



# राष्ट्रीय पशु जैव प्रौद्योगिकी संस्थान

## National Institute of Animal Biotechnology

An Autonomous Institute of the Department of Biotechnology, Ministry of Science & Technology, Govt. of India

### STORES AND PURCHASE SECTION

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<b>Telephone</b>	+91 40 2301 3903		Aryabhata Block, C. R. Rao AIMSCS, University of Hyderabad Campus, Prof. C. R. Rao Road, Hyderabad, Andhra Pradesh, India - 500 046
<b>Telefax</b>	+91 40 2301 0745		
<b>Website</b>	www.niab.org.in		

### Tender notice for the supply/installation of Laboratory Research Equipment.

#### LIMITED TENDER

**Web based publicity has been given for limited tenders. Reputed firms may download this tenders and participated as per the terms and condition mentioned herewith.**

#### **INVITATION OF SEALED OFFERS (SINGLE BID). EACH ITEM HAS TO BE QUOTED SEPARATELY.**

Director NIAB Hyderabad (AP) India invites *sealed* offers from reputed manufacturers or their authorized agents for the supply/installation/commissioning of the following items:

SN	Name Of Instrument	Qty	Ref No Mentioned on top of cover	Bid Type	Tender Fees	EMD
1	Refrigerator (2 to 8 <sup>0</sup> C) Normal door	2	NIAB/S&P/2013-14/40	<b>SINGLE COMBINED BID BOTH TECHNICAL &amp; FINANCIAL BID IN ONE COVER</b>  <b>SINGLE BID means that the total offer/bid with EMD/TD Fee (if applicable), all terms and conditions, price quote &amp; technical literature etc. is enclosed in <u>ONE SINGLE Envelope.</u></b>	Rs 500 /-	Nil
2	Ultrasonic water bath	1	NIAB/S&P/2013-14/41		Rs 500 /-	Nil
3	Digital electronic weighing balance, Fine with dual range	1	NIAB/S&P/2013-14/42		Rs 500 /-	Nil
4	Refrigerator (2 to 8 <sup>0</sup> C) Sliding doors	1	NIAB/S&P/2013-14/43		Rs 500 /-	Nil
5	Gel Rocker	2	NIAB/S&P/2013-14/44		Rs 500 /-	Nil
6	Hot Air Oven	1	NIAB/S&P/2013-14/45		Rs 500 /-	Nil
7	Digital Ion/pH Meter	2	NIAB/S&P/2013-14/46		Rs 500 /-	Nil
8	Heating Block	2	NIAB/S&P/2013-14/47		Rs 500 /-	Nil
9	Digital electronic weighing balance, Coarse 800g	1	NIAB/S&P/2013-14/48		Rs 500 /-	Nil
10	Magnetic Stirrer: W/o Hot plate	3	NIAB/S&P/2013-14/49		Rs 500 /-	Nil
11	Magnetic Stirrer: With Hot Plate	1	NIAB/S&P/2013-14/50		Rs 500 /-	Nil
12	Microwave Oven	2	NIAB/S&P/2013-14/51		Rs 500 /-	Nil
13	Bioncular Microscope	1	NIAB/S&P/2013-14/52		Rs 500 /-	Nil

**PLEASE REFER TO THE DETAILED SPECIFICATIONS & IMPORTANT POINTS / CLAUSES FOR THE RESPECTIVE ITEM AT THE END OF THIS TENDER DOCUMENT (ANNEXURE-III).**

