



सं/No.: D-21011/12/2018/NSTIB/Part-II/PSभारत सरकार /Government of India<br/>कौशल विकास और उद्यमिता मंत्रालयMinistry of Skill Development and Entrepreneurship<br/>प्रशिक्षण महानिदेशालयDirectorate General of Training<br/>राष्ट्रीय कौशल प्रशिक्षण संस्थान भुवनेश्वरNational Skill Training Institute Bhubaneswar<br/>मंचेश्वर कैंपस/Mancheswar Campus,<br/>5 वीं और 6 वीं मंजिल NSIC-IMDC बिल्डिंग5th & 6th Floor NSIC & IMDC Building, IDCO Plot No.06,<br/>मंचेश्वर इंडस्ट्रियल एस्टेट, भुवनेश्वर, ओडिशा - 751010Mancheswar Industrial Estate, Bhubaneswar Odisha - 751010दूरभाषा/TELEPHONE NO. : 0674-2974438/98 & 0671-2394317<br/>ई-मेल आई.डी /E-mail ID : <a href="mailto:attibutemediatio-msde@gov.in">attib-msde@gov.in</a>

# सं/No.: D-21011/12/2018/NSTIB/Part-II/PS

# **TENDER DOCUMENT**

## FOR

# PROCUREMENT OF TOOL & EQUIPMENTS FOR SOLAR TECHNICIAN CRAFTS TRAINING SCHEME





सं/No.: D-21011/12/2018/NSTIB/Part-II/PS भारत सरकार /Government of India कौशल विकास और उद्यमिता मंत्रालय Ministry of Skill Development and Entrepreneurship प्रशिक्षण महानिदेशालय Directorate General of Training राष्ट्रीय कौशल प्रशिक्षण संस्थान भुवनेश्वर National Skill Training Institute Bhubaneswar मंचेश्वर कैंपस/Mancheswar Campus, 5 वीं और 6 वीं मंजिल NSIC-IMDC बिल्डिंग 5<sup>th</sup> & 6<sup>th</sup> Floor NSIC & IMDC Building, IDCO Plot No.06, मंचेश्वर इंडस्ट्रियल एस्टेट, भुवनेश्वर, ओडिशा - 751010 Mancheswar Industrial Estate, Bhubaneswar Odisha - 751010 दूरभाषा/TELEPHONE NO. : 0674-2974438/98 & 0671-2394317 ई-मेल आई.डी /E-mail ID : <u>atib-msde@gov.in</u>

Dated: 22<sup>nd</sup> February, 2019

### **TENDER NOTICE**

# Subject: PROCUREMENT OF TOOL & EQUIPMENTS FOR SOLAR TECHNICIAN TRADES UNDER CRAFTS TRAINING SCHEME.

This institute of National Skill Training Institute Bhubaneswar invites sealed limited tenders from the manufacturers/authorized dealers/distributors for procurement of tool & equipment required for Solar Technician Trade under Craftsmen Training Scheme. The terms and conditions, Technical Bid and Financial Bid are given in Annexure II to V.

1. Sealed tenders in Annexure II to V each duly filled, signed with seal of the company should be dropped in the Tender Box available at Mancheswar Campus (5<sup>th</sup> Floor), NSIC Building (Dharmapada Bhawan) Mancheswar Industrial Estate Bhubaneswar latest by **3.30 PM on 15<sup>th</sup> March, 2019**, which shall be opened by tender opening committee at **4.00 PM on 18<sup>th</sup> March, 2019** in the presence of the tenderers or their representatives having authorization letter from the Firm concerned. The tenders received after scheduled date and time due to any reason including postal delay will not be considered. All tenders should be addressed to **the Assistant Director, National Skill Training Institute Bhubaneswar, Mancheswar Campus, 5<sup>th</sup> & 6<sup>th</sup> Floor NSIC Building, IDCO Plot No.06, Mancheswar Industrial Estate, Bhubaneswar, Odisha – 751010.** 

2. No conditional Tenders will be accepted and such Tenders are liable to be summarily rejected. The institute reserves the right to reject or accept any tender without assigning any reason thereto. The decision of the Director, NSTI Bhubaneswar shall be final and binding on the Tenders.

