



F.No.3-26/21-22/DST(24-768)/CPCT

Dated : 25/11/2021

निविदा-सूचना

निदेशक भा.कृ.अ.प.-भारतीय कृषि अनुसंधान संस्थान नई दिल्ली द्वारा निम्नलिखित वैज्ञानिक उपकरण/वस्तु की आपूर्ति एवं कार्य हेतु प्रतिष्ठित निर्माताओं/अधिकृत डीलरों/आपूर्तिकर्ताओं से दो बोली प्रणाली (तकनीकी एवं वित्त बोली) के अन्तर्गत सील बंद **ऑनलाईन क्यूटेशन** आमंत्रित की जाती है। क्यूटेशन/निविदा प्रस्तुत करने की अंतिम तिथि **16/12/2021** समय 1.00 बजे दोपहर तक। क्यूटेशन/निविदा को दिनांक **17/12/2021** को समय 15.00 बजे निर्धारित समिति के समक्ष खोली जाएगी। **Online bids** are invited from reputed Manufacture/Dealer/Supplier in two bid system (Technical bid & Financial bid) for purchase of following Scientific Equipment/Items on behalf of Director ICAR-Indian Agricultural Research Institute, New Delhi. The last date for submission of Bid **16/12/2021** at 1.00 PM. The bid will be opened on dated **17/12/2021** at 15.00 hrs by the prescribed committee.

विस्तृत नियम व शर्तों को भा.कृ.अ.सं. की वेबसाइट www.iari.res.in पर देखें एवं ऑनलाईन के लिए www.eprocure.gov.in देखा जा सकता है। Please visit www.iari.res.in for Details Rules and Regulation and Log on www.eprocure.gov.in for online.

क्रम संख्या Sl. No.	वैज्ञानिक उपकरण/ वस्तु का नाम Name of Scientific Equipment/ Item	मात्रा Quantity
1.	Aeroponics and hydroponics management kit for measurement of crop parameters (as per specification attached)	One

बोली लगाने के निर्देश और नियम एवं निविदा की शर्तें Instructions to the bidder and terms&conditions of tender:

- आपके द्वारा दी गयी मूल्य दर क्यूटेशन प्राप्त हेतु निर्धारित अन्तिम दिन से कम से कम 180 दिनों तक मान्य होगी। यदि आपूर्तिकर्ता द्वारा 180 दिनों की न्यूनतम अवधि की वैधता के संबंध में कोई अन्तर हो तो उसका विशेष रूप से उल्लेख होना चाहिए। *The rates quoted shall be valid for a minimum period of 180 days from the last date fixed for submission of bid.*
- क्यूटेशन में दर्शायी गई दरों में भा.कृ.अ.सं. नई दिल्ली CPCT, भा.कृ.अनु.संस्थान, नई दिल्ली-110012 में सामान/सामग्री की निःशुल्क आपूर्ति अथवा स्थापन शामिल होगा। हांलाकि विदेशी मुद्रा में दर्शाए गए उपकरण को एफ.ओ.बी./सी.आई.पी. आधार पर दर्शाया जाए। *The rates quoted shall be free of cost delivery and installation at the Centre for Protected Cultivation Technology, IARI, New Delhi-110012. However, equipment quoted in foreign currency must be quoted on FOB/ CIP basis*
- यदि सामान विदेश-निर्मित है और दर विदेशी मुद्रा में दिया गया है तो ऐसी परिस्थिति में कस्टम ड्यूटी छूट प्रमाणपत्र (सी.डी.ई.सी.) जारी किया जाएगा जो कि केवल भा.कृ.अ.सं. के लिए ही मान्य होगा। *Custom Duty Exemption Certificate(CDEC) will be issued only when the bid is quoted in foreign currency in case of foreign made items only and meant for IARI.*
- क्यूटेशन में संबंधित सामान का पूरा विवरण दिया जाएगा। *Full specifications of the item/article quoted for shall be given in the quotation.*
- उपरोक्त दिए गए दर में यदि किसी भी प्रकार का अतिरिक्त कर/टैक्स/ड्यूटी लगाया जाना है तो उसका संकेत स्पष्ट रूप से दिया जाना चाहिए। *If taxes, duties or any other charge so ever and above the rates quoted leviable, actual percentage of such taxes/duties/other charges should be clearly indicated.*

