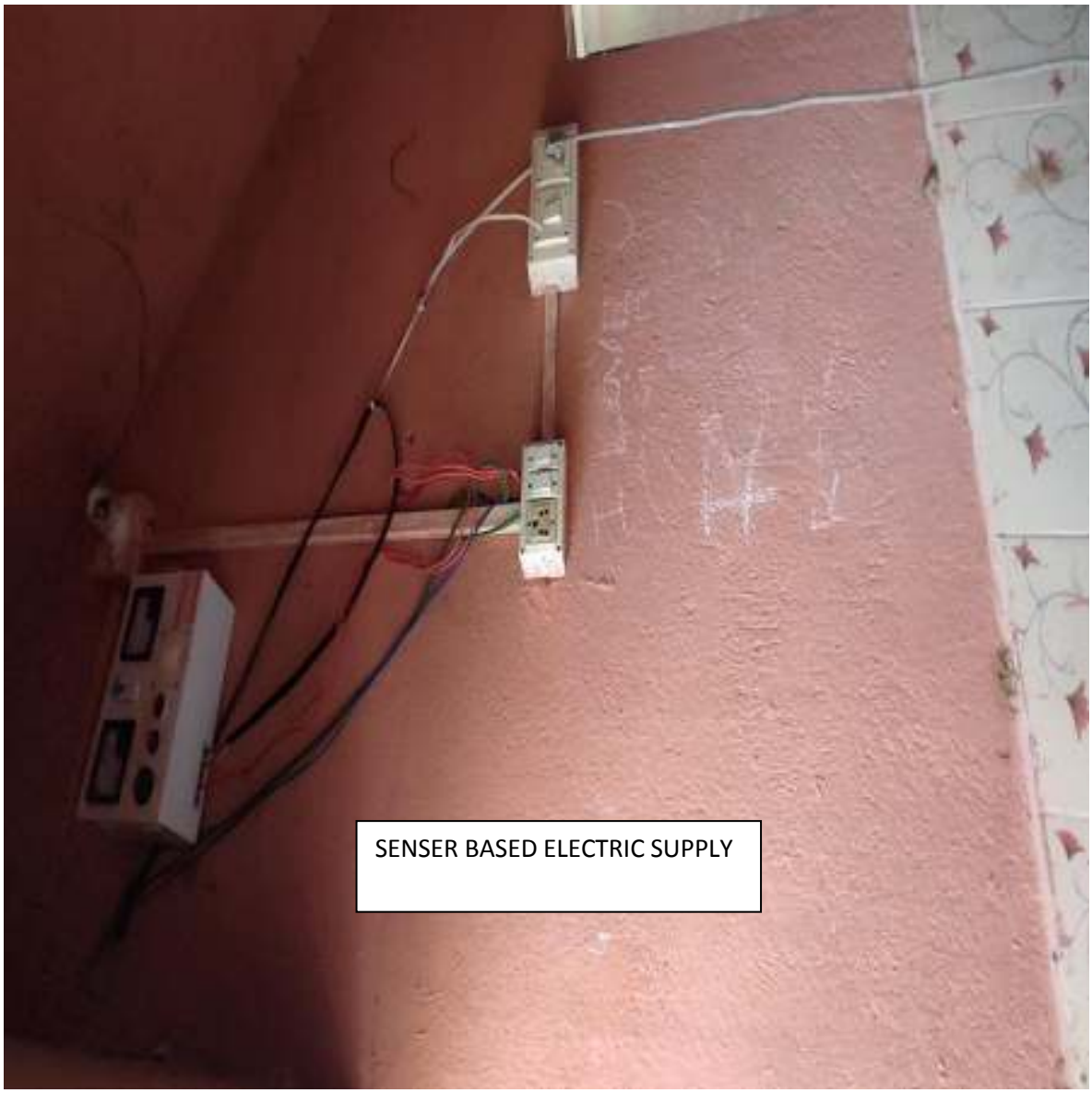
7.1.2-The Institution has facilities for alternate sources of energy and energy conservation measures : 1. Solar energy 2. Sensor-based energy conservation 3. Use of LED bulbs/ power efficient
equipment



OVER HEAD TANK

LED BULB

BILL / CASH MEMO

MOHANTY ELECTRICALS

Nuasahi, Kaptipada, Mayurbhanj, Odisha- 757040

Mob. - 9008796701, 9776596080

Date : 13/10/2022 Sl.No. 141

Name : Nuasahi college Kaptipada

Address : Nuasahi

Sl.	Particulars	Qnty	Rate	Amount
1	LED Rod 20watt	2	260	520
2	wire 0.5MM	3	12	36
3	Sqeegrip	2	10	20
4	Black Tep	1	10	10
5	Fitting bord	1	160	160
6	Drill bit	1	52	52
	Fitting charg	2man	200	200
			TOTAL	998

Rupees Nine hundred ninety eight only.

