EN SIMULATED
SOLUTIONS LLP

ENERGY & GREEN AUDIT REPORT

On

NAAC ACCREDITATION (2019-2020)

Of

Dr. B.C. Roy College of Pharmacy & Allied Health Sciences

Dr. Meghnad Saha Sarani, Bidhannagar
Durgapur-713206, West Bengal, India

Submitted by

En-Simulated Solutions LLP

Find us @
26, Satchasi Para Lane
Kolkata-700036

Call @
+91 93306 37158

Mail @
saibalsaha2@gmail.com

Also find us in

EnsimulatedSolutionsLLP

ENERGY & GREEN AUDIT COMPLETION CERTIFICATE

This is to certify that following utility has carried out Energy & Green Audit as per guidelines laid down in the Energy Conservation Act, 2001 in the month of DECEMBER 2020

Name of the Installation	Dr. B.C. Roy College of Pharmacy & Allied Health Sciences Dr. Meghnad Saha Sarani, Bidhannagar Durgapur-713206, West Bengal, India
Details of Facilities Audited	Land area = 1.5 acres = 6070.28 SqM ➢ M. Pharm. Building (Educational building 2): • Ground Floor - 223.44 SqM • 1st Floor - 220.47 SqM • 2nd Floor - 220.475 SqM • 3rd floor - 220.475 SqM • Total – 884.86 SqM ➢ B. Pharm. Building (Educational Building 1) • Each Floor - 969.54 SqM • Total = 3878.16 SqM (4 Floors in total)
Date of Energy and Green Audit	17.12.2020
Name of Certified Energy Auditor	Mr. Saibal Saha (EA-12290)
Validity of the Certificate	DECEMBER, 2021

17.12.202

Signature of Auditor
(Mr. Saibal Saha)
Executive Director

Regd. office: 26 Satchasi Para Lane, Kolkata-700036, Ph: 91 9836234475, Email:saibalsaha2@gmail.com

Acknowledgement

En-Simulated Solutions LLP extends gratitude to **Dr. B.C. Roy College of Pharmacy & Allied Health Sciences**for extending us the opportunity to conduct the Energy & Green Audit.

We are thankful to the professors & supporting staffs of the college for their transparency &consistent support in sharing relevant information and for providing data about policies andprojects along with their other valuable information. This report would have not been possible without their support.

The study team would like to acknowledge the following distinguished personnel's of Dr. B.C. Roy College of Pharmacy & Allied Health Sciences in person for the diligent involvement and cooperation.

Prof. Dr. Subrata Chakraborty, **Director**, Dr. B.C. Roy College of Pharmacy & Allied Health Sciences (BCRCPAHS)
Prof. Dr. Subhabrata Ray, **Principal**, Dr. B.C. Roy College of Pharmacy & Allied Health Sciences (BCRCPAHS)
Mr. Sagar Sengupta, **Associate Professor,** Registrar Coordinator, GPAT CELL (BCRCP)
Convenor, BCRCP-BCRP Campus Coordination Committee

About the Institution

Dr. B. C. Roy College of Pharmacy and AHS, Durgapur is a primary provider of qualified, trained industry-ready Pharmaceutical Technologists. Imparting application based pharmaceutical knowledge, BCRCP offers an open and friendly atmosphere where students learn, share and shine with expertise in medicines to ensure a healthier tomorrow. State-of-the-art infrastructure and a handful of dedicated and experienced faculty provide a comprehensive teaching-learning process at BCRCP.

Like other high-end institutions of Engineering and Management run by the Group, BCRCPAHS, named after the legendry physician Dr. Bidhan Chandra Roy, Visionary and Architect of modern West Bengal, is also being designed as a prime institution under the overall management of Dr. B. C. Roy Engineering College Society.

We are committed to impart quality “Education and Training” in Pharmacy course details that satisfy the requirements of our students in the fields of “Engineering, Pharmacy and Management” and our aim is to be an institute of excellence in global terms in the field of quality technical education through continual improvement.

As a primary provider of qualified, trained, industry-ready Pharmacy Graduates, it would benchmark best practices from top-of-the-line learning centres regardless of geographic boundaries and will then leverage the success to cater to other specialities for professional education and training services.

Durgapur is one of the first planned 'kinetic-industrial-cities' in the country set up in the post-independence era, a true-jewel of the Eastern Region. Its leading lights, the integrated Durgapur Steel Plant and Alloy Steel Plant of the Steel Authority of India, and other important industries and research establishments, have given the place a national status. The city, less than 3-hours by train from Kolkata, scores 'high' by way of urban comforts, civic and social amenities, low pollution levels. Dramatic improvements over the past decade have given it the infrastructure of a sophisticated business centre while retaining the quiet charm of a country-side town.

Dr. B. C. Roy College of Pharmacy and Allied Health Sciences is located at the distinctive location - in close proximity to vast knowledge-application areas and resources. Durgapur incidentally has the highest opportunity for Industry-Institute interface and partnership in West Bengal

Maxim:

Committed to excellence in Education

BCRCPAHS VISION

Dr. B. C. Roy College of Pharmacy and Allied Health Sciences aims to transform the institution into a global centre of learning through the application of creativity, innovativeness and discipline.

BCRCPAHS MISSION

- To Create Ideal Ambience for Learning and All-Round Growth
- To Help Students Inherit Professional Ethics and Leadership Qualities, and to be Creative, Agile and Confederate
- To Establish Professionalism, zeal for Higher Learning and Training & Placement as Three Core Values
- To Develop a Symbiotic Relationship between the Institution, Faculty, Society and the Community for Mutual Betterment with a Global Perspective

QUALITY POLICY

BCRCPAHS is committed to impart quality "Education and Training" that satisfy the requirements of our students in the fields of "Engineering, Pharmacy and Management" and our aim is to be an institute of excellence in global terms in the field of quality technical education through continual improvement.

PROGRAM EDUCATIONAL OBJECTIVES of BCRCPAHS

- To produce Diploma, Under Graduates and Postgraduates who would have developed strong background knowledge in Pharmaceutical Sciences and ability to use these ideas in an environmentally sustainable fashion in their chosen fields of profession.
- To produce Diploma, Under Graduates and Postgraduates who would demonstrate technical competence in planning and problem analysis with the help of modern tools in the fields of Pharmaceutical Sciences.
- To produce Diploma, Under Graduates and Postgraduates who would attain professional competence with self-identity and ethics through life-long learning such as advanced degrees, professional registration, and other professional activities.
- To produce Diploma, Under Graduates and Postgraduates who would function effectively through unambiguous communication in various pharmaceutical fields.
- To produce Diploma, Under Graduates and Postgraduates who would be able to take individual responsibility and to work as a part of a team towards the fulfilment of both individual and organizational goals.

Provisions offered by the institution

The institute campus is spread across one and half acres land with ample space designed for running undergraduate, post graduate and diploma courses. Along with the academic building, the institute has a sprawling green campus which is environment friendly, having rainwater harvesting, medicinal garden and play-ground for students. Area Details as follows:

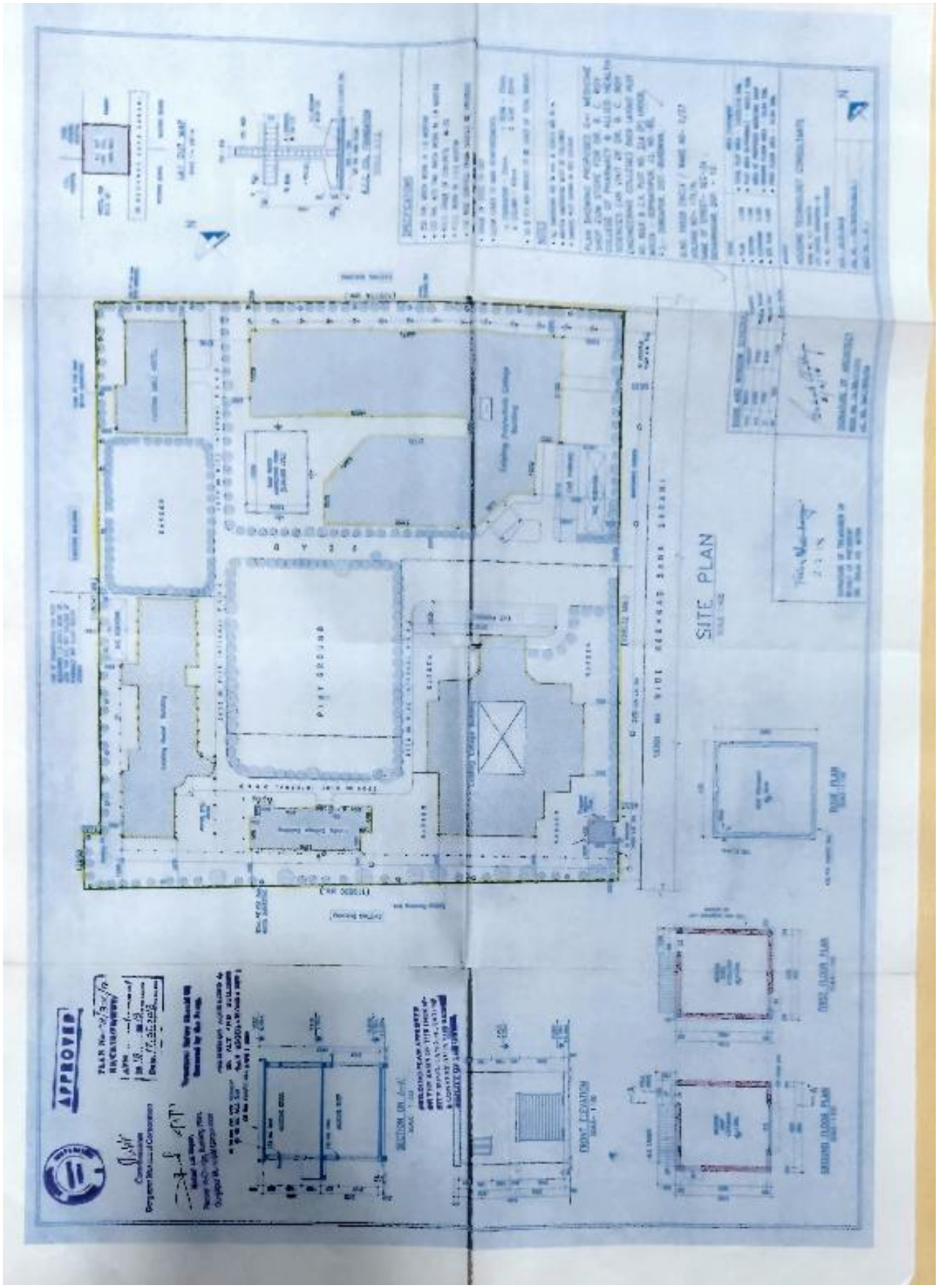
Land area = 1.5 acres = 6070.28 SqM

- M. Pharm. Building (Educational building 2):
  - Ground Floor - 223.44 SqM
  - 1st Floor - 220.47 SqM
  - 2nd Floor - 220.475 SqM
  - 3rd floor - 220.475 SqM
  - Total = 884.86 SqM

- B. Pharm. Building (Educational Building 1)
  - Each Floor - 969.54 SqM
  - Total = 3878.16 SqM (4 Floors in total)

- **Salient Features-**

  - Pollution –free, eye soothing, lush green campus
  - Highly disciplined and completely ragging –free ambience
  - Efficient and experienced faculty members
  - Well developed infrastructure
  - Industry oriented teaching
  - Well synchronized and streamlined schedule for lectures and examinations
  - Active mentorship for holistic learning
  - Special monitoring and motivational counseling for slow learners
  - Special soft skill classes for professional and personal development
  - Industrial visits and trainings on emerging technologies
  - Adjacent ATM counter
  - Internal medical unit with highly efficient medical practitioners along with a tie-up with The Mission Hospital, Durgapur
  - Top placements
  - In Campus Boy's and Girl's hostel



SANCTIONED SITE PLAN

B. Pharm deals with the following subjects –

- Biochemistry
- Human Anatomy and Physiology
- Pharmaceutical Biotechnology
- Pharmaceutical Maths and Biostatistics

B. Pharm is an undergraduate degree that is offered for duration of 4 years. The intake capacity of our B. Pharm stream is 100 candidates**.**

B. Pharm students have the opportunity to work in the fields of

- Pharmacist,
- Drug Information Specialist,
- Patient Counselling and more.
- Alternatively, students can also opt for higher studies such as M. Pharm.

With M. Pharm Pharmacology course you can secure job opportunities in –

- Health centres
- Food and drug administration
- Educational institutes
- Pharmaceutical firms
- Chemist shops
- Research agencies
- Drug control administration
- Hospitals

With M. Pharm Pharmaceutics course students can secure job opportunities as a –

- Medical Transcriptionist
- Lab technician
- Research associate
- Health Care unit manager
- Drug inspector
- Analytical chemist

Besides, with M. Pharm Pharmaceutics course they also can secure other jobs in the fields of drug control administration, chemist shops, hospitals and its administration, colleges/ universities, hospitals and more.

D. Pharm courses are affiliated under WBSCT & VE & SD.

Diploma in Pharmacy course deals with the study of –

- Accurate and safe processing of prescriptions
- Effective verbal and written communication
- Inventory control
- Pharmacy software practice
- Accurate and confidential record keeping
- Compounding techniques
- Third-party billing
- Adherence to relevant legislation

With the D. Pharmacy course, candidates can secure employment in areas like –

- Private drug stores
- Clinics
- Community Health centres
- Government hospitals
- Private hospitals

Post completing the course candidates can secure job roles like pharmacist, medical representatives, chemist, quality analyst, technical supervisors, medical transcriptionist, production executive and more.

Campus Facilities and Amenities:

- **Hostel Accommodation**

In-campus hostel accommodation separately for boys and girls with proper security arrangement are provided by the college to accommodate almost all its students. Each hostel provides a decent ambience and a feel-good climate. They are equipped with all amenities for living; dining and recreation that make each inmate feel at home.

- **Canteen and Common Room**

A canteen within the campus provides good quality snacks and meals to satisfy its clients. The common room is built with an idea to host co-curricular activities and cover a diverse range of recreational, sporting, cultural and leisurely pursuits.

- **Gymnasia**

A healthy body houses a healthy mind. To sustain multi-purpose fitness gyms have been set up in both the boys and girls hostel. The sophisticated fitness equipment enables students to work out and maintain a good physique resulting in a healthy mind. Qualified male and female trainers are appointed to guide students in building up a healthy body and healthy mind.

- **Sports and games**

To endorse excellence in sports and provide organized recreation and activity, outdoor and indoor games and sports are encouraged. Our students enjoy the zeal of playing volley ball, cricket, football, badminton in the green playground as well as table tennis and carom board as indoor recreations. Karate Training facility is available in the Campus.

- **Annual Events**

The college organizes annual sports meet every year to encourage its sportsmen and women. The Annual Tech Fest is conducted to encourage its students with technical talents, musical talents and provide some relaxation amidst the busy campus life. The college organizes several events to disseminate the role of Pharmacy graduates in the healthcare and society during the National Pharmacy Week (3rd Week of November every year).

Infrastructure Support:

The college provides state-of-the-art infrastructure support fulfilling all AICTE norms to all its students who are our greatest resource.

- **Classrooms**

We provide well designed, well ventilated and well lit classrooms for enabling unhindered teaching and learning process with ‘convenience’ and ‘care’ as the key elements. These Class Rooms are Smart Class Rooms with Online Teaching and Lecture delivery facilities aided by Smart Boards and Projector Systems.

- **Laboratories**

BCRCP has twenty (20) well equipped spacious Departmental Laboratories for all the subjects of pharmaceutical sciences (Pharmaceutical Analysis, Pharmacognosy, Pharmaceutical Chemistry, Medicinal Chemistry, Pharmaceutics, Physiology, Pharmaceutical Engineering Drawing, Microbiology and Biotechnology, Bio-Pharmaceutics and Pharmacology) as per the educational regulations laid down by PCI, New Delhi as well as AICTE, New Delhi and MAKAUT, Kolkata. Experiments are designed on the basis of theory concept so that the students can understand easily. Amongst these, BCRCP has two dedicated PG laboratories and two PG research laboratories for specialization in different M. Pharm courses with sophisticated instruments like Dissolution Apparatus, Lyophilizer with deep freezer, Tablet Punching Machine (Ten Station). Probe Sonicator etc. and provide an ambience to create industry-friendly learning environment and also carry out M. Pharm projects smoothly and efficiently.

- **Language and Simulation laboratory**

A well equipped Language Laboratory helps students weak in English to hone up their Language Communication skills under the watchful eye of a full time faculty. The Lab is an air-conditioned networked computer aided facility with dedicated software for developing language skills. A Simulation laboratory has been developed with dedicated software for the students to carry out software based pharmacology experiments.

- **Animal House**

BCRCP has an excellent and well maintained CPCSEA approved animal house with animals like rat, mice & rabbit . Observation room with air conditioned facilities, documentation room etc are also present. Institutional Animal Ethics Committee has been formed as per CPCSEA guidelines. The animal house is an added resource for the field of Pharmacology.

- **Medicinal Garden**

The institute has developed a good number of medicinal and aromatic plants in its well organized Medicinal Garden. These medicinal plants enthuse the students to identify them for demonstration as well as extraction of different kinds of drugs and also to generate an aptitude for research in Pharmacognosy and Phytochemistry. Each of our plant in the database has its own unique barcode (QR Code). These codes give students all the information they need to know about the tree -from its scientific name to its medicinal value.

- **Museum**

A pharma museum with display of crude drug samples, photographs of medicinal plants, charts, proprietary medicines, containers, closures etc is established which is informative and educative

INTRODUCTION

ENERGYAUDIT:

Energy Audit is an effective tool in defining and pursuing comprehensive energy management programs. It has positive approach aiming at continuous improvement in energy utilization in contrast to financial audit which stresses to maintain regularity. Energy audit provides answer to the question – what to do, where to start, at what cost and for what benefits.

Energy audit helps in energy cost optimization, pollution control, safety aspects and suggests the methods to improve the operating and maintenance practices of the system. It has been established that energy saving of the order of 15 to 30% is possible by optimizing use of energy by better housekeeping, low cost retrofitting measures and use of energy efficient equipment at the time of replacements. Indian industry consumes more energy as compared to its counter parts in the developed countries.

Need/Purpose:

The energy audit provides the vital information base for overall energy conservation programme covering essentially energy utilization analysis and evaluation of energy conservation measures.

It aims at**:**

- Assessing present pattern of energy consumption in different cost centers of operations.
- Relating energy inputs and production output.
- Identifying potential areas of thermal and electrical energy economy.
- Highlighting wastage in major areas.
- Fixing of energy saving potential targets for individual cost centers.
- Implementation of measures of energy conservation and realization of savings.

GREEN AUDIT:

The green audits are tools that organizations use to identify their environmental impacts and assess their compliance with applicable laws and regulations, as well as with the expectations of their various stakeholders. It also serves as a means to identify opportunities to enhance work quality, improves employee health, safety and morale, reduce liabilities and achieve other form of business values.

This concept has got its origin in recent past and suddenly got acceleration due to heavy industrial & commercial traffic which ends with unaccountable emission resulting pollution. Due to growth in population, needs has increased.

It is the duty of organizations to carry out the Green Audits of their ongoing processes for various reasons such as; to make sure whether they are performing in accordance with relevant rules and regulations, to improve the procedures and ability of materials, to analyze the potential duties and to determine a way which can lower the cost and add to the revenue. Through Green Audit, one gets a direction as how to improve the condition of environment and there are various factors that have determined the growth of carrying out Green Audit.
Green Audit is assigned to the Criterion 7 of NAAC (National Assessment and Accreditation Council) which is a self-governing organization of India that declares the institutions as Grade A, Grade B or Grade C according to the scores assigned at the time of accreditation.

Need/Purpose:

The intention of organizing Green Audit is to upgrade the environment condition in and around the institutes, colleges, companies and other organizations. It is carried out with the aid of performing tasks like waste management, water conservation, sufficient green cover and proper use of day-lighting in indoor environment. Thus it's a tool to turn the infrastructure into a better environmental friendly institute by securing the environment and cut down the threats posed to human health:

- To make sure that rules and regulations are well taken care of.
- To avoid the interruptions in environment that are more difficult to handle and their correction requires high cost.
- To suggest the best protocols for adding to sustainable development.
- To suggest improvement in the system to promote safe and clean environment.

Audit Methodology

Step 1: Initial Meeting

The Energy & Environment auditor has been invited for a meeting to discuss the audit scope and arrange an inspection of the site.

Step 2: Site Inspection

The site inspection has been conducted last 23rd of this month at the time of initial meeting. Ideally the site inspection has been conducted with the establishment officials who can answer questions about the site.

Step 3: Desktop Analysis

The Energy & Environment auditor has assessed last 24 months of the energy bills in order to investigate the energy use and check tariffs and also checked the environmental facilities offered by the institution.

Step 4: The Report

The Energy & Environment auditor has provided a written report. The scope, level of detail and accuracy of calculations have presented in the report.

In general the report will consist of the following:

- Analysis of the site's energy usage & costs and implementation of mandatory environmental features.
- A tariff analysis to make sure there are no overcharges.
- Provide information on how the site compares to other similar buildings or business.
- Identify how and where energy & environment are being used at the site.
- Provide a list of energy & environment saving opportunities.

Step 5: Implementation

The Energy & Environment audit has provided a list of options to save energy & upgrade the environmental conditions respectively. Most of the recommendations involve some capital expenditure however the report should help to determine which are the most cost effective and practical.
The next step is to obtain quotes from suppliers, implement recommendations.

Step 6: Support

The Energy & Environment auditor should be available for consultation with the establishment to provide necessary support and guidance.