## **EACH ITEM HAS TO BE QUOTED SEPARATELY**

<b>IMPORTANT POINTS</b>		
<b>TENDER FEES</b>	<b>RS 500 Per Item</b>	<b>(Non - refundable)</b>
<b>EMD AMOUNT</b>	<b>(Nil)</b>	<b>(Refundable as per terms and condition of tender)</b>
<b>MODE OF PAYMENT</b>	Demand Draft of any nationalized/commercial bank  --- DD must be enclosed along with the Quotation ---  PLEASE MENTION FIRM NAME & CONTACT NO ,TENDER REF NO BACKSIDE OF DEMAND DRAFT	
<b>DD IN FAVOUR OF</b>	<b>National Institute of Animal Biotechnology</b> payable at Hyderabad.	
Tenders without TENDER FEES / EMD (if applicable) will be rejected. NIAB does not take any responsibility for loss of Tender in transit sent by courier or any postal delays. Tenders received after the due date and time will not be entertained and rejected.		
<b>Tenders to be submitted at</b>	NIAB OFFICE  Aryabhata Block, C.R.Rao AIMSCS, University of Hyderabad Campus, Prof. C. R. Rao Road, Hyderabad, Andhra Pradesh, India , PIN: 500 046	
<b>Last Date &amp; Time For issue of Tender</b>	25 <sup>th</sup> Aug 2013	
<b>Last Date &amp; Time For Submission of Tender</b>	26/08/2013 , up to 2.00 PM	
<b>Date &amp; Time For opening of Tender</b>	26/08/2013 , up to 2.30 PM	
<b>Place Of Opening</b>	Store and Purchase section - NIAB OFFICE , Hyderabad	

### **IMPORTANT NOTE**

#### **PLEASE STRICTLY ADHERE TO THE DATES / TIMES MENTIONED IN THIS DOCUMENT**

PLEASE FILL & ENCLOSE THE BRIEF SUMMARY OF QUOTATION & CHECKLIST PROVIDED WITH THIS DOCUMENT & ENCLOSE WITH YOUR BID. **OFFERS WITHOUT THIS SHALL BE SUMMARILY REJECTED.**

The bids will be opened in the presence of representatives of tenderers, if any. In case of unscheduled holiday occurs on the date of submission/opening, then next working day shall be the prescribed date of submission/opening. Requests for postponement will not be entertained. Fax/email bids may not be accepted. Late/Delayed and tenders shall not be opened. Wrongly referenced / enclosed quotations and Unsigned (wherever signature required) bids will be rejected summarily. Please send your bids to the Stores & Purchase Officer at the address mentioned on the cover page.

**The competent authority in NIAB will have full right to reject any/all offer(s) without assigning any reason thereof and does not bind itself to accept the lowest or any other tender and full authority to postpone the tender issue date, submission /opening date or to alter any other condition of tender as per Policy Of NIAB for which no claim from whomsoever will be entertained.**