For Mohanty Electricals

14/10/22
Principal
Kaptipada Degree College
Nuasahi, Mayurbhanj

BILL / CASH MEMO

MOHANTY ELECTRICALS

Nuasahi, Kaptipada, Mayurbhanj, Odisha- 757040

Mob. - 9008796701, 9776596080

Date : 20/8/2022 Sl.No. **139**

Name : Nuashahi collage Kaptipada Nuashahi

Address : Nuashahi

Sl.	Particulars	Qnty	Rate	Amount
1/	fan colling repiring	1	470	470
2/	fan benring repiring	1	330	330
3/	fan beld	1	350	350
4/	regulator	1	190	190
5	fitting	3days	550	550
6/	fan. clamp	1	50	50
7/	Not up,down	2	20	40
8/	capacitor	1	50	50
9/	fan pipe	1	100	100
			TOTAL	2130

Receipt

Rupees Two thousand one Hundred only. Paid (2000)

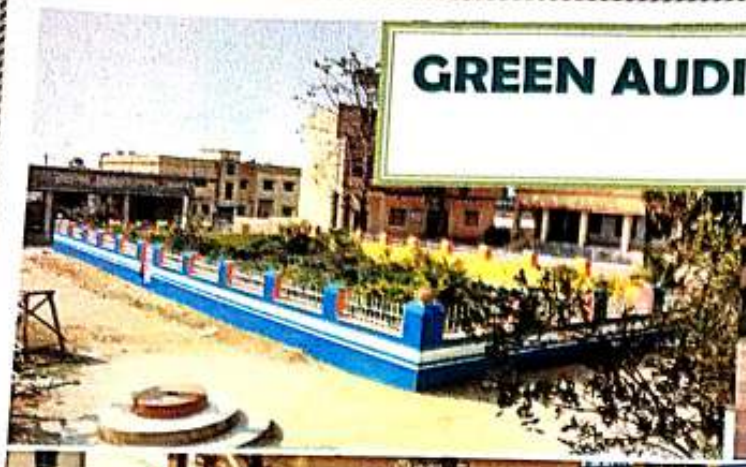
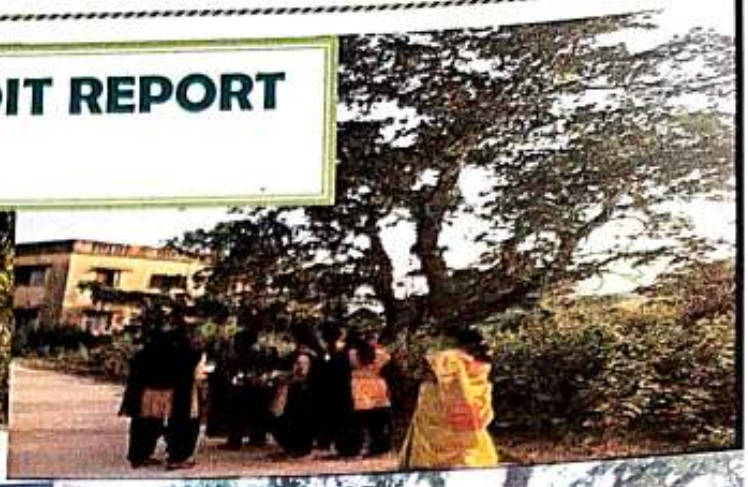
For Mohanty Electricals

