GREEN AUDIT REPORT

2018-19

JANATA MAHAVIDYALAYA, CHANDRAPUR.

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2019

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JANATA MAHAVIDYALAYA, CHANDRAPUR

Janata Mahavidyalaya established in 1958, by late Shri. Shrihari Jiwatode Guruji, Ex-MLA, is the first college in the then combined districts of Chandrapur and Gadchiroli. The college was the result of a noble and shining vision and it was 'to develop this tribal and backward region through education based on human values, social responsibility and patriotism'.

Vision statement:

"Our vision is to create a society where education will act as a true liberator and capacity-builder, and unite people on the anvils of peace, tolerance and understanding, and where the benefits of education will reach each and everyone, enabling them to live with self respect, dignity and enlightened awareness".

The mission and objectives of the college are:

- ***Develop the skills, competencies, and attitudes which are required to live in the present knowledge society.***
- ***Develop critical and analytical thinking.***
- ***Enable students to bring out best in academic, cultural and sporting pursuits.***
- ***Impart knowledge in a conceptually sound and applied manner.***
- ***Prepare students for lifelong and continuous upgradation of knowledge and skills.***
- ***Nurture moral values, develop socially committed professionals and contributors for nation building.***
- ***Expand the frontiers of knowledge through research, independent thinking, and continuous learning.***

Introduction

Environment plays a key role in human health. So, to cut down the threats to human health through adverse environmental conditions, it is necessary to carrying out Green Audit by screening environment and by using standard methods.

Green Audit helps us to upgrade the environmental conditions for better sustainability.

The intension of organizing Green Audit is to observe the environmental conditions around the institute/ college campus. Green audit is an essential tool to measure the effect of certain human activities on the environment.

Significance of Green Audit:

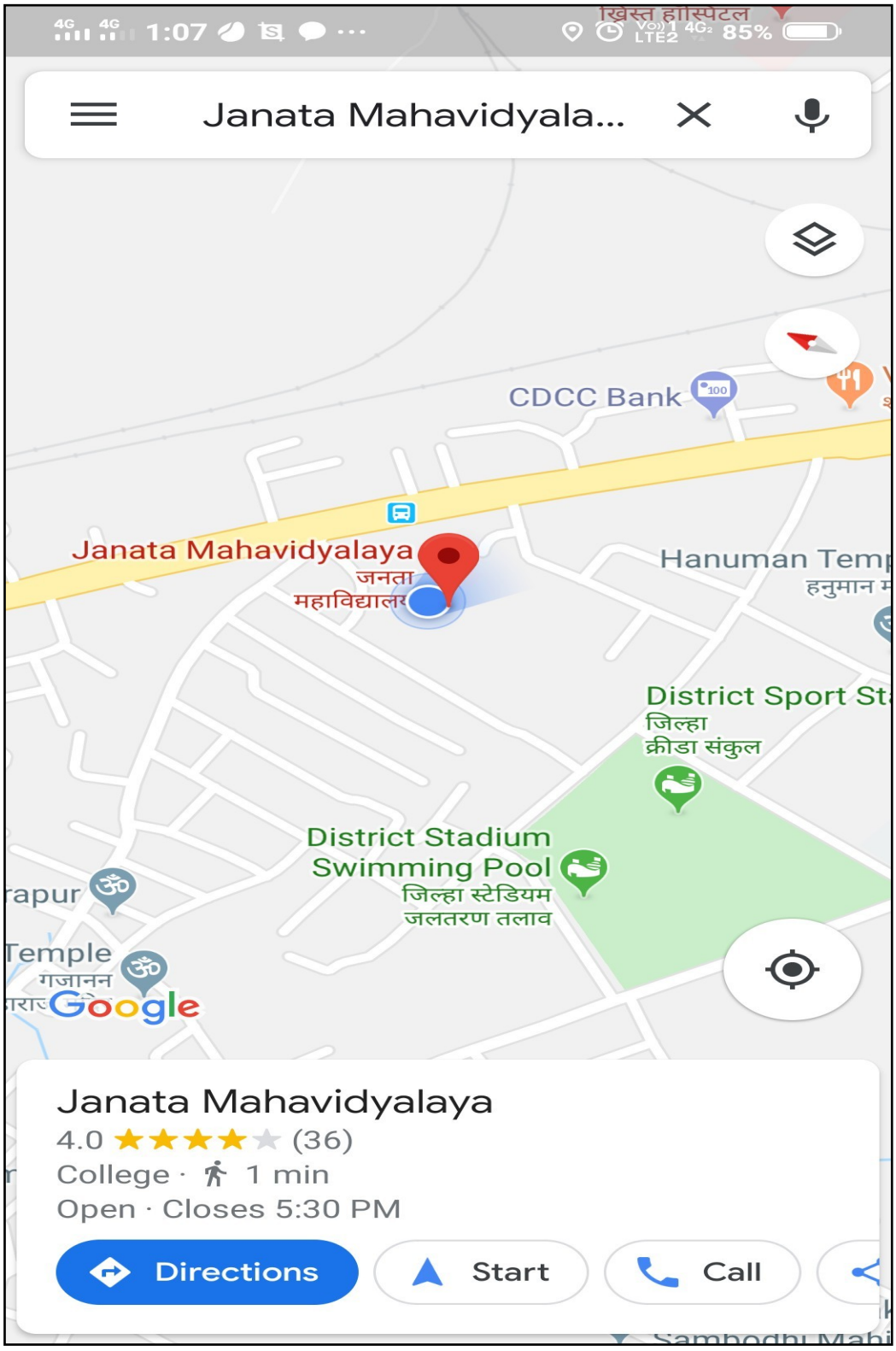
- Green audit is used to avoid the interruptions in environment due to human activities.
- Monitoring green audit helps to improve the human activities with the objective of reducing adverse effect on environment.
- Green audit suggest the best protocol for environmental awareness to maintain the sustainability for Green Earth.
- It inculcates the knowledge about effects of human activities and social services towards the environmental performance in students
- Green audit suggest the position of water management, waste management status of college campus.
- It also guide us air quality status of our college campus.
- Green audit enable us to monitor biodiversity status of our college campus.
- Green audit also suggest the availability, use and control measures for the use of electric energy.

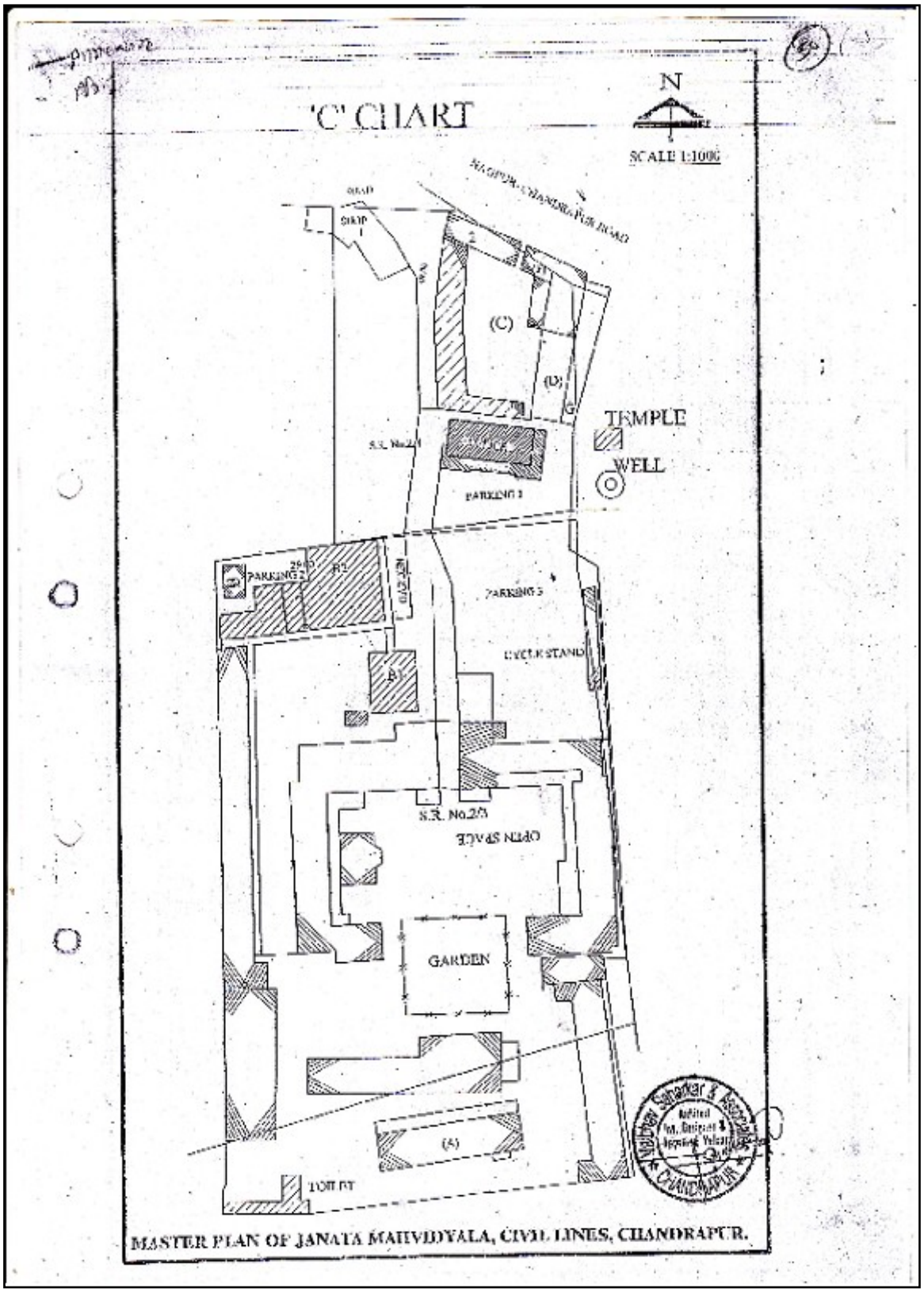
Plan of Audit:

