## **Corrigendum**

Reference No.: CSE-INS-66-20-21 Dated: 16 February 2021

Subject: Extension of date for submission and Opening of Bids for Supply and Installation of Solar Energy Harvesting Development Kit

Particulars	Date & Time		
Last date and time for	10.03.2021 at 1:00 PM	01.04.2021 at 1:00PM	
submission of tenders			
Date and time of opening of	12.03.2021 at 4:00 PM	02.04.2021 at 4:00PM	
tenders			

The others terms & condition of the tender will remain the same

**Assistant Registrar (P&S)** 

Date: 15.03.2021

# INDIAN INSTITUTE OF TECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD

Dated: 16 February 2021



## **E-TENDER DOCUMENT**

Notice Inviting Tender (NIT)

for

Supply and Installation of Solar Energy Harvesting Development Kit.

Tender No.: CSE-INS-066-20-21

Date: 16 February 2021

Bid Submission deadline: 10.03.2021, 1:00 P.M., 01.04.2021 1:00 P.M

**DEPUTY REGISTRAR (PURCHASE & STORES)** 

Indian Institute of Technology (Indian School of Mines), Dhanbad

P.O. – Indian School of Mines (I.S.M.)

DHANBAD -826004 (INDIA)

www.iitism.ac.in, purchase@iitism.ac.in

GSTIN: 20AAAAI0686D1ZA

## **Registration-:**

Registration with M/s ITI Ltd: - Intending bidders are requested to register themselves with M/s ITI Ltd (if not registered earlier) through https://mhrd.euniwizarde.com for obtaining user-id, by paying a registration fee (Rs. 2000/- +18% GST per year charge), and online tender processing fee (2500/-+18% GST, NOT REFUNDABLE) etc. Bidders are also required to obtain Digital Signature Class-III (Signing + Encryption) for participating in the e-tender.

E-Tender Processing Fee (2500/-+18% GST, NOT REFUNDABLE), pay to "ITI LTD. Through e-payment Gateway.

For participating in the e-Tendering process of Indian Institute of Technology (Indian School of Mines), Dhanbad the contractor shall have to get them registered on the site https://mhrd.euniwizarde.com by making required payment through only online payment mode so that they will get user ID and Password. This will enable them to access the website, https://mhrd.euniwizarde.com with the help of Digital Signature by which they can participate in E-Tender of Indian Institute of Technology (Indian School of Mines), Dhanbad.

For any Query contact to our helpdesk Number 011- 4960 6060, 23710092 Email - HELPDESKEUNIWIZARDE@GMAIL.COM, Mr. Dipak Kumar Jha (08448288981) &Mr. Siddharth Ghosh (09355030604).

## **NOTICE INVITING TENDER (E-TENDER)**

Subject: Supply and Installation of Solar Energy Harvesting Development Kit.

Indian Institute of Technology (Indian School of Mines), Dhanbad invites quotations for the following to be supplied and delivered in **Supply and Installation of Solar Energy Harvesting Development Kit in our CSE Department.** 

SI. No.	Description of Materials	Unit	Quantity
1.	Supply and Installation of Solar Energy Harvesting Development Kit (Detailed Specification given in Annexure – I)	No.	01 No

### **Tender Schedule**

Particulars	Da	te & Time
Bid Security or Earnest Money Deposit	Rs. 7500.00 (Rupees Seve	en thousand five hundred only)
Start date and Time for Submission of Tenders	16.02.202	21 at 1:00 P.M.
Last date and time for submission of tenders	10.03.2021 at 1:00 P.M.	01.04.2021 at 1:00 P.M.
Date and time of opening of tenders	12.03.2021 at 4.00 P.M.	02.04.2021 at 4.00 P.M.

- 1. You are requested to quote your lowest rates for the supply of above items in price bid.
- 2. Tender documents and bids should be submitted through online mode only.

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## CHAPTER 1 Instructions to Bidders

IIT (ISM), Dhanbad was formerly known as Indian School of Mines (ISM) and was a Deemed University before it got converted into an Institute of National Importance under the Institutes of Technology (Amendment)Act, 2016 passed by the Parliament of India and got the assent of President of India. The Indian School of Mines, now IIT (ISM), Dhanbad, was formally opened on 9th December 1926, by Lord Irwin, the then Viceroy of India to address the need for trained manpower related to mining activities in the country with disciplines of Mining and Applied Geology. In 1967, it was granted the status of a deemed to be university under Section 3 of UGC Act, 1956 and it was renamed as Indian Institute of Technology (Indian School of Mines) in 2016. It started as an institution to impart mining education, and today, has grown into a technical institution with various academic departments. IIT(ISM) is located in the mineral-rich region of India, in the city of Dhanbad in the state of Jharkhand. It is the third oldest institute [after IIT Roorkee and IIT (BHU) Varanasi] which got converted into an IIT

IIT (ISM), Dhanbad intends to procure the equipment "Solar Energy Harvesting Development Kit" to enrich its teaching and research facility at Dhanbad.

Reputed manufactures or authorized distributors are invited to submit their bid for "Solar Energy Harvesting Development Kit" for IIT (ISM), Dhanbad as per this tender document in a Two-Bid System: - (a) Techno-Commercial (also termed as technical bid) bid (Part-1) consisting of all technical details of the item along with commercial terms and conditions, EMD and (b) Price bid (Part-2) indicating price for their items mentioned in the technical bid. All instructions and terms and conditions must be followed, failing which bid(s) will liable to be rejected.

## **INSTRUCTIONS**

2.

- 1. Offer should be submitted under TWO-BID system i.e. "Techno-commercial bid" and "Price bid" in online mode only throughhttps://mhrd.euniwizarde.com
  - a) In a tender, either the Indian agent on behalf of the principle/ OEM and the Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.
  - b) If an agent submit bid on behalf of the principle/ OEM, the same agent shall not submit a bid on behalf of another principle/ OEM in the same tender for the same item/product.
- **3.** Bidder(s) must submit GST Certificate / TIN and Scanned Copy of PAN with the bid.
- 4. The offer must be submitted online in <u>Two-Bid</u> system through https://mhrd.euniwizarde.com Please send EMD in the form of DD issued from any Nationalized/Scheduled commercial Bank in favour of "Registrar, IIT(ISM), Dhanbad" payable at Dhanbad in the office of Deputy Registrar (Purchase & Stores), IIT (ISM), Dhanbad— 826004 (Jharkhand, India) only. Scan copy of the same should be submitted on line.
- 5. The tenderers who are currently registered and shall continue to remain registered during the tender validity period with Central Purchase Organisation (CPO) or as a Micro and Small Enterprise (MSE) as defined in MSEs Order 2012 issued by Ministry of Micro, Small and Medium Enterprises (MSME) or as a Startup as recognised by Department for Promotion of Industry and Internal Trade (DPIIT), are exempted from payment of Tender Fee and Earnest Money Deposit (EMD) / Bid Security. In case the tenderer falls in these categories, it should furnish certified copy of its valid registration details (registration with CPO or as a MSE or Startup, as the case may be). Micro & Small Enterprises must attach Registration Certificate issued by DIC / KVIC / KVIB / Coir Board / NSIC / Directorate of Handicrafts and Handlooms, or any other body specified by MSME for authentication such as updated UdyogAadhaar Memorandum / Acknowledgment.