20.8.22

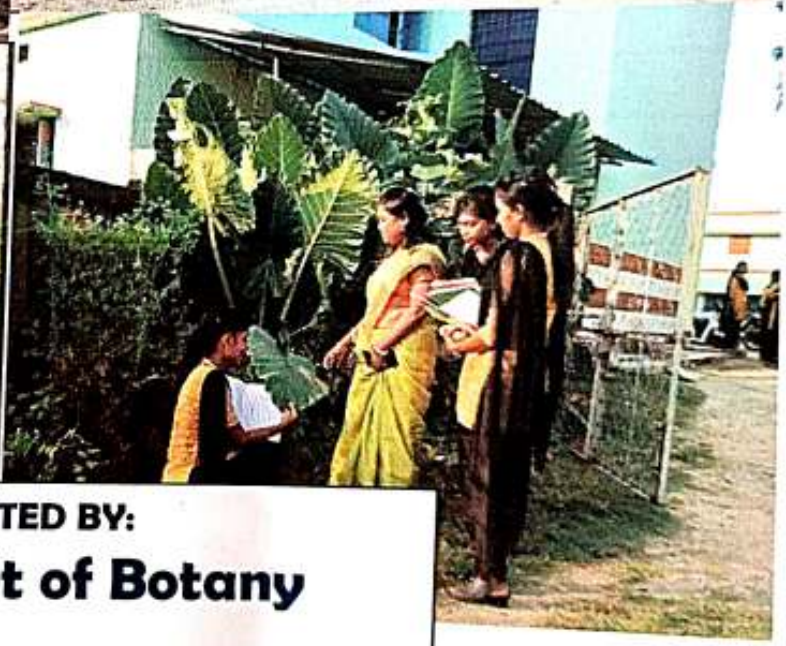
7.1.3-The facilities in the Institution for the management of the following types of degradable and non-degradable waste : 1. Solid waste management

7.1.4-Water conservation facilities available in the Institution: 1. Rain water harvesting 2. Borewell 3. Construction of tanks 4. Maintenance of water bodies and distribution system in the campus

GREEN AUDIT REPORT





SUBMITTED BY:

Department of Botany

KAPTIPADA DEGREE COLLEGE, NUASAHI, MAYURBHANJ

ACKNOWLEDGEMENT

This project work would not have been possible without the guidance and help of several individuals who has contributed and extended their help to accomplish its goal.

We express our deep sense of gratitude to our college, Kaptipada Degree College, Nuasahi, for its keen support.

We are eminently grateful to our Principal Dr.Lipika Behera Madam for her valuable guidance, co-operation, and encouragement, that helped us a lot in execution of this project and to make it a infallible success.

Last but not the least, we conclude by thanking every one whole heartedly, who helped us to clinch the project within the restricted time frame.

MEMBER

01. Mrs. Sujata Pradhan - Sujata pradhan.
Lecturer in Botany

02. Ipsita panda - Ipsita Panda
Lecturer in Botany

Forest Range Officer
Kaptipada Range

Principal
Kaptipada Degree College
Nuasahi Mayurbhani

CONTENT

Forest Range Officer
Kaptipada Range

ABSTRACT

The project" green Audit" aims to analyse the environmental correlation, which will have an impact on the eco-friendly ambience. The main objective of the project "green audit" is to promote the environment management and conservation in our college campus. In our project we had focus on counting the status of floras in our campus basing upon three categories–Tree, Herb and Shrub, calculating the oxygen produced by the floras and the carbon dioxide emitted by total persons, vehicles and electronic gadgets per week in an approximate value. We prepared an estimated data consisting of 853 numbers of plants (trees, herbs and shrubs) and 692 persons in our campus having 4 (four)acres of area. So as per our study and calculation, amount of oxygen released by the total plants and the carbon dioxide released by the total persons, vehicles and electronic gadgets are1851010 and 19000 litres per week respectively. By comparing the values of production of O_2 to CO_2 we concluded that the amount of O_2 is enormous as compared to the amount of co_2 produced in the campus. This concluded that our campus environment is an quite green environment.

INTRODUCTION

Green Audit is a process of systematic identification , quantification, recording, reporting and analysis of components of environmental diversity of institute. It aims to analyse environmental practice swithin and outside of the concerned place, which will have an impact on the eco-friendly atmosphere. Green Audit is usefull tool for college to determine how and where they are using the most energy or water or resources.

It can create health consciousness and promote environmental awareness, values and ethics. It could also be stated that institutional self-enquiry is a natural and necessary out growth of a quality educational institution. 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 foot print reduction measures.

