

# Tender Notice

Quotation Reference: SB/QEL/PUR/**KOLKATA**/Instruments/2015

03-Feb-2017

On behalf of the Spices Board, Ministry of Commerce, Govt. of India, Tenders are invited for the supply of following equipment conforming to the specifications and other requirements given in the Annexure-I for the following instruments:

## **1. Instruments for Chemistry and Residue Laboratories**

1. Atomic Absorption Spectrometer	7
2. UV-VIS Spectrophotometer	13
3. UPLC System	16
4. HPLC System	22
5. Centrifuge	28
6. Concentration workstation	33
7. Microwave Digester	37
8. Water Purification System	42
9. Recirculating Chiller	47
10. Balances 5 Digit	53
11. Balances 3 Digit	57
12. Rotary Evaporator	61
13. Muffle Furnace	66
14. LC MS/MS System	70
15. GC MS/MS System	78

## **2. Instruments for Microbiology Laboratory**

1. BOD Incubator	89
2. Bacteriological Incubator	93
3. Stomacher	97
4. Biosafety Cabinets	101
5. Water Bath Serological with stirrer	107
6. Hot Air Oven	111
7. Colony counter	114
8. Binocular Microscope	118
9. Autoclaves	122
10. pH Meter	126

The tenders have to be submitted in accordance with the terms and conditions given in pages 2 -4.

## Terms and Conditions

### (a) Instructions to the Bidder

1. Preparation of Bids : The tenders should be submitted under the two bid system, viz., **Technical bid** and **Financial bid**.
2. Delivery of Tenders: The tender shall be submitted to the designated address either by Speed Post or by Courier, so as to reach our office before the due date and time. The details are mentioned in the Terms and Conditions, attached.
3. Opening of Tenders: The offers/bids will be opened by a Committee duly constituted for this purpose at the specified place, date and time in the presence of such tenderers or their representatives as may choose to attend. The technical bids will be opened first and they will be examined by a Technical Committee, which will decide the suitability as per the specification and requirement. The financial offer bid will be opened only for those offers/bids, which technically meet all the requirements and specifications. The bidders, if interested, may also participate on the tender opening date and time. The participating bidders should produce an Authorization Letter from their companies to participate in the tender opening day. Only one representative per tenderer will be allowed to participate during the opening of tender.
4. Rejection of Tenders: The Spices Board reserves the right to reject any or all of the tenders received without assigning any reason.
5. Terms of Delivery: The quoted instrument(s) and all accessories and supporting instruments should be supplied, and the installation/commissioning of the same should be completed as specified in the Terms and Conditions mentioned. Signed copy of the Terms and Conditions should be submitted along with the Tender.

Secretary  
Spices Board, Kochi-25

### (b) Terms and Conditions of the Tender

Tender should be submitted in the prescribed tender document downloaded from the website [www.indianspices.com](http://www.indianspices.com). The tenders submitted should strictly follow the instructions specified below, failing any of which the tenders would be deemed incomplete and liable for rejection.

1. The last date for the submission of the tender will be at **5:00 pm on 15<sup>th</sup> March 2017** at the following Address:  
The Senior Scientist (QC)  
Sugandha Bhavan, Palarivattom PO,  
Ernakulam, Kerala.  
Email: [sbqelkochi@gmail.com](mailto:sbqelkochi@gmail.com)
2. Tenders received after the due date and time for whatever reasons will not be considered. The offer/bids should be submitted in a manner of two bid system, i.e. [1] Technical Bid and [2] Financial Bid. **Tenders received with both the bids in the same cover shall be summarily rejected.** Tenders for each instrument has to be submitted independently and separately.

#### i. The Technical Bids:

While submitting the technical bid for for any of the instruments in Sections I and II below, the following rules must be followed :

1. The technical bid should consist of all technical details along with commercial terms and conditions.
2. The Technical bid should contain the following documents:
  - Details of the tender, filled in the **Section I** given in the specifications of each instrument.
  - Compliance with technical specifications, filled in the **Section II** given in the specifications of each instrument.
  - In the technical bid, **Section III**, format for entering the financial details, **should be left blank. If financial details are found in the technical bid, the bid will be rejected.**
  - **Declaration of the bidder** as given in the specification of each instrument, duly signed by the authorized signatory, with seal of the company and all required contact details.
  - Technical bids received without filling in Section I and Section II, or without the signed *declaration of the bidder*, will be rejected.
3. All claims of instrument performance as required in the specifications should be substantiated by adequate instrument readouts and data. These should be submitted as hard copy with required explanatory notes.
4. Any technical literature, brochures, specification sheets etc relevant to the quoted model must be included.
5. The Technical Bid **of each instrument** should be submitted separately **in a sealed cover** superscribed "**Technical Bid - (Name of the Instrument), QEL Kolkata, 2014-15**" and addressed to the Sr. Scientist (QC) (See 1 above).

ii. **Financial bid:**

1. Financial bid should indicate item wise price for the items mentioned in Technical Bid. Detailed pricing including all charges for accessories, supporting instruments, items, quoted in Indian Rupees, extended warranty, shipping, insurance, taxes, installation charges etc. should be clearly indicated. Unit rate along with split up para of the item quoted shall be given.
  2. The rates should be indicated clearly both in figures and words. If there is any variation between the rates in figures and in words, the rates given in words will be considered for evaluation. The rates should be firm and valid for 90 days from the date of opening of financial bid. The tenderer should put full signature atleast any scoring off/corrections/or overwritings. The rates quoted should not be subject to any price variation clause.
  3. A summary of the financial bid should be submitted in the format given in **Section III** in the specifications of each instrument. This should be accompanied by the Declaration of the Bidder, as given in the specification of each instrument, duly signed by the authorized signatory, with seal of the company and all required contact details.
  4. *Financial bids received without filling Section III, or without the signed declaration of the bidder, will be rejected.*
  5. The Financial Bid should also be **in a sealed cover** superscribed "**Financial Bid -(Name of the Instrument) QEL Kolkata, 2014-15**" and addressed to the Sr. Scientist (QC) (See 1 above).
- iii. Both the sealed covers viz., Technical and Financial Bids should be put into a bigger cover, along with EMD (See 3 below) and sealed. This cover should be superscribed "**Technical and Financial Bids for (Name of the Instrument) QEL Kolkata, 2014-15**" and addressed to the Sr. Scientist (QC) (See 1 above).
- iv. The tenders will be opened at the Quality Evaluation Laboratory Spices Board, Kochi at **10 AM on 16<sup>th</sup> March 2017** . Only the Technical Bids will be opened on this date. The bidders who qualify in the Technical Bid will be informed of the date of opening of the Financial Bids.

3. **EMD:** (a) The tenderer should submit an EMD equal to 2% of the total quoted price along with the

tender by way of Demand Draft favouring “**Secretary, Spices Board**” and “**payable at Kochi**” from any nationalized bank valid for three months . (b) Bank Guarantee will not be accepted towards EMD. The Technical Bid without EMD would be considered as UNRESPONSIVE and will be rejected unless any category of tenderer is specifically exempted by the Government from payment of EMD for which reasons and proof have to be enclosed. (c) The EMD will be returned without any interest to the unsuccessful bidders after the award of the contract.

4. **Agreement Purchase Order forfeiture of EMD:** EMD will be forfeited if the tenderer
  - i. withdraws his tender or backs out after acceptance
  - ii. fails to remit the performance security
  - iii. violates any of the conditions prescribed in the tender notice
  - iv. revises any of the terms quoted, during the validity period
5. **Performance Security:** The successful bidder has to submit a Performance Security for an amount of 20% of the order value in the form of a **Bank Guarantee** from any nationalized bank and should be valid for 60 days beyond the date of completion of all contractual obligations including warranty obligation, and it will be released after 60 days beyond warranty period.
6. If an Indian Agent is involved, the following documents must be enclosed:
  - i. Foreign principal’s proforma invoice indicating the Commission payable to the Indian Agent and the nature of after sales service to be rendered by the Indian Agent.
  - ii. Copy of the agency agreement with the foreign principal and the precise relationship between them and their mutual interest in the business.
  - iii. The enlistment of the Indian agent with Director General of Supplies & Disposals under the Compulsory Registration Scheme of Ministry of Finance.
7. The offer/bids should be sent only for a machine that is available in the market and supplied to a number of customers. A list of customers in India with details should be furnished with the tenders in Sl.No.IV. Tenders for a prototype machine will not be accepted.
8. Original catalogue (not any photocopy) of the quoted model duly signed by the principals must accompany the tender.
9. In case the Technical Specification for the Instrument calls for Performance Data for the quoted model, the same has to be submitted completely in all respects in a booklet form for ready reference. This data has to be generated using the quoted model, by the bidder’s own application laboratory in India, as a proof of capability to provide application support. In case more than one model is quoted, the performance data for each model should be submitted separately. Generalized application notes or research papers will not be accepted as proof of performance, as these may not comply with the specific requirements of the Instrument. Spices Board reserves the right to witness either the reproduction of the data generated by the bidder’s laboratory or to analyze the required samples / solutions at the bidder’s laboratory in case the need arises.
10. **Delivery Schedule:** The bidder should indicate clearly the time required for delivery of the instrument. In case if there is any deviation in the delivery schedule, liquidated damages clause will be enforced or penalty for the delayed supply period will be levied.
11. **Risk Purchase Clause:** In the event of failure of supply of the item/equipment within the stipulated delivery schedule, the Board reserves the right to purchase the item/equipment from other sources on total risk of the supplier under Risk Purchase Clause.
12. **Payment:** No Advance payment will be made for purchase of items manufactured in India. For

these items, payment shall be made only after satisfactory installation is agreed to wherever the installation is involved.

13. **Warranty/Guarantee:** The offer should clearly specify five years warranty including all the spares/accessories and consumables required for the smooth and continuous functioning of the equipment as given in the section II of specifications for each equipment.
14. **User's List:** The offer should include a detailed list of users as required in the specifications of each equipment.
15. **Late offer:** The offers received after the due date and time will not be considered.
16. **Acceptance and Rejection:** Spices Board reserves the right to accept whole or any part of any tender or portion of the quantity offered or reject it in full without assigning any reason.
17. **Disputes and Jurisdiction:** Any legal disputes arising out of any breach of contract pertaining to this tender shall be settled in the court of competent jurisdiction located within the city of Ernakulam, Kochi.
18. The tenderer must sign and affix seal on every page of the tender document and furnish a certificate acknowledgement as shown below:

**(c) Acknowledgement by the Tenderer**

It is hereby acknowledged that we have gone through all the conditions mentioned above and we agree to abide by them.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

## **Part I**

### **Instruments for Chemistry and Residue Laboratories**

# Atomic Absorption Spectrophotometer

## Technical Specifications

(To be submitted by the Bidder)

Quotation Reference: SB/QEL/PUR/**Kolkata**/Instruments/14 dated 3-2-2017

### Location of Supply and Installation:

The Instrument(s) will be required to be delivered and installed at the following locations:

Spices Board Quality Evaluation Laboratory  
C/o Project Site, District Headquarter of South 24, Paraganas at Baruipur,  
JL No. 48, LR Khatian No. 1311, Mouza-Chakarbar,  
PO&PS Baruipur District South 24-Paraganas  
West Bengal 700144

*The technical bid is to be submitted by filing in Section I and II, duly signed by the authorized signatory in the 'Declaration of the Bidder'. Section III is to be left blank. incompleteness in filling up this form or failure to attach the required supporting data or documents, may result in rejection of the quotation.*

### Section I: Details of the Quotation

Quotation Submitted By	
Quotation Reference No.	
Date of submission of quotation	
Details of EMD submitted (if any)	
Full Address	
Name of principal supplier (if not self)	
Authorized contact person	
Designation	
Contact details	
List of supporting documents submitted along with the quotation	

## Section II: Compliance with Technical Specifications

### Atomic Absorption Spectrometer

*Against each point in the technical specification, compliance must be marked as YES / NO*

	Required Specification	Complying (Yes/No)	Remarks	Documentary Evidence Enclosed?
<b>AAS</b>				
1	Operation in the wavelength range 190 - 800nm or better			
2	Integrated flame and graphite furnace instrument, with software controlled changeover of atomizer between the two facilities.			
3	Appropriate Background Correction for flame and graphite furnace			
4	Real time, double beam optical system, with simultaneous measurement of both sample and reference beams			
5	Background correction of at least 3.5 Absorbance			
6	Flame mode performance guarantee (please specify absorbance for 5ppm Cu solution)			
7	Lamp holder with facility for mounting at least 6 Hollow Cathode Lamps			
8	Software controlled lamp selection, alignment and energy optimization			
9	All Titanium burner head, with software controlled highprecision, reproducible burner adjustments			
10	Corrosion resistant nebuliser, capable of handling strong acids.			
11	PMT, Solid State Detector, or any other comparable detector with high sensitivity			
12	Complete control and monitoring of gas flows through software, with automatic gas flow adjustments during oxidant changeover			
13	Safety facilities safe shutdown in the case of sudden loss of air pressure.			
14	Flame and Graphite Furnace autosamplers, with facility for at least 100 samples, sample delivery up to 50ul, increment of 0.1ul and complete control through software.			
15	Lamps for the following elements. Wherever possible EDL lamps may be quoted, HCLs may be quoted where EDLs are not available. Please provide the type of lamps for each element in the quotation.			
	Lead			
	Chromium			



	Cadmium			
	Copper			
	Iron			
	Nickel			
	Mercury			
	Arsenic			
	Molybdenum			
	Zinc			
	Magnesium			
	Manganese			
	Nickel			
16	Hydride generation system for Hg and As, with all required accessories			
17	Recirculating chiller for coolant water circulation in graphite furnace mode			
18	Windows - based software with complete system control, facilities for method and data storage, calculations, reporting with custom report designer, and data processing.			
<b>Gas Supply System</b>				
1	A gas purification system, with filters capable of supplying all gases of required purity to the AAS system, should be quoted.			
2	One spare each of all installed filters in the purification system should be quoted.			
3	Two cylinder each of all required gases for operation of the system, including high purity Acetylene, Argon and Nitrous Oxide, to be quoted from local sources for supply at the installation site			
4	Regulators (Two each) for each required gas as above to be quoted.			
5	Air compressor for flame mode should be noiseless and portable.			
<b>Computer and Printer</b>				
1	Latest model computer with DVD writer and laser printer compatible with software to be quoted.			
<b>Accessories</b>				
1	A system for exhaust for the AAS with hood for flame mode, inclusive of installation charges, to be quoted.			
<b>UPS</b>				
1	A suitable UPS System of appropriate capacity (minimum 15 KVA) with tubular batteries, capable of providing a backup time of minimum 4 hours, and capable of withstanding the initial surge current during starting up of the graphite furnace, should be quoted.			
<b>Additional Terms and Conditions</b>				

1	A complete compliance statement (this sheet filled in), stating the status of compliance with each point in the technical specification, should necessarily accompany the quotation.			
2	A minimum of <b>15 users</b> of the quoted model in India should be available. The list of these users, with full details of contact persons, addresses, telephone, mobile and email should be provided in table form.			

