GREEN AND ENVIRONMENT AUDIT REPORT

[2021 – 2022]

FOR

KANYA MAHAVIDYALAYA

GEETANAGAR, GUWAHATI-781021, ASSAM, INDIA

Conducted By

ENVIRO-TESTING-SERVICES

BIJAY NAGAR, NOONMATI, GUWAHATI-781020, ASSAM

FEBRUARY-2022

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February-2022

01	*20-02-2022*	*Issued For* **Kanya Mahavidyalaya Geetanagar, Guwahati-781021, Assam, India**		
No.	Date	Description	Checked	Approved
ETS, ENVIRO-TESTING-SERVICES Guwahati	A Report on Green and Environment Audit Report		*Job No. :ETS /KM /GEAR/ 01 dated 20/02/2022*	
			Doc: Final Report	

ETS-GUWAHATI

ENVIRO-TESTING-SERVICES

Accredited by SPCB Assam, ISO 9001, ISO 45001, MSME

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Ref: ETS/KM/GEAR/01/2022 **Date: 20th February 2022**

COMPLETION CERTIFICATE

This is a Green and Environmental report compiled on the basis of field survey and field investigation of various environmental components such as Land Use Land Cover, Micro meteorological Quality, Ambient Air Quality, Drinking Water Quality, Soil Quality, Noise Quality, Carbon Footprint ,Flora, Fauna along with environmental and Energy management practices.

The present work was carried out at the request of the Principal, Kanya Mahavidyalaya vide order number KM /Green Audit/Invitation/2021-22 Dated 20.01.2021. The findings of the study carried out during the period of February 2021 to January 2022 are presented in this report. All the Analysis of Environmental Quality Parameters is done at the laboratories of Enviro Testing Services, Noonmati, Guwahati. The Laboratory is duly recognised by State Pollution Control Board, Assam, ISO 9001 :2015; ISO 45001:2018 and MSME.

For Enviro Testing Services

ENVIRO TESTING SERVICES GUWAHATI, ASSAM

Date: 20.02.2022

(Dr. Hrishikesh Sarma)
Ex. Director, ETS, Guwahati

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Green and Environment Audit Assessment Team thanks Dr. Rina Rani Bardalai, Principal, Kanya Mahavidyalaya for assigning this important work of Green and Environment Audit. We appreciate the cooperation to us for completion of the study.

We would like to convey our sincere thanks to all the Heads of the various Departments of Kanya Mahavidlaya for giving us necessary inputs to carry out this very vital exercise of Green Audit.

Our special thanks go to the faculty of Kanya Mahavidlaya:

Mr. Guptajit Pathak, IQAC Coordinator

Mrs. Ananya Roy, Department of Bengali

Mrs. Sikha Sarma, Department of Philosophy

Mr. Tridib Goswami, Department of History

We are also thankful to other staff members who were actively involved while collecting the data and conducting field survey

For Enviro Testing Services

Date: 20.02.2022

(Dr. Hrishikesh Sarma)
Ex. Director, ETS, Guwahati

Contents

1.0 Introduction of the Institute

1.1 Brief Introduction

Kanya Mahavidyalaya, the higher education institution for girls, situated at Geetanagar, Guwahati-781021(Assam) has been imparting education up to graduate level since 16th September, 1977. The college has been established by the effort of a group of educationists and social workers of Pub-Guwahati area which started its academic activities at Pub-Guwahati Girls' High School and administrative activities at the residence of Suchibrata Raichoudhury, recipient of Sahitya Academy Award. Khanindra Chandra Barua and Suchibrata Raichoudhury were the first President and the Secretary of the Governing Body of the college respectively. Noted educa- tionist and a recipient of Padmashri Award recepient Indira Miri was appointed as the first Principal of the college. The college thereafter operated its academic purposes in a rented house located at Zoo-Road, Guwahati since 15th November 1977. The college has been shifted to its permanent campus of 10 bighas at Geetanagar hill top in 1987. An Assam-type house has been constructed with the effort of local enthusiast people which is being used as an extended campus at present. The college is at present functioning in its new campus behind Geetanagar High School on Mother Teresa Road, Geetanagar, Guwahati-21 A three-storied building has been constructed with the aid of Guwahati Refinary, Guwahati-20 and Govt. of Assam in the new campus and it has been used for academic purpose.

- **Mission and Vision of the Institute**

Mission

- All round personality development of the students.
- To spread education that helps the learners to purify their mind, body and soul.
- To encourage the students to analyze their hidden potential.
- To inculcate the students the value of character and morality as the integral part of true education.
- To collaborate with the society for the sustenance of human values and balanced neighbourhood networking.
- To promote awareness among the students and masses that they are responsible and accountable citizens of India.
- To promote methods of innovations in the students.
- To develop practical wisdom in the students to make life successful.

Vision

- To Impart higher education specifically for girls, to financially and educationallyv deprived, and every aspirant in general, to make them capable in countering the challenges of poverty, superstition, regionalism and to install into them factual culture of India.

- To impart quality education for building a strong foundation of the nation and empower girls through a progressive approach towards the advanced trends of education.
- To prepare the girls for a world of quest, ambition and excellence andv create a morally strong community through value-based education.

➢ **Motto of The College**

The Motto of Kanya Mahavidyalaya is to empower girls with relevant knowledge, competence and creativity so that they can face the challenges the world throws at them.

1.2 Location of the College Campus

Location	:	Urban
Total Campus Area	:	5717 sq. mts
Old Campus Area	:	3966 Sq. m.
New Campus Area	:	1751 sq. mts

1.3 Physical Structures

Description	Quantity
Total No of Departments	09
Auditorium	01
Hostel	Nil
Cafeteria	01
Health Centre	Nil
Heritage Corner	01
Stationery Corner	Nil
Gymnasium	Nil
Teachers Common Room	01
Libraries	01

.4. Student, Teacher & Employees Strength

Total No of Students	585
Total No of Teachers	24
Total No. of Employees	12

2.0 Brief Outlines of Green Audit

Green Audit is a process of systematic identification, quantification, recording, reporting and analysis of components of environmental diversity of organization. It aims to analyse environmental practices within and outside of the concerned place, which will have an impact on the eco-friendly atmosphere.

Green audit is a valuable means for a college to determine how and where they are using the most energy or water or other resources; the college can then consider how to implement changes and make savings. It can create health consciousness and promote environmental awareness, values and ethics. It provides staff and students better understanding of Green impact on campus. If self-enquiry is a natural and necessary outgrowth of a quality education, it could also be stated that institutional self-enquiry is a natural and necessary outgrowth of a quality educational institution. Thus it is imperative that the college evaluate its own contributions toward a sustainable future. As environmental sustainability is becoming an increasingly important issue for the nation, the role of higher educational institutions in relation to environmental sustainability is more predominant. The rapid urbanization and economic development at local, regional and global level has led to several environmental and ecological crises.

On this background it becomes essential to adopt the system of the Green Campus for the institutes which will lead for sustainable development and at the same time reduce a sizable amount of atmospheric CO_2 from the environment. The National Assessment and Accreditation Council, New Delhi (NAAC) has made it mandatory that all Higher Educational Institutions should submit an annual Green Audit Report. Moreover, it is part of Corporate Social Responsibility of the Higher Educational Institutions to ensure that they contribute towards the reduction of global warming through carbon footprint reduction measures.

3.0 Objective of Green Audit

(i) Landuse & Built-up Environment
(ii) Geographical Location with Campus Map
(iii) Present status of Meteorology, Ambient air, Noise, Soil quality and Water quality
(iv) Floral and Faunal diversity
(v) Management Practices with respect to Water, Waste and Energy
(vi) Carbon footprint
(vii) Organizational Level Efforts

4.0 Methodology

Methodology includes

(i) Physical inspection of the campus
(ii) Collection of Primary & Secondary Data

(iii) Observation and review of the documentation

(iv) Data analysis

5.0 Objective wise Analysis

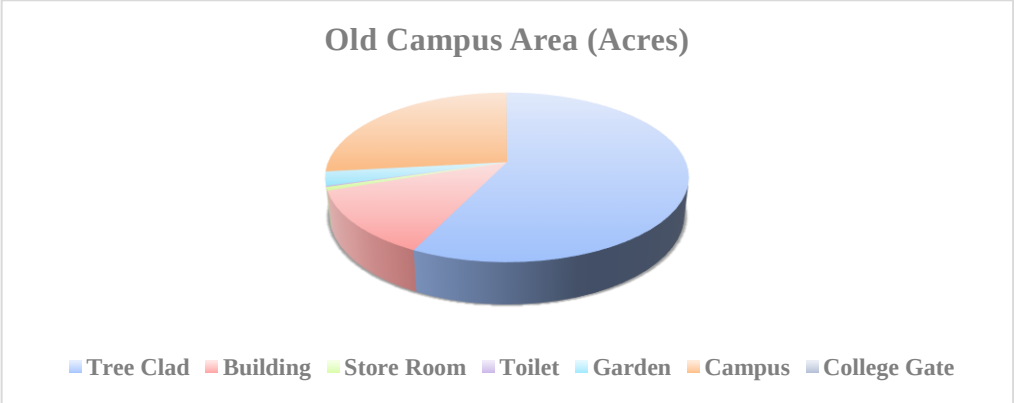
5.1 Landuse & Built-up Environment

It encompasses total area about 5717 sq. mts out of which 3966 sq. mts. in old campus while 1751 sq. mts in new campus. Both Assam type and multi-storied RRC construction are found within the campus. The old college campus provides support in maintaining a good ecological habitat for a wide variety of flora and fauna. The presence of free space and garden inside the campus augments the aesthetic value of the college.

