S. V. ARTS COLLEGE, TIRUPATI

(Affiliated by S. V. University & Funded by TTD)

GREEN AUDIT REPORT 2022-2023



*By*GREEN AUDIT COMMITTEE

S. V. Arts College, Tirupati Andhra Pradesh, India - 517502

GREEN AUDIT COMMITTEE MEMBERS

1. **Dr. M. Vani** : Co-ordinator

2. **Smt. A. Surekha** : Convener

3. **Dr. M. Sudhakar** : Member

4. **Dr. P. Nagaraju** : Member

5. **Dr. P. Sreevani** : Member



EXTERNAL COMMITTEE WITH GREEN AUDIT COMMITTEE MEMBERS



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Managing Director
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INTRODUCTION

The term "Green" means Eco-friendly or not damaging the Environment. This can acronymically be called as "Global Readiness in Ensuring Ecological Neutrality" (GREEN). Green accounting can be defined as systematic identification, quantification, recording, reporting and analysis of components of ecological diversity and expressing the same in financial or social terms. "Green Auditing", an umbrella term, is known by another name "Environmental Auditing". There is a provision of green audit in college campus. A committee has been formed to monitor the proper conservation and plantation of the plants in the campus. As per the suggestions made by IQAC, Botany Department taken the responsibility to do Green Audit with cooperation of Principal and Green Audit committee members. A report on green audit has been prepared by the Department of Botany, S. V. Arts College, Tirupati. This college was established in 1945 and Re- accredited with Grade "A" by NAAC. Total area of the college campus is 25 acres, of which 30 percent is covered by herbs, shrubs and trees, including valuable medicinal flora. The plants have been systematically identified by the Dept. of Botany. There are more than 182 plant species were audited. The green audit report has been discussed with Green audit committee with suggestions to increase greenery in campus. Extra efforts have been taken by the college to create environment consciousness amongst students. One major step in this regard is the extensive plantation program organized by NSS, NCC, and Green audit Committee and Dr. B. R. Ambedkar Open University P.G and U.G students of Botany Department. Plantation is encouraged by the Principal and all Departments Faculty members to increase greenery and reduce carbon dioxide emission effects. Medicinal existing gardens are also maintained by the Dept. of Botany of this college. Extension programs also organized to create environment awareness and conservation of Biodiversity amongst the students and public. In this regard extension program was organized at Divyaramam nursery (Tirumala), Sri Ayurvedic pharmacy (Narsingapuram) and a popular Ayurvedic nursery maintained by TTD, Andhra Pradesh) and also "Srivari thulasivanam" garden is also maintained by the Assistant Professor K. Kameswara Rao, Department of Physics, S. V. Arts College, Tirupati.

Objectives of the Green Audit:

- ❖ Green audit is to promote the environment management and conservation in the college campus.
- Geographical location
- Floral and Faunal diversity
- Meteorologic al parameter
- ❖ Ambient environmental condition
- ❖ Ensuring legislative compliance reducing environmental impacts
- Reducing waste water and energy costs
- ❖ Providing the foundation for an environmental management system
- Awareness and training on benefits
- Sustainability for students
- Energy consumptions
- ❖ Waste disposal system

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
- Audited plants

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 Vanam Manam, Janmabhoomi, Vanamahotsav and Neeru-chettu programs were organized and about 300 Ornamental, Avenue, Medicinal plants with rare and exotic beautiful trees was planted in Dhanvanthari 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. Students 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 different 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 the environmental impact of each and every process and operation on the water, soil, worker health and safety and society at large.
- 5. **Measuring performance:** Measuring the Environmental performance of an organization against best practices.
- 6. **Confirming 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 greenery corporate and performance culture.

9. **Communication:** Communicating the Environmental performance to its stakeholders though reporting will enhance the image of the College.

General Steps:

- 1. Systematic and comprehensive data collection.
- 2. Documentation with physical evidences.
- 3. Independent periodic evaluation with regulatory requirements and appropriate standards.
- 4. Systematic 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 date of the audit enabled them to adjust and become used to the concept.
- 3. The audit scope was 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 auditor's investigations on the sites.
- 7. The background information on the facility including the facility' 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 groundwater contamination were collected.

9. The pre-audit questionnaire was informed to auditee (Humphrey and Hadley - 2000).

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.
- 2. 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.
- 3. Onsite phase of the audit developed a working understanding of how the facility manages the activities that influence the environment.
- 4. If there is one works Assessed strengths and weaknesses of the auditee's management controls and risks associated with their failure were established.
- 5. Gathering audit evidence i.e. collecting data and information using audit protocol.
- 6. Communicated with the staff of the auditee to obtain most information.
- 7. Evaluated the audit evidence against the objectives established for the audit.
- 8. An exit meeting to explain the audit findings (Humphrey and Hadley-2000).