#### **Comprehensive Warranty**

1	The warranty period should be 5 Years. All breakdown of the instrument should be addressed within 24 hours by an onsite visit.			
2	All parts of the instrument, accessories and supporting instruments should be covered under the warranty. If any accessory / spare part / consumable is not covered under the comprehensive warranty, then the itemised list of such items, including their prices during the period 2014-15 and average lifetime of the items should be provided.			
3	The equipment should be installed at the proposed site, demonstrate the required objective of the test with the claimed limit of detection/quantification with the sample provided.			
4	Training should be given to the staff at the site, for the operation of the instrument on demand			
5	Any accessory system(s) other than those mentioned in the technical specifications, that are required for satisfactory installation of the system should be quoted and supplied with the instrument.			
6	Agency commission: Agency commission if any will be paid to the Indian agent in rupees on receipt of the equipment and after satisfactory installation.			
7	Agency commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in tender even in case of Nil commission. The tender should indicate the percentage of Agency commission to be paid to the Indian agent.			

#### **Declaration by the Bidder**

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

Please see section III below for financial bid. **Section III is not to be filled in the Technical Bid.**

**Section III: Financial Bid**  
**Atomic Absorption Spectrometer**

This sheet is to be attached as a covering sheet along with the formal technical bid of the quoted instrument. In case more than one instrument / model is quoted, separate sheets have to be attached with each quotation.

Financial Summary for the Instrument model : \_\_\_\_\_

Price Description		Price	Comments (if any)
Quoted Currency			
Total Instrument Cost	[a]		
Total cost of Supporting Instruments	[b]		
Comprehensive Warranty Charges	[c]		
Any other charges	[d]		
CIF Kolkata, Gujarat [a] + [b] + [c] + [d] =	[e]		
Conversion Factor to INR*	[f]		
Total Price in INR [e] x [f] =	[g]		
**Toal cost of Items quoted in INR =	[h]		
Final Price in INR = g + h =	[i]		

\* Use the conversion factor as on the date prior to the date of submission of the quotation and mention this date clearly.

\*\* Give full list of items quoted in Indian Rupees separately.

**Declaration by the Bidder**

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

# UV-VIS Spectrophotometer

## Technical Specifications

(To be submitted by the Bidder)

Quotation Reference: SB/QEL/PUR/**Kolkata**/Instruments/14 dated 3-2-2017

### Location of Supply and Installation:

The Instrument(s) will be required to be delivered and installed at the following locations:

Spices Board Quality Evaluation Laboratory  
C/o Project Site, District Headquarter of South 24, Paraganas at Baruipur,  
JL No. 48, LR Khatian No. 1311, Mouza-Chakarbar,  
PO&PS Baruipur District South 24-Paraganas  
West Bengal 700144

*The technical bid is to be submitted by filing in Section I and II, duly signed by the authorized signatory in the 'Declaration of the Bidder'. Section III is to be left blank. incompleteness in filling up this form or failure to attach the required supporting data or documents, may result in rejection of the quotation.*

### Section I: Details of the Quotation

Quotation Submitted By	
Quotation Reference No.	
Date of submission of quotation	
Details of EMD submitted (if any)	
Full Address	
Name of principal supplier (if not self)	
Authorized contact person	
Designation	
Contact details	
List of supporting documents submitted along with the quotation	

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## Section II: Compliance with Technical Specifications

### UV-VIS Spectrophotometer

**Against each point in the technical specification, compliance must be marked as YES / NO**

	Required Specification	Complying (Yes/No)	Remarks	Documentary Evidence Enclosed?
<b>UV-Vis Spectrophotometer</b>				
1	Double beam spectrometer with concave holographic grating with 1050 lines / mm or more. Half-silvered mirror beam splitter.			
2	Pre-aligned D2 and W halogen lamps with automatic source change			
3	Silicon Photodiode detector			
4	Wavelength range 190- 1100nm			
5	Spectral band pass 2nm			
6	Stray light 0.05% or less			
7	Wavelength accuracy +/- 0.4nm			
8	Wavelength setting reproducibility +/- 0.2nm			
9	Photometric modes- Absorbance, Concentration, %Transmittance, Single Beam			
10	Baseline flatness with slit width 1nm must be +/- 0.001A			
11	Photometric repeatability +/- 0.001A at 1A			
12	Stability - must be minimum 0.00015 A/h (at 500nm, 2 s response) or better			
<b>Software</b>				
1	Windows based software capable of instrument control, spectral data recording, processing and reporting.			
2	Operating modes scan, fixed wavelength measurement, wavelength program calibration, concentration measurements, etc.			
<b>Computer and Printer</b>				
1	Latest model computer with DVD writer and laser printer compatible with software to be quoted.			
<b>Accessories</b>				
2	Quartz cuvette 10mm path length - 3 pairs. The item is to be supplied along with the instrument.			
<b>Additional Terms and Conditions</b>				
1	A complete compliance statement (this sheet filled in), stating the status of compliance with each point in the technical specification, should necessarily accompany the quotation.			

2	A minimum of <b>15 users</b> of the quoted model in India should be available. The list of these users, with full details of contact persons, addresses, telephone, mobile and email should be provided in table form.			
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**Comprehensive Warranty**

1	The warranty period should be 5 Years. All breakdown of the instrument should be addressed within 24 hours by an onsite visit.			
2	All parts of the instrument, accessories and supporting instruments should be covered under the warranty. If any accessory / spare part / consumable is not covered under the comprehensive warranty, then the itemised list of such items, including their prices during the period 2014-15 and average lifetime of the items should be provided.			
3	The equipment should be installed at the proposed site, demonstrate the required objective of the test with the claimed limit of detection/quantification with the sample provided.			
4	Training should be given to the staff at the site, for the operation of the instrument on demand			
5	Any accessory system(s) other than those mentioned in the technical specifications, that are required for satisfactory installation of the system should be quoted and supplied with the instrument.			
6	Agency commission: Agency commission if any will be paid to the Indian agent in rupees on receipt of the equipment and after satisfactory installation.			
7	Agency commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in tender even in case of Nil commission. The tender should indicate the percentage of Agency commission to be paid to the Indian agent.			

**Declaration by the Bidder**

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

Please see section III below for financial bid. **Section III is not to be filled in the Technical Bid.**

**Section III: Financial Bid**  
**UV -VIS Spectrophotometer**

This sheet is to be attached as a covering sheet along with the formal technical bid of the quoted instrument. In case more than one instrument / model is quoted, separate sheets have to be attached with each quotation.

Financial Summary for the Instrument model : \_\_\_\_\_

Price Description		Price	Comments (if any)
Quoted Currency			
Total Instrument Cost	[a]		
Total cost of Supporting Instruments	[b]		
Comprehensive Warranty Charges	[c]		
Any other charges	[d]		
CIF Kolkata, Gujarat [a] + [b] + [c] + [d] =	[e]		
Conversion Factor to INR*	[f]		
Total Price in INR [e] x [f] =	[g]		
**Toal cost of Items quoted in INR =	[h]		
Final Price in INR = g + h =	[i]		

\* Use the conversion factor as on the date prior to the date of submission of the quotation and mention this date clearly.

\*\* Give full list of items quoted in Indian Rupees separately.

**Declaration by the Bidder**

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

# UPLC System

## Technical Specifications

(To be submitted by the Bidder)

Quotation Reference: SB/QEL/PUR/[Kolkata](#)/Instruments/14 dated 3-2-2017

### Location of Supply and Installation:

The Instrument(s) will be required to be delivered and installed at the following locations:

Spices Board Quality Evaluation Laboratory C/o Project Site, District Headquarter of South 24, Paraganas at Baruipur, JL No. 48, LR Khatian No. 1311, Mouza-Chakarbar, PO&PS Baruipur District South 24-Paraganas West Bengal 700144
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*The technical bid is to be submitted by filing in Section I and II, duly signed by the authorized signatory in the 'Declaration of the Bidder'. Section III is to be left blank. incompleteness in filling up this form or failure to attach the required supporting data or documents, may result in rejection of the quotation.*

### Section I: Details of the Quotation

Quotation Submitted By	
Quotation Reference No.	
Date of submission of quotation	
Details of EMD submitted (if any)	
Full Address	
Name of principal supplier (if not self)	
Authorized contact person	
Designation	
Contact details	
List of supporting documents submitted along with the quotation	



## Section II: Compliance with Technical Specifications

### UPLC System

**Against each point in the technical specification, compliance must be marked as YES / NO**

	Required Specification	Complying (Yes/No)	Remarks	Documentary Evidence Enclosed?
	<b>Pump</b>			
1	Number of solvents: Up to four			
2	Composition accuracy: +/- 0.5% , composition precision at least 0.15% RSD			
3	Suitable for nano, micro and semi-micro separations			
4	Flowrate setting: 0.001ml/min to 10.00ml/min			
5	Resolution : 3 nanoliter per step			
6	Flowrate accuracy: 1% minimum			
7	Flowrate precision Maximum 0.075% RSD			
8	Gradient curve selections			
9	Maximum operation pressure 15,000 PSI			
10	Pulsation 0.1 MPa			
11	Safety functions like leak sensor, High pressure and low pressure limits			
	<b>Autosampler</b>			
1	Automated operation and controllable through Software			
2	Total volume sample injection, variable injection volume			
3	Injection volume setting range 0.1ul to 100ul			
4	Vials capacity at least 1.5ml			
5	Number of vials - at least 100			
6	Injection volume accuracy - 0.1% error maximum			
7	Injection volume precision - 0.3% RSD maximum, for 10ul injection			
8	cross-contamination limit - 0.005% maximum			
9	Number of repeat injections - 30 / sample			
10	Operating pH range 1 - 14			
11	Rinsing needle - settable through software, before and after injection			
12	Operating temperatuer range 4 - 35 C			
	<b>Degasser</b>			
1	Online membrane type degasser			

2	Minimum 4 lines - 4 mobile phases, inbuilt facility for autosampler rinsing			
3	degassed flowline capacity 380ul			
	Column Oven			
1	Temperature control from 4 - 85C			
2	Temperature control precision 0.1C max			
3	Controllable through MS/MS software			
4	Storage capacity - minimum 3 columns			
5	Safety functions like leak sensor, high temperature cut-off			
	<b>Columns</b>			
1	The following high resolution, end capped columns to be quoted:			
	UPLC Columns:			
	C-18 5cm x 2.1mm x 1.7um - 5 Nos.			
	C-8 5cm x 2.1mm x 1.7um - 5 Nos.			
	UPLC Guard Column c18 - 15 Nos			
	UPLC Guard columns c8 - 15 Nos.			
	Normal HPLC Columns:			
	C-18 5cm x 4.6mm x 5um - 2 Nos.			
	C-18 10cm x 4.6mm x 5um - 2 Nos.			
	C-18 25cm x 4.6mm x 5um - 1 Nos.			
	C-8 10cm x 4.6mm x 5um - 2 Nos.			
	C-8 25cm x 4.6mm x 5um - 1 Nos.			
	C-18 Guard Columns - 15 Nos			
	C-8 Guard Columns - 10 Nos.			
	<b>Diode Array Detector</b>			
1	Light source - D2 and/or W lamps			
2	Number of Diode elements - minimum 512			
3	Wavelength range 190nm - 800nm			
4	Bandwidth 1.2nm			
5	Slit width 8 nm			
6	l precision : 1 nm			
7	l accuracy : 0.1 nm			
8	Should support Contour plot, Peak Purity, Spectrum Library features			
	<b>Fluorescence Detector</b>			
1	Light source: Xenon lamp			
2	Wavelength range - 200nm 650nm			
3	Dual wavelength simultaneous monitoring			
4	Spectral bandwidth 20nm			
5	Wavelength accuracy +/- 0.2nm			

<b>Software</b>				
1	The software should be capable of controlling all parts of the HPLC system.			
2	Multi-system capable. Licences required for adding additional systems/modules should be installed.			
3	Capable of acquiring data from a minimum of 4 channels from the LC System.			
4	Easy data processing, system suitability tests			
5	Full-fledged reporting facility with customized report designers should be available.			
6	Method development features in software will be desirable			
<b>Computer and Printer</b>				
1	Latest model computer with DVD writer and laser printer compatible with software to be quoted.			
	Accessories			
1	All required standards of calibration standards for the HPLC detectors, and any other material required to make the instrument functional should be provided			
2	Pack of 100 vials, complete with septa and cap, should be included			
3	One each of spare Xenon and D2 lamps should be provided			
4	Spare Solvent filters (0.25 micron), 10 Nos, and Spare Autosampler Syringe, 1 No, of the same type supplied with the system.			
<b>Additional Terms and Conditions</b>				
1	A complete compliance statement (this sheet filled in), stating the status of compliance with each point in the technical specification, should necessarily accompany the quotation.			
2	A minimum of <b>15 users</b> of the quoted model in India should be available. The list of these users, with full details of contact persons, addresses, telephone, mobile and email should be provided in table form.			