PRESENTATION OF DATA & INFORMATION

A. *Electricity Bill Analysis for the period of May'19- Apr'20*

Consumer No. 010216
Tariff Code: E (EIT)
Supply Voltage (KV):11.00
Contract Demand (KVA):50.00
Type: TOD

ELECTRICITY UTILITY ANALYSIS FOR THE PERIOD OF MAY'19 - APR'20																					
Month	Energy Consumption (kWh)			Total E.C. (kWh)	P.F.	L.F. %	Unit/Rate (Rs.)			Energy Charges (Rs.)			Total E.C. (Rs.)	Demand Chargeable (KVA)	Add. Demand Charges (Rs.)	Demand Charges (Rs.)	LF Reb(-)/Sur(+) Charge (Rs.)	PF Reb(-)/Sur(+) Charge (Rs.)	Electricity Duty Charges (Rs.)	MVCA Charges (Rs.)	Rental Charges (Rs.)	Total Bill Amount (Rs.)
	Normal	Peak	Off-Peak				Normal	Peak	Off-Peak	Normal	Peak	Off-Peak										
May'19	12730	6125	5888	24743	0.9509	42.453	4.1	4.51	3.81	52193	27624	22433.28	102250.03	81	4000	25920	0	-2424.22	24536.05	11876.64	1200	167358.5
June'19	7736	4191	4081	16008	0.9343	37.403	4.05	4.46	3.77	31330.8	18692	15385.37	65408.03	62	800	19840	0	-1106.57	16174.54	7683.84	1200	109999.84
July'19	8449	4121	3619	16189	0.9343	37.698	4.05	4.46	3.77	34218.5	18380	13643.63	66241.74	61	704	19520	0	-974.57	16157.62	7770.72	1200	110619.51
Aug'19	10626	5679	5183	21488	0.9437	46.775	4.05	4.46	3.77	43035.3	25328	19539.91	87903.55	65	1120	20800	0	-1681.86	20522.49	10314.24	1200	140178.42
Sept'19	9708	5437	5164	20309	0.9391	46.79	4.05	4.46	3.77	39317.4	24249	19468.28	83034.7	63	1440	20160	0	-1471.54	19561.91	9748.32	1200	133673.39
Oct'19	4909	3321	3150	11380	0.8994	30.527	4.0484	4.458	3.768387	19873.5	14805	11870.42	46549.18	56	480	17920	0	0	12198.81	5462.4	1200	83810.39
Nov'19	4983	3939	3306	12228	0.8533	46.83	4	4.4	3.72	19932	17332	12298.32	49561.92	43	0	13760	0	693.2	12107.51	5869.44	1200	83192.07
Dec'19	3719	3080	2837	9636	0.83	36.717	4	4.4	3.72	14876	13552	10553.64	38981.64	43	0	13760	0	1338.55	10170.72	4625.28	1200	70076.19
Jan'20	4278	3466	2678	10422	0.794	40.362	4	4.4	3.72	17112	15250	9962.16	42324.56	45	0	14400	0	2250.12	11084.06	5002.56	1200	76261.3
Feb'20	5121	3933	3209	12263	0.8111	52.837	4.0034	4.404	3.723104	20501.7	17320	11947.44	49769.22	43	0	13760	0	1980.87	12369.41	5886.24	1200	84965.74
March'20	3731	2842	2987	9560	0.8424	35.889	4.1	4.51	3.81	15297.1	12817	11380.47	39494.99	43	0	13760	0	879.19	10173.76	4588.8	1200	70096.74
April'20	1438	1555	1950	4943	0.8489	19.029	4.1	4.51	3.81	5895.8	7013.1	7429.5	20338.35	43	0	13760	155.09	348.97	6405.93	2372.64	1200	44580.98

Connected Load Details

CONNECTED LOAD/ BCRCPAHS/DGR						
Type	**Total Qty.**	**Loads (kW)**	**Daily Op. hr(s)**	**Daily kWh**	**Monthly Op. hr(s)**	**Monthly (kWh)**
INTERNAL CONSUMPTION:						
Tube light	327	0.04	7.5	98.1	180	2354.4
CFL	61	0.012	7.5	5.49	180	131.76
LED	65	0.009	7.5	4.3875	180	105.3
Ceiling Fan	258	0.08	7.5	154.8	180	3715.2
Window A.C. 1 ton	5	1.5	7.5	56.25	180	1350
Window A.C. 1.5 ton	12	2	7.5	180	180	4320
Window A.C. 2 ton	4	2.5	7.5	75	180	1800
Exhaust	13	0.15	7.5	14.625	180	351
Refrigerator	5	0.01	24	1.2	576	28.8
Water Pump	2	1.5	3	9	72	216
OTIS Elevator	1	10	7.5	75	180	1800
COMMON AREA LIGHTING:						
LED PANEL LIGHT	2	0.2	12	4.8	288	115.2
LED STREET LIGHT	2	0.2		4.8		115.2
LED PANEL LIGHT	20	0.018		4.32		103.68
LED PANEL LIGHT	2	0.1		2.4		57.6
LED SURFACE LIGHT	9	0.022		2.376		57.024
MONTHLY POWER CONSUMPTION(kWh)						**16621.16**

B. GREEN PRACTICES:

Green Practices can have tremendous benefits, both tangible and intangible. The most tangible benefits are the reduction in water and energy consumption right from day one of occupancy. The energy savings could range from 20 - 30 % and water savings around 30-50%. Intangible benefits of green campus include health & well-being of the occupants, enhancing air quality & promoting biodiversity, safety benefits and conservation of scarce national resources.

- Water Conservation:

Most of the Asian countries are water stressed and in countries like India, the water table has reduced drastically over the last decade. Green Practices system encourages use of water in a self-sustainable manner through reducing, recycling and reusing strategies. By adopting this rating programme, campus can save potable water to an extent of 30 – 50%.

- Handling of Waste:

Wastes are nowadays segregated in three types: Solid Waste, Liquid Waste & E- Waste. Handling of waste in campuses is extremely difficult as most of the waste generated is not segregated at source and has a high probability of going to land-fills. This continues to be a challenge to the municipalities which needs to be addressed. This intends to address this by encouraging buildings to segregate the waste generated in the campus.

- Energy Efficiency:

The Buildings sector is a large consumer of electrical energy. Through Energy Efficient measures, campuses can reduce energy consumption through energy efficient –exterior lighting, air conditioning systems, etc. Also, alternative resources or energy are encouraged. The energy savings that can be realized by adopting this rating programme can be to the tune of 20 – 30%.

- Sustainable Transportation:

Fossil fuel is a slowly depleting resource, world over. The use of fossil fuel for transportation has been a major source of pollution. The system encourages the use of alternate fuels or no fuel for transportation.

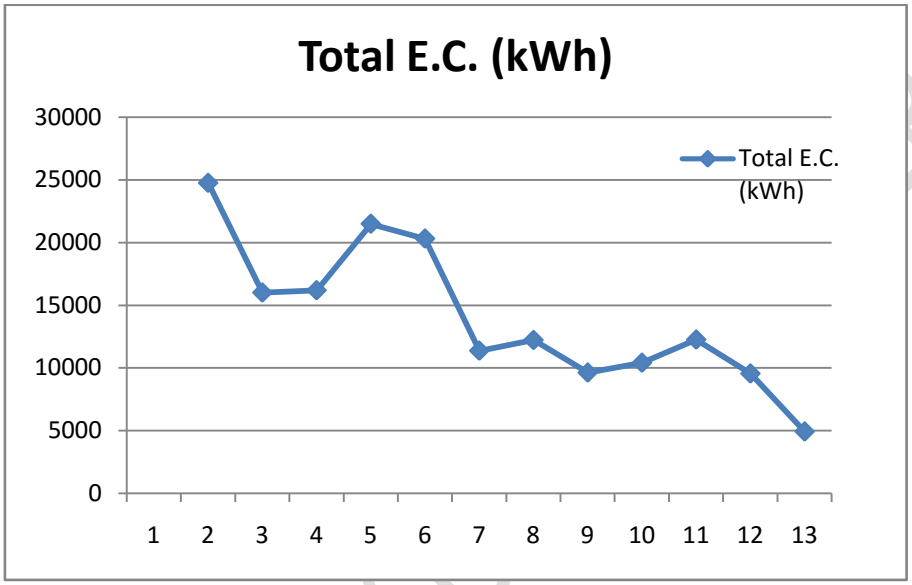
- Health and Well-being of Occupants:

Health and well-being of occupants is the most important aspect of Green Practices. The system ensures facilities to enhance health and occupant well-being which are critical in a campus.

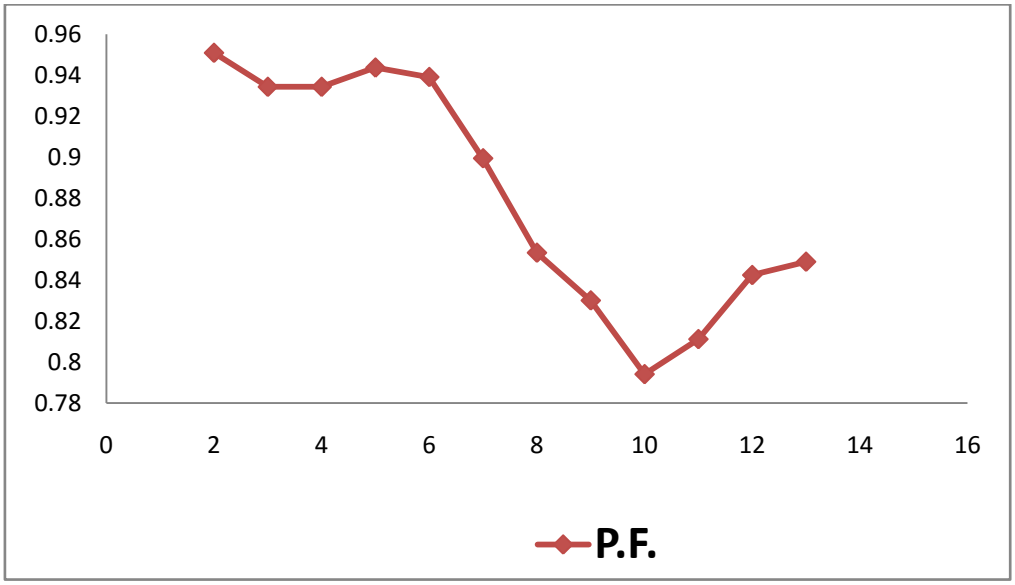
OBSERVATIONS & FINDINGS

A. ENERGY

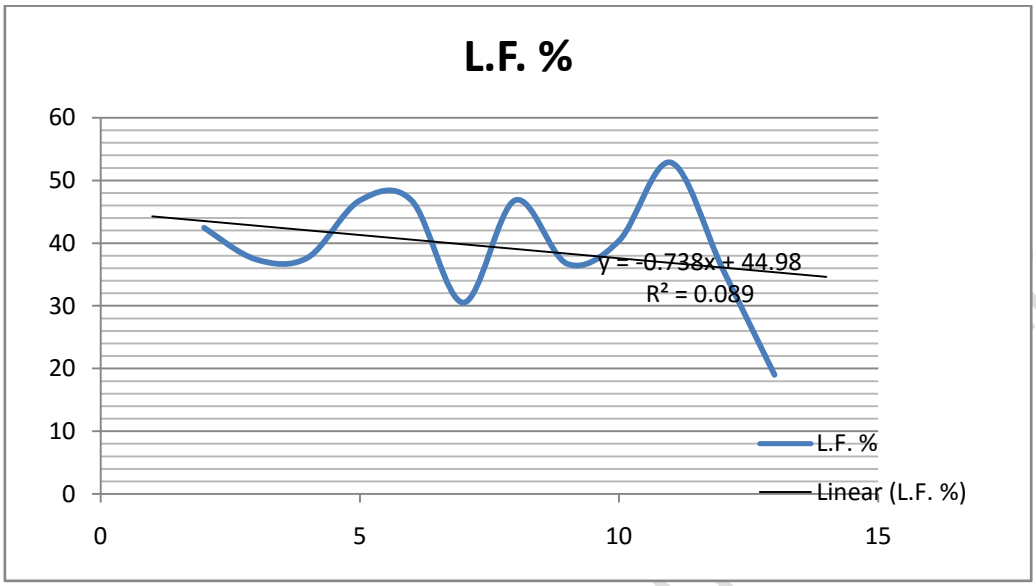
- Monthly Unit Consumption (May'19- Apr'20):



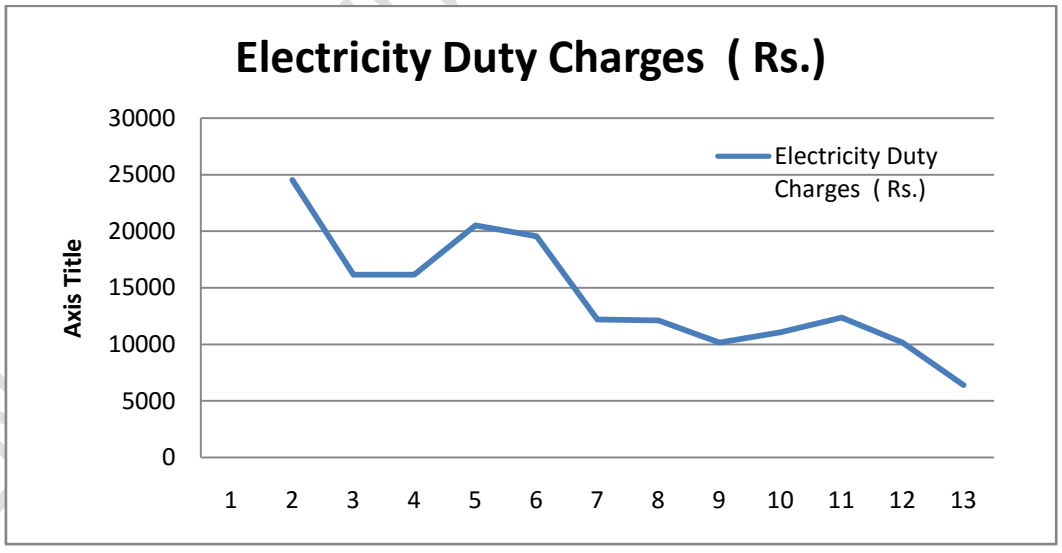
- Power Factor :



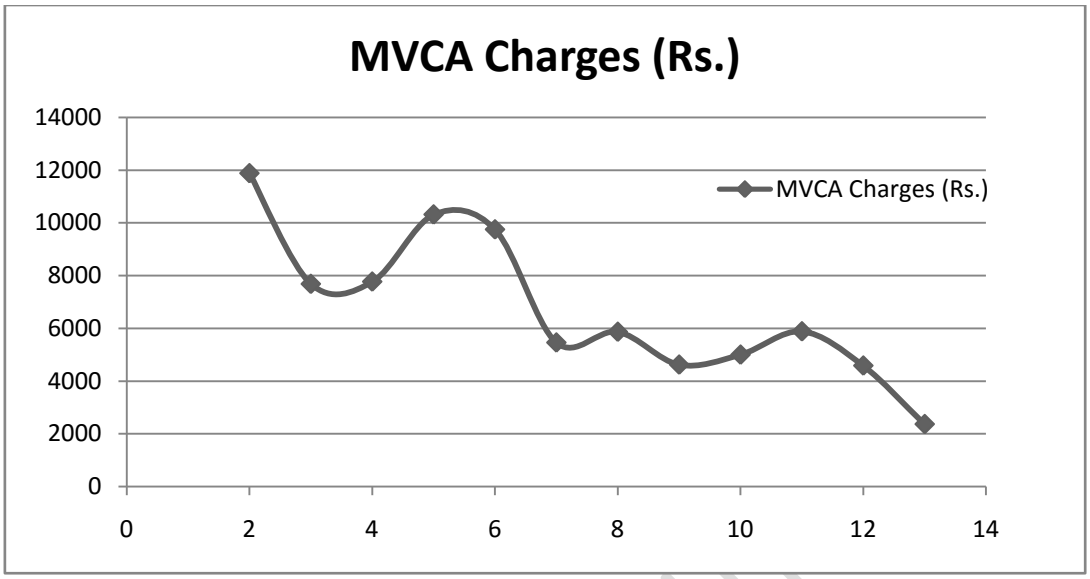
- Load Factor:



- Electricity Duty Charges (Rs.):



- MVCA Charges (Rs.):



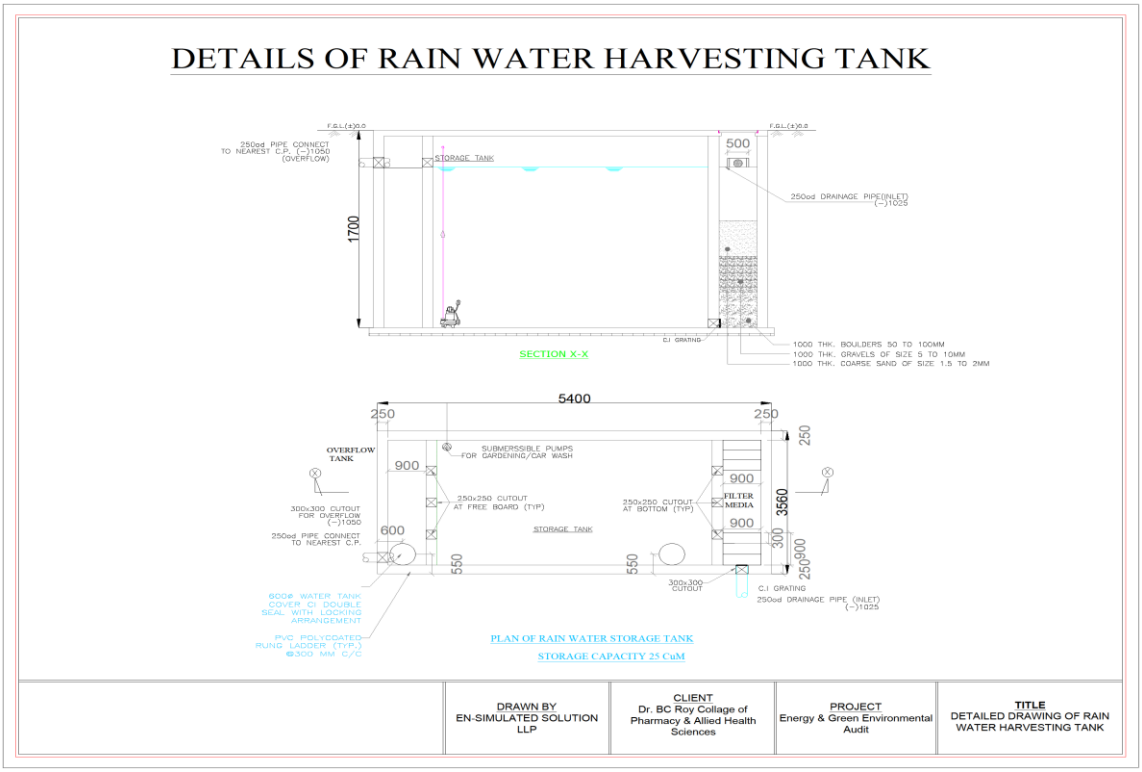
- Occupancy Details:

OCCUPANCY DETAILS			
Details	Male	Female	Total
No. of Students (Hostel)	138	59	197
No. of Students (From Outside)	303	60	363
	441	119	560
No. of Facilitator (Hostel)	4	2	6
No. of Facilitator (From Outside)	57	17	74
	61	19	80
No. of total occupant/day	**502**	**138**	**640**

C. GREEN PRACTICES

- Water Conservation:

BCRCPAHS promotes and set example for the students and staff members for positive infrastructure development. This simple method can put forward a solution which will be workable in areas where there is sufficient rain but the groundwater supply is not sufficient on the one hand and on the other surface water resource is insufficient. A Rainwater Harvesting Storage tank (Dimension 1.7 X 5.4 X 3.56 m^3) is observed with a Filtration Pit and a Recharge Pit as follows:



- Handling of Waste:

Waste management (or **waste** disposal) includes the activities and actions required to manage **waste** from its inception to its final disposal. This includes the collection, transport, treatment and disposal of **waste**, together with monitoring and regulation of the **waste management** process.

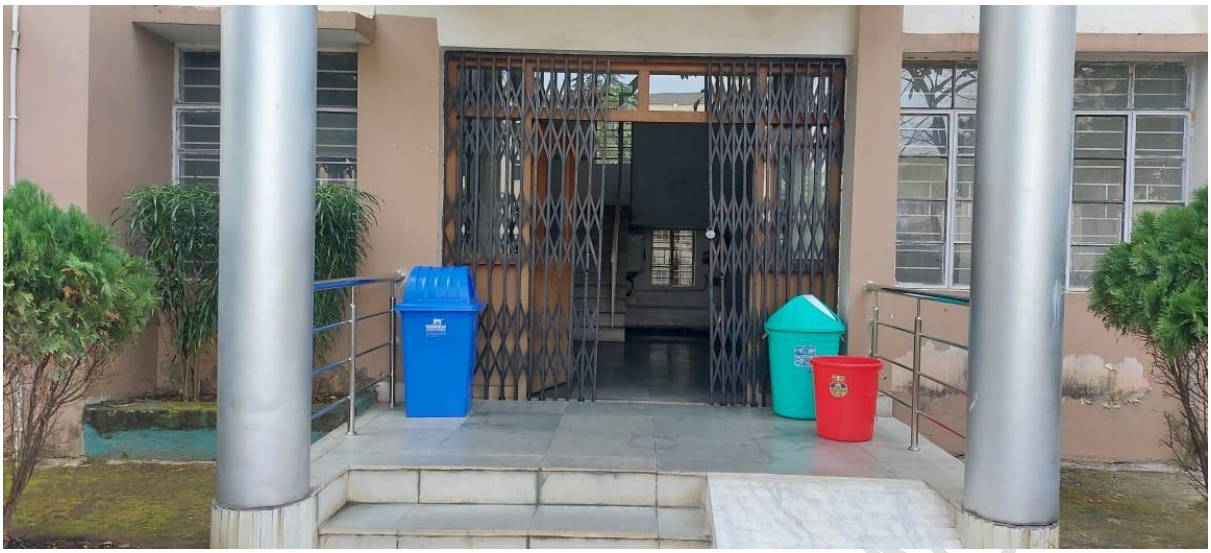
- Solid Waste:

The Resource Conservation and Recovery Act (RCRA), passed in 1976, states that "solid waste" means any garbage or refuse, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility and other discarded material, resulting from industrial, commercial, mining, and agricultural operations, and from community activities. Nearly everything we do leaves behind some kind of waste.
It is important to note that the definition of solid waste is not limited to wastes that are physically solid. Many solid wastes are liquid, semi-solid, or contained gaseous material.

