



# BHAIRAB GANGULY COLLEGE

Belgharia, Kolkata, West Bengal 700056



**THIRD CYCLE NAAC ACCREDITATION 2023**

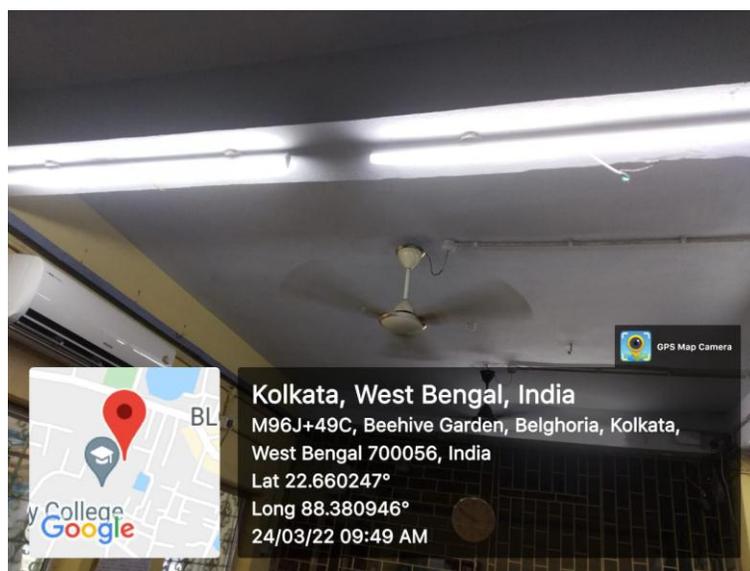
## **CRITERION 7 :Institutional Values and Best Practices**

**7.1.2. Supporting documents for Environmental Consciousness and Sustainability and Divyangjan friendly initiatives**

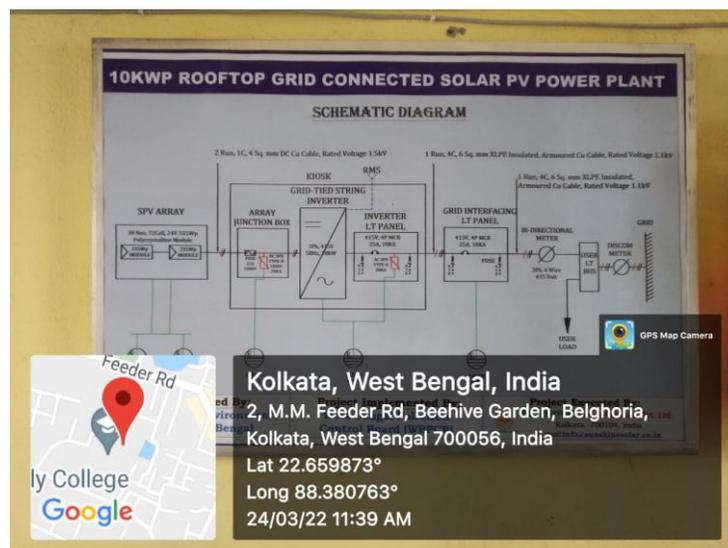
## 7.1.2. Alternate sources of energy and energy conservation measures:

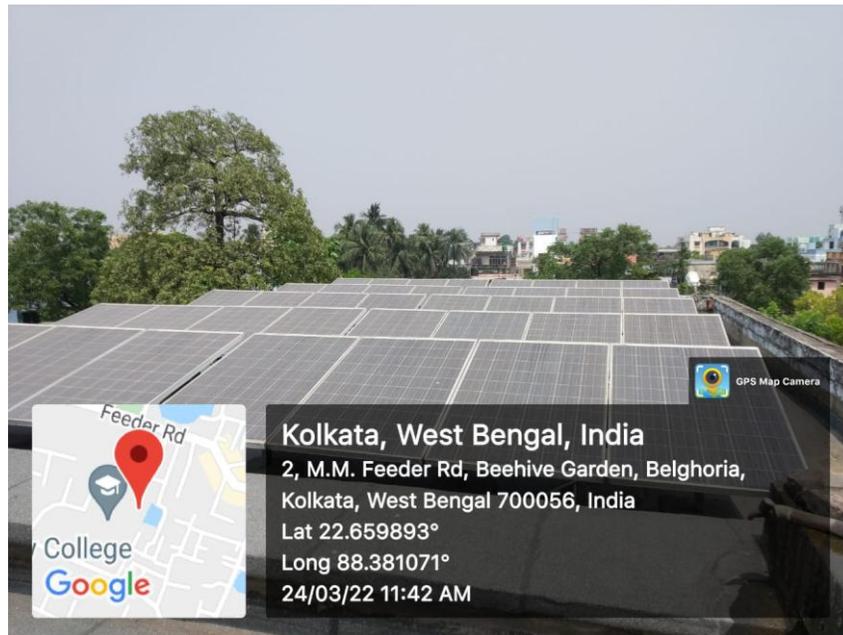
College has used LED tube lights for managing power consumption of non-renewable energy. College also strategically use solar power as a renewable source of energy. To reduce electricity consumption the college has install two panels of 10 KWP grid connected roof top solar photovoltaic power plant. By using the solar panel College posted one High Mast Lights.

### (1) Facilities for alternate sources of energy and energy conservation measures



Use of LED tube light





**Solar Energy: Two panels of 10 KW each**



**High Mast Light using Solar Panel (5 in total)**

## Documents regarding solar power

CIN: U29307WB2005PTC102158

**SUNPOWER**  
Energy Technologies Pvt. Ltd.

SUN  
POWER

Regd. Off.: 130/20/1, Bakrahat Road  
Hanspukur Green Park, P.O.- Joka, Kolkata-700104,  
West Bengal, India  
Phone : +91 33 2498 0521 • Fax : +91 33 2498 0680  
E-mail : sunpowertech@vsnl.net; info@sunpowertech.co.in  
Web : www.sunpowertech.co.in

[Designer, Manufacturer & Supplier of Solar PV , Thermal & Wind Systems & Equipments]

SETPL/MKTG/21-22/12-02  
17.12.2020

To  
The Principal,  
Bhairab Ganguly College,  
Feeder Road, Belghoria, Kolkata,  
West Bengal 700056

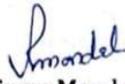
Sub. : Offer for AMC of 10kWp GCRT solar PV systems Installed at your college premises.  
Ref.: Telephonic enquiry by College teacher.

