

**Division of Soil Science & Agricultural Chemistry**  
ICAR-Indian Agricultural Research Institute, New Delhi-110012

File No.SSAC/SKDeDatta/2025-26/AAS/14-116

Dated:15.06.2026

(Bid Number/बिड संख्या- GEM/2026/B/7665051, Dated/दिनांक-15.06.2026)

On behalf of Director, IARI, New Delhi-12, the Head, Soil Science and Agricultural Chemistry, ICAR-IARI, New Delhi-110012 invites online custom bid **through GeM Portal** for Procurement of Atomic Absorption Spectrophotometer (AAS) **AT DIVISION OF SOIL SCIENCE AND AGRICULTURAL CHEMISTRY, ICAR-IARI, NEW DELHI-110012** for a period of **one year and extendable by further one or more years**, if necessary, as per requirement in the interest of **ICAR-IARI, New Delhi** subject to satisfactory performance of the Firm/Agency and its willingness to continue on same terms and conditions, as per requirements.

**1. Bid Details:**

Type of Tender/Bid	Custom bid for services through GeM Portal
Estimated Value	45.00 lakh ( Forty Five Lakh Only)
EMD/Bid Security	Rs. 100000/- (Rs. One lakh Only)
Performance Security	5% of Contract Value
Bid submission start date	<b>15.06.2026</b>
Last date for submission of bid	07.07.2026
Date for opening of technical bid	07.07.2026

**2. Contact Information for any query:-**

- AAO, Division of Soil Science and Agricultural Chemistry, ICAR- IARI, New Delhi-110012

Online bids are invited under two-bid system through GeM system from registered/well established/reputed firms for providing the services for outsourcing of Various Services for Agricultural Related works (Unskilled nature) at the Division of **Soil Science and Agricultural Chemistry, ICAR- IARI, New Delhi.**

Bid form, terms & conditions and draft agreement etc. can be downloaded from the GeM Portal. Online bids complete in all respects should be submitted through GeM Portal. Please note that only online bids through GeM will be accepted.

<b>बिड विवरण/Bid Details</b>	
विक्रेता से मांगे गए दस्तावेज़/ <b>Document required from seller</b>	Experience Criteria,Past Performance,Bidder Turnover,OEM Authorization Certificate,OEM Annual Turnover *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer
क्या आप निविदाकारों द्वारा अपलोड किए गए दस्तावेजों को निविदा में भाग लेने वाले सभी निविदाकारों को दिखाना चाहते हैं? संदर्भ मेन् है/ <b>Do you want to show documents uploaded by bidders to all bidders participated in bid?</b>	Yes (Documents submitted as part of a clarification or representation during the tender/bid process will also be displayed to other participated bidders after log in)
बिड लगाने की समय सीमा स्वतः नहीं बढ़ाने के लिए आवश्यक बिड की संख्या। / <b>Minimum number of bids required to disable automatic bid extension</b>	1
दिनों की संख्या, जिनके लिए बिड लगाने की समय-सीमा बढ़ाई जाएगी। / <b>Number of days for which Bid would be auto-extended</b>	3
ऑटो एक्सटेंशन अधिकतम कितनी बार किया जाना है। / <b>Number of Auto Extension count</b>	1
विगत प्रदर्शन / <b>Past Performance</b>	50 %
बिड से रिवर्स नीलामी सक्रिय किया/ <b>Bid to RA enabled</b>	Yes
रिवर्स नीलामी योग्यता नियम/ <b>RA Qualification Rule</b>	50% Lowest Priced Technically Qualified Bidders
लागू आरसीएम/ <b>RCM Applicable</b>	Yes
बिड का प्रकार/ <b>Type of Bid</b>	Two Packet Bid
तकनीकी मूल्यांकन के दौरान तकनीकी स्पष्टीकरण हेतु अनुमत समय / <b>Time allowed for Technical Clarifications during technical evaluation</b>	2 Days
निरीक्षण आवश्यक (सूचीबद्ध निरीक्षण प्राधिकरण /जेम के साथ पूर्व पंजीकृत एजेंसियों द्वारा)/ <b>Inspection Required (By Empanelled Inspection Authority / Agencies pre-registered with GeM)</b>	No
मूल्यांकन पद्धति/ <b>Evaluation Method</b>	Total value wise evaluation
वित्तीय दस्तावेज की आवश्यकता है / <b>Financial Document Required</b>	Yes
मध्यस्थता खंड/ <b>Arbitration Clause</b>	No
सुलह खंड/ <b>Mediation Clause</b>	No

