



VISAKHA GOVT. DEGREE & P.G. COLLEGE for WOMEN

ALTERNATE ENERGY SOURCES AND ENERGY CONSERVATION MEASURES



Alternate energy sources and energy conservation methods available in the institution are

1. Solar Energy
2. Wheeling to the grid
3. Sensor based energy conservation
4. Use of LED bulbs/Power efficient equipment

Solar Energy

Institute has installed a 20 kWp Solar PV Rooftop system with Net-metering facility. Total 64 nos. of panels are installed on the rooftop.

Geotagged photographs of Solar panels





SOLAR PANELS BILL

SAKHA GOVT. DEGREE & P.


Government of Andhra Pradesh
 GER 19-A

Date: 10-04-2018

Form of Utilization Certificate

S. No	Cheque No. & Date	Title of the work	Amount paid (Rs.)
1	701327, dtd: 15-09-2017	Solar Panel	13,48,000
2	701338, dtd: 10-04-2018	- Do -	3,37,000
Total Rs.			16,85,000

It is certified that the amount of Rs. 16,85,000/- (Rupees Sixteen lakhs Eighty Five Thousand Only) was utilized towards installing of solar panel at Government Degree College for women Visakhapatnam executed by the Windstream Energy Technologies India Pvt. Ltd., Hyderabad vide the letter from the State Project Director Govt. of A.P. RUSA, O/o Commissioner of Collegiate Education, AP, Vijayawada, dt: 23-11-2017 and the said amount was utilized for the purpose of installing solar panel for purpose for which it was sanctioned and in accordance with the terms and conditions as laid down by the RUSA.


 K. Syama Sundara Rao
 Windstream Energy Technologies
 India Pvt. Ltd, Hyderabad

Signature: 1) Principal
 (Dr. P. V. Ramana Reddy)
 PRINCIPAL
 Visakha Govt. Degree Cl.
 for Women
 Visakhapatnam-530020.

2) RUSA Coordinator
 (Dr. K. Sudha)

Date: 10/04/18
 Seal:

WHEELING TO THE GRID



ఆంధ్రప్రదేశ్ ఆంధ్ర ప్రదేశ్ ANDHRA PRADESH

78AA 071567

Sl.No. 692 dt. 28-12-2017

R.V. LAKSHMAYYA
LICENCEE
VENDOR

Sold to Ref: Dr P.V. Ramana Reddy Sh. Narayana Reddy

CHANDALA, VISAKHAPATNAM

Sold to whom: Visakha Govt. Degree College for Women

ANNAMURTHI C-1
(Individual Consumer)

Solar Rooftop Net/Gross Metering Connection Agreement

This Agreement is executed and entered into at VISAKHA GOVT DEGREE COLLEGE (W), Old Jail Road, Visakhapatnam District, on this dated 29-12-2017, between the Eligible Consumer M/s/Mr/Mrs Dr.P.V. RAMANA REDDY, residing at Government Degree College, Old Jail Road, Visakhapatnam, which means their/his/its /their successors as first party AND EASTER Power Distribution Company Ltd. (Herein after called as Discom) and having its registered office at VISAKHAPATNAM DISTRICT, Andhra Pradesh (Address) as a DISCOM incorporated under the provisions of Companies Act 1956 consequent to the AP Electricity Reforms Act, 1998 (which means its authorised representation assigns, executors and its successors) as other party herein after called the Discom, Whereas, the

[Signature]

cont..2..

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for Women
Visakhapatnam-530020.

eligible consumer has taken the responsibility to set up or facilitate the requisite Photovoltaic system and injection of Power into the Discom's grid and whereas, the Discom agrees to benefit the eligible consumer for the electricity generated and as per conditions of this agreement and Solar rooftop guidelines both the party hereby agrees to as follows:-

1. Eligibility

1.1 Eligibility consumer is required to be aware, in advance of the standard and conditions his system has to meet for being integrated into grid/distribution system.

1.2 Eligible consumer agrees that connection of Photovoltaic system to Discom's distribution system shall be bound by requirements of State Distribution Code and/or Discom's ~~Standard~~ service. The grid shall continue to perform with specified reliability, Security and quality as per the Central Electricity Authority (Grid Standard) Regulations 2019 as amended from time to time.