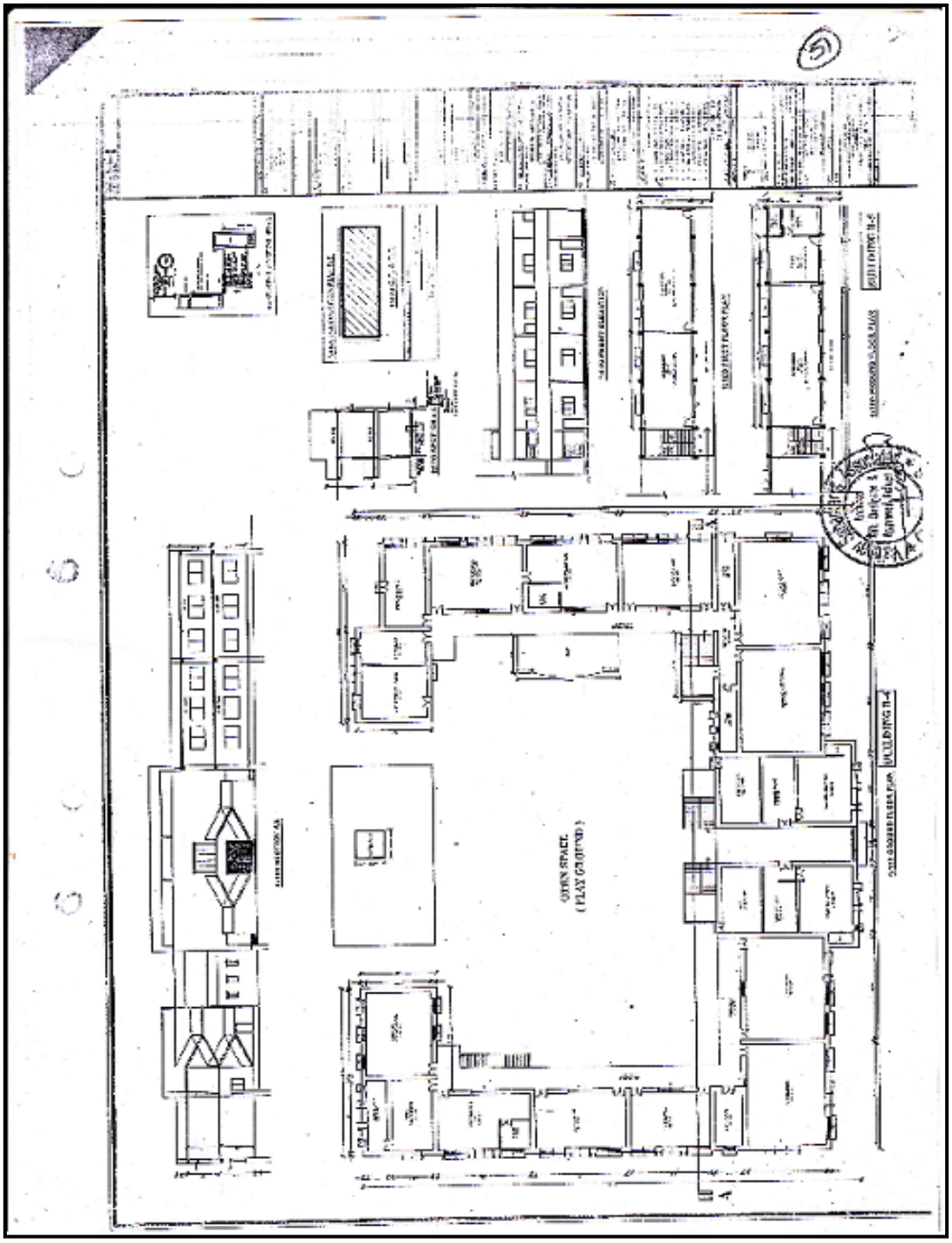
1. Waste Management Audit.
2. Water Audit
3. Energy Audit.
4. Air quality Audit
5. Biodiversity (Flora and Fauna) status of college campus.