### **Comprehensive Warranty**

1	The warranty period should be 5 Years. All breakdown of the instrument should be addressed within 24 hours by an onsite visit.			
2	All parts of the instrument, accessories and supporting instruments should be covered under the warranty. If any accessory / spare part / consumable is not covered under the comprehensive warranty, then the itemised list of such items, including their prices during the period 2014-15 and average lifetime of the items should be provided.			
3	The equipment should be installed at the proposed site, demonstrate the required objective of the test with the claimed limit of detection/quantification with the sample provided.			
4	Training should be given to the staff at the site, for the			

	operation of the instrument on demand			
5	Any accessory system(s) other than those mentioned in the technical specifications, that are required for satisfactory installation of the system should be quoted and supplied with the instrument.			
6	Agency commission: Agency commission if any will be paid to the Indian agent in rupees on receipt of the equipment and after satisfactory installation.			
7	Agency commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in tender even in case of Nil commission. The tender should indicate the percentage of Agency commission to be paid to the Indian agent.			

***Declaration by the Bidder***

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

Please see section III below for financial bid. **Section III is not to be filled in the Technical Bid.**

**Section III: Financial Bid**  
**UPLC System**

This sheet is to be attached as a covering sheet along with the formal technical bid of the quoted instrument. In case more than one instrument / model is quoted, separate sheets have to be attached with each quotation.

Financial Summary for the Instrument model : \_\_\_\_\_

Price Description		Price	Comments (if any)
Quoted Currency			
Total Instrument Cost	[a]		
Total cost of Supporting Instruments	[b]		
Comprehensive Warranty Charges	[c]		
Any other charges	[d]		
CIF Kolkata, Gujarat [a] + [b] + [c] + [d] =	[e]		
Conversion Factor to INR*	[f]		
Total Price in INR [e] x [f] =	[g]		
**Toal cost of Items quoted in INR =	[h]		
Final Price in INR = g + h =	[i]		

\* Use the conversion factor as on the date prior to the date of submission of the quotation and mention this date clearly.

\*\* Give full list of items quoted in Indian Rupees separately.

**Declaration by the Bidder**

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

## HPLC System

### Technical Specifications

(To be submitted by the Bidder)

Quotation Reference: SB/QEL/PUR/[Kolkata](#)/Instruments/14 dated 3-2-2017

**Location of Supply and Installation:**

The Instrument(s) will be required to be delivered and installed at the following locations:

Spices Board Quality Evaluation Laboratory  
C/o Project Site, District Headquarter of South 24, Paraganas at Baruipur,  
JL No. 48, LR Khatian No. 1311, Mouza-Chakarbar,  
PO&PS Baruipur District South 24-Paraganas  
West Bengal 700144

*The technical bid is to be submitted by filing in Section I and II, duly signed by the authorized signatory in the 'Declaration of the Bidder'. Section III is to be left blank. incompleteness in filling up this form or failure to attach the required supporting data or documents, may result in rejection of the quotation.*

### Section I: Details of the Quotation

Quotation Submitted By	
Quotation Reference No.	
Date of submission of quotation	
Details of EMD submitted (if any)	
Full Address	
Name of principal supplier (if not self)	
Authorized contact person	
Designation	
Contact details	
List of supporting documents submitted along with the quotation	

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## Section II: Compliance with Technical Specifications

### HPLC System

**Against each point in the technical specification, compliance must be marked as YES / NO**

	Required Specification	Complying (Yes/No)	Remarks	Documentary Evidence Enclosed?
	<b>Pump</b>			
1	Number of solvents: Up to four			
2	Composition accuracy: +/- 0.5% , composition precision at least 0.15% RSD			
3	Suitable for nano, micro and semi-micro separations			
4	Flowrate setting: 0.001ml/min to 10.00ml/min			
5	Resolution : 3 nanoliter per step			
6	Flowrate accuracy: 1% minimum			
7	Flowrate precision Maximum 0.075% RSD			
8	Gradient curve selections			
9	Maximum operation pressure at least 5000 PSI			
10	Pulsation 0.1 MPa			
11	Safety functions like leak sensor, High pressure and low pressure limits			
	<b>Autosampler</b>			
1	Automated operation and controllable through Software			
2	Total volume sample injection, variable injection volume			
3	Injection volume setting range 0.1ul to 100ul			
4	Vials capacity at least 1.5ml			
5	Number of vials - at least 100			
6	Injection volume accuracy - 0.1% error maximum			
7	Injection volume precision - 0.3% RSD maximum, for 10ul injection			
8	cross-contamination limit - 0.005% maximum			
9	Number of repeat injections - 30 / sample			
10	Operating pH range 1 - 14			
11	Rinsing needle - settable through software, before and after injection			
12	Operating temperatuer range 4 - 35 C			
	<b>Degasser</b>			

1	Online membrane type degasser			
2	Minimum 4 lines - 4 mobile phases, inbuilt facility for autosampler rinsing			
3	degassed flowline capacity 380ul			
	Column Oven			
1	Temperature control from 4 - 85C			
2	Temperature control precision 0.1C max			
3	Controllable through MS/MS software			
4	Storage capacity - minimum 3 columns			
5	Safety functions like leak sensor, high temperature cut-off			
	<b>Columns</b>			
1	The following high resolution, end capped columns to be quoted:			
	HPLC Columns:			
	C-18 5cm x 2.1mm x 1.7um - 5 Nos.			
	C-8 5cm x 2.1mm x 1.7um - 5 Nos.			
	HPLC Guard Column c18 - 15 Nos			
	HPLC Guard columns c8 - 15 Nos.			
	Normal HPLC Columns:			
	C-18 5cm x 4.6mm x 5um - 2 Nos.			
	C-18 10cm x 4.6mm x 5um - 2 Nos.			
	C-18 25cm x 4.6mm x 5um - 1 Nos.			
	C-8 10cm x 4.6mm x 5um - 2 Nos.			
	C-8 25cm x 4.6mm x 5um - 1 Nos.			
	C-18 Guard Columns - 15 Nos			
	C-8 Guard Columns - 10 Nos.			
	<b>Diode Array Detector</b>			
1	Light source - D2 and/or W lamps			
2	Number of Diode elements - minimum 512			
3	Wavelength range 190nm - 800nm			
4	Bandwidth 1.2nm			
5	Slit width 8 nm			
6	l precision : 1 nm			
7	l accuracy : 0.1 nm			
8	Should support Contour plot, Peak Purity, Spectrum Library features			
	<b>Fluorescence Detector</b>			
1	Light source: Xenon lamp			
2	Wavelength range - 200nm 650nm			
3	Dual wavelength simultaneous monitoring			
4	Spectral bandwidth 20nm			



5	Wavelength accuracy +/- 0.2nm			
<b>Software</b>				
1	The software should be capable of controlling all parts of the HPLC system.			
2	Multi-system capable. Licences required for adding additional systems/modules should be installed.			
3	Capable of acquiring data from a minimum of 4 channels from the LC System.			
4	Easy data processing, system suitability tests			
5	Full-fledged reporting facility with customized report designers should be available.			
6	Method development features in software will be desirable			
<b>Computer and Printer</b>				
1	Latest model computer with DVD writer and laser printer compatible with software to be quoted.			
	Accessories			
1	All required standards of calibration standards for the HPLC detectors, and any other material required to make the instrument functional should be provided			
2	Pack of 100 vials, complete with septa and cap, should be included			
3	One each of spare Xenon and D2 lamps should be provided			
4	Spare Solvent filters (0.25 micron), 10 Nos, and Spare Autosampler Syringe, 1 No, of the same type supplied with the system.			
<b>Additional Terms and Conditions</b>				
1	A complete compliance statement (this sheet filled in), stating the status of compliance with each point in the technical specification, should necessarily accompany the quotation.			
2	A minimum of <b>15 users</b> of the quoted model in India should be available. The list of these users, with full details of contact persons, addresses, telephone, mobile and email should be provided in table form.			

### Comprehensive Warranty

1	The warranty period should be 5 Years. All breakdown of the instrument should be addressed within 24 hours by an onsite visit.			
2	All parts of the instrument, accessories and supporting instruments should be covered under the warranty. If any accessory / spare part / consumable is not covered under the comprehensive warranty, then the itemised list of such items, including their prices during the period 2014-15 and average lifetime of the items should be provided.			
3	The equipment should be installed at the proposed site, demonstrate the required objective of the test with the claimed limit of detection/quantification with the sample provided.			

4	Training should be given to the staff at the site, for the operation of the instrument on demand			
5	Any accessory system(s) other than those mentioned in the technical specifications, that are required for satisfactory installation of the system should be quoted and supplied with the instrument.			
6	Agency commission: Agency commission if any will be paid to the Indian agent in rupees on receipt of the equipment and after satisfactory installation.			
7	Agency commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in tender even in case of Nil commission. The tender should indicate the percentage of Agency commission to be paid to the Indian agent.			

***Declaration by the Bidder***

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

Please see section III below for financial bid. **Section III is not to be filled in the Technical Bid.**

**Section III: Financial Bid**  
**HPLC System**

This sheet is to be attached as a covering sheet along with the formal technical bid of the quoted instrument. In case more than one instrument / model is quoted, separate sheets have to be attached with each quotation.

Financial Summary for the Instrument model : \_\_\_\_\_

Price Description		Price	Comments (if any)
Quoted Currency			
Total Instrument Cost	[a]		
Total cost of Supporting Instruments	[b]		
Comprehensive Warranty Charges	[c]		
Any other charges	[d]		
CIF Kolkata, Gujarat [a] + [b] + [c] + [d] =	[e]		
Conversion Factor to INR*	[f]		
Total Price in INR [e] x [f] =	[g]		
**Toal cost of Items quoted in INR =	[h]		
Final Price in INR = g + h =	[i]		

\* Use the conversion factor as on the date prior to the date of submission of the quotation and mention this date clearly.

\*\* Give full list of items quoted in Indian Rupees separately.

**Declaration by the Bidder**

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

## Centrifuge

### Technical Specifications

(To be submitted by the Bidder)

Quotation Reference: SB/QEL/PUR/**Kolkata**/Instruments/14 dated 3-2-2017

#### Location of Supply and Installation:

The Instrument(s) will be required to be delivered and installed at the following locations:

Spices Board Quality Evaluation Laboratory  
C/o Project Site, District Headquarter of South 24, Paraganas at Baruipur,  
JL No. 48, LR Khatian No. 1311, Mouza-Chakarbar,  
PO&PS Baruipur District South 24-Paraganas  
West Bengal 700144

*The technical bid is to be submitted by filing in Section I and II, duly signed by the authorized signatory in the 'Declaration of the Bidder'. Section III is to be left blank. incompleteness in filling up this form or failure to attach the required supporting data or documents, may result in rejection of the quotation.*

### Section I: Details of the Quotation

Quotation Submitted By	
Quotation Reference No.	
Date of submission of quotation	
Details of EMD submitted (if any)	
Full Address	
Name of principal supplier (if not self)	
Authorized contact person	
Designation	
Contact details	
List of supporting documents submitted along with the quotation	

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## Section II: Compliance with Technical Specifications

### Centrifuge

**Against each point** in the technical specification, compliance must be marked as **YES / NO**

	Required Specification	Complying (Yes/No)	Remarks	Documentary Evidence Enclosed?
	A high quality refrigerated table-top centrifuge meeting high and low speed centrifugation requirements in quality control laboratories should be quoted.			
1	The system should have microprocessor control for accurate and reliable centrifugation			
2	System should have ergonomic design, and should be easily portable, compact and stable			
3	Digital displays for speed (rpm / rcf), acceleration and braking rates			
4	Easy setting of parameters / programs through a push button interface			
5	Maintenance free brushless induction motor			
<b>Technical Requirements</b>				
6	Swingout and angle modes of operation			
7	Maximum speed 14000 rpm			
8	Speed set steps of 10rpm maximum			
9	Speed control accuracy +/- 20 rpm			
10	Timer 1-99 minutes, with holding time setting			
11	Timer set step 1 min			
12	Programmable methods, saving of minimum 5 methods			
13	Temperature range -9° to 40° C			
14	Temperature set step 1° C			
15	Temperature ramping at least 4°C at max speed			
16	Acceleration / Braking rates : 5 / 5			
Safety Systems				
17	Stainless steel chamber			
18	Electronic imbalance detection			
19	Locking of lid while in operation			
20	Motor over temperature protection			
21	Rotor overspeed protection			

22	Diagnostic system for possible errors, and display of errors			
<b>Accessories</b>				
23	Rotor arms for low and high speed centrifugation as required by the system should be quoted			
24	The rotor accessories for loading tubes of the following volumes should be quoted in required numbers			
25	100ml tubes			
26	50ml tubes			
27	15ml tubes			
28	5ml tubes			
29	Required number of tubes for each volume above should be quoted in required numbers.			
<b>Additional Terms and Conditions</b>				
30	A complete compliance statement (this sheet filled in), stating the status of compliance with each point in the technical specification, should necessarily accompany the quotation.			
31	A minimum of 10 users of the quoted model in India should be available. The list of these users, with full details of contact persons, addresses, telephone, mobile and email should be provided in table form.			

### Comprehensive Warranty

1	The warranty period should be 5 Years. All breakdown of the instrument should be addressed within 24 hours by an onsite visit.			
2	All parts of the instrument, accessories and supporting instruments should be covered under the warranty. If any accessory / spare part / consumable is not covered under the comprehensive warranty, then the itemised list of such items, including their prices during the period 2014-15 and average lifetime of the items should be provided.			
3	The equipment should be installed at the proposed site, demonstrate the required objective of the test with the claimed limit of detection/quantification with the sample provided.			
4	Training should be given to the staff at the site, for the operation of the instrument on demand			
5	Any accessory system(s) other than those mentioned in the technical specifications, that are required for satisfactory installation of the system should be quoted and supplied with the instrument.			
6	Agency commission: Agency commission if any will be paid to the Indian agent in rupees on receipt of the equipment and after satisfactory installation.			
7	Agency commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in tender even in case of Nil commission. The tender should indicate the percentage of Agency			

	commission to be paid to the Indian agent.			
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***Declaration by the Bidder***

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

Please see section III below for financial bid. **Section III is not to be filled in the Technical Bid.**

### **Section III: Financial Bid**

#### **Centrifuge**

This sheet is to be attached as a covering sheet along with the formal technical bid of the quoted instrument. In case more than one instrument / model is quoted, separate sheets have to be attached with each quotation.