- 6 बोली के साथ बतौर बयाना राशि रु. 20,000/- का डिमांडमॉग ड्राफ्ट/ भुगतान आदेश/मियादी जमा रसीद/ बैंक गारंटी को निदेशक, भा. कृ. अनु. संस्थान, नई दिल्ली-110012 के नाम किसी भी राष्ट्रीयकृत बैंक में देय हो, अवश्य संलग्न होना चाहिए। जिसके बिना, क्यूटेशन पर विचार नहीं किया जायेगा। बयाना राशि की मूल प्रति सीधे तौर पर संबंधित निविदा आमंत्रित अधिकारी को आखिरी तारीख तक या ऑफलाईन दर जमा करने से पहले पहुंच जानी चाहिए। डिमांड मॉग ड्राफ्ट/ भुगतान आदेश/मियादी जमा रसीद/ बैंक गारंटी से संबंधित सभी जानकारी व्यक्तिगत रूप से भेजी जानी चाहिए, इस संबंध में प्राप्त स्कैन कॉपी/या जो डाटा आपूर्तिकता द्वारा दर जमा करने के दौरान दिया गया है उससे मिलान किया जाएगा अन्यथा इस क्यूटेशन को रद्द माना जाएगा। **EMD of Rs. 20,000/- Rupees Twenty Thousand only** should be in the form of D.D./Pay Order/Fixed Deposit Receipt/ Bank Guarantee from commercial bank drawn in favour of Director, IARI payable at New Delhi. The original EMD should be submitted to the Tender Inviting Authority on or before the last date and time of offline bid submission. The details of D.D./Pay Order/Fixed Deposit Receipt/ Bank Guarantee physically sent, should tally with the details available in the scan copy and the data enter during the bid submission time otherwise the uploaded bid will be rejected. **If exemption for EMD is solicited then submit the valid exemption certificate issued from MSME/NSIC as per the Single Point Registration Scheme. (i) EMD is must if equipment is quoted through foreign principle. (ii) If equipment is of indian manufacturer then MSME/NSIC exemption will be given to manufacturer only. Authorized agent should submit EMD no exemption will be given.**
- 7 इस संस्थान द्वारा निविदाकर्ता को किसी भी सुरक्षा जमा राशि और बयाना राशि पर ब्याज नहीं दिया जाएगा। No interest on security deposit and earnest money deposit shall be paid by the Institute to tenderer.
- 8 क्यूटेशन प्रक्रिया पूरी होने के पश्चात असफल बोलीदाताओं को उनकी जमा की गयी बयाने की राशि वापस कर दी, जायेगी जबकि सफलतम बोलीदाता के मामले में यह राशि नियम के अनुसार सुरक्षा जमा के रूप में समायोजित की जा सकती है, जो कि ऑर्डर के राशि की 5-10 प्रतिशत होगी और यह डिमांड मॉग ड्राफ्ट/ भुगतान आदेश/मियादी जमा रसीद/ बैंक गारंटी निदेशक, भा. कृ. अनु. संस्थान, नई दिल्ली- 110012 के नाम किसी भी राष्ट्रीयकृत बैंक में देय हो, जिसकी वैधता सभी कार्य को पूरा करने के 60 दिनों, साथ के साथ उपकरण/सामान जिसकी कीमत (रु.1.00 लाख या इससे अधिक) की गारंटी भी शामिल होगी। हालांकि जो उपकरण रु.1.00 एक लाख से कम है उस परिस्थिति में किसी भी प्रकार का निष्पादन जमा राशि नहीं