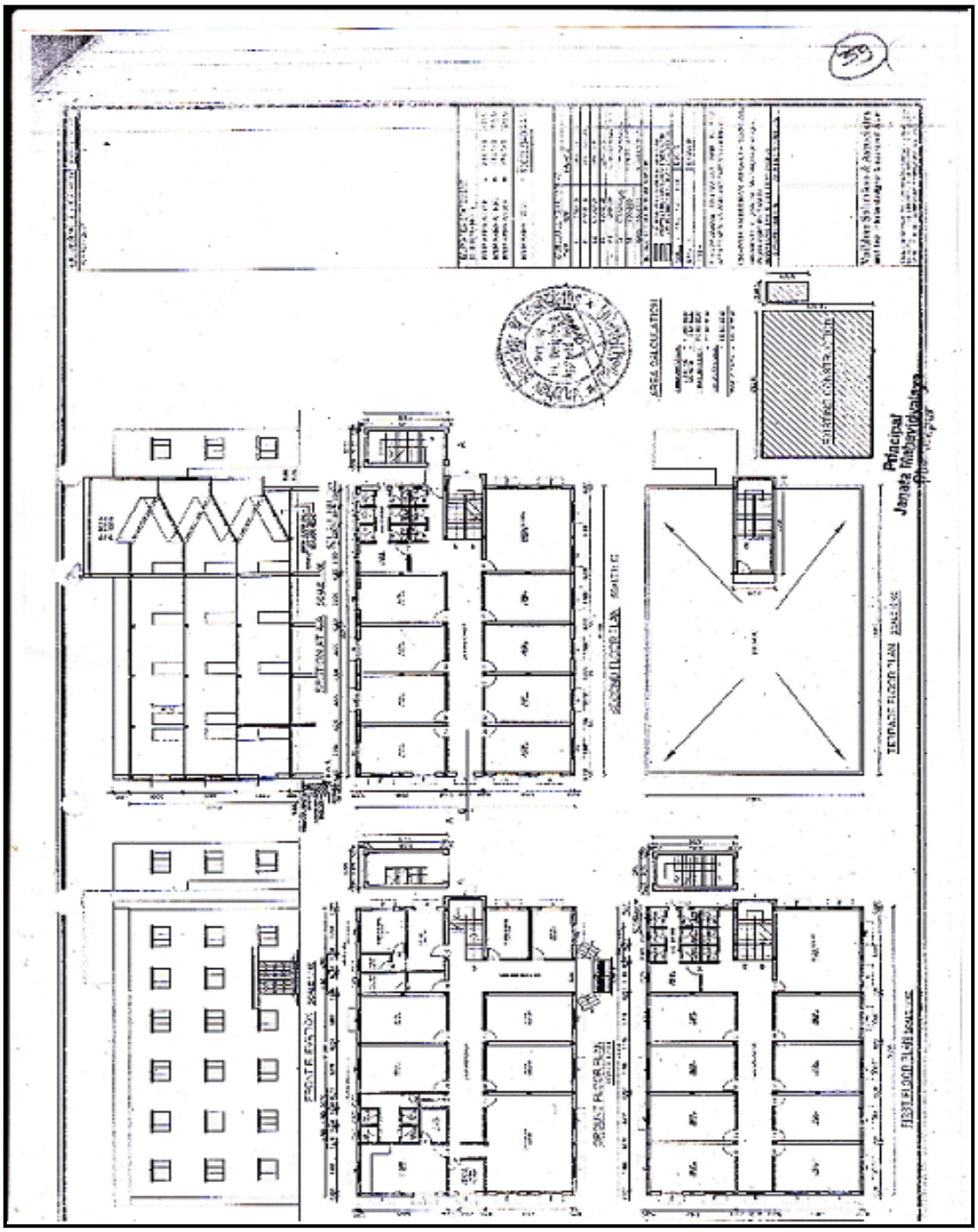
1. Maps of college campus

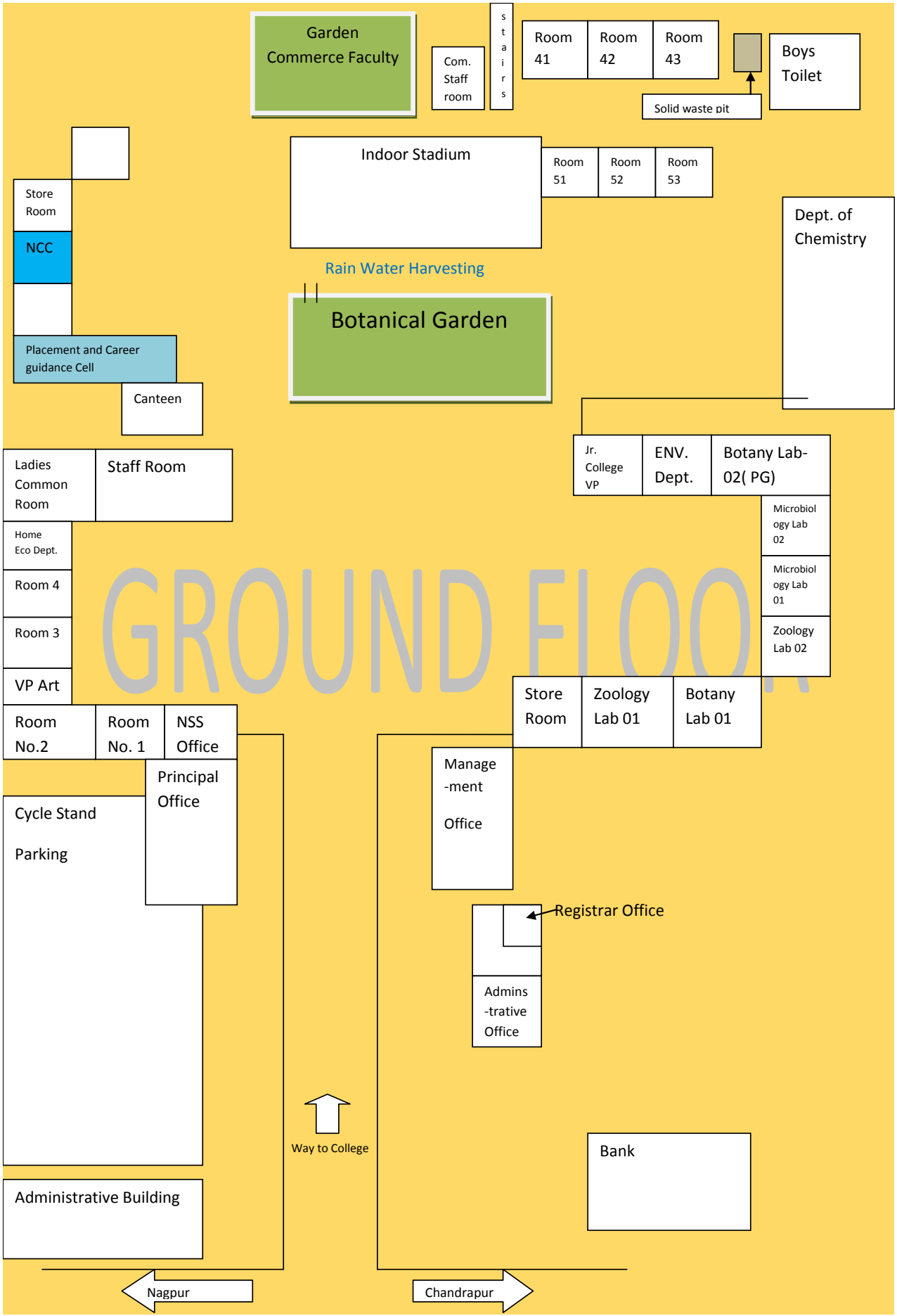
Geographical Location with Maps

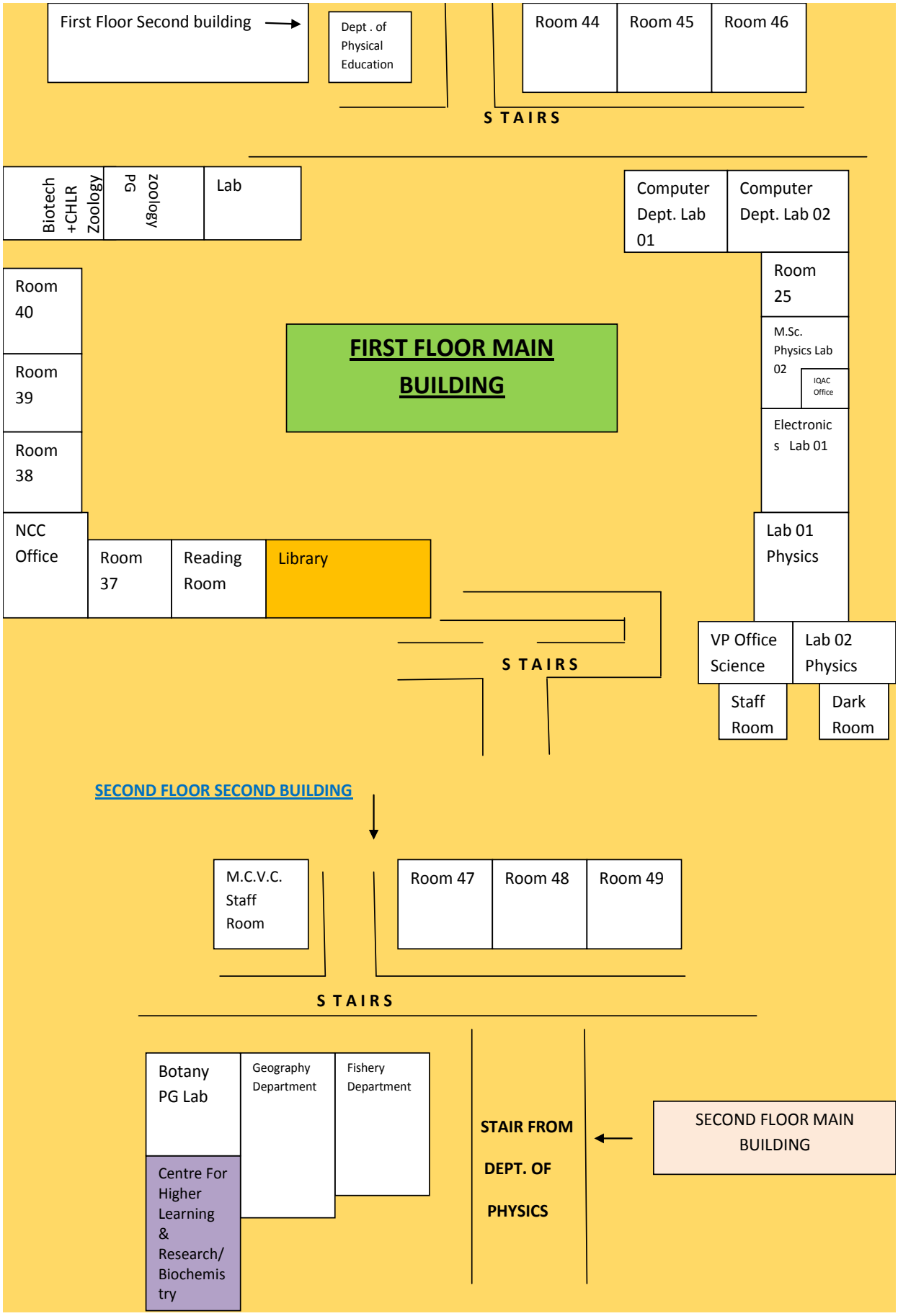



'C' CHART
N
SCALE 1:100G
SHOP
(C)
(D)
TEMPLE
WELL
PARKING 3
PARKING 2
PARKING 1
CYCLE STAND
(B)
S.R. No.2/5
OPEN SPACE
GARDEN
(A)
TOILET
MASTER PLAN OF JANATA MAHVIDYALA, CIVIL LINES, CHANDRAPUR.