- **6.** Bid document(s) and all enclosures must contain the signature and seal of the authorised representative of the bidder.
- 7. The bidder quoting for item(s) as per this tender should be the registered to provide the item/services with the appropriate government authority. Copy of registration certificate should be submitted with the tenders.
- **8.** The Bank/RTGS detail on the letter-head of the bidder(s) must be submitted along with the BID.
- **9.** After opening of bid no query pertaining to technical aspects will be entertained.
- **10.** IIT (ISM) Dhanbad will provide Concessional GST Certificate, if equipment is purchased for research purpose.

## CHAPTER 2 Terms and Conditions

# The offer must comprise of the following, failing which it will be treated as non-responsive bid hence will be rejected:

- 1. The bids under Two-Bid System will consist of two parts as per following details:-
  - <u>Techno-Commercial bid (Part 1)</u> consisting of all technical details along with required EMD amount, cost of tender form (if any), technical offer (catalogue/brochure/specifications etc.), supportive documents related to eligibility criteria (Copies of documents/Certificates like GST Registration/ PAN/ Authorization letters/ PO or Work order copies as proof of supply/work done, tax related documents etc.) along with ALL applicable forms / annexure of this tender except(Price Schedule). All the pages included as Tender Document should be legible, neatly numbered and signed by authorized person with official seal of the Firm as acceptance of the terms and conditions. Offers with Counter Conditions will be liable for Rejection. *No information regarding price should be mentioned in this part*. Any price indication in the Technical Bid will be summarily rejected. Techno- Commercial bid to be submitted in online mode only through https://mhrd.euniwizarde.com.
  - <u>Price bid (Part 2) indicating price for the items / services mentioned in tender documents. Price Schedule exactly as per format duly filled and to be submitted online mode only through https://mhrd.euniwizarde.com.</u>

In stage-one, only the Techno-Commercial (Part 1) shall be opened and evaluated. In stage-two, the Price bids (Part 2) of only the technically qualified and acceptable offers will be opened, for further evaluation.

Important Note: Offers submitted not in line with the above guidelines will be liable for rejection.

- 2. All relevant technical specifications/details of offered items, drawings, printed technical leaflets, and commercial details which are necessary to ensure that offer is complete in all respects should be attached with the technical bid documents.
- 3. All applicable forms duly filled, signed and sealed must be submitted along tender documents in bid. The bidder is expected to examine all instructions, forms, terms and specifications in the Bid Document. Failure to furnish all information required as per the tender document or submission of a bid not substantially responsive to the tender document in all respect will be at the Bidder's risk & responsibility and may result in rejection of their bids.
- **4.** A 'Compliance Statement' (Form-5) along with status of compliance.
- **5.** IIT(ISM) does not bind itself to offer any explanation to those bidders whose Technical Bids have not been found acceptable by the Evaluation Committee of the Institute.
- 6. Following documents have to be furnished by the bidders with the techno-commercial bids (part-1):
  - (a) Technical literature/catalogue with the detail specification of the material
  - (b) Satisfactory performance certificate from their customers for same/similar supply/service must be enclosed along with the technical bid.
  - (c) A copy of this tender document must be signed and sealed on all pages by the bidder(s) accepting the instructions and terms & conditions of the NIT and must be attached with the BID.
  - (d) All relevant / applicable forms as per tender documents.
- **7.** The Bidder shall indicate on the appropriate price schedule form (provided with the Tender in the Price Bid), the unit prices of the goods / services it proposes to supply under the contract.

- 8. Price should be quoted exactly as per the format as mentioned. Multiple rates for a single item/variable rates unless solicited in the tender will not be accepted and would lead to rejection of offer. Price bids with conditions /Counter conditions are liable for rejection. Detailed Break up of charges as per enclosed list may please be furnished. In case all-inclusive price is quoted without detailed price break up, then IIT (ISM) Dhanbad will not be able to consider reimbursement of any increase in statutory levies, if any.
- 9. Educational discounts, if any, should be factored while quoting. Justification of the price quoted must be provided with the Bid. For this, Price List of the OEM and purchase order of govt. organizations / IITs/ NITs/ CSIR Labs / ISRO labs etc. should be attached. Price bids of only technically qualified tenderers shall be opened in on a prenotified date and time. Decision of IIT (ISM), Dhanbad in this regard will be final and binding by all the bidders.
- **10.** IIT(ISM), Dhanbad is entitled for GST Concession under Govt. of India notifications and is registered with DSIR, Govt. of India for this purpose. This may be taken into consideration while quoting minimum possible rate.
- 11. Bid Security or Earnest Money Deposit (EMD) Required Amount for EMD must be submitted in the form of <a href="Demand Draft issued from any Nationalized/Scheduled commercial Bank in favour of Registrar, IIT (ISM), Dhanbad payable at Dhanbadwith the bid (part-1). Bid received without EMD in part-1 (techno-commercial bid) will be rejected. No interest will be payable by IIT (ISM), Dhanbad on the Earnest Money Deposit. The earnest money of all the unsuccessful bidder(s) will be returned to the respective bidder(s) through bank / RTGS transfer without any interest within 60 (sixty) days only after placing the order / awarding the contract. The Earnest Money of successful bidder(s) shall be returned on receipt of Performance Security (Performance Bank Guarantee / PBG) as mentioned in this tender document. If the successful bidder(s) fails to furnish the performance security or fails to deliver/provide the item/installation/service as per the order's terms and conditions within stipulated period, the earnest money shall be liable to be forfeited. An undertaking to this is to be submitted.

The bid security shall be in Indian Rupees. The bid security shall be in one of the following options at the bidders' choice:

- a. A bank guarantee issued/confirmed by a Scheduled Commercial Bank in India in the form provided in the bidding documents and valid for 45 days beyond the validity of the bid. In case a bidder desires to submit a BG issued from a foreign bank, then the same should be confirmed by a Scheduled commercial bank in India; or
- **b.** Fixed Deposit receipt pledged in favour of the Registrar, IIT (ISM), Dhanbad
- **c.** Through RTGS/NEFT;
- **d.** Bid Securing Declaration (as per Form-1)
- e. EMD shall be submitted in the electronic format online (by scanning) while uploading the id. This submission shall mean that EMD is received electronically. However, BG/FDR should each in original to the designated officer through post (by mentioning NIT No. and date on envelope) or by hand so as to reach by the time of tender opening. In case of exemption of EMD, the scanned copy of the document in support of exemption will have to be uploaded by the bidder during bid submission.

## 11.1 The bid security may be forfeited:

- a. If a Bidder withdraws or amends or modifies or impairs or derogates its bid during the period of bid validity specified by the Bidder on the Bid Form; or
- b. In case of a successful Bidder, if the Bidder fails to furnish order acceptance within 14 days of the order or fails to sign the contract and/or fails to furnish Performance Security within 21 days from the date of contract/ order.