Physical Structure of Kanya Mahavidyalaya

OLD CAMPUS	
Feature Name	**Area (Acres)**
Tree Clad	0.56273
Building	0.122873
Store Room	0.006833
Toilet	0.001897
Garden	0.026231
Campus	0.262633
College Gate	0.000642
Total Area	0.983839

NEW CAMPUS	
Feature Name	**Area (Acres)**
Campus	0.168392
Building	0.161939
Toilet	0.004628
Canteen	0.011338
Open Stage	0.018399
Swahid Bedi	0.000867
Water Storage	0.000644
Toilet	0.000547
Tree Clad	0.002018
Parking	0.06369
College Gate	0.000208
Total Area	0.43267



5.2 Geographical Location with Campus Map

Kanya Mahavidyalaya is situated at Guwahati, Kamrup district of Assam, within the geo-position latitude 26.1742^0N longitude 91. 7892^0E. The Map of the Kanya Mahavidyalaya is shown in Fig.1.

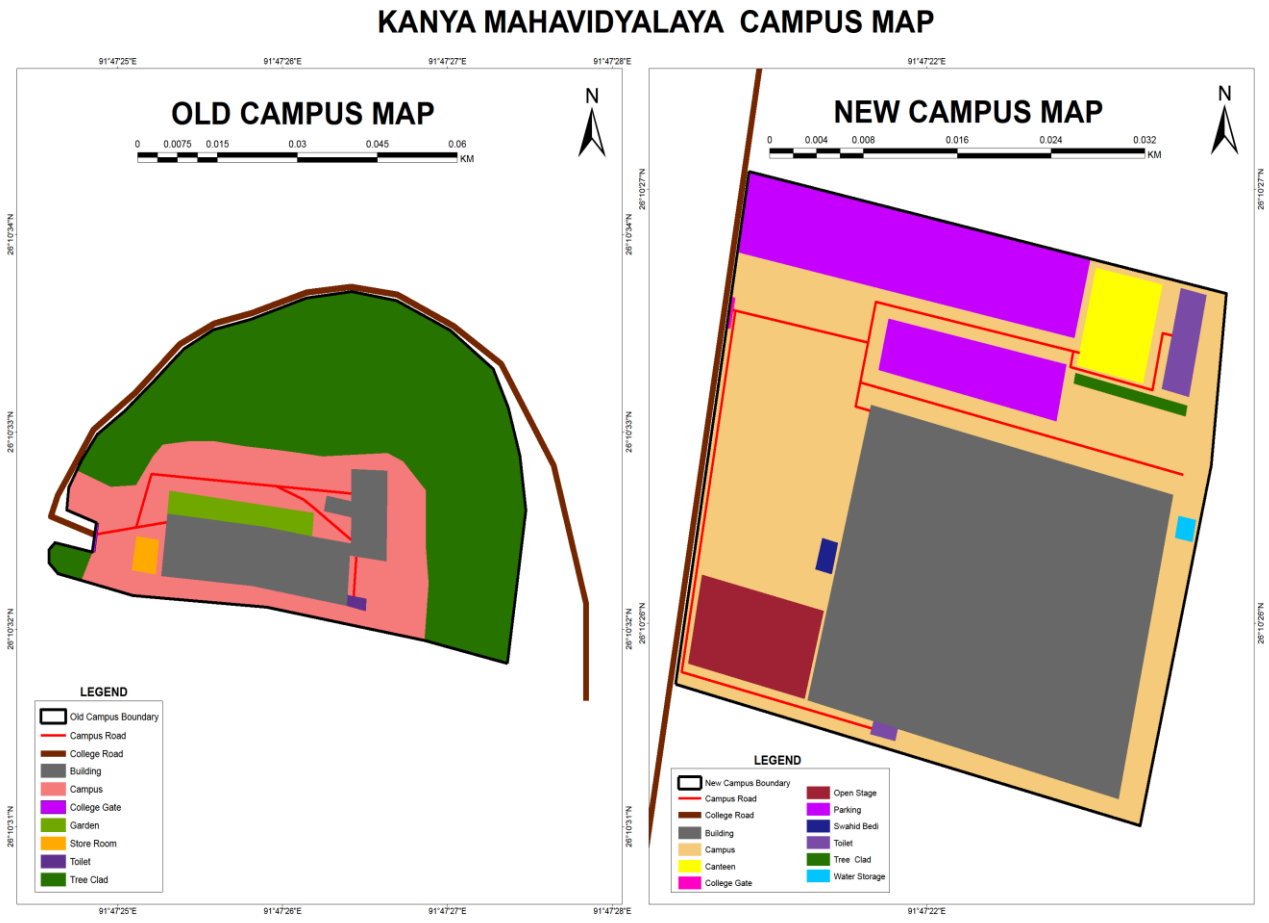
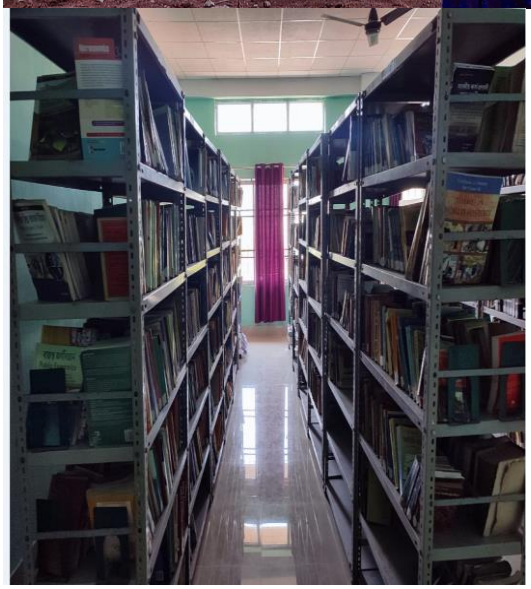


Fig1 : Map of the Kanya Mahabidlaya Campus




Glimpses of Kanya Mahavidyalaya

Glimpses of Kanya Mahavidyalaya

5.3 Present status of Micrometeorology, Ambient air, Water quality and Soil Quality

5.3.1 Micrometeorology Status

S/N	Parameters	Unit	Metrological Data at Kanya Mahavidyalaya	
1	Temperature	^{0}C	Min	22
			Max	26
2	Relative Humidity	%	10.30am	74
			16.30pm	71
3	Wind Speed	Km/hr	10.30am	7.8
			16.30pm	8.2
4	Wind Direction	-	10.30am	NNE
			16.30pm	NNE

5.3.2 Ambient Air Quality

The average results obtained in the month of January 2022 at Kanya Mahavidyalaya are presented in Tables 2. All the results meet the National Ambient Air Quality (NAAC) standards.

Table 2 : Ambient Air Quality at Kanya Mahavidyalaya

AMBIENT AIR QUALITY						
Duration (24 Hour)			Average			
S/N	Parameters	Unit	Concentration	Limit	Weather Condition*	Test Method
1	Particulate Matter (PM10)	µg/m^3	64.6	100	Clear	IS5182(23)
2	Particulate Matter (PM2.5)	µg/m^3	38.4	60		CPCB Guideline
3	Sulphur Dioxide (SO_2)	µg/m^3	12.8	80		IS5182(2)
4	Nitrogen Dioxide(NO_2)	µg/m^3	16.8	80		IS5182(vi)
5	Ammonia(NH_3)	µg/m^3	7.8	400		Indophenol Blue Method
6	Carbon Monoxide (CO)**	mg/m^3	1.2	04		Organic Vopour Sampler (APM 850) along with CO tube attachment

5.3.3 Noise Quality study

In the present study, the noise level measurements were recorded using a precision sound level meter (Envirotech SLM100) with a measuring range between 0-150 dB. The instrument is calibrated before the measurements are recorded. The microphone was placed at 1.0 m from the facades of house, away from any reflecting surface and 1.2 m above the ground. In each location, adequate number of samples was taken at 10-minute intervals. The noise levels were recorded during day time and meteorological conditions: no wind no rain. The Noise Level Monitored (Table 3) and analyzed is found to be within the CPCB Prescribed Limit

Table 3 : Noise Quality Study at Kanya Mahavidyalaya

S/N	Locations	Daytime SPL(dB) [6 am to 10 pm]		CPCB Limit SPL(dB)
		Leq	Range	
1	College Main Gate	64.9	61 – 72	75
2	Near Principal Office	54.2	52 – 67	
3	Near Class Room	53.6	45 – 62	
4	Near Canteen	63.2	55 – 64	
5	Back side of college	63.4	56 - 63	
6	Near Lecturer Hall	64.2	58 - 68	
7	Old Campus Garden area	58.8	54 - 67	
8	Old Campus Gate	62.4	59 – 69	

5.3.4 Drinking Water Quality

Drinking Water sample was collected from Kanya Mahavidyalaya as follows

Sr.No.	Sampling Locations	GPS Co-ordinate	
1	Inside college drinking water facility	N26.17'4007^0	E91.789468^0

Results of analysis of the most relevant water quality parameters are given in Tables 3. The test method for all the parameters along with tolerance limit as suggested by IS-10500 is presented in Table 3. All the parameters with respect to drinking water quality are found to be within the tolerance limit as suggested by IS: 10500.

