

# **Government College, Bundi (Raj.)**

## **Green Audit Details**

**(2020-21)**

*The Faculty and college administration were entrusted with the data collection of Green Audit*

<i>Date of Pre visit</i>	10.05.2020
<i>Date of Visit</i>	20.01.2021
<i>Green Audit Team</i>	<i>Dr. N. Bhojak - Coordinator</i> <i>Dr. H.S. Bhandari - Member</i>
<i>Internal Support</i>	<i>Principal</i> <i>IQAC Coordinator</i> <i>Dr Dilip S Rathore – Convenor, Green Audit Committee</i>

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## **Green Vision of the Institute**

- 1 Green Curriculum : Environmental Studies compulsory for all UG Programmes.  
Specific programmes and interdisciplinary programmes.
- 2 Green ethics and education: For students and faculty creation and distribution in and outside institution.
- 3 Energy Efficient Electrical and Electronic Appliances - Solar Power LED Bulbs
- 4 Report on Biodiversity: Flora & Fauna
- 5 Report on Chemicals

## **INTRODUCTION : Importance of Green Auditing for Sustainable development**

Academic institutes have broad impacts on the world around them, both negative and positive. Colleges like ours where students are coming from rural background and college is located at urban area can create a variety of adverse environmental impacts, this is why college is also in a unique position as educational institutions to be leaders in pursuing environmentally sustainable solutions. Green Audit is linked to Sustainable development process. Through Green Audit, one gets a direction as how to improve the condition of environment and there are various factors that have determined the progress of Green Audit process. The green audit practically involves energy conservation, use of renewable sources, rain water harvesting, efforts of carbon neutrality, planting of trees, hazardous waste management and E-waste management. It is necessary to conduct green audit in college campus because students have to be aware of the green audit, its advantages to save the planet and thereby get motivated to become good citizens of the country. Green audit and sustainable development process help to reduce wastage and associated cost as well as increase the product quality. As environmental sustainability is becoming an increasingly important issue for the nation, the role of higher educational institutions in relation to environmental sustainability is more relevant. Green audit can be a useful tool for a college to determine how and where they are using most of energy, water or other resources; the college can then consider how to implement changes and make savings. It can also be used to determine the type and volume of waste, which can be used for a recycling project or to improve waste minimization plan. Green auditing can also create health consciousness and promote environmental awareness, values and ethics. It provides staff and students better understanding of the impact of green

methods on campus. It gives an opportunity for the development of ownership, personal and social responsibility for the students and teachers.

Government College, Bundi is one of the best colleges in Hadoti Region of Rajasthan. Its mission is to provide quality education to all by means of hard work, dedication and devotion. The Green audit, apart from providing an evaluation of the compliance of the campus with the environment also moulds promising citizens who acknowledge responsibility towards the planet and the ecosystem. It was decided in IQAC meeting to conduct Green Audit for this session as it was suggested to Dr Dilip Singh Rathore in one of the online seminar attended by him.

The consequence of it is being observed in 2020-21 for a sustainable future of the campus. This audit process involved initial interviews with management to clarify policies, activities, records and the co-operation of staff and students in the implementation of mitigation measures. This was followed by staff and student interviews, collection of data through questionnaire, review of records, observation of practices and observable outcomes. In addition, the approach ensured that the management and staff are active participants in the green auditing process in the college.

### **Pre-Audit Stage**

On 10.05.2020 during meeting of IQAC it was decided to start the process of Green auditing. For the purpose A routine green auditing of the College was held for the period of 2020-2021 in a systematic. A pre-audit meeting provided an opportunity to reinforce the scope and objectives of the audit, and discussions were held on the practicalities associated with the audit. The meeting was held with IQAC members and it was decided to perform the Green auditing internally this year and from the next year it will be by external members.

## **Scope and Goals of Green Auditing**

A clean and healthy environment aids effective learning and provides a conducive learning environment. There are various efforts around the world to address environmental education issues. Green Audit is the most efficient and ecological way to manage environmental problems. It is a kind of professional care which is the responsibility of each individual who are the part of social and environmental processes. It is necessary to conduct green audit in college campus because it helps the students to be aware of the green audit, its advantages and thereby grow up as good citizens. Thus Green audit becomes necessary at the college level.

## **Benefits of the Green Auditing**

- More efficient resource management
- To provide basis for improved sustainability
- To create a green campus
- To enable waste management through reduction of waste generation, solid-waste and water recycling
- To create plastic free campus and evolve health consciousness among the stakeholders
- Recognize the cost saving methods through waste minimizing and managing
- Point out the prevailing and forthcoming complications
- Authenticate conformity with the implemented laws
- Empower the organizations to frame a better environmental performance
- Enhance the alertness for environmental guidelines and duties
- Impart environmental education through systematic environmental management approach and improving environmental standards

- Benchmarking for environmental protection initiatives
- Financial savings through a reduction in resource use
- Development of ownership, personal and social responsibility for the College and its environment
- Enhancement of college profile
- Developing environmental ethic and value systems in youngsters.
- Green auditing should become a valuable tool in the management and monitoring of environmental and sustainable development programs of the college.

### **Target Areas of Green Auditing**

Green audit forms part of a resource management process. Although they are individual events, the real value of green audits is the fact that they are carried out, at defined intervals, and their results can illustrate improvement or change over time. Eco-campus concept mainly focuses on the efficient use of energy and water; minimization of waste generation or pollution and also economic efficiency. All these indicators are assessed in the process of “Green Auditing of educational institute”. Eco-campus focuses on the reduction of contribution to emissions, procuring a cost effective and secure supply of energy, and encouraging and enhancing energy conservation; it promotes personal action, reduces the institute’s energy and water consumption, reduces wastes to landfill, and integrates environmental considerations into all contracts and services considered to have significant environmental impacts.

Target areas included in this green auditing are -

**Water**

**Energy**

**Waste**

**Biodiversity, Flora and fauna**

**Carbon footprint.**



## **AUDITING FOR WATER MANAGEMENT**

The purpose of a water audit report is to provide an assessment of current water usage practices, and provide a roadmap towards decreasing water usage in the future. Water audit is an assessment of how much water is used and how much water can be saved in the college. Conducting a water audit involves calculating water use and identifying simple ways for saving water in the college. There is an increasing awareness around the globe of the centrality of water to our lives. This awareness crosses political and social boundaries. In many places people have difficult access to drinking water. Often it is polluted. Water auditing is a mechanism for conserving water, which will grow in significance in the future as demand for water increases. There is a strong emphasis on principles, and on the relationship of water auditing with associated activities like environmental auditing, environmental management systems, resource conservation, flow measurement, water quality and legal frameworks. Aquifer depletion and water contamination are taking place at unprecedented rates. It is therefore essential that any environmentally responsible institution should examine its water use practices. Reducing your water use can save you money on your water use, wastewater management and energy bills and reduce on-site treatment costs. Water audits provide a way to catalog all water uses in a facility and identify ways to increase water use efficiency. The results can help to prioritize steps to implement cost-effective water-saving measures. It is possible to cut the water usage by as much as 30 percent by implementing simple conservation measures and without drastically modifying the lifestyle. Water auditing is conducted for the evaluation of facilities of raw water intake and determining the facilities for water treatment and reuse. Major consequence of water auditing is gained in terms of rainwater harvesting.

The College is not having any rain water harvesting sites / system. The college has developed FOUR water points in different blocks of the institute.

*(Annexure : - Photo Water points)*

## **AUDITING FOR ENERGY MANAGEMENT**

An energy audit establishes the baseline for any improvements in an organisation's energy use. It provides a comprehensive and systematic method for targeting cost effective efficiency gains. An energy audit is a detailed inventory of the energy performances of the institution carried out under the supervision of Physics faculty. Findings of the report reflects that there are many areas where savings without requiring any significant capital investment can be done. An Energy Audit, or Review, is an investigation of all facets of an organisation's historical and current energy use with the objective of identifying and quantifying areas of energy wastage within the organisation's activities. Energy auditing deals with the conservation and methods to reduce its consumption related to environmental degradation.