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.

- 1. Identification of Plant species and Bio-diversity.
- 2. Analysis of Water quality and usage.
- 3. Analysis of Energy consumption and costs.
- 4. 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 data collected, there are 2775 plants in the college campus. In this 761 are trees, 650 are shrubs, 1363 are herbs and remaining 2 are climbers. Out of 761 trees, 1880 trees are present in the medicinal plants in the college campus. So, 2775 plants in our college contribute to the Oxygen supply that we utilize. Being situated in the urban area, 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:

- 1. Vehicles
- 2. Refrigerators
- 3. Air conditioners
- 4. RO water Plants
- 5. Mobiles etc.
- 1. Vehicles on the days of data collection, there were 05 cars, 123 bikes and 33 scooters in our campus, which in turn proves us that these vehicles may contribute to high carbon-dioxide emission. There are 22 refrigerators, 22 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 nears the college library, recently established by the dept. of zoology and Botany. 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 192 taps, 01 water Plants and rain water harvesting pits worth 50,000 litres.
- 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. As part of "Green Campus" initiation, we shifted from conventional energy to renewable energy, to

reduce electricity bill.

In addition to this equipment, our college also has

- Horizontal and vertical electrophoresis
- ❖ A distillation unit
- Digital calorimeter
- ❖ An exhaust fan
- ❖ A laminar air flow
- A hot plate
- An incubator
- ❖ A table fan
- ❖ A hot air oven
- 2 centrifuges
- LCD Projectors
- Hand mikes
- ❖ A bell
- Colour printer
- Camera lucida
- Autoclave
- Spectrophotometer
- Microtome
- * Rain-gauze
- Hygrometer
- **❖** Anemometer
- 5. Analysis of waste generation and disposal wastes cannot be avoided in any environment. Wastes can be classified as biodegradable and non-biodegradable wastes. Biodegradable 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.
- 1. **Hostel:** The food waste generated from the canteen is collected and given to vermi- 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.

- 2. Library: The most generated waste is paper waste. It is taken for recycling.
- 3. **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.
- 4. Office: Paper wastes generated are recycled and reused.
- 5. **Garden:** Plastic and paper waste is comparatively less. Fallen leaves are collected and used in vermi-compost unit
- 6. Open auditorium: The wastes are collected after each programmed and dumbed in
- 7. **Bathroom:** The wastes are collected and burned in an incinerator behind the convent.
- 8. **Classrooms:** Paper wastes are collected in the waste basket and recycled.
- 9. **Laboratory:** The broken glass wastes and the useless instruments are disposed for recycling after thorough washing.
- 10. **College Premises:** Plastic waste generated is usually less. But paper waste is generated in a larger amount.
 - 1. There are sufficient water outlets for the students, staff and all the departments. But it is essential to check whether all these are working or not and whether the taps are leaking or not.
 - 2. Fortunately, the students of UG and PG of S. V. Arts College, Dr. B. R. Ambedkar Open University, IGNOU and also Teaching, Non-Teaching staff of the college are available to clean the college campus.

Observations:

- ❖ The green audit practically involves energy conservation, renewable recourses
- * Rain water harvesting
- Effects of Carbon neutrality
- Planting of trees
- ❖ Hazardous waste management and E-waste management

Advantages:

- ❖ It helps to protect the environment and solve environmental problems
- It enables to find our methods for waste management
- ❖ It is useful to evaluate environmental standards
- ❖ It helps in the sustainable development of the organisation

