forms.

## Levels Of Biodiversity:-

There are 3 levels of biodiversity 1. Genetic 2. Species 3. Ecosystem

**Genetic Biodiversity:** It is the total no. of genetic characteristics in the 'genetic makeup'. It ranges widely from no. of species and can be appraised by the span of survival of species. The individual differs widely from one another in their genetic makeup.

**Species Biodiversity:** It is defined as the no. of different species present in an ecosystem and relative abundance species. Diversity is the greatest when all the species present are equally abundant in the area. It is possible for an ecosystem to have high species richness but low species even the species diversity varies in a different geographical location with tropics having highest richness as we move towards pole.

**Ecosystem Biodiversity:** It deals with the variations in ecosystem with its geographical location and its overall impact on human existence and the environment. It addresses the combined characteristics of biotic properties and abiotic properties. It includes the variation in both terrestrial and aquatic system. It is the largest scale of biodiversity and within each

# Biodiversity



## BIODIVERSITY

AS A WHOLE

## COMPONENTS OF BIODIVERSITY



## IMPORTANCE OF BIODIVERSITY



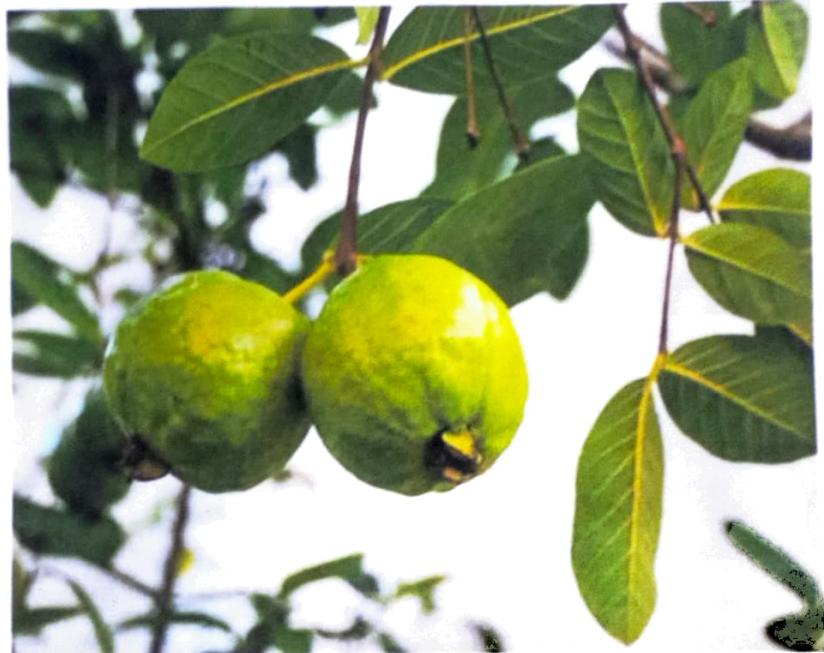
## Components of biodiversity

- Species diversity: the number and abundance of species
- Ecosystem diversity: The variety of ecosystems found in a place or on earth
- Genetic Diversity: Variety in traits/genes in a species

ecosystem there is great deal of both species and genetic diversity.

## IMPORTANCE OF BIODIVERSITY

IMPORTANCE	HISTORIC	CURRENT	POTENTIAL
Ecosystem Services	Pollinated of Crops by bees	Wet land to clear pollution effective as buffer against many pollutants	Coastal engineering against sea level rises from global warming
Medicine	Penicillins antibiotic from fungus	Horseshoe crab bloods used in bioassay for toxins	Rainforest Plant now used to combat resistant Andrew disease
Biotechnology	Asian Forest plants used for buildings	Bacterial o Bacterial genes introduced to crops to confer resistance to insects	Metal digesting bacteria clean pollution
Pets and domestic animals	Exotic animals as gifts and status symbols	Value of current pet trade	Breeds are used as their showy traits attributes



GUAVA TREE

# PREPARATION OF PEOPLE BIODIVERSITY REGISTER FLORA BIODIVERSITY

MOUZA-KHARKI  
BENAKIPARA

P.O. - KHEADAH

24, PARAGANAS (SOUTH)

DATE OF VISITING THE PLACE - 2<sup>nd</sup> June 2022.

