

ENERGY & GREEN AUDIT REPORT

BALAJI INSTITUTE OF PHARMACEUTICAL SCIENCES

Laknepally, Narsampet, Warangal.



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Balaji Institute of Pharmaceutical Sciences
Laknepally (V), Narsampet (M)
Warangal (T.S) 506 331 (T.S)
Narsampet (M)

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COLLEGE ENTRANCE VIEW



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GOOGLE MAP




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EXECUTIVE SUMMARY

Sr. No	Area	Proposed Action	Expected Result	Monthly Energy Savings in kWh	Annual Reduction in t(CO ₂) emission in Tons	Monthly Cost Savings in Rs	Investment in Rs.	Payback Period in Months
1	Lighting Recommendation 1	Replace the existing 45 W FTL tube lights into 20 W LED tubes	<p>Replace the existing 45 W FTL tube lights into 20 W LED tubes</p> <ul style="list-style-type: none"> • Total No. of light fittings = 698 Nos. • Total No. of Light fitting presently operated = 698 Nos. • Total No. of light fittings to be replace = 698 Nos. • Present Energy Consumption = 4711 kWh • Expected Energy Consumption = 2049 kWh • Total Energy Saved per Month = 4711-2049 = 2617 kWh • Total Saving = 2617 kWh • Monetary Savings = Rs.20416 • Investment = Rs.218125 • Simple Payback period = 11 Months 	2617	15	20416	218125	11



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2	Lighting Recommendation -2	Replace the existing DAYLIGHTS 400W lights into 100 W LED flood lights	<p>Replace the existing 400 W FTL tube lights into 100 W LED flood lights</p> <ul style="list-style-type: none"> • Total No. of light fittings = 39 Nos. • Total No. of Light fitting presently operated = 39 Nos. • Total No. of light fittings to be replace = 39 Nos. • Present Energy Consumption = 1170 kWh • Expected Energy Consumption = 585 kWh • Total Energy Saved per Month = 1170-585 = 585 kWh • Total Saving = 585 kWh • Monetary Savings = Rs 4563 • Investment = Rs. 78000 • Simple Payback period = 18 Months 	585	1.59	4563	78000	18
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Executive Summary – Energy Audit

Sr. No	Area	Proposed Action	Expected Result	Monthly Energy Savings in kWh	Annual Reduction in t(CO ₂) emission in Tons	Monthly Cost Savings in Rs	Investment in Rs.	Payback Period in Months
3	Fan	Replace existing 80 watt conventional ceiling fans with 50 watt energy efficient fans	<p>Replace existing 80 watt conventional ceiling fans with 50 watt energy efficient fans</p> <ul style="list-style-type: none"> • Total No. of ceiling fans present = 1960 Nos. • Total No. of ceiling fans presently operated = 1960 Nos. • Total No. of ceiling fans to be replaced = 1960 Nos. • Present Energy Consumption = 23520 kWh • Expected Energy Consumption = 14700 kWh • Total Energy Saved per Month = 23520 - 14700 = 8820 kWh • Total Saving = 8820 kWh • Monetary Savings = Rs. 68,796 • Investment = Rs. 29,40,000 • Simple Payback period = 43 Months 	8820	7.4	68796	2940000	43
				3211	29.92	31492	438810	13.93



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Executive Summary – Green Audit

Sr.No	Area	Observations	Remark
1	Tree Plantation	College has carried out tree plantation activity. Several type of trees has been planted by students and staffs as a Haritha haram program initiated by govt. of Telangana.	Good initiative taken by college toward green campus
2	Use of renewable energy – Solar PV system for power generation	Solar PV system of 290 kW has been installed by college to generate the electricity from solar energy. It helps to reduce 450 tons of CO2 emission annually	Good initiative taken by college towards use of renewable energy
3	Liquid Waste Management	At present, no any waste disposal system to reuse the waste water. Also no any standard operating procedure to dispose the chemicals used in laboratories	Sewage treatment plant can be installed in future to reuse the flushed water. Refer the guidelines mentioned in report for disposal of laboratory chemicals
4	E waste Management	At present, E -waste generated by college is sent to their Head office	College shall ensure that e-waste generated by them is channelised through collection centre or dealer of authorised producer or dismantler or recycler
5	Rain Water Harvesting	At present, rain water harvesting system is not available in the college campus. College has planned to make the system in coming months	Rain water harvesting system will help to make the water available in summer seasons Also same water can be used for gardening purpose
6	Plastic and Paper free campus	Till date, college has not issued any notification for plastic free and paper free campus. However staff and students are taking initiatives to reduce the use of plastic and papers in college campus	Management should make policy to avoid the use of plastic and paper wherever possible and publish to the student's staffs, etc.



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Acknowledgement

We extend gratitude to Balaji Institute of Pharmaceutical sciences for extending us the opportunity to conduct the Energy & Green Audit.

We are thankful to the professors & supporting staff of the college for their transparency & consistent support in sharing relevant information and for providing data about policies and projects along with their other valuable information. This report would have not been possible without their support.

The study team would like to acknowledge the following distinguished personnel's of Balaji Institute of Technology and Science in person for the diligent involvement and cooperation.

Prof. Dr. A. Shyam Sunder **Principal**

Dr.T.Manish Kumar **Head of Dept., Pharmaceutical Analysis**

Dr.P.Ravi **Head of Dept., Pharmaceutics**

Dr.J.Ravi **Head of Dept., Quality Assurance**



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About College

Balaji Institute of Pharmaceutical sciences is the one of the best Engineering college in warangal district, popularly known as BIPS, was established by Maheshwara Educational Society in 2001 at Laknepally Village near Narsampet beside Warangal-Narsampet Main Road in an area of 35 acres with an in take of 180. The place is well connected by road and train and is only 20 minutes drive from Warangal. Presently the college offers Pharmacy courses like B.Pharmacy, Doctor of Pharmacy. M.Pharmacy.

BIPS has been consistent to maintain excellence in the academic standards since its inception. Discipline is hallmark of BIPS. Learning is an enjoyable experience here, with experienced faculty, inspiring libraries and large playgrounds and state-of-the-art labs. The management has constructed magnificent buildings on the campus surrounded by serene and natural surrounding with plenty of greenery. All the laboratories are established with sophisticated and modern equipment.

The State-of-the-art facilities are provided in the institution to meet the Academic requirements of Staff & Students. Student's Welfare, Academic Growth, their Placements and overall Personality Development is the Motto. Round the Clock Security, ATM, Departmental Stores and Canteen are some of the facilities available in the Campus.

Mission

- To strive hard to produce technically trained human resources to serve the present and future global needs by providing quality education
- To provide value based training in technological advancements and employment opportunities to students by strengthening institute's interaction with industries.
- To disseminate knowledge of need based technical education, innovative learning and research & development with holistic approach.

Vision

- To be a centre for excellence in preparing the graduates professionally committed, intellectually adept and ethically balanced with high standards by imparting quality education with international standards to excel in their career to meet the challenges of the modern world and adapt to the technologically changing environment.




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Energy Audit

An energy audit is an inspection, survey and analysis of energy flows, for energy conservation in a building, processor system to reduce the amount of energy input into the system without negatively affecting the output(s). In commercial and industrial real estate, an energy audit is the first step in identifying opportunities to reduce energy expense and carbon footprints.

The Institution has facilities for alternate sources of energy and energy conservation measures

1. Solar energy:

Use of Solar Energy

Steps for Energy Conservation:

1. Use of ample glass windows for maximizing use of available natural light in the operational areas
2. Classroom and labs are designed in such a way that natural lightning and ventilation are provided

Solar panel

The management of the institution has also planned to dedicate Solar panel with capacity of 287kW for one entire Campus for all its energy usage.

2018-19

Power requirement met by renewable energy sources	Total power requirement	Renewable energy source	Renewable energy generated and used	Energy supplied to grid
360000	367000	Solar	360000 (Generated)	47200
			36000(Used)	

2019-20

Power requirement met by renewable energy sources	Total power requirement	Renewable energy source	Renewable energy generated and used	Energy supplied to grid
342000	352000	Solar	342000 (Generated)	50300
			342000(Used)	



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2020-21

Power requirement met by renewable energy sources	Total power requirement	Renewable energy source	Renewable energy generated and used	Energy supplied to grid
324000	332000	Solar	324000 (Generated)	52200
			324000(Used)	

2021-22

Power requirement met by renewable energy sources	Total power requirement	Renewable energy source	Renewable energy generated and used	Energy supplied to grid
306000	320000	Solar	306000 (Generated)	53500
			306000(Used)	

2022-23

Power requirement met by renewable energy sources	Total power requirement	Renewable energy source	Renewable energy generated and used	Energy supplied to grid
288000	305000	Solar	288000 (Generated)	55438
			288000(Used)	



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BOYS HOSTEL

NAME OF ROOM	Details	Total Qty	on	off	Wattage	Load in KW	Daily Op Hr	Monthly Op Hr	Daily KW/h	Monthly Kwh	LED lighting	Fluorescent tube/CFL	Total lighting Requirement
101	Fan	9	9	0	80	0.72	6	150	4.32	108			0
	LED Tube Light	3	3	0	20	0.06	6	150	0.36	9	9		9
	Fan	6	6	0	80	0.48	6	150	2.88	72			0
102	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6		6
	Fan	9	9	0	80	0.72	6	150	4.32	108			0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6		6
103	Fluorescent Tube	1	1	0	50	0.05	6	150	0.3	7.5		7.5	7.5
	Fan	6	6	0	80	0.48	6	150	2.88	72			0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6		6
104	Fan	6	6	0	80	0.48	6	150	2.88	72			0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6		6
	Fan	9	9	0	80	0.72	6	150	4.32	108			0
201	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6		6
	Fan	6	6	0	80	0.48	6	150	2.88	72			0
	Fan	9	9	0	80	0.72	6	150	4.32	108			0
202	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6		6
	Fan	6	6	0	80	0.48	6	150	2.88	72			0
	Fluorescent Tube	1	1	0	50	0.05	6	150	0.3	7.5			7.5
203	Fan	6	6	0	80	0.48	6	150	2.88	72			0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6		6
	Fan	6	6	0	80	0.48	6	150	2.88	72			0



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204	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6	6	6
	Fan	6	6	0	80	0.48	6	150	2.88	72			0
205	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6	6	6
	Fan	6	6	0	80	0.48	6	150	2.88	72			0
206	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6	6	6
	Fan	6	6	0	80	0.48	6	150	2.88	72			0
207	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6	6	6
	Fan	6	6	0	80	0.48	6	150	2.88	72			0
208	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6	6	6
	Fan	9	9	0	80	0.72	6	150	4.32	108			0
301	LED Tube Light	4	4	0	20	0.08	6	150	0.48	12	12	12	12
	Fan	9	9	0	80	0.72	6	150	4.32	108			0
302	LED Tube Light	3	3	0	20	0.06	6	150	0.36	9	9	9	9
	Fan	6	6	0	80	0.48	6	150	2.88	72			0
303	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6	6	6
	Fan	6	6	0	80	0.48	6	150	2.88	72			0
304	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6	6	6
	Fan	6	6	0	80	0.48	6	150	2.88	72			0
305	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6	6	6
	Fan	6	6	0	80	0.48	6	150	2.88	72			0
306	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6	6	6
	Fan	6	6	0	80	0.48	6	150	2.88	72			0

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307	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6	6
	Fan	6	6	0	80	0.48	6	150	2.88	72		0
308	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6	6
	Fan	9	9	0	80	0.72	6	150	4.32	108		0
Corridor	Fluorescent Tube	3	3	0	50	0.15	6	150	0.9	22.5	22.5	22.5
	fridge	1	1	0	200	0.2	6	150	1.2	30		0
	Exhaust Fan	1	1	0	60	0.06	6	150	0.36	9		0
	LED Tube Light	3	3	0	20	0.06	6	150	0.36	9	9	9
	CC	1	1	0	2	0.002	6	150	0.012	0.3		0
Ground (Dormitory)	Fan	12	12	0	80	0.96	6	150	5.76	144		0
	LED Tube Light	3	3	0	20	0.06	6	150	0.36	9	9	9
Computer Lab	Fluorescent Tube	1	1	0	50	0.05	6	150	0.3	7.5	7.5	7.5
	Fan	12	12	0	80	0.96	6	150	5.76	144		0
	Fluorescent Tube	8	8	0	50	0.4	6	150	2.4	60	60	60
	Computer fridge	60	60	0	50	3	6	150	18	450		0
	Exhaust Fan	1	1	0	200	0.2	6	150	1.2	30		0
Corridor	LED Tube Light	2	2	0	60	0.12	6	150	0.72	18		0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6	6
Mess	Fluorescent Tube	4	4	0	50	0.2	6	150	0.24	30	30	30
	CC	2	2	0	2	0.004	6	150	0.024	0.6	0.6	0.6
	Fan	11	11	0	80	0.88	6	150	5.28	132	132	132



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	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	6	6	6
	Fluorescent Tube	4	4	0	50	0.2	6	150	1.2	30	30	30	30
MBA Library	Fan	12	12	0	80	0.96	6	150	5.76	144	144	0	0
	LED Tube Light	3	3	0	20	0.06	6	150	0.36	9	9	9	9
	Fluorescent Tube	3	3	0	50	0.15	6	150	0.9	22.5	22.5	22.5	22.5
	Computer	4	4	0	50	0.2	6	150	1.2	30	30	0	0
Corridor	Fan	1	1	0	80	0.08	6	150	0.48	12	12	0	0
	Exhaust Fan	1	1	0	60	0.06	6	150	0.36	9	9	0	0
	LED Tube Light	3	3	0	20	0.06	6	150	0.36	9	9	9	9
	Fluorescent Tube	1	1	0	50	0.05	6	150	0.3	7.5	7.5	7.5	7.5
	CC	1	1	0	2	0.002	6	150	0.012	0.3	0.3	0	0
MBA office	Fan	9	9	0	80	0.72	6	150	4.32	108	108	0	0
	LED Tube Light	6	6	0	20	0.12	6	150	0.72	18	18	18	18
	Computer	5	5	0	50	0.25	6	150	1.5	37.5	37.5	0	0
						22.798				3419.7	198	195	393




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GIRLS HOSTEL

NAME OF ROOM	Details	Total Qty	no of	Wattage	Load in KW	Daily Op Hr	Monthly Op Hr	Daily KW/h	Monthly Kw/h	LED lighting	Fluorescent tube/CFL	Total lighting Requirement
301	Fan	6	6	80	0.48	6	150	2.88	72	0.48	0.48	0.96
	Exhaust Fan	1	1	60	0.06	6	150	0.36	9		15	15
302	Fluorescent Tube	2	2	50	0.1	6	150	0.6	15		0.1	0.1
	Fan	2	2	80	0.16	6	150	0.96	24		7.5	7.5
	Exhaust Fan	1	1	60	0.06	6	150	0.36	9		30	30
	Fluorescent Tube	2	2	50	0.1	6	150	0.6	15		0.1	0.1
303	Fan	6	6	80	0.48	6	150	2.88	72		7.5	7.5
	Fluorescent Tube	1	1	50	0.05	6	150	0.3	7.5		0.05	0.05
Seminar Hall	Fan	36	36	80	2.88	6	150	17.28	432		7.5	7.5
	Fluorescent Tube	4	4	50	0.2	6	150	1.2	30		0.2	0.2
	Fan	2	2	80	0.16	6	150	0.96	24			0
1	LED Tube Light	1	1	20	0.02	6	150	0.12	3	0.02		0.02
	Fan	2	2	80	0.16	6	150	0.96	24			0
2	LED Tube Light	1	1	20	0.02	6	150	0.12	3	0.02		0.02
	Fan	3	3	80	0.24	6	150	1.44	36			0
3	LED Tube Light	1	1	20	0.02	6	150	0.12	3	0.02		0.02
	Fan	2	2	80	0.16	6	150	0.96	24			0
4	LED Tube Light	1	1	20	0.02	6	150	0.12	3	0.02		0.02
	Fan	2	2	80	0.16	6	150	0.96	24			0
	LED Tube Light	1	1	20	0.02	6	150	0.12	3	0.02		0.02



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 Narasimpet (A)
 Narasimpet (A) - 508 231 (0.02)
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16	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3	0.02	0.02	0.02
	Fan	2	2	0	80	0.16	6	150	0.96	24			0
17	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3	0.02	0.02	0.02
	Fan	2	2	0	80	0.16	6	150	0.96	24			0
18	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3	0.02	0.02	0.02
	Fan	2	2	0	80	0.16	6	150	0.96	24			0
19	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3	0.02	0.02	0.02
	Fan	2	2	0	80	0.16	6	150	0.96	24			0
Dyning Hall	Fluorescent Tube	1	1	0	50	0.05	6	150	0.3	7.5		0.05	0.05
	Fan	2	2	0	80	0.16	6	150	0.96	24			0
Dyning Hall	Fluorescent Tube	1	1	0	50	0.05	6	150	0.3	7.5		0.05	0.05
	CC	2	2	0	2	0.00	6	150	4	0.6			0
Seminar Hall	Fan	17	17	0	80	1.36	6	150	8.16	204			0
	LED Tube Light	7	7	0	20	0.14	6	150	0.84	21	0.14	0.14	0.14
Office Room	Fan	4	4	0	80	0.32	6	150	1.92	48			0
	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3	0.02	0.02	0.02
Dyning Hall	Fluorescent Tube	1	1	0	50	0.05	6	150	0.3	7.5		0.05	0.05
	Fan	3	3	0	80	0.24	6	150	1.44	36			0
Dyning Hall	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3	0.02	0.02	0.02
	Fluorescent Tube	1	1	0	50	0.05	6	150	0.3	7.5		0.05	0.05
1st Floor	Fan	5	5	0	80	0.4	6	150	2.4	60			0