LIST OF AUDITED PLANTS IN THE COLLEGE CAMPUS

| S.No | Local Name | Scientific Name | Family | Habit | No. of Plants |
|------|----------------------------|-------------------------------|-----------------------|--------------|------------------|
| 1. | Naramamidi | Polyalthea longifolia | Annonaceae | Tree | 122 |
| 2. | Dracaena | Dracaena Angustifolia | Asparagaceae | Shrub | 45 |
| 3. | Red.Dracaena | Dracaena Marginata | Asparagaceae | Shrub | 30 |
| 4. | Royal palm | Roystonea regia | Arecaceae | Tree | 76 |
| 5. | Duranta | Duranta repens/Duranta erecta | Verbenaceae | Herb | 120 |
| 6. | Copper leaf & Jacob' scoat | Acalypha wikesiana | Euphorbiaceae | Herb | 960 |
| 7. | Ramabanam | Ixora coccinia | Rubiaceae | Shrub | 260 |
| 8. | Pogada | Mimusops elengi L. | Sapotaceae | Tree | 65 |
| 9. | Thuja plant | Thuja orientalis | Cupressaceae | Shrub | 08 |
| 10. | Mogili | Pandanus tectorius | Pandanaceae | Shrub | 01 |
| 11. | Canna lilly | Canna indical L. | Cannaceae | Shrub | 32 |
| 12. | White frangipani | Plumeria pudica | Apocynaceae | Shrub | 06 |
| 13. | Dirisena | Albizia lebbeck | Mimosanaceae | Tree | 09 |
| 14. | Thati | Borasses flabellifar | Aracaceae | Tree | 02 |
| 15. | Neem | Azardirchata - indica | Meliaceac | Tree | 10 |
| 16. | Kanuga | Pongamia pinnata | Fabaceae | Tree | 45 |
| 17. | Raavi, | Ficus religiosa | Moraceae | Tree | 17 |
| 18. | Red cassia | Cassia Roxiburghi | Caesalpiniaceae | Tree | 09 |
| 19. | Adavi rela | Cassia siamea | Cassalpinaceae | Tree | 77 |
| 20. | Chinta | Tamarindus indica | Caesalpiniaceae | Tree | 22 |
| 21. | Neredu | Syzygium cuminii | Myrtaceae | Tree | 29 |
| 22. | Alla neredu | Syzygium alternifolium | Myrtaceae | Tree | 10 |
| 23. | Tulasi | Ocimum sanctum | Lamiaccac | Herb | 163 |
| 24. | Mandaram | Hibiscus rosasinensis | Malvaceae | Shrub | 140 |
| 25. | Maddi chettu | Morinda pubescens | Rubiaceae | Tree | 23 |
| 26. | Thurai | Delonix regia | Caesalpiniaceae | Tree | 13 |
| 27. | Nandivardinam | Tabernaemontana divaricata | Apocyaneae | Shrub | 160 |
| 28. | Regu chettu | Zizuphus jujuba | Rhamnaceae | Tree | 13 |
| 29. | Ganga regu chettu | Zizuphus mauritiana | Rhamnaceae | Tree | 11 |
| 30. | Ganneru | Nerium Oleander | Apocyanaceae | Shrub | 80 |
| 31. | Jaama | Psidium guava | Myrtaceae | Tree | 04 |
| 32. | Hemelia plant | Hemelia patens | Rubiaceae | Shrub | 18 |
| 33. | Lilli plant | Pancratium fragrance | Amaryllidaceae | Herb | 36 |
| 34. | Peltophoram | Peltophorum pterocarpum | Caesalpiniaceae | Tree | 32 |
| 35. | Munaga | Moringa oleifera | Moringaceae | Tree | 02 |
| 36. | Kagithalapulu | Bauhinia variegata | Caesalpiniaceae | Tree | 42 |
| 37. | Golden trumpet | Almond cathartica | Apocynaceae | Tree | 02 |
| 38. | Pasupuganneru | Tabebuia stans | Bignoniaceae | Tree | 02 |
| 39. | Pachagotla | Tecoma stans | Bignoniaceae | Tree | 02 |
| 40. | Pasupu ganneru | Thevetia peruviana | Apocynacea e | Tree | 03 |
| 41. | Mamidi | Mangifera indica | Anacardiace ae | Tree | 08 |
| 42. | Indian cork tree | Millingtonia hortensis | Bignoniaceae | Tree | 04 |
| 43. | Eetha chetu | Phoenix sylvestris | Arecaceae | Tree | 02 |
| 44. | Subabul | Leucaena leucocephala | Fabaceae | Tree | 17 |
| 45. | Gangaravi | Thespesia populnea | Malvaceae | Tree | 06 |
| 46. | Sitaphalam | Annona squamosa | Annonaceae | Tree | 05 |
| 47. | Lemon | Citrus limon Tectona grandis | Rutaceae lamiaceae | Tree Tree | 02 02 |
| 48. | Teak | | | | |