Dear Sir,

You may be well aware that, the 10 KWp SPV power plant systems which installed at your premises has been expired. To continue of AMC of installed solar PV systems, we are attaching our Commercial offer with terms & conditions attached in Annexure - A (Commercial offer and Scope of Quarterly Preventive Maintenance) for your kind consideration. However, we will check the health of the system as soon as receive the Service Order from your end and accordingly we will give you the acceptance.

We now await your further instruction which will receive our very best prompt action.

Tanking you,  
Yours faithfully  
For **SUNPOWER Energy Technologies Pvt. Ltd.**

  
Rimpa Mondal  
(Deputy Engineer)

Encl.: a/a  
Sunpower Energy Technologies Pvt. Ltd.  
130/20/1, Bakrahat Road, P.O.-Joka,  
Kolkata-700 104, India

# BHAIRAB GANGULY COLLEGE



(Government Sponsored)  
'A' Accredited Institute by NAAC  
Belgharia, Kolkata-700 056  
Phone : (033) 2553 2280 / (033) 2564 3191  
E-mail : bhairab1968@gmail.com  
Website : www.bhairabgangulycollege.ac.in

1819/CESC/2021

13/05/2021

Ref. No. ....

Date .....

To  
The Regional Manager  
C.E.S.C. North Suburban Regional Office  
32, B.T. Road  
Kolkata-700058

**Sub:** Arrangement of Net- metering provision for 10 kWp rooftop power plant installed at  
**BHAIRAB GANGULY COLLEGE, BELGHARIA**

Site Name: **BHAIRAB GANGULY COLLEGE**

Address: **FEEDER ROAD, BELGHARIA, KOLKATA-700056**

**Consumer ID: 85000029382**

Sir,

This is to inform you, that a 10 kWp capacity Rooftop Grid Connected SPV Power Plant has been installed at our institution premises **BHAIRAB GANGULY COLLEGE**.

In this regards, we would like to request you to install a net meter against the consumer ID as mentioned above, so that the Solar Power Plant can be connected to the grid. In this context, it is appropriate to mention that the West Bengal Electricity Regularity Commission (WBERC) vide notification no. 50 dt 22.03.2013 has allowed net - metering provision for the roof top PV installation of capacity ranging from 5 KW to 100 KW.

Accordingly, we would again like to request you to kindly take appropriate necessary action so that our organisation gets the benefit of net- metering.

Recent electricity bill is enclosed for ready reference.

Yours faithfully,

(Dr. Subhranil Som)

Principal  
**BHAIRAB GANGULY COLLEGE**  
Belgharia, Kolkata-56

Contact Person Name: Shri Arup Kumar Banerjee  
Mobile No: 9474492931 / 8670844267

**Date -**

**Project Name: 50 nos. 10kWp Roof Top Grid Connected SPV Power Plant.**

**LOA No: 2821-6K/WPB/274/2018, Date: 16.12.2019**

**Customer Name: West Bengal Pollution Control Board, Kolkata, West Bengal**

### **TO WHOM IT MAY CONCERN**

This is to certified that the representative of M/S- Sunshine Power Products Pvt. Ltd. has visited at site for maintenance of 10KWp Solar PV Grid connected Power Plant System to do the following job -

- a. Checking and tightening of all electrical connections.
- b. Checking and tightening of all mechanical fittings.
- c. Checking the earthing systems
- d. Cleaning of Modules, Inverter, and other equipments.
- e. Checking all electrical parameters.
- f. Overall checking of the systems health for smooth functioning.

The SPV Power Plant System working satisfactorily.

For

**(Authorized Signatory)**

*K. Saha*  
29/11/2024

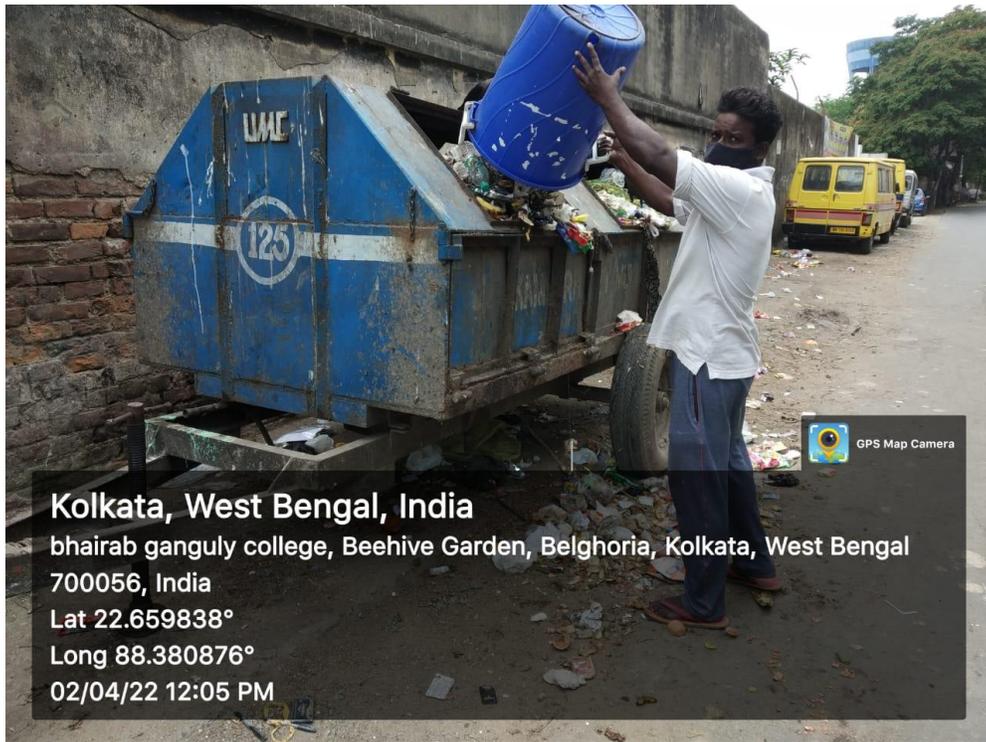


## **(2) Degradable and nondegradable waste management**

College has used two types of bins one for dumping degradable ( green) and other for non-degradable ( blue) wastes and placed at different sites in college premises. Kamarhati municipality regularly collects the wastes from college. College has also signed agreement since 03/04/2017 with Hulladek Recycling Private Limited for regularly managing E-waste of the college.