	Fluorescent Tube	2	2	0	50	0.1	6	150	0.6	15		0.1	0.1
	Led Bulb	1	1	0	20	0.02	6	150	0.12	3	0.02		0.02
Dyning Hall	Fan	4	4	0	80	0.32	6	150	1.92	48			0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	0.04		0.04
SICK room	Fan	2	2	0	80	0.16	6	150	0.96	24			0
	Fluorescent Tube	1	1	0	50	0.05	6	150	0.3	7.5		0.05	0.05
1st floor Seminar Hall	Fan	17	17	0	80	1.36	6	150	8.16	204			0
	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3	0.02		0.02
Reception	Fan	3	3	0	80	0.24	6	150	1.44	36			0
	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3	0.02		0.02
	Fluorescent Tube	1	1	0	50	0.05	6	150	0.3	7.5		0.05	0.05
	CC	1	1	0	2	0.00	2	150	0.01	0.3			0
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	0.04		0.04
	Fluorescent Tube	2	2	0	50	0.1	6	150	0.6	15		0.1	0.1
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	0.04		0.04
	Fluorescent Tube	2	2	0	50	0.1	6	150	0.6	15		0.1	0.1
	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	0.04		0.04
	Fluorescent Tube	2	2	0	50	0.04	6	150	0.6	15		0.1	0.1
Mess	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	0.04		0.04
	Fluorescent Tube	2	2	0	50	0.04	6	150	0.6	15			0.1
	fridge	2	2	0	200	0.4	6	150	2.4	60			



	LED Tube Light	1	1	0	20	0.02	6	150	0.12	3	0.02		0.02
	Fluorescent Tube	2	2	0	50	0.1	6	150	0.6	15		0.1	0.1
	Fan	1	1	0	80	0.08	6	150	0.48	12			0
Rice Room	LED Tube Light	2	2	0	20	0.04	6	150	0.24	6	0.04		0.04
	TOTAL					14.8				2221	1.26	69.28	70.54

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ENERGY SUMMARY

Description(From Elec.Bill)	Average	Unit	Supplier	Voltage (KV)	Connected load(KW)	% Solar Power generation sent to Grid
Total College load in KVA:	300	KVA	TSNPDCL	11	440.13	48.68 %
Total College load in KWh (Nov 2018-oct 2019)	26,469.83	KWh				
Solar energy generated in KWH (Nov2018-oct 2019) sent to Grid	12886.33	KWh				
7.1.3						
Annual power requirement met by renewable energy resources(KWH)	Annual power requirement (KWh)	renewable energy resource type	Avg Renewable energy generated and Used(KWh)	Energy supplied to the Grid(Kwh)		
163002	3,17,638	Solar PV Plant	51.30 %	1,54,636		

7.1.4

Total LED lamps wattage	19894	KWh	26 %
Total CFL/Fluorescent lamp Wattage:	56840	KWh	74 %
Total wattage required for lighting	77076	KWh	

Percentage of annual lighting power requirements

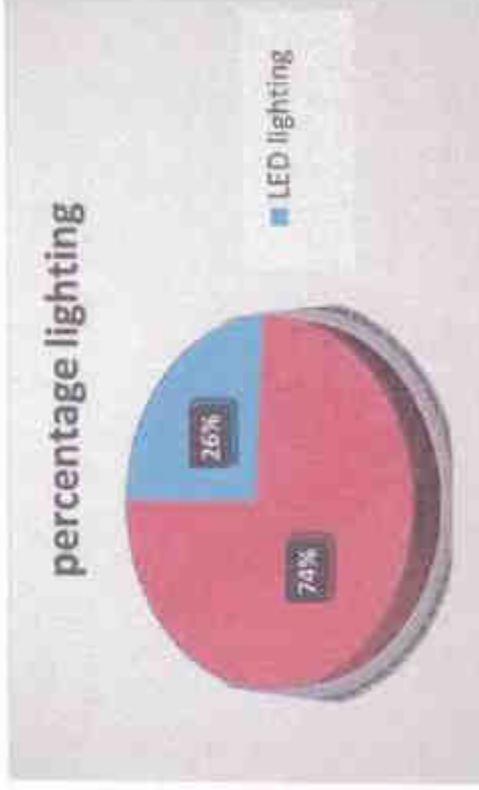
Total Lighting Requirements	Percentage Lighting Through Led Bulbs	Percentage Lighting Through Other Sources
77076	26 %	74 %



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Actual Load Measurement

The power logging is done at the mains of the 300 kVA transformer incoming. The following parameters are logged.

Phase	Voltage (Volt)			Current (Amp)		
	R Phase	Y Phase	B Phase	R Phase	Y Phase	B Phase
Min	236.5	237.6	236.1	37.7	50.1	41.3
Average	236.9	237.8	238.9	37.8	50.3	43.8
Max	237.2	238	239.1	38.2	50.6	46.2

Summary Tables For kW & Power Factor						
Phase	Power (kW)			Power Factor		
	R Phase	Y Phase	B Phase	Total	Total	Total

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Min	8.85	11.80	9.63	30.29	0.988
Average	8.86	11.85	10.34	31.05	0.988
Max	8.88	11.91	10.92	31.72	0.989

Observations

- Average and maximum phase voltage is 238.9 volts and 239.1 volts respectively.
- Average and maximum load is 31.05 kW and 31.72 kW respectively
- Average and minimum power factor recorded is 0.988 and 0.989 respectively during recorded period

BLOCK WISE CONNECTED LOAD

Block	Connected Load In KW	Monthly KWh	LED lighting	Fluorescent tube/CFL	Total lighting Requirement	no. of LED lamps	no of fluorescent lamps	No. of fans	daylights
Civil block-A	20.643	3096.45	100.5	600.75	701.25	35	89	99	0
ECE block-B	51.118	7667.7	117	723.6	840.6	39	100	115	0
EEE Block -C	24.577	3686.55	96	222.75	318.75	43	29	97	0
CSE Block	75.466	11319.9	228	591.3	819.3	130	66	200	0
MECH Block	19.735	2960.25	78	206.55	284.55	28	33	89	0
Nursing	11.295	1694.25	43.5	249.75	293.25	19	37	84	0
School	26.506	3975.9	268.5	297	565.5	89	44	2418	150
School Hostel	26.486	3972.9	87	166	249	29	24	204	10
Pharmacy	51.86	7779	162.3	951.5	1093.8	52	138	276	10



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Campus	83.537	12530.55	63	256.5	348	21	38	39	39
Girls Hostel	14.676	2201.4	117	175.5	292.5	41	26	152	0
Boys Hostel MBA	26.486	3972.9	198	175.5	373.5	66	26	201	0
Inter College	15.135	2270.25	99	144	243	33	48	163	0
Total Connected load	447.52	67128	1657.8	4736.7	6423	625	698	1960	39

1875	4711.5	23520	1170
KWh	KWh	KWh	KWh

Lighting Recommendation -1

Replace the existing 45 W FTL tube lights into 20 W LED tubes

- Total No. of light fittings = 698 Nos.
- Total No. of Light fitting presently operated= 698 Nos.
- Total No. of light fittings to be replace= 698Nos.
- Present Energy Consumption = 4711 kWh
- Expected Energy Consumption = 2049 kWh
- Total Energy Saved per Month = 4711-2049= 2617 kWh
- Total Saving = 2617 kWh
- Monetary Savings = Rs.20416
- Investment = Rs.218125
- Simple Payback period = 11 Months

Lighting Recommendation -1

Replace the existing 400 W FTL tube lights into 100 W LED flood lights

- Total No. of light fittings = 39 Nos.
- Total No. of Light fitting presently operated= 39Nos.
- Total No. of light fittings to be replace= 39Nos.
- Present Energy Consumption = 1170 kWh
- Expected Energy Consumption = 585 kWh



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- Total Energy Saved per Month = 1170-585= 585 kWh
- Total Saving = 585 kWh
- Monetary Savings = Rs 4563
- Investment = Rs.78000
- Simple Payback period = 18 Months

Fan Recommendation 1

Replace existing 80 watt conventional ceiling fans with 50 watt energy efficient fans

- Total No. of ceiling fans present = 1960 Nos.
- Total No. of ceiling fans presently operated= 1960 Nos.
- Total No. of ceiling fans to be replace= 1960 Nos.
- Present Energy Consumption = 23520kWh
- Expected Energy Consumption = 14700 kWh
- Total Energy Saved per Month = 23520-14700= 8820 kWh
- Total Saving = 8820 kWh
- Monetary Savings = Rs.68,796
- Investment = Rs. 29,40000
- Simple Payback period = 43 Months

Summary of Lighting requirements

Block	LED lighting (kwh)	Fluorescent tube/CFL(kwh)	Total lighting Requirement(kwh)
Civil block-A	100.5	600.75	701.25
ECE block-B	117	723.6	840.6
EEE Block -C	96	222.75	318.75
CSE Block	228	591.3	819.3
MECH Block	78	206.55	284.55
Nursing	43.5	249.75	293.25



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School	268.5	297	565.5
School Hostel	87	162	249
Pharmacy	162.3	931.5	1093.8
Campus	63	256.5	348
Girls Hostel	117	175.5	292.5
Boys Hostel MBA	198	175.5	373.5
Inter College	99	144	243
Total Connected load	1657.8	4736.7	6423

Description(From Elec.Bill)	Average	Unit	Supplier	Voltage (KV)	percentage Solar Power Generation and sent to grid
Total College load in KVA:	300	KVA			
Total Avg. College load in KWh (Nov 2018-oct 2019)	26,469.83	KWh	TSNPDCL	11	48.68%
Avg. Solar energy generated in KWH & sent to Grid	12886.33	KWh			



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Requirements of NAAC

7.1.3 Alternative Energy Initiative

Percentage of power requirement met by renewable energy sources (Average Calculation)

= (Power requirement met by renewable energy sources / Total power requirement) X 100

= (163002/317638) X 100

= **51.31%**

7.1.4 Percentage of lighting power requirement met through LED bulbs

Percentage of lighting power requirement met through LED bulbs

= (Lighting power requirement met through LED bulbs / Total lighting power requirement) X 100

= (19894/ 77076)

= **26 %**



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Green Audit

Green audit was initiated earlier in 1970s with the motive of inspecting the work conducted within the organizations whose exercises can cause risk to the health of inhabitants and the environment. It exposes the authenticity of the proclamations made by multinational companies, armies and national governments with the concern of health issues as the consequences of environmental pollution. It is the duty of organizations to carry out the Green Audits of their ongoing processes for various reasons such as; to make sure whether they are performing in accordance with relevant rules and regulations, to improve the procedures and ability of materials, to analyze the potential duties and to determine a way which can lower the cost and add to the revenue. Through Green Audit, one gets a direction as how to improve the condition of environment and there are various factors that have determined the growth of carrying out Green Audit. Some of the incidents like Bhopal Gas Tragedy (Bhopal; 1984), Chernobyl Catastrophe (Ukraine; 1986) and Exxon- Valdez Oil Spill (Alaska; 1989) have cautioned the industries that setting corporate strategies for environmental security elements have no meaning until they are implemented.

Green Audit is assigned to the Criteria 7 of NAAC, National Assessment and Accreditation Council which is a self-governing organization of India that declares the institutions as Grade A, Grade B or Grade C according to the scores assigned at the time of accreditation.

The intention of organizing Green Audit is to upgrade the environment condition in and around the institutes, colleges, companies and other organizations. It is carried out with the aid of performing tasks like waste management, energy saving and others to turn into a better environmental friendly institute.

Goals of Green Audit

- The objective of carrying out Green Audit is securing the environment and cut down the threats posed to human health.
- To make sure that rules and regulations are taken care of
- To avoid the interruptions in environment that are more difficult to handle and their correction requires high cost.
- To suggest the best protocols for adding to sustainable development




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Benefits of Green Audit

- It would help to shield the environment
- Recognize the cost saving methods through waste minimizing and managing
- Point out the prevailing and forthcoming complications
- Authenticate conformity with the implemented laws
- Empower the organizations to frame a better environmental performance
- It portrays a good image of a company which helps building better relationships with the group of stakeholders
- Enhance the alertness for environmental guidelines and duties

Initiatives by College towards Sustainable Environment

Tree Plantation

Tree-planting is the process of transplanting tree seedlings, generally for forestry, land reclamation, or landscaping purpose. It differs from the transplantation of larger trees in arboriculture, and from the lower cost but slower and less reliable distribution of tree seeds.

In silviculture the activity is known as reforestation, or afforestation, depending on whether the area being planted has or has not recently been forested. It involves planting seedlings over an area of land where the forest has been harvested or damaged by fire, disease or human activity. Tree planting is carried out in many different parts of the world, and strategies may differ widely across nations and regions and among individual reforestation companies. Tree planting is grounded in forest science, and if performed properly can result in the successful regeneration of a deforested area. Reforestation is the commercial logging industry's answer to the large-scale destruction of old growth forests, but a planted forest rarely replicates the biodiversity and complexity of a natural forest.

Because trees remove carbon dioxide from the air as they grow, tree planting can be used as agro engineering technique to remove CO₂ from the atmosphere. Desert greening projects are also motivated by improved biodiversity and reclamation of natural water systems, but also improved economy and social welfare due to increased number of jobs in farming and forestry.

College has planted the trees campus area to make it more environments friendly.



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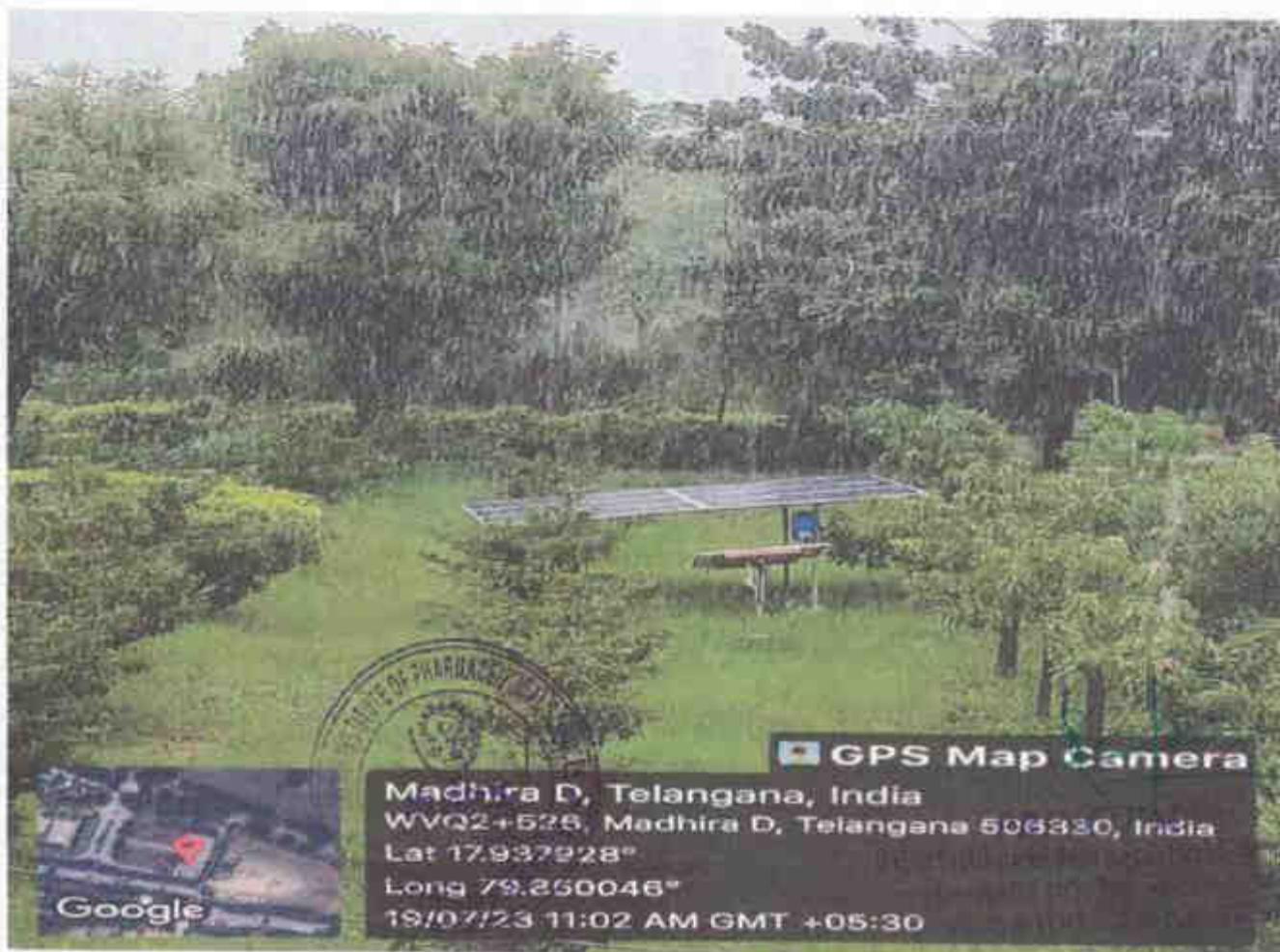
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Fig. Greenary in the front area of college premises with street lighting.



