GREEN AUDIT REPORT 2022 RIMT University, Mandi Gobindgarh



INTERNAL QUALITY ASSURANCE CELL (IQAC)



Delhi-Jalandhar GT Road (NH1), Sirhind Side, Mandi Gobindgarh, Punjab - 147301 (India)

Ref No. RIMT/ DIR/04-02/L-160-A

Dates: - 04-02-2022

RIMT – Green Audit Committee (RGAC)

Green audit is a process of systematic identification, quantification, recording, reporting and analysis of components of environmental diversity of various establishments. The committee focused on Material issues pertaining to University which have the highest influence on the Green Attributes of the University. Following are the objectives of RIMT-Green Audit Committee (RGAC).

- 1. To conduct the baseline survey to know the reality status of green practices and accordingly to develop a green policy (vision document) and framework for the University.
- 2. To evaluate the current practices which can have impact on environment such as of resource utilization, waste management, water management, energy conservations and Floral & Faunal diversity in University.
- 3. To increase environmental consciousness throughout the campus among all the stakeholders.
- 4. To give the direction to work on some local environmental issues through motivates staff as well as students to optimize sustainable use of available natural resources.

For successful implementation as per aforementioned following Faculty Members are nominated for Green Audit Committee:

- 1. Ar Vijay Christropher (School of Architecture)
- 2. Dr. Sandeep Singla (Department of Civil Engineering)
- 3. Dr. Satish Saini (Department of Electrical Engineering)
- 4. Dr. Pawan Kr. Yadav (Department of Mechanical Engineering)
- 5. Dr. Manish Gupta (Department of Mechanical Engineering)
- 6. Dr. Manish Sharma (Department of Mechanical Engineering)
- 7. Mr. J. S Dhariwal (School of Agriculture)
- 8. Dr. Rahat Ashraf (School of Agriculture)
- 9. Er. Sakshi Bhatia
- (Department of Civil Engineering)

and cel So **Director Académics**



RIMT UNIVERSITY

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Ref No: RIMT/DIR/02-07/162-A

Date: 07/02/2022

<u>RIMT- External Green Audit Committee</u>

External Green audit committee is a process of systematic identification, quantification, recording, reporting and analysis of components of environment diversity of various establishments. The committee focused on material issues pertaining to University which have the highest influence on the Green Attributes of the University.

Following are the objectives of RIMT- External Green Audit committee.

- 1. To conduct the baseline survey to know the reality status of green practices and accordingly to develop a green policy (vision document) and framework for the university
- To evaluate the current prices which can have impact on the environment such as of resources utilization, waste management, water management, energy conservations and floral & faunal diversity in University
- 3. To increase the environment consciousness throughout the campus among all stakeholders.
- To give the direction to work on some local environment issues through motivates staff as well as students to optimize sustainable use of available natural resources

For successful implementation as per aforementioned, following External Faculty members are nominated for Green audit committee:

- 1. Ar. Rajnish Walia (Visiting Faculty/Practicing Architecture Rajpura, Punjab)
- 2. Dr. Gaurav Goel (Associate Professor, School of Energy & Tech., Patiala, Punjab)
- 3. Dr.Gursewak Brar Professor, Electrical Engineering BBSBEC, Fatehgarh Sahib.
- 4. Dr. Amit Handa (Associate Professor, Department of Mechanical Engineering, IKGPTU, Kapurthala)
- 5. Dr J.S Pal (Professor, School of Agriculture(Retired) Punjab Agriculture University, Ludhiana)

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Director Academics

Established by Punjab Govt. vide Punjab Act No. 31 of 2015 & under section 2 (f) of the UGC

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INTRODUCTION:

Green Audit is a process of systematic identification, quantification, recording, reporting and analysis of components of environmental diversity of institute. It aims to analyse environmental practices within and outside of the concerned place, which will have an impact on the eco-friendly atmosphere. Green audit is a valuable means for a college to determine how and where they are using the most energy or water or other resources; the college can then consider how to implement changes and make savings. It can create health consciousness and promote environmental awareness, values and ethics. It provides staff and students better understanding of green impact on campus. If self-enquiry is a natural and necessary outgrowth of a quality education, it could also be stated that institutional self-enquiry is a natural and necessary outgrowth of a quality educational institution. Thus, it is imperative that the college evaluate its own contributions toward a sustainable future. 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 prevalent. The rapid urbanization and economic development at local, regional and global level has led to several environmental and ecological crises. On this background it becomes essential to adopt the system of the Green Campus for the institutes which will lead for sustainable development and at the same time reduce a sizable amount of atmospheric CO2 from the environment. The National Assessment and Accreditation Council, New Delhi (NAAC) has made it mandatory that all Higher Educational Institutions should submit an annual Green Audit Report. Moreover, it is part of Corporate Social Responsibility of the Higher Educational Institutions to ensure that they contribute towards the reduction of global warming through carbon footprint reduction measures.

OBJECTIVES:

In recent time, the Green Audit of an institution has been becoming a paramount important for self-assessment of the institution which reflects the role of the institution in mitigating the present environmental problems. The college has been putting efforts to keep our environment clean since its inception. Therefore, the purpose of the present green audit is to identify, quantify, describe and prioritize framework of Environment Sustainability in compliance with the applicable regulations, policies and standards. The main objectives of carrying out Green Audit are:

- To map the Geographical Location of the college
- To document the floral and faunal diversity of the college
- To record the meteorological parameter of Fatehgarh Sahib where college is situated
- To document the ambient environmental condition of weather, air, water and noise of the college
- To document the waste disposal system
- To estimate the Energy requirements of the college
- To report the expenditure on green initiatives during the last five years

METHODOLOGY:

The purpose of the green audit of RIMT is to ensure that the practices followed in the campus are in accordance with the Green Policy of the country. The methodology includes: collection of data, physical inspection of the campus, observation and review of the documentation and data analysis.

ABOUT THE University:

Driven by a strong inclination to assign the futuristic parameters to given standards of education today, RIMT carries forward its illustrious history since inception in 1998. Continuing on its path of growth, RIMT experienced the greatest period of momentum in its history while adding a new institution every year from 2002 to 2017. This legacy continues with RIMT University, Mandi Gobindgarh established by Govt. of Punjab vide Punjab Act, No. 31 of 2015 & under section 2(f) of the UGC.

Since the establishment of RIMT, our gifted; skilled and dedicated faculty have been sharing their knowledge and expertise to pave the way for students and their futures. We believe game-changing discoveries depend on bringing the right people together in an environment that gives them room to innovate. Education for Life is in our DNA and we pursue future endeavours with the same spirit, always.

We educate & prepare students here keeping the unseen challenges, which life throws at time, in mind. RIMT offers a variety of strengths-oriented-resources to identify and nurture the strengths of profound learners engaged in our variety of courses in Engineering & Technology, Hotel management & Catering Technology, Sciences, Agricultural, Management, Humanities & Arts, Education, Legal studies, Computer Application, Library, Design, Paramedical, Pharmacy, Nursing, Journalism and Mass communication

RIMT lays special emphasis on the activities that strongly enhances the inherent cognitive or perceptual powers of the mind. Sports & games, art, theatre and paintings et al are some of the extra-curricular activities that make RIMT stand apart in the crowd.

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Our Strength:

RIMT has become a progressive hub of education for students seeking higher education in various disciplines. Recognized as a melting pot of various cultures from around the world, RIMT provides a tranquil haven for knowledge-exchange.In addition to regular classroom education, we also prepare our students for their lifetime, by keeping in mind the unseen challenges which life might throw at them. RIMT offers a variety of resources based on individual strengths of students. The academic faculty and staff also facilitate time-to-time consultation, certification, and leadership development programs for further development and growth. As a part of our endeavour further the leadership qualities in learners, RIMT constantly strives to further the research and dissemination of teaching, learning, and leading with a difference.

Our Values

Every single thing that has been materialized in the world started as a dream. When supported with a strong value-system and consistent efforts, those dreams start to take wings. Since the day of its inception, RIMT has lived by these values, and has now grown into a well-reputed group of institutions. We believe in instilling these values into the moral fibre of our students as well. It is a combination of outstanding education, customized attention, and positive guidance, which ensures that our students achieve heights of success not just professionally, but also as future pillars of society.

Facilities

With The Finest Facilities, The RIMT Campus Is Built Around Student Ambitions. Students Have Unmatched Opportunities For Hands-On Learning, Utilising Some Of The Most Sophisticated Facilities, Available Anywhere.

Our RIMT campus comes equipped with all the facilities that you get in every university of international standards. While spending your days at our campus, you will have a wholesome experience. You will get to nurture your talents. Aside from studying, whether you want to blossom your talents of music, sports or other arts, you will have the necessary infrastructure, tools and opportunities to work on them.