| 49. | Fox tail palm | Wodyetia bifurcata | Arecaceae | Tree | 05 |
|-----|-------------------|----------------------------|----------------|---------|----|
| 50. | Rudraksha | Elaeocarpus ganitrus | Elaeocarpaceae | Tree | 04 |
| 51. | Panasa | Artocarpus heterophyllus | Moraceae | Tree | 02 |
| 52. | Bankapandu | Cordia dichotoma | Boraginaceae | Shrub | 01 |
| 53. | Seema bachali | Talinum fruiticosum | Portulacaceae | Herb | 01 |
| 54. | Tella nela tadi | Chlorophytum borivillianum | Asparagaceae | Herb | 01 |
| 55. | Jatropha plant | Jatropha multifida | Euphorbiaceae | Herb | 01 |
| 56. | Tella poloki | Gyrocarpus americanus | Hernandiaceae | Shrub | 01 |
| 57. | Machipatri | Artemisia vulgaris | Asteraceae | Herb | 01 |
| 58. | Ranapala | Bryophyllum pinnatum | Crassulaceae | Herb | 02 |
| 59. | Adavi amudam | Baliospermum Montana | Euphorbiaceae | Herb | 01 |
| 60. | Ulimiri chettu | Crataeva nurvalalinn | Capparidaceae | Tree | 01 |
| 61. | Pippallu | Piper longum | Piperaceae | Herb | 01 |
| 62. | Vasa | Acorus calamus | Aracaceae | Herb | 01 |
| 63. | Nimmagaddi | Cymbopogon citratus | Poaceae | Herb | 01 |
| 64. | Pachari | Pterospermum accerifolium | Malvaceae | Tree | 01 |
| 65. | Revia plant | Revia hypocrateriformis | Convolvulaceae | Herb | 01 |
| 66. | Maredu | Aegle marmilose | Rutaceae | Tree | 01 |
| 67. | Putranjiva | Putranjiva roxburghii | Putranjivaceae | Tree | 19 |
| 68. | Billa ganneru | Catharanthus roseus | Apocynacea e | Herb | 88 |
| 69. | Danimma | Punica granatum | Punicaceae | Tree | 03 |
| 70. | Cashew | Anacardium occidentale | Anacardiaceae | Tree | 02 |
| 71. | Ankudu | Wrightia tinctoria | Apocynaceae | Tree | 07 |
| 72. | Velaga | Feronia limonia | Rutaceae | Tree | 05 |
| 73. | Amla | Emblica officinalis | Euphorbiaceac | Tree | 02 |
| 74. | Arinellikayalu | Phyllanthus acidus | Euphorbiaceae | Tree | 01 |
| 75. | Banana | Musa paradisiacal | Musaceae | Shrub | 01 |
| 76. | Curry leaf | Murraya koengil | Rutaceae | Tree | 01 |
| 77. | Kunkudu | Sapindus emarginatus | Sapindaceae | Tree | 01 |
| 78. | Kagadalu | Jasminum multiflorum | Oleaceae | Shrub | 01 |
| 79. | Ashwaga ndha | Withania somnifera | Solanaceae | Herb | 01 |
| 80. | Konda kotthimeera | Pimpinella thirupatiensis | Apiaceae | Herb | 01 |
| 81. | Thippateega | Tinospura cordifolia | Menispermaceae | Climber | 01 |
| 82. | Nela usiri | Phyllathus amarus | Euphorbiaceae | Herb | 01 |
| 83. | Muripinda | Acalypha indica | Euphorbiaceae | Herb | 01 |
| 84. | Nelavemu | Andrographis paniculata | Acanthaceae | Herb | 01 |
| 85. | Swargasundari | Bignomia avalanda | Bignoniaceae | Tree | 20 |