दी जाएगी। The EMD shall be refunded to the unsuccessful bidders after finalization of the quotation. In case of successful bidder, it can be adjusted towards security deposit which is 5-10% of the order value in the form of D.D./Pay Order/Fixed Deposit Receipt/Bank Guarantee from commercial bank drawn in favour of Director, IARI payable at New Delhi and shall remain valid for 60days beyond the date of completion of all contractual obligation of supplier including warranty obligation for the equipment/goods costing Rs.1.00 lakhs (Rs. One Lakh) or more. Here would however, be no performance security deposit for equipment/goods costing less than Rs.1.00lakh(Rs.OneLakh).
- 9 फर्म द्वारा एक वर्ष की वारंटी प्रदान की जाएगी। यदि सामान/उपकरण के विवरण में वारंटी की अवधि में किसी भी प्रकार परिवर्तन है, तो उस वारंटी को अंतिम माना जाएगा। One year warranty has to be invariable provided by the firm. In case, there is any variation in the warranty period given in the specification of the item/equipment, the warranty period shall be the final as given in the specification.
- 10 कार्य के पूरा होने के बाद फर्म/पूर्तिकता को तीन पूर्व रसीद बिल प्राप्त होने के बाद भुगतान e-payment के माध्यम से किया जाएगा। Payment will be made by mode of e-payment to the supplier/firm after satisfactory completion of work and receipt to pre-receipt bills triplicate.
- 11 निदेशक, भा. कृ. अनु. संस्थान, नई दिल्ली के पास बिना कारण बताये सभी क्यूटेशनों को पूर्ण या आंशिक रूप से स्वीकार या अस्वीकार करने के अधिकार प्राप्त हैं। The Director IARI, New Delhi reserves the right to accept or reject any or all the quotations either in full or in parts without assigning any reason.
- 12 उपरोक्त शर्तों का पालन न करने वाली क्यूटेशनों को अस्वीकार करने के लिये उत्तरदायी होंगी। Quotations not Complying with the above conditions are liable to be rejected.
- 13 GST/PAN/Nos. के स्कैन कॉपी को क्यूटेशन के साथ में संलग्न किया जाए। Scanned copy of GST/PAN/Nos may be attached with the bid.
- 14 किसी कारण अनुबंध में कोई विवाद उत्पन्न होने पर भारतीय कानून और न्यायालय, नई दिल्ली की अधिकारिता के अधीन होगा। सचिव, भारतीय कृषि अनुसंधान परिषद द्वारा एकमात्र मध्यस्थ नियुक्त किया गया है, जिसका निर्णय दोनों पार्टियों (Supplier और Purchaser) पर अंतिम माना जाएगा। In case, any dispute arising out of this contract shall be subject to the jurisdiction of Indian laws & Court at New Delhi. Sole arbitrator is appointed by the Secretary, ICAR, New Delhi. His decision will be final and binding on both parties (Supplier and Purchaser)