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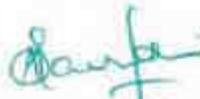
Activities related to plantation is mentioned below:

Activity Organized Report – Tree Plantation- 2018-19

Name of Activity organized	Tree Plantation
Title of the Activity	Tree Plantation
Date of Activity organized	07-08-2018
Name of the coordinator of Activity	Siddhartha kumar
Place of the Activity	BIPS Campus
Objective of the Activity	To save environment , Reduce global warming
Outcome of the Activity	Improves Air quality ,reduces erosion and pollution

Photo Gallery




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Activity Organized Report –Tree Plantation-2019-20

Name of Activity organized	Tree Plantation
Title of the Activity	Tree Plantation
Date of Activity organized	08-07-2019
Name of the coordinator of Activity	P. Siddartha Kumar
Place of the Activity	BIPS Campus
Objective of the Activity	To save environment , Reduce global warming
Outcome of the Activity	Improves Air quality ,reduces erosion and pollution

Photo Gallery



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Activity Organized Report – Tree Plantation- 2021-22

Name of Activity organized	Tree Plantation
Title of the Activity	Tree Plantation
Date of Activity organized	28-03-2022
Name of the coordinator of Activity	P. Siddartha kumar
Place of the Activity	BIPS Campus
Objective of the Activity	To save environment , Reduce global warming
Outcome of the Activity	Improves Air quality ,reduces erosion and pollution



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Activity Organized Report – Tree Plantation- 2021-22

Name of Activity organized	Tree Plantation
Title of the Activity	Tree Plantation
Date of Activity organized	04-07-2022
Name of the coordinator of Activity	P. Siddartha kumar
Place of the Activity	BIPS Campus
Objective of the Activity	To save environment , Reduce global warming
Outcome of the Activity	Improves Air quality ,reduces erosion and pollution
	




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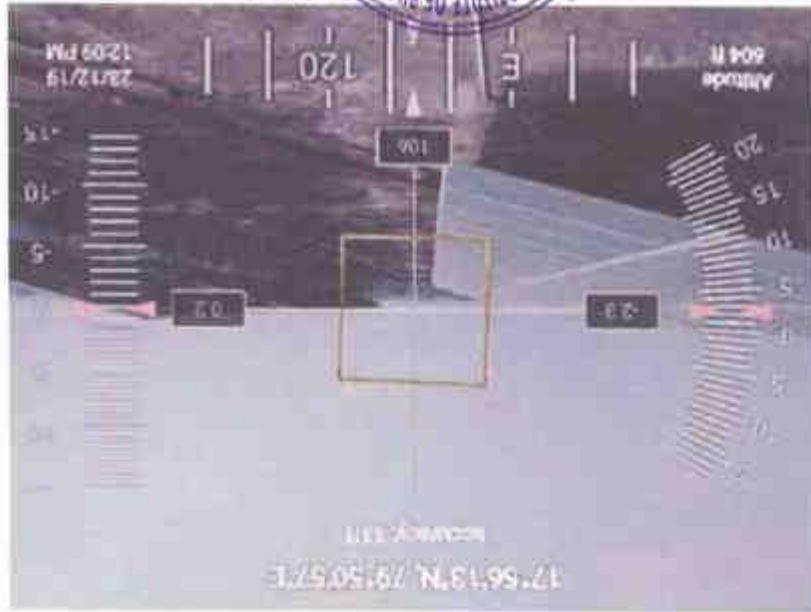
Organized Report – Swach Bharath- 2022-23

Name of Activity organized	Tree Plantation
Title of the Activity	Swach Bharth 2.0
Date of Activity organized	23-03-2022,18-10-2022
Name of the coordinator of Activity	P. Siddartha kumar
Place of the Activity	BIPS Campus
Objective of the Activity	NO Plastic, To save environment
Outcome of the Activity	Improves Air quality ,reduces erosion and pollution



P. Siddartha Kumar
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Signature



Following are the some images of installed solar PV plant

Fig: Solar Installed Capacity in Campus



Use of Solar PV System for power Generation

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Image: Roof top solar PV plant

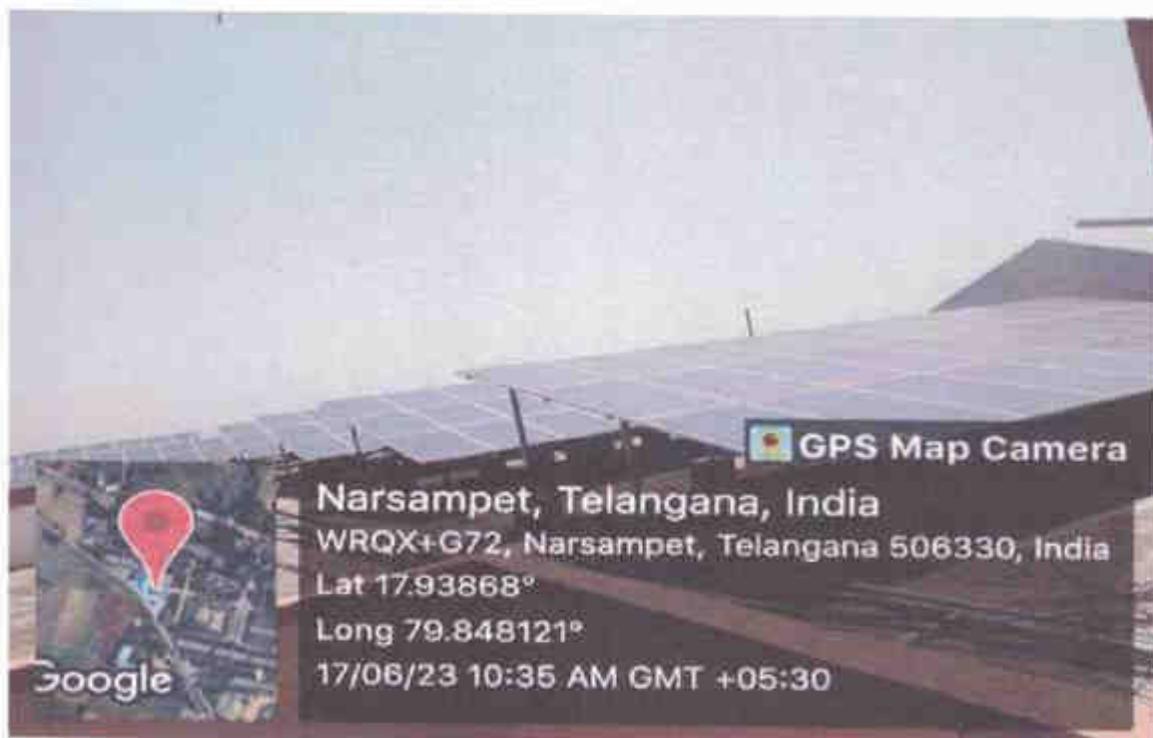


Image: roof top solar panel



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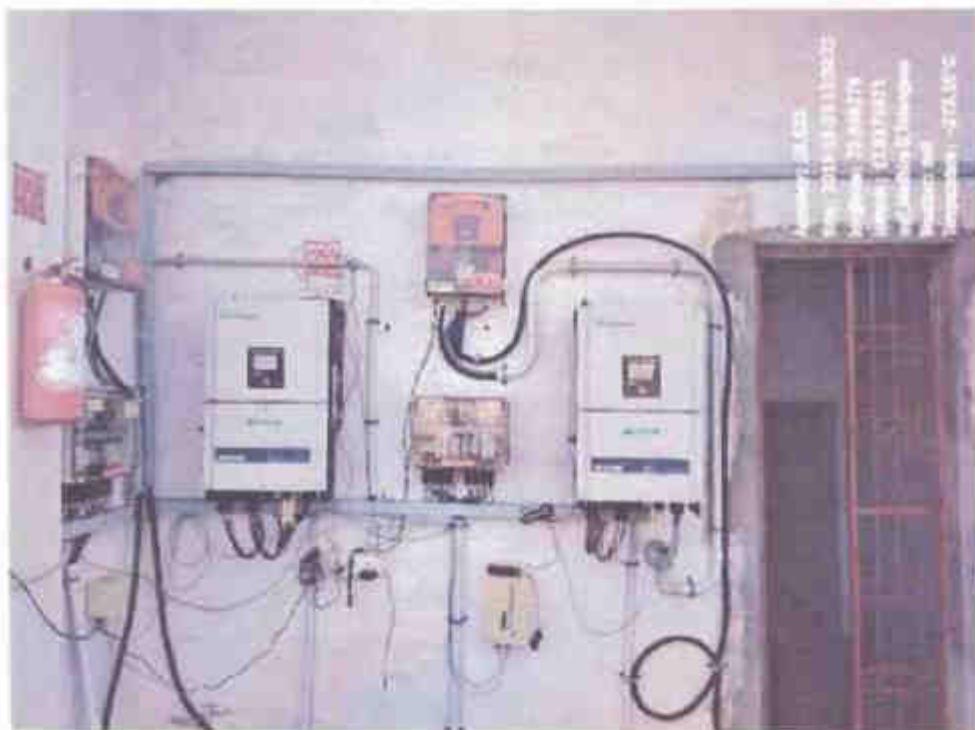


Image: Roof top solar PV plant-Inverter

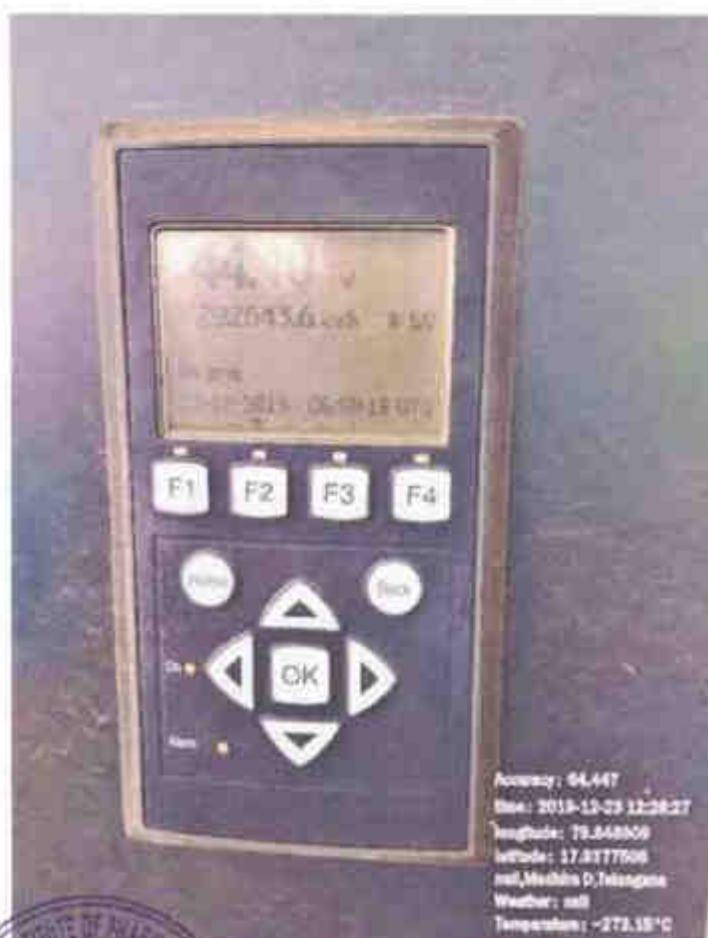


Fig: Inverter Display



Scope for Improvement

Liquid Waste Management

The proper disposal of liquid waste is a must in order to maintain a good human and animal health. Because liquid waste has a high amount of dangerous compounds such as salts and metals, it is important for companies to get rid of it in a timely manner. Industrial wastes, including dangerous and hazardous liquids, can be disposed of by using a wide variety of techniques and methods.

Present Condition

There is an improvement opportunity for college. Sewage treatment facility can be provided to re-use the waste water for applications other than drinking. It is recommended that to make standard operating procedure (SOP) for disposal of chemicals which has been used in laboratories for practical purpose

Following details are given for guidance to dispose the laboratory chemical waste

Solution

Disposal Procedures for Laboratory Chemicals

It is the clear responsibility of all research workers to ensure the safe and correct disposal of all wastes produced in the course of their work. Improper and irresponsible disposal of chemical wastes down drains, to the Local Authority refuse collection, or into the atmosphere is forbidden by law.

Wash down drains with excess water

- Concentrated and dilute acids and alkalis
- Harmless soluble inorganic salts (including all drying agents such as CaCl_2 , MgSO_4 , Na_2SO_4 , P_2O_5)
- Alcohols containing salts (e.g. from destroying sodium)
- Hypochlorite solutions from destroying cyanides, phosphines, etc.
- Fine (tlc grade) silica and alumina

It should be noted in particular that no material on the "Red List" should ever be washed down a drain. This list is as follows:

- Compounds of the following elements:- antimony, arsenic, barium, beryllium, boron, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, tellurium, thallium, tin, titanium, uranium, vanadium and zinc.
- Organohalogen, organophosphorus or organonitrogen pesticides, triazine herbicides, any other biocides
- Cyanides




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- ❑ Mineral oils and hydrocarbons
- ❑ Poisonous organosilicon compounds, metal phosphides and phosphorus element
- ❑ Fluorides and nitrites

Incineration (Solvent Waste collection)

- ❑ All organic solvents including water miscible ones
- ❑ Soluble organic waste including most organic solids
- ❑ Paraffin and mineral oil (from oil baths and pumps)

Laboratory waste bins and controlled waste

All waste suitable for the Local Authority refuse collection, except recyclable paper and glass, is termed 'controlled waste'. Items in this category which includes dirty paper, plastic, rubber and wood, should generally be placed in the waste bins available in each laboratory and will be collected by the cleaners. However, each laboratory must also have a container for certain items which are not allowed to be put in the normal waste bins. In this special controlled waste container should be put:- all broken laboratory glassware, any sharp objects of metal or glass, all fine powders (preferably inside a bottle or jar) and dirty sample tubes or other items lightly contaminated with chemicals (but not any syringes or needles).

Laboratory controlled waste containers must be emptied regularly and never allowed to overflow. Under no circumstances must any item of glass, sharp metal or fine powder ever be put in a normal laboratory waste bin. The tops must be removed from all bottles put out for disposal and there should be no detectable smell of chemicals from any bottle put for disposal.



Fig. Solid collection from the campus



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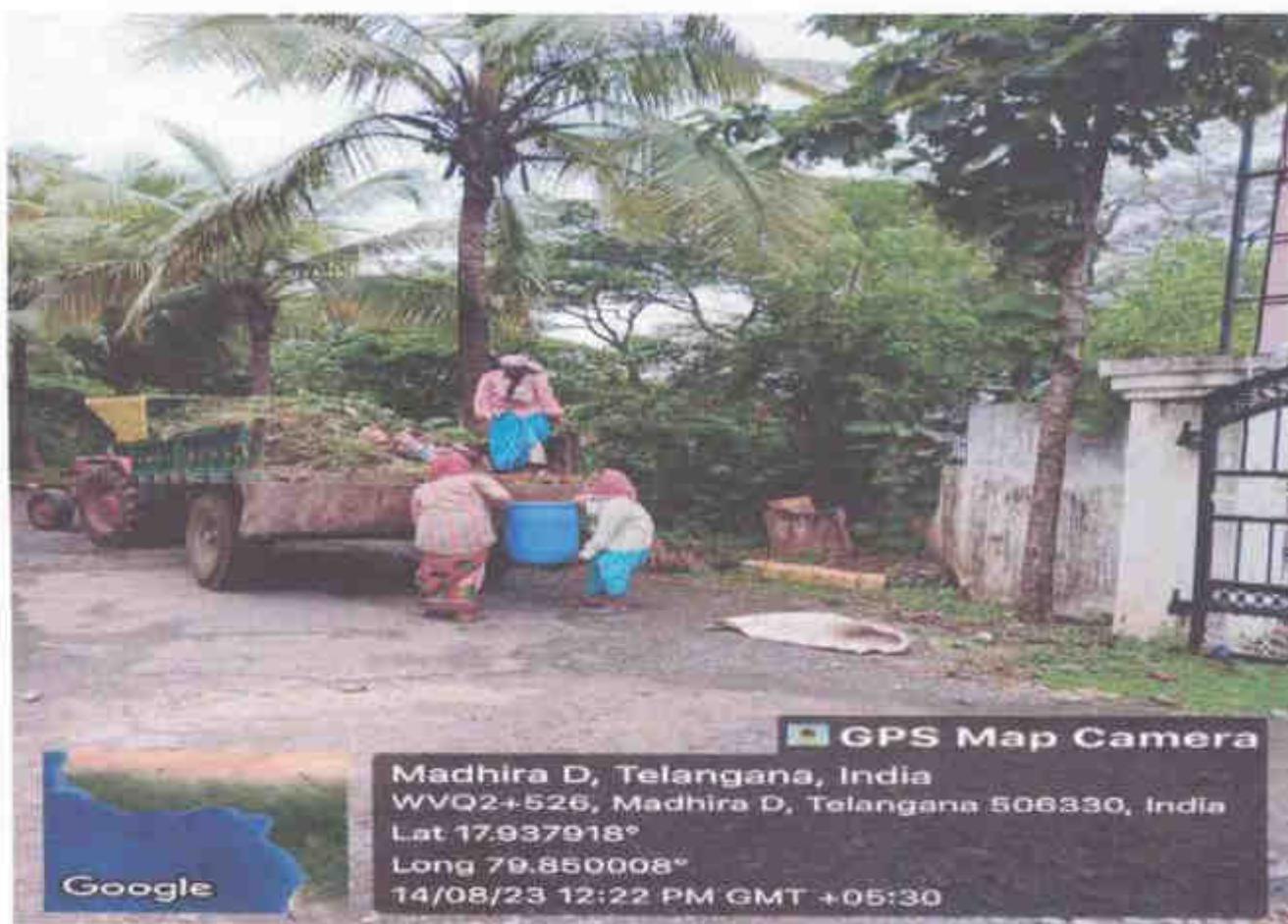


Fig: Solid waste Collecting Bins in Campus and shifting

E Waste Management

Electronic waste or e-waste describes discarded electrical or electronic devices. Used electronics which are destined for reuse, resale, salvage, recycling, or disposal are also considered e-waste. Informal processing of e-waste in developing countries can lead to adverse human health effects and environmental pollution.