1.3. All registered companies, Government entities Partnership companies/Firms, Individuals and all consumer of APDiscom(s) will be eligible for setting up of Solar Power Projects within the state for sale of electricity by captive use, in accordance with the electricity act, 2003 and Andhra Pradesh, Solar Power Policy, as amended from time to time.

1.4 Group of Persons by societies will also be eligible for setting up solar roof top projects (SRP) for sale of electricity to DISCOM by captive use or for self consumption.

2. Capacity of the SPV Plant and Maximum Contracted load of the premises

2.1 The Eligible Developer/Consumer is proposing to install rooftop solar power plant of

5 kWp capacity under Solar ROOF TOP SPV (Net/Gross) metering facility at Street Old Jail Road, VISAKHA DEGREE COLLEGE (GOVT) FOR WOMAN, Visakhapatnam. having electrical service connection no. _____, Category VII, 2 3 Phase, Distribution _____

_____ for a contracted load of 20 Kw/HPKVA. The Eligible Developer have requested DISCOM to provide grid connectivity by necessary permissions to connect rooftop solar power plant and supply solar energy into the distribution of NETWORK of

DISCOM at _____ Voltage level which shall be extended for a period of 25 years.

3. Governing Provisions:

The Eligible developer hereby undertake to comply with all the requirements of the Electricity Act, 2003 the Rules and Regulations framed under, Provisions of the Tariffs, applicable charges and General Terms and Conditions of Supply prescribed by the Discom with the approval of the Andhra Pradesh Electricity Regulatory Commission herein after called as "Commission" from the time to time and agree not to dispute the same.

4. Technical and interconnection Requirements

4.1. Eligible consumer agrees that he will install, prior to connection of Photovoltaic system to Discom's distribution system, an isolation device and agrees for the Discom to have access to and operation of this, if required, for repair and maintenance of the distribution system.

4.2 Eligible Consumer agrees that in case of a power outage on Discom's system, Photovoltaic system will shut down, unless special transfer and isolating capabilities have been installed on photovoltaic system. The Discom shall not be obligated to accept and may require the Eligible Developer to interrupt or reduce deliveries when necessary with a reasonable notice to the Eligible Developer.

4.3 The Eligible Developer shall strictly adhere to the standards specified by CSA/MNRE and installations of electrical equipment must comply with Indian Electricity rules, 1956, 4.4. The Eligible Developer can install SPV on building walls also 4.5 Prior approval of Chief Electrical Inspectorate General (CEIG) is required in case of an SRP connected at LT level of distribution network with more than 10KW capacities.

4.6. Eligible consumer agrees that Discom will specify the interface/inter connection point and metering point.

4.7 Eligible consumer agrees to adhere to following power quality measures as per International or Indian standards and/or other such measures provided by Commission/Discom.

a. Harmonic current: Harmonic current injections from a generating station shall not exceed the limits specified in IEEE 519.

b. Synchronization, Photovoltaic system must be equipped with a grid frequency synchronization device.



4.9 Grid Connectivity and Evacuation facility:

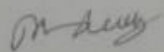
The Power generated from a solar power project shall be injected at an appropriate voltage at the sub-station and/or interconnection point of the APTransco/Discom(s). The Eligible Developer shall bear the entire cost of construction of power evacuation facilities, from the project up to the interconnection point and/or up to APTransco/Discom(s) substation. The Eligible Developer shall abide by the orders, rules, regulations and terms and conditions as approved by the commission from time to time for operation of Solar power Projects, Power evacuation, Transmission and wheeling of energy. Solar Power Projects will be exempted from paying the supervision charge to APTransco/Discom(s) towards the internal evacuation infrastructure within the project site and up to inter-connection point. Any upstream system strengthening requirement shall be born by ~~R&R~~ APTransco/Discom(s) on a priority basis.

