



UNIVERSITY OF CALCUTTA  
B. SC.  
BOTANY (HONOURS)

REGISTRATION NO: 044-1211-0274-18.

ROLL NO : 183044-11-0008.

SUBJECT: Field Notebook.

(CORE COURSE-VII)





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Ref. No.....

Date.....

## TO WHOM IT MAY CONCERN

This is to certify that Ms. Sayantani Das bearing Roll no.1830444-11-0008, Registration number 044-1211-0274-18 an examinee of B. Sc. Botany (Honours) CBCS, Semester 3 examination, 2019 of University of Calcutta has successfully completed a local excursion to AJC Bose Indian Botanic Garden on 18.03.2019 under my supervision. This is a compulsory part of their syllabus.

The examinee submitted a field report of this visit which partially completes the Practical part of Paper 7 of Botany Honours course.

*Shampriya Chowdhury*  
Dr. Shampriya Chowdhury 19.3.19

Assistant Professor and HOD

Dept. Of Botany

*Kinjalkini Biswas*  
19.3.19  
Dr. Kinjalkini Biswas

Principal

Muralidhar Girls' College

Principal  
Muralidhar Girls' College

**EXCURSION TO =**

**ACHARYA JAGADISH CHANDRA BOSE**

**INDIAN BOTANIC GARDEN**

**DATE - 11-09-19.**

Accompanying Teachers

Dr. Sangeeta Das chowdhury.

TEAM: 3rd Sem Students of Botany (Honours).





Group photo in  
Botanical garden.

2020

## INTRODUCTION

Botanical garden is a scientifically planned collection of trees, shrubs, herbs, climbers etc. which serve as a living repository of plants. In a planned Botanic Garden, plants having a close association or resemblances are usually grown together for better understanding of various plant groups for example, different species of Bamboos are grown in a exclusive group called Bambusetum. Similarly the gymnosperms in Pinetum evergreen pines (Pandanus) in Pandanetum woody tree species in Arboretum and orchids are grown in orchidarium etc. The Botanic garden not only acts as a place of aesthetic beauty attracting tourists and nature lovers but also offers ample of opportunities to botanists, hortical tourists and researchers to examine various aspect of Plant biology.

**EXAMINED**



Cactus House



During the last few decades most of the public parks or pleasure gardens which had been established earlier have been transformed into Botanic Gardens with multifarious objectives and activities.

The extensive and intensive exploration and study of the Indian flora has revealed that more than 30% of the flora is endemic and about 10% of the species (1700) are under various degree of threat. In order to protect these rare and endangered species, a large network of protected areas (Sanctuaries, National Park, Biosphere Reserve etc.) for in-situ conservation and Botanic Gardens for ex-situ conservation has been established.

In India, there is chain of Botanic gardens established in a very almost region of the country of which the Indian Botanic Garden, Howrah is among the oldest and largest garden in South-East Asia. This garden has played a very



Mimosa pudica  
Family - Fabaceae.



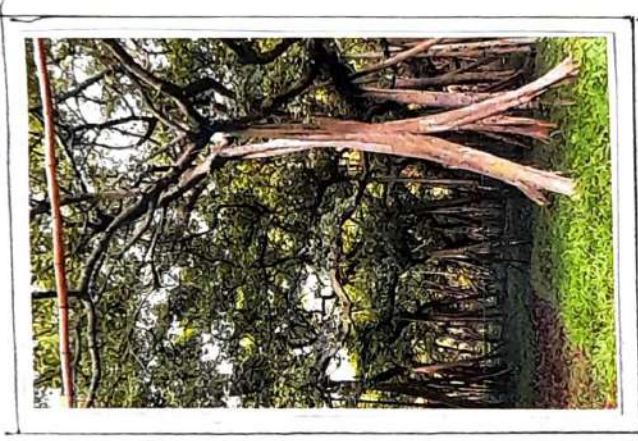
to a extent towards plant taxonomy of Roxburgh. He laid the foundation of modern plant taxonomy (Post Linnaeus) in India by establishing a large herbarium (the present day National Herbarium CAL) and is rightly called "father of Indian Botany" William Roxburgh left behind a huge collection of coloured drawings more than 2500 original colour paintings of Indian plants.