SL. NO	LOCAL NAME	SCIENTIFIC NAME	HABITAT	CHARACTERISTICS
1.	Peyara / Pyara Guava	<u>Psidium guajava</u>	Tropical and Non-Tropical Americas where plant grows in regions like Mexico, S. Americas. They are native to Tropical America & are best grown in Tropical and Sub-Tropical worldwide	<ul style="list-style-type: none"> <li>• Round to pear-shaped and measured upto 4.6 cm in diameter.</li> <li>• Their pulp contain many small hard seeds. The fruit has yellowish, white, yellow or pink flesh.</li> <li>• It grows upto 10m (33ft) &amp; lives approx for 40 years. It produces solitary white flowers and a berry fruit.</li> </ul>

Mango Tree



NAYANTARA

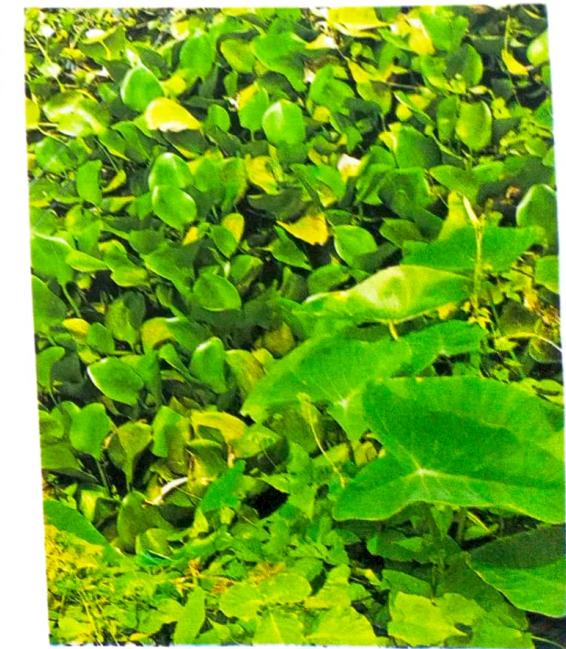
COCONUT TREE



SL NO	LOCAL NAME	SCIENTIFIC NAME	HABITAT	CHARACTERISTICS
2.	Nayantara Madagascar Periwinkle	<u>Catharanthus roseus</u>	It is most commonly associated with coastal habitats (e.g.) cliff faces, rocky ocean ledges and sand dunes and other sites with sandy soils, but also grows in bushland and green lawns with a pale midrib near urban areas.	<ul style="list-style-type: none"> <li>• It is an evergreen subshrub or herbaceous plant 1m (39 in) tall)</li> <li>• The leaves are oval to oblong 2.5–9cm (1.0–3.5) in long and 1–3.5 (0.4–1.4 in) wide glossy green hairless with a pale midrib and a short petiole 1–1.8cm (0.4–0.7 in) long; they are arranged in opposite pairs.</li> </ul>
3.	Coconut Tree or Coconut Palm Nariyal Peed	<u>Cocos nucifera</u>	They grow in warm rainforests and tropical coastal areas. They do best in spots that are 70 degrees F. They are found at Tropics and Sub Tropics	<ul style="list-style-type: none"> <li>• It is a slender palm tree widely distributed throughout the regions with a size vary between 12–30m high</li> <li>• The trunk of the tree is a cylindrical striped often tilted brown or brownish grey</li> <li>• The circular leaf scars from the old leaves when they fall down</li> </ul>
4.	Mango or Aam	<u>Mangifera indica</u>	It is originated in the foothills of the Himalayas of the Southern Asia (Eastern India, Burma, Indonesian Islands) bordering the Bay of Bengal dating over 4000s specimens still fruit after 300+	<ul style="list-style-type: none"> <li>• They grow to 30–40mtrs (98–131 feet) tall with a crown radius of 10–15m (33–49 ft).</li> <li>• The trees long lived as some specimens still fruit after 300+</li> </ul>



KOCITU (TARO)



WATER  
HYACINTH

SL.NO	LOCAL NAME	SCIENTIFIC NAME	HABITAT	CHARACTERISTICS
-	-	-	where it still grows wild in the hills of Jssam and adjacent area	<ul style="list-style-type: none"> <li>It has a characteristic fragrance and a smooth, thin tough skin. Flesh is pale yellow to orange. It is juicy sweet and sometimes fibrous.</li> <li>Seedlings undesirable or varieties are described as possessing a turpentine like taste</li> </ul>
5.	Kochuri Pana (Water Hyacinth)	<u>Eichhornia crassipes</u>	It is a large aquatic plant native to Amazon Basin and South America. It has spread mainly to the tropics and subtropics since 1800s.	<ul style="list-style-type: none"> <li>These plants vary in size from a few inches to over 3 ft tall.</li> <li>They have showy lavender flowers and the leaves are rounded and leathery.</li> <li>They are attached to short and sometimes inflated stalks.</li> <li>They have large air cavities in the parenchyma tissue. That's why they float in water.</li> </ul>
6.	Kochue (Haw)	<u>Colocasia esculenta</u>	Found in Tropical and Sub-Tropical Regions of	✓