5.3.5 Quality of Soil in the Study Area

Soil sample was collected from College Campus as follows.

Sr.No.	Sampling Locations	GPS Co-ordinate	
1	College Campus	N26.174005^0	E91.7896^0

It was analyzed for the most relevant physical and chemical parameters. It may be noted from the results of analysis that many of the soil samples have acidic pH. The presence of N, P, K and organic matter content is considerable for all the locations.

Table 4: Results of Drinking Water Quality at Kanya Mahavidyalaya

S/N	Parameters	Unit	DW	**Test Methods**	**IS-10500**
1	Odour	--	NS	APHA 20th Edition, 2150 B	Unobjectionable
2	Temperature (^{0}C)	^{0}C	27	Thermometry Method	50
3	Turbidity (NTU)	NTU	0.3	APHA 20th Edition, 2130B	5
4	pH	-	7.2	APHA 20th Edition, 4500-H+B	6.5 – 8.5
5	Conductance	mS/cm	0.41	APHA 20th Edition, 2510B	-
6	Total Dissolved Solid	mg/L	66.0	APHA 20th Edition, 2540 B	500
7	Total Suspended Solid	mg/L	26.0	APHA 20th Edition, 2540 B	-
8	Chloride	mg/L	28.2	APHA 20th Edition, 4500-Cl-B/D	250
9	Residual Chlorine	mg/L	<0.01	APHA 20th Edition, 4500-Cl-B	0.2
10	Sulphates as SO_4	mg/L	11.8	APHA 20th Edition, 4500-SO_4^{2-} E	50
11	Nitrate	mg/L	9.8	APHA 20th Edition, 4500-NO_3-B	45
12	Fluoride	mg/L	0.26	APHA 20th Edition, 4500-F^- D	1
13	Calcium	mg/L	28.6	APHA 20th Edition, 3500 B	75
14	Magnesium	mg/L	31.1	APHA 20th Edition, 3500 B	-
15	Iron	mg/L	0.13	APHA 20th Edition, 3111 B	0.3
16	Manganese	mg/L	0.006	APHA 20th Edition, 3111 B	0.1
17	Zinc	mg/L	0.04	APHA 20th Edition, 3111 B	5
18	Arsenic	mg/L	<0.001	APHA 20th Edition, 3112 B	0.01
19	Total Coliform	MPN/100ml	03	APHA 20th Edition, 3111 B	0
20	Faecal Coliform	MPN/100ml	NIL	APHA 20th Edition, 9221 E	0

Table 5: Results of Soil Quality Monitoring at Kanya Mahavidyalaya

S/N	Parameters	[S]
1	PH (1: 2)	6.6
2	Conductance (ms)	0.44
3	Sand (%)	88.0
	Silt (%)	1.02
	Clay (%)	11.8
4	Water Holding Capacity (%)	44.3
5	Bulk Density (gcm^{-3})	1.1
6	Cation Exchange capacity (meq/kg)	0.31
7	Nitrogen (%)	0.08
8	Potassium (mg/kg)	19.6
9	Sodium (mg/kg)	24.1
10	Calcium (g/kg)	22.3
41	Magnesium (mg/kg)	31.6
12	Phosphorous (mg/kg)	12.6
13	Organic matter (%)	0.66
14	Sodium Absorption Ratio (SAR)	1.4
15	Zinc (mg/kg)	14.6
16	Copper (mg/kg)	7.2

5.4 Floral and Faunal diversity

5.4.1 Floral Biodiversity

The survey was conducted in the month of February and March 2021 following the Quadrat sampling procedure. In the study area the vegetation is a complex of plant communities with considerable diversities. Since the plants showed normal and very good growth, there appears to be no adverse environmental factors prevailing in the area.

Plants of all types, in general, showed healthy and luxuriant growth in terrestrial, aquatic and aerial habitats in the study areas. Leaf diseases (leaf spot and shot-holes) on the aerial parts of the plants were very infrequently observed and did not show any adverse effect on the growth of the plants.

In this present study, different types of flora along with the total of species of the respective flora identified in the college campus are as follows.

Different types of flora		Total number of species
Tree	:	17
Shrubs	:	12
Herbs	:	14

Table 6: Floral Biodiversity at Kanya Mahavidyalaya

Kanya Mahavidyalaya College Campus Plant list						
List of TREES						
Sl no.	**Family**	**Scientific name**	**Vernacular name**	**English name**	**Uses**	**Number**
1	*Azadiracta indica* A. Juss	Neem	Indian Lilac	Meliaceae	Leaves is used for leprosy and eye disorder	1
2	*Mangifera indica* L.	Aam	Mango	Anacardiaceae	Mango is source of vitamin , it help improves eye sight	2
3	*Bauhinia variegata* L.	Kanchan	Purple orchid tree	Fabaceae	Flower is used in dysenorrhoea ,it is also antifungal and antimicrobial	1
4	*Senna siamea* (Lam.)H.S.Irwin & Barneby	Cassia	Cassia tree	Fabaceae	Used in intercropping systems, windbreaks and as shelterbelts	24
5	*Murraya koenigii* (L.)Spreng	Narasingha	Curry leaf tree	Rutaceae	Leaves are used in treating piles, inflammation, itching, fresh cuts, dysentery, bruises and edema.	1
6	*Terminalia chebula* Retz.	Xilikha	Chebulic myrobalan	Combretaceae	It is the main ingredient in the ayurvedic formulation Triphala which is used for Kidney and liver dysfunctions.	1
7	*Psidium guavaja* L.	Madhuriaam	Guava	Myrtaceae	Leaves used in treatment of stomach pain & diabetes	6
8	*Aegle marmelos* (L.)Correa	Bael	Wood apple	Rutaceae	Fruit is edible and is good for liver, anti-inflammatory, used in treatment of fever.	2
9	*Mimusops elengi* L.	Bokul	Spanish cherry	Sapotaceae	Roots used as a diruretic	28
10	*Phyllanthus emblica* L.	Amlokhi	Gooseberry	Phyllanthaceae	Fruit is rich sourse of Vitamin C and is used in tradional medicine to treat diarrhoea,	5

					jaundice and inflammation.	
11	*Moonon longifolium* (Sonn.)B.Xue& R.M.K.Saunders	Devdaru	Mast tree	Annonaceae	The leaves are used for ornamental decoration during festivals.	11
12	*Shorea robusta* Gaertn.	Sal	Sal tree	Verbenaceae	Wood is used as timber	3
13	*Cocos nucifera* L.	Narikol	Coconut	Arecaceae	Grown throughout the tropics for decoration, as well as for its many culinary and non culinary uses.	3
14	*Derris indica* (Lam.)Bennet	Korosh	Indian beech	Fabaceae	Dried leaves are used as insect repellent.	2
15	*Albizia procera* (Roxb.)Benth.	Koroi	White Siris	Mimosaceae	Bark decoction is used in treatment of rheumatism and haemorrhage	1
16	*Ficus religiosa* L.	Ahot	Peepal	Moraceae	Used in traditional medicine for about fifty types of disorders including asthma, diabetes, diarrhea, epilepsy,	1
17	*Ficus hispida* L.f.	Dimoru	Devil fig	Moraceae	Leaf juice is used in treatment of skin diseases and wounds and bark is used against pain , inflammation and epilepsy	2
List of Shrubs						
1	*Nyctanthes arbortristis* L.	Sewali	Night flowering jasmine	Nyctaginaceae	The leaves have been used in Ayurvedic medicine and Homoeo pathy for sciatica, arth ritis, and fevers, and as a laxative.	1