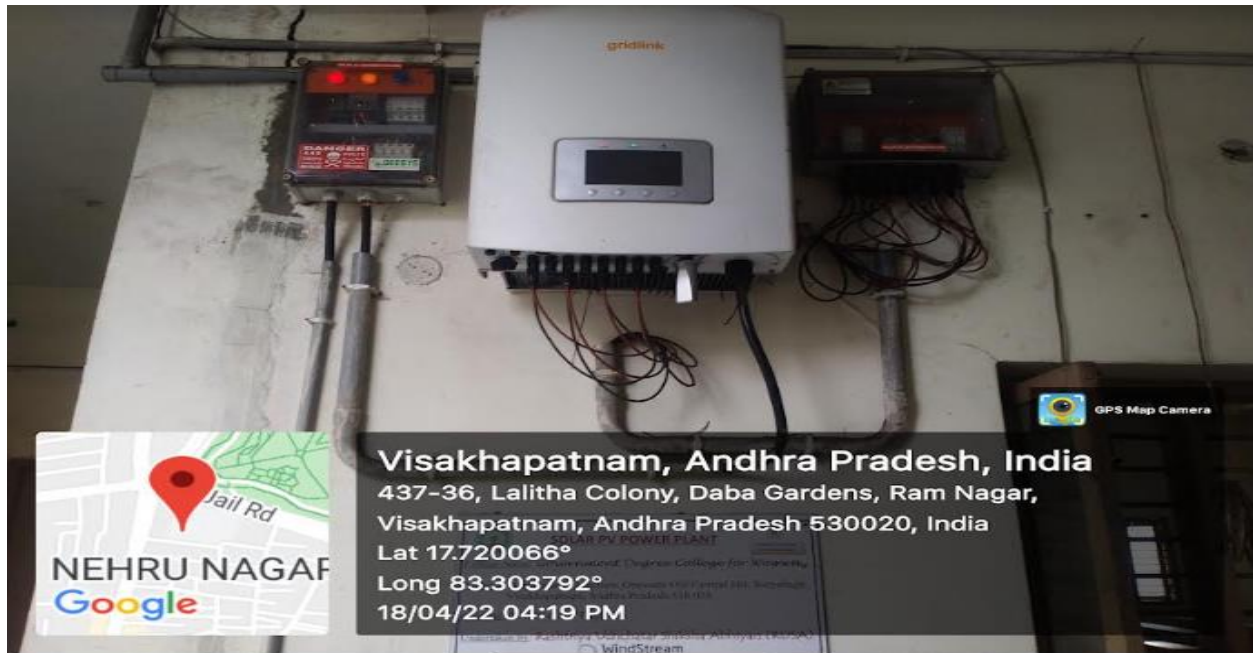
4.10 It is imperative to seek the technical details of the installation infrastructure from the supplier at the time of system installation and retain with the Eligible developer/consumer.

5. Implementation Process:

Implementation of solar rooftop net/gross metering facility will be as per the following guidelines:-

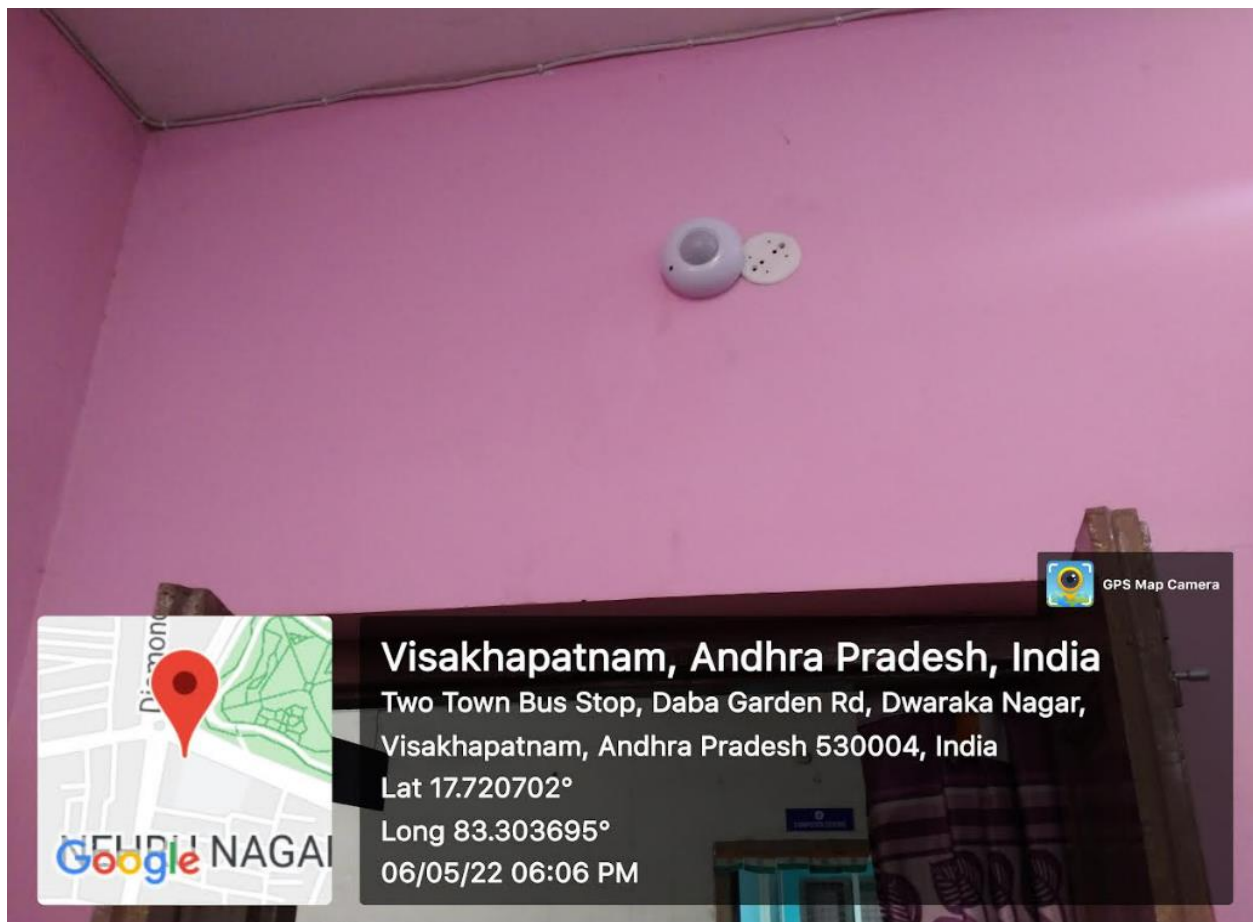
- 1) Under Net metering, Power is first sent to the appliances and lights in the house, and if excess remains, it is exported to the outside electricity network and its quantum records, 1) Under Gross Metering, all solar electricity generated is exported to the outside electricity network through an independent meter.