Garden
Commerce Faculty
Com. Staff room
stairs
Room 41
Room 42
Room 43
Boys Toilet
Solid waste pit
Indoor Stadium
Room 51
Room 52
Room 53
Store Room
NCC
Placement and Career guidance Cell
Canteen
Rain Water Harvesting
Botanical Garden
Dept. of Chemistry
Ladies Common Room
Staff Room
Home Eco Dept.
Room 4
Room 3
VP Art
Jr. College VP
ENV. Dept.
Botany Lab-02(PG)
Microbiology Lab 02
Microbiology Lab 01
Zoology Lab 02
GROUND FLOOR
Room No.2
Room No. 1
NSS Office
Principal Office
Cycle Stand
Parking
Store Room
Zoology Lab 01
Botany Lab 01
Manage-ment Office
Registrar Office
Admins-trative Office
Way to College
Bank
Administrative Building
Nagpur
Chandrapur


First Floor Second building
Dept . of Physical Education
Room 44
Room 45
Room 46
S T A I R S
Biotech +CHLR Zoology
PG zoology
Lab
Computer Dept. Lab 01
Computer Dept. Lab 02
Room 25
M.Sc. Physics Lab 02
IQAC Office
Electronics Lab 01
Room 40
Room 39
Room 38
FIRST FLOOR MAIN BUILDING
NCC Office
Room 37
Reading Room
Library
Lab 01 Physics
S T A I R S
VP Office Science
Lab 02 Physics
Staff Room
Dark Room
SECOND FLOOR SECOND BUILDING
M.C.V.C. Staff Room
Room 47
Room 48
Room 49
S T A I R S
Botany PG Lab
Geography Department
Fishery Department
Centre For Higher Learning & Research/ Biochemistry
STAIR FROM DEPT. OF PHYSICS
SECOND FLOOR MAIN BUILDING

Ramps for disabled students

Ramp near Arts faculty classrooms, Room No. 4

Ramp near ICT enabled Classroom

Ramp near Chemistry department

Waste Management Audit

Waste management is the prime challenge for our country. To overcome this challenge, Govt. Of India introduced "Sarva Swachata Abhiyan" (Clean India Mission) in 2014.

Waste management, whether it is solid waste, liquid waste and E-waste, it is one of the major task to dispose of this waste. During the disposal of waste the methods used should be eco-friendly which primarily focuses on '3R' i.e. Reduce, Reuse and Recycle.

Solid waste management

- Dust bins for collection of solid waste are placed at suitable sites in the campus.
- All biodegradable solid waste generated in the campus is collected at collection Centre of college and then sent to Mahanagar Palika for further solid waste management. For this collage has made a contract with Mr. Sanjay Dadaji Rao related to Mahanagar Palika, Chandrapur.
- Plants litter is regularly collected in a pit and sometimes burnt off.
- Heavy waste furniture is sent to workshop for dismantling and recycling.
- Experimental schedules are planned such that, solid and liquid chemical waste are reduced or reused.
- The organic **compounds prepared by students are reused** in experiments like organic spotting and crystallization.
- Compounds crystallized by students are used in Organic Spotting
- Used Solvents collected from students are distilled and reused
- Experiments are performed at the semi-micro scale to reduce usage of chemicals and organic solvents
- Compounds prepared by students are sometimes used as starting material for research
- The **chemicals recovered and recycled** by the department are Ethyl acetate, Nitro benzene, mdinitrobenzene, acetophenone, acetone ,ethyl methyl ketone, ethyl benzoate, acetanilide, bromo acetanilide,nitro acetanilide, aspirin, salicyclic acid, benzoic acid and 2- naphthol

Liquid waste management

- Hazardous liquid waste produced during experimental work in laboratories like acids and alkalis are diluted with water and neutralized with weak alkalis is properly disposed off with taking care of adverse side effect of environment.
- Volatile organic solvents used for extraction and synthesis are collected, distilled and reused.
- Water analysis has been conducted during students' practicals and projects.

E-waste management

The disposal of E-Waste is a rapidly growing problem because electronic equipment frequently contains hazardous substances which affect the environment and human health.

E-waste such as, discarded computers, office electronic equipment, TV set, refrigerator are disposed off as per their conditions. These wastes are sold to local scrap condition. Efforts are made to reduce e-waste by optimum use of electronic devices.

The college conscientiously works towards generating **minimal e-waste,** for which the following strategies are adopted:

- **Regular maintenance** of electronic equipment and computers by the in-house technician and AMC, ensures longer life.
- Weeded out computers from the computer science laboratories due to upgradation are transferred to departments, library or the administration within the college campus.
- Outdated and non functional Cathode Ray Oscilloscope, signal generators and other electronic equipment, **weeded out** from the Physics laboratory are **used for demonstration of internal parts of the equipment.**

Some biological waste coming from biology labs is first properly disinfected by using disinfectants and then it is burnt properly.

Availability of potable water is one of another prime challenge for human being. Under the "Save Water Mission" our college take care and monitored the wastage of water. We need to use water carefully. Any drip or leakages in taps are regularly monitored.

It is essential that proper method of waste water disposal should be implemented.

Photograph: 1) Waste disposal pit. 2) Dust bins in college campus


Lectures on solid waste management


Tractor carrying solid waste

DUST BINS

Dry and Wet Waste segregation

Water Audit

Water quality analysis was done by standard methods employed for water testing. MPN Index (Most Probable Number of Coliforms group of bacteria) is used to determine whether the water is potable or not according to ICMR stansards(Indian Council of Medical Research) for drinking water. Conductivity meter (Make-NAINA SOLARIS LTD. Model- NDC 736, Sr. No. 2845), pH meter (Model-Digital pH meter-111, Sr. No. 1003085) and Total solid content of water is analysed for testing the quality of water.

Table: MPN/100ml (Average value for 2018-19)

Sr.No. of sample	**Sample location**	**MPN Index (MPN/100ml)**	**Water quality**
1.	Staff room drinking water	00/100ml	Potable (Satisfactory)
2.	Water cooler near Botany department	00/100ml	Potable (Satisfactory)
3.	Staff room over head tank	9.1/100ml	Non-potable (Good)
4.	Science faculty over head tank water	9.1/100ml	Non-potable (Good)
5.	Administrative building tap water	23/100ml	Non potable (Unsatisfactory)
6.	Tap water from Chemistry department	6.1/100ml	Non-potable (Good)

Table: Physical parameters (Average values for 2018-19)
[TDS Meter (hold) CE; Range 0.9-990 ppm]

Sr.No. of sample	Sample location	Total Solids (TS) (ppm)	Conductance	pH
1.	Staff room drinking water	523	$0.05x10^{-3}$ mhos	7.0
2.	Water cooler near Botany department	514	$0.05x10^{-3}$ mhos	7.1
3.	Staff room over head tank	523	$0.05x10^{-3}$ mhos	7.5
4.	Science faculty over head tank water	523	$0.05x10^{-3}$ mhos	7.2
5.	Administrative building tap water	524	$0.05x10^{-3}$ mhos	7.2
6.	Tap water from Chemistry department	523	$0.05x10^{-3}$ mhos	7.1

Table: Water Storage Profile

Location	No. and capacity of tanks	Total capacity (Lit.)
Science wing(Second floor)	1x10,000	10,000 L.
Staff Room	1x1000	1000 L
Chemistry Dept.	2x500	1000 L
Commerce Dept.	1x500	500 L
Principle Office	1x500	500L
Administrative office	1x1000	1000L
	Total-	14,000L

Note: Approximate per capita average consumption and usage per day is **3.5 L** of water

Table: Source of water supply

Source of water supply:	
Bore well	**1 Number**
Municipal Water supply	**1 No. Near staff room**

Rain Water Harvesting

College has installed rain water harvesting system to increase the water level in college campus. Also, chemistry and other department of college used rain water after distillation for regular experimental work.