#### ईएमडी विवरण/EMD Detail

एडवाइजरी बैंक/Advisory Bank	State Bank of India
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ईएमडी राशि/EMD Amount	100000
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#### ईपीबीजी विवरण /ePBG Detail

एडवाइजरी बैंक/Advisory Bank	State Bank of India
ईपीबीजी प्रतिशत (%) /ePBG Percentage(%)	5.00
ईपीबीजी की आवश्यक अवधि (माह) /Duration of ePBG required (Months).	26

(a). जेम की शर्तों के अनुसार ईएमडी छूट के इच्छुक बिडर को संबंधित कैटेगरी के लिए बिड के साथ वैध समर्थित दस्तावेज़ प्रस्तुत करने है। एमएसई कैटेगरी के अंतर्गत केवल वस्तुओं के लिए विनिर्माता तथा सेवाओं के लिए सेवा प्रदाता ईएमडी से छूट के पात्र हैं। व्यापारियों को इस नीति के दायरे से बाहर रखा गया है।/EMD EXEMPTION: The bidder seeking EMD exemption, must submit the valid supporting document for the relevant category as per GeM GTC with the bid. Under MSE category, only manufacturers for goods and Service Providers for Services are eligible for exemption from EMD. Traders are excluded from the purview of this Policy.

(b). ईएमडी और संपादन जमानत राशि, जहां यह लागू होती है, लाभार्थी के पक्ष में होनी चाहिए। / EMD & Performance security should be in favour of Beneficiary, wherever it is applicable.

(c). ईएमडी और संपादन जमानत राशि लाभार्थी के पक्ष में होनी चाहिए। / Earnest Money Deposit (EMD) shall also be accepted by the buyer in the form of a surety bond.

#### लाभार्थी /Beneficiary :

AAO

Indian Agricultural Research Institute, New Delhi, Department of Agricultural Research and Education (DARE), Indian Council of Agricultural Research (ICAR), Ministry of Agriculture and Farmers Welfare, Room No. 8, Division of Soil Science and Agricultural Chemistry, IARI, Pusa, New Delhi  
(Krishna Bisht)

#### UIN Number NCTGC2415P

बोली विभाजन लागू नहीं किया गया/ Bid splitting not applied.

#### एमआईआई खरीद वरीयता / MII Purchase Preference

एमआईआई खरीद वरीयता / MII Purchase Preference	Yes
मेक इन इंडिया विक्रेताओं को खरीद में प्राथमिकता, यदि उनका मूल्य L1+X% तक की सीमा में है / Purchase Preference to MII sellers available upto price within L1+X%	20
मेक इन इंडिया खरीद में प्राथमिकता के लिए बिड की मात्रा का अधिकतम प्रतिशत / Maximum Percentage of Bid quantity for MII purchase preference	50

सार्वजनिक खरीद (मेक-इन-इंडिया को प्राथमिकता) आदेश 2017 के अनुसार केवल क्लास 1/क्लास 2 के स्थानीय आपूर्तिकर्ताओं को ही भागीदारी की अनुमति है दिनांक 16.09.2020 (समय-समय पर संशोधित एवं लागू) / Allow participation only from Class 1/Class 2 local suppliers as per the Public procurement(Preference to Make-in-india) order 2017 date 16.09.2020(as amended and applicable time to time)	Yes, in compliance with the MII ORDER : DPIIT Order(as amended and applicable time to time)
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#### एमएसई खरीद वरीयता/MSE Purchase Preference

एमएसई खरीद वरीयता/MSE Purchase Preference	Yes
सूक्ष्म और लघु उद्यम मूल उपकरण निर्माताओं/सेवा प्रदाता को खरीद में प्राथमिकता, यदि उनका मूल्य L1+X% / Purchase Preference to MSE OEMs/ Service Provider available upto price within L1+X%	15
सूक्ष्म और लघु उद्यम मूल उपकरण निर्माता/सेवा प्रदाता को खरीद में प्राथमिकता के लिए बिड की मात्रा का अधिकतम प्रतिशत / Percentage of Bid quantity/amount for MSE OEMs/ Service Provider Purchase preference	25

