

7.1.2 The Institution has facilities and initiatives for

Rajarshee Shahu Science College, Chandur Railway strives to provide the quality education as per the vision and mission statement. College has identified the areas of sensitization of students in relativity with environment, energy, sustainability inclusiveness and provided a conducive environment through the facilities and activities in tune with the Perspective plan, policies, and procedures. This helped in accepting the challenges of 21st century and NEP 2020 to undertake initiatives to address glocal (Global and Local) issues. The role of institute is reflected in terms of various programmes and activities incorporating within its regular functioning. The Institution has facilities and initiatives for


1. Alternate sources of energy and energy conservation measures

The Institution has facilities for alternate sources of energy and energy-conservation measures. 500KWP energy is generated through the solar panels and 25% of electricity consumption is met by these solar panels. Energy-saving LED bulbs and power-efficient equipment are used in the college campus. Ordinary lights have been replaced by CFL and LED lights to conserve energy. Institute is focusing on use of LED lights to save energy especially at common places. At the institute all fluorescent tube lights has been replaced with LED lights and used at Common places like washroom, Department passages, and Conference room etc. to save energy.

ALTERNATE SOURCES OF ENERGY AND ENERGY CONSERVATION MEASURES

SOLAR PANNEL

QUOTATION



FROM:
ECE (India) Energies Pvt Ltd.
Office :- Plot No. C - 57 , Saturna
Industrial Estate , Badnera Road
Amravati, Maharashtra
07216511778, 7774092700
sales@eceindia.com

TO:
The Principal
R.V.M. C-O Pre. A. V. Man
VIRUL ROAD CHANDUR RLY
CHANDUR-RLY 444701
Amravati, Maharashtra
9422844149

QUOTATION:
ID # 1216
Date 28-01-2017

Products

Name	Price	Quantity	Discount	Tax	Amount
Solar Roof top Power Generating System Under Net Meter arrangement [Solar Power generating system with solar panels of 3.1 KW & grid tie Inverter 5 KW]	247384.00	1 Unit	0.00		247384.00
Documentation [For Netmetering At MSEDCL & Subsidy Proposal At MEDA]	5000.00	1	0.00		5000.00
Installation	12400.00	1	0.00	14% Service Tax, 0.50% Swachh Bharat Cess & 0.50% Agricultural - 15.00 %	14260.00
Transport	1500.00	1	0.00		1500.00
Total					268144.00
Discount					0.00
Round off					0.00
Bill Amount					268144.00
Two Lakh Sixty Eight Thousands One Hundred and Forty Four Only					

Benefits of Solar Systems

1. Subsidy	30% from Central Govt (For Domestic, Institutional, Public Sector Building)
2. Income Tax	80% Accelerated Depreciation for 1st Year, 20% on 2nd year for private, Commercial, Industrial Consumer.
3. Tax Holiday	10 Year Income Tax Holiday, Municipal Tax Relaxation.
4. Maintenance	Free for 2 years. Charged from 3rd year.

Powered by Maxiclient

1

Name : The Principal, Rajarshree Shahu Science College, Chandur Rly, Dist: Amravati.
 Pin code: 444904. Contact No. : 97222-254111
 Address: Virul Road Chandur Rly, Dist: Amravati.
 Customer No : 369750054076
 Quotation No. 1080 Billing Unit No. 3000
 Quotation Date: 06/02/2017

To,
ECE (India) Energies Pvt. Ltd.
 C-57 Saturna Estate, Amravati.- 444607, No.- 0721-6511778
 Kind Atten :-Anand More. Mob No: 9766099593

PURCHASE ORDER
 Date:- 10/02/2017
 No:-

Billing :-
 The Principal, Rajarshree Shahu Science College,
 Virul Road, Chandur-Rly,
 Dist: Amravati. Pin Code: 444904.

Delivery Address with contact Person
 The Principal, Rajarshree Shahu Science College,
 Virul Road, Chandur Rly,
 Dist: Amravati, Pin Code: 444904.

Dear Sir,

We are pleased to place an order for following material as indicated below and as per terms specified.
 Kindly arrange to supply accordingly. Kindly acknowledge receipt of Purchase Order & advance payment.