Sd /-  
Manager (Stores & Purchase)  
For Director ,NIAB

## Terms & Conditions

1. Kindly quote **ONLY** in USD (\$), Euro (€), Yen (¥), GBP (£) or in INR (Rs), wherever possible. The validity of the offer should not be less than **180** days.
2. For **imported items**, mention the price of the goods on FCA/FOB basis. The comparison of bids will be done on FOB/FCA basis. Notwithstanding obligations under latest applicable INCOTERMS FCA terms, those quoting FCA rates shall have to bear export country transportation, warehousing, and processing charges and reimburse the same to the associate of our freight forwarder in the exporting country. CIF/CIP rates for shipping items upto Hyderabad (India) should also be mentioned. Items are to be Packed, Marked & Labeled as per international norms. Small individual boxes must be **palletized** for easy handling & movement. Therefore state packing/ forwarding/ documentation charges etc. (each one) separately, if applicable. **Where there is no mention of packing, forwarding, freight, insurance charges, such offers shall be summarily rejected as incomplete. Please also indicate approximate shipment (packed) weight & dimensions of the item quoted by you. Order shall normally be placed on FOB/FCA basis but Director NIAB reserves the right to place the order on CIF/CIP basis also.**
3. The Tender Document Cost, **if any**, should be enclosed in a separate envelop (within bid) containing DD , a letter on your Letter Head giving details of this DD and name of item/description and other related details.
4. For **indigenous** supplies, payment will be made by Account payee cheque only, **after** receipt of the stores in good Condition and installation. For **Imports** only LC or wire transfer payment terms **after receipt of material** and installation shall be accepted. Sight draft or Documents against Payment terms will not be accepted. LC charges outside India will be borne by the supplier. **Advance payment terms** will not be accepted.
5. In case the quotation is submitted by Indian Agent, the same must be accompanied by valid authorization letter from principals.
6. Indian Agents of the foreign supplier must be registered with Director General of Supplies and Disposal (**DGS&D**), for the import of items mentioned in the restricted list of import. One Agent cannot represent two suppliers/principals or quote on their behalf for the same item.
7. If the items are not covered under Open General License (OGL) of applicable EXIM POLICY, the same may also be mentioned clearly to obtain prior Special Import License (SIL) from DGFT; otherwise demurrage accrued due to delay in the clearance of consignment will be your responsibility.
8. A demand draft/banker's cheque **TENDER FEES / EMD** must be enclosed with the Technical Bid and PHOTOCOPY of the same to be enclosed with PRICE BID. The EMD of unsuccessful bidders shall be returned after award of contract. All tenders received without **TENDER FEES /EMD** shall be summarily rejected. **SSI Units** registered with NSIC who enjoy the exemption will **not** be **allowed exemption from Tender Document Fee & submission of Performance Bank Guarantee**. Firms registered with Govt. PSUs are not exempted from payment of EMD. **EMD DD is NOT to be clubbed with tender cost DD**.
9. Unconditional Performance Bank Guarantee (PBG) of 10% of order value will have to be submitted on the prescribed format, valid till 60 days after the warranty period from a scheduled bank within 21 days of the placement of order where payment is to be released on L/C or on delivery, failing which the contract shall be deemed as terminated. In cases where part payment is to be made on delivery & part on installation, the Performance BG shall have to be submitted at the time of release of final payment. EMD will be released on submission of the PBG. In case of delays in the shipment and or installation the validity period of the PBG will have to be suitably extended.
10. **Specifications** are basic essence of the product. It must be ensured that the offers are as per our specifications. Merely copying our specifications shall not make firms eligible for consideration. A quotation has to be supported with the printed technical literature (wherever applicable and available like in case of scientific items, misc. IT/Office products) and the specifications mentioned in the quotation must be reflected/ supported by such printed literature. Quoted/tendered item specifications should invariably be highlighted in the leaflet/literature for easy reference. **Please also make and attach with your quotation the technical compliance sheet as per the format given in Annexure I for proper evaluation at our end. In the event of any ambiguity/confusion on account of item specification/description, the offer may be rejected without giving the quoting firm any opportunity for clarification/negotiation. Accordingly technically unsuitable offers, offers not conforming to tender schedule or offers from defaulters etc. will also be rejected. However Purchaser may waive any minor informality/deviation in specifications, non-conformity, or irregularity in a bid, which does not constitute a material deviation, provided such a waiver, does not prejudice or affect the relative ranking of any Bidder.**
11. Prior to the detailed evaluation, the Purchaser will determine the substantial responsiveness of each bid to the Bid Document. For purposes of these Clauses, a substantially responsive bid is one, which conforms to all the terms and Conditions of the Bid Document without material deviations. Deviations from or objections or reservations to critical provisions such as those concerning Bid Security/ Performance Security, Warranty, Pricing, Force Majeure, Applicable Law and Taxes & Duties will be deemed to be a material deviation. If a bid is not substantially responsive, it will be rejected summarily.
12. Please ensure that quoted price is not more than the price offered to any other customer in India to whom this particular item has been sold, particularly to DBT/CSIR Labs/Institutes and other Government Organization. Copy of the latest price list for the quoted item, applicable in India, must be enclosed with your offer.
13. Enclose with your offer a certificate that the equipment is of latest technology and will not become obsolete soon and accessories & spare parts will be supplied as and when required. It may be confirmed that essential spare parts of this equipment are available in India with your Indian Agent along with the Engineer for after sale service of the equipment. **Please also specify the time period required for installation of the equipment after its receipt at NIAB is notified to you.**
14. **APPLICABLE LAW:** The Contract shall be interpreted in accordance with the laws of the Union of India and all disputes shall be subject to place of jurisdiction Hyderabad .
15. The PRICE bid must mention the prices of all items asked for individually and then summed up at last i.e. package deal for all items which are essential for the system as per our tender. **Optional items asked for can be submitted separately in the PRICE bid.**
16. We may ask for the Inspection Report related to the value or packing condition etc. to be provided by the Agency nominated by us charges for which will have to be borne by you.
17. Pre-installation requisites (electrical/floor/space/air-conditioning etc.) if any should invariably be mentioned clearly. Installation/ Training will be the full responsibility of the supplier/ Indian Agent.
18. If any short-shipment etc. is noticed, the same will be arranged immediately with all charges to this effect to be borne by

supplier/Indian agent.