1. The minimum average annual financial turnover of the bidder during the last three years, ending on 31st March of the previous financial year, should be as indicated above in the bid document. Documentary evidence in the form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be uploaded with the bid. In case the date of constitution / incorporation of the bidder is less than 3-year-old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for this criteria.
2. Experience Criteria: In respect of the filter applied for experience criteria, the Bidder or its OEM of the product offered in the bid {themselves or through reseller(s)} should have regularly, manufactured and supplied same or similar Category Products to any Central / State Govt Organization / PSU for number of Financial years as indicated above in the bid document before the bid opening date. Copies of relevant contracts and delivery acceptance certificates like CRAC to be submitted along with bid in support of having supplied some quantity during each of the Financial year. In case of bunch bids, the category of primary product having highest value should meet this criterion.
3. OEM Turn Over Criteria: The minimum average annual financial turnover of the OEM of the offered product during the last three years, ending on 31st March of the previous financial year, should be as indicated in the bid document. Documentary evidence in the form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be uploaded with the bid. In case the date of constitution / incorporation of the OEM is less than 3 year old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for this criteria.
4. Preference to Make In India products (For bids < 200 Crore):Preference shall be given to Class 1 local supplier as defined in public procurement (Preference to Make in India), Order 2017 as amended from time to time and its subsequent Orders/Notifications issued by concerned Nodal Ministry for specific Goods/Products. The minimum local content to qualify as a Class 1 local supplier is denoted in the bid document. If the bidder wants to avail the Purchase preference, the bidder must upload a certificate from the OEM regarding the percentage of the local content and the details of locations at which the local value addition is made along with their bid, failing which no purchase preference shall be granted. In case the bid value is more than Rs 10 Crore, the declaration relating to percentage of local content shall be certified by the statutory auditor or cost auditor, if the OEM is a company and by a practicing cost accountant or a chartered accountant for OEMs other than companies as per the Public Procurement (preference to Make-in -India) order 2017 dated 04.06.2020. Only Class-I and Class-II Local suppliers as per MII order dated 4.6.2020 will be eligible to bid. Non - Local suppliers as per MII order dated 04.06.2020 are not eligible to participate. However, eligible micro and small enterprises will be allowed to participate .The

buyers are advised to refer the OM No.F.1/4/2021-PPD dated 18.05.2023.

[OM No.1 4 2021 PPD dated 18.05.2023](#) for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017 and its subsequent Orders/Notifications issued by concerned Ministry .Benefits of MSE will be allowed only if seller/service provider is validated on-line in GeM profile as well as validated and approved by Buyer after evaluation of documents submitted.

**5. Purchase preference to Micro and Small Enterprises (MSEs):** Purchase preference will be given to MSEs having valid Udyam Certificate and whose credentials are validated online through Udyam Registration portal as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail themselves of the Purchase preference, the bidder must be the manufacturer / OEM of the offered product on GeM. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises and hence resellers offering products manufactured by some other OEM are not eligible for any purchase preference. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service, and Buyer will decide eligibility for purchase preference based on documentary evidence submitted in case of product bids, whereas in case of services the eligibility is automatically validated. If L-1 is not an MSE and MSE Seller (s) has / have quoted price within L-1+ 15% (Selected by Buyer) of margin of purchase preference /price band defined in relevant policy, such MSE Seller shall be given opportunity to match L-1 price and contract will be awarded for 25% (selected by Buyer) percentage of total quantity. The buyers are advised to refer the [OM No.1 4 2021 PPD dated 18.05.2023](#) for compliance of Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017. Benefits of MSE will be allowed only if seller is validated on-line in GeM profile as well as validated and approved by Buyer after evaluation of documents submitted.

6. Past Performance: The Bidder or its OEM {themselves or through re-seller(s)} should have supplied same or similar Category Products for 50% of bid quantity, in at least one of the last three Financial years before the bid opening date to any Central / State Govt Organization / PSU. Copies of relevant contracts (proving supply of cumulative order quantity in any one financial year) to be submitted along with bid in support of quantity supplied in the relevant Financial year. In case of bunch bids, the category related to primary product having highest bid value should meet this criterion.

#### **जीएसटी की धारा 9(3)|Section 9(3) Of GST**

Where ever RCM is applicable, sellers (Regular GST registered seller who opted out of FCM , unregistered seller, seller registered under composition scheme)will be forced to put Zero GST and GST cess in their bids. Buyer will have liability of paying the GST and GST cess to the government on the specified rate mentioned by them in this Bid.

7. Reverse Auction would be conducted amongst first 50% of the technically qualified bidders arranged in the order of prices from lowest to highest. Number of sellers eligible for participating in RA would be rounded off to next higher integer value if number of technically qualified bidders is odd (e.g. if 7 bids are technically qualified, then RA will be conducted amongst L-1 to L-4). In case number of technically qualified bidders are 2 or 3, RA will be between all without any elimination. If Buyer has chosen to split the bid amongst N sellers, then minimum N sellers would be taken to RA round. In case Primary products of only one OEM are left in contention for participation in RA based on lowest 50% bidders qualifying for RA, the number of sellers qualifying for RA would be increased to get at least products of one more OEM (directly participated or through its reseller) if available. Further, if bid(s) of any seller(s) eligible for MSE preference is / are coming within price band of 15% of Non MSE L-1 or if bid of any seller(s) eligible for Make in India preference is / are coming within price band of 20% of non MII L-1, then such MSE / Make in India seller shall also be allowed to participate in the RA process.