Chandrapur region faces water scarcity mostly during summer season. Our college uses rainwater harvesting to its advantage. The water from the rains is harvested for a variety of purposes.
There are three points where the water harvesting facility is endorsed.
Further, the run-down water from roof-tops is gathered through a network of pipes and collectors which is then directed into specialized pits available in the premises.
A part of the harvested rainwater satisfies the needs of the college campus; a lot of it also goes into recharging the ground water and rejuvenate the depleting ground water resources.

Rain water harvesting structure near indoor stadium and garden

Rain water harvesting structure near Administrative building

Water collected on terrace is carried through pipes and sunk into ground thus increasing ground water level

Air Audit

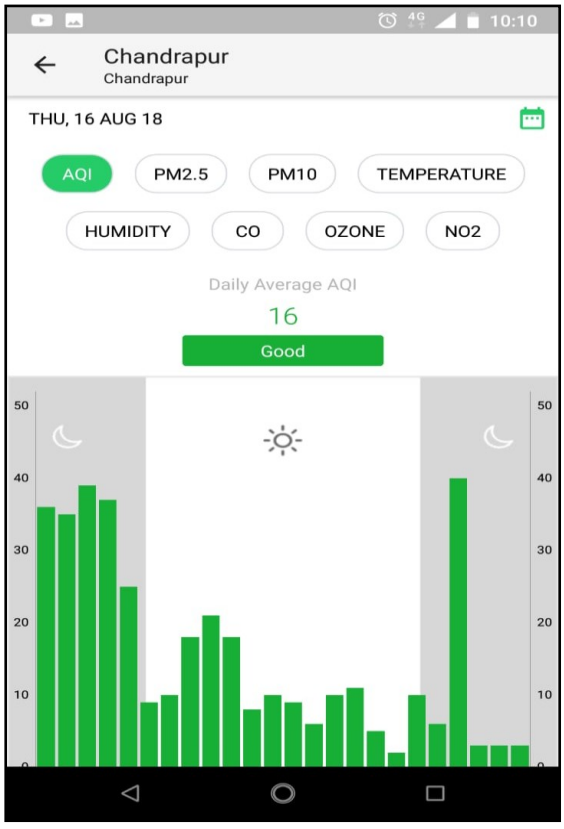
Assessment of Air quality is done by using AIRVEDA app, which is useful for measuring various parameters of air and suggest the AQI (Air Quality Index).

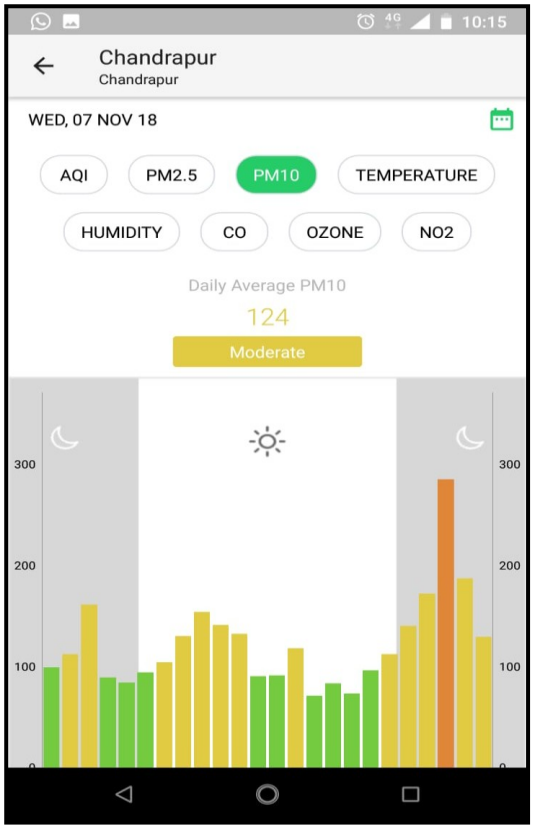
- **PM2.5**- Particle size within 2.5 micron
- **PM10**- Particle size within 10 micron

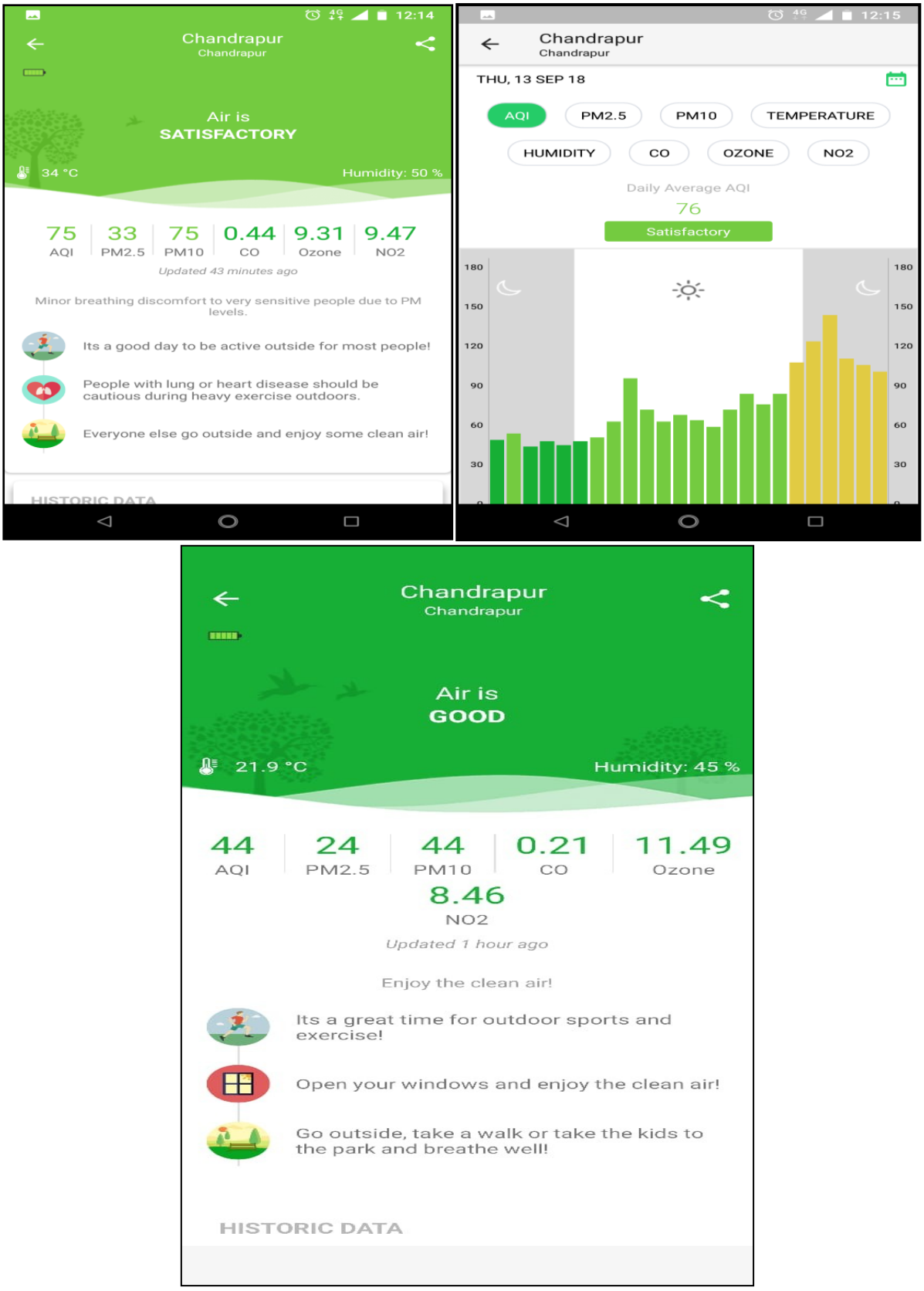
Table: Monitoring of Air by using AIRVEDA (Session 2018-19) (Average values)

Month	AQI	PM2.5	PM10	Quality
July	20	7	19	Good
August	16	7	13	Good
September	105	38	111	Moderate
October	131	54	144	Moderate
November	144	70	124	Moderate
December	212	92	148	Poor
January	176	77	149	Moderate
February	96	45	99	Satisfactory
March	107	32	113	Moderate
April	93	33	97	Satisfactory

Screenshots: AIRVEDA (Air Quality Index (AQI)







Air quality in Chandrapur, Chandrapur on Sep 28, 19 at 9:32 AM

Electric energy Audit

Electricity Consumption (In Units) for the session 2018-19

Table: Total Electricity consumption (Average values) for the session 2018-19

Location of electric meter	Units
Principle office	12,600
Indoor stadium	13,764
Chemistry Department	4200
Botany Department	8268
Water pump	25, 452
Grand Total	**64,284**

Total consumption of electricity in Units = 64,284 Units.

