

S.V.K.P & Dr K.S RAJU ARTS SCIENCE COLLEGE (A)

PENUGONDA

GREEN AUDIT REPORT

2023-24



I. INTRODUCTION

In scenario people are not caring of nature they are directly or indirectly damaging the environment and it causes problems like; global warming, difficulties in maintaining ozone layers , air pollution, water pollution etc.

Green audit is the most efficient & ecological way to solve such a environmental problem. For protecting the nature as a human being we have to show our sense of humor towards the mother earth. In corporate sector the practice of saving environment through the various programmes like CSR (Corporate social Responsibility) , Go Green , Save water, save trees , plantation of trees are to be out to safeguard the planet. The Green Audit has been actively taken by the department of P.G BOTANY , S.V.K.P& Dr K.S RAJU ARTS & SCIENCE COLLEGE. It is necessary to conduct a green audit in college campus because student aware of the green country. Green audit and sustainable development process help to reduce the wastage and associated cost as well as increase the product quality Obviously, there relationship between Green Audit and Sustainable development of the any organization. The primarily needs for achieving the sustainable development of the organization are to determine the Green Audit framework, Accurate implementation, and result analysis of it. Strong Green Audit process can help to achieve the sustainability. Green Audit frame work help to achieve the goal set by organization. Green Audit is linked to Sustainable development process.

II. Literature Review

Mathews (1997) and Matis and lenciu(2010)

Mathews, Matis and lenciu found that environmental accounting has known to be in four stages in its development (1970-1980,1981-1994,1995-2001,2002)at the current stage of the knowledge about the green auditing, Although if there are four stages of the development of environmental auditing our knowledge will approach only the last two stages because beneficial study was conducted in this period and also in this period and also concept of environmental audit was started and developed in that period.

MEMBERS OF GREEN AUDIT COMMITTEE

1. Dr . Y.V.V APPA RAO	Principal & Chairman
2. Sri K. SASI KUMAR	IQAC co- ordinator
3. Smt G.JYOTHI	Co- ordinator
4. Sri T. VENKATESWARLU	Member
5. Dr U.D.V.P PULLA RAO	Member
6. Smt P.NIRMALA MARY KUMARI	Member

The Green Audit of is Requirement of NAAC Committee to the Degree & P.G colleges. It is necessary to conduct a green audit in college campus because student aware of the green audit, its advantages to save the planet & they become good citizen of our country. The green audit practically involves use of renewable sources, conservation of the energy, rain water harvesting program, and efforts of carbon neutrality, plantation of trees, E-waste management and hazardous waste management. The national & local governments keeping lots of efforts for maintaining a planet green. Also Environment is a compulsory subject to all batches students and arrange various programme so that students are much aware of the save planet, keep it green & also save energy.

Activities organized to create greenery and its conservation at college campus is as follows

- Plantation of diversified species
- Vegetative propagation
- Uses of Medicinal plants
- Identification of plant Species

Plantation of diversified species:

To create green cover , Eco-friendly atmosphere, pure oxygen at the college campus, plantation program is organized every year with involving all students , Principal and all faculty members of various Departments. In this session VanamManam, Janmabhoomi, VanaMahotsav and Neeru-cheetu programs were organized and Ornamental, Avenue, Medicinal plants with rare and exotic beautiful trees was planted in Botanical garden and other parts of college campus. To keep the greeneries in the campus, we regularly maintain the gardens which are looked after by paid staff under the guidance of Green audit committee members. Moreover , every year we try to plant new plants.

Vegetative propagation:

To learn how to propagate vegetative garden, training program is organized for students every year by expert gardener. Student learned various propagation techniques like cutting , grafting etc.

Uses of Medicinal plants:

There are many Medicinal plants in the Botanical garden which have Medicinal value. However the students are unaware of their use and they can't identify the particular plants. Therefore faculty of Botany Department helps the students in identifying medicinal plants with their scientific names and also their Medicinal use.

Identification of plant Species:

There are so many plant species present in the college campus. The faculty of Botany department audited and identified various plant species with the help of flora. Objectives of the Green Audit Committee.

1. Verifying compliance: Verifying compliance with standards or best available techniques.
2. Identifying problems: Detecting any leakage, splits or other such problems with the operations and processes.
3. Formulating Environmental policy: Formulating the organization's Environmental policy if there is no existing policy.
4. Measuring Environmental impact: Measuring Environmental impact of each and every process and operation on the water, soil, worker health and safety and society at large stage.
5. Measuring performance: Measuring the Environmental performance of an organization under best practice.
6. Conforming Environmental management system effectiveness: Giving an indication of the effectiveness of the system and suggestions for improvement.
7. Providing a database: Providing a database for corrective action and future plans.
8. Developing the organization's Environmental strategy: Enabling management to develop its Environmental strategy for moving towards a greenary corporate and performance culture.
9. Communications: Communicating the Environmental performance to its stakeholders through reporting will enhance the image of the college.

General Steps:

1. Systematic and comprehensive data collection.
2. Documentation with physical evidences.

3. Independent periodic with regulatory requirements and comprehensive improvement and management of existing system.

The audit process:

The present audit is a Pre-audit to collect the details required for external auditing and Pre-audit activities. The pre-audit activities include the following.

