



**MAR THOMA COLLEGE FOR WOMEN
PERUMBAAVOOR**

CRITERION 7

**Institutional Values &
Best Practices**

2017-2022

7.1.2.1 Alternate Sources of Energy & Energy Conservation Measures



Installation of Solar Panels

The college has taken a significant step towards sustainable energy by installing solar panels on its rooftop. These solar panels, with a capacity of 5 KW, efficiently harness solar energy, which is then utilized to meet the energy requirements of important areas within the college premises, including the principal's room and the college office. By embracing solar power, the college has made great strides in reducing its dependence on electricity from the Kerala State Electricity Board. The solar panels' consistent energy production not only provides a reliable and eco-friendly power source but also contributes to lowering the institution's overall carbon footprint.



Solar Panels @ Rooftop of the Main Building



Bills & Invoices for the Installation of Solar Panels

ELECTRONICS
 (T), Jeevan Nagar, Janatha Road (S), Kochi - 682 025
 Tel:0484 - 2339068
 Email: aeonelec@bsnl.in

THE KERALA VALUE ADDED TAX RULES, 2005
FORM NO. 8 B
 (For customers when input tax credit is not required)
 [See rule 58(10)]
RETAIL INVOICE
 CASH / CREDIT

Invoice No. **3017** Date: **30-03-2017**

Name & Address of the Purchaser with TIN, if any: **The Principal, Marthoma College for Women, Perumbavoor, Kerala - 688 542**
 Tel: **0484-25237023** Fax: _____ E-mail: _____

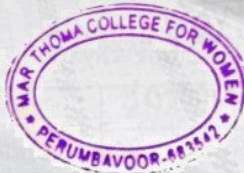
Sl. No.	Commodity Code	Commodity / Item	Rate of tax	Unit Price	Quantity	Gross Value
1	2	3	4	5	6	7
01		250 Wp Solar Photovoltaic Module	1%	12,500/-	16 Nos	2,00,000 -

GRAND TOTAL IN WORDS:
 Rs. **Two lakh two thousand only**

8	Cash Discount	
9	Net Taxable Value	2,00,000 -
10	Tax Amount	2000 -
11	Round Off	
12	Grand Total (9+10+11)	2,02,000 -


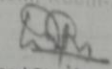
E & O E

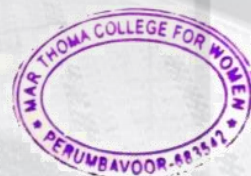
For AEON ELECTRONICS,
 Palarivattom, Kochi - 682 025.
 Authorised Signatory
 (With Status & Seal)



Bills & Invoices for the Installation of Solar Panels

AEON ELECTRONICS
 JANATHA ROAD (S)
 KOCHI-682 025

To <u>The Principal</u> <u>Marthoma College for Women,</u> <u>Perumbavoor, Kerala-683542</u>		No: <u>3178</u>
		Date: <u>30-03-17</u>
Sl.No.	Description	Amount Rs. Ps.
1	Charges for installation of 5000W MPPT Charge Controller with interfacing of 5000wp Solar photovoltaic module and 5KW/120V UPS system	5000 -
Total		5000 -
₹ Five thousand only		
 Authorized Signatory		For AEON ELECTRONICS Perumbavoor  Authorized Signatory
		Authorized Signatory (With Status & Seal)



Bills & Invoices for the Installation of Solar Panels

ELECTRONICS
Nagar, Janatha Road (S), Kochi - 682 025
Tel: 0484 - 2339068
Email: aeonelec@bsnln

THE KERALA VALUE ADDED TAX RULES, 2005
FORM NO. 8 B
(For customers when input tax credit is not required)
[See rule 58(10)]
RETAIL INVOICE
Invoice No. **3018** CASH / CREDIT Date: **30-03-2017**

Name & Address of the Purchaser with TIN, if any: **The Principal,**
Marthoma College for Women,
Perumbavoor - Kerala - 683512
Tel: **0484-2522725** Mob: _____ Fax: _____ E-mail: _____