**Green and blue bins**



**Collection by local municipality (degradable waste)**



**E-waste collection**

## Documents of Agreement with Hulladeck Private Limited

Hulladek Recycling Private Limited  
5, Deshpriya Sashmal Road, Kolkata 700033  
☎ 1800-212-7880 | ☎ 9903028800  
🌐 www.hulladek.in | 📧 help@hulladek.re

**Hulladek**  
Hungry for Waste

### SERVICE AGREEMENT FOR E-WASTE MANAGEMENT

The Agreement is entered into at Kolkata on this 3<sup>rd</sup> day of April, 2017

#### By and Between

**Hulladek Recycling Private Limited**, a company incorporated under the Companies Act 2013 having its registered office at 4, D.L. Khan Road, Flat No. B-401, 4<sup>th</sup> Floor, Kolkata-700025, West Bengal, India hereinafter referred to as First Party which expression shall unless contrary to and or repugnant to the context mean and include its successors representative and permitted assigns through Mr. Nandan Mall to enter into and sign this Agreement for and on behalf of the First Party.

#### AND

**Bhairab Ganguly College** a company incorporated under the Companies Act 1956 having its registered office at 2, Feeder Rd, Beehive Garden, Belgharia, Kolkata, West Bengal 700056 hereinafter referred to as Second Party which expression shall unless contrary to and or repugnant to the context mean and include its successors representative and permitted assigns through Dr. Minakshi Ray (Principal) to enter into and sign this Agreement for and on behalf of the Second Party.

- A.) First Party is a registered WBPCB vide The Memo No.2S(HW)(EW)-3094/2015 dated 07.12.2015 valid up to 31.07.2020 and is authorized to undertake activities WBPCB
- B.) The Second Party in compliance of E-Waste Management Rules, 2016 desires to have services for management of their Electronic Waste except liquid waste.



*Minakshi Ray*  
Principal  
BHAIRAB GANGULY COLLEGE  
Belgharia, Kolkata-56

GSTIN: 19AADCH4384E1Z1  
CPCB REGISTRATION NO.: B-29016(12)/(PRO)/18/WM-III Division



Now, being that, this Agreement witnesses the following terms & conditions to be performed by both the parties to the Agreement.

1. The First Party has agreed to pick up, transport, carry and recycle/dispose of the E-Waste from the second party as per the norms prescribed by the Government Authorities from time to time.
2. The First Party has agreed to make available Utilization Certificate confirming that E-Waste provided by the Second party to the First Party has been recycled/ disposed of as per the norms prescribed by the Government Authorities within 60 days of the pick up the E-Waste.
  - a. The second party will sign required documents to acknowledge that E-Waste has been handed over to the First Party.
3. This agreement will be in force for a period of Three (03) years (03.04.2017 - 02.04.2020) from the date of execution of this Agreement and can be renewed at the end of every period by mutual consent.
4. The second party is expected to generate minimum 500kgs of E-Waste annually during each contractual term.
5. The First Party Shall install an "E-waste Collection Bin" of Size "1 meter(L)x0.9meter (D) x 0.8 meter (W)" at or any other location as may be prescribed by the second party.
6. The Second Party has agreed to pay an 'agreement fee' of ₹7,000/- + 18% GST annually

**SERVICE AGREEMENT FOR E-WASTE MANAGEMENT**

The Agreement is entered into at Kolkata on this 2<sup>nd</sup> day of April, 2021

**By and Between**

**Hulladek Recycling Private Limited**, a company incorporated under the Companies Act 2013 having its registered office at **4, D.L. Khan Road, Flat No. B-401, 4<sup>th</sup> Floor, Kolkata-700025, West Bengal, India** hereinafter referred to as First Party which expression shall unless contrary to and or repugnant to the context mean and include its successors representative and permitted assigns through **Mr. Nandan Mall** to enter into and sign this Agreement for and on behalf of the **First Party**.

**AND**

**Bhairab Ganguly College**, a company incorporated under the Companies Act 1956 having its registered office at **2, Feeder Rd, Beehive Garden, Belgharia, Kolkata, West Bengal 700056** hereinafter referred to as Second Party which expression shall unless contrary to and or repugnant to the context mean and include its successors representative and permitted assigns through **Prof. (Dr.) Subhranil Som (Principal)** to enter into and sign this Agreement for and on behalf of the **Second Party**.

- A.) First Party is a registered Producer Responsibility Organization (PRO) vide The Registration No **B-29016(12)/(PRO)/18/WM-III Division** dated **12.11.2018** valid up to **12.11.2023** and is authorized to undertake activities prescribed for Producer Responsibility Organizations.
- B.) The Second Party in compliance of E-Waste Management Rules, 2016 desires to have services for management of their Electronic Waste except liquid waste.



*Subhranil Som*  
Principal  
BHAIRAB GANGULY COLLEGE  
Belgharia, Kolkata-56

TIN: 19AADCH4384E1Z1  
CB REGISTRATION NO.: B-29016(12)/(PRO)/18/WM-III Division



**Now, being that, this Agreement witnesses the following terms & conditions to be performed by both the parties to the Agreement**

- The First Party has agreed to pick up, transport, carry and recycle/dispose of the E-Waste from the second party as per the norms prescribed by the Government Authorities from time to time
- The First Party has agreed to make available Utilization Certificate confirming that E-Waste provided by the Second party to the First Party has been recycled/ disposed of as per the norms prescribed by the Government Authorities within 60 days of the pick up the E-Waste
  - The second party will sign required documents to acknowledge that E-Waste has been handed over to the First Party.
- This agreement will be in force for a period of **Three (03) years (02.04.2021 – 01.04.2024)** from the date of execution of this Agreement and can be renewed at the end of every period by mutual consent.
- The second party is expected to generate minimum 500kgs of E-Waste annually during each contractual term.
- The First Party Shall install an "**E-waste Collection Bin**" of Size "**1 meter(L)x0.9meter (D) x 0.8 meter (W)**" at ,or any other location as may be prescribed by the second party.

# CERTIFICATE OF E-WASTE RECYCLING

This certificate is proudly presented to

BHAIKAB GANGULY COLLEGE  
for the ethical collection and  
channelization for recycling of  
394.60 kgs of E-waste.

This document certifies that all materials/equipment have been  
channelized for recycling under standards set down in the  
E-waste (Management) Rules, 2016 and amendments thereafter.