1. The sites/area/division that are to be audited, need to be determined and selected.
2. The audited were informed of the data of the audit enabled them to adjust and become used to the concept.
3. The audit scope were identified. The auditee was consulted when establishing the scope.
4. The audit plan was designed in such a way that it accommodated changes based on information gathered during the audit and effective use of resources.
5. Green Audit Committee and assignment of responsibility were established.
6. The chosen working papers were collected. This facilitated the author's investigation on sites.
7. The background information on the facility including organization, layout and processes, and the relevant regulations and standards were collected.
8. The background information on the site's historical uses, and the location of soil and ground water contamination were collected.
9. The pre-audit questionnaire was informed to auditee

Onsite audit activities:

The onsite audit includes

1. The opening meeting is the first step between the Green audit team and dept of Botany. In this meeting the purpose of audit, the procedure and the time schedule were discussed. Site inspection is the second step for onsite activity. In this step the audit team discovered matters which are important to the audit but which were not identified at the planning stage.
2. Onsite phase of the audit developed a working understanding of how the facility manages the activities that influence the environment.
3. If there is one works assessed strengths and weaknesses of the auditee's management controls and risks associated with their failure were established.
4. Gathering audit evidence i.e collecting data information using audit protocol.
5. Communicated with the staff of the auditee to obtain most information.
6. Evaluated the audit evidence against the objectives established for the audit team discovered matters which are important to the audit but were not identified at the planning stage.
7. Onsite phase of the audit developed a working understanding of how the facility manages the activities that influence the environment.
8. If there is one work assessed strengths and weakness of how the auditee's management controls and risks associated with their failure were established.
9. Gathering audit evidence i.e collecting data and information using audit protocol.
10. Communicated with the staff of the auditee to obtain most information.
11. Evaluated the audit evidence against the objectives established for the audit.
12. An exit meeting to explain the audit findings. Team discovered matters which are important to the audit but which were not identified at the planning stage.
13. Team discovered matters which are important to the audit but which were not identified at the stage.
14. Onsite phase of the audit developed a working understanding of how the facility manages the activities that influence the environment.
15. Gathering audit evidence i.e collecting data and information using audit protocol.
16. Communicated with the staff of the auditee to obtain most information.

17. Evaluated the audit evidence against the objectives established for the audit.
18. An exit meeting to explain the audit findings.

Procedure followed:

The students were divided into four groups and under the guidance of the teaching staff of the Department of Botany, each group collected data on the assigned topics. The assigned topics were as follows.

- a. Identification of plant species and Bio-diversity.
- b. Analysis of Energy consumption and costs.
- c. Analysis of waste generation and disposal all the data were united and based on these, a report was formulated.

Report 1:

Identification of plant species and Bio-diversity in the college campus, based on our college contributes to the Oxygen supply that we utilize. Our college is exposed to various atmospheric pollutants from vehicles as well as by other external means. Based on our calculation, the different sources of carbon-dioxide emitted to our college are

- i. Refrigerators
 - ii. Air conditioners
 - iii. RO Water plants
 - iv. Mobiles etc
1. Vehicles on the days of data collection, there were cars, 62 bikes and 18 scooters in our campus, which in turns proves us that these vehicles may contribute to high carbon –dioxide emission. There are 8 refrigerators, 16 air conditioners in our campus. The students, teaching and non-teaching staff and the visitors also contribute to carbon-dioxide emission.
 2. The Vermi-compost unit recently established by the dept. of zoology. All the fallen leaves and food waste are collected from the Botanical garden and hostels are used as compost. Plastic wastes, plastic papers and bottles are collected by the students and stored at Vermi-compost compound wall for the purpose of recycling.
 3. Analysis of water quality and usage of the college campus possesses many water outlets. Our students have counted the total number of taps, rain water harvesting pits. We have found that in total there are 75 taps, rain water plants and rain water harvesting pits worth 20,000 liters.
 4. Analysis of Energy consumption and costs the college is well equipped with electricity supply. Each department possess computers, printers, fans, plug points, tube lights, bulbs etc.
 5. General information about college:

S. V. K. P & Dr K. S. Raju Arts & Science college is present in 11.45 Acres.

Administrative Block	- 2688 sq.m
U.G Block (North)	- 3817 sq.m
U.G Block (West)	- 3386 sq.m
P.G Block (West)	- 1612 sq.m
P.G Block (South)	- 5161 sq.m
Asbestos shed	- 2957 sq.m
Women's Hostel	- 8748 sq.m
Men's Hostel	- 4738 sq.m
Open Air Theater	- 6937 sq.m
U.G.C IX Plan building	- 314 sq.m
Canteen	- 627 sq.m
Play ground	- 12573 sq.m

Cricket ground	- 8000 sq.m
Basket ball court	- 420 sq.m
Running track	- 2247 sq.m
Hand ball court	- 800 sq.m
Wally ball court	- 824 sq.m
Ball bat menten court	- 288 sq.m
Chemistry back side	- 2012 sq.m
Botany garden	- 1166 sq.m
Rusa building	- 471.3 sq.m

In addition to these equipment, our college also has

Spectrophotometer
Horizontal and vertical electrophoresis
A distillation unit
Digital calorimeter
Autoclaves;
Laminar air flow
An incubator
Hot air oven
Centrifuges
Telephones
LCD Projectors
Hand mikes
A bell

Analysis of waste generation and disposal wastes cannot be avoided in any environment. Wastes can be classified as biodegradable and non-bio degradable wastes. Bio-degradable wastes include food wastes which can be easily decomposed by the bacteria in soil. But non-biodegradable wastes are those which cannot be degraded by any organism and remain as such for many years.

Canteen: The food waste generated from the canteen is collected given to vermin compost unit and dogs. Plastic waste is generally less generated from the canteen. The plastic waste kept at blocks of the vermin compost compound wall.