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for Women
Visakhapatnam-530020.



Visakhapatnam, Andhra Pradesh, India
437-36, Lalitha Colony, Daba Gardens, Ram Nagar,
Visakhapatnam, Andhra Pradesh 530020, India
Lat 17.720066°
Long 83.303792°
18/04/22 04:19 PM

SENSOR-BASED ENERGY CONSERVATION






Visakhapatnam, Andhra Pradesh, India
Two Town Bus Stop, Daba Garden Rd, Dwaraka Nagar,
Visakhapatnam, Andhra Pradesh 530004, India
Lat 17.720702°
Long 83.303695°
06/05/22 06:06 PM

SENSOR PURCHASED BILLS

Institute has installed motion sensors to control the switching ON/OFF of the lights to save energy.

Tax Invoice

PRAYAG AUTOMATIONS PRIVATE LIMITED									
D.NO 122/6, Near mahathma gandhi hospital, Sector-6, MVP colony, Visakhapatnam-530017									
www.prayagautomations.com Phone no.: 9985991899 Email: prayagautomations@gmail.com GSTIN: 37AAMCP3052E1ZG, State: 37-Andhra Pradesh									
Bill To:		Place of Supply: 37-Andhra Pradesh							
TO , THE PRINCIPAL ,VGDCW, VISAKHAPATNAM		Invoice No.: 1756 Date: 18-03-2021							
#	Item name	HSN/ SAC	Quantity	Unit	MRP	Taxable amount	CGST	SGST	Amount
1	Motion sensor (motion sensor is a new energy-saving switch. It adopts a good sensitivity detector and an integrated circuit. This sensor gathers automatism, convenience, safety, energy-saving, and practical functions. It utilizes the infrared energy from the human body as a control signal source and it can start the load at once when one enters the detection field. It can automatically identify day and night and is easy to install and a widely used product.)		3	NO	₹ 2,415.25	₹ 7,245.76	₹ 652.12 (9.0%)	₹ 652.12 (9.0%)	₹ 8,550.00
2	Sensor tube lights 18w (motion sensor in built light 18w dedicated)		12	NO	₹ 1,652.54	₹ 19,830.51	₹ 1,784.75 (9.0%)	₹ 1,784.75 (9.0%)	₹ 23,400.00
3	Installation Charges (Installation with commissioning)		15	NO	₹ 423.73	₹ 6,355.93	₹ 572.03 (9.0%)	₹ 572.03 (9.0%)	₹ 7,500.00
4	Power cable		50	-	₹ 21.19	₹ 1,059.32	₹ 95.34 (9.0%)	₹ 95.34 (9.0%)	₹ 1,250.00
Total			65			₹ 34,491.52	₹ 3,104.24	₹ 3,104.24	₹ 40,700.00
Tax type	Taxable amount	Rate	Tax amount	Amounts:					
SGST	₹ 34,491.52	9.0%	₹ 3,104.24	Sub Total					
CGST	₹ 34,491.52	9.0%	₹ 3,104.24	Total					
				Received					
				Balance					
				₹ 0.00					
				₹ 40,700.00					
Invoice Amount In Words									
Forty Thousand Seven Hundred Rupees only									
Terms and conditions:				 			For, PRAYAG AUTOMATIONS PRIVATE LIMITED  Authorized Signatory		
Thanks for doing business with us!									
Bank details:									
Bank Name: ICICI BANK LIMITED, VISHAKHAPATNAM MAIN Bank Account No.: 631605012886 Bank IFSC code: ICIC0006316 Account Holder's Name: PRAYAG AUTOMATIONS PVT LTD									
				Page 1 / 1					

