

## Kopargaon Taluka Education Society's K.J. Somaiya Arts, Commerce and Science College, Kopargaon

#### **Criterion 7- Institutional Values and Best Practices**

#### 7.1: Institutional Values and Social Responsibilities

#### 7.1.2 The Institution has facilities and initiatives for

- 1. Alternate sources of energy and energy conservation measures
- 2. Management of the various types of degradable and non- degradable waste
- 3. Water conservation
- 4. Green campus initiatives
- 5. Disabled-friendly, barrier free environment

## **Report of Alternate Sources of Energy and Energy Conservation Measures**

#### Kopargaon Taluka Education Society's

#### K. J. Somaiya College of Arts, Commerce and Science, Kopargaon

## Report on alternate sources of Energy and Energy Conservation Measures

#### 2018-19 to 2022-23

#### Introduction:

K. J. Somaiya College of Arts, Commerce and Science, Kopargaon is an educational institution that recognizes the alternate sources of renewable energy and energy conservation measures. In recent years there has been a growing concern about the fast depletion of fossil fuels and burning of fossil fuels impact on environment. To solve this problem college has implemented different measure to promote the use of alternate source of energy (PV system) and conserve energy.

#### Alternate Sources of Energy:

K. J. Somaiya College of Arts, Commerce and Science, Kopargaon has taken several initiates to promote the alternative source of energy. The college has installed a solar power system to generate electricity, which has significantly reduced its dependence on traditional energy sources. Two separates on grid photovoltaic solar power system are installed at two separate roof top bearing 10KVA capacity of each connected in grid of MSEDCL through NET metering. Cleaning of solar panel are regularly done. We provide solar water heater facilities to ladies' hostel and boy's hostel. This will also help to reduce greenhouse gas emission mitigating environmental damage.

#### **Energy Conservation Measures:**

K. J. Somaiya College of Arts, Commerce and Science, Kopargaon has implemented several energy conservation measures to reduce energy consumption. The college has replaced traditional bulbs and FTL tubes with LED tube lights. In college total LED tube light are 280. The College has installed solar street lamps having 35 numbers in ladies hostel main gate? premises. The energy conservation measures are,

- Turn off your monitor when you leave the table.
- Whenever possible, shutdown rather than logging off
- Turn off unnecessary lights, air conditioner and use day light instead.
- Keep lights off in classrooms, lecture halls when they are not in use.
- · Use fans only when they are needed.

#### Conclusion:

K. J. Somaiya College of Arts, Commerce and Science, Kopargaon is a best example for other educational institution by implementing various alternate renewable energy sources and energy conservation measures. The college has not only reduced carbon foot print but also has saved significant amount of money on energy bills. By promoting use of alternate energy sources to conserve energy. The college is contributing to a sustainable and bright futures.

7.1.2 The Institute has facilities for alternate energy sources and energy conservation measures:

#### Initiatives for alternate source of energy Wheeling to Grid with proof: Use of solar energy

The college is having two separates on grid photovoltaic solar power system installed at two separate roof top bearing 10KVA capacity of each connected in grid of MSEDCL through NET metering. Each solar plant produces 900 to 1700 units of electric power generation per month on average. We are exporting solar energy to MSEDCL grid which saves our energy expenditure by,

- 1. By reducing penalty against low power factor.
- 2. Demand charges also reduce to minimum.

#### Detail of Solar Generation:-

- Detail of Renewable Energy: Roof Top Solar Power online Grid system
- Capacity of Plant: 20 KW (each of 10 KW)
- Number of Panels: 32 + 31 = 63
- Average monthly generation: 1800 to 4000 units per month
- Average generation per annum: 42000 KW
- Total cost of solar system including GST: 5,70,000 + 700000 =12,70,000

(Energy Audit Committee) IQAC, K. J. Somaiya College Kopargaon, Dist. A.Nagar

College of Arts Commerce & Science, Kopargaon

#### Kopargaon Taluka Education Society's

#### K. J. Somaiya College of Arts, Commerce and Science, Kopargaon

#### The Institution has facilities and initiatives

1. Alternate sources of energy and energy conservation measures

Facilities for alternate source of energy-Solar energy

Solar Panels: Percentage of Power Requirement of college met by the renewable energy sources around 20 KW

Month	Import from MSEDCL	Export by College	NET KWH	
April-22	4242	366	3876	
May-22	5032	297	4735	
June-22	3557	336	3221	
July-22	3975	231	3744	
Aug-22	3837	393	3444	
Sept22	4504	265	4239	
Oct-22	3974	746	3228	
Nov22	3649	424	3225	
Dec22	4707	230	4477	
Jan23	3698	287	3411	
Feeb23	3028	293	2735	
Mar23	4143	454	3689	

The power requirement of college met by the renewable energy sources around 20KW was only 50%. The institute shall require additional 20KW solar power system to meet complete requirement of energy and to offset entire energy procurement from MSEDCL.