- c. If the bidder furnishes any document (including compliance) or makes statement(s)/declaration(s)which are found to be false/wrong/forged at any point of time prior/during/post purchase process.
- 12. Performance Security or Performance Bank Guarantee (PBG):- The successful bidder(s), on whom order will be placed, has to submit a performance security of 3% of the total order value at the earliest as per PO terms before release of any payment. Performance security has to be submitted in the form of Bank Guarantee/Demand Draft/FDR from any Nationalized/Scheduled commercial Bank in favour of the Registrar, IIT (ISM), Dhanbad. Performance security should remain valid for a period of two months beyond the date of completion of all contractual obligations of the successful bidder(s). No interest will be payable by IIT (ISM) Dhanbad on the Performance Security deposited. In case the contractor fails to provide satisfactory service, the Performance Security submitted by the bidder(s) is liable to be forfeited. An undertaking to this is to be submitted within 21 days of receipt of the notification of award/PO, the Supplier hall furnish performance security (PS).

The performance security must be received within 21 days. However, the Purchaser has the powers to extend the time frame for submission of Performance Security (PS). Even after extension of time, if the PS is not received, the contract is liable to be cancelled.

12.1In case of submission of Bank Guarantee, the bidder should ensure that the concerned bank sends a copy of Bank Guarantee to IIT(ISM), Dhanbad immediately through Registered Post/Speed post/courier/email (purchase@iitism.ac.in).

## 13. Validity Period: -

The validity period of the tender should be clearly specified. It must be at least for **180 (One Hundred Eighty)** days from opening of Technical bid.

In exceptional circumstances, the Purchaser may solicit the Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing (by post, fax or e-mail). The bid security provided shall also be suitably extended failing which the bid would be summarily ignored. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request will not be required nor permitted to modify its bid.

- **14. Finalization criteria:** L1 bidder will be decided on Overall L1 basis i.e. on Supply, Installation & Commissioning of Solar Energy Harvesting Development Kit.
- **15.** Award of purchase order/Contract: Order will be placed on the selected party after evaluation and approval of competent authority. However, Registrar IIT (ISM) Dhanbad reserves the right to cancel/discontinue this order at any point of time, with a notice to the supplier.
- **16. Warranty**: The item supplied should provide comprehensive warranty for a period of **(as per attached specification)** after the goods / services have been delivered, acceptance and successful installation as per terms of the contract.
  - 16.1 The Supplier warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.
  - 16.2 Goods requiring warranty replacements must be replaced on free of cost basis to the purchaser.
- 17. ComprehensiveAnnual Maintenance Contract / Annual Maintenance Contract (AMC/CAMC): The charges towardsAMC/CAMC should be provided separately for extension of warranty for additional years (which is beyond the normal warranty period)in the price bid if applicable.
- **18. Denial Clause**: That no increases in price on account of any statutory increase in or fresh Imposition of customs duty, excise duty, Sales Tax, CST, VAT or on account of any other taxes/duty, including custom duty, leviable in respect of the Stores specified in the said contract which takes place after original delivery period; shall be admissible on such of the said Stores, as are delivered after the said delivery period.

That notwithstanding any stipulation in the contract for increase in price on any other ground including foreign exchange rate variation, no such increase which takes place after original delivery period shall be admissible on such of the said Stores as are delivered after the said delivery period.

- **19. Delivery Period**: As time is the essence for this procurement, hence the ordered materials/work complete in all respects are required to be delivered and installed within 60 days from issue of Purchase Order / Work Order to successful bidder. Terms of Delivery F.O.R. IIT (ISM), Dhanbad only.
- **20. Inspection:** Inspection shall be carried out at IIT (ISM), Dhanbad after arrival of the materials and decision of the Institute in this regard shall be final.
- **21. Rejection and Replacement**: Rejection, if any, shall be notified to the supplier within 30 days of receipt and inspection of the material/workmanship. Rejected materials/work is to be removed by the supplier at his own risk and cost from IIT (ISM) Campus within 15 days of intimation of rejection. Defective Supplies are required to be replaced within 15 days of the removal of the rejected materials/work.
- 22. Risk Purchase: IIT (ISM) shall be at liberty to realize from the supplier the differential amount, if any, which it shall have to incur on purchase of the material/work at higher price(s) from elsewhere in the market, if the supplier, due to their fault, fails to supply the ordered quality and quantity of the material/work within the stipulated time.
- 23. Conditional offer / counter condition will not be accepted.
- 24. Payment: Payment may be released through RTGS / online payment mode against complete execution of the purchase order (PO) and submission of all the required documents as per the order within 30 days after satisfactory supply, inspection, installation/commissioning & acceptance and on submission of pre-receipted tax invoice, delivery challan, warranty certificate and installation report in triplicate and Performance Bank Guarantee. The invoice should be duly certified by the Head of Deptt. of IIT (ISM), Dhanbad to which supply is made or any other IIT (ISM) official authorized for this purpose. Advance payment may not be released. Payment will be released through bank/ RTGS/Wire transfer after statutory deductions.
- **25.** Any payment will be released only after satisfactory completion of the work/installation, Submission as well as confirmation from issuing bank of the PBG and certified bill(s) / invoice(s) along with Warranty Certificate.
- **26.** All communications are to be addressed to the Deputy Registrar (Purchase & Stores), IIT (ISM), Dhanbad through Email (<u>purchase@iitism.ac.in</u>) quoting the Tender No. and Date.
- **27.** IIT (ISM), Dhanbad reserves the right to accept or reject or cancel any or all tender notice or bid(s) or order(s) at any stage without assigning any reason thereof.
- **28.** For any dispute, the place of jurisdiction shall be Dhanbad (Jharkhand, India) only.
- **29. Governing Law:** The order, placed, will be the contract between the successful bidder(s) and IIT (ISM), Dhanbad and shall be governed by the LAWS of India and under the contract shall be taken by the parties only in Dhanbad (Jharkhand, India) to competent jurisdiction.
- **30.** Bid(s) shall be as per tender document only. If submitted in any other form / format, the same shall be rejected. All pages must be numbered properly and there must be seal and sign of the bidder(s) on all the pages of its bid.
- **31.** The bid is liable to be rejected if complete information is not given therein, or if the particulars and data (if any) asked for are not filled-in properly.
- **32.** The successful bidder(s) will indemnify IIT (ISM), Dhanbad, in case of any damage or liability, which may arise on account of any act or omission directly/indirectly attributable to the bidder(s).