Sl. No.	Commodity Code	Commodity / Item	Rate of tax	Unit Price	Quantity	Gross Value
2	3	4	5	6	7	
01		5000W Field Programmable MPPT Charge Controller	14%	15720/50	1No	15720.52

GRAND TOTAL IN WORDS:
Rs. **Eighteen thousand only**

8	Cash Discount	
9	Net Taxable Value	15720.52
10	Tax Amount	2239.48
11	Round Off	
12	Grand Total (9+10+11)	18000 -

E&OE
Authorized Signatory (With Status & Seal)
MAR THOMA COLLEGE FOR WOMEN PERUMBAVOOR-683512



Bills & Invoices for the Installation of Solar Panels

AELECTRONICS
 Aggar, Janatha Road (S), Kochi - 682 025
 Tel: 0484 - 2339068
 Email: aeonelec@bsnl.in


THE KERALA VALUE ADDED TAX RULES, 2005
FORM NO. 8 B
 (For customers when input tax credit is not required)
 [See rule 58(10)]
RETAIL INVOICE
 CASH / CREDIT

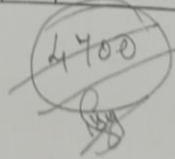
Invoice No. **3019** Date: **30-03-2017**


Name & Address of the Purchaser with TIN, if any: The Principal,
Marthoma College for Women,
Perumbavoor, Kerala - 683542

Tel: 0484-2522722 Fax: E-mail:

Sl. No.	Commodity Code	Commodity / Item	Rate of tax	Unit Price	Quantity	Gross Value
1	2	3	4	5	6	7
01		6.05g/mm Cable	5%	26/-	120m	4220 -
02		10.05g/mm Cable	5%	52/-	4m	208 -
GRAND TOTAL IN WORDS:						
Rs <u>Four thousand seven hundred</u> <u>and fifty four only</u>			8	Cash Discount		
			9	Net Taxable Value		4528 -
			10	Tax Amount		226 40
			11	Round Off		- 40
			12	Grand Total (9+10+11)		4754 -

E.&O.E. 

4750 

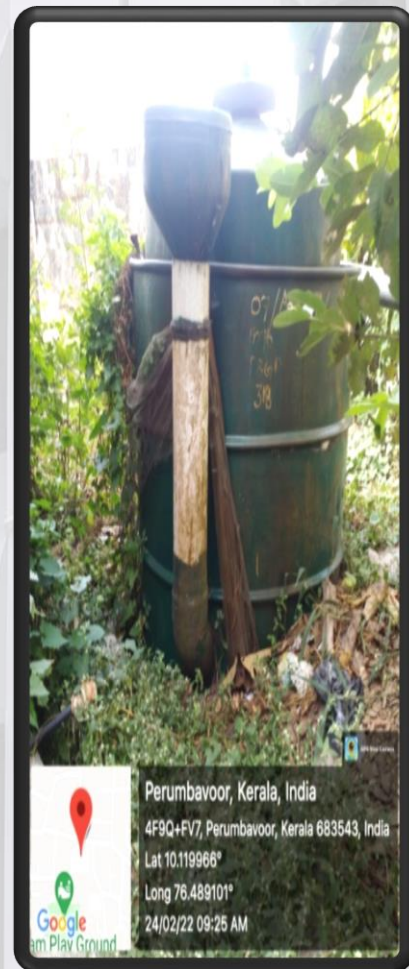
Authorised Signatory (With Status & Seal) 