You can spread your wings culturally and socially. The lush green grounds studded with trees and other plantations gives you plenty of open space to study, hold picnics (under the moonlight or under the sun), or simply cherish the verdant surroundings sitting on the immaculately maintained grass or under a dense tree. Students at RIMT come from different countries and thrive in our inclusive environment.

We want you to feel at home. We know once you get admission in our university you will be spending a major part of your life within the campus. Of course, your main purpose of staying at RIMT is pursuing your scholarly goals but it doesn't mean other amenities that enrich your life must take a back seat. Suppose you're putting in late hours in the library or in your room, buried under scores of books, notebooks and your laptop, and suddenly you need some coffee or need to stretch your body and limbs in the basketball court. You can hit one of the snack kiosks or the gym or the basketball court whenever you feel like. Need cash to pay? We have got in-campus bank ATM working round-the-clock.

VISION & MISSION VISION STATEMENT:

OUR VISION: To become one of the most preferred learning places and a centre of excellence to promote and nurture future leaders who would facilitate the desired change in the society

OUR MISSION: To impart teaching and learning through cutting-edge technologies supported by the world class infrastructure with a view to empower and transform young minds into capable leaders and responsible citizens of India instilled with high ethical and moral values.

GREEN AUDITING:

The University has adopted the 'Green Campus' system for environmental conservation and sustainability. There is main three pillars i.e. zero environmental foot print, positive impact on occupant health and performance and 100% graduates demonstrating environmental literacy. The goal is to reduce CO_2 emission, energy and water use, while creating atmosphere where students can learn and be healthy.

LAND USE ANALYSIS, RIMT University, Mandi Gobindgarh, PUNJAB (As on 04-02-2022)

GENERAL OVERVIEW OF THE CONCEPT OF LANDUSE

Land use refers to human activities and the various uses which are carried on and derived from land. Viewing the earth from space, it is now very crucial in man's activities on natural resource. In situations of rapid changes in land use, observations of the Earth from space give the information of human activities and utilization of the landscape.

Remote sensing and GIS techniques are now providing new tools for advanced land use mapping and planning. The collection of remotely sensed data facilitates the synoptic analyses of earth system, functions, patterning, and change in the local, regional as well as at global scales over time. Satellite imagery particularly is a valuable tool for generating land use map.

METHODOLOGY ADOPTED FOR LAND USE MAPPING

Three types of data that are GPS points, field survey data and Google earth data for Geo referencing have been used in this study. Land use map of the study area have been prepared using the above three types of data with the help of ArcGIS Pro software.

DATA PROCESSING AND ANALYSIS

Land use map preparation is executed through the following steps: Acquisition of data (Location: 30.6481106, 76.331786), Geo-coding and Geo referencing of satellite imageries by extracting the ground control points. Supervised classification was carried out with the aid of ground truth data collected during field survey. Scanning and digitization of maps and editing of all the Geo-referenced maps were done using GIS. Data manipulation and analysis and linking the spatial data with the attribute data for creation of topology was carried out using GIS software. Creation of GIS output in the form of land use map showing various land use have been prepared. Therefore, attempt has been made in this study to map land use for RIMT University, Punjab with a view to detect the land consumption in the built-up land area using both remote sensing and GIS techniques.

GEOGRAPHICAL LOCATION WITH CAMPUS MAP IN SCALE

The college has a sprawling pollution-free campus spread over 65.08 acres of land in the heart of District Fatehgarh Sahib. Fatehgarh Sahib is a historical place related to the martyrdom of younger sons 'Sahibzadas' of Sri Guru Gobind Singh Ji, the tenth Sikh Guru. It has an ideal geographical location with the proximity to the important cities of the region i.e. Chandigarh, Ludhiana and Patiala. The college is located at 7.5 KMs from Sirhind Railway Station, 48 KMs from Chandigarh, 64 KMs from Ludhiana, 52 KMs from Roopnagar & 40 KMs from Patiala. The nearest Airport is Chandigarh. Scaled image of college campus is shown in Photo 1. Green color in Map is representing green area. The Google aerial views of College Campus Part1 and Part 2 have been shown in Photo 2 and 3 respectively which are showing different Academic Blocks, Admin Block, Hospital, Sports Area, Hostels and Residential areas.



Figure- Map of Campus



Figure- Aerial View of Campus

LAND USE DATA OF RIMT UNIVERSITY, PUNJAB

CATEGORIES OF LAND USE	Ground Coverage AREA(m ²)
PLANTATION AREA	1,30,332.86 (49.49%)
BUILT UP AREA (BUILDINGS)	40,440.17 (15.35 %)
BUILT UP AREA (PARKING & ROADS)	39,630.60 (15.05 %)
FUTURE EXPANSION	52,978.5 (20.11%)
TOTAL AREA	2,63,381.53 (65.08 Acres)



The total area of RIMT University is 2, 63,381 m^2 out of which the built up area

(include Roads) is 30.40% (i.e. $80,070 \text{ m}^2$) and plantation area is 49.49% (i.e. 1, $30,332 \text{ m}^2$).

LAND USE (BUILT UP AREA) ANALYSIS:

The Built up area of 30.40% (i.e 80,070 m²) consists of the following regions as stated below for land consumption in built up area of RIMT. The RIMT campus built up areas have Administrative Block, Hospital, Academic Blocks 1-7, Workshops, Boys & Girls Hostels, Guest House, Villas, Staff Residences, Sports Facilities, Cafeteria and Food Court.

RIMT UNIVERSITY				
LAND AREA	AREA IN ACRES	AREA IN SQM		
AS PER APPROVED PLANS	58.34	236093.58		
NEW LAND 01	14.00	56655.98		
NEW LAND 01	3.74	15147.38		
TOTAL LAND	76.08	307896.95		
SCHOOL LAND (MINUS)	11.00	-44515.42		
	65.08	263381.53		
BLOCKS NAMES	NO. OF FLOORS	GROUND COVERAGE AREAS (SQM.)		
ACADEMIC BLOCK 1 (A,B,C,E,F,G)	3-4	7696.95		
WORKSHOP 1	1	1445.87		
ACADEMIC BLOCK 2A, 2B, EMERGENCY ,OPD, WORKSHOP 2	5	3999.19		
ACADEMIC BLOCK 3	4	1738.84		
ACADEMIC BLOCK 4A, 4B, 4C, ADMIN BLOCK	4	4441.77		
WORKSHOP 3	2	1485.23		
ACADEMIC BLOCK (5A)	4	405.73		
ACADEMIC BLOCK (5B)	2	923.40		
ACADEMIC BLOCK (5C)	3	915.32		
ACCOUNTS & STUDENTS	4			
SECTION /DRONE KNOWLEDGE CENTER		525.73		
ACADEMIC BLOCK 6	3	1799.47		
ACADEMIC BLOCK 7	4	549.61		
UTILITY BLOCK	1	92.81		

CENTRAL STORE	4	330.30	
FOOD COURT	1	2172.55	
SHOPS	2	216.14	
BOYS HOSTEL 1	4	2481.37	
BOYS HOSTEL 2 + CAFFETARIA	4	1533.88	
BOYS HOSTEL 3	5	3503.38	
GIRLS HOSTEL 1	3	867.92	
GIRLS HOSTEL 2	4	1613.15	
GIRLS HOSTEL 3	4	556.99	
VILLAS 1-3	2	309.75	
VILLAS 4	2	103.25	
FACULTY STUDIO APPARTMENT	4	362.41	
GUEST HOUSE	2	332.00	
SECURITY CKECK POST	1	37.16	
		40440.17	
OPEN / GREEN SPACES		GROUND COVERAGE AREAS (SQM.)	
CRICKET GROUND		15558.65	
FOOTBALL GROUND +		10070.00	
INFINITE GREEN		19979.88	
BOYS HOSTEL 3 GROUND		2788.15	
ROSE GARDEN		2274.92	
BACK LAWN 1		3090.93	
BACK LAWN 2		1436.50	
SUMMER FIELD		1824.79	
GIRL'S HOSTEL 3 GROUND		2480.86	
GIRL'S HOSTEL 1 GROUND		4424.47	
CAFFETARIA PARK		588.21	
PORCH PARK		631.24	
ACADEMIC BLOCK 01 COURTYARD A		2285.86	
ACADEMIC BLOCK 02 COURTYARD B		1167.78	
NEW LAND 01		56655.52	
NEW LAND 02		15135.12	
		130322.86	
BUILT OPEN SPACE			
UNIVERSITY CAMPUS ROADS A		15485.14	
UNIVERSITY CAMPUS ROADS B		2727.61	

BASKETBALL COURT + TENNIS COURT	6053.05
GREEN HOUSE	2943.09
FOOD COURT	2172.55
PARKING	
BUS / CAR PARKING	4278.80
ARCHITECTURE	935.19
HOSPITAL SIDE	636.09
ACADEMIC BLOCK 5B FRONT	393.67
BOYS HOSTEL 3 SIDE	599.22
ACADEMOIC BLOCK 5A SIDE	420.88
ACADEMOIC BLOCK 5C FRONT	705.48
GIRLS HOSTEL 1 FRONT	966.43
BANK SIDE	1313.41
	39630.60

Table: Area occupied by various buildings at RIMT University

FINDINGS:

RIMT University, which was established in the year 2015, has an ecofriendly environment. It has a long legacy of healthy environmental practices including periodic plantation, their preservation and maintenance. Its land use is such that about 75% of the total area is occupied by open land and plantation that generates a better and sustainable campus environment.