- 33. Dispute, if any arising out of providing the said service(s) shall be settled mutually or arbitration by sole Arbitrator to be appointed by the Registrar, IIT (ISM), Dhanbad at Dhanbad, mutually agreed as per the provisions of the Indian arbitration and Conciliation Act, 1996 and the Rules framed there under. The award passed by the said sole Arbitrator, will be binding upon the parties. The arbitration proceedings shall be held at Dhanbad only.
- **34.** The bidder(s) should be registered with Income Tax, GST etc. and to enclose the copies of the relevant certificate along with the technical bids. The agency must be authorized by appropriate government authority to deliver the items/services at the IIT (ISM) Dhanbad.
- **35.** The successful bidder(s) will ensure that its employees/staff/personnel would strictly follow all the security instructions and rules and regulations of IIT (ISM), Dhanbad during their visit in the campus.
- **36.** Necessary corrigendum(s), if required, may be issued at any stage, which must be acceptable to the bidder(s). Any corrigendum will be published on our website www.iitism.ac.in only. Bidder(s) must be in touch with our website www.iitism.ac.in for corrigendum(s). It will be sole responsibility of the bidder(s)s that they will go through the corrigendum(s) published, if any, on our websitewww.iitism.ac.in and submit its tender accordingly.
- 37. Shortlisted bidder(s) may be called for presentation / demonstration / meeting at IIT (ISM), Dhanbad office with a short notice (Minimum seven days time). Request from the bidder(s) to change the date and time of presentation / demonstration / meeting will not be accepted. If the bidder(s) will not attend for the same, then their bid(s) will be treated as non-responsive and hence the bid(s) will not be considered for further process.
- **38.** Part supply of the Purchase Order / Work Order is not acceptable unless until it is explicitly mentioned in Purchase Order / Work Order.
- 39. Bid complete in all respect must be submitted through applicable mode before submission deadline / last date & time for submission of the bids. The bids will be opened as per IIT(ISM) rules. In case bid opening-date is a holiday/declared as a holiday, then next working date will be the opening date of tender. Submission deadline or bid opening date & time will not be changed upon any request from the bidder side. However, it may be changed as per IIT(ISM) rules. In this regard, decision of the IIT (ISM), Dhanbad will be final and binding to all the bidders.
- **40.** For the items / services, the bidders must ensure the required quality, quantity, materials, dimensions & other parameters (HSN Code etc.) and quote accordingly. In case items / services provided are not same as quoted/ordered, the claim for payment shall not be accepted. No payment, claims for such items / services shall be released. In this regard, decision of IIT (ISM), Dhanbad will final and binding to the bidders.
- **41.** IIT (ISM), Dhanbad at its discretion may change the quantity/quality/parameters/upgrade the criteria/drop any item(s) or part thereof at any stage. In case of any dispute, the decision of IIT(ISM) shall be final and binding on the bidders/tenderers.
- **42.** IIT (ISM), Dhanbad reserves the right to accept or reject any or all the bids in part or in full without assigning any reason. The decision of the competent authority of IIT (ISM), Dhanbad will be final and binding to the bidder(s).
- **43.** Professional(s) to be deployed by the successful bidder(s) for the supply of the item / installation / execution of the work in order to provide the item(s) /service(s) as per order must be well qualified.
- 44. If any fraudulent document submitted by the vender/firm is detected at any stage during the procurement or after the procurement, the institute will take appropriate legal action against the vender/firm including the recovery of two times of purchase order/award of work and equipment/items will not be returned.
- **45.** All the tenders received will first be scrutinized to see whether the tenders meet the basic requirements as incorporated in the tender enquiry document. The tenders, who do not meet the basic requirements, are to be treated as non-responsive and ignored. The following are some of the important points, for which a tender may be declared as unresponsive and to be ignored, during the initial scrutiny:
  - i. The Bidder is not eligible.
  - ii. The Bid validity is shorter than the required period.

- iii. The Bidder has quoted for goods manufactured by a different firm without the required authority letter from the proposed manufacturer.
- iv. Bidder has not agreed to give the required performance security or has not furnished the bid security.
- v. The goods guoted are sub-standard, not meeting the required specification, etc.
- vi. Against the schedule of Requirement (incorporated in the tender enquiry), the bidder has not quoted for the entire requirement as specified in that schedule.
- vii. The bidder has not agreed to some essential condition(s) incorporated in the tender enquiry.
- **Bid Prices**:Bidders are requested to note that they should necessarily submit their price bids in the format provided and no other format is acceptable. Bidder shall indicate on the appropriate price schedule form, the unit prices and total bid prices of the goods it proposes to supply under the contract. Bidders are required to quote each and every item in price bid. Failing to this bid may be liable for rejection.
- Note: IIT (ISM) Dhanbad will not be responsible or liable to pay if bidder fails to mentioned packing, forwarding, freight, insurance charges, taxes etc. in its price bid.
- **46.** If the successful bidder(s) commits breach of any of the above or Order's terms and conditions or is not able to deliver the item / provide the services / complete the work on time, the contract will be cancelled and security deposit / performance bank guarantee shall be forfeited and a damage liability at the discretion of IIT (ISM), Dhanbad will be imposed on the bidder(s).

## **CHAPTER 3: Other Forms**

# Form-1 Bid-Securing Declaration Form

Date:	
Bid No	

To (insert complete name and address of the purchaser)

I/We. The undersigned, declare that:

I/We understand that, according to your conditions, bids must be supported by a Bid Securing Declaration.

I/We accept that I/We may be disqualified from bidding for any contract with you for a period of two year from the date of notification if I am /We are in a breach of any obligation under the bid conditions, because I/We

- a) have withdrawn/modified/amended, impairs or derogates from the tender, my/our Bid during the period of bid validity specified in the form of Bid; or
- b) having been notified of the acceptance of our Bid by the purchaser during the period of bid validity (i) fail or reuse to execute the contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the Instructions to Bidders.

I/We understand this Bid Securing Declaration shall cease to be valid if I am/we are not the successful Bidder, upon the earlier of (i) the receipt of your notification of the name of the successful Bidder; or (ii) thirty days after the expiration of the validity of my/our Bid.

Signed: (insert signature of person whose name and capacity are shown) in the capacity of(insert legal capacity of person signing the Bid Securing Declaration).

Name: (insert complete name of person signing he Bid Securing Declaration)

Duly authorized to sign the bid for an on behalf of : (insert complete name of Bidder) Corporate Seal (where appropriate)

(Note: In case of a Joint Venture, the Bid Securing Declaration must be in the name of all partners to the Joint Venture that submits the bid)

## Form-2 Contract Form

To.

The Registrar,

Indian Institute of Technology (Indian School of Mines), DHANBAD– 826004.

Ref.: Your Notice Inviting Tender No. IIT-ISM / CSE-INS-066-20-21, Dated: 12 March 2021

Sir/ Madam,

- 1. I/We have gone through all Chapters of the tender document such as Instructions and Terms and conditions, minimum eligibility criteria, schedule of requirements, Specifications and allied technical details etc. as enlisted by you in your Notice Inviting Tender for the subject under reference.
- 2. I/We, hereby confirm that we have understood all the above and confirm my/our commitment to abide by them.
- 3. If our tender is accepted, I/we undertake to supply the goods and perform the services as mentioned above, in accordance with the delivery schedule specified in the tender document.
- 4. I/We agree to keep our tender valid for acceptance for a period upto as required in tender documents or for subsequently extended period, if any, agreed to by us. We also accordingly confirm to abide by this tender upto the aforesaid period and this tender may be accepted any time before the expiry of the aforesaid period. I/We further confirm that, until a formal contract is executed, this tender read with your written acceptance thereof within the aforesaid period shall constitute a binding contract between us.
- 5. I/We further understand that you are not bound to accept the lowest or any tender you may receive against your above-referred tender enquiry.
- 6. I/We hereby declare that all statements/details made in this tender are true, complete and correct to the best of my knowledge and belief. I/We understand that in the event of any information being found false or incorrect at any stage or we do not satisfy any of the stated criteria, our offer is liable to be cancelled automatically and IIT (ISM), Dhanbad may take an action against this firm for such false information including legal action.