Table: Average usages of electricity for electrical appliances for the session 2018-19

Type	Total No. of Appliances	Power used in Watt	Time of usage per day
Tube Lights	**215**	**Approx. 1,24764 Watts**	**Approx. 5Hrs per day**
CFL	**11**		**Approx. 5Hrs per day**
Fans	**313**		**Approx. 5Hrs per day**
LEDS	**144**		**Approx. 5Hrs per day**
Laboratory Instruments	**188**		**As per requirement**

From the MSEB data, the total electric energy consumption during the session 2018-19 is 64,284 units.

After addition of LEDs from the session 2019-20, the yearly consumption will reduce.

Audit of Biodiversity status of college campus

Janata Mahavidyalaya is situated in the 'City of Black Gold' Chandrapur, 40km away from 'Tadoba National Park'. CTPS is situated 5km away from college and Irai River is 2-3km away from the college, which favours and indicates the biodiversity status of college campus.

To conserve the biodiversity, our objective is to study the existing floral and faunal status of the college campus.

This study helps to plan the methods of conservation of various species of flora- fauna, from that we can learn more about rare species.

Study of biodiversity also makes the students aware about environment, about existing flora and fauna of the college campus. Also gain the knowledge about how to conserve the sustainability of this biodiversity.

Presently various methods of bio-conservation study are available. To maintain the floral and faunal diversity we have a botanical garden and a green ambience.

Green audit allows us to understand and know about the habitat of floral and faunal species and its interactions.

Objectives:

The main objectives of this study is to collect data of floral and faunal diversity of the college campus which contains-

- Documentation of floral diversity i.e. trees, herbs, shrubs, climbers, medicinal plants, ornamental plants exist in college campus.
- Documentation of rare medicinal flora exists in college campus.
- Documentation of general group of faunal species like mammals, reptiles, insects, birds and amphibians exist in college campus.
- Study the interaction and effect on flora and fauna due to human activities and climate change.

Survey team

For floral data collection students of M.Sc. Botany and faculty have visited to various collection sites:
Dr. U.B. Deshmukh (Faculty)
Mr.Umesh Rasekar(Faculty)
Mohini Zade (Student)
Snehal Bhoyar (Student)
Kiran Durgumwar (Student)
Sneha Nagrale (Student)
Anjali Urkude (Student)
Kartik Dharne (Student)
Rohit Kumare (Student)

For faunal data collection students of M.Sc. Zoology and faculty have visited to various collection sites:
Dr. S. D. Misar (Faculty)
Mr. S. B. Kale (Faculty)
Ashwani Gahulkar (student)
Roshani Chwhan (student)
Akshay patle (student)
Smita Gore (student)
Ashwini Zade (student)
Sheetal Dhande (student)
Vishal Meshram (student)
Survey team selected various sites from college premises and its surrounding areas.

Methodology applied for survey-

- Random sampling was performed for the collection of floral species.
- Survey was conducted at day time.
- Survey team visited at various sites by walking and collected maximum data through direct sighting.
- Floral species were documented by direct sighting and counting as much as possible. Photographs of collected floral species were taken.
- Faunal species were documented from various survey sites through direct sighting at day time.

Table: Documentation of found species

Sr. no.	Species	Number
1	Mammals	10
2	Birds	23
3	Reptiles	4
4	Amphibians	3
5	Insects	5
	Total	45

Table: Check list of Mammals in and around the campus

Sr. no.	Common name	*Scientific name*	Family
1	Dog	*Canis lupus familaris*	Canidae
2	Cow	*Bos Taurus*	Boxidae
3	Cat	*Felis catus*	Felidae
4	Squirrel	*Funambulus pennanti*	Sciuridae
5	Monkey	*Macaca fascicylaris*	Cercopithecidae
6	Bat	*Pteropus pteropus*	Pteropodidae
7	Pig	*Sus scrofa cristatus*	Suidae
8	Donkey	*Equus hemionus*	Equidae
9	Goat	*Capra aegagrus*	Bovidae
10	Greater false	*Megaderma lyra*	Mergadetmatidae

Table: Check list of birds

Sr.No.	Comman Name	Scientific Name	Family
1	Pigeon	*Columba livia*	Columbidae
2	Sparrow	*Passer*	Passeridae
3	House sparrow	*Passer domesticus*	Passeridae
4	House crow	*Corvus splendens*	Corvidae
5	Indian ringneck parakeet	*Psittacula krameri*	Psittaculidae
6	Parrot (alexandrine parakeet)	*Psittacula eupatria*	Psittaculidae
7	Common myna	*Acridothernas tristis*	Sturnidae
8	Red vented bulbul	*Pycnonotus cafer*	Pycnonotidae
9	Spotted owlet	*Athene brama*	Strigidae
10	White naped woodpecker	*Cpteshrysocol festivus*	Picidae
11	spotted dove	*Spilopelia chinensis*	Columbidae
12	Shikra	*Accipiter badius*	Accipitridae
13	Black drongo	*Dicrurus macrocercus*	Dicruridae
14	Little Cormorant	*Microcarbo niger*	Phalacrocoracidae
15	Indian cormorant	*Phalacrocorax fuscicollis*	Phalacrocoracidae
16	Greater caucal	*Cantoopus senesis*	Caculidae
17	Indian roller	*Caracius Benghalenses*	Coraciidae
18	Common Hoopoe	*Caracius Benghalenses*	Coraciidae
19	Rock pigeon	*Treron*	Columbidae

20	Sunbird	*Nectarinia aspasia*	Nectariniidae
21	Asian Koel	*Eudynamys*	Cuculidae
22	Jungle babbler	*Argya striata*	Leiothrichidae
23	Cattle Egret	*Bubilcus*	Araeeidae

Table: Checklist of Reptiles:

1	Lizard	*Podarcius Muralis*	Lacertidae
2	Garden Lizard	*Calotus versicolor*	Agamidae
3	Cobra	*Naja Naja*	Elapidae
4	Indian rat snake	*Ptyas mocosa*	Colubridae

Table: Checklist of Amphibians:

1	Frog	*Hoplobarachus tigerinus*	Dicroglossidae
2	Salamander	*Urodela*	Salamandridae
3	Bufo	*Bufo bufo*	Bufonidae

Table: Checklist of Insects:

1	Cockroach	*Periplanata americana*	Blattoidae
2	Strech spider	*Tetragnatha*	Tetragnathidae
3	Mosquito	*Culex*	Culicidae
4	Carpenter ant	*Camponotus*	Formicinae
5	Grasshopper	*Tettigonia viridissina*	Tettigoniidae

Total faunal species documented as- 90

Above list is suggestive that, there is significant number of birds and mammals and insects in our college campus. Significant numbers of avian were detected through direct sighting. This is indicative of the richness of faunal species. We were not able to collect data for day-night sighting and for every season which may explore the richness of fauna.