The BCRCPAHS has availed the Waste Segregation facility at source by providing Dry/Wet Waste Bin inside the campus so far. The institution has also garbage collection facility in place offered by Durgapur Municipal Corporation.

- E-Waste:

E-waste is any electrical or electronic equipment that's been discarded. This includes working and broken items that are thrown in the garbage or donated to a charity reseller as a goodwill gesture. Often, if the item goes unsold in the store, it will be thrown away. E-waste is particularly dangerous due to toxic chemicals that naturally leach from the metals inside when buried.



According to the World Health Organization (WHO), health risks may result from direct contact with toxic materials that leach from e-waste. These include minerals such as lead, cadmium, chromium, brominated flame retardants, or polychlorinated biphenyls (PCBs). Danger can come from inhalation of the toxic fumes, as well as from the accumulation of chemicals in soil, water, and food.

This puts not just people in danger but land and sea animals as well. In developing countries, the risks are exceptionally high because some developed countries send their e-waste there. Studies have shown this global e-waste has detrimental effects on the people that work with the e-waste but also the people that live around it.

Because of this, a proper recycling process needs to be put in place to protect us and future generations.

- Energy Efficiency

Energy efficiency simply means using less energy to perform the same task – that is, eliminating energy waste. Energy efficiency brings a variety of benefits: reducing greenhouse gas emissions, reducing demand for energy imports, and lowering our costs on a household and economy-wide level. While renewable energy technologies also help accomplish these objectives, improving energy efficiency is the cheapest – and often the most immediate – way to reduce the use of fossil fuels. There are enormous opportunities for efficiency improvements in every sector of the economy.

Dr. B. C. Roy College of Pharmacy and Allied Health Sciences, Durgapur, has initiated drives for energy conservation to bring consciousness towards the environment. Consequent upon this, the college is replacing old monitors with power efficient LED monitors, as one of the measures. Additionally, the campus is using LED downward lighting fixtures to reduce the

impact of outdoor light pollution, the HVAC system is replacing with 3-star rated CFC/HCFC free to reduce the carbon impact as well as the fire extinguisher(s) purchased are of Halon free (Nitrogen based).

- Sustainable Transportation

Sustainable Transportation refers to any means of transportation that is 'green' and has low impact on the environment. Examples of sustainable transportation include walking, cycling, transit, carpooling, car sharing, and green vehicles. Transport systems have significant impacts on the environment, accounting for between 20% and 25% of world energy consumption and carbon dioxide emissions. The majority of the emissions, almost 97%, came from direct burning of fossil fuels. Greenhouse gas emissions from transport are increasing at a faster rate than any other energy using sector. Road transport is also a major contributor to local air pollution and smog.

The **United Nations Environment Programme** (UNEP) estimates that each year 2.4 million premature deaths from outdoor air pollution could be avoided. Particularly hazardous for health are emissions of black carbon, a component of particulate matter, which is a known cause of respiratory and carcinogenic diseases and a significant contributor to global climate change.

BCRCPAHS is going green with a mindset that involves continual pursuit of knowledge regarding how to live life in an environmentally friendly and responsible way. In addition to big things that reduce people's carbon footprint, individuals can adopt small, everyday practices and behaviors that help protect the environment and preserve natural resources for current and future generations.

The college is encouraging the students and the staff members to ride bicycles over cars which help to protect the environment by reducing harmful emissions. Students are being counseled that bicycle riding is an easy way to do their part in helping to preserve planet and keep their own college campus free of stinky exhaust fumes.

- Health and Well Being

The World Health Organization (WHO) defines health as 'a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity' (WHO, 1948). This is consistent with the **bio-psychosocial model** of health, which considers physiological, psychological and social factors in health and illness, and interactions between these factors. It differs from the traditional medical model, which defines health as the absence of illness or disease and emphasizes the role of clinical diagnosis and intervention.

BCRCPAHS maintain the green practices for sustainable environment. The students and staff members always try to makes healthy environment by performing different activities. The buildings on the campus are neat and clean, visually and acoustically comfortable. BCRCPAHS has implemented eco-friendly environment by the different process like

Environment Awareness Camp, Tree plantation, restricted uses for vehicles, Pollution free campus etc.

Clean Campus

Tree Plantation Program

Along with these the college has also made some additional features available for the comfort and well-being of the faculty students and staffs, which are as follows:

- Pollution –free, eye soothing, lush green campus
- Adjacent ATM counter
- Internal medical unit with highly efficient medical practitioners along with a tie-up with The Mission Hospital, Durgapur
- In Campus Boy's and Girl's hostel

Entrance of the Campus

Landscape Area of the Campus

Pharmacy Unit

Medical Unit

Netaji Open Air Auditorium

Gymnasium

Offering Daylighting

Common Area Daylight

Additionally, it has been observed that if the campus registers for any certification Rating Process, with little effort it could achieve Gold or 4-Star Rated Level which would be of National Excellence with its existing facilities in addition with some minor additional implementations.

The Campus rating system addresses the most important National priorities which include water conservation, handling waste, energy efficiency, reduced use of fossil fuels and health & well-being of occupants. The rating system requires the application of National standards and codes like the Bureau of Indian Standards (BIS), Central Ground Water Board guidelines, Central Pollution Control Board guidelines, Energy Conservation Building Code (ECBC), MNRE Guidelines, MoEFCC guidelines, National Building Code (NBC), and Renewable Energy Certificates (RECs). The overarching objective is to better the National standards so as to create new benchmarks.

- **Water Conservation:**

Most of the Asian countries are water stressed and in countries like India, the water table has reduced drastically over the last decade. Certified Green Campus rating system encourages use of water in a self-sustainable manner through reducing, recycling and reusing strategies. By adopting this rating programme, green campus can save potable water to an extent of 30 – 50%.

- **Handling of Construction Waste:**

Handling of waste in campuses is extremely difficult as most of the waste generated is not segregated at source and has a high probability of going to land-fills. This continues to be a challenge to the municipalities which needs to be addressed. Authority intends to address this by encouraging buildings to segregate the waste generated in the campus.

- **Energy Efficiency:**

The Buildings sector is a large consumer of electrical energy. Through Green Campus rating system, campuses can reduce energy consumption through energy efficient –exterior lighting, air conditioning systems, etc. Also, alternative resources or energy are encouraged. The energy savings that can be realized by adopting this rating programme can be to the tune of 20 – 30%.

- **Reduced Use of Fossil Fuels:**

Fossil fuel is a slowly depleting resource, world over. The use of fossil fuel for transportation has been a major source of pollution. The rating system encourages the use of alternate fuels for transportation.

- **Health and Well-being of Occupants:**

Health and well-being of occupants is the most important aspect of Green Campus rating system. The rating system ensures facilities to enhance health and occupant well-being which are critical in a campus.

An approach of searching for viable quotient as per standard green certification norms as follows:

Green Quotient of Existing Campus

#	Modules	Points Available	Points Achievable	Points Segregation	Compliance Action
Site Planning & Management [Maximum 22 Points]					
SPM MR 1	Green Buildings within the Campus	Mandatory			**Option 1: Green Buildings Built-up Area within the Campus** (OR) **Option 2: Green Features in the Campus Buildings**
SPM MR 2	Soil Erosion Control	Mandatory			• Soil erosion control measures must conform to the best management practices highlighted • Fertile topsoil to be stockpiled prior to construction, for future reuse or donation • Develop appropriate measures to address soil erosion, after occupancy
SPM Credit 1	Green Buildings within the Campus	10			**Option 1: Green Buildings Built-up Area within the Campus** Design individual buildings within the campus in accordance with appropriate IGBC rating system •Registered Projects Built-up Area •Certified Projects Built-up Area
			8	22	(OR) **Option 2: Green Features in the Campus Buildings** Design/ Retro-fit individual buildings with atleast 5 of the following green feature in the Campus Buildings: [Maximum 10 Points]
			0	2	• Passive Architecture
			0	2	• Heat Island Effect, Roof
			0	3	• Water Efficient Plumbing Fixtures

			0	2	• Waste Water Reuse
			1	1	• Eco-friendly Refrigerants
			1	3	• Energy Efficient Lighting Fixtures
			1	3	• High Performance Air-conditioning Equipment (applicable only for air-conditioned buildings in the campus)
			3	3	• On-site Renewable Energy (for Building requirements)
			1	2	• Daylighting
			1	1	• Outdoor Views
SPM Credit 2	Site Preservation	NA			
SPM Credit 3	Green Cover or Vegetation	6	3	3	**Case A: Green Cover or Vegetation** Demonstrate that the campus has retained or restored green cover or vegetation of the site area.
			3	3	**(AND/ OR)** **Case B: Plantation of Tree Saplings** The green cover shall have minimum 15 trees per acreage or plant tree saplings that can mature into fully grown-up trees with large canopy in the next 5 to 8 years
SPM Credit 4	Heat Island Reduction, Non-roof	4	2	2	Option 1: Non-roof Impervious Areas Provide one or more of the measures, for exposed non-roof impervious areas within the campus• Shade from existing tree cover/ newly planted saplings within 5 to 8 years of planting • Open grid pavers or grass pavers • Hardscape materials (including pavers) with SRI of atleast 29 (and not higher than 64).

			0	2	(AND/ OR) Option 2: Covered Parking Provide the parking spaces under cover
SPM Credit 5	Outdoor Light Pollution Reduction	2	0	2	Reduce light pollution to increase night sky access and enhance the nocturnal environment
	TOTAL	**22**	**16**		
Sustainable Transportation [Maximum 11 Points]					
ST Credit 1	Pedestrian Network	3	0	2	• Provide Shade for pedestrian network areas through tree cover or structured cover, for comfortable pedestrian access
			0	1	• Provide adequate illumination (Lux levels) for pedestrian network within the campus
ST Credit 2	Bicycle Lanes Network	4	0	2	• Design bicycle lane network within the campus to connect to all main buildings and basic amenities. • Provide bicycle parking at all main buildings/ basic amenities, within a walking distance of 100 meters. • Provide adequate illumination (Lux levels) for pedestrian network within the campus.
			0	2	(AND/OR) • Provide bicycles for campus occupants to commute within or outside the campus, as an environmental friendly transportation facility (for educational campus, minimum no. of bicycles must be 1 for every 25 occupants) & • Have a bicycle servicing facility within the campus (or) an alternative system to ensure that the bicycles would be in working condition.

ST Credit 3	Access to Sustainable Transportation	4	2	2	Option 1: Public Transport (2 Points) • Provide access to a public transportation facility (bus-stop/ intra-city railway station), within 800 meters walking distance from the campus entrance(s).
			0	2	(AND/ OR) Option 2: Shuttle Service (2 Points) • Electric/ CNG-powered Vehicles Operate or have a contract in place for electric/ CNG-powered vehicles within or outside the campus as shuttle services. Additionally, the project shall install electric charging facilities within the projects' parking area. (or) the project shall have atleast one CNG filling station within 5 km distance from the projects' campus entrance. (OR) • Conventional Vehicles (Fossil Fuel based vehicles) Operate or have a contract in place for shuttle services within or outside the campus (atleast 20% of the campus occupants).
TOTAL		**11**	**2**		
Water Conservation [Maximum 18 Points]					
WC MR 1	Rainwater Harvesting	Mandatory			**Case A: Rainwater Harvesting** Design rainwater harvesting system to capture/ percolate atleast 'one-day rainfall' runoff volume from roof and non-roof areas in the campus
					Case B: High Groundwater Table In areas where the Central / State Ground Water Board does not recommend artificial rain water recharge (or) if the groundwater table is less than 8 meters, the project is required to provide justification for not implementing rainwater harvesting system

WC Credit 1	Rainwater Harvesting	6	6	6	**Case A: Rainwater Harvesting** Design rainwater harvesting system to capture/ percolate atleast 'one-day rainfall*' runoff volume from roof and non-roof areas **(OR)**	
			0	6	**Case B: High Groundwater Table** Design rainwater harvesting system to capture/ percolate atleast 'one-day rainfall*' runoff volume from roof and non-roof areas	
WC Credit 2	Landscape Design	4	1	1	Turf Area (Any One)	≤ 40%
			0	2		≤ 20%
			0	1	Drought Tolerant/ Native / Adaptive Species Area (Any One)	≥40%
			2	2		≥60%
WC Credit 3	Management of Irrigation Systems	2	2		**(1 point for every three measure; maximum 2 points)** • Central shut-off valve • Soil moisture sensors integrated with irrigation system • Turf and each type of bedding area must be segregated into independent zones based on watering needs • Atleast 50% of landscape planting beds must have a drip irrigation system to reduce evaporation • Atleast 75% of turf area must have sprinkler irrigation system to reduce water loses • Time based controller for the valves such that evaporation loss is minimised and plant health is ensured • Pressure regulating device(s) to maintain optimal pressure to prevent water loss • Any other innovative methods for watering	
WC Credit 4	Wastewater Treatment and Reuse	4	0	2	**Waste Water Treatment:** Have an on-site treatment system to handle 100% of waste water generated in the campus, to the quality standards suitable for reuse, as prescribed by Central (or) State Pollution Control Board, as applicable.	

			0	2	**Waste Water Reuse:** Use treated waste water for atleast 25% of the total water required for landscaping and centralised Air-conditioning cooling tower make-up water (*if the project uses centralised water-cooled chillers)*
WC Credit 5	Optimise Water Use for Construction	NA			
WC Credit 6	Water Metering	2	0	2	**(1 point for every three measures; maximum 2 points) •** Municipal water supply • Bore water consumption • Treated waste water consumption • Water consumption for landscape requirements • Water consumption for centralised Air-conditioning cooling tower makeup (if the project uses centralised water-cooled chillers) • Building-level water consumption • Any other major source of water consumption
	TOTAL	**18**	**11**		
Energy Efficiency [Maximum 21 Points]					
EE Credit 1	Energy Efficiency in Infrastructural Equipment	10	**For all infrastructural equipment/ systems within the campus, achieve energy efficiency for the following systems: (maximum 10 points)**		
			1	5	Reduce lighting power density by for exterior areas
			0	2	All non-emergency exterior & common area lighting such as landscaping, surface and covered parking, pathways, bicycle lanes, street lighting should have Daylight sensor/ Timer-based control.
			1	2	Pumps shall have minimum efficiencies
			1	1	Motors (> 3.5 HP) with efficiency of atleast 85%

			1	3	Campuses which have installed Centralised Air-conditioning systems shall have a COP/ IPLV
EE Credit 2	On-site Renewable Energy	5	**Percentage of On-site Renewable Energy generated to the Total Annual Energy Consumption of the Campus Infrastructural Equipment/ Systems, excluding Buildings :(Any One)**		
				1	≥10
				2	≥20
				3	≥30
				4	≥40
			5	5	≥50
EE Credit 3	Off-site Renewable Energy	4	2	4	**Option 1:** Demonstrate that the project has purchased Renewable Energy Certificates (RECs) equivalent to atleast 20% of total annual energy consumption of the campus infrastructural equipment/ systems, excluding buildings.
			0		**(OR) Option 2:** Off-site Renewable Energy Investments Demonstrate that the project has invested in off-site renewable energy equivalent to atleast 20% of total annual energy consumption of the campus infrastructural equipment/ systems, excluding buildings.
EE Credit 4	Energy Metering	2	0	2	**(1 point for every three measures; maximum 2 points)** • Municipal water pumping • Ground water pumping • Treated waste water pumping • Exterior area lighting, including landscapes • Centralised air-conditioning systems • Renewable energy generation • Power backup systems (e.g. Generators sets) • Building-level energy consumption • Any other energy consuming equipment and systems
	TOTAL	**21**	**11**		

Material & Resource Management [Maximum 3 Points]						
MRM MR 1	Segregation of Waste, Post-occupancy	Mandatory			**Dry and Wet Waste** Provide separate bins to collect dry waste (paper, plastic, metals, glass, etc.,) and wet waste (Food), at all the exterior common areas of the campus, as applicable. Divert the collected waste to a centralised facility, which is easily accessible for hauling. **(AND)** **Hazardous Waste** In addition to dry and wet waste bins, provide separate bins for safe disposal of the following hazardous waste, at the centralised facility(i.e. Batteries, 'e' waste, Lamps, Medical waste, *if any*)	
MRM Credit 1	Organic Waste Management, Post-occupancy	3	1	1	Organic Waste	≥75%
				1	Garden Waste (Any One)	≥25%
			2	2		≥50%
MRM Credit 2	Handling of Waste Materials, during Construction	NA				
MRM Credit 3	Local Materials	NA				
	TOTAL	**3**	**3**			
Health & Well-being [Maximum 6 Points]						
HWB MR 1	Tobacco Smoke Control	Mandatory			**Option 1: No Smoking** Demonstrate that smoking is prohibited in the campus. **(OR)** **Option 2: Outdoor Smoking Areas** In case the campus has outdoor smoking areas, such areas shall be located at a minimum of 7.6 meters away from all outdoor air intakes (such as entrance doors, window openings etc.).	
HWB	Basic Amenities	1	**Provide atleast seven basic amenities within the campus, with pedestrian access.**			

Credit 1			1	1	List of Basic Amenities: • Accommodation facilities (Guest house, Hotel, Service apartment) • ATM / Bank Automobile refuelling station • Cafeteria/ Restaurant • Educational facilities (Crèche, Primary School, & Secondary School) • Hospital • Laundry / Dry cleaners • Leisure & Entertainment facilities (Auditorium, Amphitheatre, Theatre, etc.,) • Park / Garden • Post office / Courier service • Retail Stores (Grocery store, Supermarket, etc.,) • Saloon
HWB Credit 2	Health & Well-being facilities	4	2	2	**Health & Well-being Facilities** Demonstrate that the campus has health & well-being facilities to cater to atleast 10% of campus occupants, through the day. Health & well-being facilities include, but not limited to, aerobics, gymnasium, swimming pool, yoga, meditation, indoor games, outdoor games, playground, etc.,
			2	2	**(AND/ OR)** **Healthcare, Emergency & Security Facilities** Additionally, provide healthcare, emergency & security facilities within the campus such as first-aid/ clinic, pharmacy, emergency alarm, surveillance system etc., in the campus
HWB Credit 3	Universal Design	1	1	1	Design the campus to provide the measures for differently abled and senior citizens.
HWB Credit 4	Basic facilities for Construction Workforce	NA			
	TOTAL	**6**	**6**		
Green Education [Maximum 3 Points]					

GE Credit 1	Green Education	2	1		Promote green education by involving campus occupants, local communities & NGOs, to increase awareness levels and encourage implementation of eco-friendly practices
GE Credit 2	Green Campus Guidelines	1	1		Provide campus occupants and facility team with descriptive guidelines that educate and help them to maintain green design and construction features.
	TOTAL	**3**	**2**		
Innovation & Design [Maximum 6 Points]					
ID Credit 1	Innovation in Design Process	4	0		**Option 1: Innovation** Identify the intent of innovation credit, requirement for compliance, approach used to meet the required measures, and documentation to demonstrate compliance
			2		**Option 2: Exemplary Performance** The project is eligible for exemplary performance, if the design and/ or construction measures greatly exceed the credit requirements of the IGBC Green Campus rating system
ID Credit 2	IGBC Accredited Professional	2	2		Atleast three participants of the project team shall be IGBC Accredited Professionals
	TOTAL	**6**	**4**		
	TOTAL	**90**	**55**		
Certified 36-44, Silver 45-53, Gold 54-66, Platinum 67-90					

source reference IGBC,CII

DATA ANALYSIS

ENERGY:

1. The system load of BCRCPAHS, in the mid of the year, is observed with a low P.F. which resulting into the following:

    - A Low P.F. draws a higher internal current and the excessive heat generated will damage and/or shorten equipment life.
    - Increased reactive loads can reduce output voltage and damage equipment sensitive to reduced voltage.
    - Low P.F. requires equipment to be constructed heavier to absorb internal energy requirements
    - Low P.F. will result in a more expensive system with equipment able to absorb internal loads and larger load requirements
    - A system designer looks to increase P.F. to lower system costs, increase reliability and increase the system's life cycle
    - Utilities will charge a higher cost to industrial and commercial clients having a low P.F.

2. In L.F. which is a measure of the utilization rate, or efficiency of electrical energy usage; a high load factor indicates that load is using the electric system more efficiently, whereas consumers or generators that underutilize the electric distribution will have a low load factor.

    L.F. =Average Load/Maximum Load in given time period

The load factor graph of BCRCPAHS depicts that the load is varying. As a result, the institution is bearing some amount of penalty charges every month.

3. The Contract Demand is insufficient with respect to maximum demand.
4. As per existing facility, the tube lights of the common area corridors are bearing some sizeable amount of electricity charges.

ENVIRONMENTAL & GREEN:

1. BCRCP has also taken a large amount of policies for Green Energy & Clean Environment in College Campus (already in place and in operating phase):

    - Renewable energy generation and energy conservation
        (a) Use of LED bulbs/ power efficient equipment

    - Water conservation facilities
        (a) Rain water harvesting

    - Solid waste management
        (a) The Waste Collection facility by Municipal Authority
        (b) Segregation Of Waste at Source (Dry/Wet/E-Waste)

    - Green campus drive
        (a) Restricted entry of automobiles
        (b) Landscaping with trees and plants

    - Disabled friendly environment
        (a) Built-in ramps/lifts for easy access to classrooms
        (b) Disabled friendly washrooms (progressive implementation)

5. BCRCPAHS has also made some additional features available for the comfort and well-being of the occupants, which are as follows:

    - Accommodation Facilities – Guest House in the campus / Faculty and Staff Quarter inside the campus.
    - ATM – ATM just besidethe campus
    - Canteen – From Student and Staff
    - Hospital – MoU with The Mission Hospital Durgapur and In campus Medical Centre for Health check-up for students and staff
    - Park / Garden in the campus

RECOMMENDATIONS& DISCUSSIONS

The institution has been inaugurated in the year 2005, September. Though the modern concept of environmental features other than good practice(s), has been adopted at that time as much as possible. However addition of new buildings and other amenities is a regular practice till date. Hence, a list of recommendations along with the earlier provided recommendations are as follows:

ENERGY:

- The P.F. correction is required at the earliest. **Automatic Power Factor Controller (APFC) can be installed.**

This controller determines the rating of capacitance connected in each step during the first hour of its operation and stores them in memory. Based on this measurement, the APFC switches on the most appropriate steps, thus eliminating the hunting problems normally associated with capacitor switching.