*(Annexure : - Photo energy data)*

## **AUDITING FOR WASTE MANAGEMENT**

A waste audit is a physical analysis of waste composition to provide a detailed understanding of problems, identify potential opportunities, and give a detailed analysis of waste composition. A waste audit will help to clearly identify waste generation to:

- Establish baseline or benchmark data.
- Characterize and quantify waste streams.
- Verify waste pathways.
- Identify waste diversion opportunities.
- Identify source reduction opportunities.
- Assess effectiveness and determine ways to improve efficiency

of current waste management systems.

- Gain specific information for local government.
- Obtain detailed data on waste generation.

Solid waste can be divided into two categories: general waste and hazardous waste. General wastes include what is usually thrown away in homes and colleges such as garbage, paper, tins and glass bottles. Hazardous waste is waste that is likely to be a threat to health or the environment like cleaning chemicals and petrol. Unscientific landfills may contain harmful contaminants that leach into soil and water supplies, and produce greenhouse gases contributing to global climate change. Furthermore, solid waste often includes wasted material resources that could otherwise be channeled into better service through recycling, repair, and reuse. Thus the minimization of solid waste is essential for a sustainable college.

The waste management is being performed in three steps

### **A. Solid Waste Management:**

1. Waste bins are placed in the campus at various places like classrooms, faculty rooms, administration office, computer lab, library, corridor, washroom, common room etc.
2. Old newspapers, old files, old home assignments etc. are given for recycling to external agencies.
3. The NSS unit of the college constantly strives for cleanliness. After every week, it organizes cleanliness drive in campus for collection of garbage and solid waste.
4. Collected solid waste is handed over to municipal council for further processing.
5. Compost Pits are also made available in the zoology department of college.
6. For plastic waste management an initiative has been started by Chemistry association of college where students converts plastic waste into useful materials.
7. The biomedical waste from the animal house and different labs is removed regularly, it is collected and disposed off by incineration and also dumped in specially dug pits.

### **B. Liquid Waste Management:**

The college has planned to develop laboratory waste water neutralization plant in post graduate laboratories in next session

### **C. e-Waste Management:**

1. The college uses various types of electronic gadgets like – computers, printers, LCD projectors etc. These products become outdated after few years due to advancement in technology. Institute being aware of e-Waste and its hazards takes initiative to dispose e-waste in proper way.
2. E-waste is sold to scrap merchants for further processing.

3. Inkjet cartridge is also used after refilling. This method also reduces the volume of e-waste generation.

4. Simultaneously students are being encouraged to carry out research on the utilization of e waste. One of the research student has developed method of recovery of silver from e waste.

In addition to this, efforts are being made for carbon neutrality on the campus. The kitchen of the hostel uses the gas burners for cooking so as college canteen. Use of coal/ wood/ kerosene etc is strictly prohibited. In the Department of Chemistry LPG gas burners are used instead of gas plant based on coal/wood/diesel/petrol etc, thus reducing carbon emission.

*(Annexure : - Photo e-waste and dustbins)*

## **AUDITING FOR GREEN CAMPUS - BIODIVERSITY, FLORA AND FAUNA**

Importance of biodiversity is validated in the tradition of Rajasthan. Normally people are conscious about living beings but as the development progress like other things there is also a decline in thinking for the protection of animals and plants. Institute understand the importance and tries to educate their students in a practical way. Since the beginning, trees have furnished us with two of life's essentials, food and oxygen. As we evolved, they provided additional necessities such as shelter, medicine, and tools. Today, their value continues to increase and more benefits of trees are being discovered as their role expands to satisfy the needs created by our modern lifestyles. Trees are an important part of every community. Our streets, parks, playgrounds and backyards are lined with trees that create a peaceful and aesthetically pleasing environment. Trees increase our quality of life by bringing natural elements and wildlife habitats into urban settings. We gather under the cool shade they provide during outdoor activities with family and friends. Using trees in cities to deflect the sunlight reduces the heat island effect caused by pavement and commercial buildings. During the process of photosynthesis, trees take in carbon dioxide and produce the oxygen we breathe.

“One acre of forest absorbs six tons of carbon dioxide and puts out four tons of oxygen. This is enough to meet the annual needs of 18 people.” Trees, shrubs and turf also filter air by removing dust and absorbing other pollutants like carbon monoxide, sulfur dioxide and nitrogen dioxide. Trees control climate by moderating the effects of the sun, rain and wind. Leaves absorb and filter the sun's radiant energy, keeping things cool in summer. Trees also preserve warmth by providing a screen from harsh wind. Trees also lower the air temperature and reduce the heat intensity of the greenhouse effect by maintaining low levels of

carbon dioxide. So while we are busy studying and working on earning those good academic grades, all the trees on campus are also working hard to make the air cleaner for us. Trees on our campus impact our mental health as well; studies have shown that trees greatly reduce stress, which is a huge deal considering that many students are under some kind of stress.

The auditing has been done in two different ways one for flora and other fauna



## Flora of College Campus

### Quantitative data of Plants Species of Government College Bundi

#### Campus 2020-2021

S.N	Name of Plant	Desi name	Families	C.G.	B.G.	Tot al	T/ S	D/ M
1	<i>Acacia leucophloea</i>	<i>Arimed</i>	<i>Fabaceae</i>	6	1	7	T	D
2	<i>Acacia nilotica</i>	<i>Desi Babool</i>	<i>Fabaceae</i>	6	0	6	T	D
3	<i>Adhatoda vasica</i>	<i>Adusa</i>	<i>Acanthaceae</i>	0	10	10	S	D
4	<i>Aegle marmelos</i>	<i>Beal/ Bel patra</i>	<i>Rutaceae</i>	11	12	23	T	D
5	<i>Albizia lebbeck</i>	<i>Siris</i>	<i>Fabaceae</i>	18	6	24	T	D
6	<i>Alianthus excelsa</i>	<i>Mahaneem</i>	<i>Simaroubacea e.</i>	15	8	23	T	D
7	<i>Alstonia scholaris</i>	<i>Satpatti</i>	<i>Apocynaceae</i>	2	3	5	T	D
8	<i>Annona squamosa</i>	<i>Sitafal</i>	<i>Annonaceae</i>	0	2	2	T	D
9	<i>Azadirachta indica</i>	<i>Neem</i>	<i>Meliaceae</i>	62	8	70	T	D
10	<i>Balanites aegyptiaca</i>	<i>Hingot</i>	<i>Zygophyllace ae</i>	55	1	56	T	D
11	<i>Basella rubra</i>	<i>Nakli kali mirch</i>	<i>Besellaceae</i>	0	2	2	C	D
12	<i>Bauhinia variegata</i>	<i>Kachnar</i>	<i>Fabaceae</i>	1	2	3	T	D
13	<i>Bougainvillea glabra</i>	<i>Kagaj fool</i>	<i>Nyctaginacea e</i>	1	2	3	C	D
14	<i>Butea monosperma</i>	<i>Dhak, Plash</i>	<i>Fabaceae</i>	1	0	1	T	D
15	<i>Callistemon viminalis</i>	<i>Bottle brush</i>	<i>Myrtaceae</i>	0	4	4	S	D

16	<i>Calotropis procera</i>	Aak	<i>Asclepiadaceae</i>	25	10	<b>35</b>	S	D
17	<i>Canna indica</i>	(Keli)	<i>Cannaceae</i>	85	850	<b>935</b>	S	M
18	<i>Capparis spinosa</i>	Jaal	<i>Capparaceae</i>	22	1	<b>23</b>	S	D
19	<i>Carissa carandas</i>	Karonda	<i>Apocynaceae</i>	0	1	<b>1</b>	T	D
20	<i>Cassia fistula</i>	Amaltash	<i>Fabaceae</i>	51	14	<b>65</b>	T	D
21	<i>Cassia siamea</i>	Shyam Amaltash	<i>Fabaceae</i>	3	1	<b>4</b>	T	D
22	<i>Casurina</i>	Jhau	<i>Casuarinaceae</i>	0	2	<b>2</b>	T	D
23	<i>Catharanthus roseus</i>	(Sadabahar)	<i>Apocynaceae</i>	26	2	<b>28</b>	S	D
24	<i>Cayratia trifolia</i>	Jangli angoor	<i>Vitaceae</i>	20	25	<b>45</b>	C	D
25	<i>Celosia cristata</i>	(Cock's comb)	<i>Amaranthaceae</i>	1	1	<b>2</b>	S	D
26	<i>Cestrum diurnum</i>	Rat ka Raja	<i>Solanaceae</i>	0	1	<b>1</b>	S	D
27	<i>Cestrum nocturnum</i>	(Raat Rani)	<i>Solanaceae</i>	0	1	<b>1</b>	S	D
28	<i>Coccinia indica</i>	Kandoori	<i>Cucurbitaceae</i>	15	12	<b>27</b>	C	D
29	<i>Cocculus hirsutus</i>	Jal-jamni	<i>Menispermaceae</i>	10	15	<b>25</b>	C	D
30	<i>Crateva religiosa</i>	Varun	<i>Capparaceae</i>	2	0	<b>2</b>	T	D
31	<i>Dalbergia sissoo</i>	Shisam	<i>Fabaceae</i>	2	1	<b>3</b>	T	D
32	<i>Datura metel</i>	Dhatura	<i>Solanaceae</i>	8	5	<b>13</b>	S	D
33	<i>Datura stramonium</i>	Datura	<i>Solanaceae</i>	15	2	<b>17</b>	S	D