Assistant Director of Training For Director

#### ANNEXURE – I

#### **General Terms and Conditions**

- The tender has been invited under two bid system i.e. Technical Bid and Financial Bid. The interested agencies are advised to submit two separate sealed envelopes super scribing "Technical Bid (Annex-II-V) and "Financial Bid (Annex –VI) for supplying of Tools & equipment Solar Technician) under Craftsmen Training Scheme. Both sealed envelopes should be kept in a third sealed envelope super scribing "Tender bid for supplying of Tools & Equipment Solar Technician".
- 2. The tenderer shall submit the following document with the bid -:
  - (i) Copy of PAN of the firm.
  - (ii) Copy of TIN No & GST number with latest clearance certificate or challans.
  - (iii) Registration No. of the Firm if any
  - (iv) Three years of experience of supplying of the said items.
  - (v) Income Tax Return for the last 3 preceding years (2015-16, 2016-17 & 2017-18)
- 3. Detailed specification of the model if any for which the price bid has been submitted. A written undertaking to the effect that the firm is not blacklisted by any institution/Government Department.
- 4. The bidder should produce the proof of Authorized dealership along with complete address.
- 5. The bidder should have good track record of supplying such items to Government Departments and have past experience of dealing in these items.
- 6. The bidder should be registered with GST and any other Central/State authorities as prescribed by law. Copy of the same should be enclosed with the tender documents.
- 7. The warranty/guarantee conditions shall be clearly mentioned in the tender documents by the bidder.
- 8. This office reserves the right to increase or decrease the actual quantity required. The Successful Bidder shall have to supply the items or execute the work (installation, testing and demonstration) within 15 days after issue of award letter.
- 9. The interested bidders can visit the office to understand the scope of work, site of work etc during office hours on any working day from the date of issue of tender to the date of submission of tender.
- 10. The rates quoted in financial Bid should be inclusive of all charges such as cartage, loading, unloading etc. but excluding GST and other taxes if any. The price/rate should be valid for 90 days from the date of opening of the tender.
- 11. No advance payment will be made. The Agency is required to submit a Bill for payment after completion of supply of goods and execution of work.

Contd.....2/-

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- 12. The rates should be quoted in figures and words. In case of mismatch between two, the rates quoted in words will be considered.
- 13. The rates should be quoted excluding taxes. The taxes as applicable from time to time will be paid extra. The lowest tender will be decided on the basis of rates (excluding taxes) mentioned in Financial Bid.
- 14. The Technical Bid, Financial Bid along with duly accepted terms and conditions should be submitted in prescribed Proforma without addition, alteration and corrections. All cutting and overwriting should be duly attested under signature and seal of the company. No conditional tender will be accepted.
- 15. The successful Bidders will have to submit Performance Security @ 5% of the contract value. Performance Security may be furnished in the form of an account payee demand draft, fixed deposit receipt from a commercial bank, bank guarantee issued/confirmed from any of the commercial bank in India in an acceptable form, safeguarding the purchaser's interest in all respects in the favour of **"the Drawing & Disbursing Office, National Skill Training Institute Bhubaneswar payable at Bhubaneswar"**.
- 16. Installation, Demonstration & Training to be provided by selected bidder at NSTI Bhubaneswar (Mancheswar Campus) within one week after supply.

Encl : <u>As stated above.</u>

Asst. Director of Training/HOO For Director

**Copy to :** E-publishing through MSDE Web site.

For Director

#### Annexure - II

## SUBMISSION OF FIRM DETAILS

Sl. No	Particulars	Details to be filled by the organization
01.	Name of the firm (Tel./Mob. Nos)	
02.	Office Address Telephone Number Fax Number e-mail	
03.	Contact Person(s) (Tel./Mob. Nos)	
04.	GST Registration No.	
05.	PAN	
06.	e-mail Income Tax return of last three years	
08.	Past performance Certificate issued during last three years.	