Documents Required	Document No. (Submit a copy of the same)
Photo identity of Authorized signatory (i.e. PAN Card/Voter ID/Aadhaar Card/Official ID Card)	
GSTIN of Bidder	
PAN of Bidder	

Date:
Signature:
Name of Authorized Signatory:
Designation of Authorized Signatory:
Name of Bidder:
Address of Bidder:
Seal of Bidder:

## Form-3

# FORMAT FOR BANK GUARANTEE FOR PERFORMANCE SECURITY (PERFORMANCE BANK GUARANTEE)

То The Registrar Indian Institute of Technology (Indian School of Mines) Dhanbad-826004 (JHARKHAND) Reference: P.O.No. Dear Sir. GUARANTEENO. date: AMOUNT OF GUARANTEERs. GUARANTEECOVERSFROM TO LAST DATE FOR LODGEMENT OF CLAIM: This deed of Guarantee executed by the (\_\_\_\_\_name of the Bank) constituted under\_\_\_\_\_ Act, \_\_\_\_ having its Central Office at \_\_\_\_\_\_ (hereinafter referred to as "The Bank") in amongst other places a branch at favour of The Registrar, Indian Institute of Technology (Indian School of Mines), Dhanbad-826004 (hereinafter referred to as "The Beneficiary" for an amount of not exceeding Rs \_\_\_\_\_ (Rs.\_\_\_\_ at the request of M/s \_\_\_\_\_\_ (hereinafter referred to as the "Contractor(s)")/"Supplier(s)". In consideration of The Registrar, Indian Institute of Technology (Indian School of Mines), Dhanbad-826004 (hereinafter having entered into an agreement vide their Purchase Order No. called the Purchaser) \_dated\_\_\_\_\_ with M/s \_\_\_\_\_ (hereinafter called the Supplier) to equipments/work/Job) at their Indian Institute of Technology (Indian School of Mines), Dhanbad as per their above order, the supplier agreed to execute a Bank Guarantee for \_\_\_\_\_% of the supply order value viz. Rs. \_\_\_\_\_\_ (Rupees \_\_\_\_\_\_) towards Performance Warranty obligation for a period of \_\_\_\_ year(s) from \_\_\_\_\_ to \_\_\_\_. We, the Bank, Branch (hereinafter referred to as a Guarantor) at the request of the supplier, irrevocably undertake to indemnify and to keep indemnify the Company without any demur to the extent of Rs. (Rupees ) in the event of the aforesaid supplier failing to comply the Warranty Obligation as per the agreed terms to the full satisfaction of the Company. \_\_\_\_\_Bank, further agree that the Guarantee herein contained shall remain in full force and affect during We the period that would be taken for the performance of the equipment as stated in the Purchase Order issued by the Company and that it shall continue to be enforceable till the completion of the period and certified that warranty obligation have been fully carried out by the supplier and accordingly discharges the Guarantee subject. However, the Company shall have no right under after the expiry of the Guarantee, i.e. \_\_\_\_\_(date).

		the Compa			undertak	e not to revok	e this Gu	arantee	during its	currenc	cy except with	the previous
			•									
NOIN	nınsıa	nding anyth	iing conta	mea ner	ein.							
1.	Our	liability	under	the	Bank	Guarantee	shall	not	exceed	Rs		_ (Rupees
<b>2.</b> T	his Ba	nk Guaran	tee shall b	e valid	up to							
3. \	Ne are	e liable to p	pay the gi	uarantee	ed amour	nt or any part to ore expiry of da	thereof u			arantee	only and only	y if you serve
NOT	WITH	STANDING	anvthing	contain	ed hereir	n above, our lia	ability und	der this	Guarantee	is restri	cted to Rs.	
							•					
						on our bank in						
			-			ved and discha	-				, 3	
ouiu	guara	11100 00 1011	onou ama	WO OHA	11 50 10110	voa ana alcone	argou iroi	ii ali liab		, arraor.		
			D	etails o	of the Is	suing Bank						
	Na	me of the	Bank									
	Bra	anch Nam	е									
	Bra	anch Code	)									
	IFS	SC Code										
	E-	mail ld										
	Ph	one/Mobil	e No.									=

Seal & Signature of theBank

Note: Whenever, the bidder chooses to submit the Performance Security in the form of Bank Guarantee, then he should advise the banker issuing the Bank Guarantee to immediately send by Email (purchase@iitism.ac.in) an unstamped duplicate copy of the Guarantee directly to the Purchaser with a covering letter to compare with the original BG for the correctness, genuineness, etc.

## Form-4

# FORMAT OF BANK GUARANTEE TOWARDS BID SECURITY (EARNEST MONEY DEPOSIT)

To The Registrar Indian Institute of Technology (Indian School 826004 (JHARKHAND) Reference:NIT. No.	of Mines) Dhanbad- dated
Dear Sir,	<del></del>
GUARANTEENO	date:
AMOUNT OF GUARANTEERs.	
goods) (hereinafter called "the Bid") ag of the Indian Institute of Tech KNOW ALL PEOPLE by these presents (name of	ne Bidder") has submitted its bid dated (name and/or description of the ainst Notice Inviting Tender (Tender Document) No date nology (Indian School of Mines), Dhanbad.  that WE (name of bank) of country), having our registered office as
are bound unto for which its successors, and assigns by these present (year).	(address of bank) (hereinafter called "the Bank" (name of Purchaser) (hereinafter called "the Purchaser") i payment will and truly to be made to the said Purchaser, the Bank binds itsels. Sealed with the Common Seal of the said Bank this day of
THE CONDITIONS of this obligation are:  1) If the Bidder withdraws its Bid during the 2) If the Bidder, having been notified of the ar a) fails or refuses to execute the Contract b) fails or refuses to furnish the perform pay the Purchaser up to the above am Without the Purchaser having to substantial amount claimed by it is due to it, owing to condition or conditions. This guarantee will refuse to the substantial amount claimed by it is due to it, owing to condition or conditions.	period of bid validity specified by the Bidder on the Bid Form; or sceptance of its bid by the Purchaser during the period of bid validity: Form if required; or ance security, in accordance with the Instruction to Bidders; We undertake tount upon receipt of its first written demand, te its demand, provided that in its demand the Purchaser will note that the occurrence of one or both of the two conditions, specifying the occurre main in force up to Six/ Eight Months from the date of opening of tender or the and any demand in respect thereof should reach the Bank not later than the
	Details of the Issuing Bank
Name of the Bank	
Branch Name	
Branch Code	
IFSC Code	
E-mail Id	

Deal & Signature of the Bank

Note: Whenever the bidder chooses to submit the Bid Security in the form of Bank Guarantee, then he should advise the banker issuing the Bank Guarantee to immediately send by Registered Post (A.D.) an unstamped duplicate copy of the Guarantee directly to the Purchaser with a covering letter to compare with the original BG for the correctness, genuineness, etc.

Phone/Mobile No.