34	<i>Delonix regia</i>	<i>Flame Tree</i>	<i>Fabaceae</i>	0	1	<b>1</b>	T	D
35	<i>Dyopsis lutescens</i>	<i>Areca Pam</i>	<i>Arecaceae</i>	10	4	<b>14</b>	T	M
36	<i>Embelica officinalis</i>	<i>Amla</i>	<i>Euphorbiaceae</i>	2	1	<b>3</b>	T	D
37	<i>Eucalyptus rudis</i>	<i>Safeda</i>	<i>Myrtaceae</i>	2	0	<b>2</b>	T	D
38	<i>Euphorbia tithymaloides</i>	<i>Pedilanthus/Nagfan</i>	<i>Euphorbiaceae</i>	1	2	<b>3</b>	S	D
39	<i>Euphorbia trucalli</i>	<i>Thor</i>	<i>Euphorbiaceae</i>	1	1	<b>2</b>	S	D
40	<i>Ficus benghalensis</i>	<i>Bargad</i>	<i>Moraceae</i>	2	1	<b>3</b>	T	D
41	<i>Ficus religiosa</i>	<i>Pipal</i>	<i>Moraceae</i>	2	0	<b>2</b>	T	D
42	<i>Hibiscus rosa-sinensis</i>	<i>China rose</i>	<i>Malvaceae</i>	8	25	<b>33</b>	S	D
43	<i>Holoptelea integrifolia</i>	<i>Churel</i>	<i>Ulmaceae</i>	4	0	<b>4</b>	T	D
44	<i>Ipomea palmata</i>	<i>akoda</i>	<i>Convolvulaceae</i>	0	1	<b>1</b>	S	D
45	<i>Jasminum grandiflorum</i>	<i>(Chamali)</i>	<i>Oleaceae</i>	0	1	<b>1</b>	S	D
46	<i>Lawsonia inermis</i>	<i>Mehandi</i>	<i>Lythraceae</i>	51	2	<b>53</b>	S	D
47	<i>Leucaena leucocephala</i>		<i>Leguminoaceae</i>	<b>0</b>	<b>1</b>	<b>1</b>	<b>T</b>	D
48	<i>Manilkara hexandra</i>	<i>Rani</i>	<i>Sapotaceae</i>	0	1	<b>1</b>	T	D
49	<i>Morinda tomentosa</i>	<i>Aal</i>	<i>Rubiaceae</i>	2	3	<b>5</b>	T	D

50	<i>Morus alba</i>	<i>Shatut</i>	<i>Moraceae</i>	0	1	<b>1</b>	T	D
51	<i>Murraya paniculata</i>	<i>Bux/ Kamini</i>	<i>Rutaceae</i>	0	10	<b>10</b>	S	D
52	<i>Musa paradisiacal</i>	<i>Banana</i>	<i>Musaceae</i>	0	1	<b>1</b>	T	M
53	<i>Nerium indicum</i>	<i>Oleander / Kaner</i>	<i>Apocynaceae</i>	16	7	<b>23</b>	S	D
54	<i>Nyctanthes arbor-tristis</i>	<i>Harsingar Parijat</i>	<i>Nyctaginaceae</i>	7	2	<b>9</b>	S	D
55	<i>Ocimum basilicum</i>	<i>(Marva)</i>	<i>Lamiaceae</i>	4	4	<b>8</b>	S	D
56	<i>Ocimum sanctum</i>	<i>(Tulsi)</i>	<i>Lamiaceae</i>	6	10	<b>16</b>	S	D
57	<i>Pergularia demia</i>	<i>Utaran</i>	<i>Asclepiadaceae</i>	15	10	<b>25</b>	C	D
58	<i>Phoenix sylvestris</i>	<i>Date Palm/ Khajur</i>	<i>Arecaceae</i>	2	2	<b>4</b>	T	M
59	<i>Plumeria rubra</i>	<i>Deshi Champa</i>	<i>Apocynaceae</i>	4	1	<b>5</b>	S	D
60	<i>Pongamia pinnata</i>	<i>Karang</i>	<i>Fabaceae</i>	41	2	<b>43</b>	T	D
61	<i>Quisqualis indica</i>	<i>(Malti bel)</i>	<i>Combretaceae</i>	0	4	<b>4</b>	C	D
62	<i>Rhynchosia minima</i>	<i>Tin patti</i>	<i>Fabaceae</i>	13	10	<b>23</b>	C	D
63	<i>Ricinus communis</i>	<i>Arandi</i>	<i>Euphorbiaceae</i>	2	2	<b>4</b>	S	D
64	<i>Saraca indica</i>	<i>Ashok</i>	<i>Annonaceae</i>	10	10	<b>20</b>	T	D
65	<i>Syzygium cumini</i>	<i>Jamun</i>	<i>Myrtaceae</i>	3	1	<b>4</b>	T	D
66	<i>Tabernemontana divaricata</i>	<i>Chandni</i>	<i>Apocynaceae</i>	30	10	<b>40</b>	S	D
67	<i>Thevetia peruviana</i>	<i>Pili kaner</i>	<i>Apocynaceae</i>	24	60	<b>84</b>	S	D

68	<i>Thuja</i>	<i>Vidhya</i>	<i>Cupressaceae</i>	1	1	2	S	Gymn
69	<i>Tinospora cordifolia</i>	<i>Giloye</i>	<i>Menispermaceae</i>	4	22	26	C	D
70	<i>Vitex negundo</i>	<i>Nirgundi</i>	<i>Verbenaceae</i>	0	2	2	S	D
71	<i>Ziziphus nummularia</i>	<i>Ber</i>	<i>Rhamnaceae</i>	21	2	23	S	D
	<b>Total</b>			<b>751</b>	<b>1223</b>	<b>197</b>		

1/4uksV% C.G.= College Ground; B.G.= Botanical Ground; T= Tree; S= Shrub<sup>1/2</sup>

### Quantitative Data of Plant Families in Government College Bundi Campus 2020-21

S.N	Family	College Ground	Botanical Garden	no. of species	Habit
1	<i>Acanthaceae</i>	0	10	10	SHRUB
2	<i>Amaranthaceae</i>	1	1	2	SHRUB
3	<i>Annonaceae</i>	10	12	22	TREE
4	<i>Apocynaceae</i>	2	4	6	TREE
5	<i>Apocynaceae</i>	100	80	180	SHRUB
6	<i>Arecaceae</i>	2	2	4	TREE