Electronic scrap components, such as CPUs, contain potentially harmful components such as lead, cadmium, beryllium, or brominated flame retardants. Recycling and disposal of e-waste may involve significant risk to health of workers and communities in developed countries and great care must be taken to avoid unsafe exposure in recycling operations and leaking of materials such as heavy metals from landfills and incinerator ashes.

College need to have E-waste management policy and all the E-waste disposals generated in the college campus should be disposed/ reuse as per standard procedures/norms



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Fig. E-waste Store Room

The environmental impact of the processing of different electronic waste components

E-Waste Component	Process Used	Potential Environmental Hazard
Cathode ray tubes (used in TVs, computer monitors, ATM, video cameras, and more)	Breaking and removal of yoke, then dumping	Lead, barium and other heavy metals leaching into the ground water and release of toxic phosphor
Printed circuit board (image behind table – a thin plate on which chips and other electronic components are placed)	De-soldering and removal of computer chips; open burning and acid baths to remove metals after chips are removed.	Air emissions and discharge into rivers of glass dust, tin, lead, brominated dioxin, beryllium cadmium, and mercury
Chips and other gold plated components	Chemical stripping using nitric and hydrochloric acid and burning of chips	PAHs, heavy metals, brominated flame retardants discharged directly into rivers acidifying fish and flora. Tin and lead contamination of surface and groundwater. Air emissions of brominated dioxins, heavy metals, and PAHs
Plastics from printers, keyboards, monitors, etc.	Shredding and low temp melting to be reused	Emissions of brominated dioxins, heavy metals, and hydrocarbons
Computer wires	Open burning and stripping to remove copper	PAHs released into air, water, and soil.



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Backup Generators

In college there are two generators for emergency conditions



Fig: Backup generators for emergency conditions

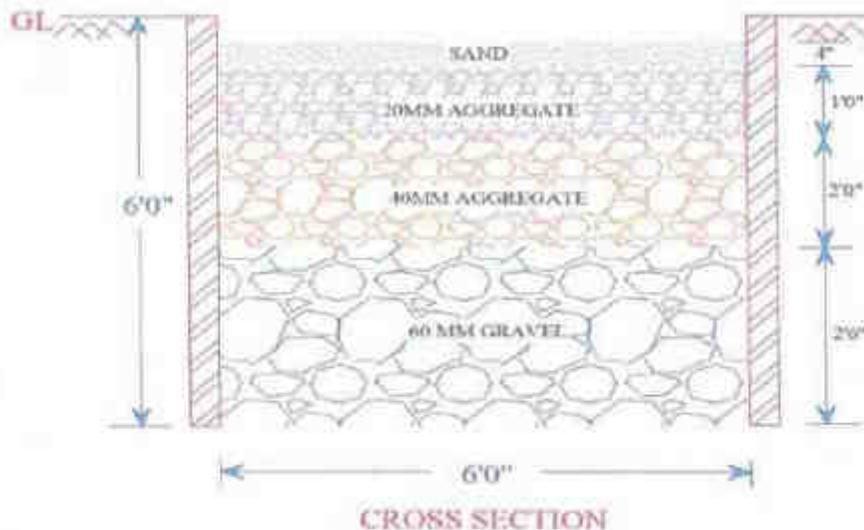



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Rain Water Harvesting

There is a good potential for rain water harvesting in a college. This water can be used for purposes like gardening, bores, wells, etc.

Feasibility study can be carried out to know the actual potential from rain water harvesting project

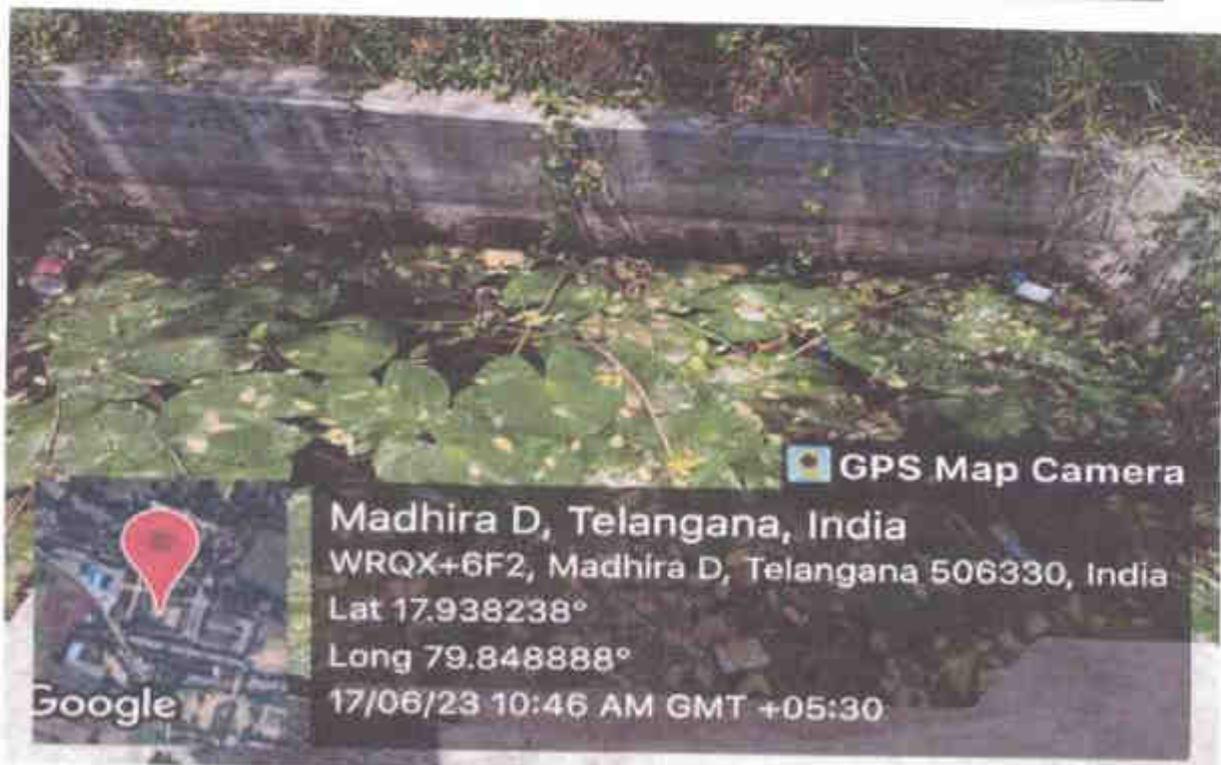


RAIN WATER HARVESTING PIT



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GREEN CAMPUS INITIATIVES



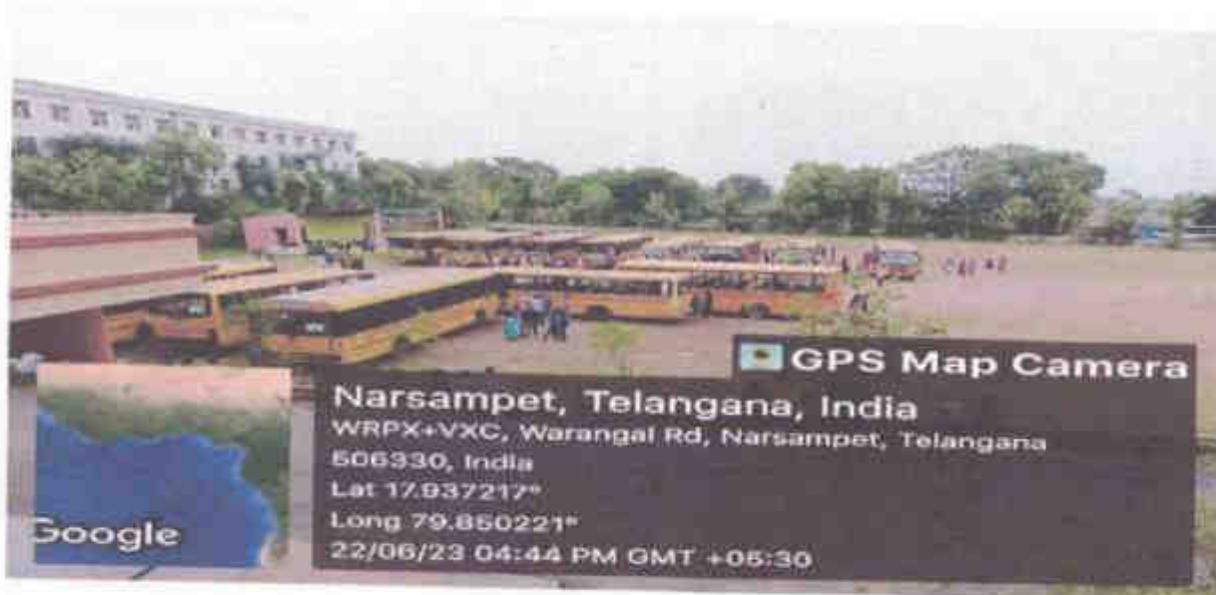
a) Use of Bicycles:
Students and staff of local area uses bicycles



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B) Public Transport

A complete bonafide Transport department works in the college to render transport facility to students and staffs from different places. These buses functions full-fledge for providing transport facilities to all staffs and students from every nock and corner.



C) Padestrain Friendlyroads And Plastic Free Campus



D) Paper less Office(Information to studts and staff given through website or whatsapp)



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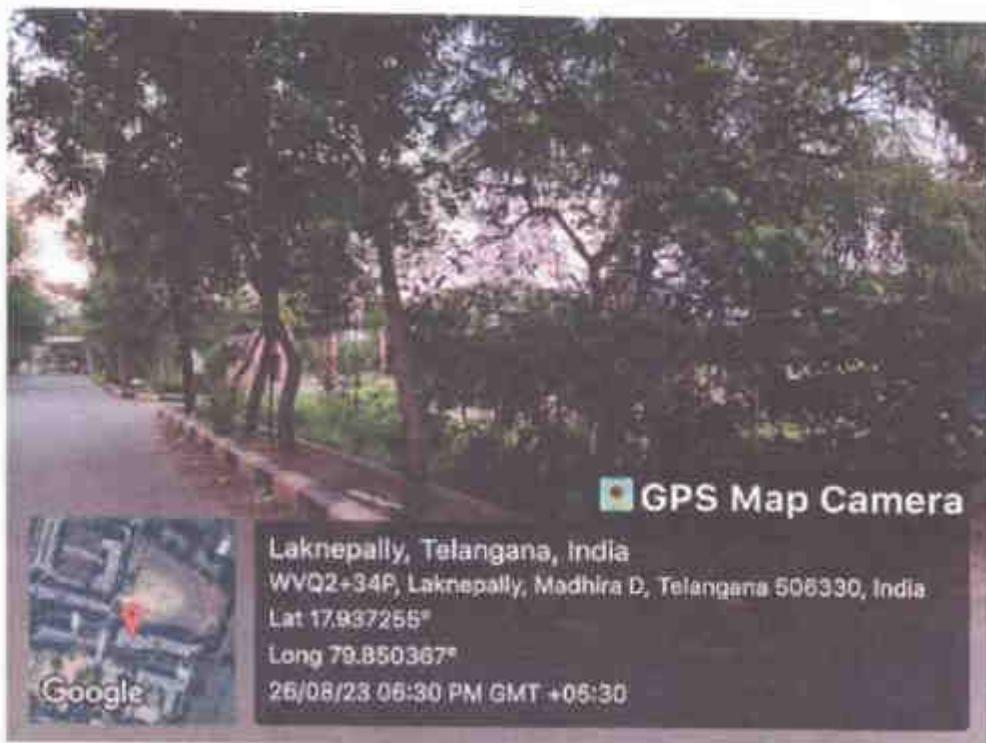
Green

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Establishment of oxygen park, plantation of oxygen rich plants

Our college has a beautiful green campus. We have skillfully planted the plants like Pimpal, Neem Trees and Tulsi so as to make the campus full of oxygen. The greenery has remained useful in developing Oxygen Park in our college.



Sanjeev

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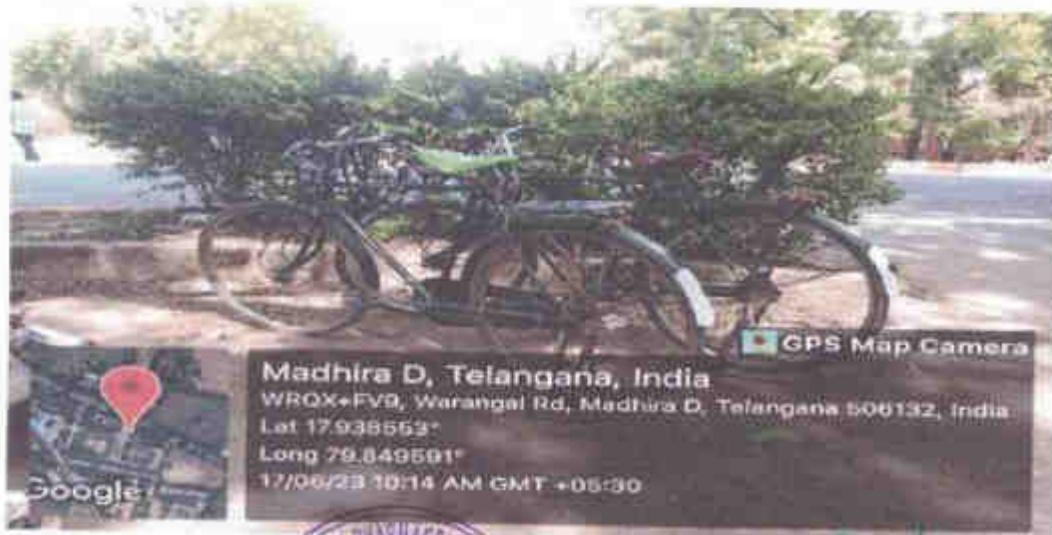
NoSmoking, NoTobacco”incampusarea:-

Tobacco and tobacco products are strictly prohibited in the college premises and consuming Tobacco and tobacco products is a punishable offence. The instructions regarding this have already been given to the students and the staff members. The boards are displayed at various places in the college.

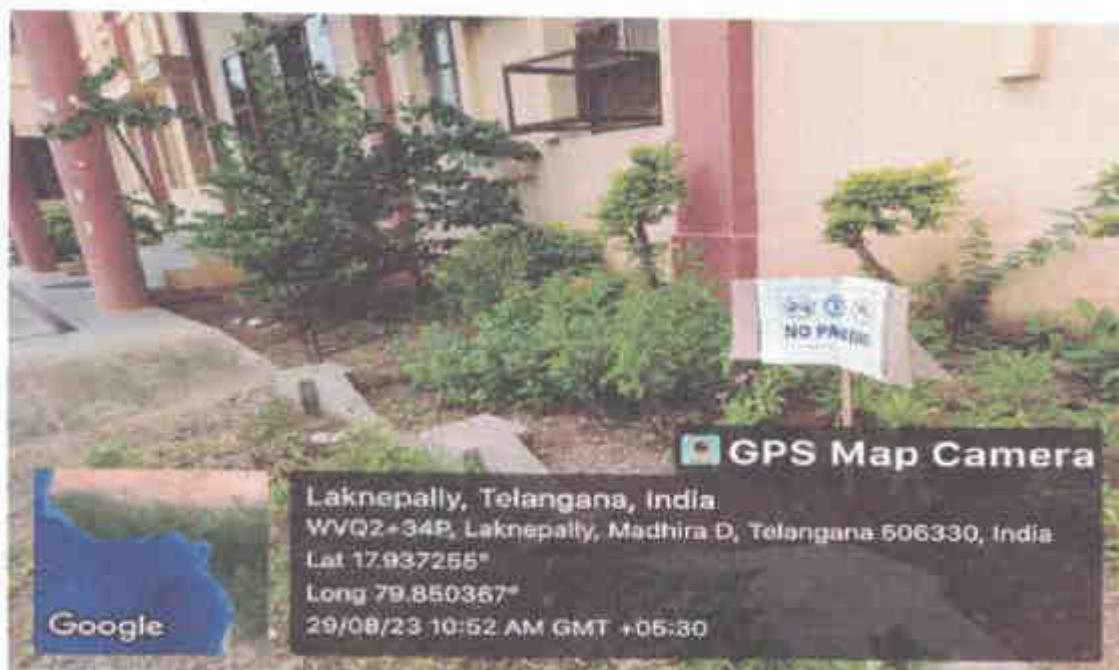
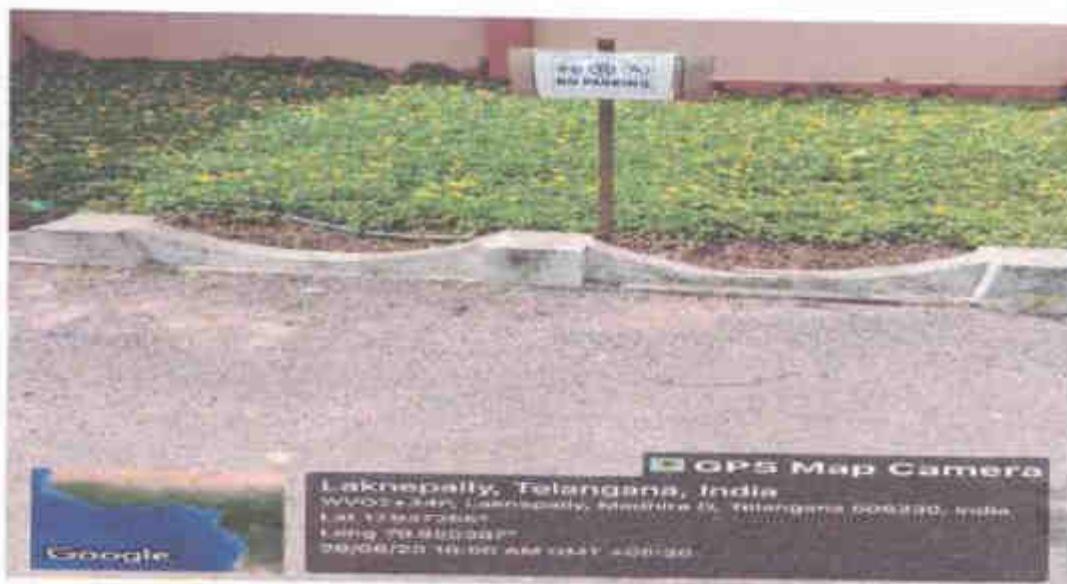


A. NoVehicleDay”:-

To avoid the air pollution the vehicles are not allowed in the campus but they are parked in the parking area, reasonably away from college. Our college has a separate parking area to avoid pollution. The Second Thursday of every month is declared as no vehicle/ bicycle day in our college. No staff member or students is allowed with vehicle on these two days and the staff and student strictly follow these guidelines.