Chief Executive Officer

Certificate No. - HUL/2017-18/K01/July/05

Date - 22-AUG-2017 [Duplicate]



**Hulladek**  
Hungry for waste

CPCB REGISTRATION NO.: B-29016(12)/(PRO)/18/WM-III Division

# CERTIFICATE OF E-WASTE RECYCLING

This certificate is proudly presented to

BHAIKAB GANGULY COLLEGE  
for the ethical collection and  
channelization for recycling of  
589.30 kgs of E-waste.

This document certifies that all materials/equipment have been  
channelized for recycling under standards set down in the  
E-waste (Management) Rules, 2016 and amendments thereafter.



Chief Executive Officer

Certificate No. - HUL/2018-19/K01/Dec/08

Date - 28-JAN-2019 [Duplicate]



**Hulladek**  
Hungry for waste

CPCB REGISTRATION NO.: B-29016(12)/(PRO)/18/WM-III Division

# CERTIFICATE OF E-WASTE RECYCLING

This certificate is proudly presented to

BHAIKAB GANGULY COLLEGE  
for the ethical collection and  
channelization for recycling of  
294.10 kgs of E-waste.

This document certifies that all materials/equipment have been  
channelized for recycling under standards set down in the  
E-waste (Management) Rules, 2016 and amendments thereafter.



Chief Executive Officer

Certificate No. - 1401/22-23/04019

Date - 25-MAY-2022



**Hulladek**  
Hungry for waste

CPCB REGISTRATION NO.: B-29016(12)/(PRO)/18/WM-III Division

### **(3) Rain water harvesting & Maintenance of water bodies in the Institution**

Bhairab Ganguly College introduced the Rain Water Harvesting Project titled “MEGH-KALASH” for conserving rain water. We can explain briefly its effectiveness by the following way:

**Christening:** Clouds in the sky bring rain and Kalash, the earthen pot, or the earth itself, holds the rain water. So, the name is “Megh Kalash” after Tagore’s one of the verses.

**Defining:** Rain water harvesting is a very effective method of water management and its conservation. This refers to collection and storage of rain water for use in times of needs of human, animal and plant.

#### ***Purpose of the Project:***

- To utilize rain water and in the process lessen dependence on municipal supply
- Conservation of water resources in consequent to the govt. policy “Jal Dharo Jal Varo”.
- To irrigate the garden area and if necessitates, use of this water for the toilets.
- To create conservation awareness among college students and others about water.
- To recharge ground water through recharge pits.
- To improve garden ecology by promoting vegetation cover and thus attracting birds, butterflies and others.

**Location of the Project:** Bhairab Ganguly College Garden sides, beside the main building where rain water come down through the rain pipes.

#### ***Details of the Project Plan:***

No. of Tanks: 5

#### ***Catchment Area:***

Tanks 1 & 2. -- 2476.9 square ft. (For Paired Tanks)

Tanks 3 ,4 & 5-- 2420 square ft.

**Transfer Channel Length:** Rain water pipe length 40 ft. approx. from the roof to the tank for each of the sites.

**Storage Capacity:** Average storage capacity: 1000 litres for each of the tanks.

Total Capacity : 4000 litres when full.

**Harvesting Scheme:**

**Step I: Collection**

**Step II: Transfer through pipelines**

**Step III: Storage Tanks**

**Step IV: Distribution through pipes for watering nearby garden supply water to the adjacent toilets**

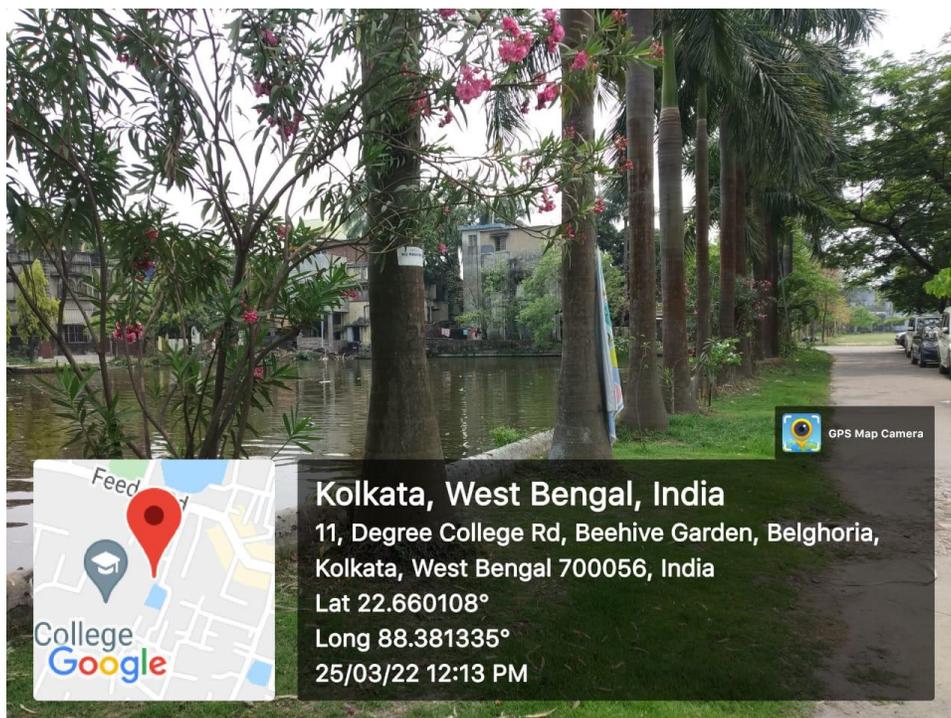
**Step V: Recharge with excess water for underground through Recharge Pits/Recharge Trench/Tube-well.**

*Recharge Pits are intended to be the size of 1 to 2 metres wide and 2 to 3 metres deep each; back filled with gravels/broken bricks (5—20 cm), gravels (5—10 mm) and coarse sand (1.5 – 2 mm).*

Rather the college also maintain water bodies in adjacent pond in a good manner.