7	<i>Arecaceae</i>	10	4	14	SHRUB
8	<i>Asclepiadaceae</i>	25	10	35	SHRUB
9	<i>Asclepiadaceae</i>	15	10	25	CLIMBER
10	<i>Besellaceae</i>	0	2	2	CLIMBER
11	<i>Cannaceae</i>	85	850	935	SHRUB
12	<i>Capparaceae</i>	2	0	2	TREE
13	<i>Capparaceae</i>	22	1	23	SHRUB
14	<i>Casuarinaceae</i>	0	2	2	TREE
15	<i>Combretaceae</i>	0	4	4	CLIMBER
16	<i>Convolvulaceae</i>	0	1	1	SHRUB
17	<i>Cucurbitaceae</i>	15	12	27	CLIMBER
18	<i>Cupressaceae</i>	1	1	2	SHRUB
19	<i>Euphorbiaceae</i>	2	1	3	TREE
20	<i>Euphorbiaceae</i>	4	5	9	SHRUB
21	<i>Fabaceae</i>	129	28	157	TREE
22	<i>Fabaceae</i>	13	10	23	CLIMBER
23	<i>Lamiaceae</i>	10	14	24	SHRUB
24	<i>Leguminoaceae</i>	0	1	1	TREE
25	<i>Lythraceae</i>	51	2	53	SHRUB
26	<i>Malvaceae</i>	8	25	33	SHRUB
27	<i>Meliaceae</i>	62	8	<b>70</b>	TREE
28	<i>Menispermaceae</i>	14	37	51	CLIMBER
29	<i>Moraceae</i>	4	2	6	TREE
30	<i>Musaceae</i>	0	1	1	TREE
31	<i>Myrtaceae</i>	5	1	6	TREE
32	<i>Myrtaceae</i>	0	4	4	SHRUB

33	<i>Nyctaginaceae</i>	7	2	9	SHRUB
34	<i>Nyctaginaceae</i>	1	2	3	CLIMBER
35	<i>Oleaceae</i>	0	1	1	CLIMBER
36	<i>Rhamnaceae</i>	21	2	23	SHRUB
37	<i>Rubiaceae</i>	2	3	5	TREE
38	<i>Rutaceae</i>	11	12	23	TREE
39	<i>Rutaceae</i>	0	10	10	SHRUB
40	<i>Sapotaceae</i>	0	1	1	TREE
41	<i>Simaroubaceae.</i>	15	8	23	TREE
42	<i>Solanaceae</i>	23	8	31	SHRUB
43	<i>Solanaceae</i>	0	1	1	SHRUB
44	<i>Ulmaceae</i>	4	0	4	TREE
45	<i>Verbenaceae</i>	0	2	2	SHRUB
46	<i>Vitaceae</i>	20	25	45	CLIMBER
47	<i>Zygophyllaceae</i>	55	1	56	TREE

Sr. No	Particular	No.
1	Total No. of Plants	1974
2	Average no of motorcycle in campus	230
3	Average no of Cars in campus	50
4	Average no. of persons in campus	1200
<b>Carbon Credit</b>		65.2 kg of CO <sub>2</sub> e 0.3 kg of CH <sub>4</sub> e 0.02 kg of N <sub>2</sub> O <sub>2</sub> e



## Main Experiment List (UG & PG)

1. Demonstration of plasmolysis using Rhoro discolor leaf of Tradescantia leaf.
2. Demonstration of phenomenon of osmosis by potato osmoscope.
3. Measurement of rate of transpiration by ganong's potometer.
4. Measurement of rate of transpiration famer's potometer.
5. Demonstrate the effect of different wave lengths on photosynthesis using ganong's photo box.
6. Demonstrate CO<sub>2</sub> is required in photosynthesis using mol's half leaf experiments.
7. Separation of chlorophyll pigments using paper chromatography.
8. Preparation of absorption spectrum of the chlorophyll by given plant material.
9. Estimation of chlorophyll-a, chl.-b, and total chl. Pigment in given plant material.
10. Compare the RQ of different materials using Ganong's Respirometer.
11. Introduction to tools and techniques of
  - a. Laminar air flow cabinet plant tissue culture.
  - b. Autoclave
  - c. Ultrafiltration
12. Preparation of culture media.
  - a. MS Media
  - b. PDA Media
13. Demonstration of inoculation technique
  - a. Explants preparation.
  - b. Surface sterilization.

c. Aseptic transfer.

14. Determination of carbonate content in water sample.
15. Determination of pH of soil sample.
16. Determination of density, frequency, abundance of herbaceous species of college campus by quadrat method.
17. Determination of minimum six of quadrat by species area curve method.
18. Phytochemical analysis of starch glucose, sucrose, fat, tannin, protein, anthocyanin.
19. To study the morphological and anatomical adaptation of hydrophytic and xerophytic plants of local area.
20. To calculate and test pollen viability in laboratory by biochemical method.
21. To test pollen viability in laboratory by germinability method. (in vitro germination)
22. A double stained section of plant part of pteridophytes and gymnosperms.
23. Preparation and mounting of the part of bryophyte, fungus, alga and bacteria.
24. Study of cell division by smear preparation of union root tips.
25. Study of genetics using monohybrid and dihybrid ratio.
26. Demonstration of emasculation and bagging technique.
27. Taxonomical description of member of different families of locality available plants.
28. Study of anatomy of primary and secondary growth in monocots and dicots using hand sections.
29. Field study of diversity in leaf shape, size, thickness, structure and development of stomata (using Epidermal peel of leaf) and leaf aestivation.
30. To demonstrate that oxygen is evolved during photosynthesis.

31. To demonstrate that light is necessary for photosynthesis, using Ganong's photo screen.
32. To prepare pure culture by streak plate method.

## **AUDITING FOR CARBON FOOTPRINT**

Colleges are adding new courses and programs for students—from engineering net-zero buildings to building net-zero companies—to develop the talent pipeline for the green economy. Students are passionate about making their campuses more sustainable and are trying hard to make it happen. Colleges are helping the cities reduce greenhouse gas emissions and save energy by reorganizing campus operations. They are leading research on clean technology and electric cars, alternative fuels, and the next generation of batteries. By renovating and retrofitting old buildings, they are reducing energy use and lowering carbon emissions. New low-carbon buildings will minimize our footprint for generations to come. These campus plans will reinforce College management's commitment to a sustainable future, including reducing energy use and emissions, and helping city to meet climate change targets. Carbon footprint is produced via direct emissions of greenhouse gases associated with combustion of fossil fuels for heating and transportation, indirect emissions associated with electricity purchase and finally other emissions related to solid waste, refrigerants, land use management, air travel, etc. Commutation of stakeholders has an impact on the environment through the emission of greenhouse gases into the atmosphere consequent to burning of fossil fuels (such as petrol). The most common greenhouse gases are carbon dioxide, water vapour, methane, nitrous oxide and ozone. An important aspect of doing an audit is to be able to measure the impact so that we can determine better ways to manage the impact. In addition to the water,

waste, energy and biodiversity audits we can also determine what our carbon footprint is, based on the amount of carbon emissions created. One aspect is to consider the distance and method travelled between home and college every day. It undertakes the measure of bulk of carbon dioxide equivalents exhaled by the organization through which the carbon accounting is done. It is necessary to know how much the organization is contributing towards sustainable development. To become carbon neutral, Colleges are trying to reduce their emissions of greenhouse gases, cut their use of energy, use more renewable energy, and emphasize the importance of sustainable energy sources.

## **Methodology of Green Auditing**

The purpose of the audit was to ensure that the practices followed in the campus are in accordance with the Green Policy adopted by the institution. The criteria, methods and recommendations used in the audit were based on the identified risks. The methodology includes: preparation and filling up of questionnaire, physical inspection of the campus, observation and review of the document, interviewing responsible persons and data analysis, measurements and recommendations. The methodology adopted for this audit was a three step process comprising of:

**Data Collection** – In preliminary data collection phase, exhaustive data collection was performed using different tools such as observation, survey communicating with responsible persons and measurements.

Following steps were taken for data collection:

- The team visited each department, centre, Library, canteen etc.
- Data on general information was collected by observation and interview.
- The power consumption of appliances was recorded by taking an average value in some cases.

## **Data Analysis**

Detailed analysis of data collected include : calculation of energy consumption, analysis of latest electricity bill of the campus, understanding the tariff plan provided by the Rajasthan State Electricity Board. Data related to water usages were also analyzed using appropriate methodology.

## **Recommendations**

On the basis of results of data analysis and other observations, some steps for reducing power and water consumption are recommended.

Urgent need and necessarily to develop one Laboratory waste water neutralization plant is there for which institute agreed to initiate by next year.

Proper treatment methods for waste are also suggested.