#### **जीएसटी की धारा 9(3)| / Section 9(3) Of GST**

Where ever RCM is applicable, sellers (Regular GST registered seller who opted out of FCM , unregistered seller, seller registered under composition scheme)will be forced to put Zero GST and GST cess in their bids. Buyer will have liability of paying the GST and GST cess to the government on the specified rate mentioned by them in this Bid.

If the buyer has mentioned MSE purchase preference in ATC then service provider is required to upload necessary documents for MSE purchase preference for verification by the buyer during evaluation.

#### **Pre Bid Detail(s)**

<b>मूल्य भिन्नता खंड दस्तावेज़/Pre-Bid Date and Time</b>	<b>प्री-बिड स्थान/Pre-Bid Venue</b>
22-06-2026 15:00:00	Room No. 8, Division of Soil Science and Agricultural Chemistry, IARI, Pusa, New Delhi

### Procurement Of Atomic Absorption Spectrophotometer (AAS) ( 1 Unit )

(क्रमशः श्रेणी 1 और श्रेणी 2 के स्थानीय आपूर्तिकर्ता के रूप में अर्हता प्राप्त करने के लिए आवश्यक/Minimum 50% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

#### तकनीकी विशिष्टियाँ /Technical Specifications

क्रेता विशिष्टि दस्तावेज़ /Buyer Specification Document	<a href="#">Download</a>
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#### इनपुट कर क्रेडिट(आईटीसी) तथा रिवर्स प्रभार (आरसीएम)/Input Tax Credit(ITC) and Reverse Charge(RCM) Details

जीएसटी पर इनपुट कर क्रेडिट /ITC on GST	जीएसटी उपकर कर क्रेडिट /ITC on GST Cess	लागू आरसीएम/R CM Applicable	रिवर्स प्रभार के अनुसार जीएसटी/GST as per RCM	रिवर्स प्रभार के अनुसार जीएसटी उपकर 1 /GST Cess 1 as per RCM	GST Cess 2 as per RCM	वैकल्पिक रिवर्स प्रभार /Optional RCM
NA	NA	Yes	18%	9%	9 (INR) - Per Unit	No

#### परेषिती/रिपोर्टिंग अधिकारी तथा मात्रा/Consignees/Reporting Officer and Quantity

क्र.सं./S.No.	परेषिती/रिपोर्टिंग अधिकारी /Consignee Reporting/Officer	पता/Address	मात्रा /Quantity	डिलीवरी के दिन/Delivery Days
1	Pankaj	110012,IARI Pusa Campus IARI New Delhi 110012	1	30

#### क्रेता द्वारा जोड़ी गई बिड की विशेष शर्तें/Buyer Added Bid Specific Terms and Conditions

##### 1. Generic

OPTION CLAUSE: The Purchaser reserves the right to increase or decrease the quantity to be ordered up to 25 percent of bid quantity at the time of placement of contract. The purchaser also reserves the right to increase the ordered quantity up to 25% of the contracted quantity during the currency of the contract at the contracted rates. The delivery period of quantity shall commence from the last date of original delivery order and in cases where option clause is exercised during the extended delivery period the additional time shall commence from the last date of extended delivery period. The additional delivery time shall be  $(\text{Increased quantity} \div \text{Original quantity}) \times \text{Original delivery period (in days)}$ , subject to minimum of 30 days. If the original delivery period is less than 30 days, the additional time equals the original delivery period. The Purchaser may extend this calculated delivery duration up to the original delivery period while exercising the option clause. Bidders must comply with these terms.

## 2. **Scope of Supply**

Scope of supply (Bid price to include all cost components) : Supply Installation Testing Commissioning of Goods and Training of operators and providing Statutory Clearances required (if any)

## 3. **Turnover**

Bidder Turn Over Criteria: The minimum average annual financial turnover of the bidder during the last three years, ending on 31st March of the previous financial year, should be as indicated in the bid document. Documentary evidence in the form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be uploaded with the bid. In case the date of constitution / incorporation of the bidder is less than 3 year old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for this criteria.