TREE DIVERSITY OF RIMT UNIVERSITY, PUNJAB:

RIMT is within the geo-position between latitude 30.6481106 N and longitude 76.331786 E in Fatehgarh Sahib, Punjab, India. It encompasses an area of about 65.08 Acres. The area is immensely diverse with a variety of tree species performing a variety of functions. Most of these tree species are planted in different periods of time through various plantation programs organized by the authority and have become an integral part of the college. The trees of the college have increased the quality of life, not only the college fraternity but also the people around of the college in terms of contributing to our environment by

providing oxygen, improving air quality, climate amelioration, conservation of water, preserving soil, and supporting wildlife, controlling 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. Many spices of birds are dependent on these trees mainly for food and shelter. Nectar of flowers and plants is a favorite of birds and many insects. Leaf - covered branches keep many animals, such as birds and squirrels, out of reach of predators. Different species display a seemingly endless variety of shapes, forms, texture and vibrant colors. Even individual trees vary their appearance throughout the course of the year as the seasons change. The strength, long lifespan and regal stature of trees give them a monument – like quality. They also remind us the glorious history of Fatehgarh Sahib and our institution in particular. We often make an emotional connection with these trees and sometime become personally attached to the ones that we see every day. A thick belt of large shady trees in the periphery of the college have found to be bringing down noise and cut down dust and storms. Thus, the college has been playing a significant role in maintaining the environment of the entire FATEHGARH SAHIB town and its surrounding areas. The following are the tree species with whom we are being attached-

S.No.	Botanical Name	Family	Common Name	Total
1	Terminalia arjuna	Combretaceae	Arjun	5
2	Aegle marmelos	Rutaceae	Bael	3
3	Callistemon spp.	Myrataceae	Bottle Brush	13
4	Bambusa vulgaris	Poaceae	Bamboo	43
5	Alstonia scholaris	Apocynaceae	Devil "s" tree (Satpatia)	18
6	Syzygium cumini	Myrtaceae	Jamun	3
7	Sterculia alata	Sterculiaceae	Kasah	5
8	Citrus reticulate/ Citrus	Rutaceae	Lemon/Lime	10
	aurantifolia			
9	Chukrasia tabularis	Meliaceae	Mahogany (Chukrasya)	49

10	Madhuca indica	Sapotaceae	Mahua	8
11	Azadirachta indica	Meliaceae	Neem	11
12	Pinus roxburghii	Pinaceae	Pine	4
13	Morus rubra	Moraceae	Red Mulberry	7
14	Moringa oleifera	Moringaceae	Sohanjana, Drumstick	7
15	Pongamia pinnata	Anacardiaceae	Sukhchain	4
16	Saraca asoca	Leguminosae	Ashok	6
17	Eucalyptus tereticornis	Myrtaceae	Safeda	1
18	Roystonea Regia	Arecaceae	Royal Palm	65
19	Cassia fistula	Fabaceae	Amaltas	2
20	Ficus religiosa	Moraceae	Pipal	5
21	Melia azedarach	Meliaceae	Drek	6
22	Mangifera indica	Anacardiaceae	Mango	5
23	Psidium guajava	Myrataceae	Guava	4
24	Mimusops elengi	Sapotaceae	Moulsari	43
25	Pterospermum acerifolium	Malvaceae	Kanak Champa	6
26	Grevillea robusta	Proteaceae	Silver Oak	13
27	Acacia nilotica	Fabaceae	Kikar	4
28	Bauhinia variegata	Fabaceae	Kachnaar	4
29	Araucaria columnaris	Araucariaceae	Christmas tree	1
30	Ficus benjamina	Moraceae	Java willow	42
31	Ficus ilastica tricolour	Moraceae	Rubber plant	1
32	Delonix regia	Fabaceae	Gulmohar	1
33	Livistona chinensis	Arecaceae	Fan Palm	8
34	Wodyetia bifurcata	Arecaceae	Fox Tail Palm	12
35	Lagerstroemia speciosa	Lythraceae	Pride of India	1
36	Gmelina arborea	Verbenaceae	Gamhar	4
37	Maduca indica	Sapotaceae	Mahua	10
38	Plumeria rubra	Apocynaceae	Pegoda	18
39	Saraca asoca syn. Saraca	Caesalpiniacea	Sita Ashoka	10
	indica	e		
		(leguminoceae)		
40	Rose spp.	Rosaceae	Gulab	100
41	Hibiscus rosa sinensis	Malvaceae	Hibiscus	40
42	Mesua ferrea	Calophyllacea	Nag kesar	2
		e		
43	Butea monosperma	Leguminoceae	Palas	8
44	Yucca aloifolia	Asparagaceae	Aloe yucca	10
45	Michelia champaka	Magnoliaceae	Swarna champa	12
46	Sabal palmetto	Arecaceae	Cabbage palm	7

47	Terminalia arjuna	Combretaceae	Arjun	5
48	Bauhinia variegate	Fabaceae	Kachnar	8
49	Pongama pinnata	Leguminoceae	Karanj/Sukh chain	6
50	Illex aquifolium	Aquifoliaceae	English holly	8
51	Magnolia grandiflora	Magnoliaceae	Southern Magnolia	15
52	Polyalthia longifolia	Annonaceae	Drier regions of india	8
53	Roystonea spp.	Arecaceae	Royal Palm	12
54	Chrysalidocarpus	Arecaceae	Cane Palm	6
	lutescens			
55	Butia capitata	Arecaceae	Butia Palm	7
56	Wodyetia bifurcata	Arecaceae	Foxtail Palm	11
57	Hyophorbe lagenicaulis	Arecaceae	Bottle Palm	9
58	Phoenix sylvestris	Arecaceae	Silver date palm	5
59	Agava vivipara	Asparagaceae	Caribbean agava	5
60	Caryota urens	Arecaceae	Fishtail palm	4
61	Coryllus avellana	Betuliaceae	Common hazel	3
62	Cypressus	Cupressaceae	Mediterraneancypress	13
	sempervirens			
63	Cycas circinalis	Cycdaceae	Queen sago	6
64	Euphorbia lactea	Euphorbiaceace	Mottled spurge	50
65	Ficus benjamina	Moraceae	Weeping fig	9
66	Juniperus horizontalis	Cupressaceae	Creeper	10
67	Musa acuminata	Musaceae	banana	2
68	Roystonea regia	Arecaceae	Cuban royal palm	8
69	Cordyline fruticosa	Aspargaceae	Cabbage tree	5
70	Polyalthia longifolia	Annonaceae	Ashoka	8
		Total		874

Table: List of tree species at RIMT UNIVERSITY, PUNJAB



Figure 1



Figure- Tree species of RIMT UNIVERSITY



Figure-3

Fig.-Represents the Main Entry Road of RIMT University Campus



Figure-Trees near Cafeteria



Figure: Entry point at Central Workshop



Figure-Tree Plantation drive

FAUNAL DIVERSITY IN RIMT University CAMPUS:

RIMT is located in Fatehgarh Sahib District of Punjab. Fatehgarh Sahib is a town and a sacred pilgrimage site of Sikhism in the North West Indian State of Punjab. The highest temperature is recorded 38⁰ C just prior to the onset of monsoon (around May- early June). Summer rain is normal, and is principally caused from late June to August by the moisture-laden South-West Monsoon, on striking the Himalayan foothills of the north. The climatic condition of the Fatehgarh Sahib district as a whole and RIMT in particular is very suitable for a wide variedly of flora and fauna to support its rich biodiversity. The faunal Diversity of RIMT campus has been studied and documented as below:

S.No	Common Name	Scientific Name
1.	Rose ringed parakeet	Psittacula krameri
2.	Squirrel	Funambulus palmarum
3.	Common Myna	Acridotheres tristis
4.	Pigeon	Columbia livia
5.	Dove	Eurasian collared dove
6.	Yellow swsp	Polistes olivaceus
7.	Butterfly	Catopsilia crocale
8.	Butterfly	Catopsila pomona
9.	House fly	Musca domestica
10.	Lizard	Hemidactylus frenatus
11.	House crow	Corvus splendens
12.	Butterfly	Catopsila pyranthe
13.	Butterfly	Danaus chrysippus
14.	Black garden ant	Camponotus major
15.	Little black ant	Camponotus minor