Use of fossil fuels has to be reduced for the sake of community health. Importance of making a green campus is communicated and mandatory reduction of carbon footprint to curtail the green house gas is also included under the recommendations. The target areas such as water, energy, waste, green campus and carbon footprint particular to the college were evaluated through questionnaire circulated among the students for data collection. Five categories of questionnaires were distributed.

The College is not having any rain water harvesting sites / system. Now it is being suggested by Green Audit team. The roof of college building should be connected through plastic pipes to the tank constructed for this purpose. In this way, the College takes care of its requirement of water. The water collected is used for drinking and watering plants.



**Dr. Narendar Bhojak**  
Coordinator & Asso. Prof.  
GCRC, PG Dept. of Chemistry,  
Govt. Dungar College Bikaner



**Dr. H. S. Bhandari**  
Member & Asso. Prof.  
GCRC, PG Dept. of  
Chemistry,  
Govt. Dungar College Bikaner



# GOVERNMENT COLLEGE BUNDI (RAJ.)

## GREEN AUDIT REPORT SESSION 2020-21

### WATER MANAGEMENT

# Drinking water facilities



Naru Ki Bawari, Kagadi Devra, Police Lines, Bundi, Rajasthan 323001, India

Latitude	Longitude
25.4321666666666	75.64934°
64°	Altitude 272 meters
Local 11:24:04 AM	Thursday, 15-07-2021
GMT 05:54:04 AM	

College ground



Bundi Rd, Police Lines, Bundi, Rajasthan 323001, India

Latitude	Longitude
25.4320499°	75.6497235°
Local 03:21:57 PM	Altitude 0 meters
GMT 09:51:57 AM	Monday, 12-07-2021

Botany department



29, Jawahar Nagar Housing Board, Bundi, Rajasthan 323001, India

Latitude	Longitude
25.4315250000000	75.6497366666667
Local 03:43:18 PM	Altitude 267.7 meters
GMT 10:13:18 AM	Monday, 12-07-2021

Room no-23



Bundi Rd, Police Lines, Bundi, Rajasthan 323001, India

Latitude	Longitude
25.4320016666666	75.6496066666666
Local 03:50:50 PM	Altitude 266.6 meters
GMT 10:20:50 AM	Monday, 12-07-2021

Principal chamber



Raghunath bhavan, c-2 Shrinathpuram,colony, cahtarpura road, Police Lines, Bundi, Rajasthan 323001, India

Latitude	Longitude
25.4310600000000	75.6493383333333
Local 10:48:25 AM	Altitude 267.1 meters
GMT 05:18:25 AM	Tuesday, 13-07-2021

Library



Raghunath bhavan, c-2 Shrinathpuram,colony, cahtarpura road, Police Lines, Bundi, Rajasthan 323001, India

Latitude	Longitude
25.431565°	75.64966°
Local 03:49:16 PM	Altitude 259.9 meters
GMT 10:19:16 AM	Monday, 12-07-2021

College ground



Unnamed Road, Police Lines, Bundi, Rajasthan 323001, India

Latitude	Longitude
25.4319583333333	75.6499316666666
Local 10:47:49 AM	Altitude 276 meters
GMT 05:17:49 AM	Wednesday, 14-07-2021

Geography department



Unnamed Road, Police Lines, Bundi, Rajasthan 323001, India

Latitude	Longitude
25.4329219°	75.6504479°
Local 03:46:58 PM	Altitude 0 meters
GMT 10:16:58 AM	Monday, 12-07-2021

Room no-51



19, shiv colony, Devpura, Bundi, Rajasthan 323001, India

Latitude	Longitude
25.4299532°	75.6497207°
Local 03:49:40 PM	Altitude 0 meters
GMT 10:19:40 AM	Monday, 12-07-2021

Staff room



Raghunath bhavan, c-2 Shrinathpuram,colony, cahtarpura road, Police Lines, Bundi, Rajasthan 323001, India

Latitude	Longitude
25.4305249999999	75.6492383333334
Local 10:54:01 AM	Altitude 267.1 meters
GMT 05:24:01 AM	Tuesday, 13-07-2021

Library



# Borewell



Raghunath bhavan, c-2 Shrinathpuram,colony,  
cahtarpura road, Police Lines, Bundi, Rajasthan  
323001, India

Latitude	Longitude
25.430944999999999	75.64928833333333
98°	°

Local 10:54:32 AM	Altitude 270.2 meters
GMT 05:24:32 AM	Tuesday, 13-07-2021



Unnamed Road, Police Lines, Bundi, Rajasthan  
323001, India

Latitude	Longitude
25.432378333333333	75.64985833333334
36°	°

Local 11:26:00 AM	Altitude 267.7 meters
GMT 05:56:00 AM	Thursday, 15-07-2021

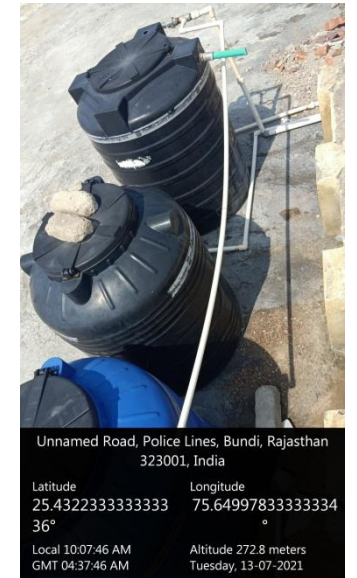
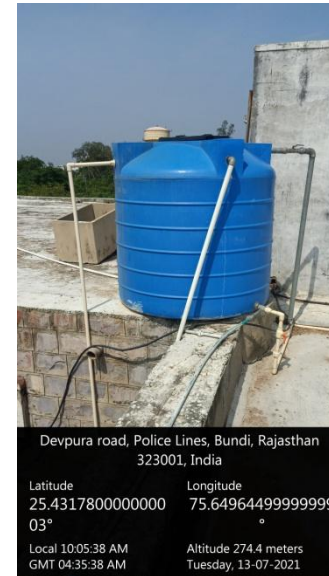


Raghunath bhavan, c-2 Shrinathpuram,colony,  
cahtarpura road, Police Lines, Bundi, Rajasthan  
323001, India

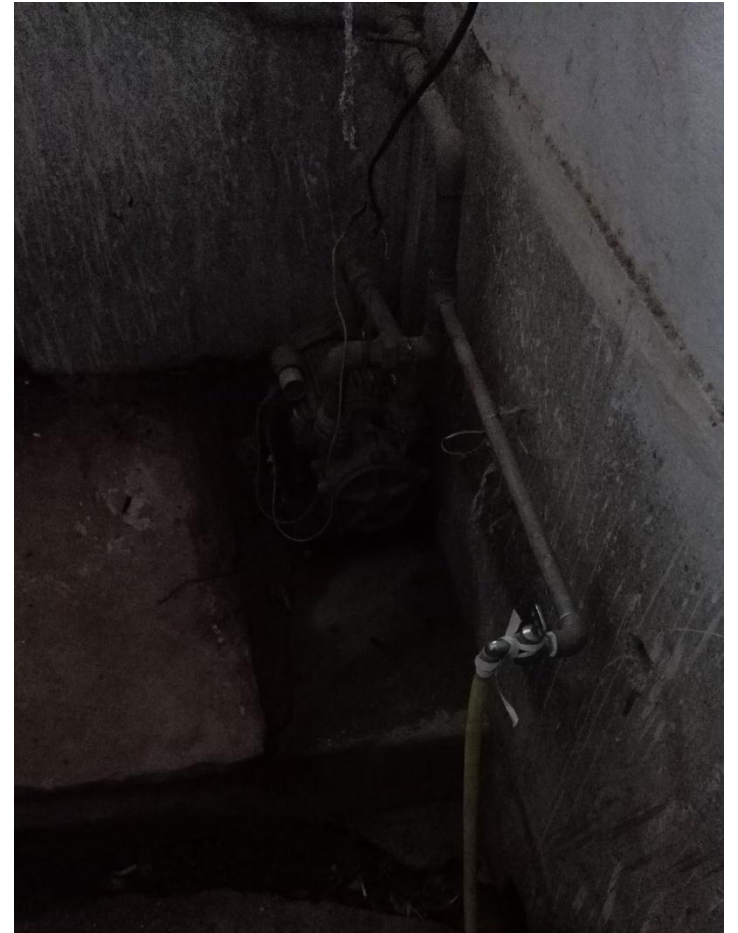
Latitude	Longitude
25.430899999999999	75.64913666666666
98°	°