GREEN  
CHILLI



KACHA  
LAFUNKA



BANANA TREE  
KOLYGAJCH

SL NO	LOCAL NAME	SCIENTIFIC NAME	HABITAT	CHARACTERISTICS
			South Asia, East Asia, Northern Australia etc.	<ul style="list-style-type: none"> <li>They are cultivated as an annual. It is a perennial herb with a thick, tuberous underground stem whose leaves are simple broad and long petioled.</li> <li>Unopened leaves and petioles are prepared as spinach and used as vegetable.</li> </ul>
4.	Kancha Laska (Green Chilli)	<u>Capsicum frutescens</u>	<p>They originate from the Western Hemisphere seed. They are found in different colors like green, orange, white, yellow etc.</p> <p>They grow under Tropical and Sub-Tropical conditions. Dried chillies used in pain balms etc.</p> <p>They grow in Tamil Nadu, Balasore etc. Hot pungent taste due to chemical called capsaicin.</p>	<ul style="list-style-type: none"> <li>They are hollow with many lobes. They are found in different colors like green, orange, white, yellow etc.</li> <li>Chemical called chilli oleoresin from dried chillies used in pain balms etc.</li> <li>Hot pungent taste due to chemical called capsaicin.</li> </ul>
8.	Kola Gaach (Banana Tree)	<u>Musa acuminata</u>	<p>They grow in humid tropical regions of Central and South America, Africa and South East Asia where there are high temp and rainfall.</p>	<ul style="list-style-type: none"> <li>Large, fleshy, upright stalks topped with soft-husked arching leaves.</li> <li>It is a perennial herbs. It grows from a bulk of rhizome. Stems from 6ft to 30ft for the largest type.</li> </ul>

SL.NO	LOCAL NAME	SCIENTIFIC NAME	HABITAT	CHARACTERISTICS
9.	Khajur (Dates)	<u>Phoenix dactylifera</u>	<p>These species is widely cultivated across Northern Africa the Middle East and South Asia and is naturalized in many tropical and subtropical regions.</p>	<p>They reach upto 30mtrs (100ft) height growing singly or forming a clump with several stems from a single root system.</p> <p>They are oval cylindrical 3-7 cm (1-3 inches) long &amp; about 2.5 cm in diameter.</p> <p>They are dark brown to bright red or yellow depending on variety.</p>
10.	(Bengal Tree) Begun Gaach	<u>Solanum melongena</u>	<p>Cultivation in the Mediterranean region Portuguese colonies took it to Brazil. It is now widely cultivated in the Tropical, Sub-Tropical and Warm temperate zones especially in Southern Europe and the Southern United States.</p>	<ul style="list-style-type: none"> <li>It is classified as a herb because of its non-woody stem.</li> <li>Its simple leaves are oblong to oval slightly lobed with its underside darker green than the upper surface.</li> <li>Both leaves and stem are covered with fine hairs.</li> <li>Its flowers sprout singly or in small clusters from the leaf axils. Individual flowers are star shaped, light purple in colour and have short stalks.</li> </ul>