LIST OF AUDITED MEDICINAL PLANTS IN THE COLLEGE CAMPUS

| S.No | Local Name | Scientific Name | Family | Habit | No. of Plants |
|------|--------------------|--------------------------|----------------|---------|------------------|
| 1. | Nelavemu | Andrographis paniculata | Acanthaceae | Herb | 56 |
| 2. | Sugandapala | Hemidesmus indicus | Asclepiadaceae | Herb | 18 |
| 3. | Tella jilledu | Calatropis procera | Asclipediaceae | Shrub | 5 |
| 4. | Kalabanda | Aloe vera | Lilliaceae | Shrub | 10 |
| 5. | Tulasi | Oscimum sanctum | Lamiaceae | Shrub | 110 |
| 6. | Vamili | Vitex negundo | Verbenaceae | Shrub | 3 |
| 7. | Onion | Allium cepa | Liliaceae | Herb | 2 |
| 8. | Sarpagandhi | Rauvolfia serpentina | Apocynaceae | Shrub | 2 |
| 9. | Tippateega | Tinospora cordifolia | Menispermaceae | Climber | 8 |
| 10 | Guntakalaga ra aku | Eclipta alba | Asteraceae | Herb | 22 |
| 11 | Pippallu | Piper longum | Piperaceae | Herb | 2 |
| 12 | Nelausiri | Phyllanthus niruri | Euphorbiaceae | Herb | 20 |
| 13 | Ummetha | Datura metal | Solanaceae | Shrub | 9 |
| 14 | Neem | Azardiricta indica | Meliaceae | Tree | 112 |
| 15 | Kanuga chettu | Pongamia pinnata | Fabaceae | Tree | 97 |
| 16 | Ashoka chettu | Polyalthia longifolia | Annonaceae | Tree | 86 |
| 17 | Maredu chettu | Aegle marmelos | Rutaceae | Tree | 3 |
| 18 | Almond | Terminalia catappa | Combretaceae | Tree | 2 |
| 19 | Jilledu | Calotropis gigantia | Asclepidaceae | Shrub | 04 |
| 20 | Regu chettu | Zyzipus jujuba | Rhamnaceae | Tree | 16 |
| 21 | Dracaena | Dracaena angustifoia | Liliaceae | Shrub | 28 |
| 22 | Vaminta | Cleome viscosa | Capparidaceae | Herb | 26 |
| 23 | Kukkavaminta | Gynandropsis pentaphylla | Capparidaceae | Herb | 32 |
| 24 | Uttareni | Achyranthus aspera | Amarathanceae | Herb | 48 |
| 25 | Atika mamidi | Boerhaavia diffusa | Nictaginaceae | Herb | 59 |
| 26 | 1 | Acalypha indica | Euphorbiaceae | Herb | 620 |
| 27 | Medabirusu | Sida acuta | Malvaceae | Herb | 18 |
| 28 | | Euphorbia hirta | Euphorbiaceae | Herb | 65 |
| 29 | Gaddi chamanthi | Tridax procumbens | Asteraceae | Herb | 271 |
| 30 | Pasupu | Curcuma longa | Zingeberaceae | Shrub | 12 |
| 31 | Mexican mint | Coleus amboinicus | Lamiaceae | Herb | 04 |
| 32 | | Cissus quandrangularis | Vitaceae | Climber | 02 |
| 33 | Ranapala | Bryophyllum pinnatum | Crassulaceae | Herb | 04 |
| 34 | Billaganneru | Catharanthus roseus | Apocynaceae | Herb | 07 |
| 35 | 1 | Artemisia vulgaris | Asteraceae | Herb | 14 |
| 36 | Munaga | Moringa oleifera | Moringaceae | Tree | 16 |
| 37 | | Syzygium cumini | Myrtaceae | Tree | 77 |
| 38 | Chinta chettu | Tamarindus indica | Caesalpinaceae | Tree | 16 |