Local 10:55:49 AM	Altitude 266.1 meters
GMT 05:25:49 AM	Tuesday, 13-07-2021

# WATER TANK



# LIBRARY WATER SUPPLY



Raghunath bhavan, c-2 Shrinathpuram,colony,  
cahtarpura road, Police Lines, Bundi, Rajasthan  
323001, India

Latitude  
25.4306944°

Longitude  
75.6491142°

Local 10:53:32 AM  
GMT 05:23:32 AM

Altitude 213.9 meters  
Tuesday, 13-07-2021

# WATER SUPPLY PIPE LINES



Bundi Rd, Police Lines, Bundi, Rajasthan 323001, India  
 Latitude 25.4318716666666 Longitude 75.6495933333333  
 66°  
 Local 10:05:17 AM Altitude 275.7 meters  
 GMT 04:35:17 AM Tuesday, 13-07-2021



Naru Ki Bawari, Kagadi Devra, Police Lines, Bundi, Rajasthan 323001, India  
 Latitude 25.4320866666666 Longitude 75.6494666666667  
 7°  
 Local 10:03:57 AM Altitude 272.3 meters  
 GMT 04:33:57 AM Tuesday, 13-07-2021



Bundi Rd, Police Lines, Bundi, Rajasthan 323001, India  
 Latitude 25.4318816666666 Longitude 75.6495133333333  
 62°  
 Local 10:53:27 AM Altitude 275.7 meters  
 GMT 05:23:27 AM Wednesday, 14-07-2021



Unnamed Road, Police Lines, Bundi, Rajasthan 323001, India  
 Latitude 25.432036° Longitude 75.650832°  
 Local 10:51:41 AM Altitude 214.8 meters  
 GMT 05:21:41 AM Wednesday, 14-07-2021



Devapura road, Police Lines, Bundi, Rajasthan 323001, India  
 Latitude 25.4317816666666 Longitude 75.6496449999999  
 66°  
 Local 10:05:37 AM Altitude 274.5 meters  
 GMT 04:35:37 AM Tuesday, 13-07-2021



Bundi Rd, Police Lines, Bundi, Rajasthan 323001, India  
 Latitude 25.4318700000000 Longitude 75.6495516666667  
 04°  
 Local 10:53:05 AM Altitude 275.1 meters  
 GMT 05:23:05 AM Wednesday, 14-07-2021



Bundi Rd, Police Lines, Bundi, Rajasthan 323001, India  
 Latitude 25.432025° Longitude 75.649565°  
 Local 10:10:49 AM Altitude 273.5 meters  
 GMT 04:40:49 AM Tuesday, 13-07-2021



Bundi Rd, Police Lines, Bundi, Rajasthan 323001, India  
 Latitude 25.4320366666666 Longitude 75.64967°  
 65°  
 Local 10:10:28 AM Altitude 273.6 meters  
 GMT 04:40:28 AM Tuesday, 13-07-2021



Bundi Rd, Police Lines, Bundi, Rajasthan 323001, India  
 Latitude 25.4320366666666 Longitude 75.64967°  
 65°  
 Local 10:10:29 AM Altitude 273.6 meters  
 GMT 04:40:29 AM Tuesday, 13-07-2021



Bundi Rd, Police Lines, Bundi, Rajasthan 323001, India  
 Latitude 25.4318850000000 Longitude 75.6495566666667  
 05°  
 Local 10:49:29 AM Altitude 276.7 meters  
 GMT 05:19:29 AM Wednesday, 14-07-2021





# September 2020

**अथर्व विद्यालय निगम लिमिटेड**  
 211111034667  
 THE PRINCIPAL SA GOVERNMENT COLLEGE  
 282908  
 745  
 24-09-2020  
 10130  
 14-09-2020  
 1

श्रेणी	विवरण	मूल्य	विवरण	मूल्य
0.12	7616.45	7619.00	142.75	1761.00
1	100000	100000	1	100000
2	10000	10000	2	10000
3	10000	10000	3	10000
4	10000	10000	4	10000
5	10000	10000	5	10000
6	10000	10000	6	10000
7	10000	10000	7	10000
8	10000	10000	8	10000
9	10000	10000	9	10000
10	10000	10000	10	10000
11	10000	10000	11	10000
12	10000	10000	12	10000
13	10000	10000	13	10000
14	10000	10000	14	10000
15	10000	10000	15	10000
16	10000	10000	16	10000
17	10000	10000	17	10000
18	10000	10000	18	10000
19	10000	10000	19	10000
20	10000	10000	20	10000
21	10000	10000	21	10000
22	10000	10000	22	10000
23	10000	10000	23	10000
24	10000	10000	24	10000
25	10000	10000	25	10000
26	10000	10000	26	10000
27	10000	10000	27	10000
28	10000	10000	28	10000
29	10000	10000	29	10000
30	10000	10000	30	10000
31	10000	10000	31	10000

**अथर्व विद्यालय निगम लिमिटेड**  
 211111034090  
 THE PRINCIPAL SA GOVERNMENT B COLLEGE  
 202908  
 270  
 24-09-2020  
 10130  
 14-09-2020  
 1

श्रेणी	विवरण	मूल्य	विवरण	मूल्य
-0.01	27618.66	27620.00	520.38	28340.00
1	100000	100000	1	100000
2	10000	10000	2	10000
3	10000	10000	3	10000
4	10000	10000	4	10000
5	10000	10000	5	10000
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7	10000	10000	7	10000
8	10000	10000	8	10000
9	10000	10000	9	10000
10	10000	10000	10	10000
11	10000	10000	11	10000
12	10000	10000	12	10000
13	10000	10000	13	10000
14	10000	10000	14	10000
15	10000	10000	15	10000
16	10000	10000	16	10000
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23	10000	10000	23	10000
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25	10000	10000	25	10000
26	10000	10000	26	10000
27	10000	10000	27	10000
28	10000	10000	28	10000
29	10000	10000	29	10000
30	10000	10000	30	10000
31	10000	10000	31	10000

**अथर्व विद्यालय निगम लिमिटेड**  
 211111043625  
 PRINCIPAL GOVT COLLEGE C/O BAPS HOSTEL  
 202908  
 190  
 24-09-2020  
 10137  
 14-09-2020  
 1

श्रेणी	विवरण	मूल्य	विवरण	मूल्य
0.23	1953.15	1953.05	36.00	1990.00
1	100000	100000	1	100000
2	10000	10000	2	10000
3	10000	10000	3	10000
4	10000	10000	4	10000
5	10000	10000	5	10000
6	10000	10000	6	10000
7	10000	10000	7	10000
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9	10000	10000	9	10000
10	10000	10000	10	10000
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24	10000	10000	24	10000
25	10000	10000	25	10000
26	10000	10000	26	10000
27	10000	10000	27	10000
28	10000	10000	28	10000
29	10000	10000	29	10000
30	10000	10000	30	10000
31	10000	10000	31	10000

# October 2020

**जयपुर विद्युत वितरण निगम लिमिटेड**  
जयपुर विद्युत निगम, जयपुर, राजस्थान

जयपुर विद्युत निगम लिमिटेड  
जयपुर विद्युत निगम, जयपुर, राजस्थान

आर.ए. 1 शुल्क

क्र.सं. 21111104997	वित्त वर्ष 2020-21	दि. 10-10-2020
THE PRINCIPAL GOVERNMENT COLLEGE	जयपुर	दि. 13-10-2020
आधार नं. 3460885133	शेड नं. 01E	विद्युत विभाग - R
पत्र नं. 79/1	दि. 25-10-2020	सूचक सं. 1

शेड नं. (क.)	शेड नं. (ख.)	शेड नं. (ग.)	शेड नं. (घ.)	शेड नं. (ङ.)
7549.40	8006.90	14458.00	236.21	14745.00

क्र.सं.	विवरण	ए.डी. सं.	ए.डी. सं.	ए.डी. सं.	ए.डी. सं.	शेड नं. (क.)
1	बिजुली शुल्क	180000A	1	1	1	7549.40
2	वैद्युत शुल्क	180000B	1	1	1	8006.90
3	वैद्युत शुल्क	180000C	1	1	1	14458.00
4	वैद्युत शुल्क	180000D	1	1	1	236.21
5	वैद्युत शुल्क	180000E	1	1	1	14745.00

शेड नं. (क.)