Table: Common and Scientific names of birds and animals

Green Audit Report, RIMT University, Fatehgarh Sahib (Punjab)

16.	Indian pariah dog	Canis lupus familiaris
17.	Purple sunbird	Cinnyris asiaticua
18.	Butterfly	Papilio polytes
19.	Babbler	Turdoides striata





Fatehgarh Sahib, Punjab 140408, India Ma2H-OPB, Fatehgarh Sahib, Punjab 140408, India	Dove (Eurasian collared dove
Fatehgarh Sahib, PB, India Micho, Fatehgarh Sahib, PB, India Micho, Fatehgarh Sahib, PB, India Micho, Fatehgarh Sahib, 14730); Li 30 65134, Long 76, 128783 Jul 29/2022 10:37 AM	Yellow wasp (Polistes olivaceus)
The bank to the ba	Butterfly (<i>Catopsilia</i> <i>crocale</i>)

Fatehgarh Sahib, PB, India Amioh, Fatehgarh Sahib, 147301, Lat 30.651635, Long 76.328988 04/29/2022 10:29 AM	Butterfly (<i>Catopsilia</i> <i>crocale</i>)
Picfengert Seltu B-B nedu Antobi, Fatengart Seltu 123201, Lisz 30 651003, Long 76.328613 0/29/2022 10:33 AM	House fly (Musca domestica)
Fatehgarh Sahib, Patehgarh Sahib, Patronia Sofo2/2022 11:10 AM	Lizard (<i>Hemidactylu</i> s frenatus)



Retengart Sahib, PB, India Anio, Fatehgart Sahib, 1473012 05/02/2022 10:41 AM	Black garden ant (<i>Camponotus</i> <i>major</i>)
Tiendern Benen, Pen, Inder Sieder ander in Benengen	Little black ant (<i>Camponotus</i> <i>minor</i>)
	Purple sunbird (Cinnyris asiaticua)

en Schort Steel Products Georgie	Butterfly (Papilio polytes)
Fatehgarh Sahib, PB, India Amloh, Fatehgarh Sahib, PB, India Amloh, Fatehgarh Sahib, PB, India Lat 30.637964, Long 76.329853 05/04/2022 09:06 AM	Babbler (Papilio polytes)

WEATHER DATA OF FATEHGARH SAHIB AND RIMT:

STATION: FATEHGARH SAHIB (INDIA (STATIONS NORTH OF LATITUDE 20~N)) Location: 30.6435° N, 76.3970° E

In Fatehgarh Sahib, the climate is warm and temperate. The summers are much rainier than the winters in Fatehgarh Sahib. The average annual temperature in Fatehgarh Sahib is 24.3 °C and precipitation level is about 770 mm.

The driest month is generally November. There is 19.4 mm of precipitation in April. The greatest amount of precipitation occurs in July, with an average of 256

mm. With an average of 33.6 °C, May is the warmest month. The lowest temperatures in the year occur in January, when it is around 6°C. The precipitation varies 252 mm between the driest month and the wettest month. The variation in temperatures throughout the year is 20.3 °C.

WEATHER DATA MONTH WISE FATEHGARH SAHIB (FROM JANUARY 2021 TO DECEMBER 2021)



The likes of an alluvial plain are strong characteristics of the city of Fatehgarh Sahib and its surroundings. The city does have a Central location in the plan region. The geographical co-ordinate of Fatehgarh Sahib is 30.6435° N, 76.3970° E. The city has an average altitude of 808 feet or 246 meters from the average sea level. The erstwhile land of Fatehgarh Sahib was very much feasible for peanut cultivation with sand dunes. However, a lot of irrigation and environmental changes have made the land more viable for wheat cultivation. The climatic conditions bear a strong resemblance with the other cities in the northern part of India. The summers are usually very hot and the winters are very cold. The summers are prevalent during the months of April to September with May, June, July, till mid-August being the hottest months. The winter is prevalent from the

month of November till the month of March. There is onset of Monsoon in September and from mid of September till November one experiences the transitional weather.

AIR QUALITY IN FATEHGARH SAHIB AND RIMT:

The ambient air quality data for Fatehgarh Sahib and RIMT for the last one year shows that there are very less polluted particles in ambient air; AQI for SO2 & NOX parameters are within the range of Indian living standards, there are a number of factors responsible for this cleanliness, calmness and serenity in this area. Firstly, population which is most responsible for all the problems and hurdles in smooth living is lowest here of all the districts of Punjab. Secondly, in this area more trees have been planted as compared to other cities. A very beautiful and historical park loaded with a large number and variety of trees known as "Aam Khaas Bhag" is situated here which reminds us the era of great Mughal emperor Jahangir. The NH-1 is also approximately 500 metres away from the University, which might be responsible for heavy density traffic throughout the year and thus might be causing lot of vehicular emissions as well as a lot of dust emissions due to the movement of vehicular traffic. Therefore, the ambient air quality of Fatehgarh Sahib Area falls in between moderate to rich quality state. The Punjab Pollution Control Board is pondering over the various possibilities to reduce the air pollution for the improvement of ambient air quality with respect to AQI is concerned. However, the annual average value of PM10, SO2, NOx in the ambient air quality of Fatehgarh Sahib city falls in the range of $49-226\mu g/m3$, $26-93 \mu g/m3$, $6-17 \mu g/m3$, $26-69 \mu g/m3$ for most of the months, as such, the graded response action plan to eradicate the problem. These values are in acceptable range, as suggested by GOI (See Coloured Table).

AIR QUALITY DETERMINATION

S.N	Months	<i>PM</i> ₁₀	<i>PM</i> _{2.5}	S_{o2}	СО	Ozone	NOX	Nh_3	Benzene
		μg	μg	μg	μg	μg	μg	μg	$\mu g/m^3$
		/m ³	$/m^{3}$	/m ³					
1	January	169.45	73.63	17.32	0.54	16.17	32.55	40.67	0.87
2	February	158.42	70.19	14.76	0.48	18.81	52.89	44.72	0.95
3	March	143.99	64.92	15.72	0.41	19.72	27.13	36.10	0.74
4	April	100.36	66.26	16.91	0.72	25.58	26.46	27.34	0.97
5	May	120.82	62.16	11.67	0.38	23.97	43.89	22.35	0.81
6	June	91.51	51.35	9.93	0.41	32.86	31.18	16.41	0.83
7	July	49.63	38.35	6.59	0.47	26.74	26.62	20.45	0.79
8	August	77.43	45.38	6.77	0.66	25.37	30.22	21.78	2.22
9	September	49.12	26.53	6.01	0.66	24.62	32.16	24.9	2.04
10	October	151.00	71.16	9.41	0.80	23.03	33.37	37.98	0.94
11	November	226.12	93.06	9.62	0.99	26.18	69.04	53.00	1.18
12	December	191.90	90.55	10.92	0.76	22.48	52.96	41.64	1.25

Parameter	Result (Range)
<i>PM</i> ₁₀	49.12-226.12
PM _{2.5}	26.53-93.06
S _{o2}	6.01-17.32
СО	0.38-0.99
Ozone	16.17-32.86
NO _X	26.62-69.04
Nh ₃	16.41-53.00
Benzene	0.74-2.22

AQI Category standard, Pollutants and Health Breakpoints								
AQI Category (Range)	<i>PM</i> ₁₀	<i>PM</i> _{2.5}	NO _X	Ozone	CO	S _{o2}	Nh ₃	
Good (0-50)	0-50	0-30	0-40	0-50	0-1.0	0-40	0-200	
Satisfactory (51-100)	51-100	<mark>31-60</mark>	41-80	51-100	1.1-2.0	41-80	201- 400	
Moderately polluted (101-200)	101-250	61-90	81-180	101-168	2.1-10	81-380	401- 800	

Poor (201-300)	251-350	91-120	181-280	169-208	10-17	381-800	801-
(1200
Very poor (301-400)	351-430	121-250	281-400	209-748	17-34	801-1600	1200-
(301-400)							1800
Severe (401-500)	430+	250+	400+	748+	34+	1600+	1800+

RIMT AQI Status (Number of Days)					
	2021				
Good	50	309			
Satisfactory	120				
Moderate	139				
Poor	42	50			
Very poor	8				
Severe	0				
Total number of Days	359	359			

WATER ANALYSIS REPORT OF RIMT:

Water quality testing is important because it identifies contaminants and prevents water- borne diseases. Drinking or using contaminated water can result in severe illness or death. That is why it is important to ensure that drinking water is safe, clean and free from bacteria and disease.

The parameters for water quality are determined by the intended use. Work in the area of water quality tends to be focused on water that is treated for human consumption, or in the environment.