## Details of the Bank Account of I.I.T. (I.S.M.), Dhanbad for Bank Guaranteepurpose

INDIAN INSTITUTE OF TE	ECHNOLOGY (INDIAN SCHOOL OF MINES), DHANBAD
Bank Account Details for Bank	Bank: State Bank of India
Guarantee purpose	Branch: I.S.M. Campus Branch, Dhanbad – 826004
	(Jharkhand)
	Branch Code: 01641
	IFSC: <b>SBIN0001641</b>
	A/c No.: <b>37057541474</b>
PAN	AAAAI0686D
GSTIN	20AAAAI0686D1ZA
TIN / TAN Number	RCHI 00063A
DSIR Certificate No.	No.: TU/V/RG-CDE(367)/2020,
(for custom duty and excise duty	Dated: 28th September 2020
exemption)	

Registrar

## Form-5

## **COMPLIANCE STATEMENT FORM**

S. No.	Required	Quoted	Compliance	Deviation, if any to be
(as per	Specifications	specification	(Yes / No)	indicated with technical
NIT)	/Parts/Accessories	including		justification
	of Tender Enquiry	Model No. if		(The compliance/
		any		deviation should be
		-		supported with relevant
				Technical
				literature/brochure)

Seal and Sign of Bidder

## UNDERTAKING BY THE BIDDER

- ❖ If the bidder offers more than one model, then the Compliance Statement must be enclosed for each and every model separately.
- The technical and commercial deviations should be indicated separately.
- ❖ If the bidder fails to enclose the technical compliance statement, the bid will be rejected.
- ❖ If the bidder furnishes document(s) (including compliance) or makes statement(s)/declaration(s) which is found to be false/wrong/forged at any point of time prior/during/post purchase process,the EMD of the bidder will be forfeited including cancellation of the bid, blacklisting of bidder/Manufacturer and appropriate legal action by the Institute. The decision of the Institute will be final in such cases.
- ❖ After opening of the price bid no clarification/query on technical aspects will be entertained by the Institute.

Signature and Seal of the Bidder

Date:-

Place:-

# Quality Control Requirements / Declaration by Tenderer [Supplier shall fill the following format and submit along with the bid.]

## Subject: Tender Enquiry No. CSE-INS-066-20-21dated 12 March 2021

Sl No.	Para-Meters	Requirements	Offered	Deviatio
				n, (if any.)
1.	Specifications	I shall supply, install & commission the material exactly as per specifications in ANNEXURE-I	Accepted	
2.	Contract Form	Duly filled, signed and sealed is to be submitted in the prescribed format as per <b>form-2</b>	YES (Page no)	
3.	Seal/Signature	All the pages of the Tender Documents are numbered, sealed, signed & Submitted.	YES	
4.	Other Essential Certificate	GST Certificate, TIN and Scanned Copy of PAN with the bid	YES (Page no)	
5.	Technical literature/ Brochures	Catalogue giving the Technical details of <b>Solar Energy Harvesting Development Kit</b> isattached.	YES (Page no)	
6.	Purchase orders	Copies of previous Purchase orders/Work Orders pertaining to Experience and Past Performance against Qualification/Eligibility criteria (if applicable)	YES (Page no)	
7.	Payment terms	Payment terms as per tender conditions is accepted	YES (Page no)	
8.	Delivery schedule	Successful bidder should supply, install & commission the item within 60 Daysafter placement of Purchase Order	YES (Page no)	
9.	Compliance Statement	Submitted as per <b>Form-5</b>	YES (Page no)	
10.	EMD	Submitted in form of DD/PBG/Bid Securing declaration/ Valid Exemption Certificate	YES (Page no)	
11.	Bank Detail	The Bank/RTGS Detail on the letter head of the bidder(s)	YES (Page no)	
12.	Vendor's Registration Certificate	Registration Certificate to provide the Item/ services with the appropriate Govt. Authority.	YES (Page no)	
13.	Warranty	Warranty terms as per tender conditions is accepted	YES (Page no)	

								0	
Your	s faithful	ly,							
Date	:								
Sign	ature:								
Name of Authorized Signatory:									
Nam	e of Bid	der:							
Seal	of Bidde	er.							

## **Technical Specification**

## **Technical Specifications of Solar Energy Harvesting Development Kit**

## 1. HD Camera RC Drone Quadcopter:

- Size: 42 \* 34.5 \* 15cm (protective ring)
- Charging time: 150 minutes Life time: 25 minutes
- Remote control signal: 2.4GHz
- Remote control distance: 200 meters Indicator light: 4 LED lights
- Highest picture resolution: 4096\*2160
- Highest video resolution: 1920\*1080
- Memory card: not supported
- Remote battery: 4 \* "AA., Analog/ Digital, 3.7 V,
- Warranty: 3 Years

## 2. Solar Controller Regulator - Charge:

- Material: plastic + electric component
- Color: black and blue
- System charging voltage: 12v
- Rated charging current: 10a/ 30a
- Floating voltage: 13.7v (adjusted arrange: 12.7-15v)
- Discharge cut-off voltage: 10.7v (adjusted arrange: 9- 11.3v)
- Standby current: < 10ma</li>
- USB output: 5v, 2a
- max Size: 13.3\*7\*3.5cm/ 5.23\*2.75\*1.38inch(L\*W\*H)
- Net weight: 10a 170g/ 6oz, Analog/ Digital, 3.7 V,
- Warranty: 3 Years

## 3. Solar panels:

- Output Power: 40 Watts
- Panel: Poly Crystalline cells Cell Conversion efficiency > 16% Compliance to IEC standards
- Voltage at Max Power: 19.25 volts
- Current at Max Power: 2.08 amps Open Circuit Voltage: 22.50 volts
- Short Circuit Current: 2.22 amps, Analog, 3.7 V,
- Warranty: 3 Years

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## 4. Solar-Powered IoT Kit:

- Dimensions:45 mm x 25 mm.
- Communication: BLE Interface
- Type: I2C, USB.
- Product Type: Power Management IC Development Tools.
- Subcategory: Development Tools.
- Unit Weight: 320 g, Analog/ Digital, 3.7 V
- Warranty: 3 Years

### 5. GPRS module:

 Quad-band 850/900/1800/1900MHz GPRS multi-slot class 12/10 GPRS mobile station class B GSM phase 2/2+ Class 4 (2 W @ 850/900MHz)

- Bluetooth: Compliant with 3.0+EDR
- FM: 76~109MHz
- Dimensions: 15.8\*17.8\*2.4mm
- Weight: 1.35g, Analog/ Digital, 3.7 V,
- Warranty: 2 Years

-

## 6. GPS module:

- Chipset: G7020-KT
- Frequency: GPS L1, SBAS L1, QZSS L1 Receiving
- Format: GPS, SBAS, QZSS
- Channels: 56 Searching Channel
- Tracking: -162dBm
- Reacquisition: -160dBm Cold Start:-148dBm
   Position Horizontal: 2.0 m (Typical Open Sky)
- Velocity: 0.1m/sec 95% (SA off)
- Timing: 1us synchronized to GPS time., Analog/Digital, 3.7 V,
- Warranty: 3 Years.