Photographs: Some fauna found during the survey:

Table: List of Floral plant species found in the campus of Janata Mahavidyalaya Chandrapur

S.N.	Scientific Name of plant	Family	Local Name	Habit	Uses	Dicot/ Monocot
1	*Acalypha indica* L.	Euphabiceae	Kuppi	H	M	D
2	*A. wilkesiana* Muell.Arg	Euphabiceae		S	O	D
3	*Achyranthus aspera* L.	Amaranthaceae	Kutri,Aghada	S	M	D
4	*Aegel marmelos* (L) Corr.	Rutaceae	Bel	T	M	D
5	*Aerva lanata* (L) Juss ex. Schult.	Amaranthaceae	Pashanbhed	H	M	D
6	*Agave americana* L var.*americana*	Agavacere	Ghaypat	S	O	M
7	*A. americana* L var. *marginata* Trel.	Agavacere	Ghaypat	S	O	M
8	*Ageratum conyzoidis* L.	Asteraceae	Sahadevi	H	M	D
9	*Aloe vera* (L) Burm. F.	Liliaceae	Korphad	H	M	M
10	*Alstonia scholaris* (L) R. Br.	Apocynaceae	Saptaparni	T	O	D
11	*Alternanthera pungens* H.B & k.	Amaranthaceae		H	W	D
12	*A. sessilis* (L) R. Br. Ex. DC	Amaranthaceae		H	W	D
13	*Alysicarpus buplerifolius* (L.) DC	Fabaceae		H	W	D
14	*Amaranthus spinosus* L.	Amaranthaceae	Katemath	H	M	D
15	*A. viridis* L	Amaranthaceae	Math	H	M	D
16	*Andrographis paniculata* (Burm. F) Wall ex Nees.	A canthaceae	Bhuineem	H	M	D
17	*Annona squamosa* L.	Annonaceae	Sitaphal	T	M	D
18	*Aratabotrys hexapetalus* (L.f) Bhandhari	Annonaceae	Modanmust	C	O	D
19	*Asparagus raamosus* Wild var. *javanicus* (Kunth) Baker.	Liliaceae	Shatavari	C	O	M
20	*Asparagus raamosus* Wild var. *raamosus*	Liliaceae	Shatavari	C	O	M
21	*Blumea eriantha* DC.	Asteraceae	Ganngaram	H	W	D
22	*Boerhaavia diffusa* L.	Nyctaginaceae	Punarnarva	H	M	D
23	*Asparagus densiflorus* (Kunth) Jessop	Liliaceae	Shatavari	S	O	M
24	*Bougainvilla spatabilis* Wild.	Nyctaginaceae	Bouganvel	C	O	D
25	*Butea monosperma* (Lamk) Taub.	Fabaceae	Palas	T	M	D
26	*Caladium bicolor* (Ait. Ex Dryand) Vent.	Araceae		H	O	M

27	*Calotropis gigantea* (L) R. Br.	Asclepiadaceae	Rui	S	M	D
28	*C. procera* (Ait) R. Br.	Asclepiadaceae	Rui	S	M	D
29	*Canna indica* L.	Cannaceae	Kardal	S	O	M
30	*Capsicum annum* L.	Solanaceae	Mirchi	H	M	D
31	*Cardamine trichocarpa* Hochst . ex. A. Rich.	Brassicaceae		H	W	D
32	*Cardiospermum helicacabum* L.	Sapindaceae	Kapalphodi	C	M	D
33	*Carica papaya* L.	Caricaceae	Papaya	T	M	D
34	*Carissa carandus* L.	Apocynaceae	Karavand	T	M	D
35	*Cascabella thevetia* (L.) Lippold.	Apocynaceae	Cascabella	T	M	D
36	*Cassia occidentalis* L.	Caesalpiniaceae	Rantarota	S	M	D
37	*C. tora* L.	Caesalpiniaceae	Tarota	H	M	D
38	*Celosia argentea* L. var. *argentea*	Amaranthaceae	Kombada	H	M	D
39	*C. argenea* L var. *cristata* (L) O. Ktze.	Amaranthaceae	Kombada	H	M	D
40	*Cestrum aurantiacum* Lindl.	Solanaceae		S	O	D
41	*Chloris barbata* Sw.	Poaceae		H	W	M
42	*C. virgata* Sw.	Poaceae		H	W	M
43	*Chrozophora rottleri* (Geis) Juss ex. Speeng	Euphorbiaceae		H	W	D
44	*Cissus repanda* Vahl.	Vitaceae		C	O	D
45	*Citrus lemon* (L) Burm . f	Rutaceae	Lemon	T	M	D
46	*Cleome viscosa* L.	Cleomaceae	Piwali Tilwan	H	W	D
47	*Cocinia grandis* (L) Voigt.	Cucurbitaceae	Tondri	C	M	D
48	*Cocculus hirsutus* (L) Diels.	Menispermaceae	Wasanwel	C	M	D
49	*Cocos nucifera* L.	Arecaceae	Nariyal	T	O	M
50	*Caladiacum variegatum* (L) Juss.	Euphorbiaceae		S	O	M
51	*Commelina benghalensis* L.	Commelinaceae		H	O	M
52	*C. diffusa* Burm. F.	Commelinaceae		H	O	M
53	*C. forssakalii* Vahl.	Commelinaceae		H	O	M
54	*Corchoras fascicularis* Lamk.	Tiliaceae		H	W	D
55	*C. olitorius* L.	Tiliaceae		H	W	D
56	*C. tridens* L.	Tiliaceae		H	W	D
57	*Cuscuta chinensis* Lamb	Cuscutaceae		P	W	D
58	*Cynodon barberi* Rang	Poaceae		H	W	M

	and Tadul.					
59	*C. dactylon* (L) Pers	Poaceae	Durva	H	M	M
60	*Cyperus rotundus* L.	Cyperaceae	Lai	H	M	M
61	*Dalbergia sissoo* Roxb ex. DC.	Fabaceae	Sisham	T	M	D
62	*Datura metel* L.	Solanaceae	Datura	H	M	D
63	*Desmodium triflorum* (L) DC	Fabaceae		H	W	D
64	*Dracaena deramensis* Engl.	Agavaceae		S	O	M
65	*D. fragrans* (L) Ker-Gawl	Agavaceae		S	O	M
66	*Duranta erecta* L.	Verbenaceae		S	O	D
67	*Ecbolium logustrinum* (Vahl) Vollesen	Acanthaceae		S	M	D
68	*Echinochloa colona* (L) Link	Poaceae		H	W	M
69	*Eclipta proatrata* (L.) L.	Asteraceae	Maka,Bhrun graj	H	M	D
70	*Emblica officinalis* Gaertn.	Euphorbiaceae	Awala	T	M	D
71	*Eragrostis aspera* (Jacal) Ness.	Poaceae		H	W	M
72	*Eragrostis tenella* (L.) P. Beauv ex R. & S.	Poaceae	Bhurghushi	H	W	M
73	*Euphorbia antiquorum* L.	Euphorbiaceae		S	O	D
74	*E. hetetophylla* L.	Euphorbiaceae		H	W	D
75	*E. hirta* L.	Euphorbiaceae	Dudhi	H	W	D
76	*E. lucocepahala* Lotsy.	Euphorbiaceae		S	O	D
77	*E. milli* Ch.des.Moulins	Euphorbiaceae		S	M	D
78	*E. thymifolia* L.	Euphorbiaceae		S	M	D
79	*E.. tirucalli* L.	Euphorbiaceae		S	M	D
80	*Evolvulus alsinoides* (L) L	Convolvulaceae	Vishukranta	H	M	D
81	*Ficus benghalensis* L.	Moraceae	Wad	T	M	D
82	*F. benjamina* L. var *nuda* (Miav). Barrett	Moraceae		T	O	D
83	*F. racemosa* L.	Moraceae	Umber	T	M	D
84	*F. religiosa* L.	Moraceae	Pimpal	T	M	D
85	*Fluggea leucopyrus* Willd.	Phyllanthaceae	Pandharphali	T	M	D
86	*Foeniculum vulgare* Mill.	Apiaceae	Souf	H	M	D
87	*Glinus oppositifolius* (L) DC.	Molluginaceae		H	M	D
88	*Gomphrena globosa* L.	Amaranthaceae		H	M	D
89	*Hamelia patens* Jacav.	Rubiaceae		S	O	D
90	*Hedyotis aspera* Huyne ex Roth.	Rubiaceae		H	W	D