Drinking water indicators:

- The following is a list of indicators often measured by situational category:
- Alkalinity
- Color of water

- pH value
- Taste and odor (geosmin, 2-Methylisoborneol (MIB), etc.)
- Dissolved metals and salts (sodium, chloride, potassium, calcium, manganese, magnesium)
- Microorganisms such as fecal coliform bacteria (Escherichia coli), Cryptosporidium, and Giardia lamblia; see Bacteriological water analysis
- Dissolved metals and metalloids (lead, mercury, arsenic, etc.)
- Dissolved organics: colored dissolved organic matter (CDOM), dissolved organic carbon (DOC)
- Heavy metals

WATER ANALYSIS REPORT

DISTRICT WATER TESTING LABORATORY, FATEHGARH SAHIB Water Supply & Sanitation Division, Opposite DC residnance, Fatehgarh Sahib

dwtlfgs@gmail.com

To,

Rimt University Opp. Floating Restaurant, G. T. Road Sirhind Side , Mandi Gobindgarh (FGS)

No.: DWTLFGS/2223/00031 Dated : 23/05/2022

Subject : Testing Reports of Water Samples.

Reference: Your Letter/SRF No. 1 Dated: 12/05/2022

As per above cited subject and reference, Please find enclosed here with the report of 2 Water sample/s received on dated 12/05/2022. It is request to fill the attached feedback form and send it back to District Water Testing Laboratory, Fatehgarh Sahib

D/A : Test Report

Bluster

Authorized Signatory For, District Water Testing Laboratory, Fatehgarh Sahib

DISTRICT WATER TESTING LABORATORY, FATEHGARH SAHIB Water Supply & Sanitation Division, Opposite DC residnance, Fatehgarh Sahib



dwtlfgs@gmail.com

	TEST REPORT						
Name & Address of Customer : Rimt University		Customer Reference No.	No : 1 Dated : 12/05/2022				
		Sample Submitted by	Raman Kumar				
Mandi Gobindga	rh (FGS)	Date of Sample Receipt	12/05/2022				
······································		Analysis Starting Date	18/05/2022				
		Analysis completion Date	20/05/2022				
Discipline : Chemical Testing		Group: Water					
Test Report No.:	DWTLFGS/2223/00031	Date of Issue :	23/05/2022				
Registration no.:	DWTLFGS/REG2223/00119	Condition of Sample :	Unsealed				
Source :	NA	Quantity/Type of Bottle:	500 ml / Amber Colored Glass Bottle				
Scheme :	NA	Location/Depth :	NA / NA				
Village :	NA	Habitation :	NA				
Block:	NA	District :	Fatehgarh Sahib				
Latitude :	NA	Longitude:	NA				
Sample Type: Wa	ter						

Sr.	Deverseter	Decult	As per IS-10500:2012 (2nd Rev.)		11-1-1-1	Deference Mathed
No	Parameter	Acceptable Permissible Limit Limit	Unit	Reference Method :		
1	pН	7.14	6.5-8.5	No Relaxation		IS 3025 (Part 11-1993) Electrometric Method
2	Colour	1	5	15	Hazen	IS 3025(Part 4-2021) Visual Comparison Method
3	Odour	AGREEABLE	Agreeable	Disagreeable		IS 3025 (Part 5 – 2018) (Second Revision)
4	Taste	AGREEABLE	Agreeable	Disagreeable		IS 3025 (Part 8 – 1984) (RA 2017)
5	TDS	90	500	2000	mg/l	IS 3025 (Part 16-1984) Gravimetric Method
6	Turbidity	BDL	1	5	NTU	IS 3025 (Part 10-1984) Nephelometric Method
7	Alkalinity	48	200	600	mg/l	IS 3025 (Part 23-1986) Indicator Method
8	Hardness	48	200	600	mg/l	IS 3025 (Part 21- 2019) EDTA Method
9	Calcium	2	75	200	mg/l	IS 3025 (Part 40-1991) EDTA Titrimetric Method
10	Magnesium	11	30	100	mg/l	APHA (23rd Ed.2017) Method: 3500-Mg+2 B By Calculation Method
11	Chloride	16	250	1000	mg/l	IS 3025 (Part 32-1988) Argentometric Method

This Report is issued under the following terms & Condition :

1. This report is referring only to the tested sample and for applicable parameter.

2. The sample will be destroyed after retention time unless otherwise specified specially.

3. This report is not to be reproduce wholly or in part and can't beused be as evidence in court of law.

4. Abbreviation used (TDS = Total Dissolved Solids, mg/l = milligram per liter, BDL = Below detection limit, APHA = American Public Health Association, IS = Indian Standard, NT = Not Tested, NA = Not Applicable NTU = Nephelometric Turbidity Unit, RA = Reaffirmed)

5. * Value not available or test not performed for this parameter.

Bluster

Sh. Brij Bhushan Quality Manager Authorized Signatory For, District Water Testing Laboratory, Fatehgarh Sahib

------ End of the Test Report

Page No : 2/2

DISTRICT WATER TESTING LABORATORY, FATEHGARH SAHIB Water Supply & Sanitation Division, Opposite DC residnance, Fatehgarh Sahib



dwtlfgs@gmail.com

	TEST REPORT						
Name & Address of Customer : Rimt University		Customer Reference No.	No : 1 Dated : 12/05/2022				
		Sample Submitted by	Raman Kumar				
Mandi Gobindga	rh (FGS)	Date of Sample Receipt	12/05/2022				
		Analysis Starting Date	18/05/2022				
		Analysis completion Date	20/05/2022				
Discipline : Chemical Testing		Group: Water					
Test Report No.:	DWTLFGS/2223/00031	Date of Issue :	23/05/2022				
Registration no.:	DWTLFGS/REG2223/00118	Condition of Sample :	Unsealed				
Source :	NA	Quantity/Type of Bottle:	500 ml / Amber Colored Glass Bottle				
Scheme :	NA	Location/Depth :	NA / NA				
Village :	NA	Habitation :	NA				
Block:	NA	District :	Fatehgarh Sahib				
Latitude :	NA	Longitude:	NA				
Sample Type: Wa	ter		•				

Sr.	Sr. Devementer	Decult	As per IS-10500:2012 (2nd Rev.)		11-14		
No	Parameter	Result	Acceptable Limit	Permissible Limit	Unit	Reference Method :	
1	рН	7.99	6.5-8.5	No Relaxation		IS 3025 (Part 11-1993) Electrometric Method	
2	Colour	1	5	15	Hazen	IS 3025(Part 4-2021) Visual Comparison Method	
3	Odour	AGREEABLE	Agreeable	Disagreeable		IS 3025 (Part 5 – 2018) (Second Revision)	
4	Taste	AGREEABLE	Agreeable	Disagreeable		IS 3025 (Part 8 – 1984) (RA 2017)	
5	TDS	400	500	2000	mg/l	IS 3025 (Part 16-1984) Gravimetric Method	
6	Turbidity	BDL	1	5	NTU	IS 3025 (Part 10-1984) Nephelometric Method	
7	Alkalinity	268	200	600	mg/l	IS 3025 (Part 23-1986) Indicator Method	
8	Hardness	300	200	600	mg/l	IS 3025 (Part 21- 2019) EDTA Method	
9	Calcium	30	75	200	mg/l	IS 3025 (Part 40-1991) EDTA Titrimetric Method	
10	Magnesium	54	30	100	mg/l	APHA (23rd Ed.2017) Method: 3500-Mg+2 B By Calculation Method	
11	Chloride	88	250	1000	mg/l	IS 3025 (Part 32-1988) Argentometric Method	

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5. * Value not available or test not performed for this parameter.

Bluster

Sh. Brij Bhushan Quality Manager Authorized Signatory For, District Water Testing Laboratory, Fatehgarh Sahib

----- End of the Test Report

Page No : 1/2

NOISE LEVEL IN THE SURROUNDING OF RIMT:

The human ear is constantly being assailed by man-made sounds from all sides, and there remain few places in populous areas where relative quiet prevails. There are two basic properties of sound:

- Loudness and
- ≻ Frequency.

Loudness is the strength of sensation of sound perceived by the individual. It is measured in terms of Decibels. Just audible sound is about 10 dB, a whisper about 20 dB, library place 30 dB, normal conversation about 35-60 dB, heavy street traffic 60-0 dB, boiler factories 120 dB, jet planes during take-off is about 150 dB, rocket engine about 180 dB. The loudest sound a person can stand without much discomfort is about 80 dB. Sounds beyond 80 dB can be safely regarded as Pollutant as it harms the hearing system. The WHO has fixed 45 dB as the safe noise level for a city. For international standards a noise level up to 65 dB is considered tolerable. Loudness is also expressed in sones. One son equals the loudness of 40 dB sound pressure at 1000 Hz. Frequency is defined as the number of vibrations per second. It is denoted as Hertz (Hz).