- 15 सफल बोलीदाता को सौंपे गए कार्य को निर्धारित आपूर्ति आदेश के भीतर कार्य करना होगा जैसा आपूर्ति आदेश में दर्शाया गया होगा यदि ऐसा नहीं किया जाता तो कम से कम 2% तथा अधिकतम 10%की क्षति नष्ट कटौती के रूप में उनके बिल से काटी जाएगी। The successful bidder has to execute the indented Job/Work as mentioned in the supply order placed with them within the stipulated period as given in the supply order placed by this office failing which 2% per week and maximum of 10% deduction as liquidated damage charges will be made from the bill in case the job is not completed within the given stipulated period.
- 16 फर्म को इस कार्य/क्षेत्र में 5 वर्ष के अनुभव का प्रमाण पत्र संलग्न करना चाहिए । Firms should have atleast 5 years experience in this line and should submit atleast two purchase order of similar equipment for the past 3 years. To elaborate 2 orders for each year hence total six orders at least.

Other Terms & Conditions

17 This procurement is for research activity purpose only.

18 The firm should submit bid on CPP Portal within the limit of 20 MB capacity failing which the tender will be rejected.

19 All documents required as per tender should be submitted alongwith technical bid in CPP Portal. No document will be accepted physically except EMD. The tender will be evaluated on the basis of online tender only.

20 Delivery Required By:-

For Indian manufacturer – Within 45 days from the Date of issue of award letter or as specified in the supply order.

For Foreign firms – 90 days from the date of opening of letter of credit (LC).

21 Terms of Delivery :-

For Indian manufacturer/suppliers:- Centre for Protected Technology, IARI, New Delhi-110012

For Foreign manufacturer/suppliers:- On FOB basis.

22 Inspection after Receipt of Goods :- The inspection will be done by the Divisional Committee in the presence of Firm's representative. The successful tender will have to provide at his own cost and arrangement technically qualified personnel at the consignee's location for joint inspection. These personnel must be able to unpack, assemble and demonstrate the use of the equipment fully and identified each Part/Machines supplied. Any consumables that are essential will be provided by the supplier free of cost.

In case of receipt of materials in damaged condition the suppliers will have to arrange the replacement of goods free of cost. All expenses in this regard will be borne by the supplier.

23 Mode of Payment:-

For Indigenous Supplies – Payment on bill basis after supply, satisfactory installation, commissioning and performance of the equipment at New Delhi and certification by our Scientists concerned.

For Imports – The payment shall be made through irrevocable Letter of Credit (L.C). LC will be opened on 100% value of the equipment/items on FOB value and 90% shall be released on presentation of complete and clear shipping documents. Rest of 10% will be released only after satisfactory installation and commissioning of the equipment. This will not include commission to the Indian Agent. Payment to the Indian agent will strictly be made in Indian Rupees after satisfactorily commissioning of equipments.

All bank charges outside India will be borne by the supplier. In case the delivery date of the contract is extended to take care of delay in supply, for which the supplier is responsible, the tenure of the letter of credit so extended, the expense incurred therefore such extension is to be borne by the supplier.

24 The following documents must be furnished with the technical bid failing which tender will not be accepted at all.

1. GST/Registration Certificate/ISO Certification etc.
2. Pan Card copy.
3. **Earnest Money Deposit (EMD) Rs.20,000/- (Rupees Twenty Thousand Only).**
Firms duly registered with NSIC, MIS, MSE (for manufacturing) shall be exempted from submitting EMD as per Govt. instructions in force.
4. Literature/pamphlet/Technical Brochure drawing etc. along-with user list.
5. **Experience:** Firms should have at least 5 years experience in this line and should submit at least two purchase order of similar equipment for the past 3 years. Two orders for each year hence six orders for three years.
6. The tender documents duly signed by the Authorized signatory of the quoting firm accepting the same should be attached with technical bid.
7. Bidder should submit a declaration/ undertaking that the firm/company has not been blacklisted or debarred by any Government Deptt/ Institute and no dispute is pending with any Government Deptt/ ICAR Institute.
8. Technical specification of equipment/item along-with compliance statement in accordance with the tender technical specification.

क्रम संख्या Sl. No.	विवरण/उपकरण मद की विशिष्टता Description / Specification of the Equipment/ Item	अनुमानित लागत Approximate Cost
1.	Aeroponics and hydroponics management kit for measurement of crop parameters (as per specification attached)	Rs. 06.00 Lakh

(सहायक प्रशासनिक अधिकारी)
Asstt.Admn.Officer

Specifications of the instrument for tender document

Name of the instrument: Aeroponic and hydroponic management kit

Procurement of aeroponic and hydroponic management kit for measurement of crop parameters in vertical farming