19. In case of indigenous supplies, the goods should be insured against theft, loss or breakage during transit and Insurance charges should not exceed 1% of the cost of material supplied, the rates of Sales Tax, Excise Duty etc. (as applicable) should be clearly indicated. Form C & D is not applicable to us. **Being an Research Institute NIAB is registered with DSIR and is exempted from payment of Custom Duty vide Govt. Notification No.51/96-Customs dated 23rd July, 1996 and Excise duty vide 10/97-Central Excise dt 1/03/1997.**

20. In case of supply order for the SCIENTIFIC EQUIPMENTS/ APPARATUS, the date of delivery should be strictly adhered to otherwise the Director, NIAB reserves the right not to accept delivery in part or full and claim liquidated damages of 1% per week subject to maximum of 10% of the total value of supply order.

21. **Printed conditions of the quotation shall not be binding on us.** Quotation must be clearly written or typed without any cutting or over-writing. All cutting/over-writings must be initialed and stamped.

22. All items should carry normal warranty period of at least one year / **as per specification** from date of installation. Therefore Warranty/Guarantee period should be mentioned clearly in the offer.

23. If the vendor has supplied identical or similar equipment to other DBT Institute the details of such supplies for the preceding three years shall be given together with the prices eventually or finally paid

24. Provide the list of users in India, particularly DBT institute /CSIR Laboratories, along with their complete address including fax, e-mail etc. Also enclose performance certificate, if available.

25. Conditional tenders/discounts etc. shall not be accepted. Rates quoted **without attached conditions** (viz. Discounts having linkages to quantity, payment terms etc.) will only be considered for evaluation purpose. Thus conditional discounted rates linked to quantities and prompt/advance payment etc, will be ignored for determining *inter-se* position. The Director NIAB however reserves the right to use the discounted rate/rates considered workable and appropriate for counter offer to the successful tenderers.

26. The acceptance of the quotation/offer will rest with the Director, NIAB, who does not bind himself to accept the lowest quotation and reserves the right to himself to reject or partially accept any or all the quotations received, or to waive off any condition without assigning any reason.

### ANNEXURE I

(To be enclosed in a similar format along with the offer)

#### TECHNICAL COMPLIANCE SHEET FORMAT

ITEM NAME			
S.No.	Tender Specifications	Bidder's Specifications	Remarks/Deviation If any

**(Technical literature/brochures/manuals should be attached along with this format)**

**Please note:**

1. Compliance/Deviation statement comparing the specifications of the quoted model to the required specifications. This statement should also give the page number(s) of the technical literature where the relevant specification is mentioned.
2. Bids must have supporting documents ( technical literature or copies of relevant pages from the service manual or factory test data) for all the points noted above, failure regarding which may result in rejection of bid.

### ANNEXURE II

(To be enclosed in a similar format along with the offer)

#### DETAILS OF LOCAL / ANY OTHER SERVICE SUPPORT

Address of Service Centre	Phone/Fax/Email	Office Hours	Service Facilities

## BRIEF SUMMARY OF QUOTATION & CHECKLIST (Enclose with Price Bid)

(Please Fill It Up. DON'T Write 'AS PER QUOTATION' / 'PLEASE REFER TO OUR OFFER' etc.)