The need of using APFC are:

- APFC help reduce Reactive Power and Apparent Power Demand.
- These controllers also help to avoid Power Factor Surcharges & Maximum Demand Penalties.
- It reduces the risk of Operational Issues and Power Loss.
- Whereas it also improves the power factor. And brings it as close to 0.99 or unity as possible.
- It provides consistent Power Factor Correction even under fluctuating power loads.
- The Automatic Control System effectively switches the capacitors on or off whenever you require.
- The APFC system continuously monitors the load and takes action based on the microprocessor relays.
- These system also have a User-Friendly Interface.
- It helps to bring down electricity consumption and reduce utility bills.
- These APFC likewise minimize Harmonic Disruption too.
- It is durable and resistant to corrosion.
- APFC System also protect electrical equipment from damage.

Proposed Models &Cost Analysis:

1. etaSMART 8R (L&T APFC Controller) - 415V – Rs. 9000/-
2. etaCON M (L&T APFC Controller) – 415-110V – Rs. 12000/-

[Details attached in the Annexure.]

- The Contract Demand is insufficient with respect to the maximum demand. It is advised to increase the contract demand (i.e. 75 KVA) to substantiate the need of maximum demand when the institution will run with *100% student capacity*.
- The existing common area lighting fixtures could be replaced by sensor based energy efficient lighting fixtures.
- The Fan(s) & Exhaust(s) could be replaced by Energy Efficient BLDC Ceiling Fan, Wall Fan and Pedestal Fan & Exhaust Fan. [Efficiencia (BLDC 32 W), Details attached in the Annexure]

ENVIRONMENTAL & GREEN:

- The existing ramp in the entrance of BCRCPAHS campus could be renovated as per the dimension guided by the NBC 2016 along with the handrail to serve the purpose.
- The existing buildings could adopt ECBC as per guidelines of MOEFCC and the roof of existing buildings could be finished with reflective type light color paints.
- It is recommended to segregate the Bio-medical Waste at source.

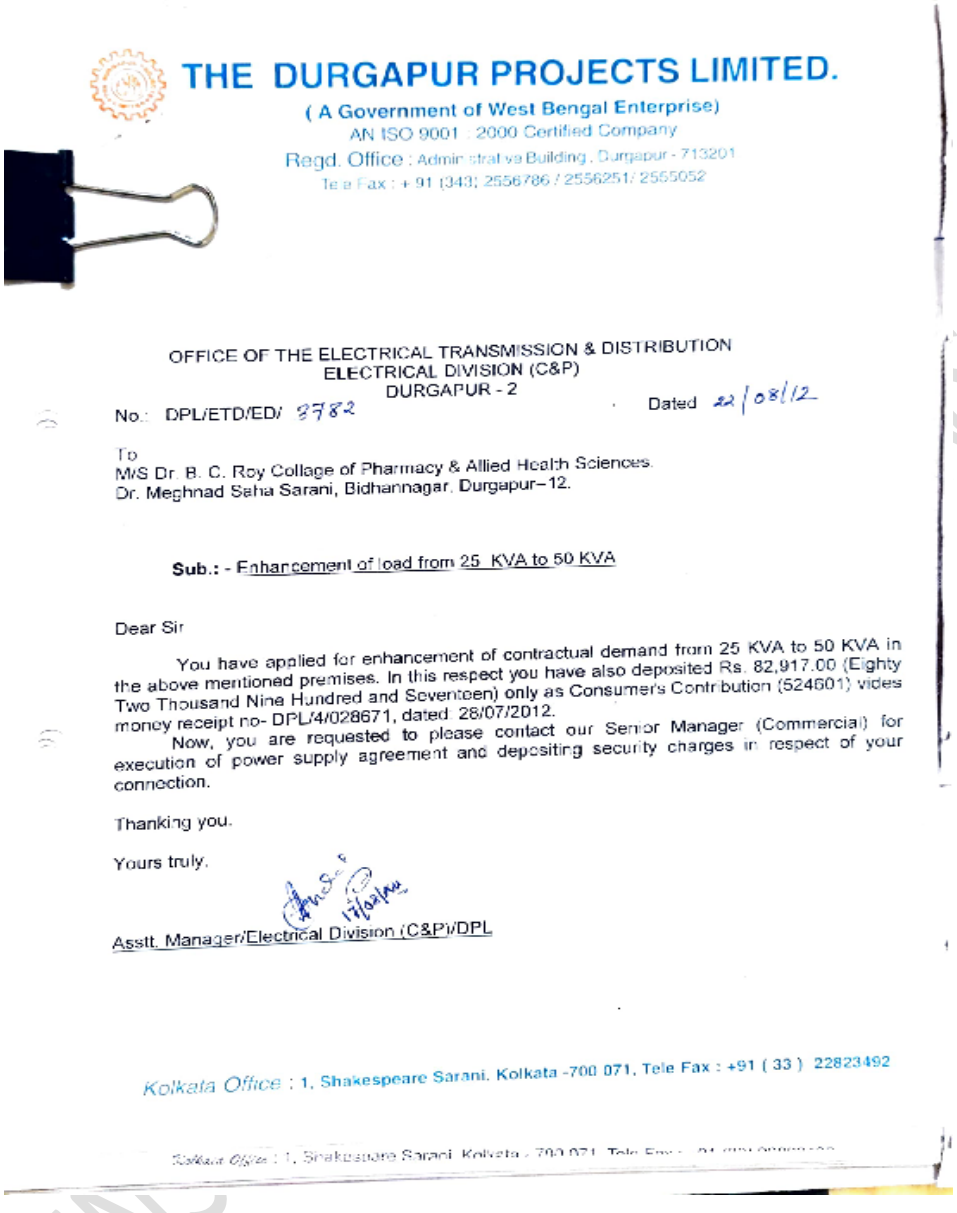
Any type of biomedical wastes shows a threat of infection to human health. Examples include non-liquid tissue and body parts from humans and other primates; laboratory and veterinary waste which contain human disease-causing agents; discarded sharps; and blood, blood products and body fluids from humans and other primates. The following are also included:

  - Used, absorbent materials saturated with blood, body fluids, or excretions or secretions contaminated with blood and absorbent materials saturated with blood or blood products that have dried. Absorbent material includes items such as bandages, gauze and sponges.
  - Non-absorbent disposable devices that have been contaminated with blood, body fluids or blood contaminated secretions or excretions and have not been sterilized or disinfected by an approved method.
  - Other contaminated solid waste materials which represent a significant risk of infection because they are generated in medical facilities which care for persons suffering from diseases requiring Strict Isolation Criteria.

- It is recommended to use the Recharged Rain-water through the sprinkler irrigation system to maintain the Landscape.
- The existing plumbing fixtures could be exchanged with low-flow fixtures(even if the faucets are introduced with aerators); this has a potential for reduction of 25-40% daily water use as follows:

Calculations showing water consumption pattern of fixtures installed For Dr. B.C. Roy College of Pharmacy & AHS, Durgapur						
Base Case				**Proposed Case**		
Faucets/ Taps				**Faucets/ Taps**		
Total Occupants	640	Number		Total Occupants	640	Number
Flow rate	8	LPM		Flow rate	5	LPM
Daily Usage	0.25	Minutes		Daily Usage	0.25	Minutes
Total Water Consumed/ day	1280	Litres		Total Water Consumed/ day	800	Litres
Total Number of working days	250			Total Number of working days	250	
Annual Water Consumed	3,20,000.00	Litres		Annual Water Consumed	2,00,000.00	Litres
Percentage of Water Saving						**38%**

ANNEXURE(S)



THE DURGAPUR PROJECTS LIMITED.

(A Government of West Bengal Enterprise)

AN ISO 9001 : 2000 Certified Company

Regd. Office : Administrative Building, Durgapur - 713201

Tele Fax : + 91 (343) 2556786 / 2556251/ 2555052

OFFICE OF THE ELECTRICAL TRANSMISSION & DISTRIBUTION
ELECTRICAL DIVISION (C&P)
DURGAPUR - 2

No.: DPL/ETD/ED/ 2782 Dated 22/08/12

To
M/S Dr. B. C. Roy College of Pharmacy & Allied Health Sciences.
Dr. Meghnad Saha Sarani, Bidhannagar, Durgapur–12.

Sub.: - Enhancement of load from 25 KVA to 50 KVA

Dear Sir

You have applied for enhancement of contractual demand from 25 KVA to 50 KVA in the above mentioned premises. In this respect you have also deposited Rs. 82,917.00 (Eighty Two Thousand Nine Hundred and Seventeen) only as Consumer's Contribution (524601) vides money receipt no- DPL/4/028671, dated. 28/07/2012.

Now, you are requested to please contact our Senior Manager (Commercial) for execution of power supply agreement and depositing security charges in respect of your connection.

Thanking you.

Yours truly.

Asstt. Manager/Electrical Division (C&P)/DPL

Kolkata Office : 1, Shakespeare Sarani, Kolkata -700 071, Tele Fax : +91 (33) 22823492

Kolkata Office : 1, Shakespeare Sarani, Kolkata - 700 071, Tele Fax : +91 (33) 22823492

Ph. Nos. 2223-6421/6472.
Extn. No. 217.

GOVERNMENT OF WEST BENGAL
DIRECTORATE OF ELECTRICITY
1, HARISH MUKHERJEE ROAD, KOLKATA-700 020
****

No. KKD/ 775 , Dated, Kolkata, the 27-3- 2012.

From :: The Dy. Chief Electrical Inspector, Govt. of West Bengal.

To :: The President,
Dr. B.C. Roy College of Pharmacy and Allied Health Sciences,
Dr. Meghnad Saha Sarani,
Bidhannagar; Durgapur – 713212,
Dist. – Burdwan.

Approval for
High Voltage installation comprising of (1) 1 X 100KVA, 11KV/433V Transformer (Make : Eastern Transformers & Equipment Pvt. Ltd.; Sl.No. :- S-1716/1) (2) One 11KV 400A GOAB Switch with D.O. Fuses (Make :- Porel Electricals) and (3) One set 15KV 5KA LA's

at your above premises as desired

In your ref. No. BCR/DPL-Elect/12/4890 dtd. 08/02/2012 .

Dear Sir/s,

With reference to your application under Rule 63(2) of the Indian Electricity Rules, 1956 and the inspection by the office on 23/03/2012 I hereby accord approval to your bringing into use the high voltage installation mentioned above subject to your compliance with the requirements of the Indian Electricity Rules, 1956 as set out below and any future additions to or alterations in the 11KV high voltage circuits or apparatus being notified to the Electrical Inspector, West Bengal and approval in writing obtained from him before the same are brought into use.

Enclo :: A bill for Rs.300.00

Yours faithfully,

(K.K.DHARA)
DY. CHIEF ELECTRICAL INSPECTOR,
WEST BENGAL

SB:
27/03/12.

Dr. B. C. Roy College of Pharmacy and Allied Health Sciences
DURGAPUR

B.Pharm

	40W	36W	11W	Exeed - 5 NOS. 20W	
1st Ful-	TUBE 76 NOS.	LED Tube	CFL 8 NOS.	AC 2 No.	FAN 57 Nos. EX - 6 No.
2nd FUL	83 NOS.		14 NOS.	3 NOS.	45 NO. EX - 3
3rd Ful-	77 NOS.	2 No.	6 No.	9 No.	52 NOS.
G.F -	32 NOS.	63 NOS.	21 Nos.	3 NOS. +1 NOS.	~~3 NOS.~~ 41 NOS. WF - 3 NOS.
M.Pharmacy G.F -	17 NOS.	DEEP FREEZER - 1 No.	6 NOS.	3 NOS.	14 NOS.
1st Ful-	15 NOS.		3 NOS.		15 NOS.
2nd Ful-	15 NOS.		3 NOS.		16 NOS. WF - 1 No.
3rd Ful-	12 NOS.				18 NOS.
	327 NOS.	65 NOS.	61 No.	21 NOS.	258 NOS. EX - 13 NOS.

West Bengal State Electricity Distribution Company Ltd.

(A Government of West Bengal Enterprise)
BURDWAN REGIONAL OFFICE
VIDYUT BHAWAN, POWER HOUSE COMPLEX , FRASER AVENUE , PURBA BARDHAMAN , PIN- 713101
Phone: 0342-2663503/2692424/2663431 , Fax: 0342-2662431 , Email: [illegible]

Consumer ID:925010216 Installation No:22068864 M/S DR. B.C ROY COLLEGE OF PHARMACY & ALLIED HEALTH DR. MEGHNAD SAHA SARANI BIDHANNAGAR Pin - 713212 Country:India	Invoice No.:400021178923 Billing Date:08.01.2020 Billing Cycle:DEC,2019 Present Reading Date:01.01.2020 Previous Reading Date:01.12.2019 Service At:DURGAPUR, BILL No: Account Reference No:25600045 Consumer No: 010216	Tariff Code:E(HIT) Supply Voltage(KV):11.00 Contract Demand(KVA):50.00 PF:0.8300 LF%:36.7173 Nature Of industry:OTHERS

Meter No	DPF00769	Type	TOD	MC	1	MF	1.00000	Loss Factor	1	Net MF	1.00000

Meter Readings	KVAH			KWH			KVA / Dt. & Time of MD		
Time	Normal	Peak	Off-peak	Normal	Peak	Off-peak	Normal	Peak	Off-peak
Present	692182.000	474107.000	459714.000	627570.000	396584.000	394538.000	33.	35.	28.
Previous	687694.000	470295.000	456404.000	623851.000	393504.000	391701.000			
	KVAH			KWH			KVA		
Reading Advance * Net MF	4488.000	3812.000	3310.000	3719.000	3080.000	2837.000	33.600	35.440	28.760

Energy Charge		Normal	Peak	Off-peak		
Rate	EC(p/KWH)	400	440	372	Energy/Min	38981.64
	P.F.Reb(-)/Sur(+)(%onEC)	3.00	6.00	0.75	Rebate on EC(Rs.)	0.00
	L.F.Reb(-)(p/KWH)				Addl.EC(Rs.)	0.00
Chargeable	KWH	3719.000	3080.000	2837.000	Total EC(Rs.)	38981.64
EC Amount	Rs.	14876.0000	13552.0000	10553.6400		
Chargeable	PF	0.8287	0.8080	0.8571		
PF	Rs.	446.28	813.12	79.15		
Demand Charge					*Demand Charge	11760.00
Rate	Normal(Rs/KVA/month)	320.00			Addl.DC(Rs.)	0.00
Chargeable	Normal KVA	35.00			Total DC(Rs.)	11760.00
	Addl.KVA	0.00			Reb on DC(on TP)	

Rebate(-)/Surcharge(+) (Rs.)	
LF Reb(-)/Sur(+)	0.00
PF Reb(-)/Sur(+)	1338.55
MVCA Charges @48 Paisa/KWH	4625.28
##Government subsidy	
@@ Other Arrear Charges	0.00

Electricity Duty					
KWTM Units	00.00	%On Net Charge	15.00	Net ED(Rs.)	10170.72
EDCOM Units	9636.00	%On Net charge	17.50	Exemption (Rs.)	
KFPHB Units	00.00	%On Net charge	5.00	#Arrear ED(Rs.)	0.00
ED DOM Units	00.00	%On Net charge	15.00	ED Adjust (Rs)	
				Total ED(Rs.)	10170.72

Other Charges & Outstanding (Rs.)			
Rental of Meter/Meters	1200.00	Amnt. For Current Month(Rs)	70076.19
Transformer Rental + GST	0.00	Due Date :	20.01.2020
E.C adjustment		Outstanding Amount(Rs.): @	0.00
D.C adjustment		Adjustment Amount (Rs) :	-0.14
Other adjustment		Adjustment Amount1(Rs) : --	0.00
LPSC Charges	0.00	Payable by DueDate(Rs):	69489.00
Adjustments	-0.14	Payable After DueDate(Rs):	70077.00
Timely Payment Rebate	-587.05		
Addl LF Rebate for Timely Payment	0.00	Payable by DueDate	
Total Timely Payment Rebate	-587.05	Through NEFT/RTGS(RS):	68909.00

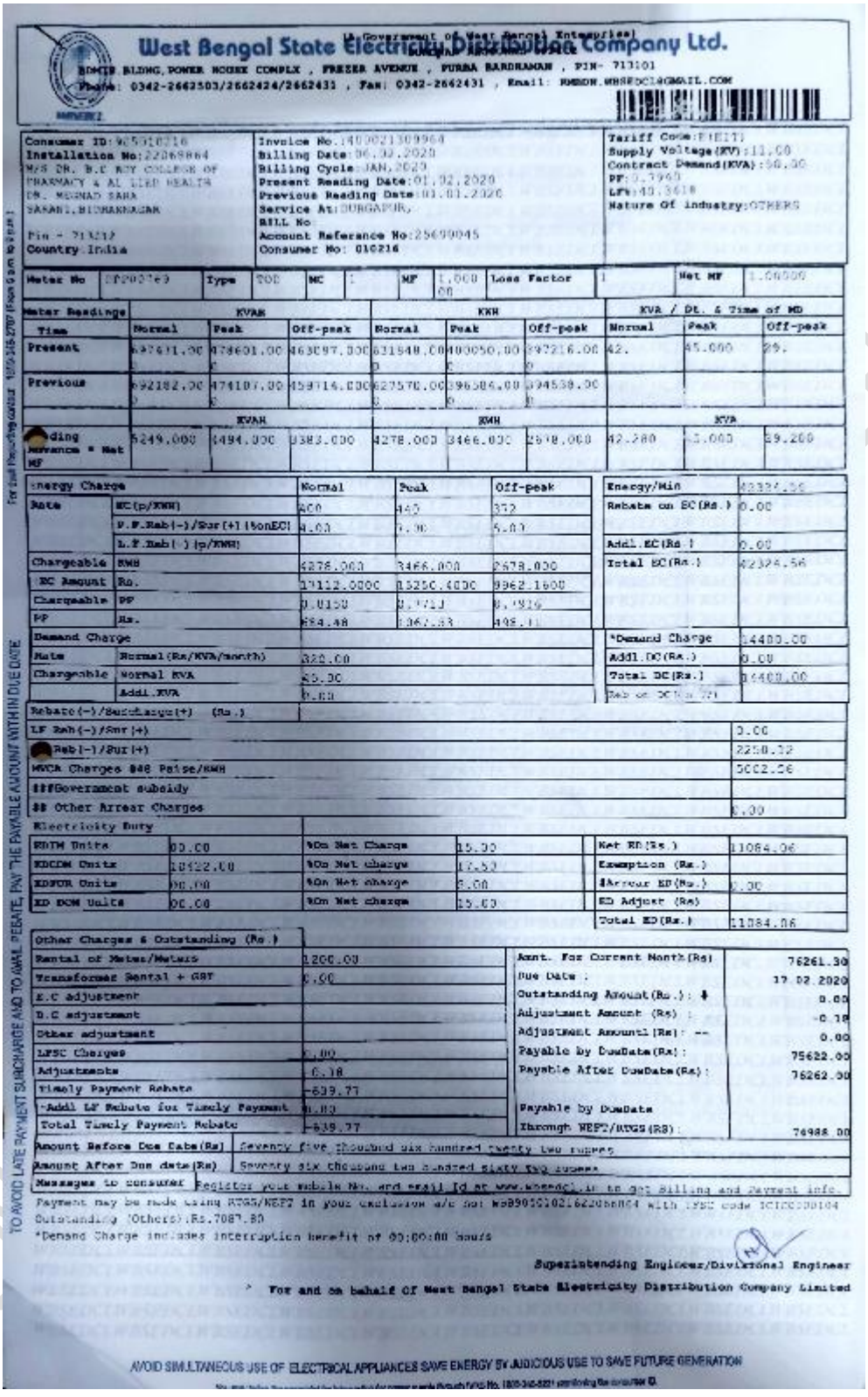
Amount Before Due Date(Rs)	Sixty nine thousand four hundred eighty nine rupees
Amount After Due date(Rs)	Seventy thousand seventy seven rupees
Messages to consumer	Register your mobile No. and email Id at www.wbsedcl.in to get Billing and Payment info.

Payment may be made using RTGS/NEFT in your exclusive a/c no: WBA9050102162206884 with IFSC code ICIC0000104
Outstanding (Others):Rs.7687.80
*Demand Charge includes interruption benefit of 00:00-00 hours

Superintending Engineer/Divisional Engineer
For and on behalf Of West Bengal State Electricity Distribution Company Limited

AVOID SIMULTANEOUS USE OF ELECTRICAL APPLIANCES SAVE ENERGY BY JUDICIOUS USE TO SAVE FUTURE GENERATION

PAY THE PAYABLE AMOUNT WITHIN DUE DATE



(A Government of West Bengal Enterprise)

West Bengal State Electricity Distribution Company Ltd.

BIDHUT BILDING, POWER HOUSE COMPLEX , FRASER AVENUE , PURBA BARDHAMAN , PIN- 713101

Phone: 0342-2662503/2662424/2662431 , Fax: 0342-2662431 , Email: RMHOM.WBSEDCL@GMAIL.COM

Consumer ID: 905010216 Installation No: 22069864 M/S DR. B.C ROY COLLEGE OF PHARMACY & AL LIED HEALTH DR. MEGNAD SAHA SARANI,BIDHANNAGAR Pin - 713212 Country :India	Invoice No.:1400021309964 Billing Date:06.02.2020 Billing Cycle:JAN,2020 Present Reading Date:01.02.2020 Previous Reading Date:01.01.2020 Service At:DURGAPUR, BILL No : Account Reference No:25690045 Consumer No: 010216	Tariff Code:F(HIT) Supply Voltage(KV):11.00 Contract Demand(KVA):500.00 PF:0.9960 LF%:40.3418 Nature Of industry:OTHERS

Meter No	DP2017e9	Type	TOD	MC	1	MF	1.000 00	Loss Factor	1	Net MF	1.00000

Meter Readings	KVAH			KWH			KVA / Dt. & Time of MD		
Time	Normal	Peak	Off-peak	Normal	Peak	Off-peak	Normal	Peak	Off-peak
Present	637411.00	478601.00	463097.00	631948.00	400050.00	297216.00	42.	45.000	29.
Previous	592182.00	474107.00	459714.00	627570.00	396504.00	294538.00			
Reading Difference = Net MF	5249.000	4494.000	3383.000	4278.000	3466.000	2678.000	42.280	1.000	29.200

Energy Charge		Normal	Peak	Off-peak		
Rate	EC(p/KWH)	400	440	372	Energy/Min	42394.56
	F.F.Reb(-)/Sur(+)(%onEC)	8.00	8.00	8.00	Rebate on EC(Rs.)	0.00
	L.F.Reb(-)(p/KWH)				Addl.EC(Rs.)	0.00
Chargeable	KWH	4278.000	3466.000	2678.000	Total EC(Rs.)	42394.56
EC Amount	Rs.	17112.0000	15250.4000	9962.1600		
Chargeable	PF	0.9150	0.9710	0.9819		
PF	Rs.	684.48	1067.33	495.11		

Demand Charge				
Rate	Normal(Rs/KVA/month)	320.00	*Demand Charge	14400.00
Chargeable	Normal KVA	45.00	Addl.DC(Rs.)	0.00
	Addl.KVA	0.00	Total DC(Rs.)	14400.00
			Reb on DC(Rs.)	