LED BULBS



LED BULBS BILL

Institute has replaced maximum existing lighting fixtures with LEDs and energy efficient lighting fixtures.

SUNDHA ELECTRICALS
 #41-32-1/2, Captain Ramarao Junction, Allipuram, Main Road, Visakhapatnam - 530 020
 PR : 0691-2525779
 Cell : 9052582681

Invoice No. **121**
 Reverse Charge (Y/N) **N**
 State **AP**
 Name **THE DRIPDOL**
 Address **VSKP**
 GSTIN:
 Invoice Date **01/11/2018**
 Vehicle Number
 e-Way Bill No. **VCTDD 000**
 Place
 Code **37**

S No.	DESCRIPTION	HSN Code	Gty./ UOM	Rate Price	Amount	Rate of Tax	SGST	CGST	IGST
1	2.5 SMD LED Bulbs	8534	25	1750	3500	18%	315	315	
TOTAL					3500	18%	315	315	
GRAND TOTAL					4130.00				

Bank Details:
 - Name of the Bank: **HDFC Bank**
 - Bank Account Number: **04172000005369**
 - Bank Branch IFSC: **HDFC 0000417**

Note: 1) Original to be retained by the buyer to provide evidence for an input tax claim.
 2) Interest will be charged @ 24% per annum, if the Bill is not paid on presentation.
 3) Goods once sold will not be taken back or re-exchanged.

For **SUNDHA ELECTRICALS**
NEELAM DEVI
 Authorised Signatory

GST : 37A0EPD3700J1ZA

TAX INVOICE
CREDITPh : 0891-2526779
Cell : 9052582681**SUNDHA ELECTRICALS**

51-32-1/2, Captain Rantarao Junction, Allipuram, Main Road, Visakhapatnam - 530 020

Invoice No. 120	Invoice Date 01/11/2018
Reverse Charge (Y/N)	Vehicle Number
State AP	e-Way Bill No.
Name THE PRICIPAL	
Address: V. G. C. C. W. D. VSKP	Place:
GSTIN:	Code 37

S No.	DESCRIPTION	HSN Code	Qty/ UOM	Rate Price	Amount	Rate of Tax	SGST	CGST	IGST
01	200W LED FAN	8505	3 Pk.	4500	13500	12%	810	810	
<p><i>Paid & Cancelled</i></p> <p>PRICIPAL Anantha Govt. College (M) Visakhapatnam</p>									
TOTAL					13500	12%	810	810	
GRAND TOTAL					15120.00				

Bank Details:
 * Name of the Bank: **HDFC Bank**
 * Bank Account Number: **04172000005990**
 * Bank Branch IFSC: **HDFC0000417**

TOTAL 13500 12% 810 810
 GRAND TOTAL 15120.00

Notes: 1) Original to be retained by the buyer to provide evidence for an input tax claim
 2) Interest will be charged @ 24% per annum, if the bill is not paid on presentation
 3) Goods once sold will not be taken back or recharged

For SUNDHA ELECTRICALS

N. SARAFAM

Authorized Signatory

Principal V.G.D.C(W) P.G MICRO BUILDING
 Andhra Pradesh, Code 37
 Email: pointerpipe@gmail.com