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Page 180



Sanjay

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B. Compulsory pollution check-up of 2W/4W :-

To have a PUC certificate is a mandatory document by RTO authorities; we are creating awareness and instructing students through periodic notices to go for PUC certification of their vehicles.

C. Display boards on college campus:-

Various boards for the awareness on the environment control, noise control, and tobacco free campus, conservation of energy, recycling of resources, tree plantation and environmental policy of college have been displayed for all the stakeholders.

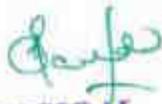



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Use of dust proof chalks:-

In our college some classrooms and laboratories are fitted with white and green boards with dust free chalks and markerpens.




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Our college is has NSS and NCC units, which regularly takes part in organizing the street shows, rallies and wallpapers exhibition everyyear.

The students also took part in AIDS awareness rally, prevention of self-medication and Dengue awareness rallies. National and social outlook is inculcated in the students through programmes such as Traffic Awareness, Swachh Bharat Abhiyan, blood donation camp, polio eradication, communal harmony, fund raising and natural calamities and other such activities through the NSS unit. The college arranges blood donation camp every year.

D. Eco-ventilators/Exhaust fans in the laboratories and the library:-

All the laboratories and library have proper ventilation and exhaust fans to maintain the freshness.




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E. Maintain data for Trees and flora of college campus:-

The campus is a green campus, which comprises of following Tress and floras:

Sr.No	Botanical Name	Habit	No. of Plants	Common Name
1	Vincarosea	Herb	02	Sadaphuli
2	Annona squamosa	Shrub	01	Sitaphal
3	Tecomastans	Shrub	15	Trumpetbush
4	Thujaorientalis	Shrub	45	Thuja
5	Ixoracoccinia	Shrub	33	Ixora
6	Cocusnucifera	Tree	55	Coconut
7	Ornamentalspecies	Herb	05	---
8	Tecomastans	Shrub	02	Trumpetbush
9	Combretumindicum	Tree	02	Allamanda
10	Melia dubia	tree	05	Malbari
11	Catharanthusroseus	Herb	10	Sadaphuli
12	Calotropisprocera	Shrub	02	Rui
13	Hibiscusrosa-sinensis	shrub	02	Jaswand
14	Lantana camara	Shrub	25	Ghaneri
15	Annona squamosa	Shrub	1	Sitaphal
16	Hyophorbelagenicaulis	Tree	41	Bottle palm
17	Delonixregia	Tree	05	Gulmohor
18	Terminalia cattapa	Tree	01	Badam
19	Alstonia	Tree	09	Saptaparni
20	Tribulusterrestris	Herb	50	Chubuk kata
21	Kalanchoetomentosa	Herb	50	Panad
22	Lantana camara	Shrub	25	Subabhul
23	Sesamumindicum	Tree	07	Vilaytichinch
24	Ficusracemosa	Tree	03	Sesam
25	Azadirachtaindica	Tree	14	Umbar
26	Vachellianilotica	Tree	01	Kadunimb
27	Cassiasiamia	Tree	04	Vedibabhul
28	Luecaenaleucocephala	Tree	17	Kasud
29	Eucalyptusglobulus	Tree	45	Nilgiri
30	Cesalpiniabonducella	Tree	02	Ghaneri
31	Pithecellobiumdulce		05	Sagargota
32	Bougainvilleaglabra	Shrub	04	Boganvel



(Signature)
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33	Spathodiacampanulata	Tree	11	Spathodia
34	Syzygiumcumini	Tree	01	Jambul
35	Pongamiapinnata	Tree	04	Karanj
36	Delonixregia	Tree	08	Gulmohor
37	Micheliachampaca	Tree	02	Sonchapha
38	Thujaorientalis	Shrub	10	Thuja
39	Cycasroxburghii	Tree	01	Cycas
40	Pongamiapinnata	Tree	07	Karanj
41	Azadirachtaindica	Tree	08	Neem
42	Santalumaalbum	Tree	10	Chandan
43	Hyophorbelagenicaulis	Tree	07	Cycas
44	Delonixregia	Tree	01	Bottlepalm
45	Syzygiumcumini	Tree	12	Jambul
46	Tamarindusindica	Tree	03	Chinch
47	Spathodeacampanulata	Tree	12	Pichkari
48	Polyathialongifolia	Tree	07	Ashok
49	Ficusreligiosa	Tree	05	Pimpal
50	Nephrolepisexaltata	Herb	03	Fern
51	Cycasroxburghii	Tree	02	Cycas
52	Ficusreligiosa	Tree	02	Pimpal
53	Thujaorientalis	Shrub	02	Thuja
54	Rosaindica	Herb	69	Rose
55	Ficusracemosa	Tree	01	Umbar
56	Gerberajamesonii	Herb	18	Gerbera
57	Solanummelongena	Herb	50	Brinjal
58	Capsicumannuum	Herb	50	Chilli
59	Mimosapudica	Herb	15	Lajalu
60	Arachishypogaea	Herb	10	Groundnut
61	Acalyphaspp.	Shrub	25	
62	Abelmoschussculantum	Herb	02	Bhendi
63	Spathodeacampanulata	Herb	03	Pichkari



[Signature]
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64	Euphorbiahirta	Herb	Undefined	Asthma-plant
65	Euphorbiageniculata	Herb	Undefined	Dudhani
66	Polyanthialongifolia	Tree	01	Ashoka
67	Peltophorumpterocarpum	Tree	04	Jambha
68	Erythrinavariegata	Tree	05	Pangara
69	Hibiscusrosasinensis	Herb	02	Chinarose
70	Partheniumhysterophorus	Herb	50	Congress
71	Thujaorientalis	Shrub	02	Thuja
72	Neriumindicum	Shrub	05	Kanher
73	Ixoracoccinia	Shrub	05	Ixora
74	Santalumalbum	Tree	01	Chandan
75	Hyophorbelagenicaulis	Tree	01	Bottlepalm
76	Combretumindicum	Tree	02	Alamanda
77	Plumeriapudica	Tree	03	Puticachafa
78	Coccusnucifera	Tree	5	Naral
79	Ravenalamadagascariensis	Tree	02	Travelpalm
80	Catharanthusroseus	Herb	08	Kanher
81	Hibiscusrosa-sinensis	Shrub	12	Chinarose
82	Neriumindicum	Shrub	02	Sadaphuli
83	Ravenalamadagascariensis	Tree	04	Travelpalm
84	Leucaenaleucocephala	Tree	10	Subabul
85	Araucariacolumnaris	Tree	01	X-mastree
86	Hyophorbelagenicaulis	Tree	04	Bottlepalm
87	Thujaorientalis	Tree	05	Thuja
88	Malingtoniahortensis	Tree	01	Buch
89	Azadirachtaindica	Tree	05	Neem
90	Hyophorbelagenicaulis	Tree	02	Bottlepalm
91	Xanthiumsp.	Herb	39	Landaga
92	Alternantherasp.	Herb	02	Chubukkata
93	Casiaquiculata	Herb	04	Tarwad
94	Euphorbiahirta	Herb	03	Dudhani




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95	Datura sp.	Shrub	34	Dhotara
96	Annona squamosa	Shrub	04	Sitaphal
97	Casiafistula	Shrub	01	Bahawa
98	Teconagrandis	Tree	1250	Sag(Teak)
99	Santalumalbum	Tree	02	Chandan
100	Azadirachtaindica	Tree	08	Kadunimb
101	Butea monosperma	Tree	01	Palas
102	Tridaxprocumbens	Herb	Undefined	Dagadpala
103	Helianthusanus	Herb	25	Suryaphul
104	Daturainnoxia	Shrub	05	Dhotara
105	Thujaorientalis	Shrub	08	Thuja
106	Ixoracoccinia	Shrub	2	Ixora
107	Cocusnucifera	Tree	12	Coconut
108	Delonixregia	Tree	07	Gulmohor
109	Tamarindusindica	Tree	04	Chinch
110	Ficusbenghalensis	Tree	2	Wad
111	Unknown I	--	10	--
112	Unknown II	--	01	--
113	Unknown III	--	02	--
114	Cascatoreflexa	Climber	Undefined	Amarvel
115	Clitoriaternatea	Climber	11	Gokarn
116	Murrayakoenigii	Shrub	08	Kadipatta
117	Lantana camera	Shrub	02	Ghaneri
118	Morusalba	Shrub	02	Tuti
119	Calotrophisprocera	Shrub	02	Rui
120	Durantarepens	Shrub	102	Duranta
121	Annona squamosa	Shrub	01	Sitaphal
122	Ficusreligiosa	Tree	02	Pimpal
123	Tamarindusindica	Tree	31	Chinch
124	Acacianilotica	Tree	23	Babhul
125	Meliaazadirachta	Tree	03	Bakannimb
126	Delonixregia	Tree	06	Gulmohor
127	Azadirachtaindica	Tree	04	Kadunimb
128	Caryotaurens	Tree	01	Fishtailpalm
129	Mangiferaindica	Tree	11	Mango
130	Aegelmarmelos	Tree	01	Bael
131	Cocusnucifera	Tree	14	Coconut
132	Santalumalbum	Tree	01	Chandan



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E. NOISE POLLUTION MANAGEMENT

A. Silence zones in the college:-

Various display boards have been placed in the library and other places for awareness to maintain silence in the college.

B. Noise control in the college :-



The college has 3 gates. Main gate for all faculty, students and girls students of girls hostel, monitored by the security guard. The security guard and the Physical Director of the college ensure smooth entry and exit of students without any noise and nuisance.

C. Controlling and monitoring of students during entry and exit:-

1. Our college has the main entrance and different gates for each building. During the annual social gatherings and other Programs, we use the main Entrance through which the students can enter and exit easily. The emergency gates are used for control the rush of students.
2. We have the entry register for the people coming to our college who are not the students of the college.
3. The security guard looks after the safety of the college campus.



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Warangal (R) - 506 301 (T.S)

D. No pressure horns for vehicle:-

Our staff members and students do not use pressure horns and if not permissible for the students studying in the college.



6. HUMAN HEALTH AND SAFETY MANAGEMENT

Our college organizes blood donation camps with the help of government hospital and the private organization. It has helped us in getting the blood group of our students. The HB Check-up has taken place which helped our students in looking after their diet.

7. Awareness campaign for human health:-

Various lectures and programmes are organized for creating health awareness and developing good habits among students and staff members. Road shows are organized through NSS / NCC unit for health awareness. Every year NSS unit organizes a camp in nearby villages and plans to clean the village campus and various lectures are organized to create awareness in villagers. NSS unit of our college adopted a village 'Nahcinapalli and Laknepally for the sake of environment awareness.




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study on knowledge, Awareness and Prevalence of Anemia in a Villages



Campaign on Food and Nutrition



Rajarajeshwari
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Rajarajeshwari Institute of Pharmaceutical Sciences
Lalampally (V), Narsimharaostradda (R)
Warangal (TS) - 506 331 (T. 5)

Free Medical Camp



Firesafety:

College has awareness and safety facility. College has many fire extinguishers, all across College Buildings. Fire extinguishers have been fixed in the main building, library building, Canteen, and all Department of the college for safety purpose.



Rashid
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Warangal (D), - 508 301 (T.S)

Controlled area for storage of hazardous chemicals:-

- **Safety work instruction when using hazardous chemicals:-**
 - While using hazardous chemicals don't eat, drink, beverages & wait until our work is done. Wash your hands clean & neat.
 - Make sure you know where the nearest firefighting equipment is located.
 - Only use the product for its intended purpose never misuses the product for anything other than its intended purpose.
- **Personal chemical safety rules:-**
 - Wear gloves while handling chemicals.
 - Follow instructor's directions.
 - Dispose off waste properly.
 - Lab coat are mandatory in laboratory.
 - Wear shoes and Safety goggles must be worn all the time while working in the lab.

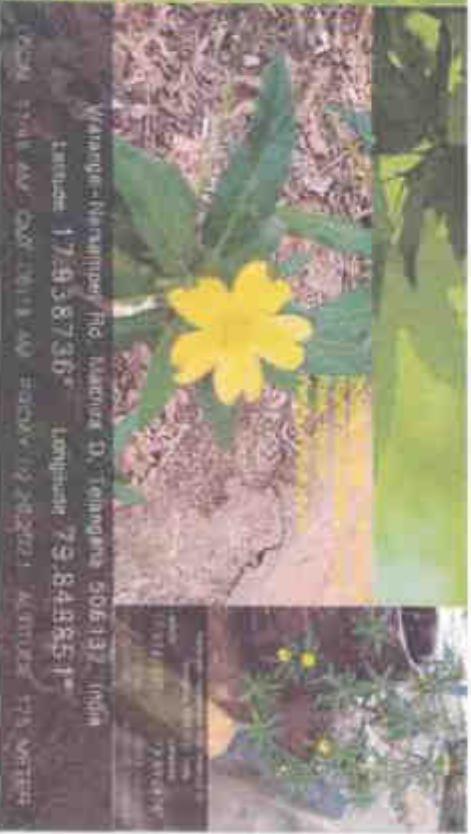
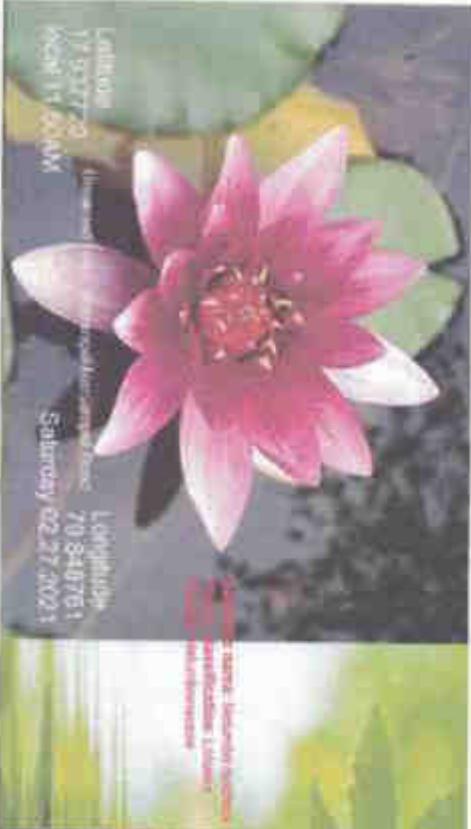
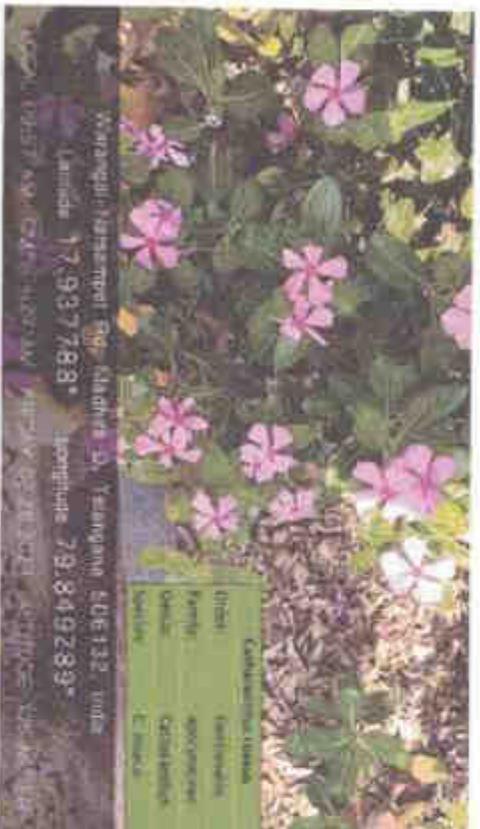



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Warangal (T.S.) - 506 331 (T.S.)