Coordinator

(Energy Audit Committee)

Co ordinator IQAC, K. J. Somaiya College Kopargaon, Dist. A.Nagar

Principal

SK/ J. Somaiya College of Arts Commerce & Science, Koparga



Today OUR K.J.Somaiya COLLEGE has started a Powerplant capacity of 10 KW.Solar power plants was inaugurated by ospicious hands of Hon. Baviskar MSEB Kopargaon, and Hon.Principal Dr.B.S.Yadav Sir today. A gaint leap toward renewable energy Resources Saving of one unit is generating two units of electricity.



Kopargaon, Maharashtra, India KJS College Rd, Mohniraj Nagar, Kopargaon, Maharashtra 423601, India Lat 19.874241° Long 74.482572° 05/01/22 09:52 AM

GPS Map Camera



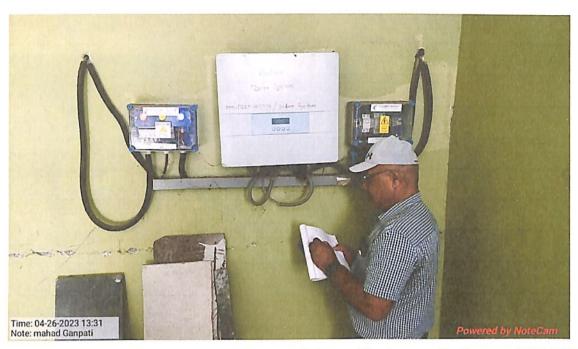


10KW Solar PV system installed on roof top of Science and Technology building.

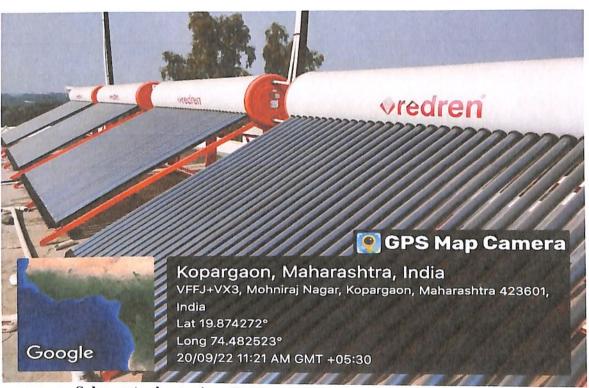


10KW Solar PV system installed on roof top of Library Building.





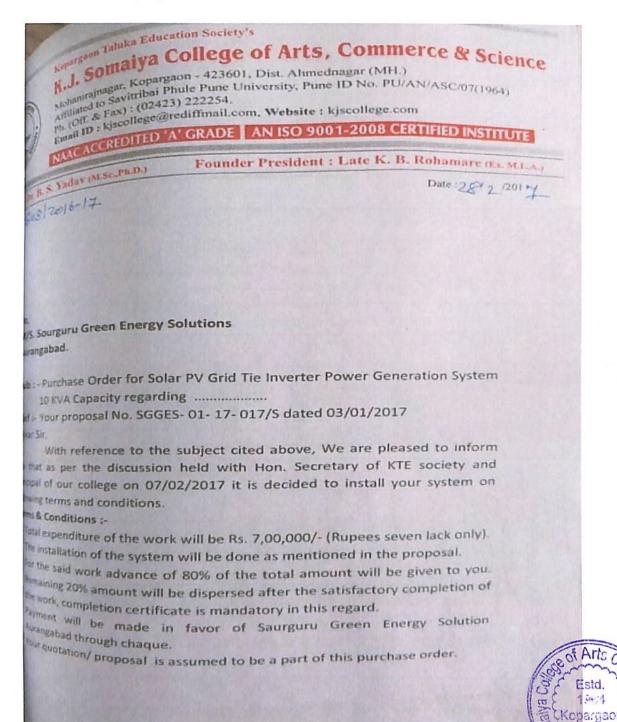
Energy Auditor Mr. B.L. Deokar was doing audit of energy in the year 2022-2023



Solar water heater installed on rooftop of Ladies Hostel



#### Solar PV equipment Bill:



of Arts

e maintenance of solar PV power plant will be done by Saurguru Green maintenance of the stated warranty period.