Sr. No.	Description	Rate	Qty.	Unit	Amount
1.	Solar Panel (Raj Ratna) Solar On Grid Inverter(Polycab) 6 KW As per Attached list. Bill of Material (Annexure - 1)	—	—	—	4,13,768.00
2.	Installation	—	—	—	39,652.00
3.	Documents for Net Metering (MSEDCL) and Subsidy.	—	—	—	11,000.00
4.	Net Meter (3-Phase)	—	—	—	9000.00
5.	Transportation	—	—	—	1500.00
Instruction(If Any) :					
					Tax
					Total
					4,75,000.00

Payment : 50% Advance along with PO and 40% at the time of delivery
 Balance 10% after installation.
 Other Terms and Condition As per Quotation.

Sign and Stamp

Use Solar for Bright Future

(Signature)
 Principal
 Rajarshree Shahu Science College
 Chandur Rly. Distt. Amravati

Maharashtra State Electricity Distribution Co. Ltd.
GSTIN: 27AAECM2933K12B Website: www.mahadiscom.in HSN CODE: 27160000

BILL OF SUPPLY FOR THE MONTH OF Feb-2023

Circle: AMARAVATI CONSTRUCT - 532 CHANDUR RLY SUB-DN - 300 BU: 3000

Consumer Name: 369750054078 SOLAR NET METER (8.00 KW)
THE PRINCIPAL R.V.M. CO PRE A.V. MANDIR
VIRUL ROAD
CHANDUR RLY.

Pin Code: 444701

Activity: Seasonal

Sanctioned load (KW): 8.00 Connected Load (KW): 8.00 Urban/Rural Flag: N Express Feeder Flag: N

Contract Demand (KVA): 8.00 50% of Con. Demand (KVA): 4.00 Feeder Voltage (KV): 11

Tariff: 73 - LT-VII-B1 DTC: 4300157

Date of Connection: 15/01/2023 Category: Public Services Other GSTIN: PAN:

Supply at: LT Elec. Duty: 4% PART II

Prev. Highest (Mth): Prev. Highest Bill Demand (KVA):

Security Deposit Hold Rs.: - 5000.00 Addl. S.D. Demanded Rs.: 0.00

Bank Guarantee Rs.: S.D. Arrears Rs.: 0.00

BILLING HISTORY

Bill Month	Units	Bill Demand (KVA)	Bill Amount
Jan-2023	365	0	7356.36
Dec-2022	581	0	4457.04
Nov-2022	718	0	5417.17
Oct-2022	1169	0	8479.18
Sep-2022	1016	0	7927.19
Aug-2022	735	0	5522.62
Jul-2022	481	0	3756.00
Jun-2022	634	0	4353.08
May-2022	1032	0	6244.73
Apr-2022	1368	0	8240.36
Mar-2022	585	0	4029.48
Feb-2022	330	0	2436.63

CUSTOMER CARE Toll Free No. 1912-1800-233-3435, 1800-102-3435

Rules & Procedure for Consumer Grievances Redressal is available at www.mahadiscom.in/consumer-portal-CGRF

Instead of Printed bill, register for E-bill and avail Rs. 10 per bill as a "Go-green" discount

For registration visit at www.mahadiscom.in/consumer-portal/Go-green request

Follow us on: [Social Media Icons]

MAHA VITARAN
STAY HOME, PAY ONLINE & STAY SAFE
FOR MORE DETAILS VISIT WWW.MAHADISCOM.IN
OR
CALL MSEDCL TOLL FREE 1912/19120/1800-102-3435/1800-233-3435

MSEDCL ONLINE PAYMENT FACILITY

- Pay Online to Save your Time and Money
- Safe and Secure
- Pay Online from MSEDCL Official Website, Mahavitaran Mobile App.
- Online payment facility available through Net-Banking, Credit Card, Debit Card, Cash Cards, UPI etc.
- 6.25% discount (up to Rs. 500) in next month bill.
- RTGS Payment facility for HT and LT consumers above 28 kw load

For RTGS payment, Virtual account number of consumer and bank details are printed on Consumer bill

Important Message

- Consumers can pay online using Net banking, Credit/Debit cards at https://www.mahadiscom.in/web/wa after registration.
- Submit / update your E-mail id and mobile number to Circle Office for receiving prompt alerts through SMS.
- Submit / update your PAN & GSTIN to Circle Office with copies of PAN & GSTIN for verification.
- Special desk is operational for HT Consumers; please contact: htconsumer@mahadiscom.in for any clarification / query or grievance.
- This Electricity Bill should not be used for the address proof and as a proof of property ownership.
- For any payment to MSEDCL, ENSURE & INSIST for computerized receipt with unique system generated receipt number. Do not accept hand written receipt. Pay online to avoid any inconvenience.