ENVIRONMENTAL PRACTICES B1-WATER MANAGEMENT

| S.No. | Department | Use of Water | Water leakage/ Repair | Use of Water purification | Rain harvest | Use of water cooler | Water pollution incidence | Water use per day (in liters) | Water storage | Water tank cleaning | Water management practices |
|-------|-----------------------|-----------------|-----------------------------|---------------------------|-----------------|---------------------------|---------------------------------|-------------------------------------|------------------|---------------------------|----------------------------------|
| 1. | Botany | | | $\sqrt{}$ | | X | X | 3000 ltr | | | $\sqrt{}$ |
| 2. | Zoology | $\sqrt{}$ | | X | | X | X | 4000 ltr | $\sqrt{}$ | | $\sqrt{}$ |
| 3. | Computer Science | | X | $\sqrt{}$ | X | X | X | 1500 ltr | X | X | X |
| 4. | Statistics | X | X | $\sqrt{}$ | X | X | X | 1000 ltr | X | X | X |
| 5. | Mathematics | $\sqrt{}$ | X | $\sqrt{}$ | X | X | $\sqrt{}$ | 1000 ltr | | | $\sqrt{}$ |
| 6. | Physics | | | $\sqrt{}$ | $\sqrt{}$ | X | $\sqrt{}$ | 1500 ltr | | | $\sqrt{}$ |
| 7. | Electronics | | | $\sqrt{}$ | | X | $\sqrt{}$ | 1000 ltr | $\sqrt{}$ | X | X |
| 8. | Hindi | | X | $\sqrt{}$ | X | X | $\sqrt{}$ | 200Ltr | | | $\sqrt{}$ |
| 9. | Telugu | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ | X | $\sqrt{}$ | 1000 ltr | $\sqrt{}$ | $\sqrt{}$ | $\sqrt{}$ |
| 10. | Chemistry | | | $\sqrt{}$ | | X | $\sqrt{}$ | 5000 ltr | | | $\sqrt{}$ |
| 11. | Commerce | | | | | X | $\sqrt{}$ | 2000 ltr | | $\sqrt{}$ | $\sqrt{}$ |
| 12. | Biotechnology | | | | | X | $\sqrt{}$ | 1500 ltr | | $\sqrt{}$ | $\sqrt{}$ |
| 13. | History | | X | | | X | X | 1000 ltr | | X | $\sqrt{}$ |
| 14. | Political Science | | X | $\sqrt{}$ | X | X | X | 500 ltr | X | X | X |
| 15. | Economics | | | $\sqrt{}$ | | X | $\sqrt{}$ | 500 ltr | | Х | X |
| 16. | English | | X | X | Х | X | X | 1000 ltr | X | X | Х |
| 17. | Sanskrit | | X | X | X | X | X | 200 ltr | X | X | X |
| 18. | Physical Education | | X | X | X | X | X | 2000 ltr | X | X | X |
| 19. | Hostel | | | $\sqrt{}$ | | $\sqrt{}$ | $\sqrt{}$ | 10000 ltr | | | $\sqrt{}$ |
| 20. | Microbiology | | | $\sqrt{}$ | \checkmark | X | X | 2000 ltr | X | X | X |
| 21. | Post Office | | | | | $\sqrt{}$ | $\sqrt{}$ | 100 ltr | | $\sqrt{}$ | $\sqrt{}$ |
| 22. | Security | | X | X | Х | X | X | 300 ltr | X | Х | X |
| 23. | Environmental studies | | X | X | х | X | X | 500 ltr | X | X | X |
| 24. | Dairy science | | X | X | х | X | X | 2000 ltr | | X | $\sqrt{}$ |
| 25. | Library | | | | | Х | | 2500 ltr | | Х | X |
| 26. | Dr. B.R. AOU | | | | | Х | Х | 1500 ltr | X | X | X |
| 27. | IGNOU | $\sqrt{}$ | | | | X | | 1000 ltr | | X | |
| 28. | Psychology | $\sqrt{}$ | | | | Х | | 500 ltr | | Х | |

B2 – WASTE MANAGEMENT

| | | a | b | С | d | e | f | g | h |
|--------|-----------------------|--------------------------------------|---|------------------------------------|--------------------|-----------------------------|----------------------------|--------------------|----------------------------------|
| S. No. | Department/ Block | Food/ Organic waste per day | Non plastic dry waste per day | Plastic, Thermocoilo per day | Other (e-waste) | Management of organic waste | Management of other waste? | Waste dumping pit? | Waste management practices |
| 1. | Botany | Н | L | N | N | Н | Н | Н | Н |
| 2. | Zoology | M | L | N | N | Н | Н | Н | Н |
| 3. | Computer Science | L | L | N | L | N | N | N | M |
| 4. | Statistics | L | M | N | N | N | N | N | N |
| 5. | Mathematics | L | N | M | L | L | N | N | N |
| 6. | Physics | M | L | N | M | L | L | L | L |
| 7. | Hindi | L | N | N | N | N | N | Н | L |
| 8. | Chemistry | Н | Н | N | L | L | M | M | M |
| 9. | Commerce | L | N | N | L | L | L | L | L |
| 10. | 0) | L | L | N | N | M | M | M | M |
| 11. | Microbiology | L | L | N | N | M | M | M | M |
| 12. | 9 | L | N | N | N | L | L | L | L |
| 13. | | L | N | N | N | N | N | L | L |
| 14. | | L | L | L | L | L | L | L | L |
| | English | L | L | N | N | L | L | L | L |
| 16. | | L | N | N | N | L | L | L | L |
| 17. | Physical Education | M | N | N | N | M | M | M | M |
| 18. | 0 | M | N | M | N | M | L | L | L |
| 19. | Electronics | M | N | M | N | M | L | L | L |
| 20. | Hostel | Н | Н | L | N | Н | Н | Н | Н |
| 21. | Post Office | L | L | N | N | M | M | M | M |
| 22. | Security | M | M | N | N | Н | L | L | L |
| 23. | Environmental studies | M | N | N | N | M | M | M | M |
| 24. | Dairy science | M | N | N | N | M | M | М | M |
| 25. | Library | L | N | N | N | N | N | L | L |
| 26. | | M | N | N | N | M | M | M | M |
| 27. | IGNOU | M | N | N | N | M | M | M | M |
| 28. | | M | N | N | N | M | M | M | M |
| | | | | H – High, L – 1 | Low, M - Me | edium, N – Nil | | ı | |