Rebate(-)/Surcharge(+) (Rs.)	
LF Reb(-)/Sur(+)	0.00
Reb(-)/Sur(+)	2258.32
MVCA Charges 848 Paise/KWH	5002.56
$$Government subsidy	
## Other Arrear Charges	0.00

Electricity Duty					
RDTH Units	00.00	%On Net Charge	15.00	Net ED(Rs.)	11084.06
EDCDM Units	18422.00	%On Net charge	12.50	Exemption (Rs.)	
EDTOR Units	00.00	%On Net charge	8.00	$Arrear ED(Rs.)	0.00
ED DCM Units	00.00	%On Net charge	15.00	ED Adjust (Rs)	
				Total ED(Rs.)	11084.06

Other Charges & Outstanding (Rs.)	
Rental of Meter/Meters	1200.00
Transformer Rental + GST	0.00
E.C adjustment	
D.C adjustment	
Other adjustment	
LPSC Charges	0.00
Adjustments	-0.18
Timely Payment Rebate	-639.77
+Addl LF Rebate for Timely Payment	0.00
Total Timely Payment Rebate	-639.77

Amnt. For Current Month(Rs)	76261.30
Due Date :	17.02.2020
Outstanding Amount(Rs.): +	0.00
Adjustment Amount (Rs) :	-0.18
Adjustment Amount(Rs): --	0.00
Payable by DueDate(Rs):	75622.00
Payable After DueDate(Rs):	76262.00
Payable by DueDate Through NEFT/RTGS(RS):	74988.00

Amount Before Due Date(Rs)	Seventy five thousand six hundred twenty two rupees
Amount After Due date(Rs)	Seventy six thousand two hundred sixty two rupees
Messages to consumer	Register your mobile No. and email Id at www.wbsedcl.in to get Billing and Payment info.

Payment may be made using RTGS/NEFT in your collection a/c no: WB0901010216220b8064 with IFSC code ICIC0000104

Outstanding (Others):Rs.7087.80

*Demand Charge includes interruption benefit of 00:00:00 hours

Superintending Engineer/Divisional Engineer

For and on behalf Of West Bengal State Electricity Distribution Company Limited

TO AVOID LATE PAYMENT SURCHARGE AND TO AVAIL REBATE, PAY THE PAYABLE AMOUNT WITHIN DUE DATE

AVOID SIMULTANEOUS USE OF ELECTRICAL APPLIANCES SAVE ENERGY BY JUDICIOUS USE TO SAVE FUTURE GENERATION

(A Government of West Bengal Enterprise)

West Bengal State Electricity Distribution Company Ltd.

ADMIN.BLDNG,POWER HOUSE COMPLX , FREZER AVENUE , PURBA BARDHAMAN , PIN- 713101
Phone: 0342-2662503/2662424/2662431 , Fax: 0342-2662431 , Email: PNBDN.WBSEDCL@GMAIL.COM

Consumer ID:905010216 Installation No:2206R864 M/S DR. B.C ROY COLLEGE OF PHARMACY & AL LIED HEALTH DR. MEGNAD SAHA SARANI,DURGANAGAR Pin - 713212 Country:India	Invoice No.:6090219499641 Billing Date:05.03.2020 Billing Cycle:FEB,2020 Present Reading Date:01.03.2020 Previous Reading Date:01.02.2020 Service At:DURGAPUR, BILL No: Account Reference No:25639045 Consumer No 010216	Tariff Code:HT(IT) Supply Voltage(KV):11.00 Contract Demand(KVA):50.00 PF:0.811 LF%:52.8366 Nature Of Industry:OTHERS

Meter No	2PP00769	Type	TOD	MC	1	MF	1.000	Loss Factor	1	Net MF	1.00000

Meter Readings	KVAH			KWH			KVA / Dt. & Time of MD		
Time	Normal	Peak	Off-peak	Normal	Peak	Off-peak	Normal	Peak	Off-peak
Present	703487.00	483715.00	467046.000	636969.00	433983.00	400425.00	38.320	43.360	31.320
Previous	697431.00	478691.00	463097.000	631848.00	430550.00	397216.00			
Reading Advance * Net MF	KVAH 6056.000		5114.000	3949.000	KWH 5121.000		4933.000	3209.000	KVA 38.320		43.360	31.320

Energy Charge		Normal	Peak	Off-peak
Rate	EC(p/KWH)	608/410	440/451	572/361
	F.P.Rab(-)/Sur(+) (%on EC)	2.00	7.00	8.00
	L.F.Rab(-)(p/KWH)			
Chargeable	KWH	5121.000	3933.000	3209.000
EC Amount	Rs.	26501.8800	17320.1200	11947.4400
Chargeable	PF	0.8456	0.7691	0.8126
PF	Rs.	419.04	1212.41	958.63

Energy/Min	49769.22
Rebate on EC(Rs.)	0.00
Addl.EC(Rs.)	0.00
Total EC(Rs.)	49769.22

Demand Charge		
Rate	Normal(Rs/KVA/month)	329.00 /329.00
Chargeable	Normal KVA	43.00
	Addl KVA	0.00

*Demand Charge	3760.00
Addl.DC(Rs.)	0.00
Total DC(Rs.)	3760.00
Rebate on DC(on TP)	

Rebate(-)/Surcharge(+) (Rs.)	
LF Rab(-)/Sur(+)	0.00
PF Rab(-)/Sur(+)	1380.87
MVCA Charges 248 Paisa/KWH	5886.24
$$$Government subsidy	
## Other Arrear Charges	0.00

Electricity Duty					
EDIM Units	00.00	%On Net Charge	16.00	Net ED(Rs.)	12369.41
EDCON Units	12369.00	%On Net charge	12.50	Exemption (Rs.)	
EDPUR Units	00.00	%On Net charge	5.00	#Arrear ED(Rs.)	0.00
ED DOM Units	00.00	%On Net charge	15.00	ED Adjust (Rs)	
				Total ED(Rs.)	12369.41

Other Charges & Outstanding (Rs.)	
Rental of Meter/Meters	220.00
Transformer Rental + GST	0.00
E.C adjustment	
D.C adjustment	
Other adjustment	
LPSC Charges	0.00
Adjustments	-0.02
Timely Payment Rebate	-73.96
*Addl LF Rebate for Timely Payment	0.00
Total Timely Payment Rebate	-73.96

Amnt. For Current Month(Rs)	84965.74
Due Date :	16.03.2020
Outstanding Amount(Rs) :	0.00
Adjustment Amount (Rs) :	-0.02
Adjustment Amount(Rs) :	0.00
Payable by DueDate(Rs) :	84252.00
Payable After DueDate(Rs) :	84966.00
Payable by DueDate Through NEFT/RTGS(Rs).	83545.00

Amount Before Due Date(Rs)	Eighty four thousand two hundred fifty two rupees
Amount After Due date(Rs)	Eighty four thousand nine hundred sixty six rupees

Messages TO CONSUMER : Register your mobile No. and email Id at www.wbsedcl.in to get Billing and Payment info.

Payment may be made using RTGS/NEFT in your exclusive a/c no: 40009630102152D068804 with IFSC code ICICC000104

Outstanding (Others):Rs.7087.80

*Demand Charge including Interruption benefit of 00:00:00 hours

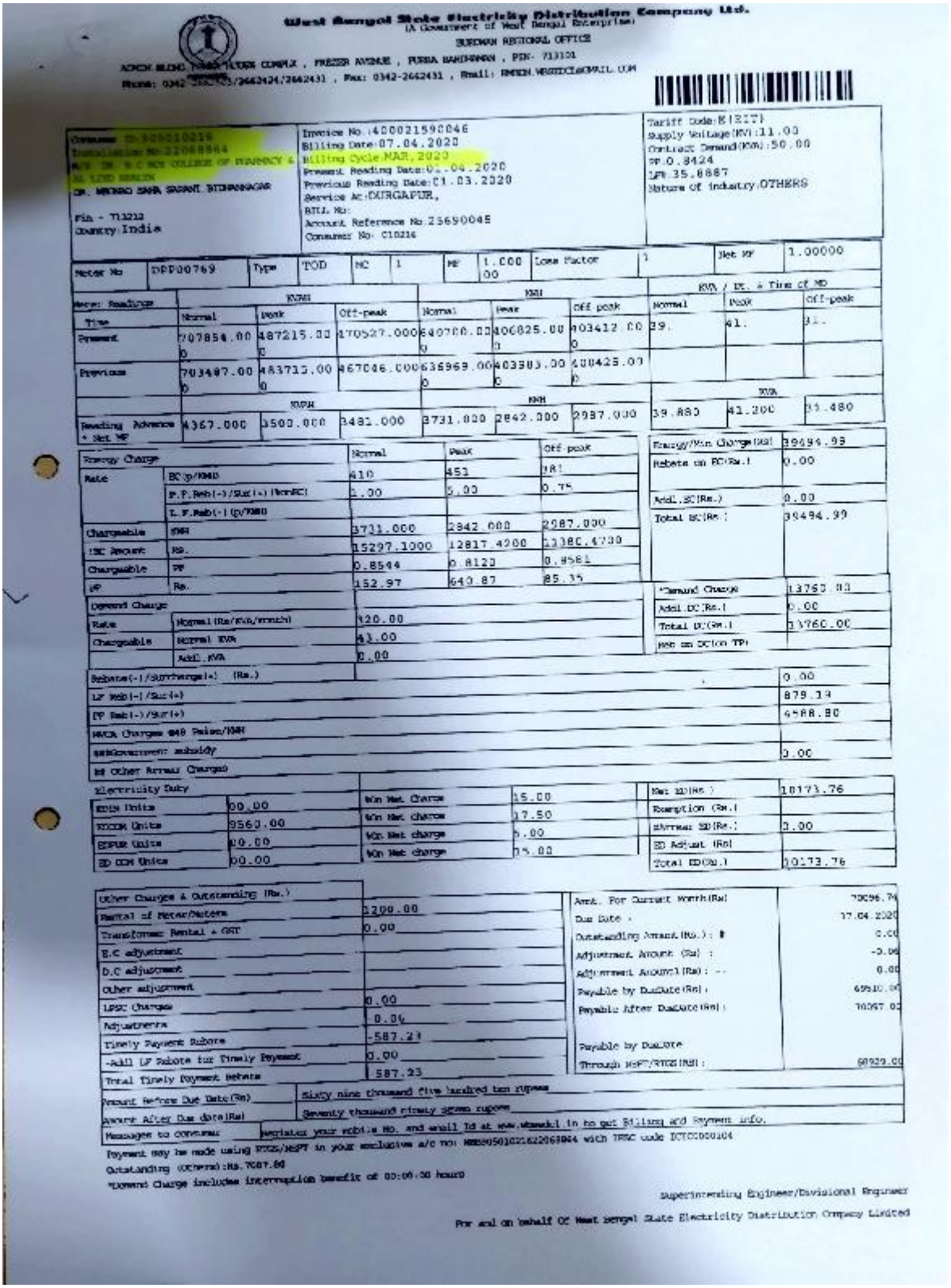
Superintending Engineer/Divisional Engineer

For and on Behalf Of West Bengal State Electricity Distribution Company Limited

TO AVOID LATE PAYMENT SURCHARGE AND TO AVAIL REBATE, PAY THE PAYABLE AMOUNT WITH IN DUE DATE

AVOID SIMULTANEOUS USE OF ELECTRICAL APPLIANCES SAVE ENERGY BY JUDICIOUS USE TO SAVE FUTURE GENERATION

You may lodge the complaint for disruption for power supply through NTSS No. 1800-345-6221 mentioning the consumer ID.



West Bengal State Electricity Distribution Company Ltd.
(A Government of West Bengal Enterprise)
BURDWAN REGIONAL OFFICE
ADMIN BLDG, POWER TOWER COMPLX , FRASER AVENUE , PURBA BARDHAMAN , PIN- 713101
Phone: 0342-2662430/2662431 , Fax: 0342-2662431 , Email: RMBEN.WBSEDCL@GMAIL.COM

Consumer ID:
Installation No:22068864
M/S DR. B.C ROY COLLEGE OF PHARMACY &
ALLIED HEALTH
DR. MEGHNAD SAHA SARANI DURGAPUR

PIN - 713212
Country:India

Invoice No.:400021590046
Billing Date:07.04.2020
Billing Cycle:MAR,2020
Present Reading Date:01.04.2020
Previous Reading Date:01.03.2020
Service At:DURGAPUR,
RBIL No:
Account Reference No:25690045
Consumer No: C10216

Tariff Code:E(HT)
Supply Voltage(KV):11.00
Contract Demand(KVA):50.00
PF:0.8424
LPF:35.8887
Nature of Industry:OTHERS

Meter No	DPP00769	Type	TOD	MC	1	MF	1.000 00	Loss Factor	1	Net MF	1.00000

Meter Readings	KVAH			KWH			KVA / Dt. & Time of MD		
Time	Normal	Peak	Off-peak	Normal	Peak	Off peak	Normal	Peak	Off-peak
Present	707854.00 0	487215.00 0	170527.000	640700.00 0	400825.00 0	103412.00 0	39.	41.	31.
Previous	703487.00 0	483715.00 0	467046.000	636969.00 0	403303.00 0	400425.00 0			
	KVAH			KWH			KVA		
Reading Advance + Net MF	4367.000	3500.000	3481.000	3731.000	2842.000	2987.000	39.880	41.200	31.480

Energy Charge		Normal	Peak	Off peak
Rate	BC @/KWH	410	451	181
	F.P.Reb(-)/Sur(+) (Non-RC)	1.00	5.00	0.75
	L.F.Reb(-)@/KWH			
Chargeable	KWH	3711.000	2842.000	2987.000
ISC Amount	Rs.	15297.1000	12817.4200	13380.4700
Chargeable	PF	0.8544	0.8123	0.8561
PF	Rs.	152.97	640.87	85.35

Energy/Wtn Charge(Rs)	39494.99
Rebate on BC(Rs.)	0.00
Addl.SC(Rs.)	0.00
Total BC(Rs.)	39494.99

Demand Charge		
Rate	Normal (Rs/KVA/month)	320.00
Chargeable	Normal KVA	41.00
	Addl.KVA	0.00

Demand Charge	13760.00
Addl.DC(Rs.)	0.00
Total DC(Rs.)	13760.00
Rebate on DC(on TP)	

Rebate(-)/Surcharge(+) (Rs.)	0.00
LF Reb(-)/Sur(+)	879.14
PF Reb(-)/Sur(+)	4588.80
HVCA Charges @48 Paise/KWH	
Reimbursement subsidy	0.00
Add Other Arrear Charges	

Electricity Duty					
ED(%) Units	00.00	Wtn Net Charge	15.00	Net ED(Rs.)	10173.76
KDCOK Units	9560.00	Wtn Net Charge	17.50	Exemption (Rs.)	
EDPUR Units	00.00	Wtn Net charge	5.00	Arrear ED(Rs.)	0.00
ED CDM Units	00.00	Wtn Net charge	15.00	ED Adjust (Rs)	
				Total ED(Rs.)	10173.76

Other Charges & Outstanding (Rs.)	
Rental of Meter/Meters	1200.00
Transformer Rental + GST	0.00
B.C adjustment	
D.C adjustment	
Other adjustment	
LPSC Charges	0.00
Adjustments	0.00
Timely Payment Rebate	-587.23
-Addl LP Rebate for Timely Payment	0.00
Total Timely Payment Rebate	587.23

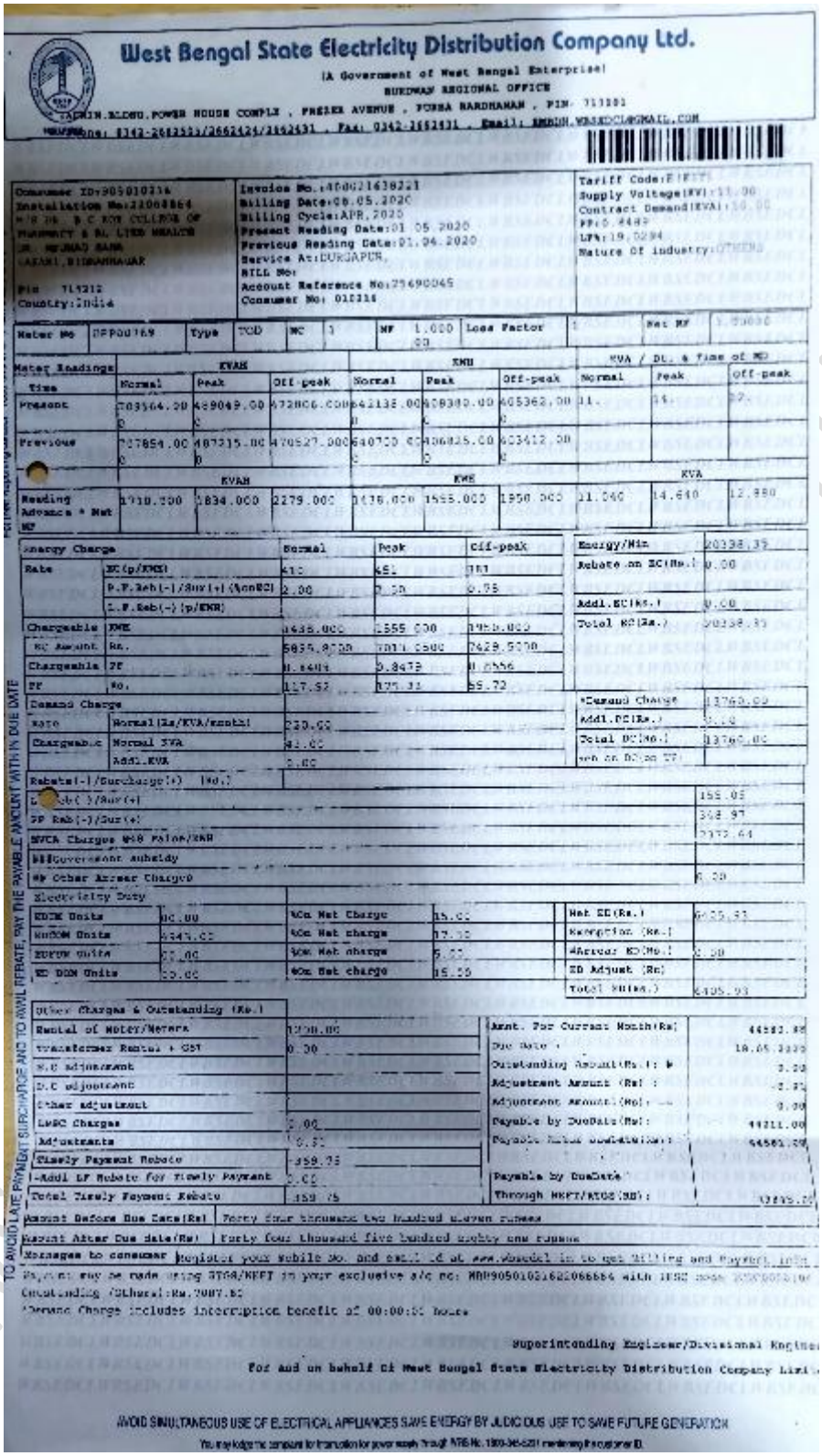
Amt. For Current Month(Rs)	70096.74
Due Date :	17.04.2020
Outstanding Amount(Rs.) : #	0.00
Adjustment Amount (Rs) :	-0.06
Adjustment Amount(Rs) : --	0.00
Payable by Due date(Rs) :	69510.00
Payable After Due date(Rs) :	70097.00
Payable by Due date Through NEFT/RTGS(Rs) :	69929.00

Amount Before Due Date(Rs)	Sixty nine thousand five hundred ten rupees
Amount After Due date(Rs)	Seventy thousand ninety seven rupees
Messages to consumer	Register your mobile No. and email Id at www.wbsedcl.in to get Billing and Payment info.

Payment may be made using RTGS/NEFT in your exclusive a/c no: 40000501021622063804 with IFSC code ICIC0000104
Outstanding (Others):Rs.7097.00
*Demand Charge includes interruption benefit of 00:00:30 hours

Superintending Engineer/Divisional Engineer

For and on behalf Of West Bengal State Electricity Distribution Company Limited



West Bengal State Electricity Distribution Company Ltd.