Invoice No: 1797
 Delivery Date: 1-Oct-2019
 Supplier's Ref: 18/4
 Buyer's Order No: 9949886397
 Dispatch Document No: 30-Sep-2019
 Despatched through: Destination
 Terms of Delivery: Eto Raju JAIL ROAD

Description of Goods	HSN/SAC	GST Rate	Quantity	Unit	Rate	per	Disc %	Amount
1 22W LED TL SET VIJAYA 2300LM 2YEARS	8405	12%	5.0	no.s	350.00			1,662.50
2 36W TUBE LIGHT TLD PHILIPS	8539	18%	10.0	no.s	50.00			423.70
3 STARTER	8536	18%	5.0	no.s	9.99			42.35
4 36W ELECTRONIC CHOKE HELONIX	8539	18%	9.0	no.s	180.00			1,372.86
5 FAN CAPACITOR	8532	18%	8.0	no.s	30.00			203.36
								3,604.77
								CGST 277.55
								SGST 277.55
								Rounding Off 0.13

Handwritten Signature
PRINCIPAL
 Visakha Govt. Degree College (W)
 Visakhapatnam

Total 37.0 no.s Rs. 4,160.00
 E & OF

Amount Chargeable (in words):
INR Four Thousand One Hundred Sixty Only

Taxable Value	Central Tax Rate	Central Tax Amount	State Tax Rate	State Tax Amount	Total Tax Amount
1,562.50	6%	93.75	6%	93.75	187.50
2,042.27	9%	183.80	9%	183.80	367.60
Total: 3,604.77		277.55		277.55	555.10

Tax Amount (in words): **INR Five Hundred Fifty Five and Ten paise Only**



Remarks: THE PRINCIPAL VGDC --- 1797 --- 1 OCT

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

Company's Bank Details:
 Bank Name: CITI UNION BANK
 A/c No: 106109000111636
 Branch & IFSC Code: Visakhapatnam & CIUB0000106
 for POINTER PIPE AGENCIES (from 1 Apr 2018)

Customer's Seal and Signature

Authorized Signatory

SUBJECT TO VISAKHAPATNAM JURISDICTION
 This is a Computer Generated Invoice



TAX INVOICE

(ORIGINAL FOR RECIPIENT)

Invoice No. 1797
 Date: 1-Oct-2019
 Delivery Note
 Mode/Terms of Payment
 10/4
 Supplier's Ref
 Other Reference(s)
 10/4
 Buyer's Order No
 Date

Despatch Document No
 Delivery Note Date
 Despatched through
 Destination

Terms of Delivery
 Ele Raju JAIL ROAD

Principal V. S. D. C. W. P. B. MICRO BUILDING
 Address: Andhra Pradesh Code: 37
 Pin Code: Andhra Pradesh

Description of Goods	HSR/SAC	GST Rate	Quantity	Incl Rate	Rate	per Dec %	Amount
22W LED TL SET VIJAYA 2300LM 2YEARS	8409	12 %	5.0 no.s	350.00	312.50 no.s		1,562.50
18W TUBE LIGHT TLD PHILIPS	8530	18 %	10.0 no.s	50.00	42.37 no.s		423.70
STARTER	8530	18 %	5.0 no.s	9.99	8.47 no.s		42.35
18W ELECTRONIC CHOKE HELONIX	8530	18 %	9.0 no.s	180.00	152.54 no.s		1,372.86
FAN CAPACITOR	8532	18 %	6.0 no.s	30.00	25.42 no.s		203.36
							3,604.77
							277.55
							277.55
							0.13

COST
 SGST
 Rounding Off

des
 PRINCIPAL
 Visakha Govt. Degree College (W)
 Visakhapatnam

Total

37.0 no.s

Amount in Words (Rupees)

INR Four Thousand One Hundred Sixty Only

Taxable Value	Rate	Central Tax Amount	State Tax Rate	Amount
1,562.50	6%	93.75	6%	93.75
423.70	9%	38.13	9%	38.13
42.35	9%	3.81	9%	3.81
1,372.86	9%	123.56	9%	123.56
203.36	9%	18.30	9%	18.30
		277.55		277.55

Institute is utilizing the natural light to its maximum. The classroom and offices are designed in such a way that it allows maximum sunlight and reduces the requirement of artificial lights.