B3 - ENERGY MANAGEMENT

| S. No. | Department/ Block | No. of Tubes + Bulbs | No. of AC's | No. of LCD projector | No. of photocopier | Computers + Printers | LED's | Non- conventional (solar) | Starting | Energy management practices |
|--------|-----------------------|-------------------------|----------------|----------------------|--------------------|-------------------------|-------|---------------------------------|----------|-----------------------------|
| 1. | Botany | 40+1 | - | 01 | - | 1+01 | 23 | - | - | LED's |
| 2. | Zoology | 40+1 | - | 01 | 01 | 1+1 | 40 | - | - | LED's |
| 3. | Computer Science | 30 | 08 | 04 | 1 | 32+2 | 20 | - | - | LED's |
| 4. | Statistics | 06 | - | 02 | 01 | 1+1 | 10 | - | - | LED's |
| 5. | Mathematics | 8 | - | 01 | ı | 1+1 | - | - | - | LED's |
| 6. | Physics | 50+10 | 04 | 02 | 2+1 | 19 | = | - | - | LED's |
| 7. | Hindi | 10 | - | 1 | 1 | - | - | - | - | LED's |
| 8. | Chemistry | 60 | - | 03 | 01 | 5+1 | 60 | - | - | LED's |
| 9. | Commerce | 10 | - | 02 | 01 | 3+1 | - | - | - | LED's |
| 10. | Biotechnology | 10 | - | 01 | ı | 1+1 | 10 | - | - | LED's |
| 11. | Microbiology | 10 | - | 01 | - | 1+1 | 10 | - | - | LED's |
| 12. | Examination Section | 7 | - | - | 04 | 1+1 | 10 | - | - | LED's |
| 13. | Seminar Hall | 24+14 | 80 | 1+1 | ı | 1 | 30 | - | - | LED's |
| 14. | History | 2 | - | ı | ı | 01 | 04 | - | - | LED's |
| 15. | Political Science | 3 | - | 1 | 1 | 1+0 | 04 | - | - | LED's |
| 16. | Economics | 3 | 01 | 01 | 01 | 1+1 | 12 | - | - | LED's |
| 17. | Sanskrit | 3+2 | - | - | ı | 01 | = | - | - | LED's |
| 18. | Telugu | 40 | - | - | - | 01 | 10 | - | - | LED's |
| 19. | English | 19 | - | - | ı | 01 | 12 | - | - | LED's |
| 20. | Hostel | 60 | - | 1 | 1 | - | 10 | - | - | LED's |
| 21. | Post Office | 10 | 1 | - | - | 1+1 | 5 | - | - | LED's |
| 22. | Security | 5 | - | - | ı | | 02 | - | - | LED's |
| 23. | Environmental studies | 06 | - | ı | - | 1+1 | 06 | - | - | LED's |
| 24. | Dairy science | 10 | 1 | 1 | ı | 3+1 | 10 | - | - | LED's |
| 25. | Library | 30 | - | - | - | 1+1 | 45 | - | - | LED's |
| 26. | Dr. B.R. AOU | 16 | - | - | - | 1+1 | 16 | - | - | LED's |
| 27. | IGNOU | 04 | - | - | - | 1+1 | 12 | - | - | LED's |
| 28. | Psychology | 05 | - | - | - | 1+1 | 06 | - | - | LED's |

B4 – LANDSCAPE / ENVIRONMENT

| Exotic plants/ Animals | Overall Biodiversity | Plant Landscape Management | Natural water bodies |
|---------------------------|----------------------|-------------------------------|-------------------------|
| G | G | G | A |
| A | G | G | A |
| - | A | - | - |
| A | G | G | - |
| - | A | G | - |
| - | A | G | - |
| - | G | G | - |
| - | G | G | - |
| G | G | G | - |
| - | G | G | - |
| A | G | G | - |
| - | A | G | - |
| - | A | G | - |
| - | A | G | - |
| - | G | G | - |
| - | A | G | - |
| - | A | G | - |
| - | A | G | - |
| - | A | G | - |
| A | A | G | - |
| G | G | G | - |
| G | G | G | - |
| - | G | G | - |
| - | A | G | - |
| - | A | G | - |
| - | G | G | - |
| - | A | G | - |
| - | G | G | - |
| | - | - A | - A G - G G |