MATERIALS, STUDY AREA & METHODS

MEXTECH SL-4012 sound level meter is used to measure the noise level. Noise test pro detects any noise, music or sound in your surroundings. It gives the information about maximum, minimum and based on them, one can calculate the average decibels.



Figure- Noise Measurement by MEXTECH SL-4012 sound level meter

MEASUREMENT PROCEDURE

The noise level was recorded at the different Important Locations of RIMT UNIVERSITY. At each spot, the measurements were taken for 60 seconds during day time (9 AM- 9 PM) and noted down the measurements. Screenshots of the measurements of noise were taken immediately on the app at the time of 60th second of each measurement.

RESULTS

The results of the experiments at different places have been tabulated in the following table:

PLACE	MEASUREMENTS (Duration in Sec.)	MINIMUM (dBA)	Maximum (dBA)	AVERAGE (dBA)
Mechanical department faculty room	60	63.1	73.2	68.15
Geotechnical Lab (Civil Engg.)	60	65.1	78.3	71.7
Main Canteen	60	67.7	79.1	73.4

Account Section	60	67.9	76.8	72.35
Administrative Block Reception	60	66.0	73.1	69.55
Pharmaceutical Director Room	60	50.8	63.4	57.1
Horticulture Lab	60	60.0	74.3	67.15
Agrasen Engg. College Workshop	60	64.9	85.4	75.15
MAEC Hostel Mess Kitchen	60	76.3	86.3	81.3
MAEC Hostel Mess Dining Hall	60	66.9	75.3	71.1
MAEC Hostel Mess Main Gate	60	65.6	71.8	68.7
B-Block Reception	60	62.1	73.1	67.6
South Campus Main Gate	60	68.2	75.6	71.9
University Main Gate	60	69.3	79.4	74.35
RIMT Hospital	60	52.3	64.2	58.25
Hotel management and Hospitality	60	62.1	73.4	67.75
RIMT ITI	60	64.4	72.3	68.35
Legal Studies	60	66.3	73.2	69.75
CSE Department	60	63.3	73.2	68.25
University Examination Department	60	62.3	71.8	67.05
Central Library	60	54.3	66.2	60.25

Table: Measurements of Noise in and around RIMT

Source: Data collected by Dr. Manish Kumar Gupta and Dr. Manish Sharma (Department of Mechanical Engineering). After the study, the measurements of noise have been recorded in and outside of RIMT area:

Inside the Campus: 65.6 dBA Outside the Campus: 73.1 dBA

WASTE DISPOSAL OF RIMT:

Waste Management at our RIMT campus happens through a compost pit where Vegetable wastes from Kitchen are Vermicomposted. Waste generating areas in the campus are kitchen/canteen, academic blocks, boy's hostels, girl's hostels and workshop. Here we practiced conversion of food waste into manure. Organic gardening is also practiced. The garden itself is the source for many of the ingredients in compost, including grass clippings, plant waste, and shredded leaves in fall. The vegetable and fruit scraps and peelings and dead houseplants are added to the compost pile



Fig: Waste management in compost and vermicomposting



Fig: Use of waste in Hydroponics

Today, soil based agriculture is facing some major problems also decreasing per capita land availability. As well as water scarcity is a major problem due to the amount of water required is variable likewise, the water used for agriculture, industrial and domestic use. The earth covers 97.2% saline water and 2.8% fresh water only. The world population is increasing day by day due to an explosion of population. We require more water supply and land for food requirements, therefore we need to recycle and reuse the waste water produced in our country. In sufficient capacity of waste water treatment and increasing sewage generation pose a big question of disposal of waste water. In India due to lack of sewage treatment plant, the 70% waste water diverted without treatment to the river and natural stream it create human health hazards. The soil degradation problem occurs while using the land for agriculture. Hydroponic technique is derived for facing those problems. It is a soil-less culture in an artificial environment in which plants are grown in nutrient solution, therefore it is possible to use sewage

water in the hydroponic system to grow plants, sewage water moving through plant roots will be utilized by this plant. It possible to reduce waste water parameter in hydroponic technique



Fig: Use of waste in making vertical gardening

In vertical gardening waste **plastic bottles are used and** made by stringing the bottles vertically in a grid along an interior wall, which is then filled up with substrate and herbs

TRANSPORTATION AT RIMT:

Being a largest campus in the region, RIMT uses a fleet of buses for transportation of the students & staff from the around locations such as Patiala, Chandigarh, Ludhiana, Ropar, Nabha. The college is dedicated to provide its students and staff all the comfort and convenience to help them to achieve their targets. The college buses at RIMT University run on CNG. The use of CNG buses can reduce fuel costs. Replacing diesel buses with CNG buses in urban transport reduces the emission of toxic substances and greenhouse gases and contributes to reducing the negative impact from the transportation sector on the environment. Fuelling the buses with a renewable energy source also results in reduced external costs, a crucial factor in determining the economic effectiveness of investments in the transport sector. There are clear and certifiable environmental benefits to higher bus ridership. By utilizing bus transportation, we reduce our automobile use and thereby help to promote clean air. It can convey many more people in much less space than individual automobiles, which helps to keep traffic congestion lower, which in turn reduces air pollution from idling vehicles, and helps riders avoid the stress that comes from daily driving in highly congested areas. By moving people more efficiently, bus transit produces significantly less air pollution per passenger mile than a standard car carrying a single driver. Buses emit approximately 20% less carbon monoxide, 10% as much hydrocarbons and 75% as much nitrogen oxides per passenger mile as an automobile with a single occupant (Source: Wikipedia).



Figure-Photograph of bus

ELECTRICAL POWER CONSUMPTION AT RIMT:

RIMT, being one of the largest Universities of Punjab, consumes on an average 1900000 kW- hr. per year of electricity only to maintain its volumetric activities throughout the year. The authority keeps on replacing the old filament bulbs, CFL bulbs and tube lights by low energy consuming LED bulbs and LED tubes and bulky high-power consuming fans by energy efficient fans in order to keep the electricity consumption of the college as low as possible. In addition to making Environmental Studies a very vital subject in our syllabus, RIMT University has gone a step further by putting that theory into practice. The college has installed various sets of solar panels, on North Block as well as south block and third floor. The energy from this solar installation is helping offset the institute's daytime peak electricity demand from the grid. RIMT with the installation of a 1280 KW solar rooftop plant was able to offset its energy usage from the state grid thus moving towards a more reliable and greener option and reducing its carbon footprint.

Percentage of annual power requirement of the Institution met by the renewable energy sources

Response: 16%

Annual power requirement met by the renewable energy sources (in KWH) Response: 317556 KWh



Figure-Electrical Power Consumption



Figure- Electrical Power Consumption

Total annual power requirement (in KWH)

Response: 1945756KWh

Power Requirements met by renewable energy sources	Total Power Require ments	Renewable energy Source	Renewable energy generated and Used	Energy supplied to the grid
317556 KWh/Year	1945756KWh/ Year	Solar	835410KWh/ year	517854 KWh

Table-Electrical power consumption by renewable source

Percentage of annual lighting power requirements met through LED bulbs

Response: 92.8%

Annual lighting power requirement met through LED bulbs (in KWH)

Response: 280728KWh

Annual lighting power requirement (excluding LED) (in KWH)

Response: 21672KWh

Total Annual Lighting Power Requirements = 302400 KWH

Total	Lighting	Percentage Lighting through	Percentage	Lighting
Requirer	nents	LED Bulbs		through
-			other so	urces
302400KWh/y	ear	280728K	2167	7
		Wh/year	2K	
		J.	Wh	

Table-Electrical power consumption by LED Bulbs

Green Audit Report, RIMT University, Fatehgarh Sahib (Punjab)