Solution, Aurangabad during the stated warranty period.

The maintenance of the stated warranty period. Solution, Automotive Solution of the statutory approvals required from various bodies shall be made available green Energy Solution Aurangabad. Surgure Green Energy Solution Aurangabad. Surgure Green Solution and finalized by Saurguru Green Energy Solution process & under the state of th respected and college will not bear any charges other than total ork cost of Rs. 7,00,000/other charges such as local TAX, CST, VAT, Service Tax, Freight, Transit, omer charge will be borne by Saurguru Green Energy Solution, Aurangabad. Surguru Green Energy Solution, Aurangabad will make use of cables and ther accessories manufactured by branded companies such as Polycab, reclevets, with prior verification by the authorities of K.J. Somaiya College. Arts Purchase order 10KW Power generation to Saurguru Green Energy Solution, Aurangabad.

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## GUTGUTU GREEN ENERGY SOLUTIONS

TAX INVOICE

MAY/17/008 invoice No. 19/05/2017 **Delivery Note** Terms of payment Supplier Ref. Other Reference Buyer's Order No. 808/2016-17 Dated 28/02/2017 Dapatch Document No. Dated Dispatch through Destination Kopargaon

Terms of Delivery

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restron of Goods	Quantity	Rate	Amount (INR)
DWPFV SOLAR ROOF TOP SYSTEM Diverses installation and Commissioning, washed betweeter Make Growatt, 32 wides of 315 Wp Make: Waaree, washanded fron Mounting Structure, 121 006 tightening Arrester, Separate and for PV module, Arrester and nature Wittennectors, DC Cable and AC 125 Wite Folycab)	One System	7,00,000.00	7,00,900.00
Total			7,00,000.00

rum frargeable (in word) INR Seven Lakhs only

#### era of Sale

Purent is to be made by Accounts Payee's cheque in favour of SAURGURU GREEN ENERGY SOLUTIONS

Sand details State Bank of Hyderabad. (Satara Parisar, Aurangabad) August Name: SaurGuru Green Energy Solutions

Ecount No. 67456979677

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For SaurGury Green Energy Solutions

Author Signatory

We help you generate green energy

K. J. Somerya Graffine, Kopargaon INWARD Invoice Inward No. ..... 4110 Ref No. .... Date - 5/5 /2017



क्रीयरगांव तालुका एज्युकेशन सोसायटीचे है सोमैया कला, वाणिज्य व विज्ञान महाविद्यालय मोहलीराजलगर, कोपरगांव, जि. अहमदनगर मार्थ सर्वाची पायती व्हीचर नंबर - 243 क्ष्णार - व्यारमान काम - व्यारमान रक्षम तपशील रुपये पैसे 1900000 19 Restory 3. 100000/ 5. 900000 ( 600000 काम अक्षरी रुपये द्वातन कार्य प्राप्त पिळाले तकार नाही. पावती लिह्न देणाराची सही प्रापाल मुख्यलिप व अधिक्षक

Keparguon Teluka Education Society's

K.J. Somaiya College of Arts, Commerce & Science Mohammanagar, Kopargaon - 423601, Dist. Ahmednagar (MH.)

Affiliated to Savitribai Phule Pune University, Pune ID No. PU/AN/ASC/07(1964) Ph. (Off & Fax): (02423) 222254

Fmail ID: kjscollege@rediffmail.com, Website: kjscollege.com

NAAC ACCREDITED 'A' GRADE AN ISO 900 1-2008 CERTIFIED INSTITUTE

Dr. B. S. Yadav (M.Sc., Ph.D.)

Founder President : Late K. B. Rohamare (Es. M.L.A.)

657/2018-19

Date: 13 / 3/2019

MXpower Solar Pvt. Ltd.

Pune.

Dear Sir.

With reference to your email dated 1st March, 2019, you have claimed 18% GST on installation cost apart from 5% GST on supply of solar. Actually in your quotation of 1/11/2018 you have shown only 5% GST for which we were ready to pay. But 18% GST has not been mentioned and it was later mentioned by you, hence we will not pay that 18% GST.