**Water conservation facilities (Megh Kalas, 5 in total )**



**Maintenance of water bodies (adjacent pond)**

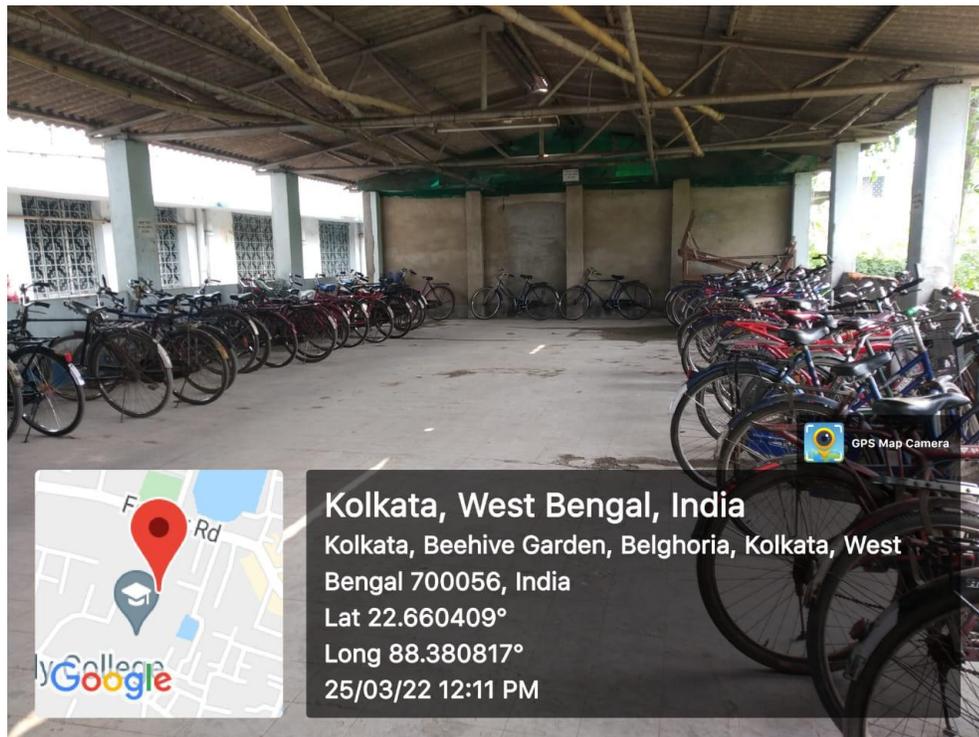
#### **(4) Green campus initiatives**

All most all students, teachers and non-teaching staffs uses by-cycles for coming college regularly. The college campus was made a plastic-free zone. College has pedestrian friendly pathways. Rose gardens, landscaping with trees and plants, butterfly gardens, college has also herbal garden (Niramoy Nikunjo), fruit gardens, many saplings were planted in both college campus.

One of the best practices of the College is the Project of **Operation Green Neighbourhood**. Throughout the academic year (2017-18), a number of initiatives geared to this objective have been taken. The programme ends with the celebration of *World Environment Day* on 5th June, 2018. Our College was celebrating the Golden Jubilee Year (2017-2018) and as a part of the programme of the green initiatives, we have taken a giant step, as we have reached a total of 3 Wards, namely, Ward No. 25, Ward No. 27 and Ward no. 28 under Kamarhati Municipality, Kamarhati, Kolkata, for plantation of different saplings. A total of 90 saplings have been planted in different locations of all these wards. Among the saplings, there were sapling of 50 Arjun Tree and others sapling consist of Debdaru Tree, Krishnachura Tree, Radhachura Tree, Bokul Tree, Guava Tree, Jarul Tree, Erika Palm and Rangan Tree etc. On 5th June, 2018, a number of dignitaries have participated in the occasion to celebrate World Environment Day. We had with

us Dr. Pradip Barui, Forest Officer, Mr. Biswanath Sengupta, Range Officer, Dept. of Forest, Govt. of West Bengal, Dr. Tarit Roychowdhury, Director, School of Environment Science, Jadavpur University, Dr. Dipanjan Majumdar, Scientist, CSIR, NEERI. Tree plantation was done in the College campus followed by a seminar on World Environment. A large number of students have participated in the programme very enthusiastically. On that particular day slogans of “*Plastic Free Zone*” and “*Arsenic Free Water*” were raised and all dignitaries have explained the importance of necessity of creating and maintenance of Green Environment.

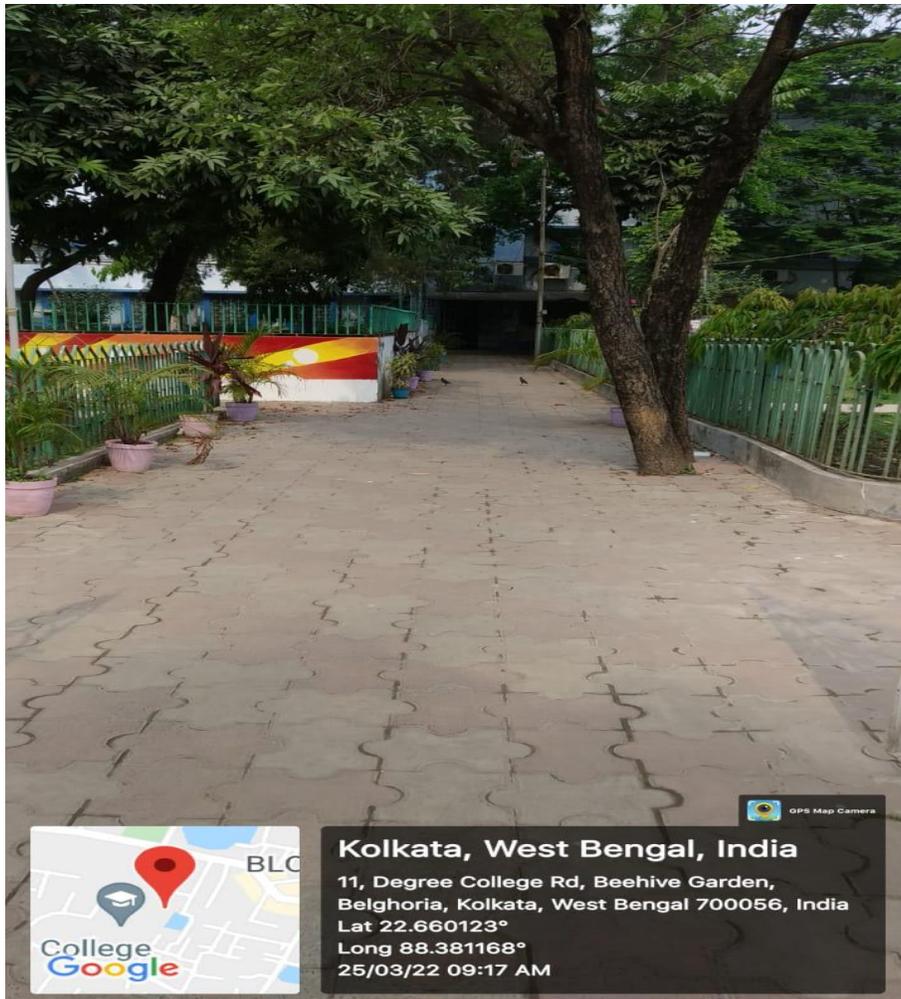
College also has an urban forest (Panorab). College has also initiated environmental consciousness through wall – paintings.