(A Government of West Bengal Enterprise)

BURDWAN REGIONAL OFFICE

ADMIN.BLDG.POWER HOUSE COMPLX , FREZER AVENUE , PURBA BARDHAMAN , PIN- 713101

Phone: 0342-2612533/2662126/2662631 , Fax: 0342-2662631 , Email: BNRDN.WBSEDCL@GMAIL.COM

Consumer ID:905010214 Installation No:210068864 M/S DR. B C ROY COLLEGE OF PHARMACY & AL LIED HEALTH DR. MEGHNAD SAHA SARANI,DURGAPUR Pin 713212 Country:India	Invoice No.:4000216380221 Billing Date:06.05.2020 Billing Cycle:APR,2020 Present Reading Date:01.05.2020 Previous Reading Date:01.04.2020 Service At:DURGAPUR, BILL No: Account Reference No:25690045 Consumer No: 010214	Tariff Code:[illegible] Supply Voltage(KV):11.00 Contract Demand(KVA):10.00 PF:0.8483 LF%:19.0294 Nature Of industry:OTHERS

Meter No	NP00769	Type	TOD	MC	1	MF	1.000	Loss Factor	1	Net MF	1.00000

Meter Readings	KVAH			KWH			KVA / DL & Time of MD		
Time	Normal	Peak	Off-peak	Normal	Peak	Off-peak	Normal	Peak	Off-peak
Present	703504.00	489049.00	472806.000	642138.00	408380.00	405362.00	11.	14.	12.
	0	0		0	0	0			
Previous	687854.00	487315.00	470527.000	640700.00	406825.00	403412.00			
	0	0		0	0	0			
	KVAH			KWH			KVA		
Reading Advance + Net MF	1710.000	1834.000	2279.000	1438.000	1555.000	1950.000	11.040	14.640	12.880

Energy Charge		Normal	Peak	Off-peak
Rate	EC(p/KWH)	410	451	781
	P.F.Reb(-)/Sur(+)(%onEC)	2.00	0.00	0.75
	L.F.Reb(-)(p/KWH)			
Chargeable	KWH	1438.000	1555.000	1950.000
EC Amount	Rs.	5835.9700	7011.0500	7428.9070
Chargeable	PF	0.8483	0.8473	0.8556
PF	Rs.	117.52	175.33	95.72

Demand Charge		
Rate	Normal(Rs/KVA/month)	220.00
Chargeable	Normal KVA	11.00
	Addl.KVA	0.00

Energy/Min	20338.39
Rebate on EC(Rs.)	0.00
Addl.EC(Rs.)	0.00
Total EC(Rs.)	20338.39
*Demand Charge	13750.00
Addl.DC(Rs.)	0.00
Total DC(Rs.)	13750.00
reb on DC(on TF)	

Rebate(-)/Surcharge(+) (Rs.)	
[illegible]eb(-)/Sur(+)	155.05
PF Reb(-)/Sur(+)	368.97
MVCA Charges @10 Paisa/KWH	2373.64
Government subsidy	
Other Arrear Charges	0.00

Electricity Duty					
EDTM Units	00.00	%On Net Charge	15.00	Net ED(Rs.)	6035.93
EDCOM Units	4347.00	%On Net charge	17.00	Exemption (Rs.)	
EDTOW Units	27.00	%On Net charge	5.00	Arrear ED(Rs.)	0.00
ED DOM Units	00.00	%On Net charge	15.00	ED Adjust (Rs)	
				Total ED(Rs.)	6035.93

Other Charges & Outstanding (Rs.)	
Rental of Meter/Meters	1200.00
Transformer Rental + GST	0.00
M.C Adjustment	
D.C Adjustment	
Other Adjustment	
LPSC Charges	0.00
Adjustments	0.00
Timely Payment Rebate	-359.75
-Addl LF Rebate for Timely Payment	0.00
Total Timely Payment Rebate	-359.75

Amnt. For Current Month(Rs)	44581.85
Due Date :	18.05.2020
Outstanding Amount(Rs.):	0.00
Adjustment Amount (Rs) :	-0.85
Adjustment Amount(Rs):	0.00
Payable by DueDate(Rs):	44211.00
Payable After DueDate(Rs):	44581.00
Payable by DueDate Through NEFT/RTGS(Rs):	44211.00

Amount Before Due Date(Rs) | Forty four thousand two hundred eleven rupees

Amount After Due date(Rs) | Forty four thousand five hundred eighty one rupees

Messages to consumer | Register your mobile No. and e-mail id at www.wbsedcl.in to get Billing and Payment info

Payment may be made using RTGS/NEFT in your exclusive a/c no: HDFC0000106 with IFSC code HDFC0000106

Outstanding /Others:Rs.70807.85

*Demand Charge includes interruption benefit of 00:00:00 hours

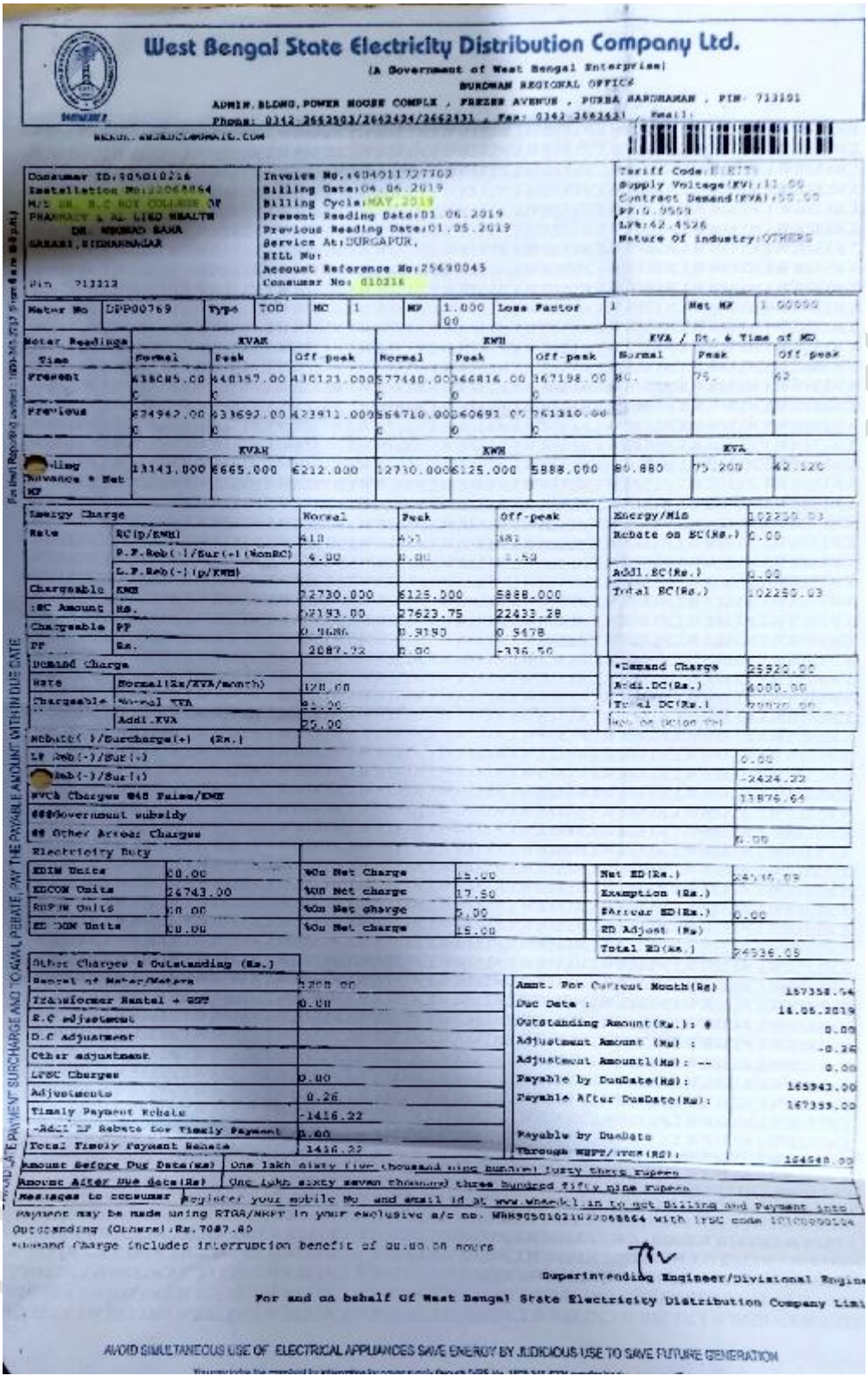
Superintending Engineer/Divisional Engineer

For and on behalf of West Bengal State Electricity Distribution Company Ltd.

AVOID SIMULTANEOUS USE OF ELECTRICAL APPLIANCES SAVE ENERGY BY JUDICIOUS USE TO SAVE FUTURE GENERATION

You may lodge the complaint for transaction for power supply through NTPS No. 1800-345-6201 mentioning the consumer ID.

TO AVOID LATE PAYMENT SURCHARGE AND TO AVAIL REBATE, PAY THE PAYABLE AMOUNT WITHIN DUE DATE



West Bengal State Electricity Distribution Company Ltd.

(A Government of West Bengal Enterprise)

BURDWAN REGIONAL OFFICE

ADMIN. BLDNG. POWER HOUSE COMPLX , FREZER AVENUE , PURBA BARDHAMAN , PIN- 713101

Phone: 0342-2662503/2662434/2662431 , Fax: 0342-2662431 , Email:

WEBSITE: WWW.WBSEDCL.COM

Consumer ID:305010216	Invoice No.:4040117277O2
Installation No:220688664	Billing Date:04.06.2019
M/S DR. B.C ROY COLLEGE OF PHARMACY & AH. LIED HEALTH DR. MUKUND SAHA	Billing Cycle:MAY,2019
SARANI,DURGANAGAR	Present Reading Date:01.06.2019
	Previous Reading Date:01.05.2019
	Service At:DURGAPUR,
	BILL No:
	Account Reference No:25690045
	Consumer No: 010216
Pin - 713212	

Tariff Code:[illegible]	
Supply Voltage(KV):11.00	
Contract Demand(KVA):55.00	
PF:0.9500	
LF%:62.4526	
Nature Of industry:OTHERS	

Meter No	DPP00769	Type	TOD	MC	1	MF	1.000	Loss Factor	1	Net MF	1.00000

Meter Readings	KVAH			KWH			KVA / Dt. & Time of MD		
Time	Normal	Peak	Off-peak	Normal	Peak	Off-peak	Normal	Peak	Off-peak
Present	438CH5.00 C	440157.00 C	436121.000 C	577440.00 C	566816.00 0	567198.00 0	80.	75.	42
Previous	434942.00 C	433692.00 0	432911.000 C	564710.00 C	560693.00 0	561310.00 0			
Billing Allowance + Net MF	13143.000	6665.000	6212.000	KVAH 12730.000	KWH 6125.000	5888.000	KVA 80.880	75.200	42.120

Energy Charge		Normal	Peak	Off-peak
Rate	EC(p/KWH)	410	455	385
	P.F.Reb(-)/Sur(+)(NonEC)	4.00	8.00	5.50
	L.F.Reb(-)(p/KWH)			
Chargeable	KWH	12730.000	6125.000	5888.000
:EC Amount	Rs.	52193.00	27623.75	22433.28
Chargeable	PF	0.9686	0.9150	0.5478
PF	Rs.	2087.32	0.00	-776.50

Energy/Mis	102250.03
Rebate on EC(Rs.)	0.00
Addl.EC(Rs.)	0.00
Total EC(Rs.)	102250.03

Demand Charge		
Rate	Normal(Rs/KVA/month)	120.00
Chargeable	Normal KVA	80.00
	Addl.KVA	25.00

*Demand Charge	25920.00
Addl.DC(Rs.)	4000.00
Total DC(Rs.)	29920.00
Rebate on DC(Rs.)	

Rebate( )/Surcharge(+) (Rs.)	
LF Reb(-)/Sur(+)	0.00
PF Reb(-)/Sur(+)	-2424.22
MVCh Charges @40 Paise/KWH	11876.64
@@@Government subsidy	
@@ Other Arrear Charges	0.00

Electricity Duty					
EDIN Units	00.00	%On Net Charge	15.00	Net ED(Rs.)	24316.09
EDCON Units	26743.00	%On Net charge	17.50	Exemption (Rs.)	
EDPIN Units	00.00	%On Net charge	5.00	@Arrear ED(Rs.)	0.00
ED CON Units	00.00	%On Net charge	15.00	ED Adjust (Rs)	
				Total ED(Rs.)	24536.09

Other Charges & Outstanding (Rs.)	
Rental of Meter/Meters	3200.00
Transformer Rental + GST	0.00
E.C adjustment	
D.C Adjustment	
Other adjustment	
LPSC Charges	0.00
Adjustments	0.26
Timely Payment Rebate	-1416.22
-Addl LF Rebate for Timely Payment	0.00
Total Timely Payment Rebate	1416.22

Amnt. For Current Month(Rs)	167358.54
Due Date :	18.06.2019
Outstanding Amount(Rs.): @	0.00
Adjustment Amount (Rs) :	-0.26
Adjustment Amount(Rs): --	0.00
Payable by DueDate(Rs):	165943.00
Payable After DueDate(Rs):	167359.00
Payable by DueDate Through NEFT/RTGS(Rs):	164540.00

Amount Before Due Date(Rs) One lakh sixty five thousand nine hundred forty three rupees

Amount After Due date(Rs) One lakh sixty seven thousand three hundred fifty nine rupees

Messages to consumer Register your mobile No and email id at www.wbsedcl.in to get Billing and Payment info

Payment may be made using RTGS/NEFT in your exclusive a/c no. WBHS05010210/220688664 with IFSC code UTIB0000104

Outstanding (Others):Rs.7087.80

*Demand Charge includes interruption benefit of 00.00.00 hours

Superintending Engineer/Divisional Engine

For and on behalf of West Bengal State Electricity Distribution Company Limi

AVOID SIMULTANEOUS USE OF ELECTRICAL APPLIANCES SAVE ENERGY BY JUDICIOUS USE TO SAVE FUTURE GENERATION

PROMPT PAYMENT SURCHARGE AND TO AVAIL REBATE, PAY THE PAYABLE AMOUNT WITHIN DUE DATE

West Bengal State Electricity Distribution Company Ltd.

(A Government of West Bengal Enterprise)
BURDWAN REGIONAL OFFICE
ADMIN.BLDNG.POWER HOUSE COMPLX , FRESER AVENUE , PURBA BARDHAMAN , PIN- 713101
Phone: 0342-2662503/2662424/2662431 , Fax: 0342-2662431 , Email: ANDON.WBSEDCL@GMAIL.COM

Consumer ID:905010216 Installation No:22068884 M/S DR. B.C ROY COLLEGE OF PHARMACY & ALLIED HEALTH DR. MEGNAD SAHA SARANI,BIDHANNAGAR Pin - 713212	Invoice No.:400020354467 Billing Date:06.07.2019 Billing Cycle:JUN,2019 Present Reading Date:01.07.2019 Previous Reading Date:01.06.2019 Service At:DURGAPUR, BILL No: Account Reference No:25693045 Consumer No: 010216	Tariff Code:E(KIT) Supply Voltage(KV):11.00 Contract Demand(KVA):50.00 PF:0.9341 LF%:37.4026 Nature Of industry:OTHERS

Meter No	DPF00769	Type	TOU	MC	1	MF	1.00000	Loss Factor	1	Net MF	1.00000

Meter Readings	KVAH			KWH			KVA / Dt. & Time of MD		
Time	Normal	Peak	Off-peak	Normal	Peak	Off-peak	Normal	Peak	Off-peak
Present	646211.000	444986.000	434501.000	583176.000	371007.000	371279.000	62.	55.	41.
Previous	638085.000	440357.000	430123.000	577440.000	366816.000	267198.000			
	KVAH			KWH			KVA		
Reading Advance * Net MF	8126.000	4629.000	4378.000	5736.000	4191.000	4081.000	62.440	55.280	41.880

Energy Charge		Normal	Peak	Off-peak
Rate	EC (p/KWH)	410/405	451/446	381/377
	P.F.Reb(-)/Sur(+) (%onEC)	-3.00	0.00	-1.00
	L.F.Reb(-) (p/KWH)			
Chargeable	KWH	5736.000	4191.000	4081.000
EC Amount	Rs.	31704.7100	18894.4200	15543.1700
Chargeable	PF	0.9520	0.9054	0.9322
PF	Rs.	-951.14	0.00	-155.43

Energy/Min	66142.30
Rebate on EC(Rs.)	0.00
Addl.EC(Rs.)	0.00
Total EC(Rs.)	66142.30

Demand Charge		
Rate	Normal(Rs/KVA/month)	320.00 /320.00
Chargeable	Normal KVA	62.00
	Addl.KVA	5.00

*Demand Charge	19840.00
Addl.DC(Rs.)	800.00
Total DC(Rs.)	20640.00
Reb on DC(on IC)	

Rebate(-)/Surcharge(+) (Rs.)	
Reb(-)/Sur(+)	0.00
PF Reb(-)/Sur(+)	-1106.57
MVCA Charges @48 Paise/KWH	7683.84
###Government subsidy	
## Other Arrear Charges	0.00

Electricity Duty			
EDIM Units	00.00	%On Net Charge	15.00
EDCOM Units	16008.00	%On Net charge	17.50
EDPUR Units	00.00	%On Net charge	5.00
ED DOM Units	00.00	%On Net charge	15.00

Net ED(Rs.)	16174.54
Exemption (Rs.)	
#Arrear ED(Rs.)	0.00
ED Adjust (Rs)	
Total ED(Rs.)	16174.54

Other Charges & Outstanding (Rs.)	
Rental of Meter/Meters	1200.00
Transformer Rental + GST	0.00
E.C adjustment	
D.C adjustment	
Other adjustment	
LPSC Charges	0.00
Adjusted Amount	0.00
Timely Payment Rebate	-933.60
-Addl LF Rebate for Timely Payment	0.00
Total Timely Payment Rebate	-933.6

Amnt. For Current Month(Rs)	110734.11
Due Date :	16.07.2019
Outstanding Amount(Rs.) : #	0.00
Adjustment Amount (Rs) :	0.00
Adjustment Amount1(Rs): ~~	0.00
Payable by DueDate(Rs):	109801.00
Payable After DueDate(Rs):	110735.00
Payable by DueDate Through NEFT/RTGS(Rs):	108877.00

Amount Before Due Date(Rs)	One lakh nine thousand eight hundred one rupees
Amount After Due date(Rs)	One lakh ten thousand seven hundred thirty five rupees
Messages to consumer	Register your mobile No. and email Id at www.wbsedcl.in to get Billing and Payment info.

Payment may be made using RTGS/NEFT in your exclusive a/c no: WBSC501021622068864 with IFSC code ICIC0000104
Outstanding (Others):Rs.7087.80
*Demand Charge includes interruption benefit of 00:00:00 hours

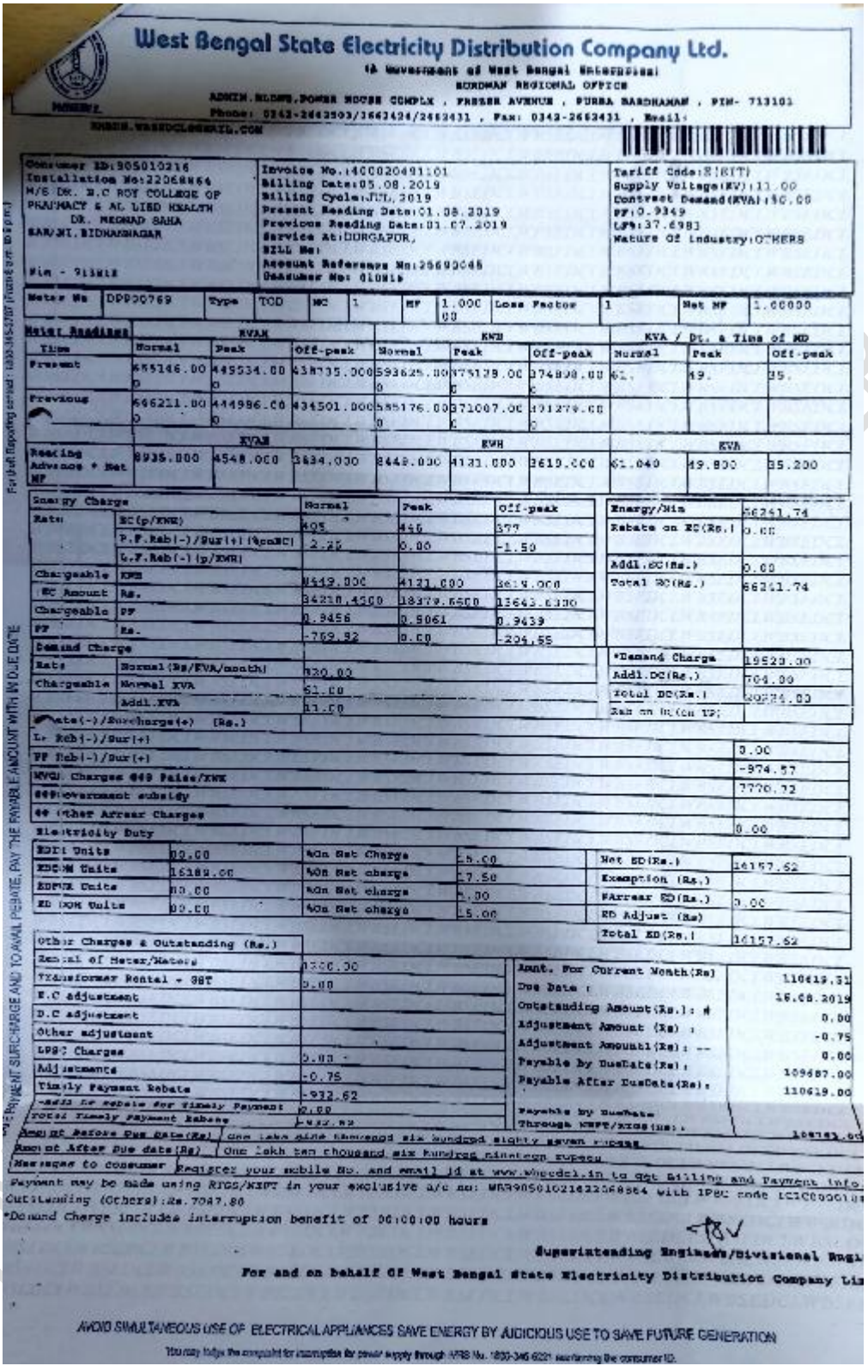
Superintending Engineer/Divisional Engine

For and on behalf Of West Bengal State Electricity Distribution Company Limi

TO AVOID LATE PAYMENT SURCHARGE AND TO AVAIL REBATE, PAY THE PAYABLE AMOUNT WITHIN DUE DATE

AVOID SIMULTANEOUS USE OF ELECTRICAL APPLIANCES SAVE ENERGY BY JUDICIOUS USE TO SAVE FUTURE GENERATION

You may lodge the complaint for interruption for power supply through IVRS No. 1800-345-5221 mentioning the consumer ID.