## 4. **Turnover**

OEM Turn Over Criteria: The minimum average annual financial turnover of the OEM of the offered product during the last three years, ending on 31st March of the previous financial year, should be as indicated in the bid document. Documentary evidence in the form of certified Audited Balance Sheets of relevant periods or a certificate from the Chartered Accountant / Cost Accountant indicating the turnover details for the relevant period shall be uploaded with the bid. In case the date of constitution / incorporation of the OEM is less than 3 year old, the average turnover in respect of the completed financial years after the date of constitution shall be taken into account for this criteria. In case of bunch bids, the OEM of CATEGORY RELATED TO primary product having highest bid value should meet this criterion.

## 5. **OEM**

IMPORTED PRODUCTS: In case of imported products, OEM or Authorized Seller of OEM should have a registered office in India to provide after sales service support in India. The certificate to this effect should be submitted.

## 6. **Warranty**

Warranty period of the supplied products shall be 2 years from the date of final acceptance of goods or after completion of installation, commissioning & testing of goods (if included in the scope of supply), at consignee location. OEM Warranty certificates must be submitted by Successful Bidder at the time of delivery of Goods. The seller should guarantee the rectification of goods in case of any break down during the guarantee period. Seller should have well established Installation, Commissioning, Training, Troubleshooting and Maintenance Service group in INDIA for attending the after sales service. Details of Service Centres near consignee destinations are to be uploaded along with the bid.

## 7. **Buyer Added Bid Specific ATC**

Buyer uploaded ATC document [Click here to view the file.](#)

## 8. **Forms of EMD and PBG**

Bidders can also submit the EMD with Account Payee Demand Draft in favour of

Director, IARI  
payable at  
New Delhi

. Bidder has to upload scanned copy / proof of the DD along with bid and has to ensure delivery of hardcopy to the Buyer within 5 days of Bid End date / Bid Opening date.

## 9. **Forms of EMD and PBG**

Bidders can also submit the EMD with Fixed Deposit Receipt made out or pledged in the name of A/C

Director, IARI

. The bank should certify on it that the deposit can be withdrawn only on the demand or with the sanction

of the pledgee. For release of EMD, the FDR will be released in the favour of the bidder by the Buyer after making endorsement on the back of the FDR duly signed and stamped along with covering letter. Bidder has to upload scanned copy/ proof of the FDR along with bid and has to ensure delivery of hardcopy to the Buyer within 5 days of Bid End date/ Bid Opening date

## अस्वीकरण/Disclaimer

The Additional Terms and Conditions (ATC) have been incorporated by the Buyer after approval of their Competent Authority. The Buyer, is solely responsible for the impact of these clauses on the bidding process, its outcome, and consequences thereof including any restriction arising in the bidding process due to these ATCs and including the modification of technical specifications and / or terms and conditions governing the bid. All representations / grievances pertaining to the ATC clauses shall be raised with the buyer organization directly and not with GeM. If any of the clause(s) is/are incorporated by the Buyer regarding the following, the bid & resultant contract shall be treated as null & void. Further, GeM reserves the right, at its sole discretion, to cancel the bid forthwith, without issuance of any prior notice or intimation :-

1. Publishing Custom / BOQ bids for items for which regular GeM categories are available (unless such Custom / BOQ item is bunched with the major regular product Category Item).
2. Mandating procurement of / from specific Brand / Make / Model / Manufacturer / Dealer except in case of Single Bid / Proprietary Article Certificate (PAC) Buying.
3. Inclusion of disqualification criteria related to suspension of seller / service provider, where such suspension period has already expired.
4. Mandating submission of documents in physical form as a pre-requisite to qualify bidders.
5. Publishing bids on GeM for procurement of works.
6. Procurement of Goods by creating a Service bid on GeM & vice-versa.
7. Seeking sample with bid or approval of samples during bid evaluation process. However, trial / sample, as the case may be, shall be permitted in cases where trial / sample are allowed as per approved and published procurement policy of the Buyers' controlling Ministry / Department / State / Public Sector Enterprises Headquarters. If there is any violation of trial / sample clause with regard to approved policy of the Buyers' Ministry / Department / State / Public Sector Enterprises Headquarters, then this is to be determined and redressed by the concerned Buyer Organisation only.
8. Seeking experience from specific organization / department / institute only or from foreign / export experience.
9. Creating bid for items from incorrect categories.
10. Reference of conditions published on any external site or reference to external documents/clauses.
11. Asking for any Tender fee / Bid Participation fee, as the case may be.
12. Buyer added ATC Clauses which are in contravention of clauses defined in bid detail section, including specifications, EMD Detail, ePBG Detail and MII and MSE Purchase Preference sections of the bid, unless otherwise allowed by the applicable GeM GTC.
13. Any ATC clause in contravention with GeM GTC Clause 4 (xiii) (h) will be invalid. In case of multiple L1 bidders against a service bid, the buyer shall place the Contract by selection of a bidder amongst the L-1 bidders through a Random Algorithm executed by GeM system.
14. In a category based bid, adding additional items, through buyer added, additional scope of work/ additional terms and conditions/or any other document. If buyer needs more items along with the main item, the same must be added through bunching category based items or by bunching custom catalogues or bunching a BoQ with the main category based item, the same must not be done through ATC or Scope of Work.