## 7. 9-DOF Attitude Gyro Magnetometer:

- Power Supply: DC3.3V-5V
- Chips: MPU9265 + HMC5883
- Size: 22 mm x 17 mm. Gyro range : ± 250 500 1000 2000
- Acceleration range:  $\pm 2 \pm 4 \pm 8 \pm 16g$
- Magnetic field range: ± 4800uT three-axis gyroscope + triaxial accelerometer and three-axis magnetic field + atmospheric pressure), Analog/ Digital, 3.3 V, Warranty: 3 Years

## 8. 3-Axis Magnetic compass:

- Module: HMC5883L Model: GY-273
- IC: HMC5883L I2C interface 1-2 degree heading accuracy Integrated 12-bit ADC 160Hz max data rate Range of -8 to +8 Gauss, Analog/ Digital, 12 V,
- Warranty: 3 Years

### 9. Wireless Sensor node:

- MCU: CC2538-CC2592
- Radio: IEEE 801.15.4 Zgbee On-board SPI programming interface. On-board highly-integrated CP2102 USB-to-UART Bridge 3 Analog JST socket. 3 Digital JST socket. On board 8 X 1 Multiplexer module. Over the air programming (OTA), Analog/ Digital, 3.7 V,
- Warranty: 5 Years

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## 10. Lora Module:

- Flash: 32M-Bits MainFrequency: 240MHzDistance: about 2.8KM
- Computing power: 600DMIPS USB adapter
- chip: cp2102 Support modes: Sniffer, Station,
- Data rate: 150 Mbps @ 11n HT40
- Transmit power: 19.5 dBm @ 11b Receiver sensitivity up to 98 dBm, Analog/ Digital, 3.7 V,
- Warranty: 2 Years

## 11. Zigbee Core Board Development Board Kit:

- Flash: Up to 256KB
- SRAM:8kB

- GPIO:21
- ADC:12-bit,8 channel
- Standby Power:0.4uA
- Wakeup Time From Standby: 500us
- RF Standard : ZigBee/802.15.4 CPU Core:8051
- Security:128-bit AES RX
- Current:20.5mA (Lowest)
- Frequency Bands: 2394- 2507MHz, Analog/ Digital, 3.7 V
- Warranty: 3 Years
- **12. Serial WiFi Wireless Adapter:** High performance-price ratio Small volume, easily embedded to other products Strong function with support LWIP protocol Support three modes: AP, STA, and AP+STA Support Lua program, Analog/ Digital, 12 V, Warranty: 3 Years

## 13. Microcontroller development kit

- Microcontroller: Atmega328
- Digital I/O Pins: 14
- Analog Input Pins: 6
- DC Current: I/O Pin 40 mADC Current: 3.3V Pin 50 mA
- Flash Memory: 32 KB
- SRAM: 2 KB (ATmega328)
- Clock Speed: 16 MHz, Analog/ Digital, 12 V
- Warranty: 3 Years

### Kit includes:

- 1. Passive Buzzer Analog 3.7 V Warranty: 2 Years
- 2. DHT11 Temperature and Humidity sensor ±2% Analog/ Digital 3.7 V Warranty: 2 Years
- 3. Potentiometer ±2% Analog 3.7 V Warranty: 2 Years
- 4. Joystick Module ±3% Analog/ Digital 3.7 V 2 Years
- 5. Membrance Switch Module1 ±2% Analog/ Digital 3.7 V Warranty: 2 Years
- 6. IR Receiver Module Analog/ Digital 3.7 V Warranty: 2 Years
- 7. R3 Controller Board ±2% Analog/ Digital 3.7 V Warranty: 2 Years
- 8. 830 Point Breadboard ±2% 3.7 V 2 Years
- 9. Servo Motor (SG90) Analog/ Digital 3.7 V Warranty: 2 Years
- 10. Stepper Motor ±2% Analog 3.7 V 2 Years
- 11. USB Cable ±2% Analog/ Digital 3.7 V 2 Years
- 12. ULN2003 Stepper Motor Driver Board ±3% Analog/ Digital 3.7 V Warranty: 2 Years
- 13. Prototype Expansion  $\pm 2\%$  3.7 V 2 Years I
- 14. 9V Battery Connector with DC ±2% Analog/ Digital 3.7 V Warranty: 2 Years
- 15. Resistor (10R) Analog 3.7-12 V
- 16. Resistor (100R) ±3% Analog 3.7-12 V
- 17. Resistor (220R)  $\pm 2\%$  Analog 3.7-12 V
- 18. Resistor (330R) Analog 3.7-12 V
- 19. Resistor (1K) ±2% Analog 3.7-12 V
- 20. Resistor (2K) ±2% Analog 3.7-12 V
- 21. Resistor (5K1) ±3% Analog 3.7-12 V
- 22. Resistor (10K) ±2% Analog 3.7-12 V
- 23. Resistor (100K) ±2% Analog 3.7-12 V
- 24. Resistor (1M) ±2% Analog 3.7-12 V
- 25. Female-to-male Dupont Wire - 3.7-6 V Warranty: 2 Years
- 26. Resistance Identification Card ±2% 3.7-6 V Warranty: 2 Years
- 27. White LED ±2% Analog 3.7-6 V Warranty: 2 Years
- 28. Yellow LED ±2% Analog 3.7-6 V Warranty: 2 Years

- 29. Blue LED ±3% Analog 3.7-6 V Warranty: 2 Years
- 30. Green LED ±3% Analog 3.7-6 V Warranty: 2 Years
- 31. Red LED ±3% Analog 3.7-6 V Warranty: 2 Years
- 32. RGB LED ±2% Analog/ 3.7-6 V Warranty: 2 Years
- 33. Photoresistor ±2% Analog 3.7 V Warranty: 2 Years
- 34. Thermistor ±2% Analog 3.7 V Warranty: 2 Years
- 35. Diode Rectifier (1N4007) Digital 3.7 V 2 Years
- 36. NPN Transistor (PN2222) ±2% Analog 3.7 V Warranty: 2 Years
- 37. Tilt Switch ±2% Digital 3.7 V Warranty: 2 Years
- 38. Button (small)  $\pm 2\%$  Digital 3.7 V Warranty: 2 Years
- 39. 1 digit 7-segment Display ±2% Digital 3.7 V Warranty: 2 Years
- 40. 4 digit 7-segment Display ±2% Digital 3.7-6 V Warranty: 2 Years
- 41. Sound Sensor Module ±2% Analog 3.7 V Warranty: 2 Years
- 42. LCD1602 Module ±2% Analog 3.7 V Warranty: 2 Years
- 43. IC L293D Analog 3.7 V Warranty: 2 Years
- 44. IC 74HC595 Analog 3.7 V Warranty: 2 Years
- 45. Active Buzzer Analog 3.7 V Warranty: 2 Years
- 46. Power Supply Module ±2% Analog/ Digital 3.7 V Warranty: 2 Years
- 47. Ultrasonic Sensor ±2% Analog 3.7-5.5 V Warranty: 2 Years
- 48. 3V Servo Motor ±2% Digital 3.7 V Warranty: 2 Years
- 49. Fan Blade - 3.7 V
- 50. Remote Digital 3.7 V Warranty: 2 Years