## Use of Bicycles



**Ban on use of Plastic**



**Pedestrian Friendly pathways**



**Rose Garden**



**Landscaping with trees and plants**



Butterfly garden



Part of the Herbal Garden( Niramoy Nikunja)



**Bird's nest**



**Fruit Garden**





**Tree Plantation**



URBAN FOREST (PRANOROB)

## WALL PAINTINGS FOR ENVIRONMENTAL CONSCIOUSNESS



## **(5) Disabled-friendly, barrier free environment in the Institution**

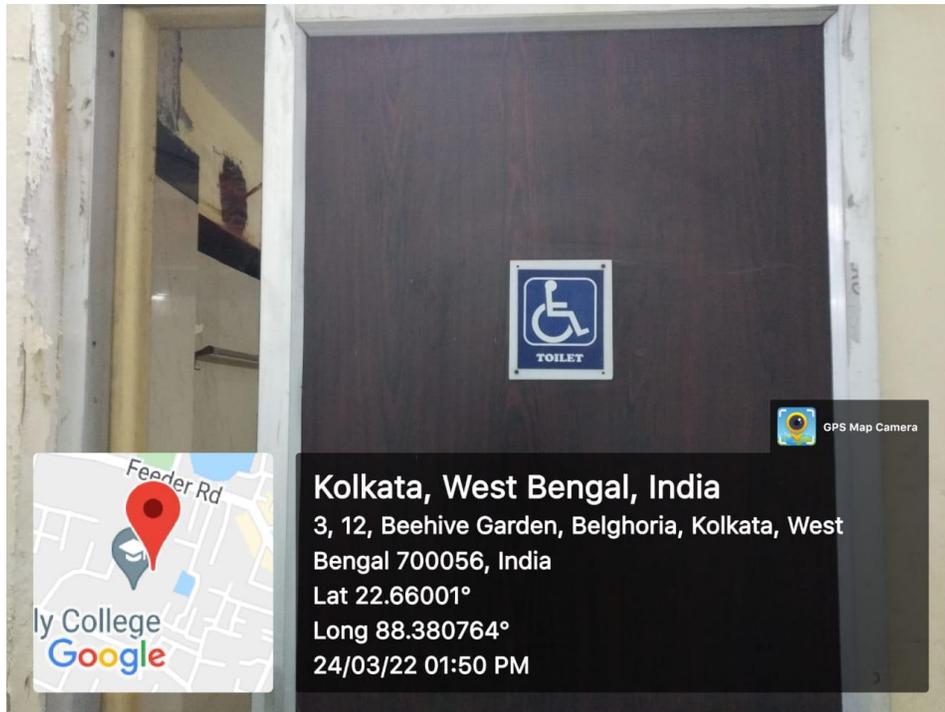
Special concession schemes have been introduced for physically challenged students. They are provided vehicles in case far-off examination centres. Students with writing disability are provided writer. The college provided facilities such as ramp, wheel chairs, braille software for visually impaired students, and magic screen magnifying software whenever needed. A specially designed toilet constructed for physically challenged students.

Rather it we can point out some other facilities which are provided by our college by the following manner.

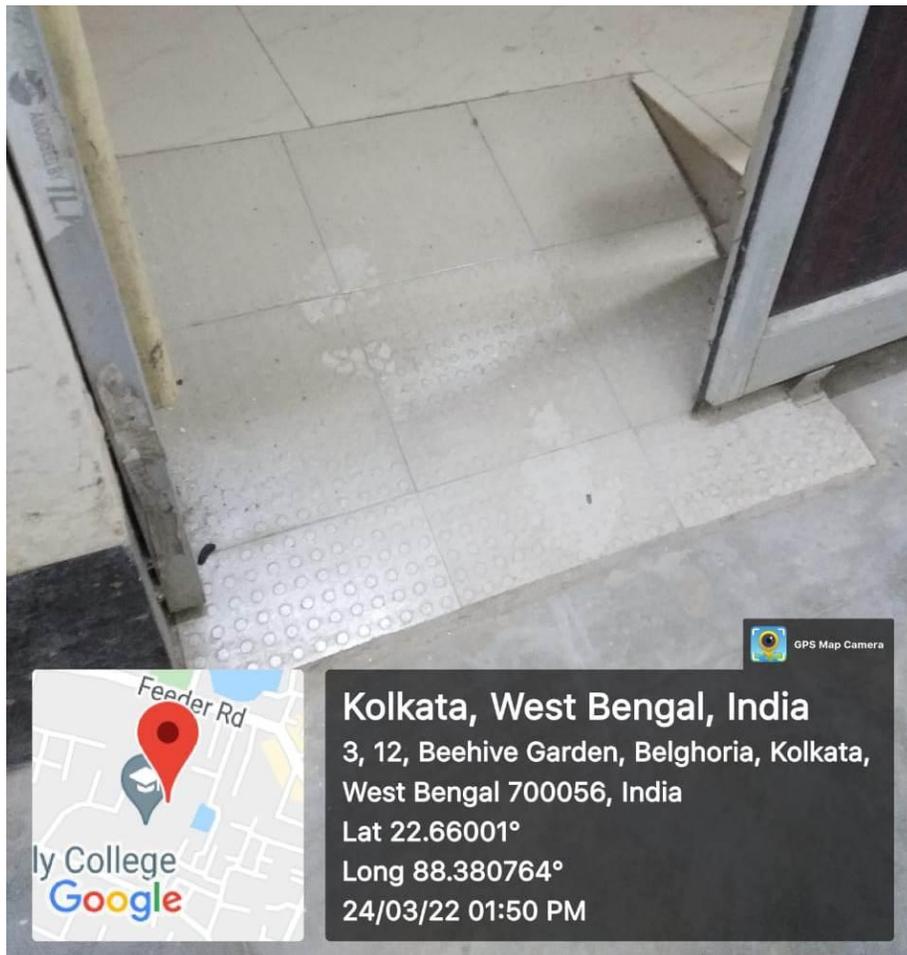
- Seats are reserved as per Govt. rules
- Tuition fee waived
- Extra time is provided during the examination as per rules
- Library staff assistance to access required books