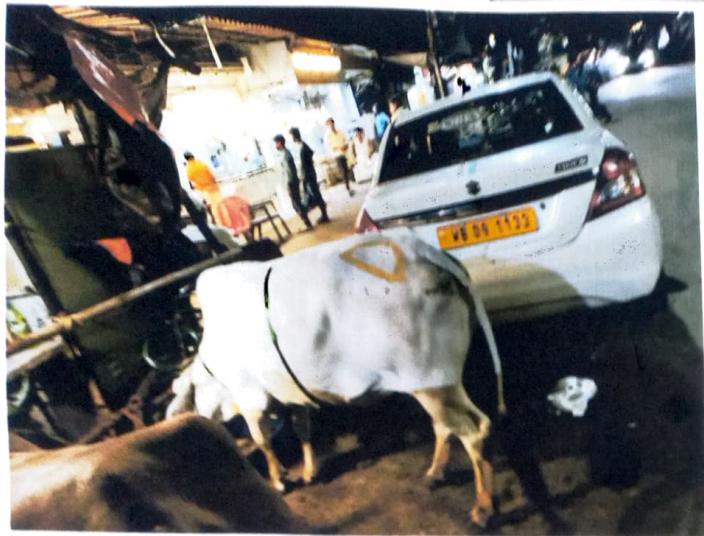


KHAJUR TREE

KHAJUR OR DATES  
TREE



BRINJAL  
TREE



COW

GBHI



SINGHISH



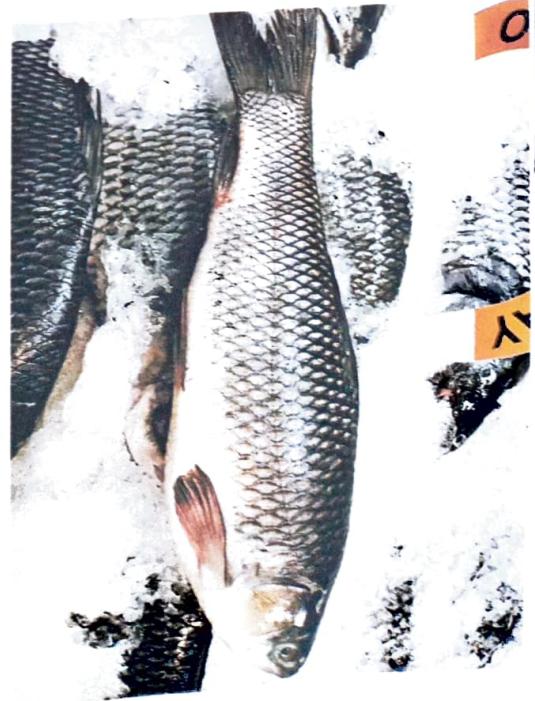
# FAUNA DIVERSITY

SL.NO	LOCAL NAME	SCIENTIFIC NAME	CHARACTERISTICS	HABITAT
1.	Singhi Fish Or Nācha	<u>Heteropneustes fossilis</u>	Their bodies are elongated and compressed with greatly depressed heads. They have long air sacs that serve as lungs that extend from the gill chamber. Their dorsal fins are short and have no spine. They are 30 cm in length.	Very common in pond, ditches, swamps and marshes. They are also found in muddy sweet. It can tolerate slightly brackish water. It is also found in drainage channels.
2.	Gākhi or Cow	<u>Bos taurus</u>	They tend to be stocky with long rectangular bodies. The head is small relative to body size. Weight and height vary greatly between domestic cattle breeds. Color varies widely among breeds. Eyes are located on the sides of their head.	They are found in grazing land. Nowadays they are found in pasture and ranges of open area. Different types of habitat include savannas, scrub forests and even desert edges. As long as they have lots of space and plenty of grass they are happy.