### 14 Sensor kits

- Class Bihor magnetic sensor ±3% Analog 3.7-12 V Warranty: 5 years
- Magic light cup ±2% Analog 3.7-12 V Warranty: 5 years
- Rotary encoder Analog 3.7-12 V Warranty: 5 years
- Optical broken ±2% Analog 3.7-12 V Warranty: 5 years
- Detect the heartbeat ±2% Analog 3.7-12 V Warranty: 2 Years
- Magnetic Reed ±3% Analog 3.7-12 V Warranty: 2 Years
- Obstacle avoidance sensor ±2% Analog 3.7-12 V –
- Hunt sensor ±2% Analog 3.7-12 V –
- Microphone sound sensor ±2% Analog 3.7-12 V –
- Laser sensor - 3.7-6 V 2 Years
- 5V relay  $\pm 2\%$  3.7-6 V 2 Years
- Temperature sensor ±2% Analog 3.7-6 V Warranty: 2 Years
- Temperature sensor ±2% Analog 3.7-6 V Warranty: 2 Years
- Linear magnetic Hall ±3% Analog 3.7-6 V Warranty: 2 Years
- Flame sensor ±3% Analog 3.7-6 V 2 Years
- Sensitive microphone ±3% Analog 3.7-6 V Warranty: 2 Years
- Temperature and humidity ±2% Analog/ 3.7-6 V Warranty: 2 Years
- XY-axis joystick ±3% Analog 3.7-12 V Warranty: 5 years
- Metal touch sensor
- Small passive buzzer ±2% Digital 3.7 V v2 Years
- 2-color LED ±2% Digital 3.7 V Warranty: 2 Years
- Hit sensor ±2% Digital 3.7 V Warranty: 2 Years
- Vibration switch ±2% Digital 3.7-6 V Warranty: 2 Years
- Photoresistor ±2% Analog 3.7 V Warranty: 2 Years
- Key switch ±2% Analog 3.7 V Warranty: 2 Years
- Tilt switch Analog 3.7 V Warranty: 2 Years
- 3-color full-color LED SMD s Analog 3.7 V Warranty: 2 Years
- Infrared emission sensor Analog 3.7 V Warranty: 2 Years
- 3-color LED ±2% Analog 3.7 V 2 Years
- IMercury open optical ±2% Analog 3.7-5.5 V Warranty: 2 Years

- Yin Yi 2-color LED 3MM ±2% Digital 3.7 V Warranty: 2 Years
- Active buzzer - 3.7 V
- Temperature sensor Digital 3.7 V v2 Years
- Automatic flashing colorful LED ±2% Analog 3.7 V Warranty: 2 Years
- Mini magnetic reed ±3% Analog 3.7-12 V Warranty: 5 years
- Hall magnetic sensor ±2% Analog 3.7-12 V Warranty: 5 years
- 15. **Raspberry Pi 4 B+ Module:** Broadcom BCM2837BO 64 bit ARMv8 QUAD Core A53 64bit Processor 4GB RAM BCM43143 WiFi 40 pin extended GPIO 4 x USB2 4 pole Stereo output and Composite video port Full-size HDMI, Pi camera Pi touch screen display ±2% Analog/Digital 3.7 V Warranty: 2 Years.
- 16. **GSM HAT Raspberry Pi Shield:** Make/Receive voice call with 3.5mm audio jack. Quad-band module (850/ 900/ 1800/ 1900MHz). Include On-board Bluetooth BT 3.0 with an antenna. Controlled via AT commands. Auto-bauding 4800bps to 115200bps ±2% Analog/ Digital 3.7 V Warranty: 2 Years.
- 17. **Raspberry Pi GPIO Expansion:** Multifunction GPIO expansion board. Easily connect Raspberry connectors and pins using jumpers. Compatible with Raspberry Pi 3B 2B +. Dimensions: 66 x 58 x 18 mm(LxWxH). Weight: 44 gm Analog/ Digital 3.7 V Warranty: 3 Years
- 18. **220V Adjustable Temperature Electric Soldering Iron Kit**: Length: 18.5cm Cable Length: 143cm Working Voltage: 220V Power: 60W Analog 12 V Warranty: 3 Years

### 19. Multimeter:

- AC Voltage: 200V/600V
- DC Voltage:200mV/2V
- DC Current :2mA/20mA/200mA/10A
- Resistance:  $200\Omega/2k\Omega$
- Maximum Display Value:1999
- Flashlight: 5MM LED Light YES Analog/ Digital 12 V
- NCV: 90-1000V AC Detection YES
- Warranty: 3 Years
- 20. MQ Gas Sensor Module (2 Years warranty):
- MQ-135, Analog 3.7 V
- MQ-2, Analog 3.7 V
- MQ-3, Analog 3.7 V
- MQ-4, Analog 3.7 V
- MQ-5, Analog 3.7 V
- MQ-6, Analog 3.7 V
- MQ-7, Analog 3.7 V
- MQ-8, Analog 3.7 V,
- MQ-9, Analog 3.7 V.

## 21. Smart Car Development kit:

- Uno R3, Analog 3.7-12 V Warranty: 5 years
- V5.0 Extension Board V3.0 ±2% Analog 3.7-12 V Warranty: 5 years
- Usb Cable Analog 3.7-12 V Warranty: 5 years
- L298n Motor Driver Board V3.0 ±2% Analog 3.7-12 V Warranty: 5 years
- Ultrasonic Sensor ±2% Analog 3.7-12 V Warranty: 2 Years
- Servo Motor ±3% Analog 3.7-12 V Warranty: 2 Years
- Bluetooth Module ±2% Analog 3.7-12 V

- Line Tracking Module ±2% Analog 3.7-12 V
- Motor ±2% Analog 3.7-12 V −
- Remote - 3.7-6 V 2 Years
- Screws And Nuts ±2% 3.7-6 V Warranty: 2 Years
- Servo Motor Fixed Plate ±2% Analog 3.7-6 V Warranty: 2 Years
- Ultrasonic Holder ±2% Analog 3.7-6 V Warranty: 2 Years
- Charger ±3% Analog 3.7-6 V Warranty: 2 Years
- Cell Box ±3% Analog 3.7-6 V Warranty: 2 Years
- Tape ±3% Analog 3.7-6 V Warranty: 2 Years
- Separation Shims ±2% Analog/ 3.7-6 V Warranty: 2 Years
- Acrylic Plates ±3% Analog 3.7-12 V Warranty: 5 years
- Wheel ±2% Analog 3.7-12 V Warranty: 5 years
- Aluminum Blocks Analog 3.7 V Warranty: 5 years
- copper columns ±2% Analog 3.7 V 5 years
- plastic box ±2% Analog 3.7 V Warranty: 2 Years
- CD with tutorial ±3% Analog 3.7V Warranty: 2 Years

## PRICE SCHEDULE

Tender Inviting Authority: INDIAN SCHOOL OF TECHNOLOGY INDIAN SCHOOL OF MINES DHANBAD

Name of Work: Supply and Installation of Solar Energy Harvesting Development Kit

Tender No: CSE-INS-066-20-21

### PRICE SCHEDULE

(This FORM must not be modified/replaced by the bidder and the same should be uploaded after filling the relevant columns, else the bidder is liable to be rejected for this tender. Bidders are allowed to enter the Bidder Name and Values only )

If packing charges, transportation charges, insurance chrages, Installation Commissioning & Training charges aready included in unit price then please mentioned zero "0" in respective cell.

	Name of the bidder													
NUMBE R#	TEXT #	TEXT #	NUMBER #	TEXT #	TEXT #	NUMBER #	NUMBER	NUMBER	NUMBER	NUMBER	NUMBER #	NUMBER #	NUMBER #	TEXT #
SI. No.	Item Description	Item Code / Make/ HS N Code	Quantit y	Units	Quoted Currenc y in INR	UNIT PRICE without any tax In Figures To be entered by the Bidder Rs.	SUB TOTAL AMOU NT Withou † Taxes	Packing &Forwar di ng if any (in INR)	Charge for Inland Transpor taion ,Insuran ceetc in INR	Installati on Commis sioning & Training in INR	TOTAL AMOU NT Without Taxes	GST in Percent age	TOTAL AMO UNT With Taxes	TOTAL AMOUNT IN WORDS
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.01	Supply and Installation of Solar Energy Harvesting Development Kit		1.000	set	INR		0.00					0.00	0.00	