Criterion VII: Institutional Values and Best Practices

[7.1.2] *The Institution has facilities for alternate sources of energy and energy conservation measures*

CURRENT CONSUMPTION DETAILS				
	KWH	KVAH	RKVAH(LAG)	RKVAH(LEAD)
Reading Date				
Current	44529.00	51730.00	31013.00	2742.00
Previous	43941.00	41204.00	16407.00	2742.00
Difference	588.00	0.00	0.00	0.00
Multiplying Factor	1.00	1.00	1.00	1.00
Consumption	588.00	0.00	0.00	0.00
Add # L.T. Metering	0.00	0.00	0.00	0.00
Adjustment	-150.00	0.00	0.00	0.00
Assessed Consumption	0.00	0.00	0.00	0.00
Total Consumption	588.00	0.00	0.00	0.00

BILLING DETAILS				
Billed Demand (KVA)	0	@ Rs.	0.00	
Assessed P.F.	0.0000	Avg. P.F.		
Billed P.R.	0.0000	L.F.	0	
Consumption Type	Units	Rate	Charges Rs.	
Industrial	0.00		0.00	
Residential	0.00		0.00	
Commercial	532.00		2431.24	
E.D. on (Rs.)	Rate %	Amount Rs.		
0.00	0.00	0.00		
4012.24	0.00	0.00		
0.00	0.00	0.00		
TOD Tariffs	Rate % (Rs./Unit)	Units	Demand	Charges Rs.
0000 Hrs-0600 Hrs & 2200 Hrs-2400 Hrs		0		
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs		0		
0900 Hrs-1200 Hrs		0		
1800 Hrs-2200 Hrs		0		
Amount in Words	₹	ELEVEN THOUSAND FIVE HUNDRED SEVENTY ONLY		

Demand Charges	
Wheeling Charges	1.35
Energy Charges	
TOD Tariff EC	
FAC @	Ps/U
Electricity Duty	
Other Charges	
Tax on Sale @	19.04 Ps/U
P.F. Penal Charges / P.F. Incentive	
Charges For Excess Demand	
Debit Bill Adjustment	0.00
TOTAL CURRENT BILL	4113.53
Current Interest	06/02/2023 0.00
Principal Arrears	7452.18
Interest Arrears	0.00
Total Bill Amount (Rounded) Rs.	11570.00
Delayed Payment Charges Rs.	51.42
Amount (Rounded) Payable After	11620.00
(Amount Rounded to Nearest Rs. 00/00/2023)	

SOLAR NET METER CONSUMPTION DETAILS									
SOLAR TARIFF	IMPORT			EXPORT			GENERATION		
	CURRENT READING	PREVIOUS READING	Units	CURRENT READING	PREVIOUS READING	Units	CURRENT READING	PREVIOUS READING	Units
0000 Hrs-0600 Hrs & 2200 Hrs-2400 Hrs	10128.00	9940.00	533.00	0.30	0.30	0.00	0.00	0.00	0.00
0600 Hrs-0900 Hrs & 1200 Hrs-1800 Hrs	20735.00	20410.00	315.00	10223.00	9947.00	78.00	16517.00	16151.00	0.00
0900 Hrs-1200 Hrs	8113.00	8416.00	97.00	7079.00	7001.00	79.00	9968.00	9747.00	0.00
1800 Hrs-2200 Hrs	5255.00	5180.00	85.00	0.80	0.80	0.00	23.00	23.00	0.00
TOTAL	44529.00	43941.00	630.00	17106.20	16950.00	156.80	26529.00	25921.00	604.00
Other	156.00	Principal Demand	0.00	Banking Charge	124		Bank	512.00	