OBJECTIVES

The main objective of the Green Audit Is to promote the environment management and conservation in the Kaptipada Degree College, Nuasahi, Mayurbhanj.

In Recenttime, the Green Audit of an institution has been becoming a paramount important for self-assessment of the institution which reflects the role of the institution in mitigating the present environmental problems. Our environment is clean since its inception. Therefore, the purpose of the present green audit is to identify, quantify, describe and prioritize framework.

The main objectives of carrying out Green Audit are in order to perform green audit included different tools such as preparation of physical inspection of the campus observation and review of the documentation data analysis, measurements and recommendations.

- Review Back ground information
- Green area management
- Energy conservation
- Oxygen level &Emission of Carbon Dioxide

MATERIAL METHOD

The project was done in our college by the students with assistance of HOD of Botany Department Mrs. Sujata Pradhan and faculties members of Botany department of Kaptipada Degree College, Nuasahi, Mayurbhanj. Three groups of students each having 4 students or participants. We measured both length &width of all the plants using a measurement tape identified them with the help of e-florabook, then categorized them into trees, herbs and shrubs. Then we analysed which one was a flowering plant or which one was a non–flowering plant. Later we prepared a list according to their square feet &campus area. We also made the final list of students trength according the data we have.

CAMPUS AREA	**4 acres**
STUDENTS TRENGTH	650 Nos
STAFF	42 Nos
TOTAL PERSONS	692 Nos

Table-1

ANALYSIS

Sl No.	Plant Name	No. Of Plants	Plant Type	Length	Width	Flowering/ Non-Flowering
1	Azadirachta Indica (neem)	20	Tree	20 Mtr.	2.5 Mtr.	Flowering
2	Aegle Marmelos (Indian Bael)	5	Tree	8 Mtr.	5 CM	Flowering
3	Mangifera Indica (Mango)	30	Tree	20 Mtr.	5.3 CM	Flowering
4	Artocarpus Heterophyicus (Jack Fruit)	6	Tree	21 Mtr.	7 CM	Flowering
5	Tamaridus Indica (Tamarind)	4	Tree	25 Mtr.	8 CM	Flowering
6	Sharea Rabasta (Sal)	15	Tree	50 Mtr.	2 CM	Flowering
7	Tectona Grandis (Teak / Shagwn)	20	Tree	40 Mtr.	12.5 MM	Flowering
8	Cccimum Basilicum	10	Herb	24 Inch		Flowering
9	Carica Papaya	6	Tree	10 Mtr.		Flowering
10	Tagetes (Marigold)	30	Herb	6-24 Inch		Flowering
11	Mimosa Pudica	25	Creeper	3 Ft.		Flowering
12	Ocimum Sanctum	20	Shrub	4 Ft.		Flowering
13	Ficus Benghalensis	2	Tree	90 Ft.	2 Ft.	Flowering
14	Ficus Religiosa	3	Tree	100 Ft.	20 Ft.	Flowering
15	Anacardium Occidentale (cashew)	10	Tree	12 Mtr.		Flowering
16	Eucalyptus Globulus	20	Tree	150 Ft.	5 Ft.	Non-Flowering
17	Bougainvillea Glabra	10	Shrub	30 Ft.		Flowering
18	Psidium Guajava	5	Tree	10 Mtr.	20 CM	Flowering
19	Coces Nucifera (Coconut)	15	Tree	80 Ft.		Flowering
20	Phoenix Dactylifera (Date palm tree)	10	Tree	60 Ft.		Flowering
21	Aloe Barbadensis (Aloevera)	10	Soccutent	2 Ft.	2 Ft.	Non-Flowering
22	Murraya Koenigli (Curry Leaves)	3	Tree	15 Ft.		Flowering
23	Saraca Asoca	6	Tree	15 Mtr.		Flowering