The actual amount decided by both the parties is 5,75,000/- & we have already paid 2,50,000/+ to you. We request you to prepare the proposal according to MEDA guidelines and submit it to MEDA.

The remaining amount (i.e. 3,25,000) will be released immediately ther the completion of entire work.

Thank you and look forward for your co-operation.

(Dr. B. S. Yadav)

Principal K. J. Somalya College of Arts Commerce & Science, Kopargaon



PURCHASE ORDER P.O. No : 1619-00 incover solar pvt. Itd. PO Date gashaa industrial park gat no-603 . : 00/00/2018 Quot No. = 151 sear khed shivapur satara road pune Quo Date : 27/10/2016 VAT TIN No. : 27350708098V #1220S : ZZAACCH1975J1ZC GST No. Service Tax : 0 god bhor Tarde PAN No STATE OF SECOND AACCH1975J Qnty Description Billing Unit Rate (Rs.) Such of 10KWp ON-grid solar Value amount (Rs.) 1 Set KWP mer with 50% advance 5.42,900/-5% 27,1456 TOTAL 5,70,045 ADVANCE 2,87,500/-REMAINDER 282,545/soft Fire Lakis seventy thousand and forty five only DOTIONS -Dia. \$51 included (5.%) RA | Ourside Octrol Limits | STEWER TO A-200mm Harries to time verbal instruction given by us. by Lorence with PO how it been, water, storage, security, sand, small stone and cament will be in our scope of Arts Authorised Signator Estd. JO 801

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#### Solar Water Heater Bill:

Kepargaon Taluka Education Society's

### K.J. Somaiya College of Arts, Commerce & Science

M.J. Solidarija (MH.)

Mohanirajnagar, Kopargaon - 423601, Dist. Ahmednagar (MH.)

Affiliated to Savitribai Phule Pune University, Pune ID No. PU/AN/ASC/07(1964) gilated to Savistical Finale Faire Conversion, rune ID No. PU/AN ASC/07(1964) 8: 0126142000, 9146152000 Email ID: kjscollege/a rediffmail.com, Website: kjscollege.com

NAAC ACCREDITED 'A' GRADE AN ISO 9001-2015 CERTIFIED INSTITUTE SANTRIBAL PHULE PUNE UNIVERSITY "BEST COLLEGE AWARD"

B. S. Yaday (M.Sc.,Ph.D.)

Founder President : Late K. B. Rohamare (Ex. M.L.A.)

.:9/1021-22

Date: 5 /8 /20221

34 PAINTS AND HARDWARE SANGAON ROAD, KOPARGAON - AHEMDNAGAR-423601 412557, 9673671717

Subject: Purchase Order for SOLAR SYSTEM
Reference: As per your quotation dated 16th JULY 2021

sezed Sir.

With reference to your quotation and subsequent discussion had with you, we sessed to give you a Purchasing Order for following Items.

Particulars	Quantity	Rate
FED-RBIS SOLAR WATER HEATER 500 LIT (HARD WATER)	4	36,250/-

4s per enclosed Terms and Conditions of the contract, The total Amount of Page order is Rs:1,45,000/- (One Lakh Forty Five Thousand Only)

Terms and Conditions.

1) Above mentioned prices are including of all Taxes.

2) Product on Site Warranty 5 years from the date of delivery.

3) Installation charges are included.

Solar system included solar panel, water tank, and fabrication stand.

Total solar system capacity is 2000 liter. (500 liter \* 4 Tanks ) "g You.

0/6

Mary

Yours Faithfully, Yadav)

प्राचार्थ के. जे. सोपैया कला, वाणिज्य व विज्ञान महाठिशालयः कोपरणंद

17/mg/2021

Tax Invoice

650 247\_

Authorite Tower No3 Kopargoan Marker S7838127 Marker S7838127 Marker S7838 gmad com Marker 1738 gmad com

Maharashtra, Code : 27

Inverse No 13 Delivery Note

Dated 5-Aug-2021 Mode/Ferms of Payment

Supplier's Ref

Other Reference(s)

Buyer's Order No.

Dated

Despatch Document No.

Delivery Note Date

Destination

Despatched through

Terms of Delivery

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institute of Goods

, Kelitge Kopargoan

Maharashira, Code - 27

HSN/SAC	GST Rate	Quantity	Rate	per	Amount
8541	5 %	4 nos	40,254 24	nos	1,61,016.95
	18 %				

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ian Water Heater 500lt (

1,61,016.96 14,491.53 14,491.53

₹ 1,90,000.02 ESOE

the or early trely Thousand and Two paise Only

SGST 9% CGST 9%

HSNISAC

Taxable Value

Central Tax Amount Rate

Total Tax Amount 28 983 06

1,61,016.96 1,51,016.96 To:a!