CONDITIONS

- The total bill amount of the bill may be verified by a Certified Demand Draft/Check drawn in favour of "Maharashtra State Electricity Distribution Co. Ltd." Whenever Security Deposit is demanded according to the Maharashtra Electricity Regulation Act, 1948.
- The current bill is payable within fifteen days from the date of issue of the bill. Even if there is any discrepancy in the bill or any other clarification needed, consumers are requested to pay the bill amount in the full immediately or under protest subject to review and adjustment of the bill amount to the payment of delayed payment charges is avoided.
- This bill is issued subject to the provision of the "Conditions and Miscellaneous charges for supply of Electrical Energy" of the Company.
- Please provide the Consumer Number on the back of the Cheque. The payment of the bill should be made at Company's office only.
- If no bill is sent by post, the same should be issued free of charge and subject to the bill date.
- Payment of bill made through RTGS/NEFT/Chq/Debit Order, the bill of amount received in MSEDCL account will be treated as receipt date.

Collection Hours: 10-30 to 15-00 Hours (Except on Bank Holidays, Sundays, 2nd & 4th Saturdays)

Electrical Energy Consumption Survey and Energy Saving

11 March 2022

Place Village: Kalamjapur Tah: Chandur Railway, Dist:Amravati

Objective of the Activity:

- To make students a responsible citizen.
- To make villagers aware of new technology.
- To help them in saving amount in electric bill.

Collaborator NSS officer and Unit

BRIEFING OF ACTIVITY:

Some peoples in Villages are unaware of the new technology introduced globally and its benefits for many reasons. To reach these peoples with proper information in their benefit is our social responsibility. One of the issues in the villages is the electric bill. To percolate the social responsibility among the students and benefit the villagers, Department of Physics in collaboration with NSS unit carried out a “Electrical Energy Consumption Survey and Energy Saving Awareness” in the Kalamjapur village.

Mr. S.A.Wani has prepared an information leaf and explained students the same in the NSS camp. Students reached people door to door and on the basis of collected information, explained them the energy consumption by different electrical appliances and aware them with new technology-based appliances that are more efficient and low energy consumption rate.

During the survey and awareness Campion, village people cooperated a lot with the students. Gentle behavior from both the end was the key for success of this activity. This activity was successfully headed under the able guidance and supervision of Head Department of Physics and NSS Officer Dr. A. P. Pachkawade, Mr. S. A. Wani and Dr. R. N. Bhagat.

USEFUL INFORMATION:

• Incandescent light bulb:

The incandescent light bulb or lamp is a source of electric light that works by incandescence, which is the emission of light caused by heating the filament. The wire is surrounded by a glass bulb that is usually filled with an inert gas.

• Compact fluorescent light bulbs (CFLs)

A fluorescent light bulb uses gas inside the bulb to light up: when electricity runs through it, it excites a mixture of gases, which are transformed into light. A fluorescent lamp tube is filled with a mix of argon, xenon, neon, or krypton, and mercury vapor. The pressure inside the lamp is around 0.3% of atmospheric pressure. The partial pressure of the mercury vapor alone is about 0.8 Pa (8 millionths of atmospheric pressure), in a T12 40-watt lamp.

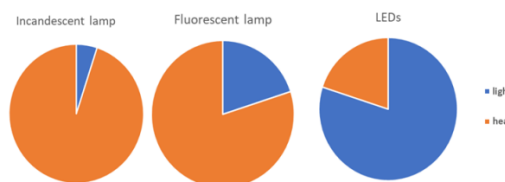
Compact fluorescent light bulbs (CFLs) use dramatically less energy than incandescent bulbs and reduce greenhouse gas emissions. But they also contain mercury – a dangerous toxin. If a CFL breaks, some of the mercury that's contained in the bulb will evaporate into the air. Inhaling mercury vapor is hazardous to human health. Breathing in mercury vapors may cause symptoms such as cough, fever, difficulty breathing, nausea, vomiting, headaches, increased salivation and an acute metallic taste in the mouth.

• **LED lamp or LED light bulb:**

An LED lamp or LED light bulb is an electric light that produces light using light-emitting diodes (LEDs). LED lamps are significantly more energy-efficient than equivalent incandescent lamps and can be significantly more efficient than most fluorescent lamps.