3.
5.
2
10F

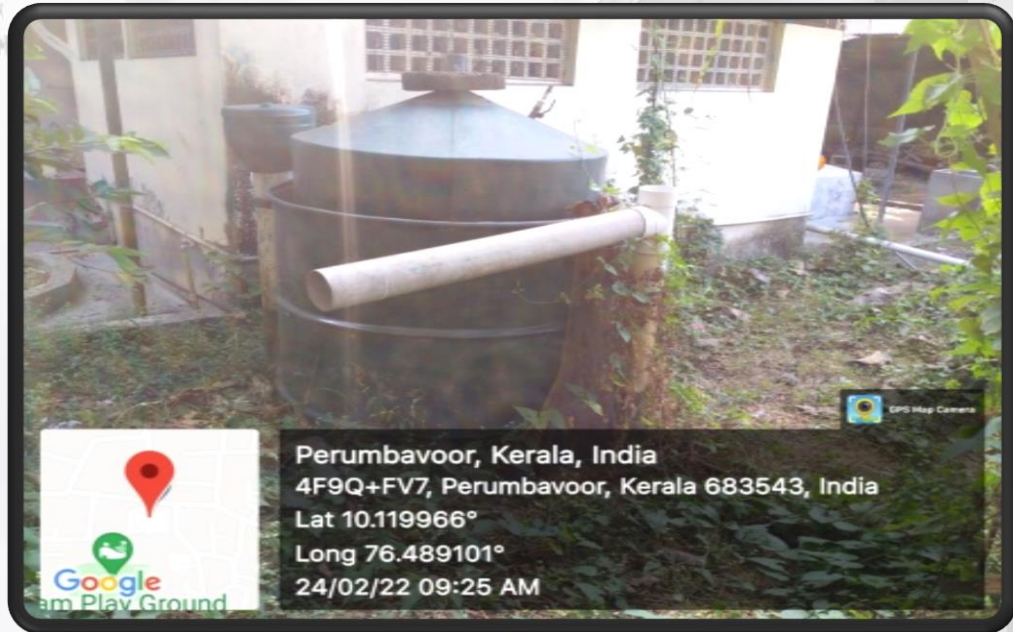


Bio-Gas Plant

The college has taken a significant leap towards sustainable practices by establishing biogas plants to generate biogas for cooking purposes. These biogas plants employ an environmentally friendly process that not only produces biogas but also yields a nutrient-rich substrate, which is utilized as organic fertilizer. The biogas plants have been set up to efficiently convert organic waste, such as kitchen scraps and agricultural residues, into biogas through anaerobic digestion. Anaerobic digestion is a natural biological process where microorganisms break down organic matter in the absence of oxygen, resulting in the production of biogas. This biogas is then harnessed and used as a clean and renewable energy source for cooking in the college's kitchen and other relevant areas.



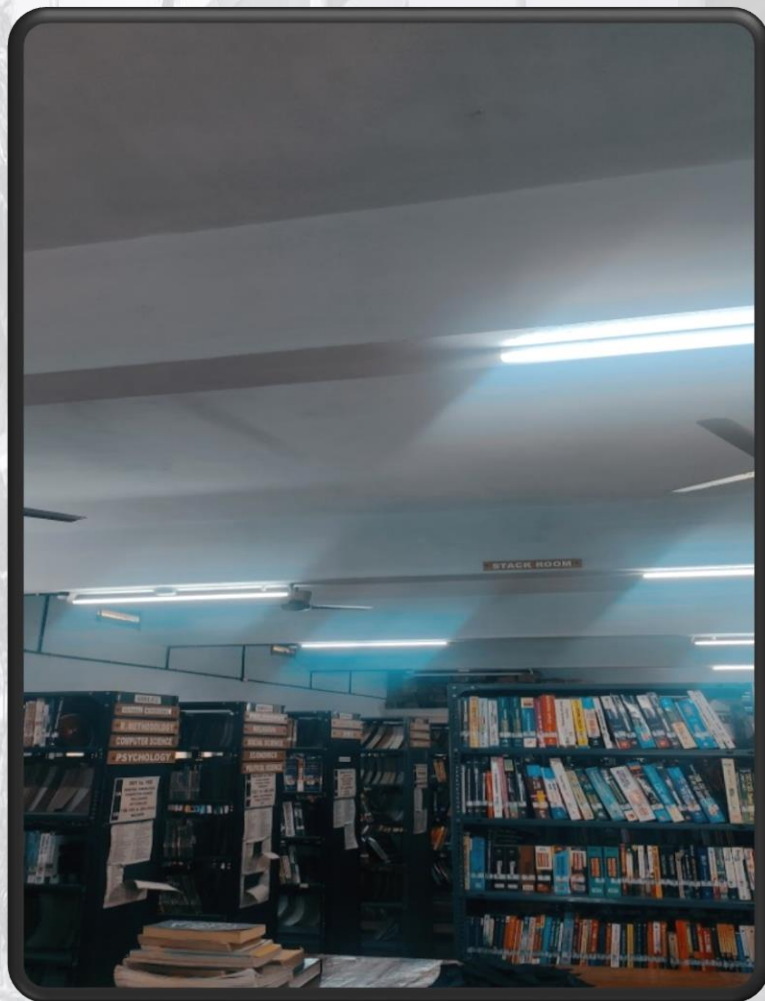
Bio-Gas Plant in the Premises of the College Hostel