Quotation Ref. No.		Date	
01	Name of the Item (Equipment / System etc.)		
02	Main Item Model NUMBER		
03	Total FCA/FOB Value Of The Offered Package (Inclusive of Indian Agency Commission, if any)		
04	Insurance & Airfreight Charges		
05	CIF / CIP Value Of The Package <b>or</b> FOR NIAB value (for indigenous items)		
06	Payment Terms (Refer to our terms) <b>(Conditional Payment Terms Will NOT Be Accepted)</b>		
07	Delivery Time (Weeks/Months)		
08	Warranty (Months/Years) <b>Please CHK specification</b>		
09	Validity of Quotation (Days/Months) (not less than 180 days)		
10	Product Import Code * ( ITC HS Code of the item / main item) (Please consult any Export / Import / Customs Agent or ITC Handbook ) <b>WRITE NA IN CASE OF INDIGENOUS ITEM</b>		
11	Country of Origin (product) <b>WRITE NA IN CASE OF INDIGENOUS ITEM</b>		
12	Port(s) of Shipment ) <b>WRITE NA IN CASE OF INDIGENOUS ITEM</b>		
<b>CHECKLIST</b>			
01	Following Things Are Mentioned On The Main (Outer) Envelope  •Item Name •NIAB Reference No. •Last Date For Submission Of Tender •Date Of Opening Of Tender •Firm's Name & Address		
02	<b>If Applicable</b> , TENDER FEES / EMD is <b>Enclosed</b> Demand Draft(s) Is/Are In Favour Of <b>National Institute of Animal Biotechnology</b> payable at Hyderabad.		
03	Prices have been quoted keeping in view Para 1, 2, 5, 12, 15, 16, 22 & 25 of the Terms & Conditions		
04	The <b>Technical Compliance Statement</b> (As Per Annexure I) Has Been Enclosed.		
05	Quotation Have Been Duly Signed And Stamped By The <b>Authorized &amp; Competent Person</b> . All Cuttings/Over Writings Have Been Duly Checked, Initialed And Stamped. (If Applicable)		
06	This full Notice Inviting Tender (NIT) should be printed and hard copy to be submitted along with BID. Tender Document with each page duly signed by the Bidder as token of acceptance. This Notice Inviting Tender (N.I.T) shall form part of the Tender Document.		

*We have read and understood the tender terms and conditions. We assure to follow NIAB standard rules and procedures applicable for this tender process. The undersigned is competent to sign the tender document including this page on behalf of the quoting firm.*

Date

(Name, Designation with  
Signature and Company Seal)

## **ANNEXURE-III**

### **(SPECIFICATIONS/IMPORTANT POINTS & CLAUSES OF EQUIPMENTS)**

<b>SN</b>	<b>Name Of Instrument</b>	<b>Qty</b>	<b>Ref No</b>
<b>1</b>	<b>Refrigerator (2 to 8<sup>0</sup>C) Normal door</b>	<b>2</b>	<b>NIAB/S&amp;P/2013-14/40</b>

### **REFRIGERATORS (2 to 8<sup>0</sup>C) (Normal doors-1 No )**

#### **Specifications:**

- Gross Capacity : 300-320 lit
- Type : Frost free
- Number of doors : single/two, sliding transparent doors
- External and inbuilt digital temperature controller and display
- LED interior lighting
- Removable door gasket
- Integrated lock
- Wheels with lockable swivel castors
- Freely adjustable internal racks
- All required accessories should be provided

#### **Other Requirements:**

- **3 years comprehensive warranty + 2 years free AMC should be mentioned clearly.**
- Availability of local Service Support and response time for a Service Call during and after warranty to be mentioned. After Sale, service should be available promptly.
- Additional features/accessories if any that can potentially increase the productivity of this instrument should be quoted as optional items

SN	Name Of Instrument	Qty	Ref No
2	Ultrasonic water bath	1	NIAB/S&P/2013-14/41

## ULTRASONIC WATER-BATH

### Specifications:

- Capacity: 10-15 litres Single/Dual chamber
- Chamber: Stainless steel interior chamber and epoxy powder-coated exterior to resist corrosion and chemical damage.
- Degassing: To be able to do degassing of solvents for HPLC
- To be able to do homogenization of samples for residue analysis
- Timer: Should have Front mounted controls for simple operation
- Setting between 1 to 99 min and continuous operation.
- Temperature: Adjustable between 20 to 80 °C
  - Display of present and set point of bath temperature
  - Integrated thermometer with accuracy of  $\pm 1.5^{\circ}\text{C}$
  - Should have Over-temperature safety circuitry
- Operating voltage: 230  $\pm$ 10VAC, 50 Hz
- Accessories: Steel Basket, Lid, Beaker holder, Handle adjustment holder for insert basket. 1.5/2 ml, 5ml, 15 ml tubes holder