Library: The most generated waste is paper waste. It is taken for recycling.

Store: Not much waste is generated .But the paper waste and plastic covers are collected, separated and kept at blocks of the vermin compost compound wall.

Office: Paper waste generated are recycled and reused.

Garden: Plastic and paper waste is comparatively less. Fallen leaves are collected and used in vermin compost unit.

Seminar hall: The wastes are collected after each programme and dumped it.

Bathrooms: The wastes are collected and burned behind the college.

Class rooms: Paper wastes are collected in the waste basket and recycled.

Laboratory: The broken glass wastes and the useless instruments are disposed for recycling after through washing.

College premises: Plastic waste generated is usually less .But paper waste is in larger amount.

Observations:

There are sufficient water outlets for all the departments .But it is essential to check whether all these are working or not and whether the taps are leaking or not. Fortunately , the students of UG &PG ,Teaching and Non –teaching staff of the college are available to clean the college campus.

From entrance gate to administrative block:

S.No	Name of the plant	Family	Habitat T/S/H/C	Uses	No.of plants
1	<i>Duranta repens</i>	Verbinaceae	S	Avenue	443
2	<i>Azadirachta indica</i>	Meliaceae	T	Timber	251
3	<i>Ficus blakiana</i>	Moraceae	T	Timber	161
4	<i>Murraya koenigii</i>	Rutaceae	T	Edible	118
5	<i>Cassia fistula</i>	Fabaceae	T	Timber	03

India map to silver jubilee park:

S.No	Name of the plant	Family	Habitat T/S/H/C	Uses	No.of plants
1	<i>Phyllanthus niruri</i>	Euphorbiaceae	H	Medicinal	197
2	<i>Duranta repens</i>	Verbinaceae	S	Avenue	180
3	<i>Azadiracta indica</i>	Meliaceae	T	Timber	171
4	<i>Ruellia tuberosa</i>	Apocynaceae	H	Weed	137
5	<i>Tridax procumbens</i>	Asteraceae	H	Weed	132
6	<i>Vernonia cineria</i>	Asteraceae	H	Weed	105
7	<i>Acalypha wilkesiana</i>	Euphorbiaceae	S	Avenue	95
8	<i>Ixora coccinea</i>	Rubiaceae	S	Avenue	36
9	<i>Ficus blackiana</i>	Moraceae	T	Timber	27
10	<i>Hibiscus rosa-sinensis</i>	Malvaceae	S	Ornamental	22
11	<i>Ocimum sanctum</i>	Lamiaceae	S	Medicinal	19
12	<i>Agave Americana</i>	Asparagaceae	H	Avenue	15
13	<i>Tagetis species</i>	Asteraceae	H	Ornamental	10
14	<i>Euphorbia hirta</i>	Euphorbiaceae	H	Weed	09
15	<i>Clitoria ternata</i>	Fabaceae	C	Ornamental	08
16	<i>Terminalia catappa</i>	Combretaceae	T	Timber	08
17	<i>Nerium odorum</i>	Apocynaceae	S	Ornamental	07
18	<i>Syzygium jambo</i>	Myrtaceae	T	Timber	05
19	<i>Mangifera indica</i>	Anacardiaceae	T	Timber	04

MBA block side garden to MCA block front side

S.No	Name of the plant	Family	Habitat T/S/H/C	Uses	No.of plants
1	<i>Duranta repens</i>	Verbinaceae	S	Avenue	105
2	<i>Ruellia tuberosa</i>	Apocynaceae	H	Weed	46
3	<i>Acalypha indica</i>	Euphorbiaceae	H	Weed	41
4	<i>Murraya koienigi</i>	Rutaceae	T	Timber	30
5	<i>Hibiscus rosa-sinensis</i>	Malvaceae	S	Ornamental	18
6	<i>Ocimum sanctum</i>	Lamiaceae	S	Ornamental	20
7	<i>Parthenium hysterophorus</i>	Asteraceae	H	Weed	21
8	<i>Croton bonplandianum</i>	Euphorbiaceae	H	Weed	06
9	<i>Crossandra infundibuliformis</i>	Lamiaceae	S	Ornamental	06
10	<i>Carica papaya</i>	Caricaceae	T	Edible	06
11	<i>Phyllanthus niruri</i>	Euphorbiaceae	H	Medicinal	05
12	<i>Plumeria pudica</i>	Apocynaceae	S	Ornamental	05
13	<i>Ixora coccinea</i>	Rubiaceae	S	Ornamental	05
14	<i>Azardirecta indica</i>	Meliaceae	T	Timber	04
15	<i>Allmanda cathartica</i>	Apocynaceae	S	Ornamental	05
16	<i>Psidium guajava</i>	Myrtaceae	T	Edible	03
17	<i>Elaeocarpus serratus</i>	Elaeocarpaceae	T	Timber	01
18	<i>Araucaria sp</i>	Aracariaceae	T	Ornamental	01
19	<i>Catharanthus roseus</i>	Apocynaceae	H	Medicinal	04
20	<i>Aegle marmelos</i>	Rutaceae	T	Timber	01
21	<i>Jasminum sps</i>	Jasminaceae	S	Ornamental	01
22	<i>Curcuma longa</i>	Zingiberaceae	S	Edible	02
24	<i>Ficus blackiana</i>	Moraceae	T	Timber	83
26	<i>Terminalia catappa</i>	Combretaceae	T	Edible	15
27	<i>Reodiscolor sps</i>	Commalinaceae	H	Ornamental	15
28	<i>Agave sps</i>	Asparagaceae	H	Ornamental	12
29	<i>Nerium odorum</i>	Apocynaceae	S	Ornamental	11
30	<i>Cassia fistula</i>	Fabaceae	T	Timber	10
31	<i>Thuja</i>	Cupressaceae	T	Ornamental	01
32	<i>Musa paradisiaca</i>	Musaceae	T	Edible	01
33	<i>Anthocephalus cadamba</i>	Rubiaceae	T	Timber	01
34	<i>Peltophorum – pterocarpus</i>	Fabaceae	T	Timber	01