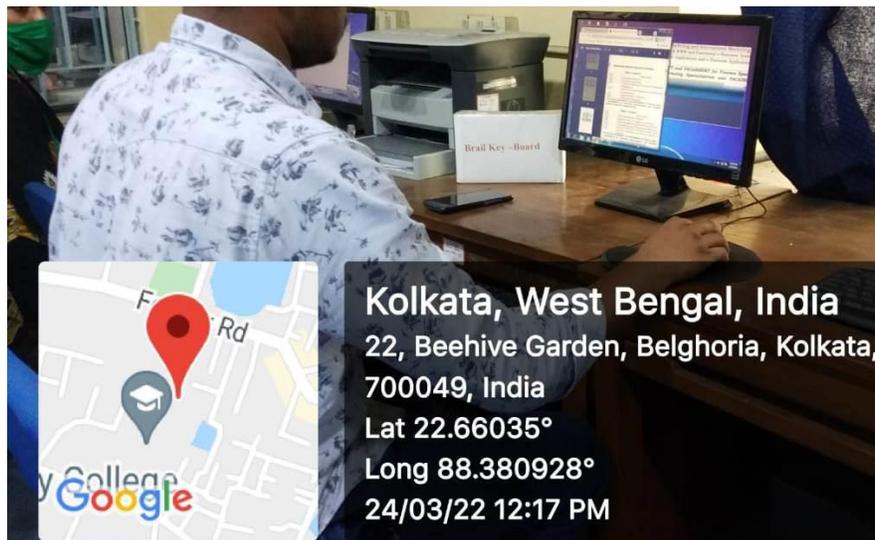
**Wheelchair for Specially-abled Students**