### Other Requirements:

- **3 years comprehensive warranty + 2 years free AMC should be mentioned clearly .**
- Availability of local Service Support and response time for a Service Call during and after warranty to be mentioned. After Sale, service should be available promptly.
- Additional features/accessories if any that can potentially increase the productivity of this instrument should be quoted as optional items

SN	Name Of Instrument	Qty	Ref No
3	Digital electronic weighing balance , Fine with dual range 100/220g	1	NIAB/S&P/2013-14/42

## DIGITAL WEIGHING BALANCE

### Fine balance with dual Range with built in calibration

- Balance with Glass draft shield, smooth-action doors that open extremely wide for thorough cleaning (removable weighing chamber base plate).
- High-contrast, easy-to-read display with large digits
- Weighing capacity 100|220 g
- Readability 0.01|0.1 mg
- Tare range (subtractive) 220 g
- Repeatability (std. deviation)  $\leq \pm 0.05$ |0.1 mg
- Linearity  $\leq \pm 0.1$ |0.2 mg
- Response time (average)  $\leq 6$  s| $\leq 3$  s
- Operating temperature range +10 to +30 °C
- Digital display, Fast response time, Good repeatability, Internal Calibration
- Operating Voltage: 230  $\pm$ 10VAC, 50 Hz.

### Other Requirements:

- **3 years comprehensive warranty + 2 years free AMC should be mentioned clearly .**
- Availability of local Service Support and response time for a Service Call during and after warranty to be mentioned. After Sale, service should be available promptly.
- Additional features/accessories if any that can potentially increase the productivity of this instrument should be quoted as optional items



<b>SN</b>	<b>Name Of Instrument</b>	<b>Qty</b>	<b>Ref No</b>
<b>4</b>	<b>Refrigerator (2 to 8<sup>0</sup>C) Sliding doors</b>	<b>1</b>	<b>NIAB/S&amp;P/2013-14/43</b>

## **REFRIGERATORS (2 to 8<sup>0</sup>C)** (Sliding doors-1 No )

### **Specifications:**

- Gross Capacity : 300-320 lit
- Type : Frost free
- Number of doors : single/two, sliding transparent doors
- External and inbuilt digital temperature controller and display
- LED interior lighting
- Removable door gasket
- Integrated lock
- Wheels with lockable swivel castors
- Freely adjustable internal racks
- All required accessories should be provided

### **Other Requirements:**

- **3 years comprehensive warranty + 2 years free AMC should be mentioned clearly .**
- Availability of local Service Support and response time for a Service Call during and after warranty to be mentioned. After Sale, service should be available promptly.
- Additional features/accessories if any that can potentially increase the productivity of this instrument should be quoted as optional items

SN	Name Of Instrument	Qty	Ref No
5	Gel Rocker	2	NIAB/S&P/2013-14/44

## GEL ROCKER

### Specifications:

- Shaker for staining, de-staining and washing of the gels.
- Table top mini rotating shaker with controllable speed from 5-30 rpm or better
- Rocking angle 1° to 48° or more
- Rotating flat form size of ~24-29cm X 24-29cm.
- Digital display of the rotation speed.
- Digital Set timer for continuous or timed operations
- Platform should be chemical-resistant and easy to clean
- If available, provide double tier/ dual platform

### Other Requirements:

- **3 years comprehensive warranty + 2 years free AMC should be mentioned clearly.**
- Availability of local Service Support and response time for a Service Call during and after warranty to be mentioned. After Sale, service should be available promptly.
- Additional features/accessories if any that can potentially increase the productivity of this instrument should be quoted as optional items

<b>SN</b>	<b>Name Of Instrument</b>	<b>Qty</b>	<b>Ref No</b>
<b>6</b>	<b>Hot Air Oven</b>	<b>1</b>	<b>NIAB/S&amp;P/2013-14/45</b>

## **HOT AIR OVEN**

### **Specifications:**

- 100-150 lit capacity
- Inner chambers should be made from corrosion-resistant stainless steel.
- Outer side should be of mild steel finished with superior quality enamel paint.
- Inner 3 or more adjustable and detachable racks
- Operating Temperature: 50 °C up to 250 °C
- Door opening : over 180°
- Microprocessor-based controls
- Digital display and built in timer
- Automatic visible and audible alarm system at over temperature
- Sensitivity and temperature uniformity  $\pm 0.5$  °C to  $\pm 1$  °C
- After Sale, Service should be available promptly.