क्र.सं.	विवरण	ए.डी. सं.	ए.डी. सं.	ए.डी. सं.	ए.डी. सं.	शेड नं. (क.)
1	बिजुली शुल्क	180000A	1	1	1	7549.40
2	वैद्युत शुल्क	180000B	1	1	1	8006.90
3	वैद्युत शुल्क	180000C	1	1	1	14458.00
4	वैद्युत शुल्क	180000D	1	1	1	236.21
5	वैद्युत शुल्क	180000E	1	1	1	14745.00

**जयपुर विद्युत वितरण निगम लिमिटेड**  
जयपुर विद्युत निगम, जयपुर, राजस्थान

जयपुर विद्युत निगम लिमिटेड  
जयपुर विद्युत निगम, जयपुर, राजस्थान

आर.ए. 1 शुल्क

क्र.सं. 21111104996	वित्त वर्ष 2020-21	दि. 10-10-2020
THE PRINCIPAL SA. GOVERNMENT HIGH SCHOOL	जयपुर	दि. 13-10-2020
आधार नं. 9495885133	शेड नं. 667	विद्युत विभाग - R
पत्र नं. 79/1	दि. 23-10-2020	सूचक सं. 1

शेड नं. (क.)	शेड नं. (ख.)	शेड नं. (ग.)	शेड नं. (घ.)	शेड नं. (ङ.)
4.36	38488.94	38493.30	768.95	39262.00

क्र.सं.	विवरण	ए.डी. सं.	ए.डी. सं.	ए.डी. सं.	ए.डी. सं.	शेड नं. (क.)
1	बिजुली शुल्क	180000A	1	1	1	4.36
2	वैद्युत शुल्क	180000B	1	1	1	38488.94
3	वैद्युत शुल्क	180000C	1	1	1	38493.30
4	वैद्युत शुल्क	180000D	1	1	1	768.95
5	वैद्युत शुल्क	180000E	1	1	1	39262.00

शेड नं. (क.)

क्र.सं.	विवरण	ए.डी. सं.	ए.डी. सं.	ए.डी. सं.	ए.डी. सं.	शेड नं. (क.)
1	बिजुली शुल्क	180000A	1	1	1	4.36
2	वैद्युत शुल्क	180000B	1	1	1	38488.94
3	वैद्युत शुल्क	180000C	1	1	1	38493.30
4	वैद्युत शुल्क	180000D	1	1	1	768.95
5	वैद्युत शुल्क	180000E	1	1	1	39262.00

**जयपुर विद्युत वितरण निगम लिमिटेड**  
जयपुर विद्युत निगम, जयपुर, राजस्थान

जयपुर विद्युत निगम लिमिटेड  
जयपुर विद्युत निगम, जयपुर, राजस्थान

आर.ए. 1 शुल्क

क्र.सं. 211111043525	वित्त वर्ष 2020-21	दि. 10-10-2020
PRINCIPAL GOVT COLLEGE CHO BOYS HOSTEL	जयपुर	दि. 13-10-2020
आधार नं. 3028442511	शेड नं. 100	विद्युत विभाग - R
पत्र नं. 79/1	दि. 23-10-2020	सूचक सं. 1

शेड नं. (क.)	शेड नं. (ख.)	शेड नं. (ग.)	शेड नं. (घ.)	शेड नं. (ङ.)
0.30	1544.00	1544.00	36.43	1580.00

क्र.सं.	विवरण	ए.डी. सं.	ए.डी. सं.	ए.डी. सं.	ए.डी. सं.	शेड नं. (क.)
1	बिजुली शुल्क	180000A	1	1	1	0.30
2	वैद्युत शुल्क	180000B	1	1	1	1544.00
3	वैद्युत शुल्क	180000C	1	1	1	1544.00
4	वैद्युत शुल्क	180000D	1	1	1	36.43
5	वैद्युत शुल्क	180000E	1	1	1	1580.00

शेड नं. (क.)

क्र.सं.	विवरण	ए.डी. सं.	ए.डी. सं.	ए.डी. सं.	ए.डी. सं.	शेड नं. (क.)
1	बिजुली शुल्क	180000A	1	1	1	0.30
2	वैद्युत शुल्क	180000B	1	1	1	1544.00
3	वैद्युत शुल्क	180000C	1	1	1	1544.00
4	वैद्युत शुल्क	180000D	1	1	1	36.43
5	वैद्युत शुल्क	180000E	1	1	1	1580.00





# December 2020

**जयपुर विद्युत वितरण निगम लिमिटेड**  
 जयपुर विद्युत वितरण निगम लिमिटेड  
 जयपुर विद्युत वितरण निगम लिमिटेड  
 जयपुर विद्युत वितरण निगम लिमिटेड

**ACN A-1-BUMER**  
 21111034997  
 200912  
 10069  
 09-12-2020  
 871  
 1.0

श्रीकांत कांत शिंदे (श.)	अर्चना डी. शिंदे (श.)	श्रीकांत कांत शिंदे (श.)	श्रीकांत कांत शिंदे (श.)	श्रीकांत कांत शिंदे (श.)	श्रीकांत कांत शिंदे (श.)
7798.43	825.85	8029.00	357.74	8160.50	

**जयपुर विद्युत वितरण निगम लिमिटेड**  
 जयपुर विद्युत वितरण निगम लिमिटेड  
 जयपुर विद्युत वितरण निगम लिमिटेड  
 जयपुर विद्युत वितरण निगम लिमिटेड

**ACN A-1-BUMER**  
 21111034999  
 200912  
 10067  
 09-12-2020  
 7072  
 1

श्रीकांत कांत शिंदे (श.)	अर्चना डी. शिंदे (श.)	श्रीकांत कांत शिंदे (श.)	श्रीकांत कांत शिंदे (श.)	श्रीकांत कांत शिंदे (श.)	श्रीकांत कांत शिंदे (श.)
3041.20	19028.30	48370.00	500.41	48329.00	

**जयपुर विद्युत वितरण निगम लिमिटेड**  
 जयपुर विद्युत वितरण निगम लिमिटेड  
 जयपुर विद्युत वितरण निगम लिमिटेड  
 जयपुर विद्युत वितरण निगम लिमिटेड

**ACN A-1-BUMER**  
 21111034325  
 200912  
 10069  
 09-12-2020  
 192  
 1

श्रीकांत कांत शिंदे (श.)	अर्चना डी. शिंदे (श.)	श्रीकांत कांत शिंदे (श.)	श्रीकांत कांत शिंदे (श.)	श्रीकांत कांत शिंदे (श.)	श्रीकांत कांत शिंदे (श.)
3048.23	1977.15	4025.00	77.21	4103.00	

**जयपुर विद्युत वितरण निगम लिमिटेड**  
 जयपुर विद्युत वितरण निगम लिमिटेड  
 जयपुर विद्युत वितरण निगम लिमिटेड  
 जयपुर विद्युत वितरण निगम लिमिटेड

**ACN A-1-BUMER**  
 21111034997  
 200912  
 10069  
 09-12-2020  
 871  
 1.0

**जयपुर विद्युत वितरण निगम लिमिटेड**  
 जयपुर विद्युत वितरण निगम लिमिटेड  
 जयपुर विद्युत वितरण निगम लिमिटेड  
 जयपुर विद्युत वितरण निगम लिमिटेड

**ACN A-1-BUMER**  
 21111034999  
 200912  
 10067  
 09-12-2020  
 7072  
 1

**जयपुर विद्युत वितरण निगम लिमिटेड**  
 जयपुर विद्युत वितरण निगम लिमिटेड  
 जयपुर विद्युत वितरण निगम लिमिटेड  
 जयपुर विद्युत वितरण निगम लिमिटेड