LED-Bulbs

The college has taken a proactive approach to energy conservation by extensively incorporating LED bulbs throughout its premises. This transition to LED lighting represents a significant step towards reducing energy consumption and promoting sustainability on campus. LED bulbs are known for their energy efficiency, long lifespan, and lower environmental impact compared to traditional incandescent or fluorescent bulbs. By replacing conventional lighting fixtures with LED lamps, the college has already witnessed a noticeable reduction in electricity consumption, contributing to cost savings and a greener environment. Recognizing the success of this initiative, the College Authority is now planning to accelerate its efforts towards energy conservation by aiming for 100% LED lamp usage in the near future.

LED-Bulbs @ the Library





LED Bulbs at the Auditorium

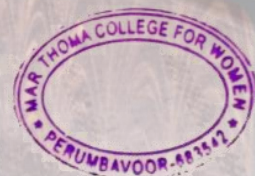
Perumbavoor, KL, India

Kunnathunad, Perumbavoor, 683542, KL, India

Lat 10.118874, Long 76.489008

05/01/2023 01:42 PM GMT+05:30

Note : Captured by GPS Map Camera



Bills/Invoices for the Purchase of LED Bulbs

ORIGINAL FOR THE BUYER

BFJ9496L1ZU

ON APPROVED LIST OF CENTRAL & STATE GOVERNMENTS

Fax : 91-484 : 2370524
Office : 2354924
2360424
Phone : 2373267
2381195
2372232
E-mail: joselect@gmail.com

JOS ELECTRICALS

P.B. No. 3565, NEAR SHENOY'S THEATRE, M.G. ROAD, ERNAKULAM, KOCHI-682 035

TAX INVOICE

Invoice No : JS-201819 11071
Date : 30-10-2018
PO. No :
Date :

Shipping Address
The Principal --
Mar Thoma College For Women
Perumbavoor-683542
Ph 0484 2522723, 9446438600
Kerala India

Principal --
Mar Thoma College For Women
Perumbavoor-683542
Ph 0484 2522723, 9446438600
Kerala India

Sl No	Description of Goods (HSN Code)	Qty	UOM	UnitRate	Gross Amt	Disc %	Taxable Amt	CGST	SGST	IGST	Total (Rs)	
								Amount	Amount	Amount		
								[Rate]	[Rate]	[Rate]		
1	18W LED TUBE LIGHT SLIM LINE CROMPTON 94051090	25.00	Nos	280.00	7000.00	.00	7000.00	420.00	420.00	.00	7840.00	
								6.00	6.00			
TOTAL		25.00			7000.00		7000.00	420.00	420.00	.00	7840.00	

Total Invoice Value : 7840.00

In Words : Rupees Seven Thousand Eight Hundred and Forty Only.

JOS ELECTRICALS
Authorised Signatory

Hostel.