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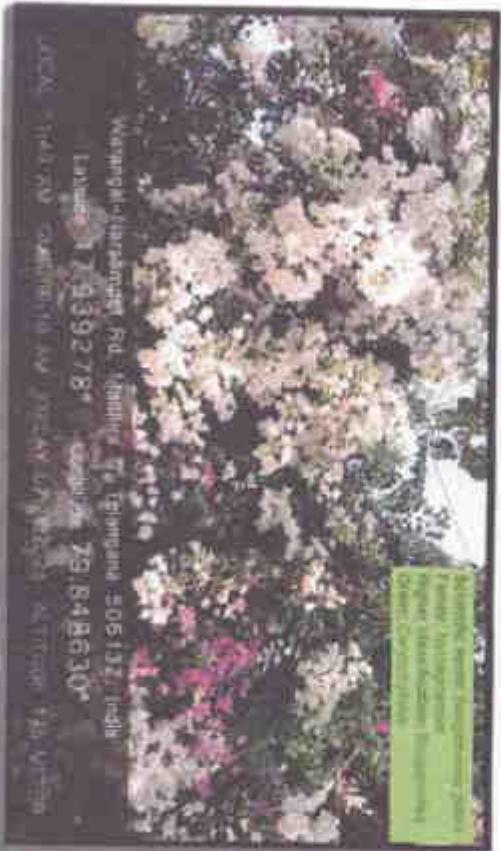
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Balaji

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Nerium oleander

Name:	Nerium
Class:	Nerium
Species:	N. oleander
	Nerium oleander



Shri Chaitanya Institute of Pharmacy
Warananagar, Warangal - 506002, India
Ph: 0878 2531111 Fax: 0878 2531112
E-mail: info@chaitanyaipharma.com

Scientific name: *Nerium oleander*
Rank: Species
Family: Apocynaceae
Order: Fabiales



Shri Chaitanya Institute of Pharmacy
Warananagar, Warangal - 506002, India
Ph: 0878 2531111 Fax: 0878 2531112
E-mail: info@chaitanyaipharma.com



B.N. *Acalypha indica* L.

Common Name :- Spurge
Family : Euphorbiaceae



B.N. *Abrus precatorius* L.

Common Name :- Gingga
Family : Papilionaceae



Chaitanya

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B.N. Aloe vera L.

Common Name :- Aloe
Family : Liliaceae



B.N. Ammannia reticulata L.

Common Name :- Netted castard
Family : Amaranthaceae



B.N. Alstonia scholaris Lam.

Common Name :- Blackboard tree
Family : Apocynaceae



B.N. Amaranthus triandra L.

Common Name :- Chupakata
Family : Amaranthaceae



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B.N. *Argemone mexicana* L.

Common Name : Mexican poppy
Family : Papaveraceae



B.N. *Bambusa* Voss. Sp.

Common Name : Bamboo
Family : Poaceae



B.N. *Aster Foug.* Sp.

Common Name : Aster
Family : Asteraceae



B.N. *Bauhinia variegata* L.

Common Name : Kiritchin
Family : Caesalpinaceae



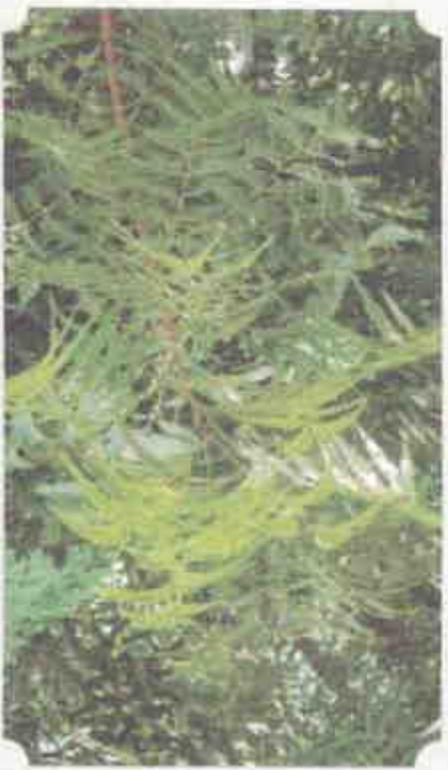
PRINCIPAL
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Narsampet (N), Narsampet (N.)
Warangal (D) - 506 331 (T.S)

Spent



B.N. *Biota orientalis* L.

Common Name :- Thuja
Family :- Cupressaceae



B.N. *Azadirachta indica* L.

Common Name :- Neem
Family :- Meliaceae



B.N. *Bidens biternata* Voss.

Common Name :- Black-jack
Family :- Asteraceae



B.N. *Bidens pilosa* L.

Common Name :-
Family :- Asteraceae



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Warangal (Dt) - 506 331 (T.S)

Banjan



B.N. *Bougainvillea spectabilis* Willd.

Common Name :- Bougainvillea
Family : Nyctaginaceae



B.N. *Boerhavia diffusa* Lam.

Common Name :- Punarnava
Family : Nyctaginaceae



B.N. *Cassia uniflora* L.

Common Name :- Cassia
Family : Fabaceae



B.N. *Brassica juncea* L.

Common Name :- Brown Mustard
Family : Brassicaceae



Balaji

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Warangal (Dt) - 506 331 (T.S)



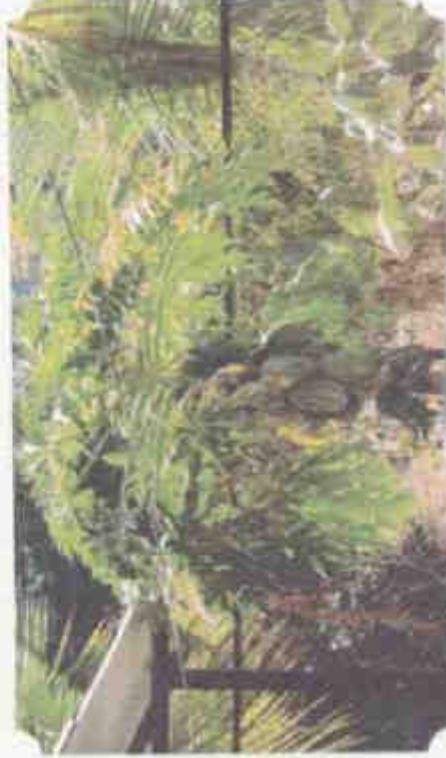
B.N. *Cassia siamea* L.

Common Name :- Kassod
Family :- Caesalpinaceae



B.N. *Cassia tora* Benth.

Common Name :- Takala
Family :- Caesalpinaceae



B.N. *Carica papaya* L.

Common Name :- Papaya
Family :- Caricaceae



B.N. *Calotropis procera* Benth.

Common Name :- King Crown
Family :- Apocynaceae



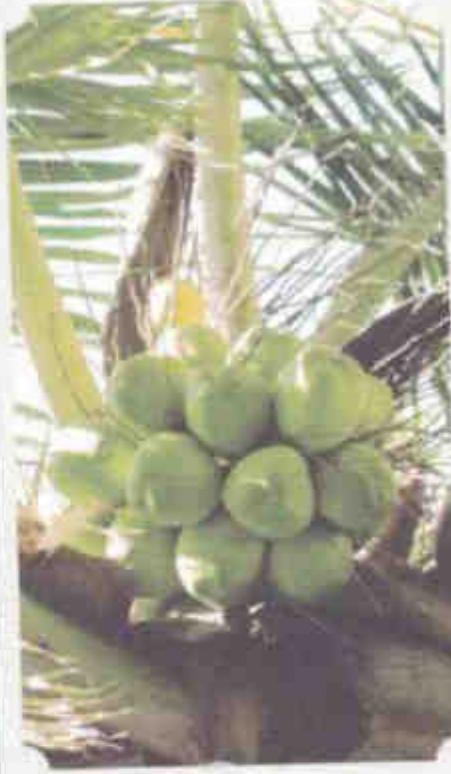
Garfen

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Garfen Institute of Pharmaceutical Sciences
Laknepally (V), Narsampet (M)
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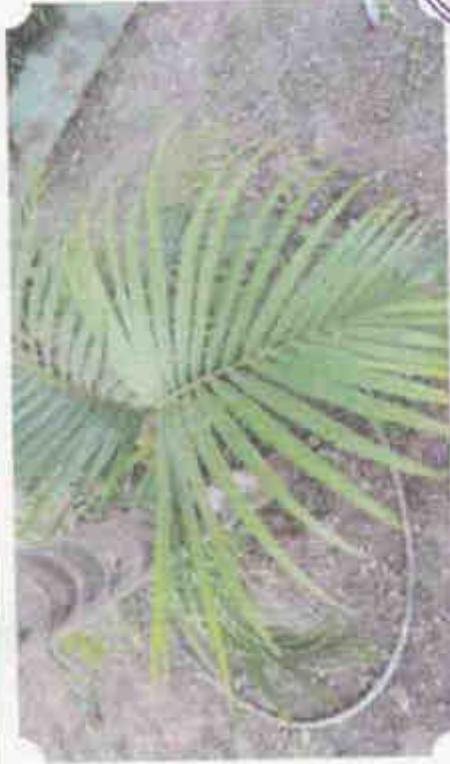
B.N. *Coccolobus hirsutus* L.

Common Name :- Patalgarudi
Family : Menispermaceae



B.N. *Cocos nucifera* Benth.

Common Name :- Coconut
Family : Arecaceae



B.N. *Chrysalidocarpus hirtescens* L.

Common Name :- Golden cane
Family : Arecaceae



B.N. *Chloris barbata* Lam.

Common Name :- Finger grass
Family : Poaceae

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Warangal (Dt) - 506 331 (T.S)





B.N. *Costus speciosus* Benth.

Common Name :- Crepe ginger
Family : Costaceae



B.N. *Dioon* Lindl. Sp.

Common Name :- Dioon
Family : Zamiaceae



B.N. *Crossandra infundibuliformis* (L.) Nees.

Common Name :- Aboli
Family : Acanthaceae



B.N. *Cryptostegia grandiflora* Lam.

Common Name :- Rubber vine
Family : Apocynaceae



Scopus

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Y. N. Road, Narsampet (Dt) - 506 331 (T.S)



B.N. *Crinum* L. Sp.

Common Name :- Gulchadi
Family : Amoryllidaceae



B.N. *Couroupita gauriensis* L.

Common Name :- Common Bull tree
Family : Lecythidaceae



B.N. *Cymbopogon citratus* Stapf.

Common Name :- Lemmon grass
Family : Poaceae



B.N. *Datura innoxia* L.

Common Name :- Datura
Family : Solanaceae



BIPS

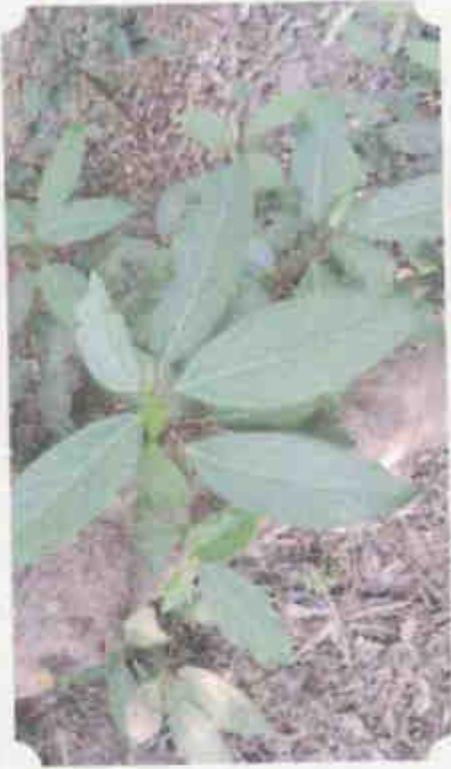
PRINCIPAL

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Lakshmi Narsampet (V), Narsampet (M)
Warangal (Dt) - 506 331 (T.S)**



B.N. *Dioscorea bulbifera* L.

Common Name :- Air potato
Family : Dioscoreaceae



B.N. *Ficus racemosa* L.

Common Name :- Umbar
Family : Moraceae



B.N. *Duranta erecta* L.

Common Name :- Pigeon berry
Family : Verbenaceae



B.N. *Ficus religiosa* L.

Common Name :- Pimpal
Family : Moraceae



Principal

PRINCIPAL

Collegiate Institute of Pharmaceutical Sciences
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Warangal (Dt) - 506 331 (T.S)



B.N. *Elaeis guineensis* Jacq.

Common Name :- African oil palm

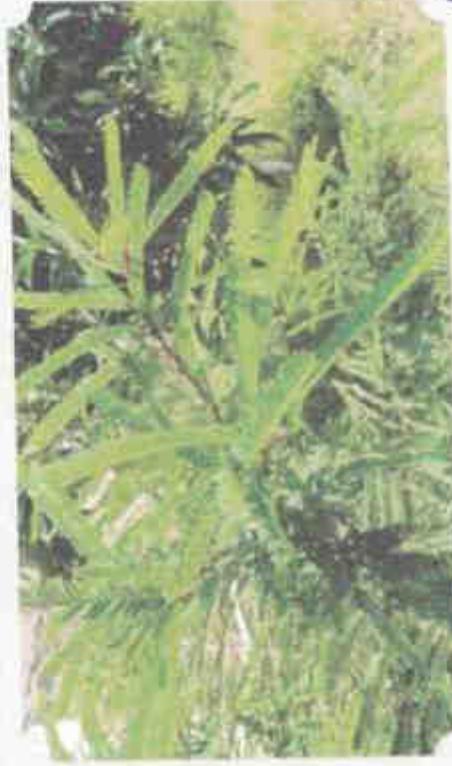
Family :- Aracaceae



B.N. *Erythrina indica* Lam.

Common Name :- Sunshine tree

Family :- Fabaceae



B.N. *Emblica officinalis* L.

Common Name :- Amla

Family :- Phyllanthaceae



B.N. *Dracaena* Lam. Sp.

Common Name :- Dracaena

Family :- Dracaenaceae



B.N.

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B.N. Institute of Pharmaceutical Sciences
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Warangal (Dt) - 506 331 (T.S)



B.N. *Epiphyllum oxypetalum* Benth.

Common Name :- Night queen
Family :- Cactaceae



B.N. *Euphorbia hirta* L.

Common Name :- Lal Dudhani
Family :- Euphorbiaceae



B.N. *Euphorbia geniculata* L.

Common Name :- Dudhani
Family :- Euphorbiaceae



B.N. *Eucalyptus globulus* L.

Common Name :- Blue gum
Family :- Myrtaceae



PRINCIPAL

B.P.S. Institute of Pharmaceutical Sciences
Laknepally (V), Narsampet (T.A)
Warangal (Dt) - 506 331 (T.S)



B.N. *Kigellia pinnata* Lam.

Common Name :- Sausage tree
Family : Bignoniaceae



B.N. *Ficus carica* Retz.

Common Name :- Fig
Family : Moraceae



B.N. *Holmskioldia sanguine* Retz.

Common Name :- Cup and Saucer plant
Family : Labiaceae



B.N. *Ipomoea obscura* L.

Common Name :- Morning glory
Family : Convolvulaceae



PRINCIPAL

Bala Institute of Pharmaceutical Sciences
Lakshapally (V), Narsasrampet (M)
Warangal (Dt) - 506 331 (T.S)



B.N. *Ficus virens* Lam.

Common Name :- Vad tree
Family : Moraceae



B.N. *Lantana* L. Sp.

Common Name :- Wild sage
Family : Verbenaceae



B.N. *Lantana* L. Sp.

Common Name :- Wild sage
Family : Verbenaceae



B.N. *Lawsonia inermis* L.

Common Name :- Hina tree
Family : Lythraceae

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PRINCIPAL
Bajji Institute of Pharmaceutical Sciences
Chittoor (M), Narsampet (M)
V. aranga (Dt) - 506 331 (T.S)





B.N. *Musa paradisiaca* L.

Common Name :- Bananas
Family : Musaceae



B.N. *Nymphaea nouchali* Burm.f.

Common Name :- Blue water lily
Family : Nymphaeaceae



B.N. *Murraya koengii* Sprengel

Common Name :- Kadipattu
Family : Rutaceae



Sakshin

PRINCIPAL

Sakshin Institute of Pharmaceutical Sciences
Kadipattu (V), Narsampet (T.S)
Kadipattu (Dt) - 506 331 (T.S)



B.N. *Ocimum penniflorum* L.

Common Name :- Tulsi
Family : Labiaceae



B.N. *Opuntia elator* Lam.

Common Name :- Prickly pear
Family : Cactaceae



B.N. *Ocimum sanctum* L.

Common Name :- Tulsi
Family : Labiaceae



B.N. *Nephrolepis exaltata* L.

Common Name :- Sword fern
Family : Nephrolepidaceae



Balaji

PRINCIPAL

Balkrishna Institute of Pharmaceutical Sciences
Lakshmapaty (V), Narsampet (M)
Warangal (Dt) - 506 331 (T.S)



B.N. *Passiflora foetida* L.

Common Name :- Wild water lemon.
Family : Passifloraceae



B.N. *Parthenium hysterophorus* Voss.

Common Name :- Congress Grass
Family : Asteraceae



B.N. *Peristrophe bicalyculata* Retz.

Common Name :- Kali Anghedi
Family : Acanthaceae



B.N. *Physalis minima* L.

Common Name :- Wild Solanum
Family : Solanaceae



PRINCIPAL
B.N.S. Institute of Pharmaceutical Sciences
Lakshapally (V), Narsampet (M)
Telangana, India - 506 331 (T.S.)



B.N. *Plumeria pudica* Jacq.

Common Name :- Podlica Chitra
Family :- Apocynaceae



B.N. *Plumbago capensis* Lam.

Common Name :- Blue plumbago
Family :- Plumbaginaceae



B.N. *Oxalis corniculata* L.

Common Name :- Sleeping beauty
Family :- Oxalidaceae



B.N. *Oriodoxa regia* Voss.