# Authorized Signature of Supplier with stamp

## **TECHNICAL BID**

#### Annexure – III

## LIST OF EQUIPMENT FOR SOLAR TECHNICIAN

SI.	Brief Description of Item	Quantity	Offered specification
No.			
01.	Multimeter Digital 0 to 1000 M Ohms, 2V to 700 V,100 microA to 10A DC and AC	02Nos.	
02.	Megger Analog - 500 V	01No.	
03.	Hydrometer	04Nos.	
04.	Solar Insulation meter	02Nos.	
05.	Pyranometer 400 – 1100 nano meter, Auto change for measuring range Auto power off with disable function Instantaneous display Ave/Min/Max values 20 points memory Socket of tripod mounting Magnetic mount Backlit LCD and 4 digits triple display	01No	
06.	Pyrheliometer	01No.	
07.	Lux meter (Lux meter LCD read out 0.05 to 7000 Lumens with battery).	02 Nos.	
08.	Magnetic Flux Meter 0-500 tesla	02 Nos.	
09.	Tong Tester / Clamp Meter 0 - 100 A (Digital Type)	01 No.	
10.	Soldering Iron 25 Watt, 65 Watt and 120 Watt, 230 volt	02 Nos. Each	
11.	Temperature controlled Soldering iron 50 Watt, 230 Volt	02 Nos.	
12.	Thermometer Digital 0° C - 150° C	01 No.	
13.	Sun Shine recorder	02Nos.	
14.	Weather monitoring station To monitor and record Sunshine, wind velocity, temperature, rainfall etc with software.	01 No.	
15.	Solar cell based sunlight radiation meter For Solar power measurement up to 2000 w/square meter	02 Nos.	
16.	Magnetic compass	04 Nos.	
17.	Cut models of photo voltaic cell assembly	02 Nos.	
18.	Cut model of Lead acid battery	01 No.	
19.	Lead Acid battery 12V, 40Ah, 75Ah	01 No. each	
20.	Lead Acid battery 12V, 100 Ah	04 Nos.	
21.	Solar simulator for solar cell characteristic study To study IV" curve of a solar cell of minimum 2 watt under variable illumination, temperature and Suitable load	01 No.	
22.	IV Curve tester	01 No.	
23.	Sun path finder	01 No.	
24.	Solar energy trainer with grouping of solar cells To group (series or parallel) at least six solar cells each with minimum 2 W with suitable loads	01 No.	
25.	Solar tracker demonstrator kit To study manual and automatic control of 10 W solar panel in East-west and North-south &back	01 No.	

Contd.....2/-

26.	Solar PV e-learning software using animations for training NA	01	
		License	
27	Halogen lamp with stand for illumination of solar panels in lab AC mains operated to provide 0 to 1000 watts per meter square	02 Sets	
28.	Motorized Bench Grinder AC mains operated		
29.	Battery Charger 0 - 6 - 9 - 12 - 24 - 48 V, 30amp	01 No.	
30.	Solar photovoltaic module 75 W mono crystalline module 75 W, Amorphous silicon module 250 W thin film module 5W, 10W, 40W poly Crystalline module	01 No. each	
31.	Solar panels 250 Wp	04 Nos.	
32.	Solar Charge controller with Dusk to Dawn automatic switching 12V, 10A	05 Nos.	
33.	Solar charge controller with manual switch ( Day lighting) 12 V 10 A	05 Nos.	
34.	Array junction box for connecting 250W x 4 Nos. Solar panel with DC fuse, DC MCB, and surge Suppressor protection	02 Nos.	
35.	Solar lantern LED type Type of load : LED, 3W Battery : sealed maintenance free type 6V, 4AH Charging time : 7-8 hours/day Solar Panel Wattage : 5Wp Open Circuit : 10 V DC Voltage Voc Back up : 14-15 Hours at medium intensity 4-5 hours at high intensity.	01 No.	
6.	Solar lantern CFL type Type of Load CFL-7W, Battery 12V, 7Ah (SMF), Charging time 7-8, hours/Day, Solar Panel wattage 10Wp, Solar Panel V 21Voc, Back up 4-5 Hours	01 No.	
37.	Solar lantern assembly sets	01 No.	
38.	Solar cell kit	01 No.	
39.	Clinometer for Angle measurement	01 No.	
40.	Spirit level For floor level check	01 No.	
41.	Anemometer for wind speed measurement	01 No.	
42.	DC table fan 12 VA.C. Voltmeter M.I 0 –500V ACA.C. Voltmeter M.I 0 – 500V ACA.C. Voltmeter M.I 0 –500V ACA.C.	02 Nos	
43.	Volt meter 0 - 30V	01No	
44.	Volt meter 0 - 100V	01 No	
45.	Ammeter MC 0 - 1A	02 Nos.	
46.	Ammeter MC 0 - 5A	02 Nos.	
47.	Ammeter MC centre zero 0 - 20A	02 Nos.	
48.	Ammeter MC centre zero 0-50A	02 Nos.	
49.	Power Factor Meter	01 No.	
50.	Rheostat       0 -1 Ohm, 5 Amp       0 -10 Ohm, 5 Amp       0- 25 Ohm,1 Amp       0- 300 Ohm, 1 Amp	01 No each	