91	*Helianthus annus* L.	Asteraceae	Suryaphul	H	M	D
92	*Heliconia angustifolia* Hook	Asteraceae		S	O	M
93	*Hemidesmus indicus* (L) R. Br.	Periplocaceae	Khobarwel	C	M	D
94	*Hibiscus rosa-sinesis* L.	Malvaceae	Jaswand	T	M	D
95	*Hypatis suaveolens* (L.) Poit	Lamiaceae		H	W	D
96	*Impatiens balsamina* L.	Balsaminaceae		H	M	D
97	*Indigofera linnalae* Ali	Fabaceae		H	W	D
98	*Ipomoea triloba L.*	Convolvulaceae		C	M	D
99	*Ixora chinensis* Lamk.	Rubiaceae		S	O	D
100	*I. coccinea* L.	Rubiaceae		S	O	D
101	*Jasminum officinale* L.	Oleaceae		S	O	D
102	*J. sambac* (L.) Ait	Oleaceae	Mogara	S	O	D
103	*Jatropha integrrima* Jacq.	Euphorbiaceae	Jatropha	S	O	D
104	*J. podagria* Hook	Euphorbiaceae	Jatropha	S	O	D
105	*Kalanchoe diagremontiana* Raym-Hamt & H.Perrier	Crassulaceae	Panhuti	H	M	D
106	*Lantana camera* L.	Verbenaceae	Ghaneri	S	O	D
107	*Launaea procumbens* (Roxb) Ramayya & Rajgopal	Asteraceae		H	M	D
108	*Lindernia ciliata* (Colsm) Pennell	Scrophulariaceae		H	W	D
109	*L. crustacea* (L) f. Muell	Scrophulariaceae		H	W	D
110	*Ludwigia perennis* L.	Onagraceae		H	W	D
111	*Malachra capitata* (L) L.	Malvaceae		H	W	D
112	*Malvastrum coromandeliancum* (L) Garcke	Malvaceae		H	W	D
113	*Mangifera indica* L.	Anacardiaceae	Amba	T	M	D
114	*Manilkara zapota* (L) Van Royen	Sapotaceae	Chiku	T	M	D
115	*Mazus pumilus* (burm. F.) Steenis	Scrophulariaceae		H	W	D
116	*Mecardonia procumbens*(Mill) Small.	Scrophulariaceae		H	M	D
117	*Michelia champaca* L	Magnoliceae	Champer	T	M	D
118	*Mirabilis jalapa* L	Nyctaginaceae	4'0 clockplant	H	O	D
129	*Mollugo pentaphylla* L.	Molluginaceae		H	M	D
120	*Momordica charantia* L.	Cucurbitaceae	Karela	C	M	D
121	*Murdannia nudiflora* (L.) Brenan.	Commelinaceae		H	W	M

122	*Murraya paniculata* (L) Jack.	Rutaceae	Kadhipatha	T	M	D
123	*Musa paradisiaca* L.	Musaceae	Banana	T	M	M
124	*Nerium indicum* Mill.	Apocynaneae	Kanher	S	M	D
125	*Ocimum basilicum* L.	Lamiaceae	Shabda	H	M	D
126	*O. tenuiflorum* L.	Lamiaceae	Holleybasil	H	M	D
127	*Opuntia* sp.	Cactaceae		S	O	D
128	*Oxalis corniculata* L.	Oxalidaceae	Ambushi	H	M	D
129	*Parthenium hysterophorus* L.	Asteraceae	Gajargawat	H	W	D
130	*Pedilanthus tithymaloides* (L.) Poit.	Euphorbiaceae		S	O	D
131	*Peltophorum pterocarpum* (DC) Baker ex Heyne.	Caesalpiniaceae	Peltophorum	T	O	D
132	*Pentas lanceolata* (Forssk.) Schum.	Rubiaceae		H	O	D
133	*Pergularia daemia* (Forssk). Chiov.	Asdepiadaceae	Utaran wel	C	M	D
134	*Peristrophe paniculata* (Forssk.) Brummit	Acanthaceae		H	M	D
135	*Phyla nodiflora* (L.)Greene.	Verbenaceae		H	M	D
136	*Phyllanthus amarus* Schumach & Thonn.	Euphorbiaceae	Bhuiawala	H	M	D
137	*P. maderaspatensis* L.	Euphorbiaceae		H	M	D
138	*P. urinaria* L.	Euphorbiaceae		H	M	D
139	*P. virgatus* Forst f.	Euphorbiaceae		H	M	D
140	*Physalis minima* L.	Solanceae	Kamoni	H	M	D
141	*Pilea microphylla* (L) Liebm.	Urticaceae		H	M	D
142	*Pithecellobium dulce* (Roxb.) Benth.	Mimosaceae	English chinch	T	M	D
143	*Plumeria alba* L.	Apocynaceae	Champa	T	M	D
144	*P. rubra* L.	Apocynaceae	Champa	T	M	D
145	*Polyalthia longifolia* (Sonner.) Thw.	Annonaceae	Ashok	T	M	D
146	*Pongamia pinnata* (L). pierre	Fabaceae	Karanje	T	M	D
147	*Portulaca grandiflora* Hook	Porulacaceae	Ghol	H	O	D
148	*P. oleracea* L.	Porulacaceae	Ghol	H	M	D
149	*P. quadrifida* L.	Porulacaceae	Ghol	H	M	D
150	*Pothos scandens* L.	Araceae	Money Plant	C	O	M
151	*Psidium guajava* L.	Myrtaceae	Peru	T	M	D
152	*Punica granatum* L.	Punicaceae	Dalimb	T	M	D
153	*Rhoeo discolor* (L'herit)	Commelinaceae		H	O	M

	Hance ex.Walp.					
154	*Ricinus communis* L.	Euphorbiaceae	Errand	S	M	D
155	*Rivinia humilis* L.	Phytolaccaceae		H	M	D
156	*Rosa damascena* Mill.	Rosaceae	Gulab	S	O	D
157	*R. indica* L.	Rosaceae	Gulab	S	O	D
158	*R. multiflora* Thumb.	Rosaceae	Gulab	S	O	D
159	*Ruellia brittoniana* Leonard	Acanthaceae		H	O	D
160	*Scoparia dulcis* L	Scrophulariaceae		H	M	D
161	*Sida acuta* burm. F.	Malvaceae	Bala	H	M	D
162	*S. cordifolia* L.	Malvaceae	Bhuibala	H	M	D
163	*S. rhombifolia* L.	Malvaceae	Atibala	H	M	D
164	*Syzygium cumini* (L) Skuls	Myrtaceae	Jambhul	T	M	D
165	*S. jambos* (L) Alst.	Myrtaceae	Jambhul	T	M	D
166	*Tabernaemontana divaricata* (L) R. Br.	Apocynaceae		T	O	D
167	*Tagetes erecta* L.	Asteraceae	Zandu	H	O	D
168	*T. patula* L.	Asteraceae	Zandu	H	O	D
169	*T. tenuifolia* Cav.	Asteraceae	Zandu	H	O	D
170	*Tecoma stans* (L) HB. & k.	Bignoniaceae	Tecoma	T	O	D
171	*Tectona grandis* L. f.	Verbenaceae	Sag	T	M	D
172	*Tephrosia purpurea* (L). Pers.	Fabaceae	Diwali	H	M	D
173	*Thevetia nerifolia* Juss ex Steud	Apocynaceae		T	M	D
174	*Tinospora cordifolia* (Willld)Hook.f.and Thomas	Menispermaceae	Gulwel	C	M	D
175	*Trianthurna portulacastrum* L.	Apzoaceae		H	M	D
176	*Trichosanthis anguina* L.	Cucurbitaceae		C	M	D
177	*Tridax procumbens* L.	Asteraceae	Kambarmodi	H	M	D
178	*Vernonia cinerea* (L) Less.	Asteraceae	Sahadevi	H	M	D
179	*Vigna trilobata* (L) Vard	Fabaceae		H	M	D
180	*Xenostegia tridentata* (L) Austin & Staples	Convolvulaceae		C	M	D

M -Monocot -27 ;D-Dicot-153;O-Oramental-59;W-Wild- 30;S-Shrub-36;P-Parasitic-01;T-Tree-35;C-Climber-16;H-Herb-92; Medicinal-101

Total floral species found in college campus—180

From this collected data, it is indicative that there is significant diversity in floral and faunal species. Our college campus has rich biodiversity. During study, we grouped the flora and fauna into various subgroups. Diverse group of parasitic plant viz. *Cuscuta chinensis Lamb* was documented, whereas diverse group of herbs and trees were documented. Near about 101 medicinal plant also adds richness in floral diversity.

Photographs: Visit of survey team

4. Suggestions and Recommendations:

- **Waste dumped in disposal pit may be recycled and reused in the form of compost.**
- **More proper method for E-waste disposal can be implemented.**
- **Use of plastic is strictly banned in college campus.**
- **Over head water tanks must be regularly washed and disinfected by adding bleaching powder.**
- **To meet the need of electricity, solar lamps can be used as alternate source of energy.**
- **Plantation of some rare medicinal plants in botanical garden can enhance the richness of floral diversity.**
- **Eco-friendly and sustainable use of resources should be implemented in college campus.**

GREEN AMBIENCE