-		P	sP	CL) Punja	ab Sta	te Power	Corpo	ratio	on Li	mited	
				PUNJ	AB STATE POWER COR	PORATION LIMITED				Billion Cater		
		(Regd.	Office P.S E-m	E.B. Head Official 1912@pspc	ce. The Mall Patiala-1470	01,Ph. 1912), CIN: U4	40109PB2010SGC033813			TECOPY FOR		
Division	T		Division	1	Circle		Rill Custo					
RCIAL MA	NDI	SPEC	AL DIVISI	ON	KHANNA		07-2021		27-JUL	-2021	1003484642	
BINDGARH	4		MAN									
300230980	63				Load	Contract Demand	Tariff Type	Bill Status	Due I	Date	Bill Amount	
er Name: N	WS HU	KAM CH	AND					A March 19 Anna	Cash/Online	DD/Cheque		
COM PARE	KASH H	I PURA	BHADLA	MANDI	2105.877	1500	FOR NRS>100KWA DPC	0	06-Aug- 2021	06-Aug-2021	Rs.512730/-	
					Voltage		Details of Metr	ar		Meter	CT CT NO.	
ection Date:	29-01-	2008			Supply	Meter Number	Make	Capacity	Digit	Status	Make	
e No. 98X)	0000010	11			11.00	PBB49956	SECURE		8	0	4866	
Feeder Co	ode •	Da	te of New I	Reading	Date of Old R	eading	19 Bill Period Meter Security 303 0		Securit Cons.		Security cons/Meter Security Interest	
FDC00000	00742		22-JUL-	2021	22-SEP-2	020			1126000			
						N	leter Reading				State State	
Туре	Old Read	i ling R	New Ci	urrent Units	Meter Multiplier	Line CT Ratio	Meter CT Ratio	Overall Multiplier	MMTS Correction	Old Meter Cons.	Unit Consumed	
KWH	1				1.00	30/5	5/5	6.00	La dina si kasa	A Contract		
KVAH	1				1.00	30/5	5/5	6,00				
MDI	1 0.	00	31.18		1.00	30/5	5/5	6,00	Production of the		187.08	
						(#	i) Fixed Charges	10	I Dillion	Davis (D)	1 4 54 4 55	
Contract Lo Demand (oad / Co (L) KWH	htract KVA	Actual Lo KWH	ad/Demand KVA (A)	80% of (L) KV	NH/KVA (B)	A or B whichever greater KWH/KVA (C)	month (R)	Billing Days (D)		A: Fixed Charges Amount =CxRxDx12/365	
	1500		18	37.08	1200	0.00	1200.00	110.00	303		1311344.00	
(8) Energ	y Charg	05	[(C) Fuel Co	st Adjustment Charg	jes	*Addit	ional Surcharge			
KWH/KV/	AH Tai	riff Rate	B: Amoun	KWH/KVAH Consumption	Rate of FCS/KWH-KVAH		C: Amount	Units	Tariff Rate	Amount	Total Energy Charges(Rs.) + FCA + Addl. Surcharge	
		6.55	1483300	1			0.00	68029	0.29	19728.00	1503028	
				(D) Ren	tal Charges			GST				
Mater F for PSF Met	Rent PCL er	MCB, C	T/PT Unit ental	Rent for any other equipment	Tota	il Rent	HSN Code	SGST	CGST	Total GST	D: Total Rent with Tax	
60/	1 01		0		1	6949		625.41	625.41	1250.82	8199.82	

1	/oltage Su	rcharge		Demand Surcharge			ToD		Surcharge			
Supply Voltage	Catered : Voltage		Voltage Surcharge Amount	Demand in excess	Rate of Demand Surcharge	Amount of Demand Surcharge	Peak Hours KWH/KVAH	Rate			Total Surcharge (Rs.)	
11.00	11.00		rangona	0.00	0.00	0.00	20324.63	2.00	40549.00		40649.00	
11.00	11.00			0.00	(F)	Rebates		1				
			Voltag	e Robater			ToD Rebates					
1 builts		MTUER	T Robate	Amoun	1	Non-Peak Hours KWH/KVAH		Rate	Rate Amount		F Total Rebates (Rs.)	
OTHES		467	03.00	0.00		1430	2.85	1.25	178779.00)	224071.00	
			51.00	(G) Previous	Amount Notice No.: and Date:							
Units	Fixed	Energy Charges	FCA	Rentals	Surcharges(*)	Rebates(-)	Taxes	Subsidy	Total	GN	et Previous Adjustme (Rs.)	
		-2607738		1			/0		0/-260548	8	0/-2605488	
				(H) Sur	dry Charges/Allowance	s Notice No	and Date: -					
Late Payment	Units	Fixed Charges	Energy Charges	FCA	Rentals	Surcharges(*)	Rebates(-)	Taxes	Subsidy	Total	H: Net Sundry Charges/Allowanc (Rs.)	
	1			1	1	1	/	/0	1	47123	47123	
					(1)	Subsidy						
Qubridir	od KOMHUKA			Rate for Subsidy			Amount			I Net Su	bsidy (Rs.)	
				0.00		0.00				00		
			Taxation									
Etersteinen.	Municipal	IDE	Cow Cess	Total Tax (J) Net Ener		rgy Charges		GurriPrev Ro	unding Amount	N	ET BILL AMOUNT	
Duty	Тах									Rs.512730/-		
394642.00	0.00	131548.00	0.00	526190			0.00			Fivel	akh Twelve Thousa ven Hundred Thirty Rupees Only	
		1	in the second		(K) Total	Billed Amount						
Due Date by Gash/Online	Due Date by	Net Amor di	int Payable by lie date	Late Payment Surcharge for LT consumer upto 15 days @2% of unpaid amount	Amount Payable by LT consumer upto 15 days after due date	Late Payment Surcharge for HT consumer upto 7 days after due date	Amount Payable by HT consumer upto 7 days after due date	Late Payment HT consume @5% of un	t Surcharge for ir upto 7 days paid amount	Amount Payable by HT consumer after 7 days & upl 15 days after due date		
06-Aug- 2021	06-Aug- 2021	5	12730	51158		51158		127895				
Interest @ 1.5	% per mont	h on gross	unpaid amoun	t including surcharge shall be levi	ed after 15 days from due	date of bill.						
					(L) Previous C	ycle's Consumption	The second second			2		
and the second se	Cycle 2	Cycle 3	Cycle 4	Cycle 5	Cycle 6	Cycle 7	Cycle 8	Cycle 9	Cycle 10	Cycle 11	Cycle 12	
Cycle 1		C								-		
Cycle 1 MONTH:JUL-	AUG-20	SEP-20	JUL-21									
Cycle 1 MONTH JUL- 20	AUG-20 127	SEP-20 107	JUL-21 187	-	-				200 6 6 6	-		

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Green Audit Report, RIMT University, Fatehgarh Sahib (Punjab)