WHITE SWAN

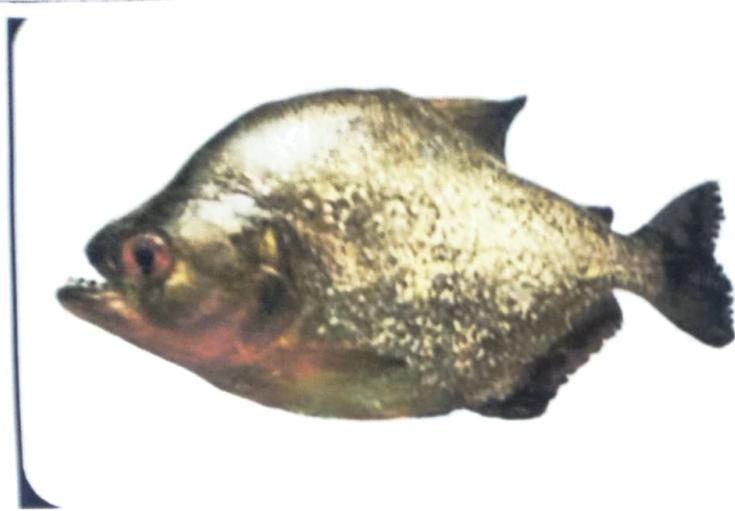


Mrigd.  
Mysit



ROTOOR ROL  
FISH

SL.NO	LOCAL NAME	SCIENTIFIC NAME	HABITAT	CHARACTERISTICS
3.	Sadahamsa or White Swan	<u>Cygnus olor</u>	They are large-bodied waterfowl that lives in marshes, lakes and other wetlands. They are found in colder places as well as in common area. Northern Europe, Asia North America. They are also found in Manasasore in the Himalaya.	They have the ability to swim and fly with incredible speed and agility. They are long-necked, heavy-bodied, big-footed birds. They migrate in diagonal formation or V formation at great heights. They move as fast on the water or in the air.
4.	Rohu or Rui Maacha/Fish	<u>Labeo rohita</u>	They occur in rivers throughout much of Northern and Central and Eastern India, Pakistan, Vietnam, Nepal, Bangladesh and Myanmar. It is also found in rivers of Peninsular India and Sri Lanka.	The body is thick and is covered with cycloid scales. Head is triangulated and mouth is inferior. Surface and under surface is brown colour. Belly is white silvered colour. They have two pair of nostrils. Mouth is covered with two lips. Teeth are absent in jaws.
5.	Mrigal Maacha or Mrigal Carp	<u>Cirrhinus cirrosus</u>	They are found in fast flowing streams and rivers but can tolerate high levels of Salinity.	The body are longish. The lower parts of their body are about straight lengthwise. Upper lip is curved to down.



PIRANHA  
FISH



BABY  
PIRANHA



MAGUR OR  
WALKING CAT FISH

SL.NO	LOCAL NAME	SCIENTIFIC NAME	HABITS	CHARACTERISTICS
-	-	-	They are fish of South Asian countries like sides gray colored. Two side and Bangladesh, India, Thailand lower part is silver colored. It Philippines.	They has a pair of trunk. Back They has a pair of trunk. Back
6.	Piranha Macha	<u>Pygocentrus nattereri</u>	They are native to the Central and Southern river systems of S. America where they inhabit tropical rivers and streams. They are found in muddy water. In U.S. they have been found in ponds, lakes, rivers and below falls.	Most species never grow larger than 60 cm (2 ft) long. Colours vary from silvery with orange undersides to almost completely black. They have deep bodies saw-edged bellies and large. Generally blunt heads with jaws bearing sharp, triangular teeth. It has
7.	Magi Maaleh or Walking Cat-fish	<u>Clarias batrachus</u>	They are found in Pakistan, India, Sri Lanka, Bangladesh, Myanmar, Singapore, Philippines. They are mostly found in ditches and swampy waters. Also found in ponds, streams, mud.	The greatest width of head equal its length. Upper jaw is longer than the lower jaw. Lower pair of lobes. Dorsal fin is very long and caudal fin is free. Scales absent. Length of about 32 cm and weight about 235 g.



CAT OR  
BIRALA



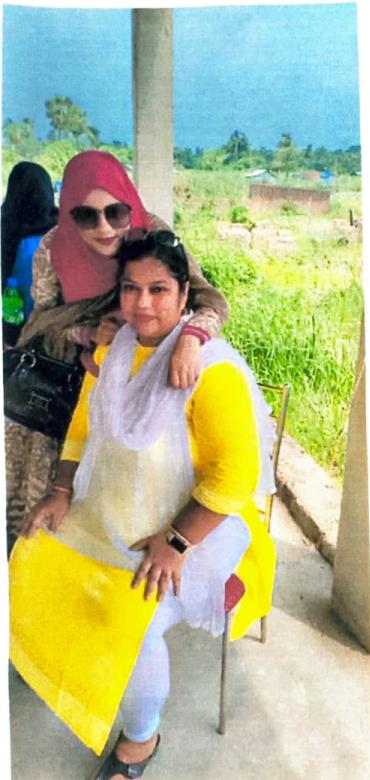
BUFFALO



RUPCHANDA  
OR POMFRET



SL NO	LOCAL NAME	SCIENTIFIC NAME	HABITAT	CHARACTERISTICS
8.	Bivala or Cat	<u>Felis catus</u>	They are found in areas where human lives but usually rural areas.	It is a prey animal that has long tail and sharp claws. Can jump 6 times up to their height. They have 18 toes. Can sleep for around 13-16 hrs a day (70% of their life). They are usually white, black, brown, yellow.
9.	Buffalo	<u>Bubalus bubalis</u>	They can live in grasslands, savanna, swamps, wetland, floodplains, mixed forest and glades	They kill more hunters than any other species. They are truly good runners. They are large and reach 6.8 to 11 ft in length. They are up to 5.6 in height and weigh in at between 660-1900 pound. They have smooth tongues.
10.	Rupchanda Naach or Chinese Ponyjet	<u>Pampus chinensis</u>	They are found in the muddy bottom near the sea coasts where depth is 100mtr. They are sometimes found in the estuarine brackish water. It is native to the Amazon Basin in tropical S. America.	It has flattened body with a deeply forked tail. They have skeleton and bones but is placed in the middle and top of its body. They have one single bone.



WITH MY BELOVED TEACHER  
BLESSED TO HAVE HER..

✓  
Shahnaz  
18/10/2021  
(5/5)