Bills/Invoices for the Purchase of LED Bulbs

Tax Invoice

Industrial Services LLP Development Area (DA) Amoor P.O. South Perumbavoor PIN: 224401 Name: Kerala, Code: 32 Email: info@flygon.in	Invoice No. U306 Delivery Note	Dated 16-Dec-2019 Mode/Terms of Payment Supplier's Ref. Other Reference(s) Buyer's Order No. Dated Despatch Document No. Delivery Note Date Despatched through Destination Terms of Delivery
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Description of Goods and Services	HSN/SAC	Quantity	Rate	per	Disc. %	Amount
1. LED SWI COB	9405	10 nos	62.50	nos		625.00
2. SERVICE CHARGES	996713					127.12
						752.12
				6 %		37.50
				6 %		37.50
				9 %		11.44
				9 %		11.44
				1 %		7.52
						(-)-7.52
Total						₹ 850.00

E. & O.E

Amount Chargeable (in words) INR Eight Hundred Fifty Only						
HSN/SAC	Taxable Value	Central Tax		State Tax		Total Tax Amount
		Rate	Amount	Rate	Amount	
9405	625.00	8%	37.50	6%	37.50	75.00
996713	127.12	9%	11.44	9%	11.44	22.88
Total			48.94		48.94	97.88

Tax Amount (in words) : INR Ninety Seven and Eighty Eight paise Only

Declaration
 We declare that this invoice shows the actual price of the goods described and that all particulars are true and correct.

for Flygon Industrial Services LLP
 Authorized Signatory

This is a Computer Generated Invoice



Bills/Invoices for the Purchase of LED Bulbs

ORIGINAL DUPLICATE TRIPLICATE

32AABFJ9496L1ZU Fax : 91-484 : 2370524
 ON APPROVED LIST OF CENTRAL & STATE GOVERNMENTS Office : 2354924
: 2380424
 Phone : : 2373267
: 2381195
: 2372232
JOS ELECTRICALS E-mail: joselect@gmail.com
 CE 1947 P.B. No. 3565, NEAR SHENOY'S THEATRE, M.G. ROAD, ERNAKULAM, KOCHI-682 035

TAX INVOICE Invoice No : JS-201819 3648
Date : 11-06-2018
PO. No :
Date :

Billing Address **Shipping Address**
 Mar Thoma College For Women Perumbavoor Mar Thoma College For Women Perumbavoor
 Perumbavoor Perumbavoor
 Perumbavoor Ph 9847322499

Kerala India Kerala India

S No	Description of Goods [HSN Code]	Qty	UOM	UnitRate	Gross Amt	Disc Amt	CGST	SGST	IGST	Total (Rs)
							Amount [Rate]	Amount [Rate]	Amount [Rate]	
1	18W/20W LED TUBE LIGHT FITTINGS OSRAM 94051090	30.00	Nos	295.00	8850.00	.00	531.00	531.00	.00	9912.00
							6.00	6.00		
2	12W LED LAMP CROMPTON CDL 85399090	10.00	Nos	135.00	1350.00	.00	81.00	81.00	.00	1512.00
							6.00	6.00		
3	48 Inch CEILING FAN HS RIVIERA CROMPTON 84145120	24.00	Nos	1355.93	32542.32	.00	2928.81	2928.81	.00	38399.94
							9.00	9.00		
4	ANGLE HOLDER NOVA 85365020	8.00	Nos	30.00	240.00	48.00	17.28	17.28	.00	226.56
							9.00	9.00		
TOTAL		72.00			42982.32	48.00	3558.00	3558.00	.00	50050.50

Signature

Total Invoice Value 50051.00 **JOS ELECTRICALS**
 In Words : Rupees Fifty Thousand and Fifty One Only. Authorized Signatory
 I/we hereby certify that my/our registration certificate under the GST Act is in force on the date on which the sale of the goods specified
 in this tax invoice is made by me/us and that the transaction of sale covered by this tax invoice has been effected by me/us and it shall be
 accounted for in the turnover of sales while filing of return and the due tax, if any, payable on the sales has been paid or shall be paid.



Bills/Invoices for the Purchase of LED Bulbs

32AVDPV0832B2Z2 Mob.: 9497010472

ELECTRONIC POINT
Municipal Shopping Complex,
Subhash Maidan, A. M. Road, Perumbavoor.