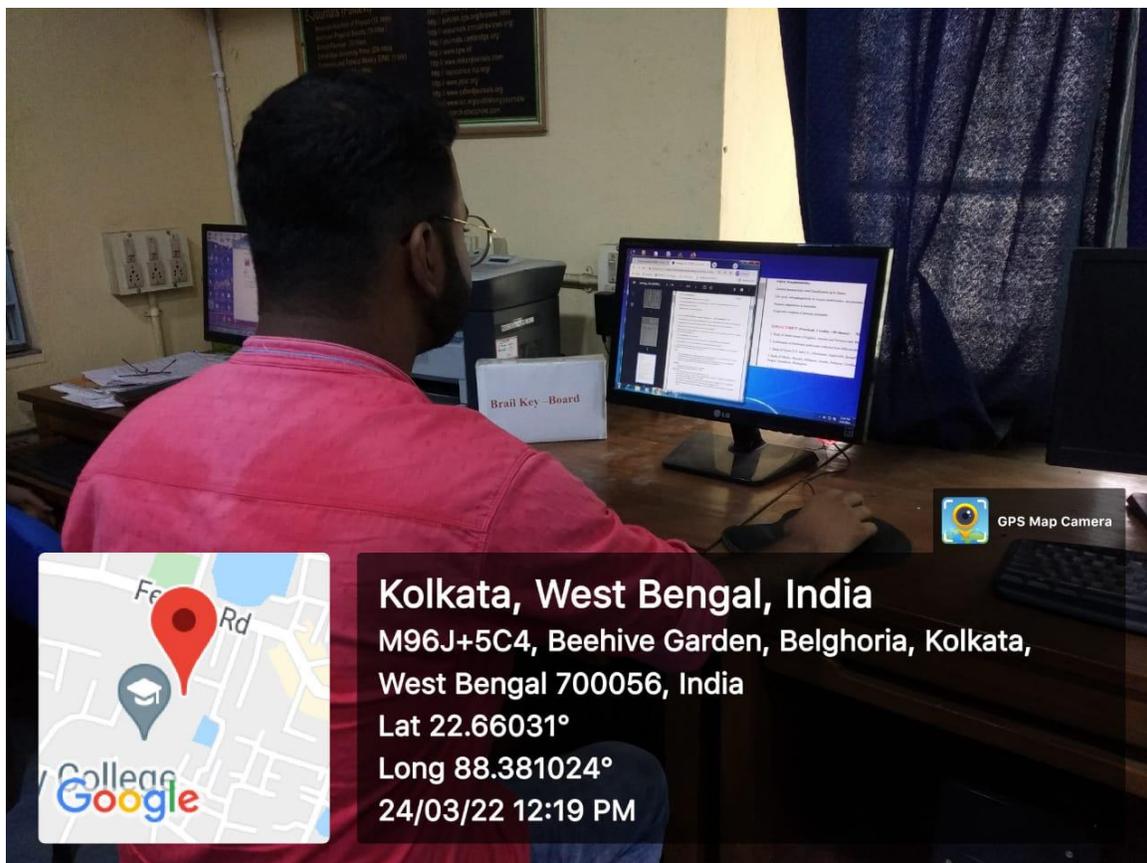
**Disabled-friendly washroom**



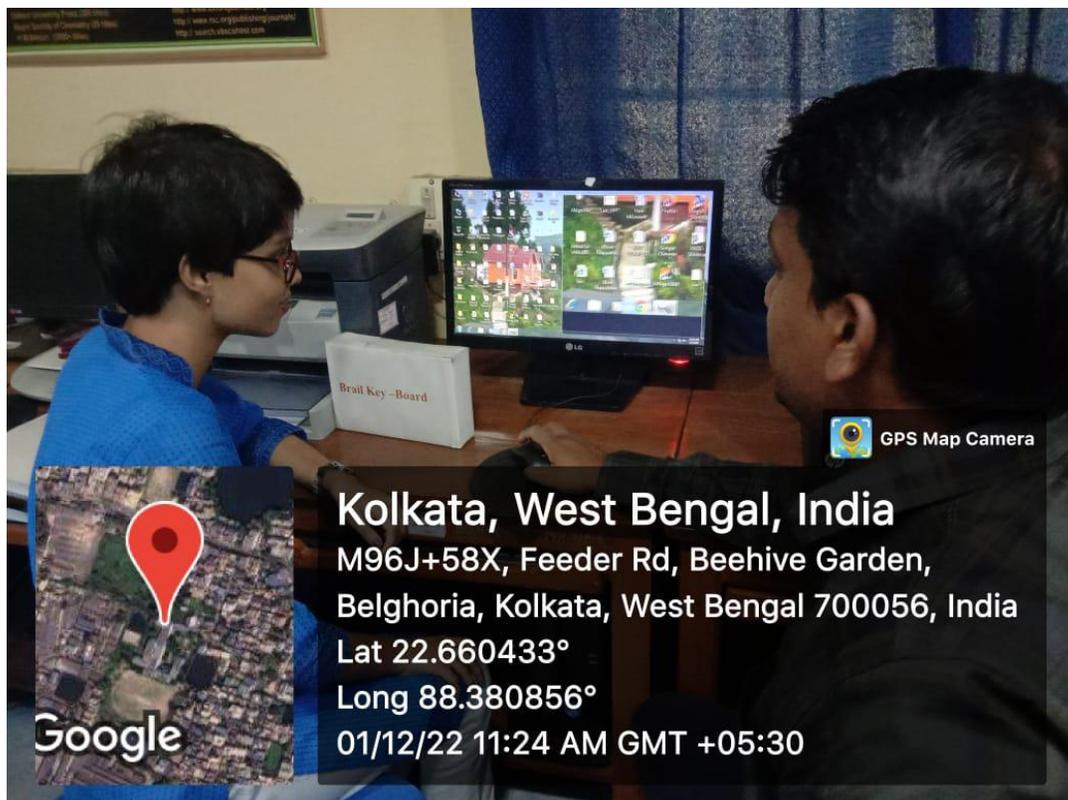
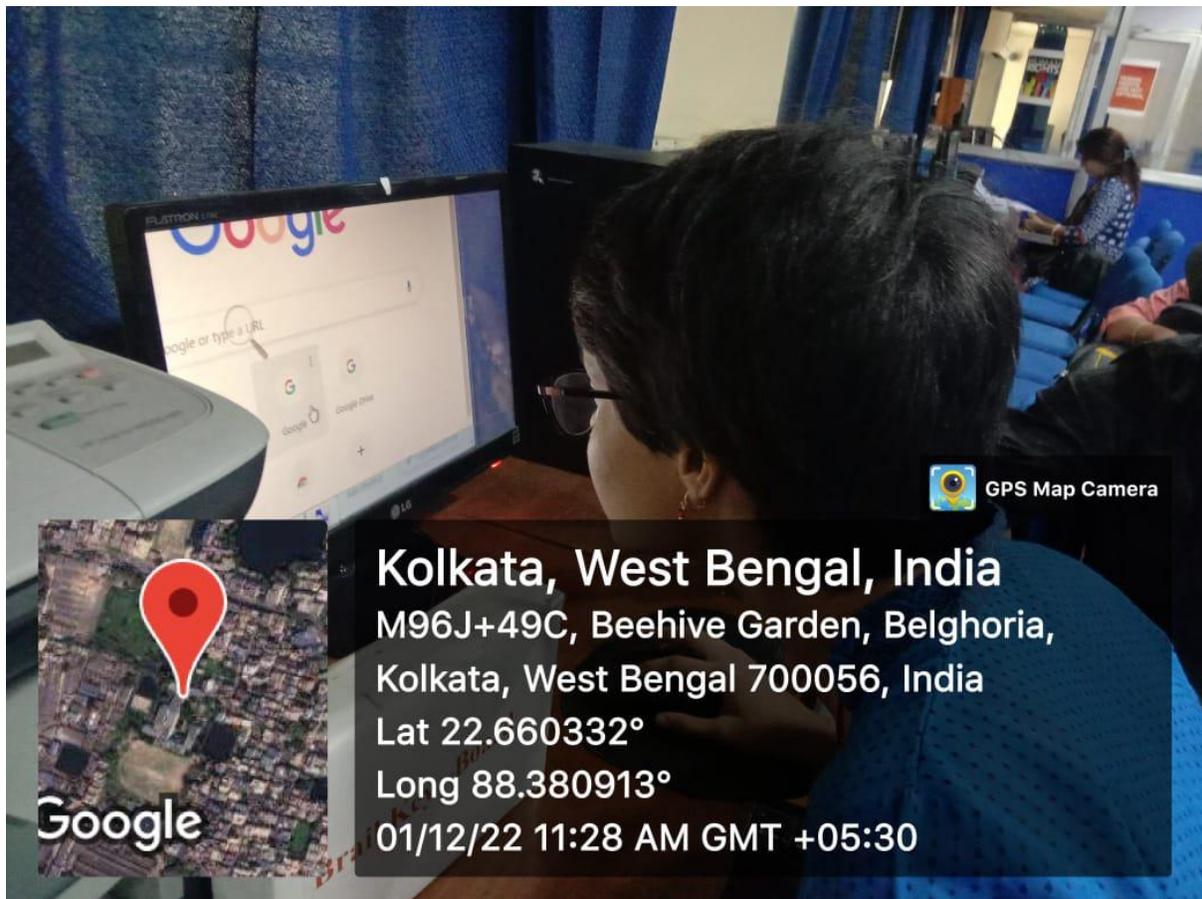
## Ramp for Specially-abled students



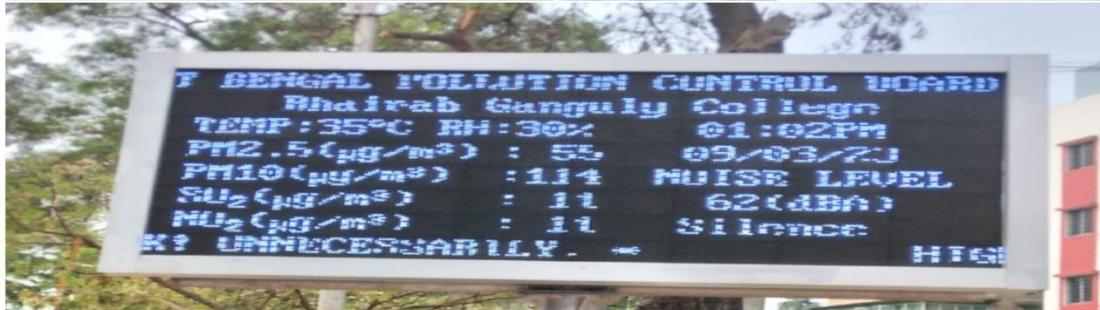
**Assistive technology for visually challenged students - Brail Keyboard**



## Low-Vision Magnifying Software to access digital resources



A visually impaired student using assistive technology



Signage Boards displaying: Students' facilities, notices, pollution indicator, directions