Further, if any seller has any objection/grievance against these additional clauses or otherwise on any aspect of this bid, they can raise their representation against the same by using the Representation window provided in the bid details field in Seller dashboard after logging in as a seller. Buyer is duty bound to reply to all such representations and would not be allowed to open bids if he fails to reply to such representations.

**All GeM Sellers/Service Providers shall ensure full compliance with all applicable labour laws, including the provisions, rules, schemes and guidelines under the four Labour Codes i.e. the Code on Wages, 2019; the Industrial Relations Code, 2020; the Occupational Safety, Health and Working Conditions Code, 2020; and the Code on Social Security, 2020 as and when notified and brought into**

force by the Government of India.

**For all provisions of the Labour Codes that are pending operationalisation through rules, schemes or notifications, the corresponding provisions of the pre-existing labour enactments (such as The Minimum Wages Act, 1948, The Payment of Wages Act, 1936, The Payment of Bonus Act, 1965, The Equal Remuneration Act, 1976, The Payment of Gratuity Act, 1972, etc. and relevant State Rules) shall continue to remain applicable.**

**The Seller/ Service Providers shall, therefore, be responsible for ensuring compliance under:**

- **All notified and enforceable provisions of the new Labour Codes as mentioned hereinabove; and**
- **All operative provisions of the erstwhile Labour Laws until their complete substitution.**

**All obligations relating to wages, social security, safety, working conditions, industrial relations etc. and any other statutory requirements shall be strictly met by the Seller/ Service Provider. Any non-compliance shall constitute a breach of the contract and shall entitle the Buyer to take appropriate action in accordance with the contract and applicable law.**

**This Bid is governed by the General Terms and Conditions, conditions stipulated in Bid and Service Level Agreement specific to the Service, as the case may be, as provided in the Marketplace.**

**However, in case of Service, if any condition specified in General Terms and Conditions is contradicted by the conditions stipulated in Service Level Agreement specific to said Service, then it will over-ride the conditions in the General Terms and Conditions.**

[यह बिड सामान्य शर्तों के अंतर्गत भी शासित है /This Bid is also governed by the General Terms and Conditions](#)

जेम की सामान्य शर्तों के खंड 26 के संदर्भ में भारत के साथ भूमि सीमा साझा करने वाले देश के बिडर से खरीद पर प्रतिबंध के संबंध में भारत के साथ भूमि सीमा साझा करने वाले देश का कोई भी बिडर इस निविदा में बिड देने के लिए तभी पात्र होगा जब वह बिड देने वाला सक्षम प्राधिकारी के पास पंजीकृत हो। बिड में भाग लेते समय बिडर को इसका अनुपालन करना होगा और कोई भी गलत घोषणा किए जाने व इसका अनुपालन न करने पर अनुबंध को तत्काल समाप्त करने और कानून के अनुसार आगे की कानूनी कार्रवाई का आधार होगा।/In terms of GeM GTC clause 26 regarding Restrictions on procurement from a bidder of a country which shares a land border with India, any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. While participating in bid, Bidder has to undertake compliance of this and any false declaration and non-compliance of this would be a ground for immediate termination of the contract and further legal action in accordance with the laws.