TAX INVOICE
No.: E 733 Date: 20.11.2019
Tax is Payable on Reverse Charge (Yes / No)
Transportation Mode:
Vehicle No.:

Name & Address of Receiver (Billed to / Shipped to) The principal Mar Thoma College for women
Perumbavoor State KERALA State Code 32 GSTIN / Unique ID:

Sl No	Description of Goods	HSN Code	Qty	UOM	Rate (Per Item)	Dis	Amount	CGST Rate Amount	SGST Rate Amount	IGST Rate Amount	Amount
	Mx Light LED AT-25		01		1779/66		1779/66				
Total							1779/66	160/16	160/16		

Certified that the Particulars given above are true & correct

GRAND TOTAL IN WORDS: Rs. Two Thousand One Hundred Only

Total Invoice Amount 2100/-

For **ELECTRONIC POINT**
Authorized Signatory

23

ESTIMATE 02/06/2020

To. 19:17:55

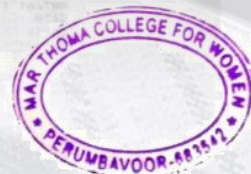
Sln	Particulars	Unit	Disc%	Qty.	Rate	Amount
1	LED 9W ORIENT			4.000	80.00	320.00
2	EMERGENCY LED			2.000	420.00	840.00
3	PENDEND HOLDER			1.000	25.00	25.00

Rs. one thousand one hundred and ninety seven Only

Amount : 1,185.00
K.F.C.S Amount : 11.85
Round off : 0.15
GRAND TOTAL : 1,197.00

B-L095
S.MAN : NA/KV
1. Below 50 Mtr wire will not taken back.
2. Only 6mm and 4mm Full coil wire will return back.
3. Goods without bill will not return back.
4. Please contact Authorised Service Centre for Company Items.

Handwritten: CPA 1000



MOU with Energy Conservation Society

**MEMORANDUM
OF
UNDERSTANDING**

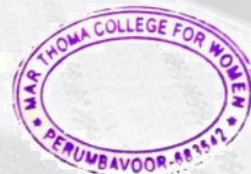
signed between

**1.MAR THOMA COLLEGE FOR WOMEN,
PERUMBAVOOR**

and

2.ENERGY CONSERVATION SOCIETY


DR. LISY CHERIAN
PRINCIPAL
MAR THOMA COLLEGE FOR WOMEN
PERUMBAVOOR - 883 542
KERALA



MOU with Energy Conservation Society

Mar Thoma College For Women, Perumbavoor (referred as First Party) and Energy Conservation Society (ECS) (referred as second party) signed a Memorandum of Understanding (MOU) as a part of Academics-industry interaction and for mutually beneficial promotional activities. The understanding is stated as follows.

During the contemplation of understanding both parties agree to work together and achieve the following objectives.

1. To contribute and enhance the ability of students to adapt to actual working environment and practical applications of knowledge gained.
2. To establish a close and continuous interaction between Mar Thoma College For Women, Perumbavoor and Energy Conservation Society (ECS) to discuss professional and practical issues related to the field of energy conservation.
3. To exchange technical ideas and deliver expert lectures in professional electrical engineering practices with the aim of promoting renewable energy sources.
4. To organize training camps and internships for students from B. Sc., B.Voc. and other courses.
5. To organize site/field visits for the students to promote interaction between students and field engineering community.
6. To organize extracurricular, co-curricular and related activities jointly for the benefit of students and for creating awareness of energy conservation.
7. To organize continuing education program by assessing the need of engineering industry with emphasis on energy conservation.
8. To organize seminars/workshops in mutually agreed areas for dissemination of knowledge amongst the students, professional community and society at large.
9. Both parties shall strive together and put their best efforts for successful implementation of the agreement.




 DR. LISY CHERIAN
 PRINCIPAL
 MAR THOMA COLLEGE FOR WOMEN
 PERUMBAVOOR-683 542
 KERALA



Energy Conservation Measures

Instructions for Reducing Electricity Consumption