### **Other Requirements:**

- **3 years comprehensive warranty + 2 years free AMC should be mentioned clearly .**
- Availability of local Service Support and response time for a Service Call during and after warranty to be mentioned. After Sale, service should be available promptly.
- Additional features/accessories if any that can potentially increase the productivity of this instrument should be quoted as optional items

SN	Name Of Instrument	Qty	Ref No
7	Digital Ion/pH Meter	2	NIAB/S&P/2013-14/46

## DIGITAL Ion/pH METER

The instrument should have auto- recognition of standards, method storage facility, Simultaneous display of pH and temperature measurements and other parameters.

### Specifications:

#### pH:

- Display : Multi line back lit LCD
- pH Range : 0 to 14 or -2.000 to 19.999
- Resolution : 0.001 / 0.01/0.1 pH
- Accuracy :  $\pm 0.002$
- Calibration : 1 to 5 points

#### ISE:

- Range : 0 to 1999.9
- Resolution : 1, 2, or 3 significant digits
- Relative Accuracy :  $\pm 0.2$  mV or 0.05%, whichever is greater.

#### TEMPERATURE:

- Range : -5 to 100 °C or better
- Resolution : 0.1°
- Accuracy :  $\pm 0.1$ °C
- Temperature Compensation: Auto / Manual
- Operating voltage : 230  $\pm$ 10VAC, 50 Hz.
- Universal power adapter

#### Other Requirements:

- Calibration Standards for all ions and Electrode Storage Solutions.
- **3 years comprehensive warranty + 2 years free AMC should be mentioned clearly.**
- Availability of local Service Support and response time for a Service Call during and after warranty to be mentioned. After Sale, service should be available promptly.
- Additional features/accessories if any that can potentially increase the productivity of this instrument should be quoted as optional items

SN	Name Of Instrument	Qty	Ref No
8	Heating Block	2	NIAB/S&P/2013-14/47

## HEATING BLOCK

### Specifications:

- Dry bath incubator should have interchangeable dual blocks
- 2 Block System : 20 X 16 mm tubes & 12 X 19 mm tubes
- Temperature Range : Ambient + 5 to 150°C or more
- Temperature Accuracy : ± 0.1 at 37°C
- Temperature Increment : 0.1 ° C
- Temperature Calibration : Yes
- Block Uniformity at 100°C : ± 1°C
- Heating Time : 100°C in less than 12 min.
- Timer : 99 hours 59 minutes
- Block Material : Anodized Aluminum
- Display : Digital for Time & Temperature
- Safety Device : Leak proof heating chamber & over temp. protection
- Operating voltage : 230 ±10VAC, 50 Hz.

### Other Requirements:

- Provide blocks for 20 X 10 mm, 20 X 16 mm and 20 X 2 ml Tubes – 1 No.
- Other range of blocks or accessories can be quoted optionally
- Block extraction tool to be supplied.
  - **3 years comprehensive warranty + 2 years free AMC should be mentioned clearly .**
  - Availability of local Service Support and response time for a Service Call during and after warranty to be mentioned. After Sale, service should be available promptly.
  - Additional features/accessories if any that can potentially increase the productivity of this instrument should be quoted as optional items

SN	Name Of Instrument	Qty	Ref No
9	Digital electronic weighing balance ,	1	NIAB/S&P/2013-14/48

## DIGITAL WEIGHING BALANCE

### Specifications:

#### Coarse Balance

- Electronic precision balance with built-in calibration
- Capacity                                800 g
- Readability                            0.01 g
- Tare range (subtractive) 800 g
- Response time (avg.)    1- 2 seconds
- Repeatability                         $\leq \pm 0.02$  g
- Linearity                                 $\leq \pm 0.03$  g
- Pan (diameter)                        150 mm
- High-contrast, easy-to-read display