S. No.	Item	Specification/Description
Unit-I		
1.	Chlorophyll SPAD meter	Measuring system: optical density difference at 2 wavelengths (640nm and 940 nm); measurements:chlorophyll content (mg/cm ²), SPAD unit, date &time, sensor temperature; measurement range: 0 to 99.9; accuracy: $\pm 0.5\%$; measurement area: 9 x 9 mm;measurement thickness: 0.1 inch (3mm) thickness can be measured; time to perform measure:less than 1 sec; receptor: silicon photodiode; light source: 2 LED; display: 2 lines x 16 characters LCD display; data storage: 9500 measurements can store in device and species name up to 490; interface: USB Port; operating system: Windows 7, Windows 8.1, Windows 10; controls: recall data, delete recent data, clear all data;power source:2 AA (1.5V) batteries; battery life: 5000 - 30000 measures.
2.	Leaf Area Meter	Leaf area meter with inbuilt data logger; measurement parameters: leaf area, average area, length of leaf, width of leaf; measurement unit: millimeter, square centimeter; accuracy: +2%; resolution: 0.01 cm ² ; length: 1000 mm; width: 160 mm; thickness: 8 mm; scan speed: 150mm/s; data storage: 1000 set; display: 122 x 32 dot matrix, 2 rows, display; data download: data communication cable.
3.	NDVI Meter	Measurement sample: Turf grass canopy; measurement system: reflectance of red (660 nm) and NIR (850 nm) light; own light source; measurement area: approximately 3.0 inches (7.6 cm); measurement Units: a) Percent reflectance (0.0 to 99.9) of Red and NIR, b) NDVI (0.000 to 1.000), c) Grass index (1.00 to 9.00); measurement interval: one second per measurement without GPS, two to four seconds per measurement with GPS; repeatability: $\pm 5\%$ of measurement; download file format: comma-delimited text file; temperature range: 32° to 104° F (0° to 40°C) environmental sealing: dust-proof; data logger capacity: 3250 measurements.
Unit-II		
1.	Lux Meter	Light measuring range: 0 to 99999 Lux, 0 to 9300 ftc, accuracy: ± 3 Lux or $\pm 3\%$ (compared to reference

		instrument at 90° light irradiation); resolution: 1 Lux (0 to 19999 Lux), 10 Lux (Remaining Range); measuring rate: 0.5 s; storage temperature: -40 to +70 °C; operating temperature: 0 to +50 °C; dimensions: 133 x 46 x 25 mm; protection class: IP40.
2.	Lux Multimeter	Simultaneous display of Lux and lighting type; large 1.4" (1999 count) LCD display; % displays differential from reference point "ZERO" re-calibration; utilizes precision photo diode and colour correction filter cosine and color corrected measurements; ±4% accuracy is enhanced by selecting lighting type (Tungsten/Daylight, Fluorescent, Sodium, Mercury); Record/Recall MIN, MAX and AVG readings, data hold plus auto shut off; built-in RS232 serial interface, optional software; Fc Range: 200, 2000, 5000Fc; Lux range: 2000, 20000, 50000Lux; Max. Resolution: 0.1Fc/1Lux; basic accuracy: ±4%FS; cosine & color corrected; PC interface.
3.	Quantum PAR/ DLI Light Meter	DLI (Daily Light Integral) 0 to 560 moles m ⁻² day ⁻¹ ; display resolution: PAR Light -0.1 μmol m ⁻² s ⁻¹ from 0.0 to 99.9, 1 μmol m ⁻² s ⁻¹ from 100 to 6,500, DLI - 0.1 moles m ⁻² day ⁻¹ ; accuracy: +/- 5% (each meter is calibrated to a NIST traceable light; sensor on a broad-spectrum light source); DLI: calculated continuously from light readings every 3 minutes; water resistant: IP-65 rated for use in rain, irrigation and condensing environments (do not submerge); operating environment: 32-130°F (0-55°C) with 0-100% RH.

All components should be BIS/ISO certified.

Maintenance period: One Year.

Company should have at least 3 years experience of installation of similar system.