Contd.....3/-

51.A.C. Energy Meter01 No.Single Phase, 10A, 240 V induction type01 No.52.A.C. Energy Meter01 No.Three Phase, 15A, 440 V01 No.induction type02 Nos.53.Kilo Wattmeter Analog02 Nos.0-1.5-3KW, pressure coil rating- 240v/440v, current rating-5A/10A Analog, portable type Housed in Bakelite case02 Nos.54.Digital Wattmeter 230 V, 1 KW, 50 Hz02 Nos.55.Phase Sequence Indicator 3 Phase, 415 V02 Nos.56.Frequency Meter 45 to 55 Hz02 Nos.57.DC LED Lamp 3W, 5W, 10W50 Each58.DC Pump 24 V02 Nos.	
52.A.C. Energy Meter Three Phase, 15A, 440 V induction type01 No.53.Kilo Wattmeter Analog 0-1.5-3KW, pressure coil rating- 240v/440v, current rating-5A/10A Analog, portable type Housed in Bakelite case02 Nos.54.Digital Wattmeter 230 V, 1 KW, 50 Hz02 Nos.55.Phase Sequence Indicator 3 Phase, 415 V02 Nos.56.Frequency Meter 45 to 55 Hz02 Nos.57.DC LED Lamp 3W, 5W, 10W50 Each	
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56.       Frequency Meter 45 to 55 Hz       02 Nos.         57.       DC LED Lamp 3W, 5W, 10W       50 Each	
57.       DC LED Lamp 3W, 5W, 10W       50 Each	
58.       DC Pump 24 V       02 Nos.	
59.PWM Controller04 Nos.	
60.   MPPT Charge Controller   04 No.	
61. Inverter with Battery   01 Nos.	
1 KVA with 12 V Battery Input- 12	
volt DC,Output-220 volt AC	
62. Solar PCU 04 Nos.	
Off grid 1 KW MPPT Sine wave	
Solar Power Conditioning Unit	
63.Solar Grid tied inverter Demonstrator kit 300W KW01 No.	
64. Solar Street Light 01 Nos.	
12V, 75Ah battery, 75 Wp	
solar panel, 12V, 10A dusk to	
dawn charge controller, 60 W	
LED lights and 9 m height pole all	
dismountable	
65.Solar, wind and hybrid power plant 1 KW cumulative01 No.	
Solar Traffic Light 01 No.	
12V, 75Ah battery, 75 Wp solar controller, 15 W LED lights with suitable	
colors and 9 m height pole all dismountable	
66.     Used water treatment solar plant demonstrator kit 1 liter capacity     01 No.	
67.solar DC pump 1 HP01 No.	
68.Demonstration kit for wind01 No.	
generation (Wind turbine with	
blower) 300 W	
69. Rechargeable battery 12 V 100 Ah 01 No	
70. Rechargeable battery 12 V 7 Ah 10 Nos	
71.Rechargeable battery 6 V 5 Ah10 Nos	
72.LED lights 12 V DC10 Nos	
73.       LED lights 6 V DC       10 Nos.	

#### Annexure – III

## FINANCIAL BID

Sl. No	Technical Specification	Qty	Quoted Unit Rate in INR	Quoted unit rate inclusive of all the duties, taxes, commissioning and training on FOR basis	Total Amount

Authorized Signature of Supplier with stamp