**ACN A-1-BUMER**  
 21111034325  
 200912  
 10069  
 09-12-2020  
 192  
 1

# January 2021

 <b>जबपुर विपुल वितरण निगम लिमिटेड</b> <small>राज्य सरकार, जबपुर, झारखंड</small> <small>जबपुर, झारखंड - 831001</small>	<b>आर.सी. नंबर : 211111004997</b> <b>आर.सी. नंबर : 211111004997</b>
<b>आर.सी. नंबर : 211111004997</b> <b>आर.सी. नंबर : 211111004997</b>	<b>आर.सी. नंबर : 211111004997</b> <b>आर.सी. नंबर : 211111004997</b>

<b>आर.सी. नंबर : 211111004997</b> <b>आर.सी. नंबर : 211111004997</b>	<b>आर.सी. नंबर : 211111004997</b> <b>आर.सी. नंबर : 211111004997</b>	<b>आर.सी. नंबर : 211111004997</b> <b>आर.सी. नंबर : 211111004997</b>
------------------------------------------------------------------------	------------------------------------------------------------------------	------------------------------------------------------------------------

क्र.सं.	विवरण	प्रमाण	प्रमाण	प्रमाण	प्रमाण
1	...	...	...	...	...
2	...	...	...	...	...
3	...	...	...	...	...
4	...	...	...	...	...
5	...	...	...	...	...
6	...	...	...	...	...
7	...	...	...	...	...
8	...	...	...	...	...
9	...	...	...	...	...
10	...	...	...	...	...
11	...	...	...	...	...
12	...	...	...	...	...
13	...	...	...	...	...
14	...	...	...	...	...
15	...	...	...	...	...
16	...	...	...	...	...
17	...	...	...	...	...
18	...	...	...	...	...
19	...	...	...	...	...
20	...	...	...	...	...
21	...	...	...	...	...
22	...	...	...	...	...
23	...	...	...	...	...
24	...	...	...	...	...
25	...	...	...	...	...
26	...	...	...	...	...
27	...	...	...	...	...
28	...	...	...	...	...
29	...	...	...	...	...
30	...	...	...	...	...

 <b>जबपुर विपुल वितरण निगम लिमिटेड</b> <small>राज्य सरकार, जबपुर, झारखंड</small> <small>जबपुर, झारखंड - 831001</small>	<b>आर.सी. नंबर : 211111004996</b> <b>आर.सी. नंबर : 211111004996</b>
<b>आर.सी. नंबर : 211111004996</b> <b>आर.सी. नंबर : 211111004996</b>	<b>आर.सी. नंबर : 211111004996</b> <b>आर.सी. नंबर : 211111004996</b>

क्र.सं.	विवरण	प्रमाण	प्रमाण	प्रमाण	प्रमाण
1	...	...	...	...	...
2	...	...	...	...	...
3	...	...	...	...	...
4	...	...	...	...	...
5	...	...	...	...	...
6	...	...	...	...	...
7	...	...	...	...	...
8	...	...	...	...	...
9	...	...	...	...	...
10	...	...	...	...	...
11	...	...	...	...	...
12	...	...	...	...	...
13	...	...	...	...	...
14	...	...	...	...	...
15	...	...	...	...	...
16	...	...	...	...	...
17	...	...	...	...	...
18	...	...	...	...	...
19	...	...	...	...	...
20	...	...	...	...	...
21	...	...	...	...	...
22	...	...	...	...	...
23	...	...	...	...	...
24	...	...	...	...	...
25	...	...	...	...	...
26	...	...	...	...	...
27	...	...	...	...	...
28	...	...	...	...	...
29	...	...	...	...	...
30	...	...	...	...	...

 <b>जबपुर विपुल वितरण निगम लिमिटेड</b> <small>राज्य सरकार, जबपुर, झारखंड</small> <small>जबपुर, झारखंड - 831001</small>	<b>आर.सी. नंबर : 2111110043525</b> <b>आर.सी. नंबर : 2111110043525</b>
<b>आर.सी. नंबर : 2111110043525</b> <b>आर.सी. नंबर : 2111110043525</b>	<b>आर.सी. नंबर : 2111110043525</b> <b>आर.सी. नंबर : 2111110043525</b>

क्र.सं.	विवरण	प्रमाण	प्रमाण	प्रमाण	प्रमाण
1	...	...	...	...	...
2	...	...	...	...	...
3	...	...	...	...	...
4	...	...	...	...	...
5	...	...	...	...	...
6	...	...	...	...	...
7	...	...	...	...	...
8	...	...	...	...	...
9	...	...	...	...	...
10	...	...	...	...	...
11	...	...	...	...	...
12	...	...	...	...	...
13	...	...	...	...	...
14	...	...	...	...	...
15	...	...	...	...	...
16	...	...	...	...	...
17	...	...	...	...	...
18	...	...	...	...	...
19	...	...	...	...	...
20	...	...	...	...	...
21	...	...	...	...	...
22	...	...	...	...	...
23	...	...	...	...	...
24	...	...	...	...	...
25	...	...	...	...	...
26	...	...	...	...	...
27	...	...	...	...	...
28	...	...	...	...	...
29	...	...	...	...	...
30	...	...	...	...	...





April 2021

Table with columns for bill details, meter information, and a detailed list of charges including energy charges, meter charges, and taxes. Total amount is 7568.00.

Table with columns for bill details, meter information, and a detailed list of charges including energy charges, meter charges, and taxes. Total amount is 31358.00.

Table with columns for bill details, meter information, and a detailed list of charges including energy charges, meter charges, and taxes. Total amount is 782.00.



# June 2021

FORM NO. 211118  
**अजयपुर विद्युत वितरण निगम लिमिटेड**  
 1000 1000000  
 1999-2000  
 2000-2001  
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 2013-2014  
 2014-2015  
 2015-2016  
 2016-2017  
 2017-2018  
 2018-2019  
 2019-2020  
 2020-2021  
 2021-2022

FORM NO. 211118  
**अजयपुर विद्युत वितरण निगम लिमिटेड**  
 1000 1000000  
 1999-2000  
 2000-2001  
 2001-2002  
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 2008-2009  
 2009-2010  
 2010-2011  
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 2013-2014  
 2014-2015  
 2015-2016  
 2016-2017  
 2017-2018  
 2018-2019  
 2019-2020  
 2020-2021  
 2021-2022

FORM NO. 211118  
**अजयपुर विद्युत वितरण निगम लिमिटेड**  
 1000 1000000  
 1999-2000  
 2000-2001  
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 2014-2015  
 2015-2016  
 2016-2017  
 2017-2018  
 2018-2019  
 2019-2020  
 2020-2021  
 2021-2022

FORM NO. 211118  
**अजयपुर विद्युत वितरण निगम लिमिटेड**  
 1000 1000000  
 1999-2000  
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 2016-2017  
 2017-2018  
 2018-2019  
 2019-2020  
 2020-2021  
 2021-2022

FORM NO. 211118  
**अजयपुर विद्युत वितरण निगम लिमिटेड**  
 1000 1000000  
 1999-2000  
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 2016-2017  
 2017-2018  
 2018-2019  
 2019-2020  
 2020-2021  
 2021-2022

FORM NO. 211118  
**अजयपुर विद्युत वितरण निगम लिमिटेड**  
 1000 1000000  
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 2018-2019  
 2019-2020  
 2020-2021  
 2021-2022

FORM NO. 211118  
**अजयपुर विद्युत वितरण निगम लिमिटेड**  
 1000 1000000  
 1999-2000  
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 2018-2019  
 2019-2020  
 2020-2021  
 2021-2022

FORM NO. 211118  
**अजयपुर विद्युत वितरण निगम लिमिटेड**  
 1000 1000000  
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 2016-2017  
 2017-2018  
 2018-2019  
 2019-2020  
 2020-2021  
 2021-2022

FORM NO. 211118  
**अजयपुर विद्युत वितरण निगम लिमिटेड**  
 1000 1000000  
 1999-2000  
 2000-2001  
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 2012-2013  
 2013-2014  
 2014-2015  
 2015-2016  
 2016-2017  
 2017-2018  
 2018-2019  
 2019-2020  
 2020-2021  
 2021-2022

**Dr. Narendra Bhojak**  
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 Govt. Dungar College Bikaner

**Dr. H. S. Bhandari**  
 Member & Asso. Prof.  
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 Govt. Dungar College Bikaner