Financial Summary for the Instrument model : \_\_\_\_\_

Price Description		Price	Comments (if any)
Quoted Currency			
Total Instrument Cost	[a]		
Total cost of Supporting Instruments	[b]		
Comprehensive Warranty Charges	[c]		
Any other charges	[d]		
CIF Kolkata, Gujarat [a] + [b] + [c] + [d] =	[e]		
Conversion Factor to INR*	[f]		
Total Price in INR [e] x [f] =	[g]		
**Toal cost of Items quoted in INR =	[h]		
Final Price in INR = g + h =	[i]		

\* Use the conversion factor as on the date prior to the date of submission of the quotation and mention this date clearly.

\*\* Give full list of items quoted in Indian Rupees separately.

#### **Declaration by the Bidder**

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE



## Concentration Workstation

### Technical Specifications

(To be submitted by the Bidder)

Quotation Reference: SB/QEL/PUR/**Kolkata**/Instruments/14 dated 3-2-2017

#### Location of Supply and Installation:

The Instrument(s) will be required to be delivered and installed at the following locations:

Spices Board Quality Evaluation Laboratory  
C/o Project Site, District Headquarter of South 24, Paraganas at Baruipur,  
JL No. 48, LR Khatian No. 1311, Mouza-Chakarbar,  
PO&PS Baruipur District South 24-Paraganas  
West Bengal 700144

*The technical bid is to be submitted by filing in Section I and II, duly signed by the authorized signatory in the 'Declaration of the Bidder'. Section III is to be left blank. incompleteness in filling up this form or failure to attach the required supporting data or documents, may result in rejection of the quotation.*

### Section I: Details of the Quotation

Quotation Submitted By	
Quotation Reference No.	
Date of submission of quotation	
Details of EMD submitted (if any)	
Full Address	
Name of principal supplier (if not self)	
Authorized contact person	
Designation	
Contact details	
List of supporting documents submitted along with the quotation	

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## Section II: Compliance with Technical Specifications

### Concentration Workstation

*Against each point in the technical specification, compliance must be marked as YES / NO*

	Required Specification	Complying (Yes/No)	Remarks	Documentary Evidence Enclosed?
1	A high quality, durable nitrogen based bench top evaporation workstation should be quoted, with the following features:			
2	At least 50 nozzles for appropriate numbers of sample loading			
3	Volume ranges should be 1ml to 30ml			
4	Digital display of parameters: At least temperature, time and nitrogen pressure			
5	Bath temperature with range from ambient to 99°C with temperature accuracy of at least +/- 3C and resolution of +/- 1C should be available			
6	Timer range 1min - 99 min at least. Timer accuracy should be 0.1%			
7	Settable pressure ranges from 0 to 30PSI with precise pressure control			
8	The system should have a push button based interface for entering / setting parameters			
9	Facility to connect to a computer or printer for printing out records is desirable.			
10	The system should be able to handle / evaporate solvents like water, acetone, acetonitrile, ethyl acetate, hexane, methanol, methylene chloride and toluene.			
11	The system should have CE certification.			
12	<b>Accessories</b>			
13	The evaporation tubes and racks for the following volumes should be quoted: 30ml, 10ml and 4ml. If the above volumes are not available exactly, the nearest volumes should be quoted. Facility for easy changing of racks for different volumes should be available.			
14	One nitrogen cylinder of required purity, along with regulators, tubes and any other accessory needed to connect the cylinder to the system, should be quoted from sources at the site where the instrument is to be installed.			
15	<b>Additional Terms and Conditions</b>			

16	A complete compliance statement (this sheet filled in), stating the status of compliance with each point in the technical specification, should necessarily accompany the quotation.			
17	A minimum of 5 users of the quoted model in India should be available. The list of these users, with full details of contact persons, addresses, telephone, mobile and email should be provided in table form.			

### **Comprehensive Warranty**

1	The warranty period should be 5 Years. All breakdown of the instrument should be addressed within 24 hours by an onsite visit.			
2	All parts of the instrument, accessories and supporting instruments should be covered under the warranty. If any accessory / spare part / consumable is not covered under the comprehensive warranty, then the itemised list of such items, including their prices during the period 2014-15 and average lifetime of the items should be provided.			
3	The equipment should be installed at the proposed site, demonstrate the required objective of the test with the claimed limit of detection/quantification with the sample provided.			
4	Training should be given to the staff at the site, for the operation of the instrument on demand			
5	Any accessory system(s) other than those mentioned in the technical specifications, that are required for satisfactory installation of the system should be quoted and supplied with the instrument.			
6	Agency commission: Agency commission if any will be paid to the Indian agent in rupees on receipt of the equipment and after satisfactory installation.			
7	Agency commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in tender even in case of Nil commission. The tender should indicate the percentage of Agency commission to be paid to the Indian agent.			

### **Declaration by the Bidder**

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

Please see section III below for financial bid. **Section III is not to be filled in the Technical Bid.**

### **Section III: Financial Bid Concentration Workstation**

This sheet is to be attached as a covering sheet along with the formal technical bid of the quoted instrument. In case more than one instrument / model is quoted, separate sheets have to be attached with each quotation.

Financial Summary for the Instrument model : \_\_\_\_\_

Price Description		Price	Comments (if any)
Quoted Currency			
Total Instrument Cost	[a]		
Total cost of Supporting Instruments	[b]		
Comprehensive Warranty Charges	[c]		
Any other charges	[d]		
CIF Kolkata, Gujarat [a] + [b] + [c] + [d] =	[e]		
Conversion Factor to INR*	[f]		
Total Price in INR [e] x [f] =	[g]		
**Toal cost of Items quoted in INR =	[h]		
Final Price in INR = g + h =	[i]		

\* Use the conversion factor as on the date prior to the date of submission of the quotation and mention this date clearly.

\*\* Give full list of items quoted in Indian Rupees separately.

#### **Declaration by the Bidder**

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

## Microwave Digester

### Technical Specifications

(To be submitted by the Bidder)

Quotation Reference: SB/QEL/PUR/[Kolkata](#)/Instruments/14 dated 3-2-2017

#### Location of Supply and Installation:

The Instrument(s) will be required to be delivered and installed at the following locations:

Spices Board Quality Evaluation Laboratory  
C/o Project Site, District Headquarter of South 24, Paraganas at Baruipur,  
JL No. 48, LR Khatian No. 1311, Mouza-Chakarbar,  
PO&PS Baruipur District South 24-Paraganas  
West Bengal 700144

*The technical bid is to be submitted by filing in Section I and II, duly signed by the authorized signatory in the 'Declaration of the Bidder'. Section III is to be left blank. incompleteness in filling up this form or failure to attach the required supporting data or documents, may result in rejection of the quotation.*

### Section I: Details of the Quotation

Quotation Submitted By	
Quotation Reference No.	
Date of submission of quotation	
Details of EMD submitted (if any)	
Full Address	
Name of principal supplier (if not self)	
Authorized contact person	
Designation	
Contact details	
List of supporting documents submitted along with the quotation	

## Section II: Compliance with Technical Specifications

### Microwave Digester

***Against each point in the technical specification, compliance must be marked as YES / NO***

	Required Specification	Complying (Yes/No)	Remarks	Documentary Evidence Enclosed?
<b>Microwave Digester</b>				
1	Capable of carrying out complete, reproducible and fast digestion / extraction work for Analysis of heavy metals in spices and other food products using AAS technique.			
2	Built-in methods library, with adequate documentation, for extraction of heavy metal residues from various sample types as per pre-set standard procedures like EPA / ISO. The instrument should be able to handle extractions of heavy metals at ppb-ppm levels.			
3	At least 1400W power, with variable power settings for small or highly reactive samples			
4	Built-in forced air cooling system. Fast cooling to reduce cycle time.			
5	Continuous un-pulsed microwave power delivery, without power surges, to achieve even digestion			
6	At least 10 reaction vessels capable of use at the same time, chemical resistant and suitable for acid digestion work, with capacity up to 100ml. Optional handling of varying sample amounts should be provided.			
7	The cavity should be stainless steel and multilayer PTFE coated			
8	Integrated filtration devices enabling direct connection to the extraction vessels to obtain the extract.			
9	Designed for unattended operation after loading samples			
10	Temperature range up to 200°C at 40 bar with electronic display, feedback and settings.			
11	Pressure range up to 70 bar with electronic display, feedback and settings.			
12	Reaction vessels and pressure / temperature sensors should facilitate easy cleaning / replacement.			
13	The reaction vessels must have immersion temperature probes as well as remote IR sensor			
14	System should be capable of simultaneous pressure sensing in all vessels.			
15	Complete operational control and monitoring through control panel on the instrument.			
16	Capable of complete control, monitoring, data generation and event logging through external software control from PC.			

17	Detailed information on pressure and temperature for all the reaction vessels during the reaction process should be available as software readout.			
18	Sturdy and chemical-resistant body capable of withstanding harsh laboratory environments.			
19	Built-in safety systems to protect against rapid temperature and pressure changes during digestion, including auto cut-off and alarm.			
20	All accessories required for easily calibrating the pressure and temperature sensors, with the required software support, should be provided.			
<b>Accessories</b>				
1	All spares and accessories required for maintaining the entire system for a period of five years should be quoted. Itemized breakup list of the spares should be provided.			
<b>Additional Terms and Conditions</b>				
1	A complete compliance statement (this sheet filled in), stating the status of compliance with each point in the technical specification, should necessarily accompany the quotation.			
2	A minimum of 5 users of the quoted model in India should be available. The list of these users, with full details of contact persons, addresses, telephone, mobile and email should be provided in table form.			

#### **Comprehensive Warranty**

1	The warranty period should be 5 Years. All breakdown of the instrument should be addressed within 24 hours by an onsite visit.			
2	All parts of the instrument, accessories and supporting instruments should be covered under the warranty. If any accessory / spare part / consumable is not covered under the comprehensive warranty, then the itemised list of such items, including their prices during the period 2014-15 and average lifetime of the items should be provided.			
3	The equipment should be installed at the proposed site, demonstrate the required objective of the test with the claimed limit of detection/quantification with the sample provided.			
4	Training should be given to the staff at the site, for the operation of the instrument on demand			
5	Any accessory system(s) other than those mentioned in the technical specifications, that are required for satisfactory installation of the system should be quoted and supplied with the instrument.			
6	Agency commission: Agency commission if any will be paid to the Indian agent in rupees on receipt of the equipment and after satisfactory installation.			
7	Agency commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in tender even in case of Nil commission. The tender should indicate the percentage of Agency			

	commission to be paid to the Indian agent.			
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***Declaration by the Bidder***

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

Please see section III below for financial bid. **Section III is not to be filled in the Technical Bid.**



**Section III: Financial Bid**  
**Microwave Digester**

This sheet is to be attached as a covering sheet along with the formal technical bid of the quoted instrument. In case more than one instrument / model is quoted, separate sheets have to be attached with each quotation.

Financial Summary for the Instrument model : \_\_\_\_\_

Price Description		Price	Comments (if any)
Quoted Currency			
Total Instrument Cost	[a]		
Total cost of Supporting Instruments	[b]		
Comprehensive Warranty Charges	[c]		
Any other charges	[d]		
CIF Kolkata, Gujarat [a] + [b] + [c] + [d] =	[e]		
Conversion Factor to INR*	[f]		
Total Price in INR [e] x [f] =	[g]		
**Toal cost of Items quoted in INR =	[h]		
Final Price in INR = g + h =	[i]		

\* Use the conversion factor as on the date prior to the date of submission of the quotation and mention this date clearly.

\*\* Give full list of items quoted in Indian Rupees separately.

**Declaration by the Bidder**

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

## Water Purification System

### Technical Specifications

(To be submitted by the Bidder)

Quotation Reference: SB/QEL/PUR/**Kolkata**/Instruments/14 dated 3-2-2017

#### Location of Supply and Installation:

The Instrument(s) will be required to be delivered and installed at the following locations:

Spices Board Quality Evaluation Laboratory  
C/o Project Site, District Headquarter of South 24, Paraganas at Baruipur,  
JL No. 48, LR Khatian No. 1311, Mouza-Chakarbar,  
PO&PS Baruipur District South 24-Paraganas  
West Bengal 700144

*The technical bid is to be submitted by filing in Section I and II, duly signed by the authorized signatory in the 'Declaration of the Bidder'. Section III is to be left blank. incompleteness in filling up this form or failure to attach the required supporting data or documents, may result in rejection of the quotation.*

### Section I: Details of the Quotation

Quotation Submitted By	
Quotation Reference No.	
Date of submission of quotation	
Details of EMD submitted (if any)	
Full Address	
Name of principal supplier (if not self)	
Authorized contact person	
Designation	
Contact details	
List of supporting documents submitted along with the quotation	

--	--

## Section II: Compliance with Technical Specifications

### Water Purification System

*Against each point in the technical specification, compliance must be marked as YES / NO*

	Required Specification	Complying (Yes/No)	Remarks	Documentary Evidence Enclosed?
1	System should be capable of producing type II (10-15Megaohm resistivity ) and type I (18.2 megaohm resistivity)with pretreatment cartridge, Reverse Osmosis, Electro Deionization Module, Mixed bed ion exchange resin, inbuilt TOC monitor and final membrane filter with feed water acceptance upto 2000micro Siemens conductivity .			
<b>STAGE 1</b>				
2	2 stage pretreatment system			
3	5 micron and 1 micron wrapped type depth filter			
4	Pressure gauges for display of pressure at each stage, Automatic low/high pressure cut off			
<b>STAGE 2</b>				
5	Pretreatment cartridge with antiscaling compound			
6	Mixed bed ion electro deionisation module with auto regeneration by a weak electric current, eliminating the need for chemical regeneration or replacement of DI resin cartridges .			
7	Carbon beads at cathode of the EDI module to prevent scaling of the module			
8	Coaxial resistivity cell with a flow through design and a cell constant of 0.01cm-1			
<b>STAGE 3</b>				
9	A blow molded, cylindrical PE reservoir with a conical bottom and opaque walls with a 30 liter capacity			
10	The tank should fill from the bottom .			
11	Application Specific cartridges to remove ionic and organic contaminants to trace levels			
12	Built in TOC monitor with a 0.5mL Quartz cell and UV lamp which accurately measures TOC online from 1-999ppb .			
13	Water production unit that can be placed either on the bench , under the bench or on the wall			

14	Point of delivery unit with the polishing filters at the point of use . Option of connecting 3 units with the main water producing unit			
<b>STAGE 4</b>				
11	Stand alone point of delivery unit with			
12	1. Adjustable height and rotating arm - adjustable to any glassware.			
13	2. Multi colour monitor displaying : resistivity,TOC,level of water in reservoir,volume dispensed and other alarms, printing to be directly accessible from the point of delivery unit			
14	<b>Dispensing unit</b>			
15	Final Filters: Pharmaceutical grade , final filter with 0.22micronmembrane filter in stack disc configuration			
16	Less than 50 Db noise levels during operation			
<b>Additional Terms and Conditions</b>				
17	A complete compliance statement (this sheet filled in), stating the status of compliance with each point in the technical specification, should necessarily accompany the quotation.			
18	A minimum of 10 users of the quoted model in India should be available. The list of these users, with full details of contact persons, addresses, telephone, mobile and email should be provided in table form.			