Hostel Garden and College Garden:

S.No	Name of the plant	Family	Habitat T/S/H/C	Uses	No.of plants
1	<i>Duranta repens</i>	Verbinaceae	S	Avenue	334
2	<i>Murraya koenigii</i>	Rutaceae	T	Edible	173
3	<i>Azardirecta indica</i>	Meliaceae	T	Timber	57
4	<i>Euphorbia mili</i>	Euphorbiaceae	H	Ornamental	49
5	<i>Agave americana</i>	Asparagaceae	H	Ornamental	24
6	<i>Ruellia tuberosa</i>	Apocynaceae	H	Weed	20
7	<i>Plumeria alba</i>	Apocynaceae	S	Ornamental	09
8	<i>Anthocephalus cadamba</i>	Rubiaceae	T	Timber	06
9	<i>Psidium guajava</i>	Myrtaceae	T	Edible	06
10	<i>Pongamia glabra</i>	Fabaceae	T	Timber	05
11	<i>Cocos nucifera</i>	Arecaceae	T	Edible	05
12	<i>Hibiscus rosa-sinensis</i>	Malvaceae	S	Ornamental	05
13	<i>Araucaria</i>	Aracariaceae	T	Ornamental	04
14	<i>Ocimum sanctum</i>	Lamiaceae	S	Medicinal	04
15	<i>Delonix regia</i>	Fabaceae	T	Timber	04
16	<i>Tectona grandis</i>	Lamiaceae	T	Timber	04
17	<i>Syzygium jumbo</i>	Myrtaceae	T	Edible	04
18	<i>Citrus aurantifolia</i>	Rutaceae	T	Edible	04
19	<i>Ixora coccinea</i>	Rubiaceae	S	Ornamental	04
20	<i>Couropitia guinensis</i>	Lecythediaceae	T	Timber	03
21	<i>Mangifera indica</i>	Anacardiaceae	T	Edible	03
22	<i>Acalypha indica</i>	Euphorbiaceae	H	Weed	01
23	<i>Terminalia catappa</i>	Combretaceae	T	Edible	01
24	<i>Artocarpus heterophyllus</i>	Moraceae	T	Timber	01

Fountain park

S.No	Name of the plant	Family	Habitat T/S/H/C	Uses	No.of plants
1	<i>Ocimum sanctum</i>	Lamiaceae	S	Medicinal	11
2	<i>Araucaria sps</i>	Aracariaceae	T	Avenue	4
3	<i>Duranta repens</i>	Verbinaceae	S	Avenue	48
4	<i>Psidium guajava</i>	Myrtaceae	T	Edible	3
5	<i>Couropitia guinensis</i>	Lecythediaceae	T	Timber	5
6	<i>Murayya koenigii</i>	Rutaceae	T	Edible	12
7	<i>Azardirecta indica</i>	Meliaceae	T	Timber	4
8	<i>Delonix regia</i>	Fabaceae	T	Timber	3
9	<i>Anthocephalus cadamba</i>	Moraceae	T	Timber	2

11	<i>Cocos nucifera</i>	Aricaceae	T	Edible	2
12	<i>Parthenium hysterophorus</i>	Asteraceae	H	Weed	53
13	<i>Tridax procumbens</i>	Asteraceae	H	Weed	15
14	<i>Rosa indica</i>	Rosaceae	S	Medicinal	55
15	<i>Chrysanthemum indica</i>	Asteraceae	H	Medicinal	11
16	<i>Hibiscus- rosa – sinensis</i>	Malvaceae	S	Avenue	15
17	<i>Almonda cathertica</i>	Apocynaceae	T	Avenue	9
18	<i>Plumeria pudica</i>	Apocynaceae	T	Avenue	8
19	<i>Agave angustifolia</i>	Asparagaceae	H	Avenue	31
20	<i>Ficus microcarpa</i>	Moraceae	T	Timber	8

Administrative Block Left Side And Water Plant

S.No	Name of the plant	Family	Habitat T/S/H/C	Uses	No.of plants
1.	<i>Agave angustifolia</i>	Asparagaceae	H	Avenue	2
2.	<i>Jasminum grandiflorum</i>	Oleaceae	S	Avenue	3
3.	<i>Dieffenbachia bowmannii</i>	Araceae	H	Avenue	59
4.	<i>Oreodoxa regia</i> (Palm sps)	Areaceae	T	Avenue	4
5.	<i>Rheo discolor</i>	Commelinaceae	H	Avenue	22
6.	<i>Durantha repens</i>	Verbinaceae	S	Avenue	146
7.	<i>Nerium odorum</i>	Apocynaceae	S	Avenue	1
8.	<i>Ocimum sanctum</i>	Lamiaceae	S	Avenue	8
9.	<i>Cycus revoluta</i>	Cycadaceae	S	Avenue	2
10.	<i>Pteris quadriaurita</i>	Pteridaceae	S	Avenue	12
11.	<i>Ficus benamina</i>	Moraceae	H	Avenue	63
12.	<i>Psidium guajava</i>	Myrtaceae	T	Edible	11
13.	<i>Hibiscus rosa sinensis</i>	Malvaceae	S	Avenue	4
14.	<i>Tagetus patula</i>	Asteraceae	S	Avenue	3
15.	<i>Syzygium jambo</i>	Myrtaceae	T	Edible	1
16.	<i>Araucaria sps</i>	Aracariaceae	T	Avenue	2
17.	<i>Cycas quadriaurita</i>	Cycadaceae	S	Avenue	2