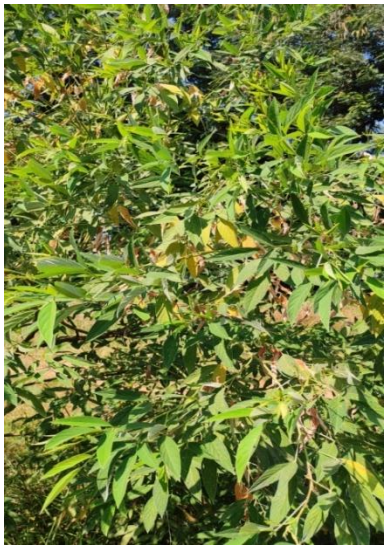
2	*Hibiscus rosasinensis* L.	Joba	China rose	Malvaceae	The flowers are edible and are used in salads, and can also be used as a pH indicator.	2
3	*Cajanus cajan* (L.)Millsp.	Arhar	Pigeon pea	Fabaceae	The leaf, seed and young stems are used in treating gingivitis, stomatitis and as toothbrush.	4
4	*Ocimum gratissimum* L.	Ram tulsi	African Basil	Lamiaceae	Used in treating bacterial and fungal infections, inflammation, diarrhoea.	6
5	*Ocimum tenuiflorum* L.	Tulsi	Holy Basil	Lamiaceae	Treatment of diseases, insect repellent and disinfectant	5
6	*Tabernaemontana divaricata* R.Br. ex Roem. & Schult.	Kathondaful	Pin wheel flower	Apocynaceae	Ornamental	4
7	*Jasminum sambac* (L.)Aiton	Mallika ful	Arabian jasmine	Oleaceae	Used to treat dysmenorrhoea, amenorrhoea, ringworm, leprosy, skin diseases and also as an analgesic, antidepressant, anti-inflammatory, antiseptic, aphrodisiac, sedative.	2
8	*Lawsonia inermis* L.	Jetuka	Henna	Lyrthaceae	Leaf paste is used as dye and in hair care, also as antiseptic for fungal and bacterial infection.	1
9	*Riccinus communis* L.	Eri gos	Castor	Euphorbiaceae	Castor oil is extracted from the seeds which is used to relief pain, muscle aches, abdominal pains and also for hair growth.	1
10	*Citrus limon* (L.)Burm.	Kaji Nemu	Assam lemon	Rutaceae	Fruit is widely used for culinary, beverages, industrial and medicinal uses.	1

11	*Tagetes erecta* L.	Narjiful	Marigold	Asteraceae	Ornamental, plant juice is used for treating digestive tract problems including poor appetite, gas, stomach pain, colic, intestinal worms and dysentery.	5
12	*Thevetia peruviana* (Pers.) K.Schum.	Karobi fool	Yellow oleander	Apocynacaea	Used as an ornamental plant and seed oil was used to make a 'paint' with antifungal, antibacterial and anti-termite properties	2

List of Herbs						
1	*Eclipta alba* L.	Bhringaraj	False daisy	Asteraceae	The whole plant is used as antiseptic, febrifuge, tonic, deobstruent in hepatic and spleen enlargement and is emetic, also used as scalp tonic for promoting hair growth..	5
2	*Ageratum conyzoides*L.	Gendhali bon	Billygoat weed	Asteraceae	Widely used by many traditional cultures, against dysentery and d iarrhea. It is also an insecticide and nema ticide.	6
3	*Catharanthus roseus* (L.) G.Don	Nayantora	Periwinkle	Apocynaceae	Root paste is used to treat septic wounds.	5
4	*Rorippa indica* L.	Ganga mula	Indian field cress	Brassicaceae	Used for cough-suppressing, phlegm-eliminating, circulation and detoxifying, disinhibiting dampness and removing jaundice.	5

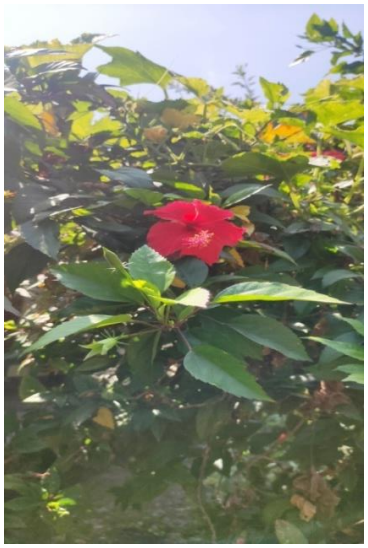
5	*Cyanthilium cinereum*(L.) H.Rob		Little ironweed	Asteraceae	The seeds are used as a source of alexipharmic and anthelmintic drugs, and as an alternative in leprosy and chronic skin diseases.	5
6	*Solanum nigrum* L.	Pokmou	Black night shade	Solanaceae	Used as food as well as medicinal plant to treat pneumonia, aching teeth, stomach ache, tonsillitis, wing worms, pain, inflammation and fever, tumor, inflammation, and also as hepaprotective, diuretic, antipyretic	5
7	*Leucas aspera* (Willd)Link.	Boga Durun	Thumbe	Lamiaceae	Used in the traditional medicine to treat snake bites. It is also an antipyretic; it is a herb that has the ability to help reduce fevers.	12
8	*Cyperus rotundifolia* L.	Mutha bon	Nutgrass	Cyperaceae	A medicinal herb traditionally used to treat various clinical conditions at home such as diarrhoea, diabetes, pyresis, and inflammation, malaria, and stomach and bowel disorders.	20
9	*Oldenlandia corymbosa* L.	Bon jaluk	Diamond flower	Rubiaceae	The plant is known to clear heat and toxins, activate blood circulation, promote diuresis and relieve stranguria. It is also active against appendicitis, hepatitis, pneumonia, cholecystesis, urinary infection, cellulites and snake bite.	12
9	*Bambusa tulda* Roxb.	Jati bah	Indian timber Bamboo	Poaceae	Young shoots are edible. Culms are used for construction, furniture, boxes, mats making etc.	20

10	*Phyllostacys aurea*(Andre)Riviere & C. Riviere	Sonali bah	Golden Bamboo	Poaceae	Ornamental	5
11	*Musa paradiasica* L.	Kol	Banana	Musaceae	Bananas are one of the best fruit sources of vitamin B6, can aid digestion and help beat gastrointestinal issues and also give energy without the fats and cholesterol.	3
12	*Rivina humilis* L.	Borali bokua	Bloodberry	Peteveriaceae	Leaves are used for treating wounds, cuts , bruises.	5
13	*Solanum melongena* L.	Bengena	Brinjal	Solanaceae	Edible Vegetable	5
14	*Capsicum annum* L.	Jolokia	Chilli	Solanaceae	Edible Vegetable	4

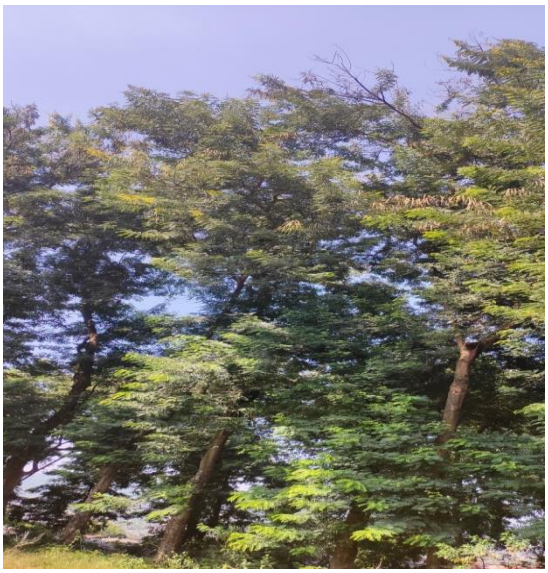


Cajanus cajan (L.)Millsp.

Rivina humilis L



Hibiscus rosasinensis L.



Senna siamea (Lam.)H.S.Irwin & Barneby

Tabernaemontana divaricata R.Br. ex Roem. & Schult.

Terminalia chebula Retz

Few Photographs of Flora at Kanya Mahabidyalaya

Phyllostacys aurea(Andre)Riviere & C. Riviere

Mangifera indica L.

Phyllanth

Cocos nucifera L.

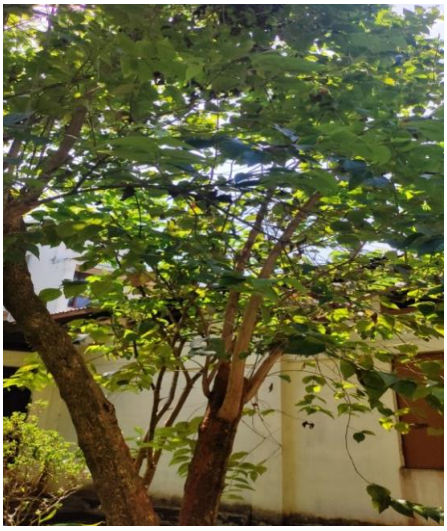
Thevetia peruviana (Pers.) K.Schum

Murraya koenigii (L.)Spreng

Few Photographs of Flora at Kanya Mahabidlaya

Citrus limon (L.)Burm

Moonon longifolium (Sonn.)B.Xue&R.M.K.Saunders



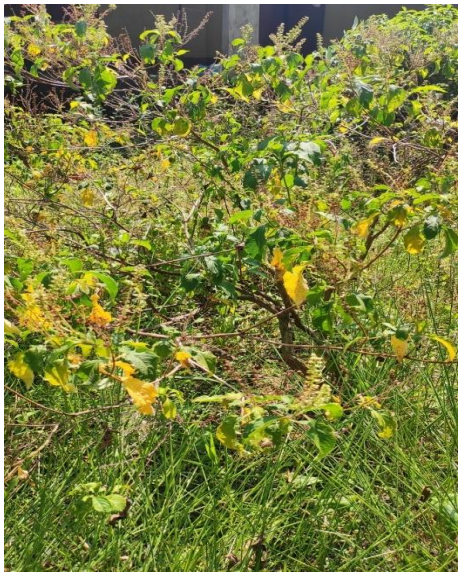
Nyctanthes arbor6tristis L.