#### **Comprehensive Warranty**

1	The warranty period should be 5 Years. All breakdown of the instrument should be addressed within 24 hours by an onsite visit.			
2	All parts of the instrument, accessories and supporting instruments should be covered under the warranty. If any accessory / spare part / consumable is not covered under the comprehensive warranty, then the itemised list of such items, including their prices during the period 2014-15 and average lifetime of the items should be provided.			
3	The equipment should be installed at the proposed site, demonstrate the required objective of the test with the claimed limit of detection/quantification with the sample provided.			
4	Training should be given to the staff at the site, for the operation of the instrument on demand			
5	Any accessory system(s) other than those mentioned in the technical specifications, that are required for satisfactory installation of the system should be quoted and supplied with the instrument.			
6	Agency commission: Agency commission if any will be paid to the Indian agent in rupees on receipt of the equipment and after satisfactory installation.			
7	Agency commission will not be paid in foreign currency under any circumstances. The details should be explicitly			

	shown in tender even in case of Nil commission. The tender should indicate the percentage of Agency commission to be paid to the Indian agent.			
--	--	--	--	--

***Please sign the declaration on the next page.***

***Declaration by the Bidder***

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

Please see section III below for financial bid. **Section III is not to be filled in the Technical Bid.**

**Section III: Financial Bid**  
**Water Purification System**

This sheet is to be attached as a covering sheet along with the formal technical bid of the quoted instrument. In case more than one instrument / model is quoted, separate sheets have to be attached with each quotation.

Financial Summary for the Instrument model : \_\_\_\_\_

Price Description		Price	Comments (if any)
Quoted Currency			
Total Instrument Cost	[a]		
Total cost of Supporting Instruments	[b]		
Comprehensive Warranty Charges	[c]		
Any other charges	[d]		
CIF Kolkata, Gujarat [a] + [b] + [c] + [d] =	[e]		
Conversion Factor to INR*	[f]		
Total Price in INR [e] x [f] =	[g]		
**Toal cost of Items quoted in INR =	[h]		
Final Price in INR = g + h =	[i]		

\* Use the conversion factor as on the date prior to the date of submission of the quotation and mention this date clearly.

\*\* Give full list of items quoted in Indian Rupees separately.

**Declaration by the Bidder**

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

## Recirculating Chiller

### Technical Specifications

(To be submitted by the Bidder)

Quotation Reference: SB/QEL/PUR/**Kolkata**/Instruments/14 dated 3-2-2017

#### Location of Supply and Installation:

The Instrument(s) will be required to be delivered and installed at the following locations:

Spices Board Quality Evaluation Laboratory  
C/o Project Site, District Headquarter of South 24, Paraganas at Baruipur,  
JL No. 48, LR Khatian No. 1311, Mouza-Chakarbar,  
PO&PS Baruipur District South 24-Paraganas  
West Bengal 700144

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### Section I: Details of the Quotation

Quotation Submitted By	
Quotation Reference No.	
Date of submission of quotation	
Details of EMD submitted (if any)	
Full Address	
Name of principal supplier (if not self)	
Authorized contact person	
Designation	
Contact details	
List of supporting documents submitted along with the quotation	

--	--

## Section II: Compliance with Technical Specifications

### Recirculating Chiller

*Against each point in the technical specification, compliance must be marked as YES / NO*

	Required Specification	Complying (Yes / No)	Remarks	Documentary evidence enclosed?
1.	Heavy duty system, with sturdy design Compact and portable on wheels			
2.	Capable of circulating chilled coolant (water based or otherwise) through a minimum of ten soxhlet type Condensers connected in series			
3.	Coolant reservoir of sufficient capacity for recirculation and made of high grade SS			
4.	Digital display of set and actual temperature, control unit capable of setting coolant temperature in increments of 1°C			
5.	Durable and capable of operating at the set temperature for the entire range with a maximum permissible variation of ± 2.0°C, for at least 10 hours continuously.			
6.	Working temperature range -10° to 35°C			
7.	The system should use CFC free refrigeration technology.			
8.	Protection for over temperature			
9.	Suitable coolant to be quoted in adequate amount. If water based, full details should be given			
10.	Suitable length of coolant tubes with proper insulation should be quoted. The length should be enough to connect ten soxhlet type condensers in series. As shown in Figure 1			
11.	A compliance statement with each point in the specification should compulsorily accompany the quotation, without which the quotation will be considered incomplete.			
12.	User's list with contact numbers of the quoted model in India			
13.	Any breakdown of the systems during the warranty period has to be resolved in 48 hours.			
14.	A comprehensive warranty with all necessary spares for 5 years for the complete equipment should be provided.			
<b>Additional Terms and Conditions</b>				
1	A complete compliance statement (this sheet filled in),			



	stating the status of compliance with each point in the technical specification, should necessarily accompany the quotation.			
2	A minimum of 5 users of the quoted model in India should be available. The list of these users, with full details of contact persons, addresses, telephone, mobile and email should be provided in table form.			

**Comprehensive Warranty**

1	The warranty period should be 5 Years. All breakdown of the instrument should be addressed within 24 hours by an onsite visit.			
2	All parts of the instrument, accessories and supporting instruments should be covered under the warranty. If any accessory / spare part / consumable is not covered under the comprehensive warranty, then the itemised list of such items, including their prices during the period 2014-15 and average lifetime of the items should be provided.			
3	The equipment should be installed at the proposed site, demonstrate the required objective of the test with the claimed limit of detection/quantification with the sample provided.			
4	Training should be given to the staff at the site, for the operation of the instrument on demand			
5	Any accessory system(s) other than those mentioned in the technical specifications, that are required for satisfactory installation of the system should be quoted and supplied with the instrument.			
6	Agency commission: Agency commission if any will be paid to the Indian agent in rupees on receipt of the equipment and after satisfactory installation.			
7	Agency commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in tender even in case of Nil commission. The tender should indicate the percentage of Agency commission to be paid to the Indian agent.			

A Schematic drawing of the required instrument setup is given in the following figure.

### Schematic : Requirements for Refrigerated Circulation Bath

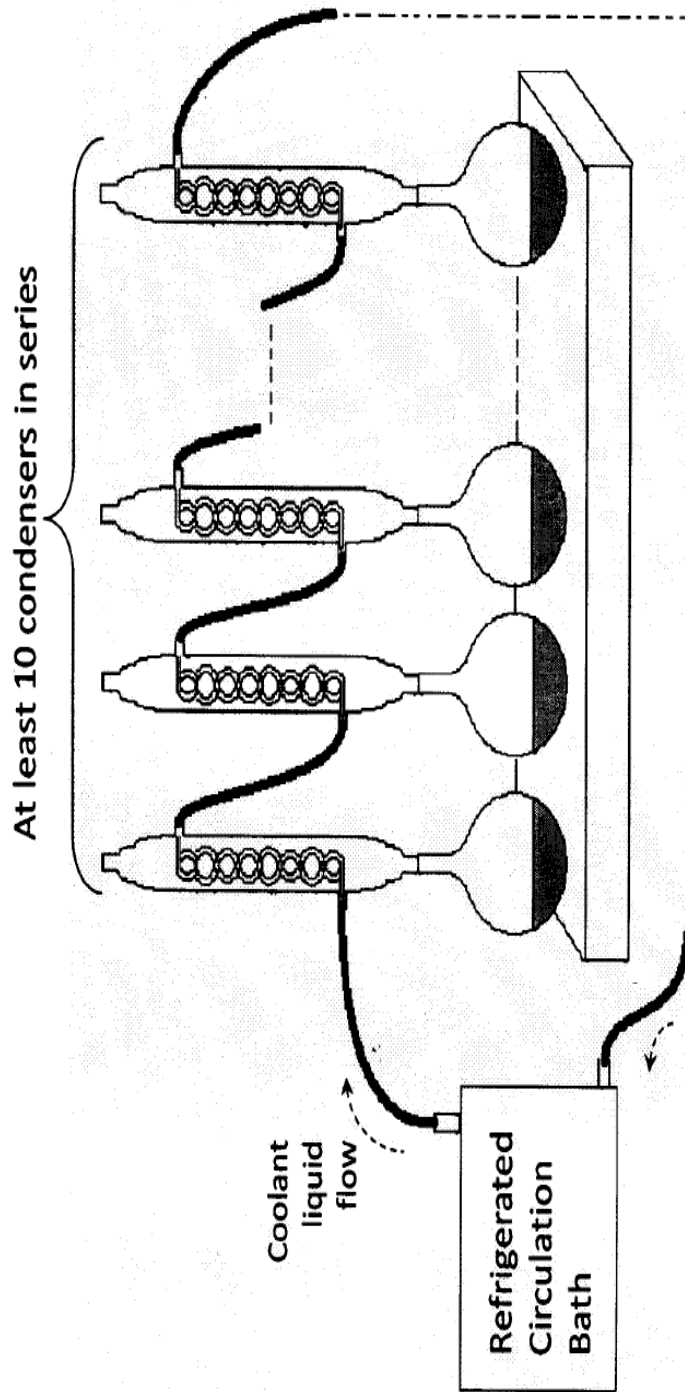


Fig. 1

***Declaration by the Bidder***

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

Please see section III below for financial bid. **Section III is not to be filled in the Technical Bid.**

### **Section III: Financial Bid** **Recirculating Chiller**

This sheet is to be attached as a covering sheet along with the formal technical bid of the quoted instrument. In case more than one instrument / model is quoted, separate sheets have to be attached with each quotation.

Financial Summary for the Instrument model : \_\_\_\_\_

Price Description		Price	Comments (if any)
Quoted Currency			
Total Instrument Cost	[a]		
Total cost of Supporting Instruments	[b]		
Comprehensive Warranty Charges	[c]		
Any other charges	[d]		
CIF Kolkata, Gujarat [a] + [b] + [c] + [d] =	[e]		
Conversion Factor to INR*	[f]		
Total Price in INR [e] x [f] =	[g]		
**Toal cost of Items quoted in INR =	[h]		
Final Price in INR = g + h =	[i]		

\* Use the conversion factor as on the date prior to the date of submission of the quotation and mention this date clearly.

\*\* Give full list of items quoted in Indian Rupees separately.

#### **Declaration by the Bidder**

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

**DATE**

## Electronic Balance - 5 Digit Precision

### Technical Specifications

(To be submitted by the Bidder)

Quotation Reference: SB/QEL/PUR/[Kolkata](#)/Instruments/14 dated 3-2-2017

#### Location of Supply and Installation:

The Instrument(s) will be required to be delivered and installed at the following locations:

Spices Board Quality Evaluation Laboratory  
C/o Project Site, District Headquarter of South 24, Paraganas at Baruipur,  
JL No. 48, LR Khatian No. 1311, Mouza-Chakarbar,  
PO&PS Baruipur District South 24-Paraganas  
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### Section I: Details of the Quotation

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Quotation Reference No.	
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Details of EMD submitted (if any)	
Full Address	
Name of principal supplier (if not self)	
Authorized contact person	
Designation	
Contact details	
List of supporting documents submitted along with the quotation	

## Section II: Compliance with Technical Specifications

### Electronic Balance – 5 Digit Precision

*Against each point in the technical specification, compliance must be marked as YES / NO*

	Required Specification	Complying (Yes / No)	Remarks	Documentary evidence enclosed?
1	Readability of 0.00001 g. (0.01 mg).			
2	Compact design with sturdy chemical resistant body.			
3	Weighing pan $\varnothing$ at least 90 mm or equivalent.			
4	Calibration of a frequently used weighing range using external weights.			
5	Digital panel with backlit display.			
6	Overload protection feature.			
7	calibration certificate with F1 / E2 class calibration weights traceable to NPL should be provided with the balance.			
8	The supplier should have the capability to provide calibration of the balance once in six months with NPL certified weights. Full details of this service should be provided.			
9	One spare power adapter should be provided			
10	Full operation manual should be provided.			
11	User list for the quoted model in India with full contact information should be provided.			
12	Full warranty information should be provided.			
13	A compliance statement with each point in the specification should compulsorily accompany the quotation, without which the quotation will be considered incomplete.			
14	Internal adjustment weight for precise result.			
15	Maximum Capacity at least 200g.			
16	Capability of displaying weighing result in different units.			
17	Features like Taring and % weighing feature should be available.			
18	Repeatability at least 0.03 mg.			
19	High grade, chemical resistant housing.			
20	Backlit display.			
21	Standard RS232c interface to connect to external PC.			
22	Hook for weighing below the balance.			
23	Glass draft shield with sliding doors, with free access from right, left and above			
<b>Additional Terms and Conditions</b>				

1	A complete compliance statement (this sheet filled in), stating the status of compliance with each point in the technical specification, should necessarily accompany the quotation.			
2	A minimum of 5 users of the quoted model in India should be available. The list of these users, with full details of contact persons, addresses, telephone, mobile and email should be provided in table form.			