Botany Garden

S.No	Name of the plant	Family	Habitat T/S/H/ C	Uses	No.of plants
1	<i>Rosa indica</i>	Rosaceae	S	Avenue	19
2	<i>Bougainvillea spectabilis</i>	Nyctaginaceae	S	Avenue	13
3	<i>Agave angustifolia</i>	Asparagaceae	S	Avenue	66
4	<i>Ocimum sanctum</i>	Lamiaceae	S	Avenue	14
05	<i>Areca catechu</i>	Arecaceae	T	Avenue	21
6	<i>Ixora</i>	Rubiaceae	S	Avenue	11
7	<i>Duranta repens</i>	Verbinaceae	S	Avenue	102
8	<i>Kaempferia galanga</i>	Zinziberaceae	S	Medicinal	9
9	<i>Spathodea campanulata</i>	Bignoniaceae	T	Timber	1
10	<i>Rheo discolor</i>	Commalinaceae	H	Avenue	17
11	<i>Ficus microcarpa</i>	Moraceae	T	Timber	13
12	<i>Nyctanthus arbor-tristis</i>	Nyctaginaceae	S	Avenue	2
13	<i>Acypha wilkesiana</i>	Euphorbiaceae	S	Avenue	1
14	<i>Ravenala madagascariensis</i>	Strelitziaceae	T	Avenue	2
15	<i>Carica papaya</i>	Caricaceae	T	Edible	2
16	<i>Pteris</i>	Pteridaceae	T	Timber	10
17	<i>Plectranthus amboinicus</i>	Lamiaceae	S	Medicinal	1
18	<i>Aerva lanata</i>	Amaranthaceae	H	Weed	2
19	<i>Andrographis paniculata</i>	Acanthaceae	H	Weed	1
20	<i>Aloe barbadensis</i>	Asphodelaceae	H	Medicinal	2
21	<i>Chrysanthemum indicum</i>	Asteraceae	H	Avenue	1
22	<i>Bryophyllum pinnatum</i>	Crassulaceae	H	Avenue	5
23	<i>Tecoma stans</i>	Bignoniaceae	T	Avenue	1
24	<i>Acalypha indica</i>	Euphorbiaceae	H	Weed	2
25.	<i>Euphorbia sps</i>	Euphorbiaceae	H	Avenue	5
26	<i>Catharanthus roseus</i>	Apocynaceae	H	Medicinal	2
27	<i>Hibiscus rosa-sinensis</i>	Malvaceae	S	Avenue	10

28	<i>Asparagus recemosus</i>	Asparagaceae	S	Medicina I	2
29.	<i>Cinnamomum zeylanicum</i>	Lauraceae	S	Medicina I	1
30	<i>Plumeria rubra</i>	Apocynaceae	S	Avenue	1
31	<i>Phyllanthus cicirus</i>	Euphorbiaceae	H	Avenue	2
32	<i>Mentha piperita</i>	Lamiaceae	H	Medicina I	1
33	<i>Cycas revoluta</i>	Cycadaceae	S	Avenue	1

Herbal Garden

S.No	Name of the plant	Family	Habitat T/S/H/C	Uses	No.of plants
1	<i>Carica papaya</i>	Caricaceae	T	Medicinal	21
2	<i>Musa paradisiaca</i>	Musaceae	T	Medicinal	5
3	<i>Phyllanthus emblica</i>	Phyllanthaceae	T	Medicinal	3
4	<i>Azardiracta indica</i>	Meliaceae	T	Medicinal	2
5	<i>Saraca asoca</i>	Caesalpinaceae	T	Medicinal	1
6	<i>Ficus religiosa</i>	Moraceae	T	Medicinal	1
7	<i>Pachygone ovate</i>	Menispermaceae	S	Medicinal	1
8	<i>Feronia limonia</i>	Rutaceae	T	Medicinal	1
9	<i>Sapindus laurifolius</i>	Sapindaceae	T	Medicinal	8
10	<i>Annona muricata</i>	Annonaceae	T	Medicinal	1
11	<i>Annona reticulata</i>	Annonaceae	T	Medicinal	1
12	<i>Ziziphus mauritiana</i>	Rhamnaceae	T	Medicinal	18
13	<i>Calotropis procera</i>	Apocynaceae	S	Medicinal	2
14	<i>Manilkara zapota</i>	Sapotaceae	T	Medicinal	2
15	<i>Cleome viscosa</i>	Cappridaceae	H	Medicinal	3
16	<i>Punica granatum</i>	Punicaceae	S	Medicinal	5
17	<i>Acalytha indica</i>	Euphorbiaceae	S	Medicinal	13
18	<i>Vernonia cineria</i>	Asteraceae	S	Medicinal	10
19	<i>Boerhavia diffusa</i>	Nyctaginaceae	S	Medicinal	5
20	<i>Cassia absus</i>	Fabaceae	H	Medicinal	3
21	<i>Ruellia tuberosa</i>	Acanthaceae	S	Medicinal	25
22	<i>Psidium guajava</i>	Myrtaceae	T	Medicinal	11
23	<i>Couropita guianensis</i>	Lecythidaceae	T	Medicinal	1
24	<i>Syzygium aromaticum</i>	Myrtaceae	S	Medicinal	2
25	<i>Myristica fragrans</i>	Myristicaceae	T	Medicinal	1
26	<i>Abrus precatorius</i>	Fabaceae	T	Medicinal	4
27	<i>Aerva lanata</i>	Amaranthaceae	S	Medicinal	8
28	<i>Solanum surattense</i>	Solanaceae	S	Medicinal	10
29	<i>Aegle marmelos</i>	Rutaceae	T	Medicinal	6
30	<i>Phyllanthus acidus</i>	Phyllanthaceae	T	Medicinal	3
31	<i>Vitex negundo</i>	Verbinaceae	T	Medicinal	4