2.50%

28,983.06

28,983.06

COMPENSATION Three and Six paise Only

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This is a Computer Generated Invoice

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बर्जी की गर्द कारीक से तीन पाट के किए बैंका VALID FOR THREE MONTHS FROM THE DATE OF ISSUE CBS 31082021 WIS GIRT /CURRENT ACCOUNT D D M M Y Or Bearer या धारक को 190000/-अदा करे FOR K J SOMAIYA ARTS COMMERCE COL 10000748 क्त की मार्च प्राच्या में के सम्बद्धान्त कर है है। toss a par et all branches in India Please sign above 1002738# 423012001# 200248#

# सोलर सिस्टाममुळे

कापरमाव / प्रतिनिधी

बस्तविल्यामुळे ६८० झाडांची लाक्वड महाविद्यालयाच्या चैजबिलात बदत होईल. अनुसन दिते स्वाह्मी झा बेबलेला निर् करण्यासार छे आहे. इसेच जी वीज निर्नेती स प्रजल्य सुरू करण्यासती महावेदातवने होते, ती प्रदूषण क्रिक्टित होत असल्याने पुढाकार घेवून पर्यावरण संरक्ष्णाल खुन महिनदान्यल स्त्रेष कर्जा प्रस् होही. पर्बावरण संरक्षमही होते, असे प्रतिपादन मोठी मदत केली अहे. येगान्य बाबाव कोपरगः ततुनवन्त्रये अस्त हा प्रविकास मनिया बारबिंड यांनी केले.

महाविद्यालयमध्ये दहा किलोवॅटच्या 'ऑन खूप अन्निदनीय आहे. ग्रीड सोक्र सिस्टीन्च्या उद्घटनासंव त्या वस्ति प्रचर्य वद्य स्माते 'अमच्या उत्ते उरिका हाते. य उत्क्रमाबात बोलंत होत्या. कार्यक्रमाच्या अध्यक्षस्थानी महादिद्यालयाने ग्रीन ऑडिट केल्यानेलर संस्थेते अध्यक्ष बलाक हो गर्व व हरा महादिखालयाचे प्राप्तार्थ की बी. एस. यदव होते. सीरकर्जीय महत्त्व आमञ्चा तक्षात आले व संस्था उन्होंने प्राप्तार्थ व प्राप्ता बारबिड म्हणाल्या, या सौरकर्जा केंद्रमधून संस्थेन त्यावर वावडीने निर्णय घेवून स्वत

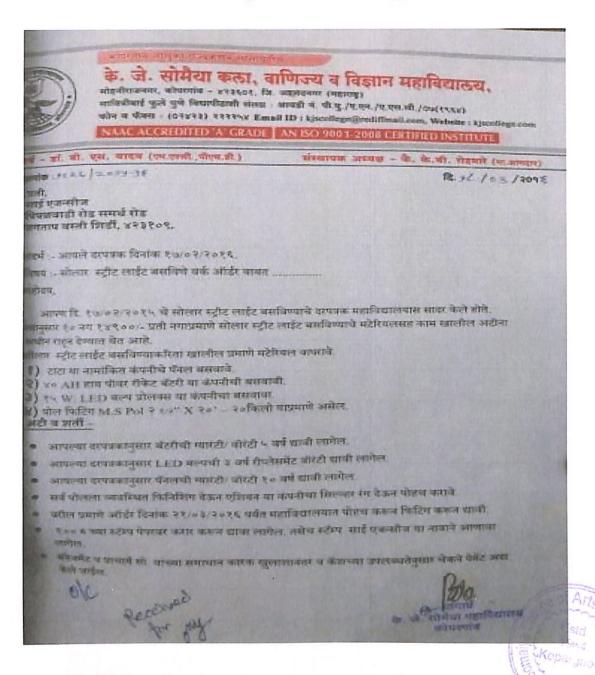
दस्रोज जवळ्यास ४५ युनिट रीत तकर तत्व गुरुक्त देख व त्वासाठी महाराष्ट्र दहा किलो जॉन ग्रीड स्टेलर सिस्टोन होगार असून दर महिन १२ हजर सम्याची एनजी डेक्समेटने हुन साल ८० हजर एन.जी. सोल्युशन प्रोजेक्टच्या डेव्हलपर भारतात उपलब्ध असणाऱ्या सौरकर्जेच प्रकल्प आहे. मनिषा बारबिंड यांनी केले. उपयोग वाढवावा लागपार आहे. त्यवृष्टीने क गरूसके उद्बादन बेमे.एस. के.जे. सोमय्या व के. बी. रोहमारे नहविद्यालयाने व संस्थेने वाखिक्तेली दृद्द्ये ई.डी.से.रत.वे प्राची विचारीय भी. पांडे