Equivalent Wattages and Light Output of Incandescent, CFL, and LED Bulbs:

Light Output	LEDs	CFLs	Incandescents
Lumens	Watts	Watts	Watts
450	4-5	8-12	40
750-900	6-8	13-18	60
1100-1300	9-13	18-22	75-100
1600-1800	16-20	23-30	100
2600-2800	25-28	30-55	150



Comparing the Features of Incandescent, CFL, and LED Light Bulbs:

Features	LEDs	CFLs	Incandescents
Frequent On/Off Cycling	no effect	shortens lifespan	yes
Turns on instantly	yes	slight delay with some CFLs	yes
Durability	durable	fragile	fragile
Heat Emitted	low (3 btu's/hr)	medium (15 btu's/hr)	high (85 btu's/hr)
Sensitivity to high temperature	some	yes	no
Sensitivity to low temperature	no	yes	no
Sensitivity to humidity	no	yes	some
Hazardous Materials	none	5 mg mercury/bulb	none
Replacement frequency (over 25k hours)	1	2.5	20+

Activity Photos



Survey Form

RAJARSHEE SHAHU SCIENCE COLLEGE
Chandur Rly., Amravati
Department of Physics

Electrical Energy Consumption Survey and Energy Saving Awareness

Village: Kalamjapur
Tah: Chandur Railway, Dist: Amravati
Homes: 281, Population: 1072

Date: 11-3-2022

Name of the House Owner: शिवाजी गोळे
Total Number of Family Members: 1
Number of Electrical Appliances:-

1.	Bulb	Incandescent Bulb	CFL Bulb	LED Bulb
2.	Tube light		✓ 3	✓ 3
3.	Cooler			
4.	Television			
5.	Audio System			
6.	PC/Laptop			
7.	Refrigerator			
8.	Mixture			
9.	Washing Machine			
10.	Mobile	✓ 1		
11.	Electric Motor			
12.	Electrical Induction			
13.	Water Heater			

Do you use solar energy? NO
Average electric bill/month: 300

House Owner/Member Sign: शिवाजी गोळे

Name of the Student: Divya D. Shelokar
Class & Subject Group: B.Sc. 2nd year (CBZ)

Signature of the Student: Divya D. Shelokar

RAJARSHEE SHAHU SCIENCE COLLEGE
Chandur Rly., Amravati
Department of Physics

Electrical Energy Consumption Survey and Energy Saving Awareness

Village: Kalamjapur
Tah: Chandur Railway, Dist: Amravati
Homes: 281, Population: 1072

Date: 11/03/2022

Name of the House Owner: शिवाजी गोळे
Total Number of Family Members: 2
Number of Electrical Appliances:- 3

1.	Bulb	Incandescent Bulb	CFL Bulb	LED Bulb
2.	Tube light	✓ 2		
3.	Cooler			
4.	Television	✓ 1		
5.	Audio System			
6.	PC/Laptop			
7.	Refrigerator			
8.	Mixture			
9.	Washing Machine			
10.	Mobile	✓ 1		
11.	Electric Motor			
12.	Electrical Induction			
13.	Water Heater			

Do you use solar energy? No
Average electric bill/month: 350

House Owner/Member Sign: शिवाजी गोळे

Name of the Student: Nikita Ramdas Mahalle
Class & Subject Group: B.Sc. 2nd CMP

Signature of the Student: N.R. Mahalle

RAJARSHEE SHAHU SCIENCE COLLEGE
Chandur Rly., Amravati
Department of Physics




Electrical Energy Consumption Survey and Energy Saving Awareness

Village: Kalamjapur, Amravati
Tah: Chandur Railway, Dist: Nagpur
Homes: 281, Population: 1072

Date: 11-03-2022

Name of the House Owner: दिलीप चव्हास
Total Number of Family Members: 4

Number of Electrical Appliances:-

			
	Incandescent Bulb	CFL Bulb	LED Bulb
1. Bulb		✓ 4	
2. Tube light			
3. Cooler	✓		
4. Television	✓		
5. Audio System	-		
6. PC/Laptop	-		
7. Refrigerator	-		
8. Mixture	✓		
9. Washing Machine	-		
10. Mobile	✓ 1		
11. Electric Motor	✓		
12. Electrical Induction	-		
13. Water Heater	-		