24	Citrus Limon	2	Tree	10 Ft.		Flowering
25	Thuja Occidentatis	6	Tree	5 Ft.		Non-Flowering
26	Cardacum Variegatum (Croton)	20	Shrub	8 Ft.		Non-Flowering
27	Madagascar Periwinkle	30	Herb	30 Inch		Flowering
28	Maringa Oleifera	6	Tree	12 Mtr.	45 CM	Flowering
29	Capsicum Annum (Chilly)	6	Shrub	4 Ft.	5 CM	Flowering
30	Sida Cardifolia (Bajramuli)	5	Shrub	70 Inch		Flowering
31	Achyrantias Aspera (Afamaranga)	30	Herb	90 CM		Non-Flowering
32	Elacocartus Ganitrus	1	Tree	31 mtr.		Flowering
33	Saccharum Spontaneum (Kasatandi)	50	Grass	5 Mtr		Flowering
34	Coriandrum Sativur (Corrinder)	30	Herb	50 CM		Flowering
35	Senna Tora	40	Herb	90 CM		Flowering
36	Coccinia Grandis	15	Cvire	3 Mtr.		Flowering
37	Cyperus Rotundus (Grass)	50	Grass	140 CM		Non-Flowering
38	Chrysanthemum Indicum (Sebati pink)	20	Herb	24 Inch		Flowering
39	Chrysanthemum Muttiform (sebati yellow)	20	Herb	24 Inch		Flowering
40	Collocasia Esculenta	30	Herb	6 Inch		Non-Flowering
41	Thevetia Peruviara	6	Tree	12 Mtr.		Non-Flowering
42	Tabernaemon Divaricata	10	Herb	2 Mtr.		Flowering
43	Hibiscus Rosasinensis (Mandara)	4	Shrub	10 Ft.	3 Ft.	Flowering
44	Ixora Chinersis (rangani)	10	Shrub	15 Ft.	3 Ft.	Flowering
45	Anthocephalus Cadamba (Kadamba)	2	Tree	45 Mtr.	100 CM	Flowering
46	Calotrofis Gigantea (Arakha)	20	Shrub	4 Mtr.		Flowering

47	Tridax Procumbers	30	Herb	50 CM		Flowering
48	Araucaria Columnaris	6	Tree	60 Mtr		Non-Flowering
49	Araucaria Nemorosa	4	Tree	70 Mtr.		Non-Flowering
50	Ligustrum Ovalifolium	4	Shrub	15 Ft.		Flowering
51	Brunfelsia Uniflora	5	Shrub	3Mtr.		Flowering
52	Cyanthillium Cinereum	20	Herb	120 CM		Flowering
53	Mikaria Scanders	30	Herb	10 Ft.		Flowering
54	Mazus Pumilug	30	Creeper	30 CM		Flowering
55	Rhoeo Disolor	20	Shrub	50 CM		Non-Flowering
56	Butea Monosperma	6	Tree	15 Mtr.		Non-Flowering
Total No. of Plants		**853**				

Table-2

Classroom / Offices	Total Lights	LightType	Fan	AC	CCTV	BulbHolders	PC
Room-1 (History)	6	LED	4				7 (6 PC, 1 Projector)
Room-2 (Pol. Sc.)	5	LED	4				
Room-3 (Edn.)	5	LED	5				
Room-4 (Odia)	2	LED	3				
Room-5 (Phil)	2	LED	4				
Room-6 (Common)	2	LED	3				
Room-7 (Botany)	3	LED	3				
Room-8 (Zoology)	8	LED	4	1 (Freeze)	1		
Room-9 (Phy)	8	LED			1		
Room-10	2	LED	6		1		
Room-11 (Chem)	7	LED	2		1		
Room-12							
Toilet	6	LED					
Room-13 (Math)	4	LED	3				
Office	4	LED-3Nos BAR-1Nos	3	1			
Exam Sec	2	BAR	1				
Library	8	LED	7		2		
Seminar Hall	8	LED	8		1		
Principal Office	2	LED	3		1		
Staff Common	3	BAR	2		1	1 TV	