Derris indica L

Psidium guavaja L

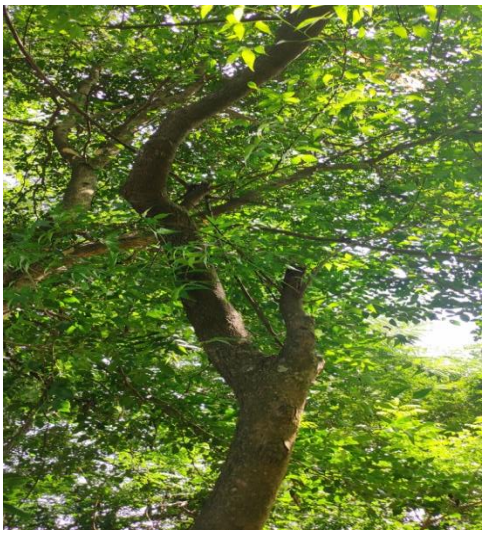
Ocimum gratissimum L.

Few Photographs of Flora at Kanya Mahabidlaya

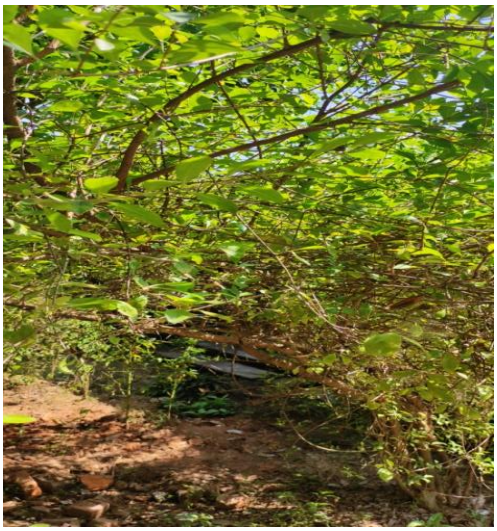


Ocimum tenuiflorum L

Ficus hispida L.f



Azadirachta indica A.Nees



Terminalia chebula Retz.

Riccinus communi L.*s*

Catharanthus roseus (L.) G.Don

Few Photographs of Flora at Kanya Mahabidlaya

5.4.2 Faunal Biodiversity

In view of the need to determine the faunal characteristics of the study areas within the constraints of time, a checklist survey method was followed. Checklist surveys are employed primarily to confirm the presence of species, and sometimes the number of individuals of species in a surveyed area.

Either invertebrates or vertebrates, the variety of animals enriched the region with its ecological significance and balancing the ecosystem. Kanya Mahavidyalaya campus has variety of faunal species including different kinds of insects, molluscs, annelids, reptiles, birds and mammals.

The survey was conducted during February – March 2021. Many avian faunae and butterfly species are observed in different seasons due to the natural green surroundings of the campus.

Among the avian species, 19 bird species are recorded in the college campus which includes some resident birds, common birds and winter migratory birds. Ten species of butterflies have been recorded in the college campus. The plants in the campus and nearby areas of the college play an important ecological role within the campus and also the adjoining areas. These are also food plants and roosting sites of a number of Avian species. The faunal biodiversity recorded in the college campus is presented in the Table 7 - 8.

Table 7 : faunal biodiversity recorded at Kanya Mahavidyalaya Campus

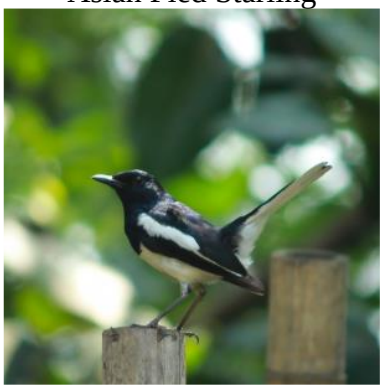
List of avian species recorded in the College campus

Serial No.	Common Name	Scientific Name
1	Common Myna	*Acridotheres tristis*
2	Black Drongo	*Dicrurus macrocercus*
3	Indian Jungle Crow	*Corvus culminatus*
4	Black Hooded Oriole	*Oriolus xanthornus*
5	Oriental Magpie Robin	*Copsychus saularis*
6	Pigeon	*Columba livia domestica*
7	Spotted Dove	*Spilopelia chinensis*
8	Cattle Egret	*Bubulcus ibis*
9	Oriental Magpie Robin	*Copsychus saularis*
10	White Throated Kingfisher	*Halcyon smyrnensis*
11	House Sparrow	*Passer domesticus*
12	House crow	*Corvus splendens*
13	Red Vented Bulbul	*Pycnonotus cafer*
14	Asian Pied Starling	*Gracupica contra*
15	Eurasian Tree Sparrow	*Passer montanus*
16	Black rumped woodpecker	*Dinopium javanense*
17	Purple Sunbird	*Cinnyris asiaticus*
17	White wagtail	*Motacilla alba*
19	Blue Throated Barbet	*Megalaima asiatica*

Common Myna

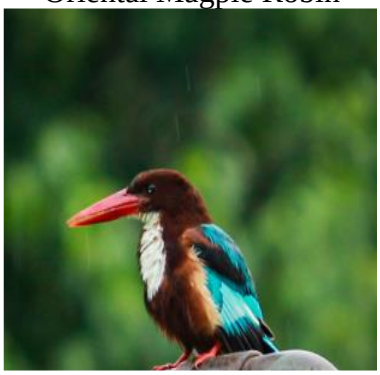
Asian Pied Starling

House Sparrow



Oriental Magpie Robin

Blue Throated Barbet



White Throated Kingfisher

Pigeon

Spotted Dove

Few Photographs of Fauna at Kanya Mahavidyalaya

List of butterflies recorded in the College campus

Serial No.	Common Name	Scientific Name
1	Common Mormon	*Papilio polytes*
2	Common crow	*Eupolea core*
3	Lemon Pansy	*Junonia lemonias*
4	Black veined Albatros	*Appias olferna*
5	Red Helen	*Papilio helenus*
6	Indian cabbage white	*Appias canidia*
7	Pipevine swallowtail	*Battus philenor*
8	Common mime	*Papilio clytia*
9	Chocolate demon	*Ancistroides nigrita*
10	Common Grass Yellow	*Eurema hecabe*

Common Mormon

Common Grass Yellow

Lemon Pansy

Common crow

Pipevine swallowtail

Black veined Albatros

Few Photographs of Fauna at Kanya Mahavidyalaya

5.5 Management Practices with respect to Water, Waste and Energy

5.5.1 Water Management Practices

- Water Storage per day = 1000 Lit
- Water Tank Cleaning = Twice per Annum
- Daily Consumption of water = 1000 Lit.

Components	Wise use of water	Water Leakage Repair	Use of push Tap	Use of Water purification	Rain Water Harvest	Water Use Per Day	Water Management Practices
Departments	✓	-	x	-	x	1000 L	✓
Library	✓	-	x	-	x		✓
Office	✓	-	x	1	x		✓
Teacher Common Room	✓	-	x	-	x		✓
Girls Common Room	✓	-	x	-	x		✓
Auditorium	✓	-	x	-	x		✓
Student Toilet	✓	-	x	-	x		✓
Canteen	✓		x	-	x		✓
Gardening	✓	-	x	-	x		✓

Observations

(i) The college Management installs many low - flow faucets, as the replacement for the existing conventional taps.

(ii) The toilet and wash room should be equipped with push button

(iii) Water escaping from overflows either inside or outside building was not identified during onsite audit.

(iv) The clear policy of rain water harvesting is not identified. The college has not been set-up any rain water harvesting units.

5.5.2 Energy Management Practices

Electric Load = 22.86 KW per hours(approx)

Daily Consumption = 22.16 unit per day (approx)

Electric Bill paid for the period of 2021 -22 (Bill Attached) =Rs.

Department	No. of Tubes	No. of CFL Light	No. of LEDs	No. of Fens Celling+wall+ exhust	No. of LCD projector	No. of Computers + Printers	No. of photocopier	Common / sophisticated analytical equipment	No. of Ac
Total	30	06	130	130	3	20 Computer + 3 Printers	2	Nil	Nil

Observations:

i) There is minimum or practically negligible use of lights during day time as the building structure has possibility of daylight usage

ii) The lighting arrangements are well balanced with arrangements to switch ON and OFF

iii) The policy of college is switch off the lights and other electrical equipment when they are not in use.

iv) Cleanliness is well maintained. In- house light fittings are cleaned time to time.

v) Lights are negligibly operated during day time. The lights are operated manually. There is no any sensor-based lighting system

vi) The college is utilising natural lighting as first preference

vii) Computers, printers, photocopiers and other equipment are switched off at the end of the day.

viii) The all the electrical equipment is well operated. The overall electrification system is regularly monitored by a duly qualified electrician.

ix) Regarding the use of renewable energy college has not installed any solar panels yet .

x) College Management is evaluating the feasibility of introduction of the solar PV generation.

5.5.3 Waste Management Practices

In general, waste can be defined as the unwanted or unusable materials that include solid as well as liquid. Further, solid waste can be divided into-

(i) Biodegradable

(ii) Non-biodegradable

Biodegradable waste consists of food waste, waste from toilets etc. and non-biodegradable waste contains plastics, tins, glassware etc. Besides, there are some hazardous wastes generated from laboratories, and E-waste (Computers, electric and electronic parts).