• Do you use solar energy? NO

• Average electric bill/month: 500

House Owner/Member Sign: दिलीप चव्हास

Name of the Student: Achal Ganeshrao Thakare
Class & Subject Group: B.Sc. 2nd year (CBZ)

Signature of the Student: Athakare

RAJARSHEE SHAHU SCIENCE COLLEGE
Chandur Rly., Amravati
Department of Physics




Electrical Energy Consumption Survey and Energy Saving Awareness

Village: Kalamjapur, Amravati
Tah: Chandur Railway, Dist: Nagpur
Homes: 281, Population: 1072

Date: 11-3-2022

Name of the House Owner: दिवाकर तु. शेळकर
Total Number of Family Members: 4

Number of Electrical Appliances:-

			
	Incandescent Bulb	CFL Bulb	LED Bulb
1. Bulb	1	✓	
2. Tube light			
3. Cooler	✓		
4. Television	✓		
5. Audio System			
6. PC/Laptop			
7. Refrigerator			
8. Mixture			
9. Washing Machine			
10. Mobile	✓ 1		
11. Electric Motor			
12. Electrical Induction			
13. Water Heater			

• Do you use solar energy? NO

• Average electric bill/month: 600

House Owner/Member Sign: दिवाकर तु. शेळकर

Name of the Student: Divya D. Shelokar
Class & Subject Group: B.Sc. 2nd year (CBZ)

Signature of the Student: Divya D. Shelokar

Name of the Student :-	Year	
1) Ankita B. Chambekar	3 rd yr	28] Pratiksha S. Gadhave Bsc 2nd yr
2) Abhilash A. Jagtap	3 rd yr	29] Nikita B. Jambhale Bsc 1 st yr
3) Bhagyashri G. Solanke	3 rd yr	30] Sanjiv S. Vike Bsc 2 nd yr
4) Shivani P. Tone	3 rd yr	31] Shrutika S. Patil Bsc 3 rd yr
5) Dipali R. Garode	3 rd yr	32] Saloni D. Girdhale -11-
6) Rutuja B. Karale	3 rd yr	33] Shweta M. Jaiswal -11-
7) Mayuri D. Dhore	3 rd yr	
8) Kumal Meshram	3 rd yr	
9) Nikita R. Mahalle	2 nd yr	
10] Sejal D. Adarkane	2 nd yr	
11] Achal A. Galale	1 st yr	
12] Bhagyashri H. Nakshane	1 st yr	
13] Achal K. Wanjari	1 st yr	
14] Payal K. Wanjari	1 st yr	
15] Prochi S. Mundane	1 st yr	
16] Rutuja J. Nakhballe	1 st yr	
17] Rutika R. Chimanekar	1 st yr	
18] Samiksha G. Wanve	2 nd year	
19] Achal G. Thakore	2 nd year	
20] Gayatri S. Girdhale	2 nd year	
21] Harsha R. Dhage	2 nd yr	
22] Pnathi Wankhade	2 nd yr	
23] Vaishnavi Mahalle	2 nd yr	
24] Divya Shelokar	2 nd yr	
25] Prachi R. Meshram	2 nd year	
26] Neha D. Borkar	2 nd year	
27] Tanisha J. Wankhade	2 nd year	
28] Achal S. Ingole	1 st year	
29] Sakshi M. Pandit	1 st year	
30] Sampada N. Thakore	1 st year	
31] Komal D. Mate	2 nd year	
32] Nikita D. Gadhave	2 nd year	
33] Kujar P. Chaudhari	2 nd year	

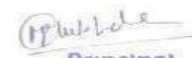
NSS Officer
Dr.A.P.Pachkawade
 Head Dept. of Physics

Convenor
Mr. S. A. Wani
 Asst. Prof. Dept. of Physics

Co-Convenor
Dr. Roshani N. Bhagat
 Asst. Prof. Dept. of Physics


IQAC Co-ordinator
 Rajarshree Shahu Science College
 Chandur Rly., Dist. Amravati
(Dr. Minal Keche)




Principal
 Rajarshree Shahu Science College
 Chandur Rly., Dist. Amravati
(Dr. Mahesh Chikhale)
 Chairman IQAC and Principal