West Bengal State Electricity Distribution Company Ltd.

(A Government of West Bengal Enterprise)

BURDWAN REGIONAL OFFICE

ADMIN.BLDNG.POWER HOUSE COMPLEX , FRASER AVENUE , PURBA BARDHAMAN , PIN- 713101

Phone: 0342-2662503/2662424/2662431 , Fax: 0342-2662431 , Email:

ADMIN.WASHDCL@GMAIL.COM

Consumer ID:9050010216
Installation No:220688864
M/S DR. B.C ROY COLLEGE OF PHARMACY & AL LIED HEALTH DR. MEGHNAD SAHA SAR/MI,BIDHANNAGAR

Pin - 713212

Invoice No.:400020491101
Billing Date:05.08.2019
Billing Cycle:JUL,2019
Present Reading Date:01.08.2019
Previous Reading Date:01.07.2019
Service At:DURGAPUR,
BILL No:
Account Reference No:206900645
Consumer No: 010015

Tariff Code:S(HT)
Supply Voltage(KV):11.00
Contract Demand(KVA):800.00
PF:0.9349
LF%:37.698
Nature Of Industry:OTHERS

Meter No	DPP30769	Type	TOD	MC	1	MF	1.000 00	Loss Factor	1	Net MF	1.00000

Meter Readings	KVAH			KWH			KVA / Dt. & Time of MD		
Time	Normal	Peak	Off-peak	Normal	Peak	Off-peak	Normal	Peak	Off-peak
Present	655146.000	445534.000	438735.000	593625.000	377178.000	374898.000	61.	19.	05.
Previous	646211.000	444986.000	434501.000	585176.000	371007.000	371279.000			
Reading Advance + Net MF	8935.000	4548.000	3634.000	8449.000	4131.000	3619.000	61.040	19.800	05.200

Energy Charge		Normal	Peak	Off-peak
Rate:	EC(p/KWH)	495	446	377
	P.F.Reb(-)/Sur(+)(%onEC)	2.22	0.00	-1.50
	L.F.Reb(-)(p/KWH)			
Chargeable	KWH	8449.000	4131.000	3619.000
EC Amount	Rs.	36218.4500	18379.6500	13643.6300
Chargeable	PF	0.9456	0.9061	0.9439
PF	Rs.	-769.82	0.00	-204.55

Energy/Mtr	66241.74
Rebate on EC(Rs.)	0.00
Addl.EC(Rs.)	0.00
Total EC(Rs.)	66241.74

Demand Charge		
Rate	Normal(Rs/KVA/month)	330.00
Chargeable	Normal KVA	61.00
	Addl.KVA	11.00

*Demand Charge	19523.00
Addl.DC(Rs.)	704.00
Total DC(Rs.)	20227.00
Reb on DC(on TP)	

Rate(-)/Surcharge(+) (Rs.)	
L. Reb(-)/Sur(+)	0.00
PF Reb(-)/Sur(+)	-974.57
WBSEDCL Charges 649 Paise/KWH	7720.72
649:Government subsidy	
649 Other Arrear Charges	0.00

Electricity Duty

EDI Units	00.00	%On Net Charge	15.00
EDC:N Units	16189.00	%On Net charge	17.50
EDPUX Units	00.00	%On Net charge	5.00
ED DOM Units	00.00	%On Net charge	15.00

Net ED(Rs.)	16157.62
Exemption (Rs.)	
Arrear ED(Rs.)	0.00
ED Adjust (Rs)	
Total ED(Rs.)	16157.62

Other Charges & Outstanding (Rs.)	
Rental of Meter/Meters	1300.00
Transformer Rental + SBT	0.00
E.C adjustment	
D.C adjustment	
Other adjustment	
LPSC Charges	0.00
Adjustments	-0.75
Timely Payment Rebate	-932.62
-Addl Rebate for Timely Payment	0.00
Total Timely Payment Rebate	-932.62

Amt. For Current Month(Rs)	110619.37
Due Date :	16.08.2019
Outstanding Amount(Rs.): #	0.00
Adjustment Amount (Rs) :	-0.75
Adjustment Amount(Rs): --	0.00
Payable by DueDate(Rs):	109687.00
Payable After DueDate(Rs):	110619.00
Payable by DueDate Through RKPT/RTGS(Rs):	109687.00

Amount Before Due Date(Rs) One lakh nine thousand six hundred eighty seven rupees

Amount After due date(Rs) One lakh ten thousand six hundred nineteen rupees

Messages to consumer Register your mobile No. and email id at www.wbsedcl.in to get Billing and Payment info

Payment may be made using RTGS/NEFT in your exclusive a/c no: WB3905010216220688864 with IFSC code ICIC0000010

Outstanding (Others):Rs.7047.80

*Demand Charge includes interruption benefit of 00:00:00 hours

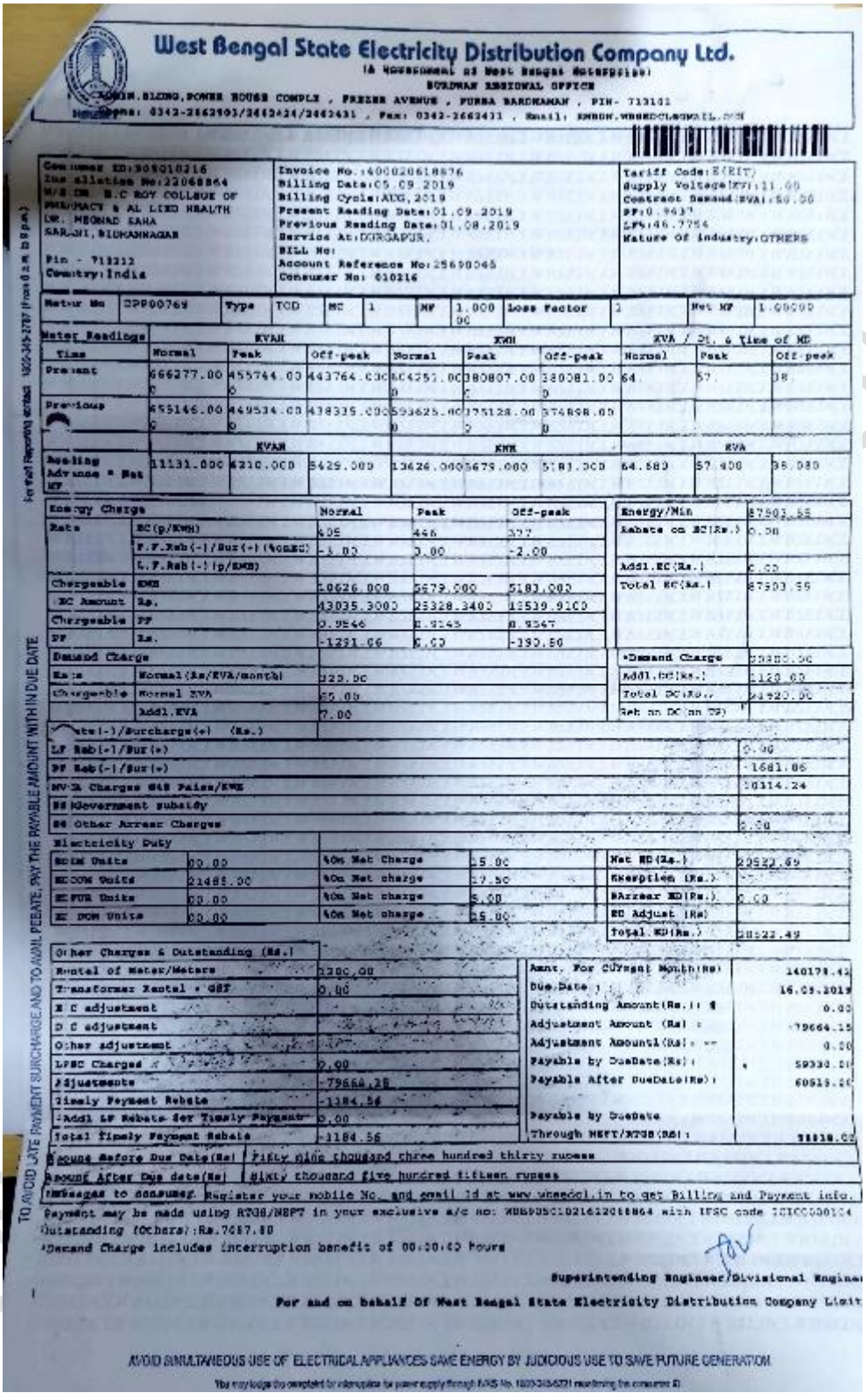
Superintending Engineer/Divisional Engi

For and on behalf Of West Bengal State Electricity Distribution Company Li

PAYMENT SURCHARGE AND TO AVAIL REBATE, PAY THE PAYABLE AMOUNT WITH IN DUE DATE

AVOID SIMULTANEOUS USE OF ELECTRICAL APPLIANCES SAVE ENERGY BY JUDICIOUS USE TO SAVE FUTURE GENERATION

You may lodge the complaint for incomplete for power supply through ARS No. 1800-345 6221 mentioning the consumer ID.



West Bengal State Electricity Distribution Company Ltd.

(A Government of West Bengal Enterprise)

BURDWAN REGIONAL OFFICE

ADMIN.BLDNG,POWER HOUSE COMPLX , FREZER AVENUE , PURBA BARDHAMAN , PIN- 713101

Phone: 0342-2662901/2662424/2662431 , Fax: 0342-2662431 , Email: RMBDN.WBSEDCLHQ@GMAIL.COM

Consumer ID:309010216
Installation No:220688864
M/S DR B.C ROY COLLEGE OF PHARMACY & AL LIED HEALTH
DR. MEGHNAD SAHA SARANI, BIDHANNAGAR

Pin - 713212
Country:India

Invoice No.:400020618876
Billing Date:05.09.2019
Billing Cycle:AUG,2019
Present Reading Date:01.09.2019
Previous Reading Date:01.08.2019
Service At:DURGAPUR.
BILL No:
Account Reference No:25690045
Consumer No: 010216

Tariff Code:E(HT)
Supply Voltage(KV):11.00
Contract Demand(KVA):50.00
PF:0.963
LF%:46.7754
Nature Of Industry:OTHERS

Meter No	DPP00769	Type	TOD	MC	1	MF	1.000 00	Loss Factor	1	Net MF	1.00000

Meter Readings	KVAH			KWH			KVA / Pt. & Time of MD		
Time	Normal	Peak	Off-peak	Normal	Peak	Off-peak	Normal	Peak	Off-peak
Present	666277.00 0	455744.00 0	443764.00	604251.00 0	380807.00 0	380081.00 0	64	57	38
Previous	655146.00 0	449534.00 0	438335.00	593625.00 0	375128.00 0	374898.00 0			
Reading Advance = Net MF	KVAH			KWH			KVA		
	11131.000	6210.000	5429.000	10626.000	5679.000	5183.000	64.580	57.400	38.080

Energy Charge		Normal	Peak	Off-peak
Rate	EC(p/KWH)	405	446	327
	F.P.Reb(-)/Sur(+)(%oEC)	-1.00	0.00	-2.00
	L.P.Reb(-)(p/KWH)			
Chargeable	KWH	10626.000	5679.000	5183.000
EC Amount	Rs.	43035.3000	25328.3400	16539.9100
Chargeable	PF	0.9546	0.9145	0.9567
PF	Rs.	-1231.66	0.00	-190.50

Energy/Min	87503.55
Rebate on EC(Rs.)	0.00
Addl.EC(Rs.)	0.00
Total EC(Rs.)	87503.55

Demand Charge		
Rate	Normal(Rs/KVA/month)	320.00
Chargeable	Normal KVA	50.00
	Addl.KVA	7.00

*Demand Charge	20480.00
Addl.DC(Rs.)	1120.00
Total DC(Rs.)	24920.00
Reb on DC(on DC)	

Rebate(-)/Surcharge(+) (Rs.)

LF Reb(-)/Sur(+)	0.00
PF Reb(-)/Sur(+)	-1681.06
MVA Charges @48 Paise/KVH	10114.24
Government subsidy	
Other Arrear Charges	0.00

Electricity Duty

EC(M Units	00.00	%On Net Charge	15.00	Net ED(Rs.)	20522.69
EC(OM Units	21485.00	%On Net charge	17.50	Exemption (Rs.)	--
EC(UR Units	00.00	%On Net charge	5.00	Arrear ED(Rs.)	0.00
EC (ON Units	00.00	%On Net charge	15.00	ED Adjust (Rs)	
				Total ED(Rs.)	20522.69

Other Charges & Outstanding (Rs.)	
Rental of Meter/Meters	1200.00
Transformer Rental + GST	0.00
E C adjustment	
D C adjustment	
Other adjustment	
LPSC Charges	0.00
Adjustments	-79664.15
Timely Payment Rebate	-1184.56
Addl LP Rebate for Timely Payment	0.00
Total Timely Payment Rebate	-1184.56

Amnt. For CUrrent Month(Rs)	140178.42
Due Date :	16.09.2019
Outstanding Amount(Rs.) :	0.00
Adjustment Amount (Rs) :	-79664.15
Adjustment Amount(Rs) :	0.00
Payable by DueDate(Rs) :	59330.00
Payable After DueDate(Rs) :	60515.00
Payable by DueDate Through NEFT/RTGS(Rs) :	58818.00

Amount Before Due Date(Rs) : Fifty nine thousand three hundred thirty rupees

Amount After Due date(Rs) : Sixty thousand five hundred fifteen rupees

Messages to consumer: Register your mobile No. and email id at www.wbsedcl.in to get Billing and Payment info.

Payment may be made using RTGS/NEFT in your exclusive a/c no: WBSEDCL0216220688864 with IFSC code ICICC000104

Outstanding (Others):Rs.7687.80

*Demand Charge includes interruption benefit of 00:00:00 hours

Superintending Engineer/Divisional Engineer

For and on behalf Of West Bengal State Electricity Distribution Company Limited

AVOID SIMULTANEOUS USE OF ELECTRICAL APPLIANCES SAVE ENERGY BY JUDICIOUS USE TO SAVE FUTURE GENERATION

You may lodge the complaint for interruption for power supply through SMS No. 1800345 6770 mentioning the consumer ID

TO AVOID LATE PAYMENT SURCHARGE AND TO AVAIL REBATE, PAY THE PAYABLE AMOUNT WITH IN DUE DATE

For Fast Reporting contact 1800-345-6770 (from 6 a.m. to 8 p.m.)

West Bengal State Electricity Distribution Company Ltd.

(A Government of West Bengal Enterprise)
BURDWAN REGIONAL OFFICE
ADMIN.BLDNG,POWER HOUSE COMPLX , FRESER AVENUE , PURBA BARDHAMAN , PIN- 713101
Phone: 0342-2662801/2662824/2662411   Fax: 0342-2662411 , Email: [illegible]@GMAIL.COM

Consumer ID:[illegible] Installation No:[illegible]8864 M/S DR. B C ROY COLLEGE OF PHARMACY & AL LIED HEALTH [illegible] [illegible] Pin - [illegible] Country:India	Invoice No.:[illegible] Billing Date:[illegible] Billing Cycle:[illegible] 2019 Present Reading Date:[illegible].10.2019 Previous Reading Date:01.09.2019 Service At:DURGAPUR, BILL No: Account Reference No-[illegible] Consumer No: 010216	Tariff Code:[illegible] Supply Voltage(KV):[illegible] Contract Demand(KVA):[illegible] PF:[illegible] LF%:[illegible] Nature Of Industry:OTHERS

Meter No	[illegible]	Type	TOD	MC	[illegible]	MF	1.000	Loss Factor	[illegible]	Net MF	1.00000

Meter Readings	KVAH			KWH			KVA / Dt. & Time of MD		
Time	Normal	Peak	Off-peak	Normal	Peak	Off-peak	Normal	Peak	Off-peak
Present	[illegible]	451765.000	448204.000	[illegible]	[illegible]	[illegible]	63	59	41.
Previous	[illegible]	[illegible]	443764.000	[illegible]	[illegible]	[illegible]			
	KVAH			KWH			KVA		
Reading Advance * Net MF	10184.000	6001.000	5440.000	9708.000	5437.000	5164.000	63.240	59.120	41.120

Energy Charge		Normal	Peak	Off-peak		
Rate	EC(p/KWH)	606	646	577	Energy/Min	83034.70
	P.F.Reb(-)/Sur(+)(%of EC)	-3.00	0.00	-1.50	Rebate on EC(Rs.)	0.00
	L.F.Reb(-)(p/KWH)				Addl.EC(Rs.)	0.00
Chargeable	KWH	9708.000	5437.000	5164.000	Total EC(Rs.)	83034.70
EC Amount	Rs.	[illegible]	[illegible]	[illegible]		
Chargeable	PF	0.9533	0.9060	0.9493		
PF	Rs.	-1179.52	0.00	-292.02		

Demand Charge				
Rate	Normal(Rs/KVA/month)	320.00	*Demand Charge	20160.00
Chargeable	Normal KVA	63.00	Addl DC(Rs.)	1440.00
	Addl.KVA	9.00	Total DC(Rs.)	21600.00
			Reb on DC(or TP)	

Rebate(-)/Surcharge(+) (Rs.)	
LF Reb(-)/Sur(+)	0.00
PF Reb(-)/Sur(+)	-1471.54
MVCA Charges @[illegible] Paise/KWH	9548.32
***Government subsidy	
** Other Arrear Charges	0.00

Electricity Duty					
EDIN Units	00.00	%On Net Charge	[illegible]	Net ED(Rs.)	19561.91
EDCON Units	20189.00	%On Net charge	17.50	Exemption (Rs.)	
EDFUR Units	00.00	%On Net charge	5.00	#Arrear ED(Rs.)	0.00
ED DOM Units	00.00	%On Net charge	15.00	ED Adjust (Rs)	
				Total ED(Rs.)	19561.91

Other Charges & Outstanding (Rs.)			
Rental of Meter/Meters	1200.00	Amnt. For Current Month(Rs)	133673.39
Transformer Rental + GST	0.00	Due Date :	15.10.2019
E.C adjustment		Outstanding Amount(Rs.) : #	0.00
D.C adjustment		Adjustment Amount (Rs) :	-0.24
Other adjustment		Adjustment Amount(Rs) : **	0.00
LPSC charges	0.00	Payable by DueDate(Rs):	132545.00
Adjustments	-0.24	Payable After DueDate(Rs):	133674.00
Timely Payment Rebate	1129.11		
-Addl LF Rebate for Timely Payment	0.00	Payable by DueDate	
Total Timely Payment Rebate	-1129.11	Through NEFT/RTGS(Rs):	131417.0[illegible]

Amount Before Due Date(Rs)	One lakh thirty two thousand five hundred forty five rupees
Amount After Due date(Rs)	One lakh thirty three thousand six hundred seventy four rupees
Messages to consumer	Register your mobile No, and email Id at www.wbsedcl.in to get Billing and Payment info

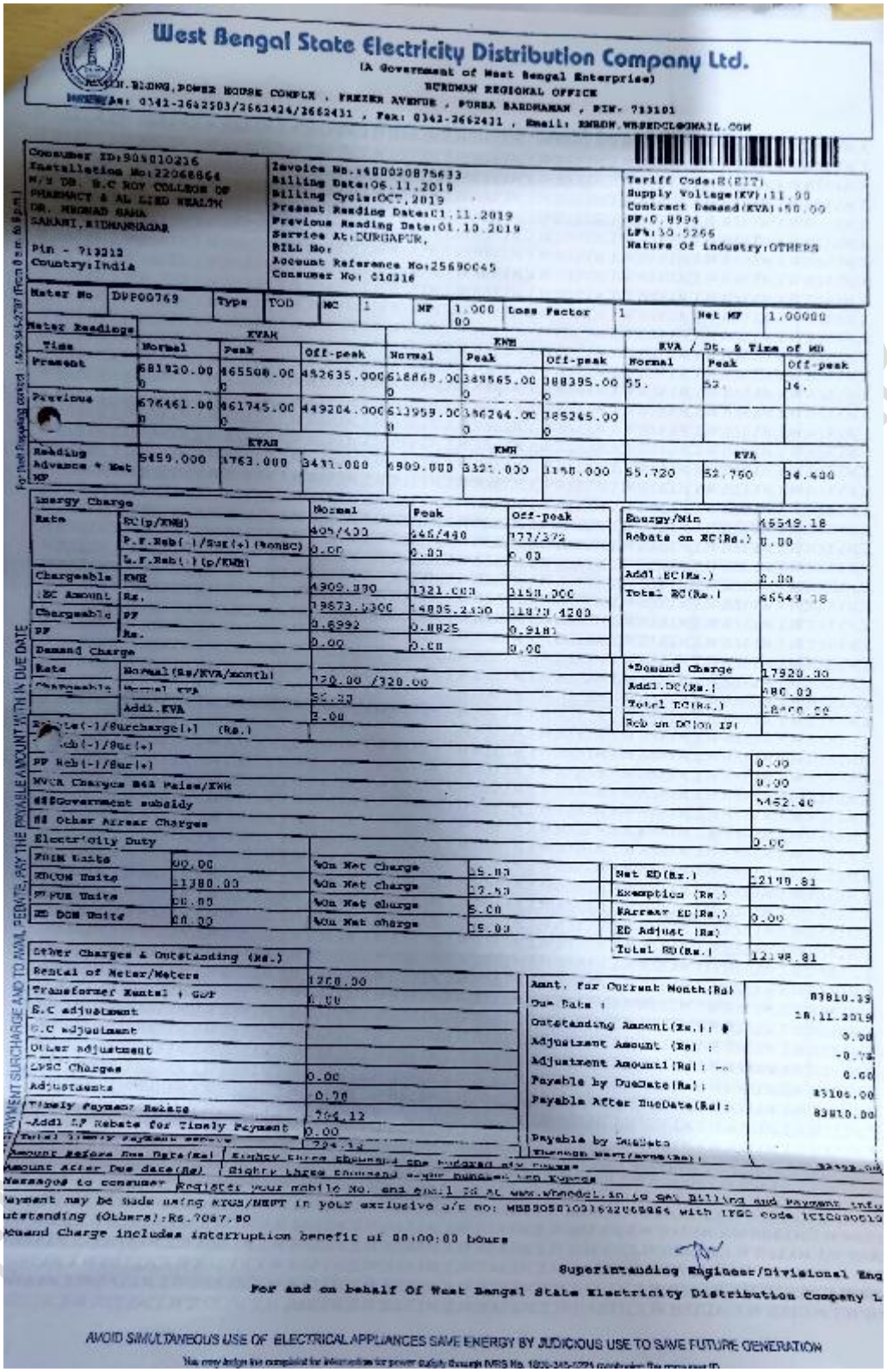
Payment may be made using RTGS/NEFT in your exclusive a/c no: [illegible] with IFSC code [illegible]
Outstanding (Others):Rs.7087.[illegible]
*Demand Charge includes interruption benefit of 00:00:00 hours

Superintending Engineer/Divisional Engin[illegible]
For and on behalf Of West Bengal State Electricity Distribution Company Limi[illegible]

AVOID SIMULTANEOUS USE OF ELECTRICAL APPLIANCES SAVE ENERGY BY JUDICIOUS USE TO SAVE FUTURE GENERATION

For Fault Reporting contact 1800-345-5707 (From 8 a.m to 8 p.m)

LATE PAYMENT SURCHARGE AND TO AVAIL REBATE, PAY THE PAYABLE AMOUNT WITHIN DUE DATE



West Bengal State Electricity Distribution Company Ltd.