The institute has over 1500 stakeholders which includes students, teaching staff and non-teaching staffs. Thus a huge amount of waste is generated on a daily basis. Therefore, to quantify and segregate the daily waste, the College has adopted proper management strategies within the college campus to reduce its hazardous effect.

Sl/No.	Source	Type of waste	Approximate amount of waste generated per day
1.	Classroom, staff room, Library	Paper, pen, wrappers, plastic bottles etc	Biodegradable waste per day= 4 kg Non-biodegradable waste = 2.5 kg. Liquid Waste= 0.8 L E-waste per Annum= 15kg
3.	Toilets	Sanitary napkins, waste water etc.	
4.	Canteen	Disposable plates, leftover food and water, wrappers, plastic bottles etc.	
5.	Office and computer centre	Papers, wrappers, plastics, paper pins, E-waste etc.	

Waste management practices adopted by the College

1. Solid waste generated in the campus
   - To collect dry and wet waste, dustbins with two chambers are placed in the library, teachers' common room, canteen, lecture hall, classroom etc.
   - Segregation of solid waste into dry and wet waste in different bins.
   - Specific waste management plans are adopted to manage solid waste in the campus .

- E-waste includes malfunctioning computer monitors, printers, scanners, calculators, keyboards, mouse, cables, circuit boards, bulbs etc. generated from campus is subjected to handover E-waste authorised agency

2. Toilet waste
   - Soak pits are available in toilets
   - Toilet waste is connected to large tanks. These tanks are cleaned periodically.
3. Other waste
   - Sanitary napkins are subjected to burn in the incinerator.
   - Leaf litters are used for vermicomposting.
   - Waste like broken bulbs, tubes etc. which cannot be repaired are dumped temporarily at the dumping bin and later on disposed of to the municipality collection van.

6.0 Carbon footprint due to Transport System

Emission of CO_2 through transport system – both public and private – is very high in India as India is credited with the third rank in carbon emission in this regard. It is estimated that in India, 9% of the total carbon is emitted by the transport system.

In Kanya Mahabidyalaya during survey it was observed that on an average, there are 12 number of four wheelers are used by faculty while 25 number of two wheelers are used by students and staff. Further student uses bicycles 12 numbers. It is appropriate to calculate the petrol consumption separately for four wheelers and two wheelers.

The fuel consumption by vehicles is determined by the type of vehicle, year of manufacturing, maintenance status, traffic system of the particular area, etc. High-end and medium-range bikes consume different quantities of petrol.

Conversion table to calculate carbon emission by vehicles per litre is very complicated in view of the local variables to be taken for calculation. Instead, a simple but universally accepted calculation calendar for various types of fuels and their CO_2 conversion rate was adopted.

6.1 Emissions of CO_2 by transport system at Kanya Mahabidyalaya

It is estimated that the average mileage covered by each vehicle is about	10 km.
The total mileage covered by the 25 number of two wheelers per year	(25 × 10 × 200) = 50000 km
The average mileage covered by four wheelers is also the same	8 km per day
The total mileage covered by 12 four wheelers per year	(12 ×8 × 200) = 19200 km
The total mileage covered by two and four wheelers per year	(50000+ 19200) = 69,200km
The standard fuel consumption for two wheelers is taken	35 km / 1L of Fuel
The standard fuel consumption for Four wheelers is taken	15 km / 1L of Fuel
The total quantity of petrol consumed by 23 number Two Wheelers	(50000 /35) = 1428.6 L
The total quantity of fuel consumed by 40 number four wheelers per year	(19200/15) = 1280 L
The total fuel consumption per year (Two+ Four) Wheelers	(1428.6 + 1280) = 2708.6 L
Combustion of 1 litre of diesel/petrol leads to the emission of CO_2	2.68 kg
The total quantity of CO_2 emitted by 2708.6 litres of fuel per year	(2708.6 × 2.68) = 7259 kg

6.2 Flora and Carbon Footprint Reduction

Carbon Absorption Capacity of Flora at Kanya Mahavidyalaya

The carbon footprint calculation is based on the following standard accepted assumptions

- Carbon absorption capacity of one full grown tree = 6.8 kg CO_2
- Carbon absorption capacity of one semi grown tree = 3.4 kg CO_2
- Carbon absorption capacity of one Shrubby vegetation = 0.2 kg CO_2

Total CO_2 absorption Capacity of Flora

Type of Tree	Total No. of Tree	Amount of CO_2 absorption/ tree (kg)	Total CO_2 absorption (kg)
Full Grown	94	6.8	94 x 6.8 = 639.2
Semi Grown	34	3.4	34x3.4 = 115.6
Shrubby Vegetation	117	0.2	117x0.2 = 23.4
		Total amount of carbon absorption by Flora	**778.2**

6.3 Oxygen Emission Capacity of Flora at Kanya Mahabidyalaya

The carbon footprint calculation is based on the following standard accepted assumptions

- Oxygen Emission capacity of one full grown tree = 117.6 kg O_2
- Oxygen Emission capacity of one semi grown tree = 58.8 kg O_2
- Oxygen Emission Capacity of 400 number of Shrubby vegetation = 550 kg O_2

Type of Tree	Total No. of Tree	Amount of O_2 Emission / tree (kg)	Total O_2 Emission (kg)
Full Grown	94	117.6	94 x117.6 = 11,054
Semi Grown	34	58.8	34x58.8 = 1999
Shrubby Vegetation	0.3 (117/400=0.3)	550	0.3 x 550 = 165
		Total amount of Oxygen Emission by Flora	13218

6.4 Summary of Carbon Footprint Reduction at Kanya Mahavidyalaya

Carbon Absorption Capacity of Flora	**778.2** kg
Oxygen Emission Capacity of Flora	**13218** kg
The total quantity of CO_2 emitted by vehicles	7259 kg

6.5 Summary of Carbon Footprint per person at Kanya Mahavidyalaya

Total Carbon Footprint in Tonnes	:	7.3
Total Carbon Footprint in kg	:	7259
Total Average number of persons in the College	:	621
Carbon emission per person in kg	:	7259/621= 11.6
Carbon emission per person in kg	:	11.6 kg

7.0. Organizational effort

S/N	Items	Responses
Organizational effort		
1	Is the college having campus green team?	Yes. Copy Attached
2	Have you established an environmental mission/vision for your campus	Yes. College has established Environment to make the students and teachers aware about the environmental issues and challenges. The college has organized several programmes addressing environmental awareness among students and community as well (e.g. World Wetland Day, 2nd February; World Environment Day, 5th June; World Wild-life Conservation Day, 4th December; World Soil Day 5th December).
3	College initiates any tree plantation programme	Yes. programme organized within and outside the college campus particularly on College Foundation Day and World Environment Day (5th June)
4	How may numbers of existing tree, shrubs and herbs species	Tree- 94, Shrubs- 34, Herbs- 117
5	How may numbers of existing full-grown tree, semi grown trees	Full Grown - 94 Semi Grown – 34
6	Is there any lawn in the college campus? If yes what is area	Yes
7	Is the college encouraging sustainable behaviour via: Education campaigns? Such as Posters, placards, Messages, incentives? Contests? awards?	Yes, College organized various programme encouraging sustainable behaviour such as World Environment day (5th June), World Wetlands day (2nd February), National Science day (28th February), International Yoga Day (21st June), World AIDS Day(1st December), No Tobacoo Day (31st May), Ekta Divas (31st October) ; Wildlife Conservation Day (4th December); World Soil Day (5th December) and many more.

8	Is the college staff modelling sustainable behaviour for students, peers, and community?	Kanya Mahavidyalaya has adopted a village named Bonda almost 5 to 6 kilometers from the college. Few community development work has been initiated.
9	Is the college having solar, wind, or other forms of renewable energy?	No. Planning to initiate very soon
10	What are the good practices pertaining to Transport?	Encourage the use of public transport
11	What is the average number of vehicle movements in terms of two & Four wheelers	Two Wheelers: 23 - 25 Four Wheelers: 10 – 12
12	Has the college calculated its carbon footprint	Yes, College has taken several initiatives to reduce total carbon footprint amount within the college campus.
13	Has the college adopted any specific measures to reduce pollution	To motivate students, social service competitions are being held on special occasion such as college week, environment day, Science day, Azadi ka Amrit Mahotsav etc., where they are awarded for their active participation.

Few Photographs of Tree Plantation at Kanya Mahavidyalaya

8.0 Recommendations

Water Management

(i) The college Management needs to consider the low - flow faucets, as the replacement for the existing conventional taps.

(ii) The toilet and wash room should be equipped with push button

(iii) Sprinkler and drip irrigation should use for gardening

(iv) The college should properly install rain water harvesting unit

(v) Considering contamination of water with coliform bacteria, water purification treatment facilities may be installed within the campus in order to ensure safe drinking water.