**---धन्यवाद/Thank You---**

**REVISED**

**Specifications for Atomic Absorption Spectrometer**

No.	Specification	Description
1	Spectrometer Type	Double beam
2	Monochromator	Czerny-turner/Littrow design type. Focal length: 267 mm/300 mm/330 mm/350 mm/389 mm
3	Wavelength range	185-900 nm or wider
4	Monochromator Grating	≥ 1800 lines/mm
5	Wavelength repeatability/reproducibility or Linear dispersion	Wavelength repeatability/reproducibility < 0.05 nm or Linear dispersion ≤ 1.6 nm/mm
6	Detector type	Solid state detector or Photo multiplier tube
7	Slit selection/Bandwidth	0.2-1.0 nm or wider, automatic selection or better
8	Lamp	8-lamp mount lamp Turret with automated lamp selection, compatible with Hollow Cathode Lamps
9	Background Correction	Deuterium background correction
10	Burner system	Flame type. 10 cm air/acetylene burner and 5 cm nitrous oxide/acetylene burner, made of all Titanium or Incoloy alloy with Teflon base for corrosion resistance. Automatic burner adjustment (Horizontal and Vertical angle)
11	Nebulizer	Adjustable nebulizer with inert platinum-rhodium or platinum-iridium capillary. Corrosion resistant/ acid resistant.
12	Spray Chamber	Spray chamber should be capable of handling acids, alkalis and organic solvents.
13	Gas control or management system	Programmable gas control and monitoring of fuel gas and oxidant gas. Computer or software operated flame ignition, extinction, and gas flow.
14	Safety Functions	Multi-sensors monitoring of burner head and automatic ignition and shutdown of flame/ Ignition only by ignite button and presence of safety interlocks/Automatic flame extinction via sensor with flame monitor/ Interlocks to prevent ignition in case of improper installation of burner head or burner drain system
15	Operation	<ul style="list-style-type: none"><li>• External computer operated.</li><li>• Software for operating the AAS must be provided.</li></ul>
16	Certification and Compliance	Instrument should have certification from any reputed international authority. ISO 9001 complied.



<b>17 Accessories (Mandatory)</b>		
A	Exhaust Hood for AAS Made up of S.S.304, of length 10ft. & Blower motor of capacity approximately 2800RPM & 1/8 hp with all necessary fittings with additional flanges, angles etc.	1 No.
B	Nitrous Oxide Gas Cylinder with Two stage Cylinder Regulator Brass Chrome plated body with S.S. Diaphragm with Preheater	1 No.
C	Acetylene Gas Cylinder with Two Stage Cylinder Regulator with S.S. Diaphragm	1 No.
D	Compressed air cylinder	1 no.
E	Oil free compressor of approximately 20 litres Storage tank, Safety valve, Pressure Switch, Drain valve, Pressure gauge, Non-return valve, Needle valve, Solenoid valve etc. 230V, 50 Hz, 1 Phase	1 No.
F	Gas Purification & Control Panel single stage for Acetylene, N <sub>2</sub> O & Compressed Air Gas	1 No.
G	Standard fittings like Nuts, Ferrules, Union, Couplings, clamps, Hardware etc.	1 No.



H	PC compatible with above instrument having minimum features Processor- Latest generation Core-i5 Processor or better, 64 bit Display – 23 inch or bigger, Full HD IPS LED/LCD display Operating System- windows 11 or latest Graphics-Dedicated Graphic memory- 2GB Dedicated Graphic processor- Storage – SSD – 512 GB or better, System memory – 8 GBDDR3 or better Laser jet printer compatible with above computer (B/W)	1 No.
I	Online UPS for power back up (minimum 5 KVA and 1 hour backup for full system)	1 No.
J	Two numbers of Hard Copy of Operating Manual with Soft copy.	
K	Two numbers of Hard copy of Service manuals / maintenance manual with Soft copy.	
L	NIST Traceable single element calibration standards for above elements. Aqueous standards 1000 ppm: Aqueous Solution standards for Fe, Mn, Zn, Cu, Ni, Co, Mg, and Al elements (100 mL or more)	1 No. per element
M	Coded Hollow Cathode Lamps compatible with the turret should be provided for Fe, Mn, Zn, Cu, Ni, Co, Mg, and Al. Lifespan of lamp: 5000 mA-hr or more	1 HCL per element
N	Separate 10 cm burner head for air-acetylene flame and 5 cm burner head for nitrous oxide-acetylene flame should be supplied with the system.	
O	Other accessories required for installation and successful operational of AAS should be quoted	

18	<p>Future upgradable: The quoted system should be fully upgradable in future with following accessories: -</p> <ul style="list-style-type: none"> <li>• Hydride or Vapor Generation System</li> <li>• Automatic burner cleaning scrapper- Burner should be upgradable with automatic scrapper to remove unwanted crust</li> <li>• The quoted system should also be fully upgradable with graphite furnace module with same series</li> </ul>
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### **Additional requirements**