B5 – BUILT-UP ENVIRONMENT

| | | *a | b | С | d | *e | f | *g | *h | i |
|------|-----------------------|----------|----------------------|----------------------------|------------------|-------------------------|---------------------|-----------------|--------------------------------|--|
| S.No | Department/ Block | Building | Eco- friendliness | Fire prevention provisions | Aesthetic appeal | Serenity of class rooms | Ladies rest room | Recreation room | Provision for differently able | Toilets, Men, Women, Diff. abled |
| 1. | Botany | С | G | G | G | G | G | G | - | G |
| 2. | Zoology | С | G | G | G | G | G | G | - | G |
| 3. | Computer Science | С | Α | G | G | G | G | - | - | G |
| 4. | Statistics | С | A | G | G | G | G | G | - | G |
| 5. | Mathematics | С | A | G | G | G | G | - | - | G |
| 6. | Physics | С | G | G | G | G | G | G | - | G |
| 7. | Hindi | С | A | A | G | G | G | - | - | G |
| 8. | Chemistry | С | G | G | G | G | G | G | - | G |
| 9. | Commerce | Н | A | G | G | G | G | - | - | G |
| 10. | Biotechnology | С | G | G | G | G | G | G | - | G |
| 11. | History | С | A | G | G | G | G | - | - | G |
| 12. | Political Science | С | A | G | G | G | G | - | - | G |
| 13. | Economics | С | A | G | G | G | G | G | - | G |
| 14. | Sanskrit | С | A | G | G | G | G | ı | - | G |
| 15. | Telugu | С | A | G | G | G | G | ı | - | G |
| 16. | Microbiology | С | G | G | G | G | G | G | - | G |
| 17. | Electronics | С | A | G | G | G | G | G | - | G |
| 18. | Physical Education | С | A | A | G | G | G | g | G | G |
| 19. | Hostel | С | A | G | G | NA | G | G | G | G |
| 20. | English | С | A | G | G | G | G | G | - | G |
| 21. | Post Office | С | G | G | G | NA | G | - | - | A |
| 22. | Security | С | G | G | G | NA | A | - | - | A |
| 23. | Environmental studies | С | A | G | G | G | G | G | - | G |
| 24. | Dairy science | С | G | G | G | G | G | A | - | G |
| 25. | Library | С | G | G | G | G | G | G | - | G |
| 26. | Dr. B.R. AOU | С | G | G | G | G | G | A | - | G |
| 27. | IGNOU | С | A | G | G | G | G | G | - | G |
| 28. | Psychology | С | G | G | G | G | G | G | - | G |
| | | ľ | NA- Not Applica | ble; G-Good; A | -Average; P- | Poor; C- Concr | ete; H- Herita | ge | | |

A-Not Applicable; G-Good; A-Average; F-Foor; C-Colictete; II- Heritag

B6 - TRANSPORTATION

| | | a | b | С | d | E |
|--------|-----------------------|------------------|----------------------|--|------------------|---------------------|
| Sl.No. | Department /Block | Dept. VehicleNo. | Memberswith vehicles | Members usingpublic transportation (%) | Use of Bicycles? | Vehicle Pooling? |
| 1. | Botany | - | 4 | - | 01 | - |
| 2. | Zoology | - | 8 | - | 01 | - |
| 3. | Telugu | - | 4 | - | - | - |
| 4. | Computer science | - | 09 | - | - | - |
| 5. | Statistics | - | 01 | 01 | 01 | - |
| 6. | English | - | 07 | 05 | 01 | - |
| 7. | Mathematics | - | 08 | - | - | - |
| 8. | Physics | - | 10 | - | 04 | - |
| 9. | Hindi | - | 01 | - | - | - |
| 10. | Chemistry | - | 10 | 01 | - | - |
| 11. | Commerce | - | 07 | - | 01 | - |
| 12. | Biotechnology | - | 01 | - | - | - |
| 13. | History | - | 03 | - | - | - |
| 14. | PoliticalScience | - | 04 | - | 01 | - |
| 15. | Economics | - | 05 | - | - | - |
| 16. | Microbiology | - | 02 | - | - | - |
| 17. | Sanskrit | - | 01 | - | - | - |
| 18. | Physical Education | - | 03 | - | - | - |
| 19. | Hostel | - | 15 | 03 | - | - |
| 20. | Electronics | - | 05 | - | - | - |
| 21. | Post Office | - | 01 | - | - | - |
| 22. | Security | - | 10 | - | - | - |
| 23. | Environmental studies | - | 02 | - | 01 | - |
| 24. | Dairy science | - | 02 | 01 | - | - |
| 25. | Library | - | 03 | - | - | - |
| | Dr. B.R. AOU | - | 03 | - | - | - |
| 27. | IGNOU | - | 05 | - | - | - |
| 28. | Psychology | - | 02 | - | - | - |