Energy Management

- The public lights within the campus may be run with solar panels and the replacement of existing lights should be done with LED lamps.
- Energy auditing should be done with the help of Energy Management Centre (EMC)

Waste Management

- Specific waste management plans should be adopted to manage solid waste in the campus, use of plastic carry bags, plastic glass/ cups/plates and flex boards should be banned inside the College to create a plastic free zone.
- For managing organic wastes organised vermicompost plant may be installed in the campus
- There should be a proper system for the management of hazardous wastes.
- More toilets may be constructed in the campus ; separate toilets are required for differently abled students

Green Management

- The Campus should develop a garden in front of the buildings.
- Green habitat concept should be adopted for all the building construction activities of the college in future, which may help a long way in reducing energy usage, increasing aesthetic appeal of the buildings and class rooms, besides reducing carbon foot print.
- Further, more green spaces should be established all around the campus around larger trees and shades for the benefit of the students. All these aspects should monitor by Green Campus Committee.
- Air quality, Drinking water quality should monitor annually.

****

Annexure 1 : Scanned copy of Green Campus Committee of Kanya Mahavidyalaya
Annexure 2 : Scanned copy of electric bill paid receipt
Annexure 3 : Scanned copy of ISO Certificate
Annexure 4 : Scanned copy of PCB Certificate
Annexure 5 : Scanned copy of MSME Certificate

OFFICE OF THE PRINCIPAL
KANYA MAHAVIDYALAYA
GEETANAGAR, GUWAHATI-781021

Ph-9864030513,Email:- kanyamahavidyalaya1977@gmail.com
Web site:- www.kanyamahavidyalaya.org

Green Audit Committee constituted with the following members:-

sl No	Name	Designation	Portfolio
1	Manju Saikia	Principal i/c	President
2	Guptajit Pathak	Assistant Professor ,IQAC coordinator	coordinator
3	Ananya Roy	Assistant Professor	Member
4	Sikha Sarma	Assistant Professor	Member
5	Barnali Choudhury	Assistant Professor	Member
6	Tridib Goswami	Assistant Professor	Member

Date: 22/01/2022

Place: Guwahati

Yours sincerely,

(Guptajit Pathak)

IQAC coordinator
Kanya Mahavidyalaya
Geetanagar, Guwahati-781021

(Manju Saikia)

Principal i/c
Kanya Mahavidyalaya
Geetanagar, Guwahati-781021

Principal i/c
Kanya Mahavidyalaya
Guwahati-21

2021

ASSAM POWER DISTRIBUTION COMPANY LIMITED

ZOO ROAD ELECTRICAL SUB-DIVISION

CIN: U40109AS2003SGC007242

GSTIN: 18AABCL1354J1ZJ

ELECTRICITY BILL

Website: www.apdcl.org

Centralized Customer Care Number: 1912

Consumer Name	: **KANYA MAHAVIDYALAYA**	Consumer No	: **017000018340**	Bill Amount	: **2766.00**
Address	:	Old Consumer No	: 51000314994	Due Date	: 2021-12-22
,MT RD GEETA NAGAR,ZOO ROAD		MRU No	: A0BH	Bill No	: **900257421**
		Pole No	: 000	Bill Period	: 2021-11-01 to 2021-11-30
		Connected Load in KW	: 10.00	Bill Date	: 2021-12-07
Contact No	: 8402004146	KVA	: 11.76	No of Days	: 30
Email ID	:	Load Security Held	: 15200.00	Meter Status	: WORKING
Tariff Category	: LT V(A) GENERAL PURPOSE (OTHER	Meter No	: AP10011026	Billing Status	: NORMAL
Supply Voltage Level	: LT				

METER READING DETAILS

Reading Type	Meter No	MF	Previous Reading in KWH	Previous Export in KWH	Current Reading in KWH	Current Export in KWH	Difference in KWH	Difference Export in KWH
KWH(N)	AP10011026	1	713	0	912	0	199	0
KWH(N)	NA	0	0		0		0	

Units Consumed	PF Penalty/Rebate	LT Metering Penalty @3%	LTTR Penalty @10%	HT Rebate @3%	Billable Units in KWH
199	4	0.00	0.00	0	199
0.00	0.00				

Recorded Demand(in KVA)	0	Maximum Demand(in KVA)	0	Billing Demand(in KVA)	11.76	Average Power Factor	96
Power in Hours	0	Availibility Percentage				0	

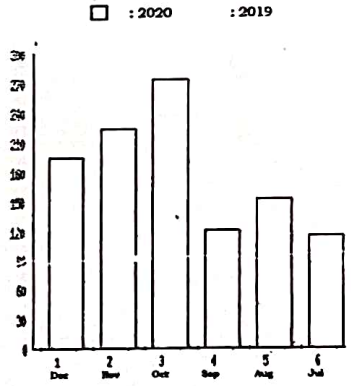
BILLING DETAILS

Current Demand	Outstanding Amount	Adjustment Amount	Government Subsidy	Solar Rebate	Net Bill Amount
₹ 2766.49	₹ 0	₹ 0	₹ 0.00	0.0	₹ 2766.00
PLEASE PAY YOUR BILL ON TIME AND HELP US TO SERVE YOU BETTER				₹ Two thousand seven hundred and sixty six only	

Notice

1) Pay and view bills online at **www. APDCL.org**
2) Update your mobile numbers to avail different SMS services
3) Smart meter consumers download the APDCL **smartbijulee app** to know daily consumption and more

ENERGY CONSUMPTION (LAST MONTH'S BILL)



CHARGES BREAKUP			
Details	**Units**	**Rate**	**Amount in ₹**
Energy Charge	(a) First 195	6.15/unit	1199.25
	(b) Next 0	0/unit	0
	(c) Next 0	0/unit	0
Total Energy Charge			1199.25
Energy Charge Re-Estimated			0.00
Demand/Fixed charge	10 Units	145.00/unit	1435.5
FPPPA Charge	0.00 Units	195/unit	0
Electricity Duty	195 Units	5.00/unit	131.74
Govt. Subsidy	0 Units	0.00/unit	0.00
Meter Rent			0
Transformer M D Charge			0
Overdrawal Penalty			0
Adjustment Amount			0
Charges for dishonoured cheque			0
Arrear Principal			0
Arrear Surcharge			0
Current Surcharge			0
Miscellaneous Arrear			0.00
Total Bill Amount			2766.00

Checked by E&OE

Prepared By
MDM

Signature with seal

9398

2022

ASSAM POWER DISTRIBUTION COMPANY LIMITED

ZOO ROAD ELECTRICAL SUB-DIVISION

CIN: U40109AS2003SGC007242

GSTIN: 18AABCU1354J1ZJ

ELECTRICITY BILL

Website: www.apdcl.org

Centralized Customer Care Number: 1912

Consumer Name	: KANYA MAHAVIDYALAYA	Consumer No	017000018340	Bill Amount	: 2867.00
Address	:	Old Consumer No	: 51000314994	Due Date	: 2022-01-19
,MT RD GEETA NAGAR,ZOO ROAD		MRU No	: A0BII	Bill No	: 900274061
		Pole No	: 000	Bill Period	: 2021-12-01 to 2021-12-31
		Connected Load in KW	: 10.00	Bill Date	: 2022-01-04
Contact No	: 8402004146	KVA	: 11.76	No of Days	: 31
Email ID	:	Load Security Held	: 15200.00	Meter Status	: WORKING
Tariff Category	: LT V(A) GENERAL PURPOSE (OTHER	Meter No	: AP10011026	Billing Status	: NORMAL
Supply Voltage Level	: LT				

METER READING DETAILS

Reading Type	Meter No	MF	Previous Reading in KWH	Previous Export in KWH	Current Reading in KWH	Current Export in KWH	Difference in KWH	Difference Export in KWH
KWH(N)	AP10011026	1	912	0	1111	0	199	0
KWH(N)	NA	0	0		0		0	

Units Consumed	PF Penalty/Rebate	LT Metering Penalty @3%	DTR Penalty @10%	HT Rebate @3%	Billable Units in KWH
199	2	0.00	0.00	0	199
0.00	0.00				

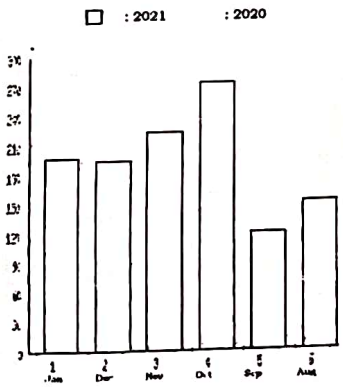
Recorded Demand(in KVA)	0	Maximum Demand(in KVA)	0	Billing Demand(in KVA)	11.76	Average Power Factor	95
Power in Hours		0	Availibility Percentage			0	

BILLING DETAILS

Current Demand	Outstanding Amount	Adjustment Amount	Government Subsidy	Solar Rebate	Net Bill Amount
₹ 2825.08	₹ 0	₹ 0	₹ 0.00	0.0	₹ 2867.00
PLEASE PAY YOUR BILL ON TIME AND HELP US TO SERVE YOU BETTER				₹ Two thousand eight hundred and sixty seven only	

APDCL wishes all our valued consumer a very Happy New Year and Happy Bhogali Bihu

ENERGY CONSUMPTION (LAST MONTH'S BILL)



CHARGES BREAKUP

Details	Units	Rate	Amount in ₹
Energy Charge	(a) First 197	6.15/unit	1211.55
	(b) Next 0	0/unit	0
	(c) Next 0	0/unit	0
Total Energy Charge			1211.55
Energy Charge Re-Estimated			0.00
Demand/Fixed charge	10 Units	145.00/unit	1479
FPPPA Charge	0.00 Units	197/unit	0
Electricity Duty	197 Units	5.00/unit	134.53
Govt. Subsidy	0 Units	0.00/unit	0.00
Meter Rent			0
Transformer M D Charge			0
Overdrawal Penalty			0
Adjustment Amount			0
Charges for dishonoured cheque			0
Arrear Principal			0
Arrear Surcharge			0
Current Surcharge			41.5
Miscellaneous Arrear			0.00
Total Bill Amount			2867.00

Checked by E&OE

Prepared By
MDM

Signature with seal

9659

Certificate

This is to Certify that

ENVIRO TESTING SERVICES

Bijay Nagar, Noonmati, Guwahati - 781020,
Assam, India

has been found in Compliance with requirements of

Quality Management System

ISO 9001:2015

for the following scope:

Environment Work Deals With Testing of Soil, Water and Air.