age:	into (if requi	ired) email ID a	and mobile nun	nber by visiting	https://contactregistrat	ion.pspcl.in/ as further bills will	be delivered through	emails & SMS onl	ly as per CC 17120
1. Please check & up	ate (in requ	irea) emainte e							
Notice dated 5.5.20	no Rs 20.00	0/- shall be acc	epted in digita	I mode only w.	e.f. 01-07-2021.		fut and a data and the	a may be taken as n	otico undor section
2. Payments exceeding	t of billed am	iount is not mad	le by the due da	te, the power sur	oply shall be liable for disc	connection after expiry of 15 days o	t the que date and in	s may be taken as n	Dice brider section
Electricity Act 2003	read with re-	gulation 32 of th	e Supply Code.	2014.					
4. SEE DETAILS OF	METER/COM	SUMPTION O	N 2ND PAGE.		DEEN CHARGED AS IN	TEREST ON UNPAID AMOUNT			
5. RS. 0 HAS BEEN	CHARGED A	AS LATE PAYM	ENT SURCHAN	GE, RS. U HAS	ODE ONLY W.E.E. 01/07/	2021			
6. PAYMENTS EXCE	EDING RS.	50 000/- SHALL	BE ACCEPTE	D IN DIGITAL N	ODE ONLY W.E.F. 01/07	2019			
7. PAYMENTS EACE	REEN CHAR	GED AS ED @	15% OF SOP ID	OF @ 5% OF SC	P, COWCESS @ 1 OR 2	PAISA PER KWH/KVAH			
8. CHARGES HAS L	ONLY ACC	OMMODATE OI	NE TARIFF RAT	E, SO ONLY OL	D TARIFF RATES AS PE	R CC 24/2021 ARE BEING DISPL	AYED.		
10	Uner no -					Could Dation (Could Nos 1	766-1767 of 2018 filed	by TSPL and Conte	empt Petition (Civil)
11. Surcharge arising	out of the ju	idgment and ord	ier dated 07.08.2	2019 passed by 1	the Hon'ble Supreme Cour	t in Contempt Petition (Civil) Nos. 1	100-1101 012010		
1278 of 2018 file	d by NPL.						State Barrie		
	Quantity	1000	Non-Taxable	Amount	Taxable Amount	CGST 9%		SGST 9%	8199
Description (HSN Code)	1 1		0		6949	625.41		625.41	0.000
Meter Rent (997319)	1		0		0	0		0	0
MCB Rent (991319)	0	UNT-Units	0		0	0	Martin California		
Electrical Energy									
	1								
(2/1000)									
(271000)							the second second second		The state of the
PUNJAB STATE P	OWER CO	RPORATION	LIMITED					The Station	
PUNJAB STATE Po website:www.pspcl	OWER CO	RPORATION 3-B	LIMITED				Overall		Consumption
PUNJAB STATE PO	OWER CO	RPORATION) 3-B	LIMITED	Meter R	eading	Old Status	Overail Multiplier		Consumption
PUNJAB STATE PO	OWER CO	RPORATION) 3-B	LIMITED	Meter R	reading New Status	Old Status	Overall Muttiplier 6.00		Consumption 382806
PUNJAB STATE PO website:www.pspcl	OWER CO	RPORATION) 3-B Import	LIMITED	Meter R KWH	leading New Status 281281	Old Status 225425 228167	Overall Multiplier 6.00 6.00		Consumption 382806 387204
PUNJAB STATE PO website:www.pspcl Bi-Directional Meter	OWER CO	RPORATION) 3-B Import (From PSPCL)		Meter R KWH KVAH	eading New Status 281281 284668	Old Status 225425 228167 0	Overall Multiplier 6.00 6.00 6.00		Consumption 382806 387204 187.08
PUNJAB STATE P(website:www.pspc) Bi-Directional Meter	OWER CO	RPORATION) 3-B Import (From PSPCL)		Meter R KWH KVAH KVA	eading New Status 281281 284668 31.18	Old Status 225425 228167 0 22281	Overall Multiplier 6.00 6.00 6.00 6.00		Consumption 382806 387204 187.08 160656
PUNJAB STATE P/ website:www.pspcl Bi-Directional Meter	OWER CO	RPORATION) 3-B Import (From PSPCL) Export	LIMITED	Meter R KWH KVAH KVA KWH	eading New Status 281281 284668 31.18 59264	Old Status 225425 228167 0 33730 24015	Overail Multiplier 6.00 6.00 6.00 6.00 6.00		Consumption 382806 387204 187.08 160656 160746
PUNJAB STATE P website.www.pspcl Bi-Directional Meter	OWER CO	RPORATION) 3-B Import (From PSPCL) Export (To PSPCL)	LIMITED	Meter R KWH KVAH KVA KWH KVAH	eading New Status 281281 284668 3118 59264 59563	Old Status 225425 228167 0 33730 34015	Overall Multiplier 6.00 6.00 6.00 6.00 6.00 6.00		Consumption 382806 387204 187.08 160656 160746 0
PUNJAB STATE P website.www.pspcl Bi-Directional Meter	OWER CO	RPORATION) 3-B Import (From PSPCL) Export (To PSPCL)	LIMITED	Meter R KWH KVAH KVA KWH KVAH KVA	eading 281281 284669 31.18 59264 59563 0	Old Status 225425 228167 0 33730 34015 0 0 0	Overall Multiplier 6.00 6.00 6.00 6.00 6.00 6.00 6.00		Consumption 382806 387204 187.08 160656 160746 0 222150
PUNJAB STATE Pr website:www.pspct Bi-Directional Meter	OWER CO	RPORATION 0 3-B Import (From PSPCL) Export (To PSPCL) Net	LIMITED	Meter R KWH KVAH KVH KVH KVAH KVAH KVAH	eading New Status 281281 284668 31.18 59264 59264 59264 59264 0 0 222017	Old Status 225425 228167 0 33730 34015 0 191695 40452	Overall Multiplier 6.00 6.00 6.00 6.00 6.00 6.00 6.00 6.0		Consumption 382806 387204 187.08 160656 160746 0 222150 226458
PUNJAB STATE P website.www.pspcl Bi-Directional Meter	OWER CO	RPORATION) 3-B Import (From PSPCL) Export (To PSPCL) Net	LIMITED	Meter R KWH KVAH KVA KWH KVAH KVAH	eading New Status 281281 284668 3118 59284 59563 0 222017 222017 225105	Old Status 225425 228167 0 33730 34015 0 191695 194152 0	Overall Multipler 6.00 6.00 6.00 6.00 6.00 6.00 6.00 6.0		Consumption 382806 387204 187.08 160545 160746 0 222150 226458 187.08
PUNJAB STATE P website.www.pspcl Bi-Directional Meter	DWER CO	RPORATION) 3-B Import (From PSPCL) Export (To PSPCL) Net	LIMITED	Meter R KWH KVAH KVA KWH KVA KVA KVA KVA KVA	eading 261281 264281 284665 31.18 59264 59563 0 222017 222017 2225105 31.18	Old Status 225425 228167 0 33730 34015 0 191895 194152 0 0 249015	Overall Multiplier 6.00 6.00 6.00 6.00 6.00 6.00 6.00 6.0		Consumption 382806 387204 187.08 160656 160746 0 222150 222458 187.08 270908
PUNJAB STATE Pr website www.pspct Bi-Directional Meter	DWER CO	RPORATION) 3-B Import (From PSPCL) Export (To PSPCL) Net Solar		Meter R KWH KVAH KVA KWH KVAH KVA KWH KVA KWH	eading New Status 281281 284668 31.18 59264 59563 0 0 222017 22505 31.18 478988	Old Status 225425 228167 0 33730 34015 0 191695 194152 0 340911 20 0	Overall Multipler 6.00 6.00 6.00 6.00 6.00 6.00 6.00 6.0		Consumption 382806 387204 187.08 160556 160745 0 222150 226458 187.08 187.08 220908 282063
PUNJAB STATE P website www.pspcl Bi-Directional Meter	DWER CO	RPORATION) 3-B Import (From PSPCL) Export (To PSPCL) Net Solar	LIMITED	Meter R KWH KVAH KVA KWH KVAH KVAH KVAH KVA KVA	eading New Status 281281 284668 31.18 59264 59563 0 0 222017 222505 31.18 478998 492119	Old Status 225425 228167 0 33730 34015 0 191695 194152 0 0 318911 318911 3327168	Overall Multipler 6.00 6.00 6.00 6.00 6.00 6.00 6.00 6.0		Consumption 382806 387204 187.08 160746 0 222150 226458 187.08 270908 2270908 282063 183 183
PUNJAB STATE P website.www.pspcl Bi-Directional Meter Solar Meter	DWER CO	RPORATION 3-B Import (From PSPCL) Export (To PSPCL) Net Solar		Meter R KWH KVAH KVA KWH KVA KWH KVA KWH KVA KWH KVA	eading 261281 261281 284665 31.18 59264 59563 0 222017 225105 31.18 478998 49219 0	Old Status 225425 228167 0 33730 34015 0 191895 194152 0 318911 327168 0 0 318911 327168	Overall Multiplier 6.00 6.00 6.00 6.00 6.00 6.00 6.00 6.0	Curre	Consumption 382806 387204 160256 160256 160746 0 222150 222458 187.08 270908 282063 163 163 163
PUNJAB STATE P4 website:www.pspct Bi-Directional Meter Solar Meter	DWER CO	RPORATION 0 3-B Import (From PSPCL) Export (To PSPCL) Net Solar	LIMITED	Meter R KWH KVA KWA KWH KVAH KVAH KVAH KVAH KVAH KVAH KVA KWA KVA	eading New Status 281281 284688 31.18 59264 59563 0 222017 225105 31.18 478998 42219 0 0 10 0 10 10 10 10 10 10 1	Old Status 225425 228167 0 33730 34015 0 191625 194152 0 348911 327168 0 Total Consum	Overall Multipler 6.00 6.00 6.00 6.00 6.00 6.00 6.00 6.0	Curre	Consumption 382806 387204 187.08 1600556 160746 0 222150 226458 187.08 270908 2282053 183 nt Carry Forward: 0
PUNJAB STATE P website www.pspcl Bi-Directional Meter Solar Meter Previous Carry Enowart 0	DWER CO	RPORATION 3-B Import (From PSPCL) Export (To PSPCL) Net Solar	LIMITED	Meter R KWH KVAH KVA KWH KVAH KVA KVAH KVA KVA KVA KVA KVA KVA KVA KVA KVA KVA	eading New Status 281281 284668 31.18 59264 59264 59264 0 0 222017 225105 31.18 478998 492119 0 et Cons. for Billing, 226458	Old Status 225425 228167 0 33730 34015 0 191695 194152 0 0 318911 322768 0 1 10tal Consun	Overall Multipler 6.00 6.00 6.00 6.00 6.00 6.00 6.00 6.0	Curre	Consumption 382806 387204 187.08 160746 0 222150 2226458 187.08 270908 282063 163 163 at Carry Forward: 0
PUNJAB STATE P website www.pspcl Bi-Directional Meter Solar Meter Previous Carry Forward. 0	DWER CO	RPORATION 0 3-B Import (From PSPCL) Export (To PSPCL) Net Solar	LIMITED	KWH KVAH KVAH KVAH KVAH KVAH KVAH KVAH KVA	eading 281281 284668 31.18 59264 59563 0 222017 2017 20	Old Status 225425 228167 0 334015 0 191895 194152 0 338911 327168 0 Total Consun	Overall Multiplier 6.00 6.00 6.00 6.00 6.00 6.00 6.00 6.0	Curre	Consumption 382806 387204 160256 160246 0 222150 2226458 187.08 2279908 282063 163 nt Carry Forward: 0

Electricity Bill (RIMT University)