- All technical specifications should be verified by demonstration.
- Cost of all accessories, the instrument and the cost of installation and training should be quoted in the main financial bid.
- The instrument must be highly accurate and repeatable. Measurement error must be < 5% based on standard solutions. The repeatability (precision) should be within 1 to 5% (relative standard deviation). The accuracy and repeatability have to be verified for Fe, Mn, Zn, Cu, Ni, Co, Mg, and Al through demonstration. Any bidder, even if satisfies all other specifications, will be disqualified if their instrument fails to show the required level of accuracy and repeatability for any of the abovementioned elements during demonstration.
- System should provide highest safety standards.
- Specialized AAS software package with excellent and exhaustive cook-book should be included. Software should have options for automated optimization of gas composition and burner head position for method development of unknown samples.
- The specification should be supported by a printed and authentic technical literature. All specifications mentioned should be supported with printed brochure of the OEM/ MA and should be available on manufacturer website.
- The AAS should be supplied with 2-year warranty against all manufacturing defects. Warranty should include all parts which need to be replaced due to dust, high salt or acid accumulation, etc.
- CMC for 3 years should be quoted separately from main bid as optional.
- OEM/Bidder/ MAF Company must be manufacturing the quoted series of instrument for last 10 years and have at least more than 5 installations in Govt. organizations.
- List of users of the instrument in India along with their contact details.
- Recent Supply order copy of the Govt. institutes.
- Manufacturer should have facility in Delhi to provide service for smooth functioning of the instrument after sales.
- Safety features must be there
- Suitable for laboratory table to place the instrument along with all accessories



### Installation, Training & Maintenance

- Installation & commissioning of the equipment should be carried out by supplier at user's site. Operational, basic troubleshooting and maintenance training should be imparted to user's operator. Minimum 10 days training for complete operation of instrument after installation.
- Supplier must have factory trained engineers stationed in India to maintain the system and carry out AMC.
- Supplier must be reputed manufacturer/ authorized agent of manufacturer and should offer brand new equipment.

The specifications are generic and broad based in nature.

  
11/10/2026  
Debarup Das

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वैज्ञानिक/ Scientist  
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Division of Soil Science & Agricultural Chemistry  
Indian Agricultural Research Institute, New Delhi-110012

REVISED

Specifications of AAS from Brochures of four different models

No.	Description	Generic	Analytik Jena Double beam Atomic Absorption Spectrophoto meter, Analytik Jena (novAA 800F)	Agilent Double beam Atomic Absorption Spectrophoto meter Agilent (AA280)	SHIMADZU Double beam Atomic Absorption Spectrophoto meter SHIMADZU (AA-7800)	perkin elmer Double beam Atomic Absorption Spectrophoto meter perkin elmer (PinAAcle 900 series)
1	Spectrometer Type	Double beam	3	2	1	1
2	Monochromator	Czerny-turner/Littrow design type. Focal length: 267 mm/300 mm/330 mm/350 mm/389 mm	3	2	1	1
3	Wavelength range	185-900 nm or wider	3	2	1	1
4	Monochromator Grating	≥ 1800 lines/mm	3	2	1	1
5	Wavelength repeatability/reproduci bility or Linear dispersion	Wavelength repeatability/reproducib ility < 0.05 nm or Linear dispersion ≤ 1.6 nm/mm	3	2	--	1
6	Detector type	Solid state detector or Photo multiplier tube	3	2	1	1
7	Slit selection/Bandwidth	0.2-1.0 nm or wider, automatic selection or better	3	2	1	1

8	Lamp mount or turret	8-lamp mount lamp Turret with automated lamp selection, compatible with Hollow Cathode Lamps	3	2	1	1
9	Background Correction	Deuterium background correction	3	3	1	2
10	Burner system	Flame type. 10 cm air/acetylene burner and 5 cm nitrous oxide/acetylene burner, made of all Titanium or Incoloy alloy with Teflon base for corrosion resistance. Automatic burner adjustment (Horizontal and Vertical angle)	2	3	2	2
11	Nebulizer	Adjustable nebulizer with inert platinum- rhodium or platinum- iridium capillary. Corrosion resistant/ acid resistant.	2	3	2	2
12	Spray Chamber	Spray chamber should be capable of handling acids, alkalis and organic solvents.	2	3	2	2

13	Gas control or management system	Programmable gas control and monitoring of fuel gas and oxidant gas. Computer or software operated flame ignition, extinction, and gas flow.	2, 3	3	2	2
14	Safety Functions	Multi-sensors monitoring of burner head and automatic ignition and shutdown of flame/ Ignition only by ignite button and presence of safety interlocks/Automatic flame extinction via sensor with flame monitor/Interlocks to prevent ignition in case of improper installation of burner head or burner drain system	2	3	2	2
15	Operation	External computer operated. Software for operating the AAS must be provided.	3	2	1	3
16	Certification and Compliance	Instrument should have certification from any reputed international authority. ISO 9001 complied.	6	1	<a href="https://www.ssi.shimadzu.com/about/iso.html#:~:text=Shimadzu%20Corporation">https://www.ssi.shimadzu.com/about/iso.html#:~:text=Shimadzu%20Corporation</a>	4



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The comparison only includes specifications. It does not include accessories and additional requirements.

  
15/06/2026  
Debarup Das

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