Common Name :- Cuban royal palm
Family :- Aracaceae



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Laxmepally (V), Narsampet (M)
Warangal (Dt) - 506 331 (T.S)



B.N. *Portulaca L. Sp.*

Common Name :- Rose moss
Family : Portulacaceae



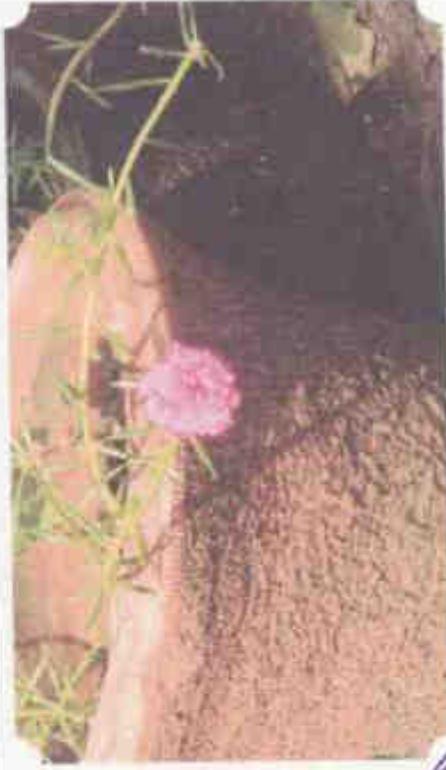
B.N. *Putranjiva roxburghii L.*

Common Name :- Karupali
Family : Putranjivaceae



B.N. *Psidium guajava L.*

Common Name :- Guava
Family : Myrtaceae



B.N. *Portulaca grandiflora Hook*

Common Name :- Rose moss
Family : Portulacaceae



Principal

PRINCIPAL

Bala Institute of Pharmaceutical Sciences
Lakshmi Narsampat (M)
Vijayaramangal (Dt) - 506 331 (T.S)



B.N. *Ricinus communis* L.

Common Name :- Castor
Family : Euphorbiaceae



B.N. *Ruellia tuberosa* Foug.

Common Name :- Mimul root
Family : Acanthaceae



B.N. *Rosa* L. Sp.

Common Name :- Glabra Rose
Family : Rosaceae



B.N. *Rhyncostia minima* L.

Common Name :- Least snow
Family : Fabaceae



B. N. Principal
PRINCIPAL

Balaji Institute of Pharmaceutical Sciences
Lakonipally (V), Narsampet (M)
Warangal (Dt) - 506 331 (T.S)



B.N. *Pothos* Burm F. Sp.

**Common Name :- Golden pothos
Family : Araceae**



B.N. *Synedrella nodiflora* (L.) Gaertn.

**Common Name :- Pig grass
Family : Asteraceae**



B.N. *Pseuderanthemum atropurpureum* L.

**Common Name :- Black varnish
Family : Acanthaceae**

Principa

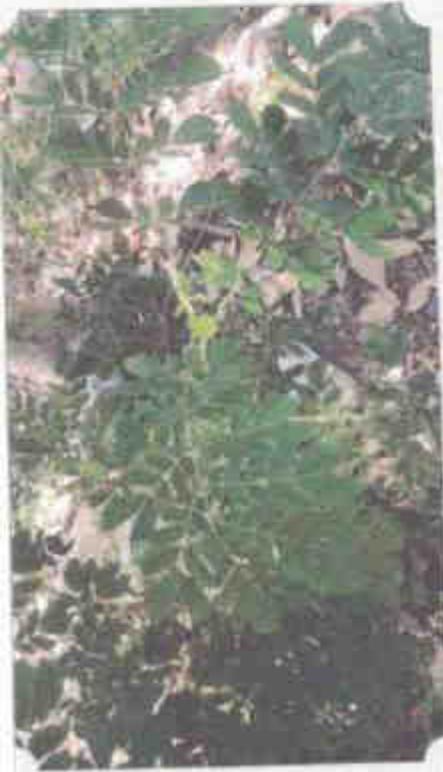
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**Dr. Jijji Institute of Pharmaceutical Sciences
Akroshpally (A), Narsampet (N)
Warangal (Dt) - 506 331 (T.S)**



B.N. *Solanum virginianum* L.

**Common Name :- Thorny night shade
Family : Solanaceae**



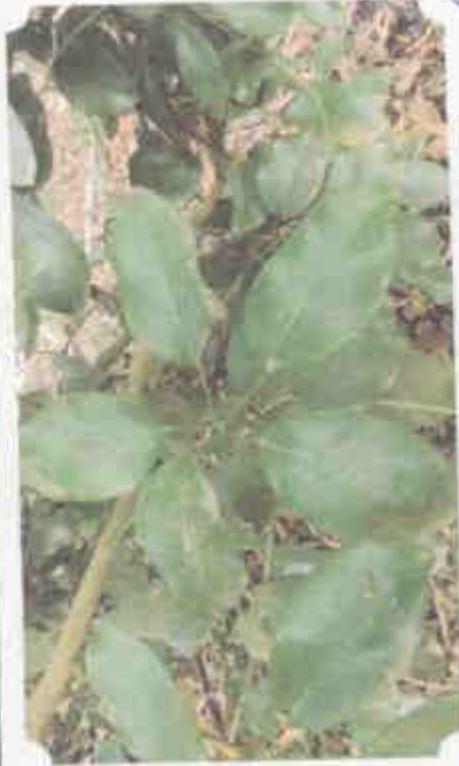
B.N. Samanea saman Thumb.

Common Name :- Rain plant
Family : Fabaceae



B.N. Sansevieria thyrsifolia Thumb.

Common Name :- Snake plant
Family : Asparagaceae



B.N. Schefflera venulosa Walp.

Common Name :- Schefflera vine
Family : Araliaceae



B.N. Sida Benth. Sp.

Common Name :- Flannel weed
Family : Malvaceae



Balaji

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Balaji Institute of Pharmaceutical Sciences
Laknepally (V), Narsampet (M)
Warangal (Dt) - 506 331 (T.S)



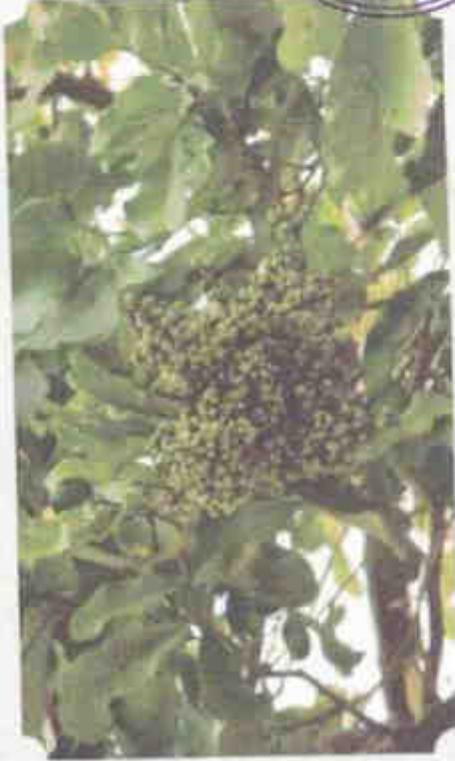
B.N. *Sonchus oleraceus* L.

Common Name :- Sow thistle
Family : Asteraceae



B.N. *Santalum album* L.

Common Name :- Chandan
Family : Santalaceae



B.N. *Sopindus trifolatus* Voss.

Common Name :- Soap berries
Family : Sapindaceae



B.N. *Solanum anguif* L.

Common Name :- Bitter
Family : Solanaceae



Signature

PRINCIPAL

Bharatiya Institute of Pharmaceutical Sciences
Lakshmi Nagar, Wazirpur (M)
Delhi - 110028 (T.S)



B.N. Terminalia bellerica Voss.

Common Name :- Baheda
Family : Combretaceae



B.N. Tamarindus indicus Benth.

Common Name :- Tamarind
Family : Caesalpinaceae



B.N. Terminalia cattapa Foug.

Common Name :- Sea-almond
Family : Combretaceae



B.N. Tecoma stans Lam.

Common Name :- Yellow-bells
Family : Bignoniaceae



Jafer

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Birla Institute of Pharmaceutical Sciences
Laknepally (V), Narsampet (M)
Warangal (Dt) - 506 331 (T.S)



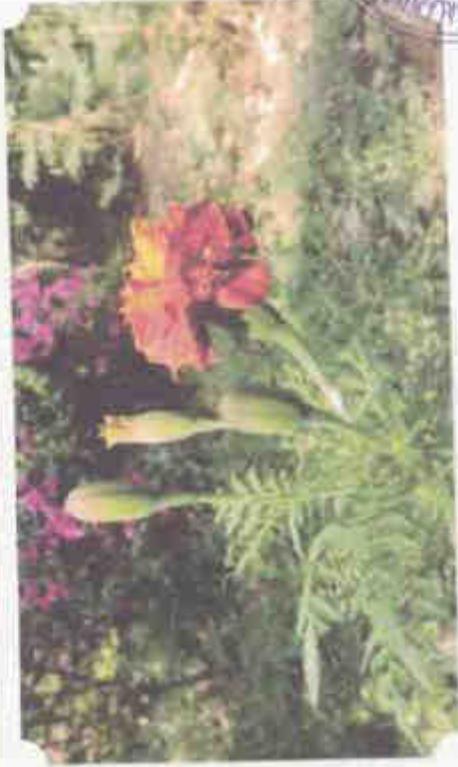
B.N. *Tabernaemontana divaricata* Schuet.

Common Name :- Pin wheel flower
Family : Apocynaceae



B.N. *Terminalia elliptica* Willd.

Common Name :- Silver grey wood
Family : Combretaceae



B.N. *Tagetes* L. Sp.

Common Name :- Marigold
Family : Asteraceae



B.N. *Tagetes* L. Sp.

Common Name :- Marigold
Family : Asteraceae



SciLife

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B.N.S.P.S. Lakshmi Institute of Pharmaceutical Sciences
Lakshmi (V), Narsampet (M)
V. arangat (Dt) - 506 331 (T.S)



B.N. *Thespesia populnea* (L.) Roxb.

Common Name :- Indian tulip
Family :- Malvaceae



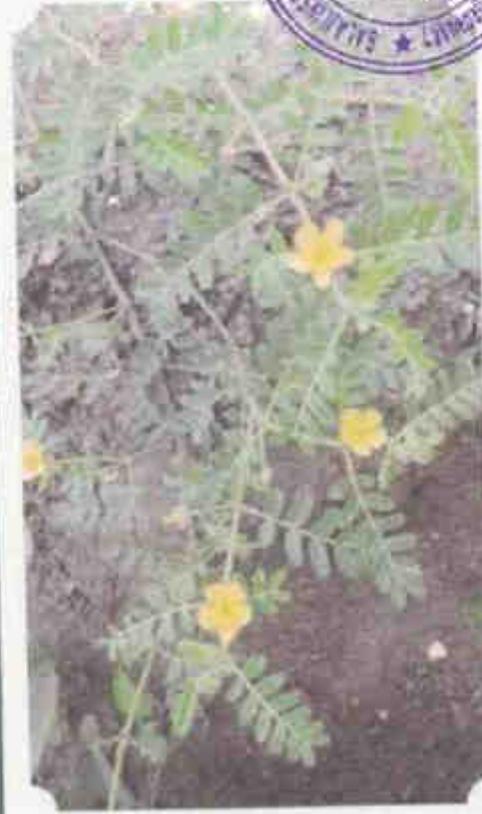
B.N. *Vernonia cinerea* Voss.

Common Name :- Satalodi
Family :- Asteraceae



B.N. *Tradax procumbens* Voss.

Common Name :- Con
Family :- Asteriaceae
PRINCIPAL
Bharati Institute of Pharmaceutical Sciences
Laknepally (M), Narsampet (M)
Laknepally (Dt) - 508 331 (T.S)



B.N. *Tribulus terrestris* L.

Common Name :- Gokharu
Family :- Zygophyllaceae





B.N. *Vigna aconitifolia* Voss.

Common Name :- Moth Bean
Family : Fabaceae



B.N. *Vinca rosea* L.

Common Name :- Vinca
Family : Apocynaceae



B.N. *Zea mays* L.

Common Name :- Maize
Family : Poaceae



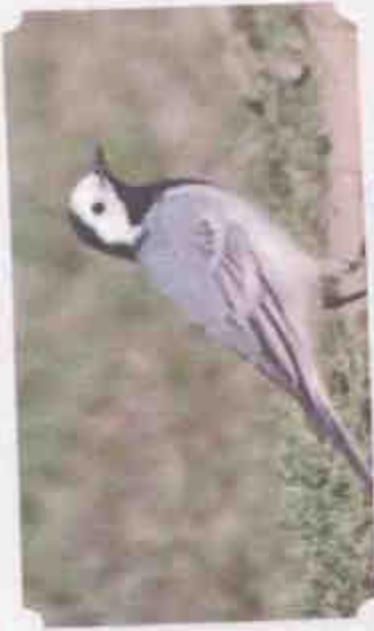
B.N. *Spathodea paniculata* Benth.

Common Name :- Pichkari
Family : Bignoniaceae



B.N.P.S.
PRINCIPAL

**Institute of Pharmaceutical Sciences
Narsampet (M)
Narsampet (V), Narsampet (T.S.)
V. rangal (Dt) - 505 331 (T.S.)**



Common Name: White Wagtail

Scientific Name: :- *Motacilla alba*
Migratory Status: :- Resident migrant
Marathi Name: :- पांढऱा धोबि
(पांढऱा धोबि)

Food: :- Insects

Habitat: :- Lakes, River, Nala
Family: :- Motacillidae
Category: :- Perching Birds
(परचणु शिकारी)



Common Name: Common Swallow

Scientific Name: :- *Hirundo rustica*
Migratory Status: :- Resident
Marathi Name: :- मल्लिंगी
(मल्लिंगी)

Food: :- Insects

Habitat: :- Riverside
Family: :- Hirundinidae
Category: :- Perching Birds
(परचणु शिकारी)



Common Name: Black Ibis

Scientific Name: :- *Plegadis populifera*
Migratory Status: :- Resident
Marathi Name: :- कोरा शिकारी
(कोरा शिकारी)

Food: :- Insects, Grains

Habitat: :- Riverside
Family: :- Threskiornithidae
Category: :- Waders
(शिकारी)



Common Name: Spotted Owl

Scientific Name: :- *Nyctaleus nyctaleus*
Migratory Status: :- Resident
Marathi Name: :- पांढऱा शिकारी
(पांढऱा शिकारी)

Food: :- Beetles, Insects, Mice

Habitat: :- Woodland, Plantation
Family: :- Strigidae
Category: :- Night Birds
(रात्री शिकारी)



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Balaji Institute of Pharmaceutical Sciences
Lakshimpally (V), Narsampet (V),
Warangal (Dt) - 506 331 (T.S)



Common Name: Common Hoopoe

Scientific Name :- *Upupa epops*
Migratory Status :- Resident
Marathi Name :- हाण्यस, पाय्या (ग्रॅव्ह, मॅगॅव्ह)
Food :- Insects

Habitat :- Woodland, Scrubland
Family :- Upupidae
Category :- Perching Birds (वृक्षचर, वृक्षचर)



Common Name: Oriental White Eye

Scientific Name :- *Zosterops palpestris*
Migratory Status :- Resident
Marathi Name :- चारुसोवळा, चालिदामला (वेष्टर, वेष्टर)
Food :- Fish, Insects, Nectar, Fruits

Habitat :- Scrubland
Family :- Zosteropidae
Category :- Perching Birds (वृक्षचर, वृक्षचर)



Common Name: Oriental White Eye

Scientific Name :- *Zosterops palpestris*
Migratory Status :- Resident
Marathi Name :- चारुसोवळा, चालिदामला (वेष्टर, वेष्टर)
Food :- Fish, Insects, Nectar, Fruits

Habitat :- Scrubland
Family :- Zosteropidae
Category :- Perching Birds (वृक्षचर, वृक्षचर)



Common Name: Indian Robin

Scientific Name :- *Eopsaltriaa indicus*
Migratory Status :- Resident
Marathi Name :- कान्हो (मराठ)

Habitat :- Woodland, Scrubland
Family :- Muscicapidae
Category :- Perching Birds (वृक्षचर, वृक्षचर)



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Batej Institute of Pharmaceutical Sci.
Laknepally (V), Narsampet (M.)
Warangal (Dt) - 506 331 (T.S)



Common Name: Purple Sunbird

Scientific Name :- *Actinornis asiatica*
Habitat :- Woodland
Family :- Nectariniidae
Migratory Status :- Resident
Category :- Perching Birds
Marathi Name :- लालुला सुरपुष्प (लालुला सुरपुष्प)
Food :- Insects, Nectar



Common Name: Purple Sunbird

Scientific Name :- *Actinornis asiatica*
Habitat :- Woodland
Family :- Nectariniidae
Migratory Status :- Resident
Category :- Perching Birds
Marathi Name :- सूर्यपक्षी (सूर्यपक्षी)
Food :- Insects, Nectar



Common Name: Pied Bushchat

Scientific Name :- *Sylvia curruca*
Habitat :- Riverside
Family :- Muscicapidae
Migratory Status :- Resident
Category :- Perching Birds
Marathi Name :- कवचा (कवचा)



Common Name: Rose Ringed Parakeet

Scientific Name :- *Psittacula krameri*
Habitat :- Woodland
Family :- Psittacidae
Migratory Status :- Resident
Category :- Perching Birds
Marathi Name :- पोपट (पोपट)