**Comprehensive Warranty**

1	The warranty period should be 5 Years. All breakdown of the instrument should be addressed within 24 hours by an onsite visit.			
2	All parts of the instrument, accessories and supporting instruments should be covered under the warranty. If any accessory / spare part / consumable is not covered under the comprehensive warranty, then the itemised list of such items, including their prices during the period 2014-15 and average lifetime of the items should be provided.			
3	The equipment should be installed at the proposed site, demonstrate the required objective of the test with the claimed limit of detection/quantification with the sample provided.			
4	Training should be given to the staff at the site, for the operation of the instrument on demand			
5	Any accessory system(s) other than those mentioned in the technical specifications, that are required for satisfactory installation of the system should be quoted and supplied with the instrument.			
6	Agency commission: Agency commission if any will be paid to the Indian agent in rupees on receipt of the equipment and after satisfactory installation.			
7	Agency commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in tender even in case of Nil commission. The tender should indicate the percentage of Agency commission to be paid to the Indian agent.			

**Declaration by the Bidder**

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

Please see section III below for financial bid. **Section III is not to be filled in the Technical Bid.**

**Section III: Financial Bid**  
**Electronic Balance 5 Digit Precision**

This sheet is to be attached as a covering sheet along with the formal technical bid of the quoted instrument. In case more than one instrument / model is quoted, separate sheets have to be attached with each quotation.

Financial Summary for the Instrument model : \_\_\_\_\_

Price Description		Price	Comments (if any)
Quoted Currency			
Total Instrument Cost	[a]		
Total cost of Supporting Instruments	[b]		
Comprehensive Warranty Charges	[c]		
Any other charges	[d]		
CIF Kolkata, Gujarat [a] + [b] + [c] + [d] =	[e]		
Conversion Factor to INR*	[f]		
Total Price in INR [e] x [f] =	[g]		
**Toal cost of Items quoted in INR =	[h]		
Final Price in INR = g + h =	[i]		

\* Use the conversion factor as on the date prior to the date of submission of the quotation and mention this date clearly.

\*\* Give full list of items quoted in Indian Rupees separately.

**Declaration by the Bidder**

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

**DATE**



## Electronic Balance - 3 Digit Precision

### Technical Specifications

(To be submitted by the Bidder)

Quotation Reference: SB/QEL/PUR/[Kolkata](#)/Instruments/14 dated 3-2-2017

#### Location of Supply and Installation:

The Instrument(s) will be required to be delivered and installed at the following locations:

Spices Board Quality Evaluation Laboratory  
C/o Project Site, District Headquarter of South 24, Paraganas at Baruipur,  
JL No. 48, LR Khatian No. 1311, Mouza-Chakarbar,  
PO&PS Baruipur District South 24-Paraganas  
West Bengal 700144

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### Section I: Details of the Quotation

Quotation Submitted By	
Quotation Reference No.	
Date of submission of quotation	
Details of EMD submitted (if any)	
Full Address	
Name of principal supplier (if not self)	
Authorized contact person	
Designation	
Contact details	
List of supporting documents submitted along with the quotation	

## Section II: Compliance with Technical Specifications

### Electronic Balance – 3 Digit Precision

*Against each point in the technical specification, compliance must be marked as YES / NO*

	Required Specification	Complying (Yes / No)	Remarks	Documentary evidence enclosed?
1	Readability of 0.001 g. (0.1 mg).			
2	Compact design with sturdy chemical resistant body.			
3	Weighing pan $\varnothing$ at least 90 mm or equivalent.			
4	Calibration of a frequently used weighing range using external weights.			
5	Digital panel with backlit display.			
6	Overload protection feature.			
7	calibration certificate with F1 / E2 class calibration weights traceable to NPL should be provided with the balance.			
8	The supplier should have the capability to provide calibration of the balance once in six months with NPL certified weights. Full details of this service should be provided.			
9	One spare power adapter should be provided			
10	Full operation manual should be provided.			
11	User list for the quoted model in India with full contact information should be provided.			
12	Full warranty information should be provided.			
13	A compliance statement with each point in the specification should compulsorily accompany the quotation, without which the quotation will be considered incomplete.			
14	Internal adjustment weight for precise result.			
15	Maximum Capacity at least 200g.			
16	Capability of displaying weighing result in different units.			
17	Features like Taring and % weighing feature should be available.			
18	Repeatability at least 0.03 mg.			
19	High grade, chemical resistant housing.			
20	Backlit display.			
21	Standard RS232c interface to connect to external PC.			
22	Hook for weighing below the balance.			
23	Glass draft shield with sliding doors, with free access from right, left and above			
<b>Additional Terms and Conditions</b>				

1	A complete compliance statement (this sheet filled in), stating the status of compliance with each point in the technical specification, should necessarily accompany the quotation.			
2	A minimum of 5 users of the quoted model in India should be available. The list of these users, with full details of contact persons, addresses, telephone, mobile and email should be provided in table form.			
3	Full details of the warranty of the system, with coverage of all parts of the system, should be clearly mentioned in the tender.			

***Declaration by the Bidder***

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

Please see section III below for financial bid. **Section III is not to be filled in the Technical Bid.**

**Section III: Financial Bid**  
**Electronic Balance 3 Digit Precision**

This sheet is to be attached as a covering sheet along with the formal technical bid of the quoted instrument. In case more than one instrument / model is quoted, separate sheets have to be attached with each quotation.

Financial Summary for the Instrument model : \_\_\_\_\_

Price Description		Price	Comments (if any)
Quoted Currency			
Total Instrument Cost	[a]		
Total cost of Supporting Instruments	[b]		
Comprehensive Warranty Charges	[c]		
Any other charges	[d]		
CIF Kolkata, Gujarat [a] + [b] + [c] + [d] =	[e]		
Conversion Factor to INR*	[f]		
Total Price in INR [e] x [f] =	[g]		
**Toal cost of Items quoted in INR =	[h]		
Final Price in INR = g + h =	[i]		

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\*\* Give full list of items quoted in Indian Rupees separately.

**Declaration by the Bidder**

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SIGNATURE OF TENDERER

SEAL OF THE COMPANY

**DATE**

## Rotary Evaporator

### Technical Specifications

(To be submitted by the Bidder)

Quotation Reference: SB/QEL/PUR/**Kolkata**/Instruments/14 dated 3-2-2017

#### Location of Supply and Installation:

The Instrument(s) will be required to be delivered and installed at the following locations:

Spices Board Quality Evaluation Laboratory  
C/o Project Site, District Headquarter of South 24, Paraganas at Baruipur,  
JL No. 48, LR Khatian No. 1311, Mouza-Chakarbar,  
PO&PS Baruipur District South 24-Paraganas  
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### Section I: Details of the Quotation

Quotation Submitted By	
Quotation Reference No.	
Date of submission of quotation	
Details of EMD submitted (if any)	
Full Address	
Name of principal supplier (if not self)	
Authorized contact person	
Designation	
Contact details	
List of supporting documents submitted along with the quotation	

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## Section II: Compliance with Technical Specifications

### Rotary Evaporator

***Against each point in the technical specification, compliance must be marked as YES / NO***

	Required Specification	Complying (Yes/No)	Remarks	Documentary Evidence Enclosed?
1	The system must contain a) rotary evaporator b) diaphragm vacuum pump c) re-circulating chiller, all made by the same company. All the components of the system should be supplied together. The system should meet the following technical specifications:			
2	<b>Rotary Evaporator</b>			
3	Should be consisting of motorised lift with provision of automatic lift in case of electricity failure.			
5	Vertical condenser			
6	Rotation speed : Rotation speed 20 to 280 rpm or better			
7	Integrated/ non-integrated Digital display of all parameter i.e. rotation speed, bath temperature, vacuum, vapour temperature (both set and actual)etc. Control unit should be inbuilt.			
8	Evaporating flask: 50ml, 100ml, 500ml, 1000ml should be supplied.			
9	Receiving flask: 1000ml x 4 Nos.			
10	Heating bath capacity: 4.5 lit or above			
11	Heating (minimum)180 deg C or above			
12	Automatic over heat cut-off protection			
13	Must have USB Interface for data management with software			
14	Must be supplied along with woulff bottle.			
15	System should have capability to find boiling point and perform distillation automatically/Integrated solvent database of solvents for convenient setting of distillation conditions.			
16	Should be able to program the required vacuum change in a ramp			
17	Must have 'timer function' which can allow unattended operations.			
18	<b>Vacuum Pump</b>			
19	Ultimate vacuum less than 10mbar			
20	Should be controlled by controller attached or inbuilt in			

	rotary evaporator			
21	Suction capacity 1.8 cubic metre /h or more			
22	Diaphragm made of chemically inert substance/PTFE			
23	Re-circulating chiller			
24	Compact and robust chiller with temperature range -10degC to unspecified			
25	Digital display of temperature			
26	Cooling capacity 400 watt at 15 deg C or more			
<b>Additional Terms and Conditions</b>				
27	A complete compliance statement (this sheet filled in), stating the status of compliance with each point in the technical specification, should necessarily accompany the quotation.			
28	A minimum of 20 users of the quoted model in India should be available. The list of these users, with full details of contact persons, addresses, telephone, mobile and email should be provided in table form.			

#### **Comprehensive Warranty**

1	The warranty period should be 5 Years. All breakdown of the instrument should be addressed within 24 hours by an onsite visit.			
2	All parts of the instrument, accessories and supporting instruments should be covered under the warranty. If any accessory / spare part / consumable is not covered under the comprehensive warranty, then the itemised list of such items, including their prices during the period 2014-15 and average lifetime of the items should be provided.			
3	The equipment should be installed at the proposed site, demonstrate the required objective of the test with the claimed limit of detection/quantification with the sample provided.			
4	Training should be given to the staff at the site, for the operation of the instrument on demand			
5	Any accessory system(s) other than those mentioned in the technical specifications, that are required for satisfactory installation of the system should be quoted and supplied with the instrument.			
6	Agency commission: Agency commission if any will be paid to the Indian agent in rupees on receipt of the equipment and after satisfactory installation.			
7	Agency commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in tender even in case of Nil commission. The tender should indicate the percentage of Agency commission to be paid to the Indian agent.			

#### **Declaration by the Bidder**

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all

data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

Please see section III below for financial bid. **Section III is not to be filled in the Technical Bid.**



**Section III: Financial Bid**  
**Rotary Evaporator**

This sheet is to be attached as a covering sheet along with the formal technical bid of the quoted instrument. In case more than one instrument / model is quoted, separate sheets have to be attached with each quotation.

Financial Summary for the Instrument model : \_\_\_\_\_

Price Description		Price	Comments (if any)
Quoted Currency			
Total Instrument Cost	[a]		
Total cost of Supporting Instruments	[b]		
Comprehensive Warranty Charges	[c]		
Any other charges	[d]		
CIF Kolkata, Gujarat [a] + [b] + [c] + [d] =	[e]		
Conversion Factor to INR*	[f]		
Total Price in INR [e] x [f] =	[g]		
**Toal cost of Items quoted in INR =	[h]		
Final Price in INR = g + h =	[i]		

\* Use the conversion factor as on the date prior to the date of submission of the quotation and mention this date clearly.

\*\* Give full list of items quoted in Indian Rupees separately.

**Declaration by the Bidder**

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

## Muffle Furnace

### Technical Specifications

(To be submitted by the Bidder)

Quotation Reference: SB/QEL/PUR/**Kolkata**/Instruments/14 dated 3-2-2017

#### Location of Supply and Installation:

The Instrument(s) will be required to be delivered and installed at the following locations:

Spices Board Quality Evaluation Laboratory  
C/o Project Site, District Headquarter of South 24, Paraganas at Baruipur,  
JL No. 48, LR Khatian No. 1311, Mouza-Chakarbar,  
PO&PS Baruipur District South 24-Paraganas  
West Bengal 700144

*The technical bid is to be submitted by filing in Section I and II, duly signed by the authorized signatory in the 'Declaration of the Bidder'. Section III is to be left blank. incompleteness in filling up this form or failure to attach the required supporting data or documents, may result in rejection of the quotation.*

### Section I: Details of the Quotation

Quotation Submitted By	
Quotation Reference No.	
Date of submission of quotation	
Details of EMD submitted (if any)	
Full Address	
Name of principal supplier (if not self)	
Authorized contact person	
Designation	
Contact details	
List of supporting documents submitted along with the quotation	

## Section II: Compliance with Technical Specifications

### Muffle Furnace

***Against each point in the technical specification, compliance must be marked as YES / NO***

	Required Specification	Complying (Yes/No)	Remarks	Documentary Evidence Enclosed?
	A Muffle furnace is required for obtaining high temperature. This furnace should have the following features:			
1	Internal Dimensions of the furnace (minimum): Height = 15cm, width = 15cm, depth = 35cm.			
2	Working Temperature range : ambient to 1350°C or better			
3	Heating Element : Silicon Carbide (SiC)			
4	Temperature Accuracy : $\pm 2^{\circ}\text{C}$ or better			
5	Temperature Control : Through microprocessor based PID controller with minimum 30 steps			
6	Furnace Insulation : Ceramic wool			
7	Temperature settings & Display : Digital and double display			
8	Power source : 220 V ,50Hz single phase			
9	Out body and inner body : Stainless Steel			
	Accessories required			
10	Stainless Steel Tongs (15-20 Inch)- 02 No			
11	Furnace gloves-02 Pairs			
	<b>Additional Terms and Conditions</b>			
9	A complete compliance statement (this sheet filled in), stating the status of compliance with each point in the technical specification, should necessarily accompany the quotation.			
10	A minimum of 5 users of the quoted model in India should be available. The list of these users, with full details of contact persons, addresses, telephone, mobile and email should be provided in table form.			
11	Full details of the warranty of the system, with coverage of all parts of the system, should be clearly mentioned in the tender.			

*Please sign the declaration in the next page.*

***Declaration by the Bidder***

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

Please see section III below for financial bid. **Section III is not to be filled in the Technical Bid.**

**Section III: Financial Bid**  
**Muffle Furnace**

This sheet is to be attached as a covering sheet along with the formal technical bid of the quoted instrument. In case more than one instrument / model is quoted, separate sheets have to be attached with each quotation.