#### BRIEF HISTORY OF INDIAN BOTANIC GARDENS

A part from William Roxburgh, the other eminent botanists who served as superintendents during the pre-independence period were:

- Thomas Henry Colebrooke from 1813-1814.
- Buchanan Francis Hamilton from 1814-1815.
- Nathaniel Wallich from 1815-1816 (relieved of this duties).
- Thomas Casey from 1816-1817.
- Nathaniel Wallich from 1817-1842 (left due to ill health)

- William Griffith from 1812-1812.
  - Nathaniel Wallich from 1845-1847.
  - Hugh Falconer from 1847-1850.
  - Thomas Thomson from 1855-1861.
  - Thomas Anderson from 1861-1869.
  - C.B. Clarke from 1869-1871.
  - Captain George King from 1871-1897.
  - David Proin from 1897-1905.
- Lt. Col from -1923.
- Lt. Col Gage from 1906-1923.
  - C.C. Calder from 1923-1937.
  - K. Biswas from 1937-1955.



Ficus benghalensis

Family - Moraceae.

*Ficus benghalensis*



SALIENT FEATURES OF ACHARYA JAGADISH CHANDRA BOSE  
INDIAN BOTANIC GARDEN:—

Indian Botanic Garden is situated at the distance of 8 km from Howrah Railway Station and 26 km from Calcutta International Airport (Netaji International Airport). The Indian Botanic Garden covers an area of about 273 acres on the west bank of the River Ganga (Hooghly). The Indian Botanic Garden is one of the most famous gardens of the world like the Royal Botanic Garden, Kew (England). It is unique landscaping <sup>was initiated</sup> by Sir George King. The Garden is divided into 25 sections or divisions, each specified for growing different types of plants. There are 24 lakes in the

NAME OF THE PLANT

- 11) *Andropogon pumilata* (Kalmegh)
- 12) *Pandanus foetida*
- 13) *Gundllochalamus gigantomus* (Bamboo)
- 14) *Theobroma cacao* (chocolate tree)
- 15) *Platygotha alata* (sugarcane)
- 16) *Stychechos mura-vomica*
- 17) *Amphistha nobilis* (Queen of flowering plant)
- 18) *Bauhinia variegata*
- 19) *Brounea coccinea*
- 20) *Gysophyllum eomitte* (Rosogollata)
- 21) *Kigelia pinnata*

FAMILY

- Andropogon pumilata* - Poaceae  
*Pandanus foetida* - Pandanaceae  
*Gundllochalamus gigantomus* - Poaceae  
*Theobroma cacao* - Sterculiaceae  
*Platygotha alata* - Sterculiaceae  
*Stychechos mura-vomica* - Fabaceae  
*Amphistha nobilis* - Fabaceae  
*Bauhinia variegata* - Fabaceae  
*Brounea coccinea* - Fabaceae  
*Gysophyllum eomitte* - Sapotaceae  
*Kigelia pinnata* - Bignoniaceae



cycas circinalis

Family - cycadales.



We have also seen few species of gymnosperms growing of the Plantum of Acharya Jagadish Chandra Bose 'Indian Botanic Garden'. There are as follows: —

Name of the Plant	Family
<u>Cycas</u> <u>cineraria</u>	Cycadaceae.
<u>Cycas</u> <u>reticulata</u>	Cycadaceae.
<u>Pinus</u> <u>roxburghii</u>	Pinaceae.
<u>Podocarpus</u> <u>nervifolius</u>	Podocarpaceae.

**EXAMINED**



Gloriosa superba  
Family - Liliaceae.

## CONCLUSION

It was a great experience to visit Acharya Jagadish Chandra Bose Indian Botanic Garden where we came across different plant species of the world. Species growing in harmony with the Indigenous. Here we gathered knowledge on various types of plant belonging to different families. In the Botanic Garden we observed various situations of plants - The medical plant in "Chamok Udayam" orchids in the National orchiderium, several species of palm in the "large palm house" few species of cactus and other succulents in the "Cactus House"/"Glass House" different species of gymnosperm in the Pinetum, bamboos in Bambusetum etc. we also saw the famous "The Great Banyan Tree", Giant Lily, Branching palm, Cannon Ball tree, Mad trees etc. which are the most attracting plants of garden.

During this excursion we visited the "Central National Herbarium" (CAL) which is situated inside the garden from where we get some useful knowledge on herbarium methodology. It was our



opportunity to visit the type section of CNH, where we had a look at the wall catalogue and the beautiful colour icons. These icons were unique as these were painted with natural dye during early 19<sup>th</sup> - 20<sup>th</sup> century, mostly by the native artists.

It was also obvious that the visit to Acharya Jagadish Chandra Bose Indian Botanic Garden has increased our interest on plants, environmental and their conservation. We, our whole department are grateful to our teachers of Botany Department for arranging this educational excursion.

S. Daschoudhury  
30.11.19.