यने केले. यरंबे ही, स्वीलकर, मी. प्रमितन केने आहे.

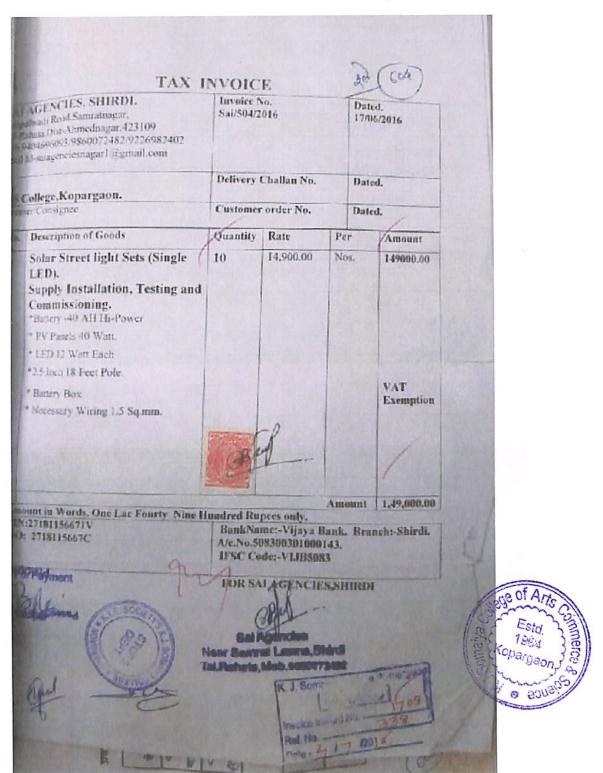


**News Paper Cutting (Sakaal)** 

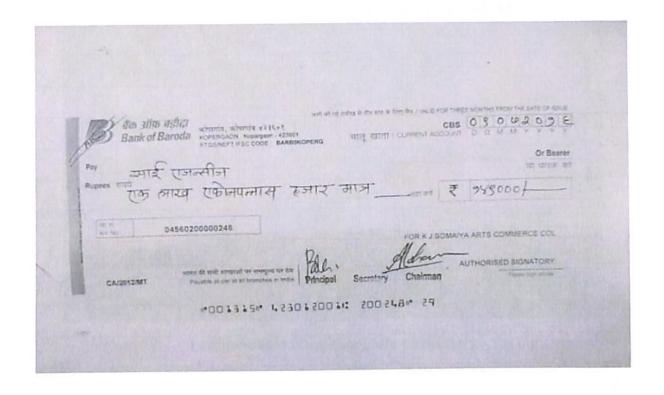
#### Invoice/ Bills for electricity: LED Street Light:



9 900%

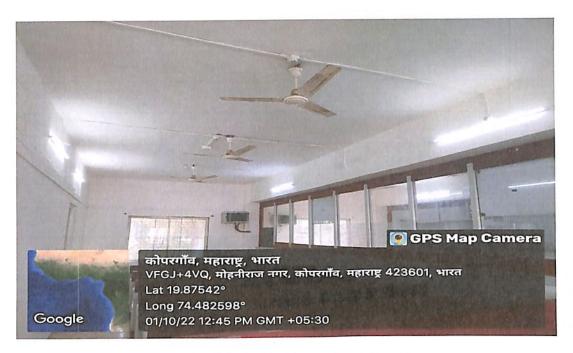


Scanned with CamScanner





Street light on the main gate of College



LED tube light in the Computer Laboratory



LED tube light in the Seminar Hall



LED tube light in the Class Room



Coordinator
(Energy Audit Committee)

Co ordinator IQAC, K. J. Somaiya College Kopargaon, Dist. A.Nagar Principal

K. J. Somaiya College of Arts

Commerce & Science, Kopargaon