Financial Summary for the Instrument model : \_\_\_\_\_

Price Description		Price	Comments (if any)
Quoted Currency			
Total Instrument Cost	[a]		
Total cost of Supporting Instruments	[b]		
Comprehensive Warranty Charges	[c]		
Any other charges	[d]		
CIF Kolkata, Gujarat [a] + [b] + [c] + [d] =	[e]		
Conversion Factor to INR*	[f]		
Total Price in INR [e] x [f] =	[g]		
**Toal cost of Items quoted in INR =	[h]		
Final Price in INR = g + h =	[i]		

\* Use the conversion factor as on the date prior to the date of submission of the quotation and mention this date clearly.

\*\* Give full list of items quoted in Indian Rupees separately.

**Declaration by the Bidder**

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

lc ms/ms

**DATE**

# LC MS/MS System

## Technical Specifications

(To be submitted by the Bidder)

Quotation Reference: SB/QEL/PUR/**Kolkata**/Instruments/14 dated 3-2-2017

### Location of Supply and Installation:

The Instrument(s) will be required to be delivered and installed at the following locations:

Spices Board Quality Evaluation Laboratory  
C/o Project Site, District Headquarter of South 24, Paraganas at Baruipur,  
JL No. 48, LR Khatian No. 1311, Mouza-Chakarbar,  
PO&PS Baruipur District South 24-Paraganas  
West Bengal 700144

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### Section I: Details of the Quotation

Quotation Submitted By	
Quotation Reference No.	
Date of submission of quotation	
Details of EMD submitted (if any)	
Full Address	
Name of principal supplier (if not self)	
Authorized contact person	
Designation	
Contact details	
List of supporting documents submitted along with the quotation	

## Section II: Compliance with Technical Specifications

### LC MS/MS System

*Against each point in the technical specification, compliance must be marked as YES / NO*

	Required Specification	Complying (Yes/No)	Remarks	Documentary Evidence Enclosed?
1	HPLC System			
	All components of the HPLC system should be from the same supplier, and should be amenable to control / data acquisition from the MS Software.			
	Pump			
1	High Pressure Binary Gradient Pumping System			
2	Purging of both pumps independently, manually as well as through software			
3	Suitable for operation as front-end for MS/MS System, compatible with the software controlling the MS/MS System			
4	Flowrate setting: 0.0001ml/min to 10.00ml/min			
5	Resolution : 3 nanoliter per step			
6	Flowrate accuracy: 1% minimum			
7	Flowrate precision Maximum 0.3% RSD			
8	Gradient curve selections			
9	Maximum discharge pressure at least 40 MPa			
10	Pulsation 0.1 MPa			
11	Safety functions like leak sensor, High pressure and low pressure limits			
	Autosampler			
1	Automated operation controllable through MS/MS Software			
2	Automated autosampler purging through software			
3	Total volume sample injection, variable injection volume			
4	Injection volume setting range 0.1ul to 100ul			
5	Vials capacity at least 1.5ml			
6	Number of vials - at least 100			
7	Injection volume accuracy - 0.1% error maximum			
8	Injection volume precision - 0.3% RSD maximum, for 10ul injection			
9	cross-contamination limit - 0.005% maximum			
10	Number of repeat injections - 30 / sample			
11	Operating pH range 1 - 14			
12	Rinsing needle - settable through software, before and after injection			
13	Operating temperature range 4 - 35°C			

	Degasser			
1	Online membrane type degasser			
2	Minimum 5 lines - 4 mobile phases, 1 autosampler rinsing			
	Column Oven			
1	Temperature control from ambient to 85°C			
2	Temperature control precision 0.1°C max			
3	Controllable through MS/MS software			
4	Storage capacity - minimum 3 columns			
5	Safety functions like leak sensor, high temperature cut-off			
	Columns			
1	The following high resolution, end capped columns suitable for analysis of azo dyes and natural products. The columns should be quoted from any of the following two suppliers : Phenomenex (Luna series), Waters (Symmetry series)			
	C-18 5cm x 4.6mm x 5um - 10 Nos.			
	C-18 10cm x 4.6mm x 5um - 5 Nos.			
	C-18 25cm x 4.6mm x 5um - 2 No.			
	C-8 5cm x 4.6mm x 5um - 5 Nos.			
	C-8 10cm x 4.6mm x 5um - 5 Nos.			
	C-8 25cm x 4.6mm x 5um - 1No.			
2	The columns should be supplied with certificates citing batch no, particle size distribution, Inertness, metal sensitivity, hydrophobic index and column performance checks			
3	20 Nos. each of C-8 and C-18 guard columns, from the same supplier as the columns, should be provided. Replaceable cartridge-type guard columns are desirable. In this case, two separate cartridge holders are to be quoted.			
2	MS/MS System			
	Ion Sources			
1	Dual / Orthogonal or off-axis spray or any other equally efficient technology capable of avoiding interference from solvents and other extraneous matter			
2	ESI and APCI probes to be provided, with facility of interchanging easily by the user, and auto-detection of installed probe by the instrument and software.			
3	The source should have self-contained heating system for achieving desired operational temperatures.			
4	Sprayer position should be adjustable in vertical and horizontal directions with adjustment scales for easy optimization.			
5	Facility for visual examination of spray should be available.			
6	The source should be easily removable from the system to facilitate user cleaning without venting the vacuum, with automatic shutdown of system while the source / probe is being removed.			



7	The source should be able to handle 0.5ul/min to 2ml / min flow, without flow splitting.			
8	The source housing should be fully vented to avoid contaminating laboratory air.			
9	All source parameters to be adjustable through software.			
	Vacuum System			
1	A differentially pumped vacuum system, including air-cooled turbomolecular pump, capable of supplying the required vacuum to the instrument. The system should have vacuum safety features to prevent damage to the instrument in case of failure.			
2	All accessories required for the proper functioning of the vacuum system should be supplied.			
	Mass Analyzer			
1	Triple quadrupole MS/MS System			
2	Mass Range at least 50 - 1500 AMU			
3	Mass Accuracy 0.01% over the entire mass range			
4	Mass resolution - unit resolution over the entire mass range. Higher resolution capability desirable.			
5	Mass Stability: 0.1 dalton over 24 hours (please include data in compliance statement)			
6	Collision cell - high pressure collision cell for high sensitivity MRM studies without loss in sensitivity			
7	Scan Types:			
	Full Scan MS			
	Selected Ion Monitoring in both Q1 and Q3			
	Precursor Ion Scan			
	Product Ion Scan			
	Neutral Loss Scan			
	MRM			
8	Minimum Scan Speed 10,000 daltons / second or above, with user selectable scan speed.			
9	Minimum MRM dwell time 1 millisecond			
10	Minimum Number of MRMs: 200 MRMs in a single time period, with no loss in sensitivity for co-eluting components at any one point of time.			
11	No significant crosstalk should be detectable for reserpine at the following conditions : Infusion of 0.2 pg/ul, for MRMs 609 <sup>+</sup> 195 and 100 <sup>+</sup> 195 at 2 milliseconds dwelltime (please provide graphical data)			
12	+ve / -ve polarity switching time between alternate MRM scans: 50ms			
13	A high sensitivity, high throughput detector with zero dead time, low noise and high accuracy at low level detections.			
	Software			

1	Latest model computer with DVD writer and laser printer, suitable for operation with the software, should be quoted.			
2	The software should be user friendly, capable of controlling the entire function of HPLC and MS/MS, with required licenses for system suitability calculations; all accessories required for its operation should be quoted.			
3	The software should have full-fledged capability of calculating system suitability parameters, both for MS and HPLC.			
4	Full-fledged reporting facility with capability of customized user-designed report formats should be available.			
5	The software should necessarily have the following features:			
	Retention-time based programming / monitoring of MRM scans, so that only desired MRMs are monitored in desired retention time ranges			
	Fragment interpretation tools			
	Automated quantitative data processing features			
	Option for naming MRM transitions			
	System Performance Requirements			
The requirements in this section pertain to the working requirements of the system. Any claims made in the compliance statement (see section 4 below) should be substantiated by documentary evidence, chromatograms, spectra and other relevant data. The data should be reproducible in the laboratory after installation of instrument.				
1	Sensitivity of the instrument: In ESI +ve, MRM transition 609 <sup>+</sup> 195 at unit resolution (0.7± 0.1 amu), 0.5pg on-column HPLC injection of Reserpine should give a S/N ratio of at least 2000:1. For ten injections, %RSD should be <5%. Chromatograms to be provided, with details of mobile phase, column and injection volume used.			
2	Analysis of Mycotoxins: A limit of quantitation of Aflatoxin B1 in chilli matrix of at least 1ppb without using immunoaffinity column cleanup (please provide full method details and chromatograms. Also mention the lowest LOQ achievable.)			
3	Analysis of Illegal Dyes: A limit of quantitation of Para Red in chilli matrix of at least 0.5 ppb (please provide full method details and chromatograms. Also mention the lowest LOQ achievable.)			
4	Analysis of Pesticide Residues: A limit of quantitation of Methyl Parathion in chilli matrix of at least 0.5ppb (please provide full method details and chromatograms. Also mention the lowest LOQ achievable.)			
	Desirable Features			
1	Pre-configured and optimized methods, with reference standards, for analysis of Pesticide Residues and Mycotoxins			
2	MRM List and product ion spectra for a wide range of compounds including pesticide residues, mycotoxins and synthetic dyes for screening and quantitation.			
3	Accessories of the System			
	Gas Generators			

1	Gas Generators capable of supplying all necessary gases with the required purity, pressure and flow rate, as required for the LC MS/MS instruments should be provided. It should be complete with all necessary accessories.			
2	If Gas Generators for a required gas is not available, two cylinders each of all required gases for operation of the system should be provided, to be quoted from local sources for supply at the installation site.			
3	In case external compressors are required for the gas generators, the same should be portable, noiseless and highly durable.			
	Spares and Accessories			
1	All required standards of mass calibration and tuning, and any other material required to make the instrument functional should be provided			
2	Pack of 200 vials, complete with septa and cap, should be included			
3	An ultrasonic bath suitable for cleaning parts of HPLC and LC MS/MS should be included.			
	UPS			
1	A UPS System of Numeric / Aplab Make, with Exide 6EL Tubular Batteries, of appropriate capacity (minimum 10 KVA) and input/output phases as per requirement of the LC MS/MS System, capable of providing a backup time of minimum 4 hours, with comprehensive warranty of minimum 5 years inclusive of battery, should be quoted.			
4	Terms and Conditions			
2	A complete compliance statement, stating the status of compliance with each point in the technical specification, should necessarily accompany the quotation. Graphical data and chromatograms should be provided wherever mentioned in the specifications. The compliance against system performance requirements should necessarily include the necessary data, graphs and chromatograms. The claims in the compliance statement should be demonstrable at the time of installation.			
3	A comprehensive warranty for 5 years for the complete equipment including independent accessories like UPS and gas generators should be provided. The warranty should include mass calibration performed yearly with valid PPG solution provided by the vendor. In case of breakdown, service should be available onsite within 24 hours			
4	Complete users list for the quoted model in India, with contact addresses, emails and phone numbers should be provided.			

**Please sign the declaration in the next page.**

***Declaration by the Bidder***

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

Please see section III below for financial bid. **Section III is not to be filled in the Technical Bid.**

**Section III: Financial Bid**  
**LC MS/MS System**

This sheet is to be attached as a covering sheet along with the formal technical bid of the quoted instrument. In case more than one instrument / model is quoted, separate sheets have to be attached with each quotation.

Financial Summary for the Instrument model : \_\_\_\_\_

Price Description		Price	Comments (if any)
Quoted Currency			
Total Instrument Cost	[a]		
Total cost of Supporting Instruments	[b]		
Comprehensive Warranty Charges	[c]		
Any other charges	[d]		
CIF Kolkata, Gujarat [a] + [b] + [c] + [d] =	[e]		
Conversion Factor to INR*	[f]		
Total Price in INR [e] x [f] =	[g]		
**Toal cost of Items quoted in INR =	[h]		
Final Price in INR = g + h =	[i]		

\* Use the conversion factor as on the date prior to the date of submission of the quotation and mention this date clearly.

\*\* Give full list of items quoted in Indian Rupees separately.

**Declaration by the Bidder**

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

**DATE**

# GC MS/MS System

## Technical Specifications

(To be submitted by the Bidder)

Quotation Reference: SB/QEL/PUR/**Kolkata**/Instruments/14 dated 3-2-2017

### Location of Supply and Installation:

The Instrument(s) will be required to be delivered and installed at the following locations:

Spices Board Quality Evaluation Laboratory  
C/o Project Site, District Headquarter of South 24, Paraganas at Baruipur,  
JL No. 48, LR Khatian No. 1311, Mouza-Chakarbar,  
PO&PS Baruipur District South 24-Paraganas  
West Bengal 700144

*The technical bid is to be submitted by filing in Section I and II, duly signed by the authorized signatory in the 'Declaration of the Bidder'. Section III is to be left blank. incompleteness in filling up this form or failure to attach the required supporting data or documents, may result in rejection of the quotation.*

### Section I: Details of the Quotation

Quotation Submitted By	
Quotation Reference No.	
Date of submission of quotation	
Details of EMD submitted (if any)	
Full Address	
Name of principal supplier (if not self)	
Authorized contact person	
Designation	
Contact details	
List of supporting documents submitted along with the quotation	

## Section II: Compliance with Technical Specifications

### GC MS/MS System

**Against each point in the technical specification, compliance must be marked as YES / NO**

All items required for the full-fledged function of an advanced, high sensitive GC MS/MS system, including all software, accessories and supporting instruments as outlined below are to be quoted.

#### 1. GENERAL REQUIREMENTS

	Required Specification	Complying (Yes / No)	Remarks	Documentary evidence enclosed?
1	All components of the GC MS/MS system should be from the same supplier.			
2	<b>Two</b> Systems to be quoted, to be installed at different laboratories of Spices Board, details given in 7 below.			