CALCULATION AND CONCLUSION

OXYGENPRODUCTION

- 1 PLANT=310 lt/day
- 1 PLANT=2170 lt/week
- 853 PLANT=1,851,010 lt/week

OXYGENCONSUMPTION

- 1 PERSON CONSUMES OXYGEN IN ONE WEEK = 25 lt
- 692 PERSONS CONSUMED OXYGEN IN ONE WEEK=17300 lt

CARBON DIOXIDE PRODUCTION

- 1KW produces 870gm. of CO_2
- So,1W produces 0.87gm. of CO_2

Types of Electronic Device	Amount of Electricity produced	1 device Producing CO_2	Total No.of Devices Present	Amount of CO_2 produced in 1hr	Working Hour of The Electronic Device	Total Amount of CO_2 Produced
LED	9W	0.87×9= 7.83gm.	81 Nos	7.83×81= 634.23gm.	10hrs.	634.23×10=63 42.3gm./day
FAN	320W	0.87×320= 278.40gm.	67 Nos	278.40× 67= 18652.80gm.	10hrs.	18652.80 ×10=186529gm./day
AC / Freeze	1000W	0.87×1000= 870gm.	2 Nos	870×2= 1740gm.	5hrs.	1740 ×10=17400 gm./day
COMPUTER	200W	0.87×200= 174gm.	8 Nos	174×8= 1392gm.	10hrs.	1392 ×10=13920 gm./day
BARLIGHT	40W	0.87×40= 34.80gm.	9 Nos	34.80×9= 313.2gm.	10hrs.	313.2 ×10=3132gm./day
CCTV	50W	0.87×50= 43.50gm.	9 Nos	43.50×9= 391.5 gm.	5hrs.	391.5 ×5=1957.5gm./day

- A human produces the same amount of CO_2 as it intakes O_2.
- So, 692 persons produces 17300 lt. of CO_2 in a week.
- 1 Vehicle produces 100gm. Of CO_2 in 1 hour. But in campus vehicle usage is of an average of 30 minutes. i.e., 1 vehicle produces 50 gm. Of CO_2.
- So, Average of 50 vehicles produces 2500gm. Of CO_2 per day.
- So weekly the Vehicles in campus produces 17,500gm. Of CO_2.
- Weekly the electronic devices produces 1,60,4966gm.of CO_2.
- So weekly from the campus we get both from vehicle and electronic gadgets are 1,622,466gm.of CO_2.
- Converting it into liters, we get 1622.46lt.of CO_2.
- As mentioned above, the humans present in the campus produce 17300lt.of CO_2.
- So,adding both of them we get 18,922lt.of CO_2,which is Approximately **19000lt.**of CO_2.
- Amount of Oxygen released = 1,851,010 lt.
- Amount of Carbon Dioxide released= 19000lt.
- Comparing to the amount of O_2 produced and amount of CO_2 produced we conclude that the amount of O_2 is very large as compared to the amount of CO_2 produced.
- This concludes that our Campus environment is a fully-green environment.

7.1.5- Green campus initiatives include: 1. Restricted entry of automobiles 2. Battery-powered vehicles 3. Pedestrian-friendly pathways 4. Ban on the use of Plastics 5. Landscaping with trees and plants 


B 5459
electric


B 5459
electric


OD
0530
electric


OD 11 Y
0530

PLASTIC BAG FREE ENVIRONMENT

KAPTIPADA DEGREE COLLEGE

NUASAHI, MAYURBHANJ

Notice No.- 194/(6)/22 Date:- 31.12.22

All the staff and the students of the college are instructed to use the dustbin kept in the campus. They are further requested not to throw the polythene bag, pouches or any unused paper here and there to keep the campus clean and green.

Principal

KAPTIPADA DEGREE COLLEGE

NUASAHI, Mayurbhanj

KAPTIPADA DEGREE COLLEGE

NUASAHI, MAYURBHANJ

Notice No.- 194(a)/22 **Date:-** 31.12.22

All the staff and the students of the college are instructed to come to college on foot or bicycles or E-bikes on Saturday of every week to keep the campus clean and eco friendly.

Principal

KAPTIPADA DEGREE COLLEGE

NUASAHI, Mayurbhanj

KAPTIPADA DEGREE COLLEGE

NUASAHI, MAYURBHANJ

Notice No.- 321(5)/21 **Date:-** 18.12.21

All the staff and the students of the college are instructed to use the dustbin kept in the campus. They are further requested not to throw the polythene bag, pouches or any unused paper here and there to keep the campus clean and green.

Principal
KAPTIPADA DEGREE COLLEGE
NUASAHI, Mayurbhanj

KAPTIPADA DEGREE COLLEGE

NUASAHI, MAYURBHANJ

Notice No.- 321/(a)/21 **Date:-** 18.12.21

All the staff and the students of the college are instructed to come to college on foot or bicycles or E-bikes on Saturday of every week to keep the campus clean and eco friendly.

Principal
KAPTIPADA DEGREE COLLEGE
NUASAHI, Mayurbhanj

Principal
Kaptipada Degree College
Nuasahi Mayurbhanj