#### Other Requirements

- **3 years comprehensive warranty + 2 years free AMC should be mentioned clearly .**
- Availability of local Service Support and response time for a Service Call during and after warranty to be mentioned. After Sale, service should be available promptly.
- Additional features/accessories if any that can potentially increase the productivity of this instrument should be quoted as optional items

SN	Name Of Instrument	Qty	Ref No
10	Magnetic Stirrer: W/o Hot plate	3	NIAB/S&P/2013-14/49

## MAGNETIC STIRRER W/O HOT PLATE

### Specifications:

- Rugged Aluminum die cast housing.
- Acid & Alkali resistant top
- Easy to clean & Maintain
- Size 18-20 x 18-20cms
- Digital display
- Capacity of container size/sample load 4-5 Liter/10-11 Kgs
- Separate temperature and RPM controllers with digital display
- Electronic speed control from 100-1200 RPM.
- Operating voltage : 230 ±10VAC, 50 Hz.

### Other Requirements

- **3 years comprehensive warranty + 2 years free AMC should be mentioned clearly .**
- Availability of local Service Support and response time for a Service Call during and after warranty to be mentioned. After Sale, service should be available promptly.
- Additional features/accessories if any that can potentially increase the productivity of this instrument should be quoted as optional items

SN	Name Of Instrument	Qty	Ref No
11	Magnetic Stirrer: With Hot Plate	1	NIAB/S&P/2013-14/50

## MAGNETIC STIRRER WITH HOT PLATE

### Specifications:

- Rugged Aluminum die cast housing.
- Acid & Alkali resistant top
- Easy to clean & Maintain
- Top hot warning system
- Size 18-20 x 18-20cms
- Digital display
- Capacity of container size/sample load 4-5 Liter/10-11 Kgs
- Separate temperature and RPM controllers with digital display
- Electronic speed control from 100-1200 RPM.
- Operating voltage : 230  $\pm$ 10VAC, 50 Hz.

### Other Requirements

- **3 years comprehensive warranty + 2 years free AMC should be mentioned clearly .**
- Availability of local Service Support and response time for a Service Call during and after warranty to be mentioned. After Sale, service should be available promptly.
- Additional features/accessories if any that can potentially increase the productivity of this instrument should be quoted as optional items



<b>SN</b>	<b>Name Of Instrument</b>	<b>Qty</b>	<b>Ref No</b>
<b>12</b>	<b>Microwave Oven</b>	<b>2</b>	<b>NIAB/S&amp;P/2013-14/51</b>

## **MICROWAVE OVEN**

### **Specifications:**

- Type: Convection
- Capacity: 28-32 (Liter)
- Microwave Frequency: 2450(MHZ)
- Cavity: Stainless Steel
- Control Type: Tact/Dial Type Controls
- Display: Digital Display
- All required accessories should be provided
- Models with better features can also be quoted

### **Other Requirements**

- **3 years comprehensive warranty + 2 years free AMC should be mentioned clearly .**
- Availability of local Service Support and response time for a Service Call during and after warranty to be mentioned. After Sale, service should be available promptly.
- Additional features/accessories if any that can potentially increase the productivity of this instrument should be quoted as optional items

SN	Name Of Instrument	Qty	Ref No
13	Bioncular Microscope	1	NIAB/S&P/2013-14/52

## Binocular Microscope for biological research purpose

### Feature and Parameters: -

Viewing Head: Binocular Head,  
 Inter pupillary Distance: adjustable 48-75mm  
 Viewing angle 45<sup>0</sup>  
 Illumination: External Illumination Halogen Lamp/ LED,  
 Adjustable Brightness  
 Stage: Moving mechanical stage  
 Coarse and fine focusing  
 Turret to hold 4 Objectives  
 Objective change: Manual

### Objectives

Infinity Plan Achromatic 4X  
 Infinity Plan Achromatic 10X  
 Infinity Plan Achromatic 40X  
 Infinity Plan Achromatic 100X  
 Other lenses may be quoted as optional

### Other Requirements

- **3 years comprehensive warranty + 2 years free AMC should be mentioned clearly .**
- Availability of local Service Support and response time for a Service Call during and after warranty to be mentioned. After Sale, service should be available promptly.
- Additional features/accessories if any that can potentially increase the productivity of this instrument should be quoted as optional items