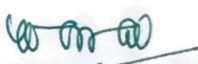
32	<i>Aloe vera</i>	Asparagaceae	H	Medicinal	13
33	<i>Costus speciosus</i>	Costaceae	T	Medicinal	1
34	<i>Agave Americana</i>	Asparagaceae	H	Medicinal	1
35	<i>Aristolochia indica</i>	Aristolocaceae	S	Medicinal	1
36	<i>Rauwolfia serpentina</i>	Apocynaceae	S	Medicinal	1
37	<i>Cinnamomum verum</i>	Lauraceae	T	Medicinal	1
38	<i>Terminalia bellerica</i>	Combretaceae	T	Medicinal	5
39	<i>Vitex negundo</i>	Lamiaceae	S	Medicinal	1
40	<i>Amorphophallus paeonifolius</i>	Araceae	S	Medicinal	10
41	<i>Leucas aspera</i>	Lamiaceae	S	Medicinal	4
42	<i>Jatropha multifida</i>	Euphorbiaceae	S	Medicinal	1
43	<i>Bixa orellana</i>	Bixaceae	S	Medicinal	1
44	<i>Cissus quadrangularis</i>	Vitaceae	S	Medicinal	1
45	<i>Hemionitis arifolia</i>	Pteridaceae	H	Medicinal	1
46	<i>Strychnos nux-vomica</i>	Loganiaceae	H	Medicinal	1
47	<i>Tylophora indica</i>	Apocynaceae	S	Medicinal	1
48	<i>Adhatoda zeylanica</i>	Acanthaceae	S	Medicinal	1
49	<i>Dalbergia latifolia</i>	Fabaceae	T	Medicinal	2
50	<i>Datura fastuosa</i>	Solanaceae	S	Medicinal	2
51	<i>Ocimum basilicum</i>	Lamiaceae	H	Medicinal	1
52	<i>Bauhinia variegata</i>	Fabaceae	T	Medicinal	1
53	<i>Acorus calamus</i>	Acoraceae	H	Medicinal	1
54	<i>Aristolochia bracteata</i>	Aristolocaceae	H	Medicinal	1
55	<i>Alpinia galanga</i>	Zinziberaceae	H	Medicinal	1
56	<i>Murraya koenigii</i>	Rutaceae	T	Medicinal	8
57	<i>Gymnema sylvestre</i>	Apocynaceae	H	Medicinal	3
58	<i>Piper longum</i>	Piperaceae	H	Medicinal	30
59	<i>Plumbago zeylanica</i>	Plumbaginaceae	H	Medicinal	3
60	<i>Argyrea nervosa</i>	Convolvulaceae	H	Medicinal	1
61	<i>Ophiorrhiza mungos</i>	Rubiaceae	H	Medicinal	1
62	<i>Cymbopogon flexuosus</i>	Poaceae	H	Medicinal	1
63	<i>Hemidesmus Indicus</i>	Apocynaceae	H	Medicinal	1
64	<i>Thespesia populnea</i>	Malvaceae	T	Medicinal	1
65	<i>Datura metel</i>	Solanaceae	S	Medicinal	2
66	<i>Sphaeranthus indicus</i>	Asteraceae	H	Medicinal	1
67	<i>Asparagus racemosus</i>	Asparagaceae	H	Medicinal	1
68	<i>Vetiveria zizanioides</i>	Poaceae	H	Medicinal	1
69	<i>Cinnamomum tamala</i>	Lauraceae	T	Medicinal	1
70	<i>Clitoria ternatea</i>	Fabaceae	H	Medicinal	6
71	<i>Citrus aurantifolia</i>	Rutaceae	T	Medicinal	1
72	<i>Asystasia gangetica</i>	Acanthaceae	H	Medicinal	1