Certificate No.	:	QMS/025224/1221
Original Certificate Date	:	08-December-2021
Issue Date	:	08-December-2021
Expiry Date	:	07-December-2024

To check this certificate status visit:
"http://uasl.uk.com/certifiedorganization.html"

.....
Authorised Signature

Quality Control Certification

UK Office: 1929, Chynoweth House,
Trevissome Park, Truro-TR48UN, Cornwall, UK

India Office: 2nd Floor, Aman Market,
Narela Mandi, Delhi - 110 040, India

"Quality Control Certification (QCC)" accredited by "UASL, England, UK". This certificate remains the property of "QCC" to whom it must be returned on request.

Certificate

This is to Certify that

ENVIRO TESTING SERVICES

Bijay Nagar, Noonmati, Guwahati - 781020,
Assam, India

has been found in Compliance with requirements of
Occupational Health and Safety Management Systems

ISO 45001:2018

for the following scope:

Environment Work Deals With Testing of Soil,
Water and Air.

Certificate No.	:	OHSMS/025225/1221
Original Certificate Date	:	08-December-2021
Issue Date	:	08-December-2021
Expiry Date	:	07-December-2024

To check this certificate status visit:
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Pollution Control Board, Assam

(Department of Environment & Forests : : Government of Assam)

অসম প্রদূষণ নিয়ন্ত্রণ পৰিষদ

(অসম চৰকাৰৰ বন আৰু পৰিৱেশ বিভাগ)

No.WB/GUW/T-2445/13-14/198 1949

Dated Guwahati the 19th Feb 2022

OFFICE ORDER

In exercise of the powers conferred under section 17(2) of the Water (Prevention & Control of Pollution) Act, 1974 and section 17(2) of the Air (Prevention & Control of Pollution) Act, 1981, the Pollution Control Board, Assam is pleased to renew the recognition of the Laboratory for One (1) year subject to the outcome of Hon'ble Guwahati High Court Order WP(C)/8468/2018 to **M/s. Enviro Testing Services, Bijoy Nagar ,House No.35. Noonmati, Guwahati-22, Kamrup (M),Assam** awarded vide Pollution Control Board, Assam order No. WB/GUW/T-2445/13-14/197 dtd.19.02.2022. This Renewal of recognition is awarded subject to the following terms & conditions for the purpose of analyzing certain parameters discharged from the industries or any other institutions.

Terms & Conditions:

1. The recognition may be revoked or withdrawn subject to the violation of the following conditions :-

   i. The laboratory shall carry out analysis only for the parameters authorized by the Board as mentioned in the certificate of approval.
   ii. The laboratory shall carry out analysis of samples as per IS, APHA code of Federal Regulation and should specify the method in the analysis report.
   iii. The laboratory will keep a proper record of receipt of samples, the reading of each and every parameter analyzed and calculation of results of all parameters on permanent register and will subject to inspect by the Board.
   iv. The samples collected should be analyzed within seven (7) days from the date of collection and copy of the same along with the brief inspection report to be sent to Pollution Control Board, Assam.
   v. The accredited laboratory will collect samples as required by the process, which will be divided in two parts. One part will be analyzed, while the other part will be preserved for thirty days. For air samples, the used thimbles and filter papers will be preserved for six(6) months so that the Board can check randomly and verify the credibility.
   vi. The Board officials may visit laboratory for checking preserved samples at random.
   vii. The Laboratory must submit information on whether ETPs/APCDs installed by the respective unit was running or not along with test report. At the time of collection samples by the Laboratory, all the processes of the unit should invariably be running. The analysis report should generally reflect site conditions and capacity at which the industry was running at the time of sampling.
   viii. Records pertaining to inventory of the chemicals/ reagents shall be kept properly on a permanent register and will be subject to inspection by the Board.
   ix. Laboratory will submit details of staff involved in sampling and testing and the person coming for collection of sample should have authority letter of Laboratory.
   x. Any change in address, staff or other additions/ alterations in the facilities of the laboratory should immediately be reported to this office within fifteen (15) days.

Contd....p/2

xi. *Prior information is to be given* to the concerned Regional Officers and Head Office for collection of sample and Regional Officers/Field Officer will associate during the sampling.

xii. The approval shall be suspended or cancelled if the Board has reason to believe that the data reported by the Laboratory is repeatedly erroneous. Further the Laboratory and its key personnel shall be liable to be proceeded against for imposition of penalty in case the Board has reason to believe that the data reported by the Laboratory is intentionally manipulated.

xiii. If it is found that the aforementioned Laboratory has any involvement with any of the industry against whom allegations have been made forging of Board's Authority, will result in withdrawal of recognition apart from other legal proceeding as provided under existing laws.

xiv. If the laboratory failed to achieve the satisfactory performance regarding testing of the coded samples supplied by the Pollution Control Board, Assam will result in withdrawal of recognition.

xv. The instruments/equipment should be always kept in working and perfectly calibrated condition.

xvi. The Laboratory has to submit a brief plan on safety measures undertaken for risk management pertaining to the work environment.

xvii. In legal matters, the analytical reports of the above laboratories will not be binding to the Board and such reports generated by the State Board will always prevail over.

xviii. Regarding compliance of occupiers, Boards analytical report and opinion will stand final over the reports and opinion of the aforesaid laboratory.

xix. Board will have every right to accept or reject the analytical and other reports submitted by the aforesaid laboratory without assigning any reason thereof.

xx. National Accreditation Board for Testing and Calibration Laboratories (NABL) is mandatory at the time of Next renewal of recognition i.e from the year 2023 onward.

2. This order will remain valid for **one (1) year with effect from 20 Feb, 2022** subject to the outcome of Hon'ble Gauhati High Court Order in WP(C)/8468/2018. But the said recognition may also be withdrawn at any time in case of violation of any of the aforementioned conditions or any of the conditions mentioned in **Annexure-A(i) & (ii)** or for any other unlawful activities, which are not proper under the law of the land.
3. This order has been passed as per the approval of the Competent Authority.

Member Secretary

Memo No.WB/GUW/T-2445/13-14/198-A 1949 Dated Guwahati the19th Feb 2022

Copy to:

1. The Chairman, Pollution Control Board, Assam for favour of information.
2. The Incharge, Central Laboratory, PCBA for information & necessary action.
3. M/s. Enviro Testing Services, Bijoy Nagar, House No.35, Noonmati, Guwahati-22,Kamrup (M) for information and necessary action.

Member Secretary

भारत सरकार
Govt. of India
सूक्ष्म, लघु और मध्यम उद्यम मंत्रालय
MINISTRY OF MICRO, SMALL & MEDIUM ENTERPRISES

उद्योग आधार Udyog Aadhaar

D

Type of Enterprise	Micro	Small	Medium
Manufacturing	A	B	C
Services	D	E	F
UAN	AS03D0000207		

GM-DIC - KAMRUP METROPOLITAN

Udyog Aadhaar Memorandum

1 Name of Entrepreneur: SATYA NATH GOSWAMI
2 Social Category: GENERAL
3 Name of Enterprise: ENVIRO - TESTING SERVICES
4 Type of Organization:
5 Postal Address: H. NO. 35, BIJAY NAGAR, NOONMATI, GUWAHATI - 781020, ASSAM.
District: KAMRUP METROPOLITAN State: ASSAM PIN: 781020
Mobile No: 9435707936 Email: envirotesting2011@gmail.com
6 Date of commencement: 15/12/2001
7 Previous Registration details-if any: ::
8 Bank Details
IFS Code: SBIN0006196
Bank Account: 30368995867
9 Major Activity: SERVICES

11

SN	NIC 2 Digit	NIC 4 Digit	NIC 5 Digit Code	Activity Type
1	71 - Architecture and engineering activities; technical testing and analysis	7120 - Technical testing and analysis	71200 - Technical testing and analysis	Services

11 Persons employed: 10
12 Investment (Plant & Machinery / Equipment's): 10(Rs. In Lakhs)
13 District Industry Centre: KAMRUP METROPOLITAN

Declaration
I hereby declare that information given above is true to the best of my knowledge. Any information, that may be required to be verified, shall be provided immediately before the concerned authority.

PRINT

Click here for Udyog Aadhaar Acknowledgement

Enviro-Testing-Services Guwahati, Assam