Salim Ali
PRINCIPAL

Salim Ali Institute of Pharmaceutical Sciences
Laknepally (V), Narsampet (M)
Warangal (Dt) - 506 331 (T.S)



Common Name: Large Grey Babbler

Scientific Name: *Turdoides malabaricus*
Migratory Status: Resident
Marathi Name: साठ्ठि (Saththi) / बार्बल (Barbal)
Food: Insects, Flgs, Grains
Habitat: Garden
Family: Timaliidae
Category: Perching Birds (उडणारे पक्षि)



Common Name: Rosy Starling

Scientific Name: *Sturnus roseus*
Migratory Status: Migrant
Marathi Name: रोजी (Roji) / पाली (Pali) / म्यो (Myo)
Food: Insects
Habitat: Open, Agricultural Land
Family: Sturnidae
Category: Perching Birds (उडणारे पक्षि)



Common Name: Baya Weaver

Scientific Name: *Ploceus philippinus*
Migratory Status: Resident
Marathi Name: सुग्रम (Sugram) / देवचिमन (Devchiman)
Food: Grains, Insects
Habitat: Scrubland
Family: Ploceidae
Category: Perching Birds (उडणारे पक्षि)



Common Name: Brahminy Starling

Scientific Name: *Sturnia pagularum*
Migratory Status: Resident
Marathi Name: ब्राह्मणी म्यो (Brahmani Myo)
Food: Fruits, Insects
Habitat: Woodland, Scrubland
Family: Sturnidae
Category: Perching Birds (उडणारे पक्षि)



PRINCIPAL

Balaji Institute of Pharmaceutical Science & Technology
Laknepally (V), Narsampet (M)
Warangal (Dt) - 506 331 (T.S)



Common Name: Indian Grey Hornbill

Scientific Name: *Cypocitta thibetana*
 Migratory Status: Resident
 Marathi Name: धानेश (धन)

Food: Fruits, Insects
 Habitat: Woodland
 Family: Bucerotidae
 Category: Pecking Birds
 (उडणारे/उडणारी)



Common Name: Indian Grey Hornbill

Scientific Name: *Cypocitta thibetana*
 Migratory Status: Resident
 Marathi Name: धानेश (धन)

Food: Fruits, Insects
 Habitat: Woodland
 Family: Bucerotidae
 Category: Pecking Birds
 (उडणारे/उडणारी)



Common Name: Red Vented Bulbul

Scientific Name: *Pycnonotus cafer*
 Migratory Status: Resident
 Marathi Name: लाडूया बुलबुल
 (लडूया बुलबुल)

Food: Fruits, Insects
 Habitat: Woodland, Town
 Family: Pycnonotidae
 Category: Pecking Birds
 (उडणारे/उडणारी)



Common Name: Green Red-Eyed

Scientific Name: *Mniotilta arvensis*
 Migratory Status: Resident
 Marathi Name: (उडणारे/उडणारी)

Habitat: Woodland
 Family: Mniotiltidae
 Category: Pecking Birds
 (उडणारे/उडणारी)



Balaji

PRINCIPAL
 Balaji Institute of Pharmaceutical Sciences
 Laknepally (V), Narsampet (M)
 Warangal (Dt) - 506 331 (T.S)



Common Name: Bay Blue-headed Shrike

Scientific Name: *Lanius vittatus*
Migratory Status: Resident
Marathi Name: गांधारी, चोला क्लाई (चोला, गेर उडारा)
Food: Insects, Chota Khatke
Habitat: Scrubland
Family: Laniidae
Category: Perching Birds (उडारा, गेर उडारा)



Common Name: Greater Coucal

Scientific Name: *Centropus sinensis*
Migratory Status: Resident
Marathi Name: धुंधरा, सोकावला (धुंधरा, सोकावला)
Food: Insects, Birds eggs
Habitat: Woodland
Family: Cuculidae
Category: Pheasanting Birds (उडारा, सोकावला)



Common Name: White Throated Kingfisher

Scientific Name: *Halcyon leucorhoa*
Migratory Status: Resident
Marathi Name: क्लांबीय
Food: Fish, Crabs, Lizard, Mice
Habitat: Riverbank, Woodland, Scrubland
Family: Alcedinidae
Category: Perching Birds (उडारा, सोकावला)



Common Name: Blue Rock Pigeon

Scientific Name: *Columba livia*
Migratory Status: Resident
Marathi Name: पाखा, कबोला (उडारा, सोकावला)
Food: Cereals, Pulses
Habitat: Woodland, Town
Family: Columbidae
Category: Upland Ground Birds (उडारा, सोकावला)



Sankh

PRINCIPAL
Sankh Institute of Pharmaceutical Sciences
Laknepally (V), Narsampet (M)
Warangal (Dt) - 506 331 (T.S)



Common Name: Red-wattled Lapwing

Scientific Name: *Vanellus indicus*
Migratory Status: Resident
Marathi Name: लावंग (Laving)
Category: *पंचमंडल (Panchmandal)*

Common Name: Laughing Dove
Food: Seeds, Grains
Habitat: Woodland, Scrubland
Family: Columbidae
Category: *उपलब्ध (Uplabd)*



Common Name: Little Egret

Scientific Name - *Egretta garzetta*
Migratory status - Resident
Marathi name - बागदा (Bagada)

Food: Insects
Habitat: Woodland, Scrubland
Family: Ciconiidae
Category: *पंचमंडल (Panchmandal)*



Common Name: Ashy Prinia

Scientific Name: *Prinia ashy*
Migratory Status: Resident
Marathi Name: राबडेली वारुवा (Rabdeli Varuva)

Food: Insects
Habitat: Woodland, Scrubland
Family: Cisticolidae
Category: *पंचमंडल (Panchmandal)*



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Balaji Institute of Pharmaceutical Sciences
Lakshnapally (V), Narsampet (K.)
Warangal (Dt) - 506 331 (T.S)



Common Name: Indian Chat (Brown rock chat)

Scientific Name - *Chondestes cinerea*
Migratory status - Resident
Marathi name - *Chappalav*
(Common)

Food - Seed, Grains
Habitat - Woodland
Family - *Mniotiltidae*



Common Name: White breasted waterhen

Scientific Name - *Amaretritis phoeniceus*
Migratory status - Resident
Marathi name - *Pinkkoraundi*
(Common)

Food - Seed, Grains
Family - *Ardeidae*



Common Name: Indian Pond Heron

Scientific Name - *Ardeola grayii*
Migratory status - Resident
Marathi name - *Vinchaik*
(Common)

Food - Seed, Grains
Family - *Ardeidae*



Common Name: Shikra

Scientific Name - *Accipiter badius*
Migratory status - Resident
Marathi name - *Shikra*
(Common)

Food - eggs, bats, rodents, frogs
Family - *Accipitridae*



Scopus

PRINCIPAL

Bapat Institute of Pharmaceutical Sciences*
Lakshmi Narsampet (V), Narsampet (M);
Warangal (D); - 506 331 (T.S)



 **GPS Map Camera**

Laknepally, Telangana, India
WVQ2+34P, Laknepally, Madhira D, Telangana 506330, India
Lat 17.937255°
Long 79.850367°
29/08/23 11:18 AM GMT +05:30

Google



 **GPS Map Camera**

Laknepally, Telangana, India
WVQ2+34P, Laknepally, Madhira D, Telangana 506330, India
Lat 17.937255°
Long 79.850367°

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PRINCIPAL,
Institute of Pharmaceutical Sciences
Laknepally (V), Narsampet (M)
Madhira D, Narsampet (T.S)



 **GPS Map Camera**

Laknepally, Telangana, India
WVQ2+34P, Laknepally, Madhira D, Telangana 506330, India
Lat 17.937255°
Long 79.850367°
29/08/23 11:26 AM GMT+4:05:30



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PRINCIPAL

Babji Institute of Pharmaceutical Sciences
Laknepally (V), Narsampet (M)
Warangal (Dt) - 506 331 (T.S)





GPS Map Camera

Laknepally, Telangana, India
WVQ2+34P, Laknepally, Madhira D, Telangana 506330, India
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Long 79.850367°
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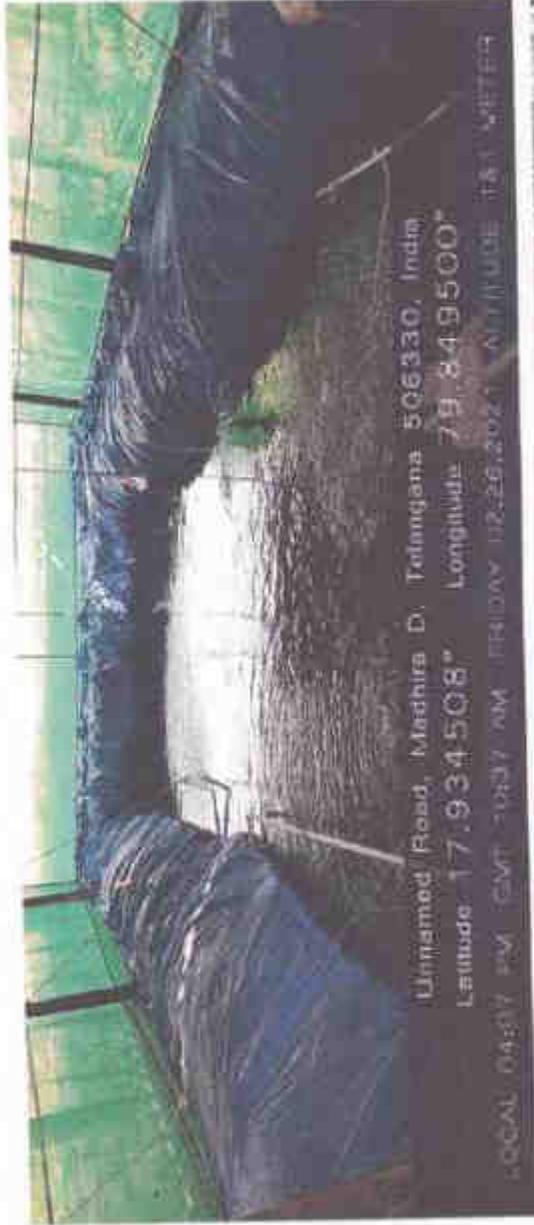


GPS Map Camera

Laknepally, Telangana, India
WVQ2+34P, Laknepally, Madhira D, Telangana 506330, India
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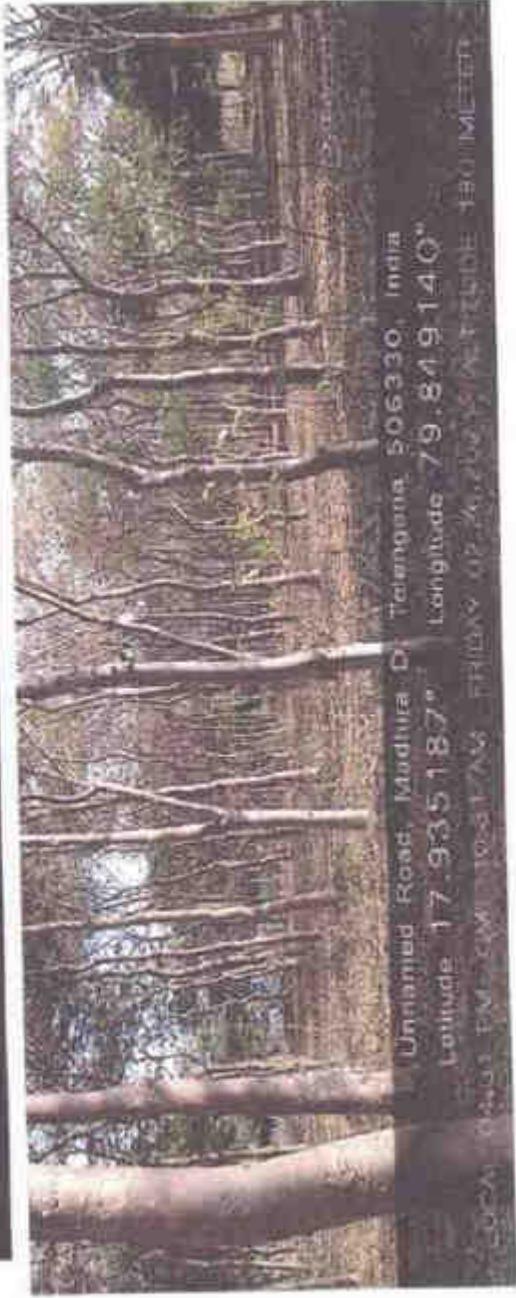



PRINCIPAL
Bala Institute of Pharmaceutical Sciences
Laknepally (V), Narsampet (R),
Warangal (Dt) - 506 331 (T.S)



Unnamed Road, Madhura D, Telangana 506330, India
Latitude 17.934508° Longitude 79.849500°

LOCAL 04:07 PM GMT 10:37 AM FRIDAY 12-26-2021 ALTITUDE 181 METER



Unnamed Road, Madhura D, Telangana 506330, India
Latitude 17.935187° Longitude 79.849140°

LOCAL 04:03 PM GMT 10:31 AM FRIDAY 12-26-2021 ALTITUDE 180 METER



Balaji
PRINCIPAL
Balaji Institute of Pharmaceutical Sci:
Laknepally (V), Narsampet
Warangal (Dt) - 506 331 (T.S.)



Warangal-Marsampet Rd, Madhira D, Telangana 506132, India
Latitude 17.938246° Longitude 79.850124°

LOCAL TIME: 05:00:10 AM WEDNESDAY 02 FEB 2023 ALTITUDE: 102 METERS



Warangal-Marsampet Rd, Madhira D, Telangana 506132, India
Latitude 17.938608° Longitude 79.848448°

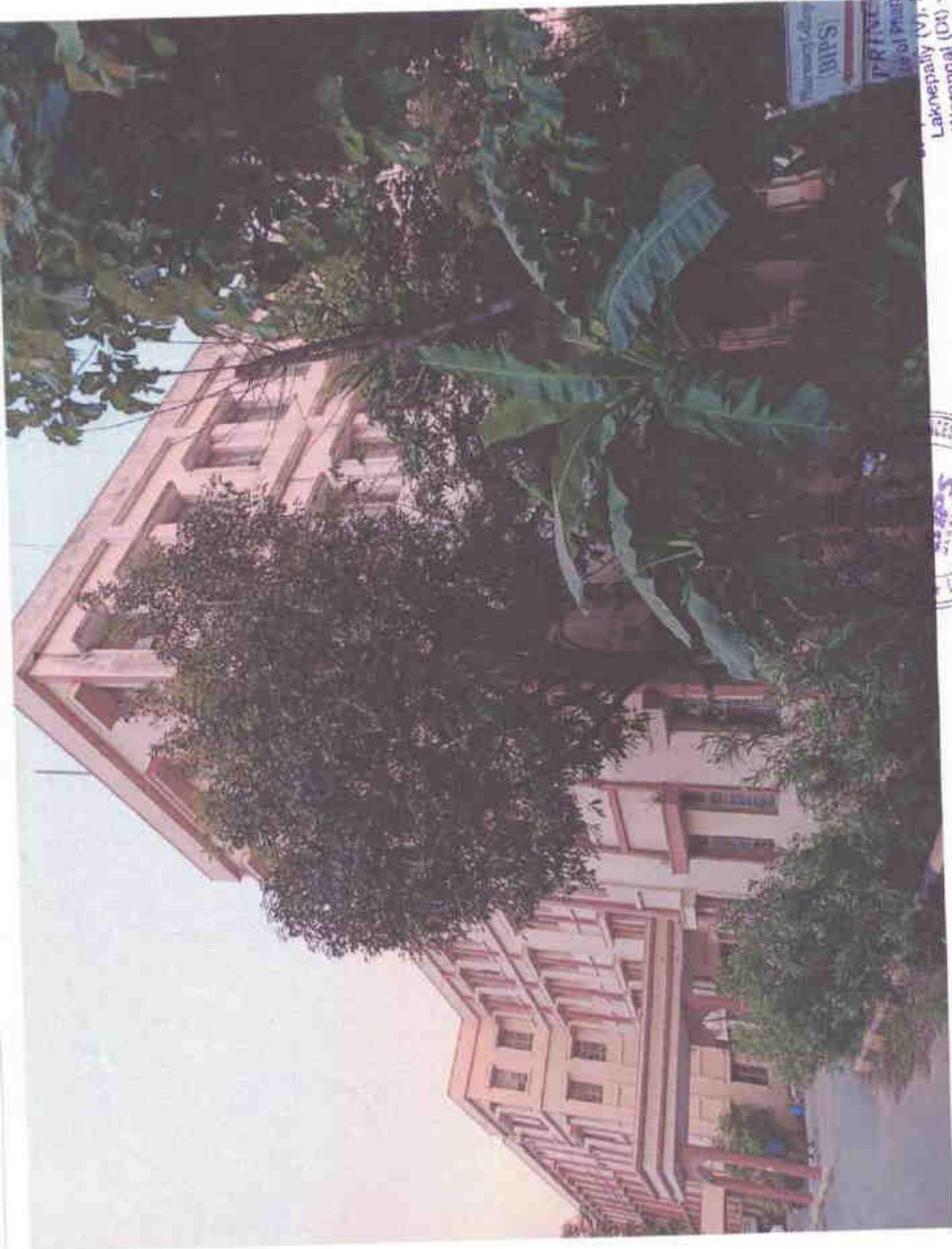
LOCAL TIME: 05:00:03 AM WEDNESDAY 02 FEB 2023 ALTITUDE: 179 METERS



Handwritten signature in blue ink.

PRINCIPAL

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Laknepally (V), Narsampet (M)
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Scopus

PRINCE PAL
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