73	<i>Citrus medica</i>	Rutaceae	T	Medicinal	1
74	<i>Benincasa hispida</i>	Cucurbitaceae	H	Medicinal	1
75	<i>Elaeocarpus serratus</i>	Elaeocarpaceae	T	Medicinal	1
76	<i>Santalum album</i>	Santalaceae	T	Medicinal	1
77	<i>Centella asiatica</i>	Apiaceae	H	Medicinal	2
78	<i>Jasminum nitidum</i>	Oleaceae	S	Medicinal	1
79	<i>Terminalia chebula</i>	Combretaceae	T	Medicinal	10
80	<i>Artocarpus heterophyllus</i>	Moraceae	T	Medicinal	2
81	<i>Tinospora cordifolia</i>	Menispermaceae	H	Medicinal	1
82	<i>Terminalia catappa</i>	Combretaceae	T	Medicinal	2
83	<i>Sida cordifolia</i>	Malvaceae	S	Medicinal	1
84	<i>Operculina turpethum</i>	Convolvulaceae	C	Medicinal	1
85	<i>Cocos nucifera</i>	Arecaceae	T	Medicinal	21
86	<i>Cassia fistula</i>	Fabaceae	T	Medicinal	7
87	<i>Anthocephalus cadamba</i>	Rubiaceae	T	Medicinal	1
88	<i>Ocimum kilimandscharicum</i>	Lamiaceae	S	Medicinal	1
89	<i>Semecarpus anacardium</i>	Anacardiaceae	T	Medicinal	1
90	<i>Hibiscus rosa-sinensis</i>	Malvaceae	H	Medicinal	3
91	<i>Catharanthus roseus</i>	Apocynaceae	H	Medicinal	3
92	<i>Pongamia pinnata</i>	Fabaceae	T	Medicinal	15
93	<i>Delonix regia</i>	Fabaceae	T	Medicinal	4
94	<i>Mimusops elengi</i>	Sapotaceae	T	Medicinal	1
95	<i>Kaempferia galanga</i>	Zinziberaceae	H	Medicinal	1
96	<i>Tabernaemontana divaricata</i>	Apocynaceae	S	Medicinal	1
97	<i>Alstonia scholaris</i>	Apocynaceae	T	Medicinal	1
98	<i>Andrographis paniculata</i>	Acanthaceae	H	Medicinal	3
99	<i>Trianthema portulacastrum</i>	Aizoaceae	H	Medicinal	1
100	<i>Butea monosperma</i>	Fabaceae	T	Medicinal	1
101	<i>Psoralea corylifolia</i>	Fabaceae	H	Medicinal	1
102	<i>Lawsonia inermis</i>	Latheraceae	S	Medicinal	1
103	<i>Solanum nigrum</i>	Solanaceae	S	Medicinal	1
104	<i>Artemisia vulgaris</i>	Asteraceae	H	Medicinal	1
105	<i>Mimosa pudica</i>	Mimosaceae	H	Medicinal	1
106	<i>Anacyclus pyrethrum</i>	Asteraceae	H	Medicinal	1
107	<i>Plectranthus amboinicus</i>	Lamiaceae	H	Medicinal	3

108	<i>Withania somnifera</i>	Solanaceae	H	Medicinal	1
109	<i>Basella alba</i>	Basellaceae	H	Medicinal	1
110	<i>Gloriosa superba</i>	Colchicaceae	H	Medicinal	1
111	<i>Adenanthera pavonina</i>	Fabaceae	T	Medicinal	1
112	<i>Nyctanthes arbour-tritis</i>	Oleaceae	S	Medicinal	1
113	<i>Sterculia urens</i>	Malvaceae	T	Medicinal	1
114	<i>Abelmoschus moschatus</i>	Malvaceae	S	Medicinal	1
115	<i>Eucalyptus citriodora</i>	Myrtaceae	T	Medicinal	2
116	<i>Anethum graveolens</i>	Apiaceae	H	Medicinal	1
117	<i>Phyllanthus amarus</i>	Phyllanthaceae	H	Medicinal	1
118	<i>Euphorbia neriifolia</i>	Euphorbiaceae	T	Medicinal	1
119	<i>Euphorbia hirta</i>	Euphorbiaceae	H	Medicinal	5
120	<i>Sansevieria roxburghiana</i>	Asparagaceae	H	Medicinal	1
121	<i>Coccinea grandis</i>	Cucurbitaceae	H	Medicinal	2
122	<i>Achyranthes aspera</i>	Amaranthaceae	H	Medicinal	1
123	<i>Eclipta prostrata</i>	Asteraceae	H	Medicinal	1
124	<i>Crossandra infundibuliformis</i>	Acanthaceae	S	Medicinal	1
125	<i>Annona squamosa</i>	Annonaceae	T	Medicinal	1
126	<i>Indigofera tinctoria</i>	Fabaceae	S	Medicinal	1
127	<i>Mentha piperata</i>	Lamiaceae	H	Medicinal	1
128	<i>Mucuna pruriens</i>	Fabaceae	S	Medicinal	1
129	<i>Ricinus communis</i>	Euphorbiaceae	S	Medicinal	2
130	<i>Zingiber officinalis</i>	Zinziberaceae	H	Medicinal	1
131	<i>Ocimum sanctum</i>	Lamiaceae	S	Medicinal	10
132	<i>Curculigo orchoides</i>	Hypoxidaceae	H	Medicinal	1
133	<i>Cycus circinalis</i>	Cycadaceae	T	Medicinal	1
134	<i>Nerium odorum</i>	Apocynaceae	S	Medicinal	2
135	<i>Tridax procumbens</i>	Asteraceae	H	Medicinal	5
136	<i>Tectona grandis</i>	Lamiaceae	T	Medicinal	10
137	<i>Morinda citrifolia</i>	Rubiaceae	S	Medicinal	1
138	<i>Mangifera indica</i>	Anacardiaceae	T	Medicinal	3
139	<i>Rauvolfia tetraphylla</i>	Apocynaceae	S	Medicinal	1
140	<i>Cynodon dactylon</i>	Poaceae	H	Medicinal	1
141	<i>Tamarindus indica</i>	Fabaceae	T	Medicinal	2
142	<i>Sauropus andogynus</i>	Phyllanthaceae	S	Medicinal	1
143	<i>Bryophyllum pinnatum</i>	Crassulaceae	H	Medicinal	2
144	<i>Oroxylum indicum</i>	Bignoniaceae	T	Medicinal	1
145	<i>Ficus racemosa</i>	Moraceae	T	Medicinal	1
146	<i>Chrysalidocarpus lutescens</i>	Aracaceae	T	Medicinal	1