(A Government of West Bengal Enterprise)

BURDWAN REGIONAL OFFICE

O.BLDNG,POWER HOUSE COMPLX , FRAZER AVENUE , PURBA BARDHAMAN , PIN- 713101

Ph.No: 0342-2642503/2662424/2662431 , Fax: 0342-2662411 , Email: BNRDN.WBSEDCL@GMAIL.COM

Consumer ID:900010216
Installation No:22068864
M/S DR. B.C ROY COLLEGE OF PHARMACY & AL LIED HEALTH
DR. MEGHAD SAHA SARANI,DURGAPUR

Pin - 713212
Country:India

Invoice No.:400020875633
Billing Date:06.11.2019
Billing Cycle:OCT,2019
Present Reading Date:01.11.2019
Previous Reading Date:01.10.2019
Service At:DURGAPUR,
BILL No:
Account Reference No:25690045
Consumer No: 010316

Tariff Code:E(HT)
Supply Voltage(KV):11.00
Contract Demand(KVA):50.00
PF:0.8994
LF%:30.5266
Nature Of Industry:OTHERS

Meter No	DVP00769	Type	TOD	MC	1	MF	1.000	Loss Factor	1	Net MF	1.00000

Meter Readings	KVAH			KWH			KVA / DL & Time of MD		
Time	Normal	Peak	Off-peak	Normal	Peak	Off-peak	Normal	Peak	Off-peak
Present	681920.00 0	465508.00 0	452635.000	618869.00 0	389565.00 0	388395.00 0	55.	52.	14.
Previous	676461.00 0	461745.00 0	449204.000	613959.00 0	386244.00 0	385265.00 0			
Reading Advance + Net MF	5459.000	3763.000	3431.000	4909.000	3321.000	3130.000	55.720	52.760	34.400

Energy Charge		Normal	Peak	Off-peak
Rate	EC(p/KWH)	405/400	445/440	377/372
	F.F.Reb(-)/Sur(+) (RoNEC)	0.00	0.00	0.00
	L.F.Reb(-)(p/KWH)			
Chargeable	KWH	4909.000	3321.000	3130.000
EC Amount	Rs.	19873.6500	14805.2400	11870.4200
Chargeable	PF	0.6992	0.8825	0.9181
PF	Rs.	0.00	0.00	0.00

Energy/Min	46549.18
Rebate on EC(Rs.)	0.00
Addl.EC(Rs.)	0.00
Total EC(Rs.)	46549.18

Demand Charge			
Rate	Normal(Rs/KVA/month)	320.00 /320.00	
Chargeable	Normal KVA	50.00	
	Addl.KVA	5.00	
Rebate(-)/Surcharge(+) (Rs.)			
PF Reb(-)/Sur(+)			0.00
MVCA Charges @61 Paise/KWH			0.00
@@Government subsidy			3452.40
## Other Arrear Charges			
Electricity Duty			0.00

+Demand Charge	17920.00
Addl.DC(Rs.)	480.00
Total DC(Rs.)	18400.00
Reb on DC(on IP)	

PUEM Units	00.00	%On Net Charge	15.00	Net ED(Rs.)	12198.81
EM/OM Units	11380.00	%On Net Charge	12.50	Exemption (Rs.)	
PUE Units	00.00	%On Net charge	5.00	Arrear ED(Rs.)	0.00
EE DOM Units	00.00	%On Net charge	15.00	ED Adjust (Rs)	
				Total ED(Rs.)	12198.81

Other Charges & Outstanding (Rs.)	
Rental of Meter/Meters	1260.00
Transformer Rental + GST	0.00
E.C adjustment	
E.C adjustment	
Other adjustment	
LPSC Charges	0.00
Adjustments	0.70
Timely Payment Rebate	764.12
-Addl LP Rebate for Timely Payment	0.00
Total Timely Payment Rebate	764.12

Amnt. For Current Month(Rs)	83810.39
Due Date :	18.11.2019
Outstanding Amount(Rs.):	0.00
Adjustment Amount (Rs) :	-0.70
Adjustment Amount(Rs):	0.00
Payable by DueDate(Rs):	83109.00
Payable After DueDate(Rs):	83810.00
Payable by DueDate	
Payable After DueDate(Rs)	

Amount Before Due Date(Rs) : Eighty Three thousand one hundred and nine rupees

Amount After Due date(Rs) : Eighty Three thousand eight hundred and ten rupees

Messages to consumer : Register your mobile No. and email ID at www.wbsedcl.in to get Bill(s) and Payment info.

Payment may be made using RTGS/NEFT in your exclusive a/c no: MBB30501031642068864 with IFSC code ICIC0000012

Outstanding (Others):Rs.7047.80

Demand Charge includes interruption benefit of 00:00:00 hours

Superintending Engineer/Divisional Eng

For and on behalf Of West Bengal State Electricity Distribution Company L

AVOID SIMULTANEOUS USE OF ELECTRICAL APPLIANCES SAVE ENERGY BY JUDICIOUS USE TO SAVE FUTURE GENERATION

You may lodge the complaint for interruption in power supply through IVRS No. 1800-345-6757 (toll free) by quoting the consumer ID

For Load Regulating control : 1800-345-6757 (from 8 a.m. to 8 p.m.)

PAYMENT SURCHARGE AND TO AVAIL REBATE, PAY THE PAYABLE AMOUNT WITHIN DUE DATE

West Bengal State Electricity Distribution Company Ltd.

(A Government of West Bengal Enterprise)
BURDWAN REGIONAL OFFICE
ADMIN.BLDNG,POWER HOUSE COMPLX , FRAZER AVENUE , PURBA BARDHAMAN , PIN- 713101
Phone: 0342-2662501/2662424/2662431 , Fax: 0342-2662431 , Email: RMBDN.WBSEDCL@GMAIL.COM

Consumer ID: [illegible]0216 Installation No: 2068864 [illegible] COLLEGE OF PHARMACY & ALLIED HEALTH [illegible] SAHA [illegible] Pin: 713212 Country: India	Invoice No.: 400021028455 Billing Date: 07.12.2019 Billing Cycle: NOV,2019 Present Reading Date: 01.12.2019 Previous Reading Date: 01.11.2019 Service At: DURGAPUR. BILL No: Account Reference No: 25690045 Consumer No: 010216	Tariff Code: [illegible] Supply Voltage(KV): 11.00 Contract Demand(KVA): 55.00 PF: 0.8531 LF%: 46.8393 Nature Of Industry: OTHERS

Meter No	DFP00769	Type	TOD	MC	1	MF	1.00000	Loss Factor	1	Net MF	1.00000

Meter Readings	KVAH			KWH			KVA / Dt. & Time of MD		
Time	Normal	Peak	Off-peak	Normal	Peak	Off-peak	Normal	Peak	Off peak
Present	687694.000	470295.000	456404.000	623851.000	393504.000	391701.000	39.	41.000	31
Previous	681920.000	465508.000	452635.000	613868.000	389565.000	388395.000			
	KVAH			KWH			KVA		
Reading Advance * Net MF	5774.000	4787.000	3769.000	4383.000	3939.000	3305.000	39.970	41.000	31.640

Energy Charge		Normal	Peak	Off-peak
Rate	EC(p/KWH)	400	443	372
	P.F.Reb(-)/Sur(+)(%onEC)	0.00	4.00	0.00
	L.F.Reb(-)(p/KWH)			
Chargeable	KWH	4983.000	3939.000	3306.000
EC Amount	Rs.	19932.0000	17[illegible].0000	12298.3200
Chargeable	PF	0.8630	0.8229	0.8772
PF	Rs.	0.00	691.26	0.00

Energy/Min	49561.92
Rebate on EC(Rs.)	0.00
Addl.EC(Rs.)	0.00
Total EC(Rs.)	49561.92

Demand Charge		
Rate	Normal(Rs/KVA/month)	320.00
Chargeable	Normal KVA	43.00
	Addl.KVA	0.00

*Demand Charge	13760.00
Addl.DC(Rs.)	0.00
Total DC(Rs.)	[illegible]
[illegible]	

Rebate(-)/Surcharge(+) (Rs.)	
LF Reb(-)/Sur(+)	0.00
PF Reb(-)/Sur(+)	693.26
MVCA Charges 45 Paise/KWH	5569.44
###Government subsidy	
## Other Arrear Charges	0.00

Electricity Duty			
EDIN Units	00.00	%On Net Charge	15.00
EDCOM Units	72228.00	%On Net charge	17.50
EDPUR Units	00.00	%On Net charge	5.00
ED DOM Units	00.00	%On Net charge	15.00

Net ED(Rs.)	12107.51
Exemption (Rs.)	
#Arrear ED(Rs.)	0.00
ED Adjust (Rs)	
Total ED(Rs.)	12107.51

Other Charges & Outstanding (Rs.)	
Rental of Meter/Meters	200.00
Transformer Rental + GST	0.00
E.C adjustment	
D.C adjustment	
Other adjustment	
LPSC Charges	0.00
Adjustments	-0.57
Timely Payment Rebate	-698.85
-Addl LF Rebate for Timely Payment	0.00
Total Timely Payment Rebate	-698.85

Amt. For Current Month(Rs)	83192.13
Due Date :	17.12.2019
Outstanding Amount(Rs.): #	0.00
Adjustment Amount (Rs) :	-0.57
Adjustment Amount1(Rs): --	0.00
Payable by DueDate(Rs):	82493.00
Payable After Duedate(Rs):	83192.00
Payable by DueDate Through NEFT/RTGS(RS):	[illegible]

Amount Before Due Date(Rs)	Eighty two thousand four hundred ninety three rupees
Amount After Due date(Rs)	Eighty three thousand one hundred ninety two rupees
Messages to consumer	Register your mobile No. and email id at www.wbsedcl.in to get Billing and Payment info

Payment may be made using RTGS/NEFT in your exclusive a/c no; WBR9050102162206886[illegible] with IFSC code [illegible]
Outstanding (Others) Rs.7457.80
*Demand Charge includes interruption benefit of 00:00:00 hours

Superintending Engineer/Divisional Engine[illegible]
For and on behalf of West Bengal State Electricity Distribution Company Limi[illegible]

AVOID SIMULTANEOUS USE OF ELECTRICAL APPLIANCES SAVE ENERGY BY JUDICIOUS USE TO SAVE FUTURE GENERATION

TO AVOID LATE PAYMENT SURCHARGE AND TO AVAIL REBATE PAY THE PAYABLE AMOUNT WITH IN DUE DATE

ELECTRICITY UTILITY BILLS (of Period May’20-Apr’21)

amazon.in

Details for Order #403-6844727-8046738

Print this page for your records.

Order Placed: 14 January 2022
Amazon.in order number: 403-6844727-8046738
Order Total: 2,400.00

Not Yet Dispatched

Items Ordered	Price
1 of: *My Green Bin LIVE CLEAN GO GREEN Creating wealth from waste Green rich Organic Composter 25 ltrs + 1 Bag Microbes (5 ltrs) - Convert Kitchen Waste to Manure* Sold by: Wintech Square (seller profile) New Serial Number:	2,400.00

Delivery Address:
SAGAR SENGUPTA
Dr. B. C. Roy College of Pharmacy & AHS
Dr. Meghnad Saha Sarani
DURGAPUR, WEST BENGAL 713212
India

Delivery Option:
Standard Delivery

Payment information

Payment Method:
Visa | Last digits: 4471
Amazon Pay balance

Billing Address:
SAGAR SENGUPTA
Dr. B. C. Roy College of Pharmacy & AHS
Dr. Meghnad Saha Sarani
DURGAPUR, WEST BENGAL 713212
India

Item(s) Subtotal:	2,400.00
Shipping:	0.00
Total:	2,400.00
Grand Total:	**2,400.00**

To view the status of your order, return to Order Summary.

Please note: this is not a GST invoice.

HAVELLS

Fans

All Fans shall come under the HSN code 8414

Maximum Retail Price
w.e.f. 26th April 2018
Price (in ₹)

Energy Saving Models			
Name	Colour	Star Rating	1200 mm
Outer Pack Size			2x1
ES NEO (new)	White / Brown / Ivory		2560/-
ES-50	White / Brown / Ivory		2690/-
ES - 50 Premium	White / Brown / Ivory		2690/-
ES-40	White / Brown / Bianco		3130/-
Fusion 50	Metallic Beige-Brown / Pearl Ivory-Gold		3470/-
Efficiencia (BLDC 32 W) (new)	Metallic White / Beige - Dust Resistant	BLDC	6480/-

BLDC – Brush Less Direct Current

Name	Base Models	600/ 750 mm	900 mm	1050/ 1200 mm	1400 mm
Outer Pack Size		4x1	2x1/-	2x1	3x1
XP-390	White / Brown / Ivory	2540/-	2770/-	2540/-	2730/-
Pacer	White / Brown / Ivory	2550/-	2550/-	2550/-	2740/-
Velocity/Velocity HS	White / Brown / Ivory	2610/-	2610/-	2610/-	2790/-
Spark HS	White / Brown / Ivory	-	-	2630/-	-
SS-390	White / Brown / Bianco	2680/-	2680/-	2680/-	2860/-
SS-390 Metallic	Pearl Ivory / Sparkle Brown / Pearl White-Silver / Pearl Brown / Maroon / Sapphire	2820/-	2820/-	2820/-	3010/-
ES-50	White / Brown / Ivory	-	-	-	2970/-
Outer Pack Size	Decorative Models	4x1	2x1	2x1	3x1
Spark Deco	White / Brown / Ivory	-	-	2880/-	-
Artemis	Elegant White / Brown / Ivory	-	-	2920/-	-
SS-390 Deco	Pearl Ivory / Pearl Copper / Sparkle Brown	-	-	3090/-	-
Vogue Plus	Silver - Blue / Pearl Brown / Ivory - Pearl Brown	-	-	3090/-	-
Andria	Espresso Brown* / Indigo Blue* / Pearl White* / Maroon*	-	-	3110/-	-
Festiva	Pearl Copper Gold, Ocean Blue - Silver / Pearl White - Silver / Lavender Mist - Silver	-	-	3410/-	-
Fusion	Pearl White-Silver / Pearl Ivory-Gold / Silver-Blue / Beige-Oasis Green/ Beige-Brown / Beige-Wine Red	3440/-	3440/-	3440/-	3640/-
Areole	Pearl Brown Silver / Pearl Ivory Bronze / Lavender Mist-Silver / Mist Honey	-	-	3500/-	-
Glaze (new)	Pearl Ivory Gold/ Pearl White Copper / Sapphire Blue Chrome	-	-	3560	-
Troika	Pearl White Silver / Champagne Honey	-	-	3580	-
Zester (new)	Pearl White / Dusk / Slate	-	-	3610	-
Nicola	Gold Mist-Copper / Bronze-Copper / Pearl Ivory-Gold / Pearl White-Silver	3650/-	3650/-	3650/-	3850/-
Enticer	Rose Gold / Pearl White Gold / Pearl White Chrome / Espresso Brown Copper* / Metallic Black - Chrome / Maroon Chrome / Beige Copper	-	3690/-	3690/-	3860/-
Spartz	Gold Mist Pearl - Brown / Pearl White Ocean Blue / Pearl White Baby Blue	-	3760/-	3760/-	3920/-
Leganza	Bronze-Gold / Pearl White-Silver / Lavender Mist-Silver / Mist Honey	-	-	3770/-	-
Leganza - 4 Blade	Bronze-Gold / Pearl White-Silver / Lavender Mist-Silver / Mist Honey	-	-	4080/-	-
Spiro Neo (new)	Black & White / Indigo Blue / Woody White	-	-	4200/-	-
Enticer Art Ltd. Edition	Inmould design - Metallic White / Metallic Black	-	-	4400/-	-
Enticer Art (new) Collector's Edition	Rose Gold / White Blue	-	-	4400/-	-
Enticer Art (new) Heritage Edition	Espresso Brown*	-	-	4400/-	-
Splash (new)		-	-	4990/-	-
Name	Decorative Model	1320 mm		Outer Pack Size	
Sagittal	Blush Copper / Pearl White Chrome	4140/-		2x1	

*Espresso Brown, Espresso Brown Copper and Indigo Blue are metallic with matt finish.
*Maroon and Pearl White are metallic and dust resistant.
Speed resistance type regulator is available for Rs.100/-
Enticer Art is available in 1200 mm only.

BLDC FAN DETAILS

APFC Controller [8536]

etaCON M - APFC Controller

Features:

- Modular and expandable steps
- CT secondary - 1 A / 5 A Site selectable
- Measurement of individual Current and Voltage harmonic (THD) up to 15th Order
- Available in combination of 3 to 14 steps for contactor controlled APFC panels
- Capacitor failure indication
- In-built temperature sensor
- Suitable for LV as well as HT side sensing
- Communicable on Modbus through RS485 Plug-in Module

etaCON M Selection Guidelines

Steps	Steps Description	Size (Wx H in mm)	Combination	Cat. No. Combination	M.R.P. (₹) Per Set
3	2 +1*	96 x 96	3 Step APFC Controller	ETACONM003R	9500
5	4 +1*	96 x 96	5 Step APFC Controller	ETACONM005R	11000
6	5 +1*	96 x 96	3 Step APFC Controller + 3 Step Plug-in module	ETACONM003R + ETACONEXP3R	11500
7	6 +1*	96 x 96	5 Step APFC Controller + 2 Step Plug-in module	ETACONM005R + ETACONEXP2R	12400
8	7 +1*	96 x 96	5 Step APFC Controller + 3 Step Plug-in module	ETACONM005R + ETACONEXP3R	13000
8	7 +1*	144 x 144	8 Step APFC Controller	ETACONM008R	14000
10	9 +1*	144 x 144	8 Step Controller + 2 Step Plug-in module	ETACONM008R + ETACONEXP2R	15400
11	10 +1*	144 x 144	8 Step Controller + 3 Step Plug-in module	ETACONM008R + ETACONEXP3R	16000
12	11 +1*	144 x 144	8 Step APFC Controller + 2 Step Plug-in module + 2 Step Plug-in module	ETACONM008R + ETACONEXP2R + ETACONEXP2R	16800
13	12 +1*	144 x 144	8 Step APFC Controller + 2 Step Plug-in module + 3 Step Plug-in module	ETACONM008R + ETACONEXP2R + ETACONEXP3R	17400
14	13 +1*	144 x 144	8 Step APFC Controller + 3 Step Plug-in module + 3 Step Plug-in module	ETACONM008R + ETACONEXP3R + ETACONEXP3R	18000

* Last Contact can be programmed for capacitor switching / Alarm function / Fan Control

etaCON M APFC Controller

Model	Single CT input	Voltage input	Cat. No.	M.R.P. (₹) Per Unit
3 Step APFC Controller (96 x 96)	1 A / 5A	415V / 110 V	ETACONM003R	9500
5 Step APFC Controller (96 x 96)			ETACONM005R	11000
8 Step APFC Controller (144 x 144)			ETACONM008R	14000

etaCON M Optional Plug-in Modules

Description	Model	Cat. No.	M.R.P. (₹) Per Unit
2 Steps Plug-in Module	2 Relays NO	ETACONEXP2R	1400
3 Steps Plug-in Module	3 Relays NO	ETACONEXP3R	2000
RS485 Plug-in Module	RS485 Plug-in Module	ETACONRS485	7500

New

etaSMART - APFC Controller

Features:

- Simple and Smart Controller
- Available in 4 to 16 steps for contactor controlled APFC Panels
- Auto programming function available
- CT secondary - 1 / 5 Amp site selectable

Steps	Size	Cat. No.	Single CT input	Voltage input	M.R.P. (₹) Per Unit
4	96 x 96	CS90884OOOO	1/ 5 Amp	415 V	8000
6	96 x 96	CS90885OOOO			9000
8	96 x 96	CS90902OOOO			10000
12	144 x 144	CS90903OOOO			12500
14	144 x 144	CS90904OOOO			13500
16	144 x 144	CS90905OOOO			14500

Active Harmonic Filter (AHF) [8543]

- Reduces THD within IEEE limits
- Dynamic correction of THD
- Improves both distortion & displacement Power Factor
- Load balancing & Neutral current reduction (triplen harmonics) with 4 wire filter

Filter Rating (A)	3 Phase 3 wire AHF		3 Phase 4 wire AHF	
	Cat. No.	M.R.P. (₹) Per Unit	Cat. No.	M.R.P. (₹) Per Unit
30	AHF030331D2	On Request	AHF030341D2	On Request
60	AHF060331D2		AHF060341D2	
75	AHF075331D2		AHF075341D2	
100	AHF100331D2		AHF100341D2	
150	AHF150331D2		AHF150341D2	
200	AHF200331D2		AHF200341D2	
300	AHF300331D2		AHF300341D2	
400	AHF400331D2		-	
600	AHF600331D2			
800	AHF800331D2			

APFC Details