147	<i>Areca catechu</i>	Aracaceae	T	Medicinal	1
148	<i>Phyllanthus reticulatus</i>	Phyllanthaceae	S	Medicinal	1
149	<i>Stevia rebaudiana</i>	Asteraceae	S	Medicinal	1
150	<i>Ficus benghalensis</i>	Moraceae	T	Medicinal	1
151	<i>Abutilon indicum</i>	Malvaceae	S	Medicinal	2
154	<i>Chrysanthemum</i>	Asteraceae	H	Medicinal	1
155	<i>Tagetes patula</i>	Asteraceae	S	Medicinal	2




Signature of the Principal

PRINCIPAL
S.V.K.P. & Dr.K.S. RAJU ARTS & SCIENCE COLLEGE (A)
PENUGONDA-534320. W.G.D.A.P



S.V.K.P. & Dr. K.S. Raju Arts & Science College

(Autonomous)

Recognized by UGC as "College with Potential for Excellence"

Accredited by NAAC with grade 'A'

Dr.Y.V.V.APPARAO M.Sc., Ph.D.,
PRINCIPAL



PENUGONDA - 534 320.

West Godavari District
Andhra Pradesh

22 -04 -2024

GREEN AUDIT CERTIFICATE

This is to certify that S. V. K. P & Dr. K. S. RAJU Arts & Science College(A), Penugonda. Has conducted detailed Green Audit of the campus to assess the Green Initiative planning, efforts, activities implemented in the college campus, like Plantation, Waste water management, Energy Audit and various Environmental activities. The Green Audit aimed to maintain the campus Eco-friendly.


Coordinator

Auditors

T. Venkateswarlu 
P.Nirmal Mary Kumary 




PRINCIPAL
S.V.K.P & Dr.K.S.RAJU ARTS & SCIENCE COLLEGE (A)
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PRINCIPAL



PENUGONDA - 534 320.

West Godavari District
Andhra Pradesh

10 - 03 -2023

GREEN AUDIT COMMITTEE

The following are the members of the Green Audit Committee for the year 2023- 2024.

1	Dr. Y. V. V. Appa Rao, Principal	Chairman
2	Sri K. Sasi Kumar , H. O. D of English	IQAC Coordinator
3	Smt G. Jyothi, Lecturer in P.G Botany	Coordinator
4	Sri T. Venkateswarlu, Lecturer in P.G Chemistry	Auditor
5	Smt P.Nirmala Mary Kumary, Lecturer in P.G Botany	Auditor



PRINCIPAL
S.V.K.P. & Dr.K.S.RAJU ARTS & SCIENCE COLLEGE (A)
PENUGONDA-534320.W.G.Dt.A.P

Tel : 08819 - (O) : 246126, 246926 | Mobile : 90663 65365

email : svkp_penugonda@rediffmail.com, svkp.penugonda@gmail.com, Web:www.svkpandksrajucollege.edu.in

Mobile : 9704448889 | email : yvvarao@gmail.com

Certificate

HYM International Certifications Pvt. Ltd.

Certified that the Environmental Management System

SRI VASAVI KANYAKA PARAMESWARI AND

DR.KALIDINDI SURYANARAYANA RAJU ARTS AND SCIENCE COLLEGE

Penugonda, West Godavari District, Andhra Pradesh, India

has been assessed and found to be in accordance with the requirements of the environmental standards

ISO 14001 : 2015

(Environmental Management System)

for the following scope of certification

PROVIDING U.G. COURSES B.A., HONOURS (HISTORY), B.A., HONOURS (ECONOMICS), B.SC., HONOURS (MATHEMATICS) B.SC. HONOURS (PHYSICS)
B.SC., HONOURS (CHEMISTRY), B.SC., HONOURS (ELECTRONICS), B.SC., HONOURS (BOTANY), B.SC., HONOURS (ZOOLOGY), B.SC., HONOURS (COMPUTER SCIENCE),
B.SC., HONOURS (BIOTECHNOLOGY), B.SC., HONOURS (BIOCHEMISTRY), B.COM. HONOURS (GENERAL), B.COM. HONOURS (COMPUTER APPLICATIONS) BCA, HONOURS
PG COURSES MCA, M.B.A M.SC., ORGANIC CHEMISTRY, M.SC. ZOOLOGY, M.SC., BOTANY, M.SC., AQUACULTURE

Further information about the scope of this certificate and applicability of ISO 14001 : 2015 requirements may be obtained by consulting the organization.

Certificate No : HYM/IAS/EMS/ 9186414/0024

Issue Date : 22/12/2023

1st Surveillance 21/12/2024

Renewal Date : 21/12/2026

2nd Surveillance 21/12/2025



Authorised Signature

HYM International Certifications Pvt. Ltd

NOTE: This Certificate is Valid From 22/12/2023 to 21/12/2024

This is an accredited certificate authorized for issue by Accreditation Service for Certifying Bodies [Europe] Limited who have assessed M/s.HYM International Certifications Pvt. Ltd. against defined criteria and in cognisance of ISO 17021:2015 "Conformity Assessment - Requirements for bodies providing audit and Certification of management Systems".

www.hymcertifications.com on for checking the validation of the Certification

Regd.Flat No. 201(02nd Floor), Plot No. 163A/164A, A.K Towers, Survey No.183, Addagutta Society, Western Hills, Kukatpally, Hyderabad - 500 071, Telangana State, India.

E-mail: siva@hymcertifications.com, Website: www.hymcertifications.com