#### 2. GAS CHROMATOGRAPH SYSTEM:

##### a) Interface

	Required Specification	Complying (Yes / No)	Remarks	Documentary evidence enclosed?
1	All components of the GC Should be controllable through the MS/MS software.			
2	The GC must feature an external screen to provide easy accessibility to set and monitor all parameters of the GC. The screen should provided all needed data, including all temperature, pressure, flow parameters..			
3	The screen of the GC must provide all needed data, including all temperature and pressure/flow parameters, type of carrier gas, carrier gas column pressure, flow rates, split flow, detector gas flow rates and all detector parameters.			
4	GC should have routine automatic column evaluation procedure and storing the column pneumatic resistance. It should also allow an automated correction of the nominal column parameters			

##### b) Oven

	Required Specification	Complying (Yes / No)	Remarks	Documentary evidence enclosed?
1	The coloum oven should have an operating range from ambient to 450°C using the optional sub ambient oven accessory.			
2	Fast heat-up time of 100°C/min or more			
3	The oven temperature stability is within 0.01 °C of set temperature			

4	The operating temperature range should be 3°C above ambient to $\geq 450$ °C			
5	Oven Ramps /Plateaus/Cool down: the instrument should have number of ramps/plateaus: 20/21			

**c) Injector and Autosampler**

	Required Specification	Complying (Yes / No)	Remarks	Documentary evidence enclosed?
	<b>INJECTOR</b>			
1	One Split/Splitness as Standard			
2	One PTV injector as Standard			
3	The injectors should be able to operate with narrow bore capillary, normal capillary and wide bore and columns			
4	The injector should feature an optimized, modular thermal profile for split and splitless/PTV injection with a cold head.			
5	The injector should permit large volume splitless injection (up to 50 microliteres) without requiring pressure pulse to quantitatively recover the whole sample, and without any further hardware requirement.			
6	The injector should allow timed closure/opening of the purge line			
7	Maximum Temperature should be $\geq 400$ degree C			
8	Split Ratio: $\geq 7000:1$			
9	Pressure in the range of range: 0-950 kPa			
	<b>Auto Sampler:</b> The GCMS/MS should be supplied with atleast 100 vial auto sampler capable of injecting in all installed injectors of GC-MS/MS with different methods.			

**d) Columns**

	Required Specification	Complying (Yes / No)	Remarks	Documentary evidence enclosed?
1	All columns quoted should be high efficiency, low bleed capillary columns, especially suitable for MS analysis. The columns should have performance certificates which should contain all relevant column parameters.			
2	The following columns should be quoted: <ol style="list-style-type: none"> <li>1. DB-1 MS or equivalent (2 Nos.)</li> <li>2. DB-5 MS or equivalent (2 Nos.)</li> <li>3. DB-35 MS or equivalent (1 No.)</li> <li>4. DB-17 MS or equivalent (1 No.)</li> <li>5. DB-225 MS or equivalent (1 No.)</li> <li>6. Capillary column suitable for determining enantiomeric composition of essential oils (2 No.)</li> </ol>			



	<p>7. Capillary column suitable for analysis of mineral oils (1 No.)</p> <p>8. All columns should have dimensions: 30mx0.25mmx0.25 um (please mention if different)</p>			
3	Column Back flush technology is desirable for column and MS safety and life			

e) **GC Analytical Performance**

	<b>Required Specification</b>	<b>Complying (Yes / No)</b>	<b>Remarks</b>	<b>Documentary evidence enclosed?</b>
	<p><b>GC Analytical Performance:</b>            The GC should have a Retention Time Repeatability of &lt;0.0008 min or better            The Peak Area Responsibility should be &lt;0.5% RSD or better (Please provide data)</p>			YES / NO

3. **TRIPLE QUADRUPOLE MS/MS SYSTEM**

a) **Mass Analyzer**

	<b>Required Specification</b>	<b>Complying (Yes / No)</b>	<b>Remarks</b>	<b>Documentary evidence enclosed?</b>
1	<p><b>A high sensitivity Triple Quadrupole GC-MS/MS System.</b>            Features for elimination of neutral noise and increasing sensitivity should be available.            Should have high efficient ion transmission form Q1 to Q2 and Q2 to Q3.</p>			
2	<p><b>Ionization:</b></p> <ol style="list-style-type: none"> <li>1. EI with dual filaments</li> <li>2. CI +ve and -ve</li> <li>3. The calibration standards for EI and CI should be provided.</li> </ol>			
3	<p><b>Pumping Systems</b></p> <ol style="list-style-type: none"> <li>1. Dual stage, air cooled turbomolecular pump with capacity of 300L/Sec or higher for fast vacuum.</li> <li>2. Easy change over from EI to CI should be available.</li> <li>3. Should allow the system to withstand high carrier flow rates of 15 ml/min or higher.</li> <li>4. The pump should be covered under the comprehensive warranty clause (Section III)</li> </ol>			
4	<p><b>Electron Energy</b>            The system should have user selectable electro energy from 10-150eV or higher.</p>			
5	<p><b>Emission Current, dual filaments</b>            It should have emission current upto 200 ua with improved regulation at low current.</p>			
6	<p><b>Collision Cell:</b>            Efficient collision cell for generation of daughter ions capable of providing high sensitivity MS/MS</p>			

	analysis.			
7	<b>Transfer Line Temperature</b> The temperature should be up to 400 degree C.			

**b) Operational Modes and other requirements**

	<b>Required Specification</b>	<b>Complying (Yes / No)</b>	<b>Remarks</b>	<b>Documentary evidence enclosed?</b>
1	The mass range should be 10-1000 a.m.u. or better.			
2	<b>Scan Speed:</b> The MS should have a scan speed of <b>at least 6,000 amu/second</b> or better. It should have the ability to acquire at least 50 scans per second in full scan mode.			
3	<b>Mode (MS)</b> It should have full scan, SIM, timed-SIM, combined full scan/SIM and combined full scan/timed-SIM modes.			
4	<b>Modes (MS/MS)</b> It should have MRM, timed-MRM, combined MRM/full scan, combined timed MRM/full scan product ion scan modes. The following features should be available: <ol style="list-style-type: none"> <li>1. Up to 500 MRM/second acquisition rate.</li> <li>2. Resolution of 0.7 Da with mass stability of +/- 0.1Da</li> <li>3. User adjustable resolution with required selectable settings up to 4 Da on both Q1 and Q3</li> <li>4. Minimum Dwell time of 1 ms</li> </ol>			
5	<b>Scan Speed</b> The MS should have scan speed >6000 a.m.u./second or better. It should have an ability to acquire more than 50 scans/sec in full scan.			
6	MRM transitions-500 MRM transitions per second			

**c) Software Features and Data System**

	<b>Required Specification</b>	<b>Complying (Yes / No)</b>	<b>Remarks</b>	<b>Documentary evidence enclosed?</b>
1	It should have Automated MRM Development			
2	It should have Automated acquisition window adjustment based on retention time.			
3	It should have Compound based MRM Library			
4	It should have a software for controlling and acquiring all the MS and conventional detectors			
5	It should have software for reporting for environmental and food safety market as per international protocols.			

6	The latest version of the NIST, Wiley, PMW (licensed version) should be included.			
7	The software should be user friendly, capable of controlling the entire functions of GC and MS/MS, with required licenses for systems suitability calculations; all accessories required for its operation should be quoted.			
8	The software should have full fledged capability of calculating system suitability parameters, both for MS and GC			
9	Full-fledged reporting facility with capability of customized user-designed report format should be available.			
10	The software should necessarily have the following features:			
a.	Retention-time based programming/ monitoring of MRM scans, so that only desired MRMs and multiple MRM transition ions are monitored in desired retention time ranges.			
c.	Automated quantitative data processing features with database of Maximum number of molecules.			
d.	Option for naming MRM transitions.			

#### 4. COMPUTER AND PRINTER

	Required Specification	Complying (Yes / No)	Remarks	Documentary evidence enclosed?
1	Computer DVD writer and color laser printer suitable for operation with the software (specification mentioned above) should be quoted.			

#### 5. SYSTEM PERFORMANCE REQUIREMENTS

The requirements in this section pertain to the working requirements of the system. Any claims made in the compliance should be substantiated by giving suitable detailed outputs from the quoted model of the instrument generated at the applications labs of the supplier, in the form of report for easy reference. The reports should necessarily include the instrument output data, graphs and chromatograms. The claims in the compliance statement should be demonstrable, at the time of installation. The submitted data will need to be reproduced in the presence of Spices Board Officials, if necessary.

	Required Specification	Complying (Yes / No)	Remarks	Documentary evidence enclosed?
1	Sensitivity of the instruments: In EI MRM transition 272-222/241 at unit resolution (0.7+/-0.1 a.m.u), 100 fg on -column GC injection of OFN should give an S/N ratio of at least 5000:1. For ten injections % of RSD should be <5%. Chromatograms to be provided, with details of mobile phase, column and injection volume used.			YES / NO
2	Analysis of pesticide residues: A limit of			

	quantitation of methyl parathion, Quinalphos and profenophos in chilli matrix of <b>at least 1 ppb</b> in MRM mode (please provide full extraction and instrument method details and chromatograms / spectrum. Also mention the lowest LOQ achievable)			YES / NO
3	Pre-configured and optimized methods, with reference standards, for analysis of pesticide residues (provide details)			YES / NO
4	MRM list and production spectra for a wide range of compounds including pesticide residues, screening and quantitation (provide details)			YES / NO

## 6. SUPPORT SYSTEMS, PARES AND ACCESSORIES

### a) UPS System

	Required Specification	Complying (Yes / No)	Remarks	Documentary evidence enclosed?
1	A 15KVA/suitable dedicated UPS system with Exide 6EL+, 150 AH tubular batteries capable of providing 5 hours back up to the GC MS/MS system should be quoted.			

### b) Gases / Gas Generators

	Required Specification	Complying (Yes / No)	Remarks	Documentary evidence enclosed?
1	Two cylinders each of <u>all required gases</u> for operation of the system should be provided, to be quoted from local sources for supply at the installation site. Purity of the required Gases should be 99.9995%			
2	Gas generators, where quoted, should be covered under the comprehensive warranty clause (Section III)			
3	Two regulators of high quality (one for use, one spare) should be provided for each gas required for the system. The gas piping connections of high and appropriate quality, including any fitter and purification systems, should be provided and installed along with the system.			

### c) Accessories and spares

	Required Specification	Complying (Yes / No)	Remarks	Documentary evidence enclosed?
1	All required standards of mass calibration and turning, and any other material required to make the instrument functional should be provided.			
2	Pack of 5000 vials, complete with septa and cap,			

	should be included			
3	Filter – 2 Nos.			
4	Caliberated Digital FloW Meter- 1 No. With NABL Accredited certificate			
5	Caliberated Digital Temperature meter with probe-1 No. With NABL Accredited Certificate (-25-400)			
6	Septa for GC (400 Nos.)			
7	PTV Maintenance kit for GC-1 No.			
8	Syringes-Autosampler (10uL) 10 each			
9	Filament- 10 nos			
10	Spare SS inj module with Pneumatics for GC-1 No.			
11	2 ml vials and caps for auto sampler-3000 nos			
12	Graphite Ferrules for Capillary columns of 0.25 and 0.32 mm id – 20 each			
13	Innert Glass Liners with glass wool for Split injections 10 each			
14	Oil for vacuum pump-5L			
	<b>Essential Accessories</b>			
1	Shiortix Tubing Cutter-2 Nos.			
2	Standard installation Table and Chair with sufficient bech-top area to accomodate GC-MS/MS and data station should be quoted			

#### 7. TERMS AND CONDITIONS

Required Specification	Complying (Yes / No)	Remarks	Documentary evidence enclosed?
A minimum of 5 operational installations of the quoted model in India should be available for the instrument to be considered for purchase			
A comprehensive warranty for 5 years for the complete equipment including Spares and Accessories should be provided. Independent accessories like UPS and gas generators/ Cyliders also should be covered under 5 Years Warranty. The warranty should include mass calibration performed Quaterly with valid Standard provided by the vendor. In case of breakdown, service should be available onsite within 24 hours (See Section III below).			
Upon installation, an LOQ of 1 ppb at S:N ratio 50:1 and other QA/QC checks of the Quoted Model for the following Pesticides in the spice matrix provided by the lab should be demonstrated: Profenophos, lprobenphos, Triazophos, Quinalphos, Phorate, Chlorpyriphos, Bifenthrin, Cypermethrin, Methyl parathion, Malathion, Dithion and Imidachloprid.			

***Declaration by the Bidder***

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

Please see section III below for financial bid. **Section III is not to be filled in the Technical Bid.**

**Section III: Financial Bid**  
**GC MS/MS System**

This sheet is to be attached as a covering sheet along with the formal technical bid of the quoted instrument. In case more than one instrument / model is quoted, separate sheets have to be attached with each quotation.

Financial Summary for the Instrument model : \_\_\_\_\_

Price Description		Price	Comments (if any)
Quoted Currency			
Total Instrument Cost	[a]		
Total cost of Supporting Instruments	[b]		
Comprehensive Warranty Charges	[c]		
Any other charges	[d]		
CIF Kolkata, Gujarat [a] + [b] + [c] + [d] =	[e]		
Conversion Factor to INR*	[f]		
Total Price in INR [e] x [f] =	[g]		
**Toal cost of Items quoted in INR =	[h]		
Final Price in INR = g + h =	[i]		

\* Use the conversion factor as on the date prior to the date of submission of the quotation and mention this date clearly.

\*\* Give full list of items quoted in Indian Rupees separately.

**Declaration by the Bidder**

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

**DATE**

## **Part II**

### ***Instruments for Microbiology Laboratory***



# BOD Incubator

## Technical Specifications

(To be submitted by the Bidder)

Quotation Reference: SB/QEL/PUR/**Kolkata**/Instruments/14 dated 3-2-2017

### Location of Supply and Installation:

The Instrument(s) will be required to be delivered and installed at the following locations:

Spices Board Quality Evaluation Laboratory  
C/o Project Site, District Headquarter of South 24, Paraganas at Baruipur,  
JL No. 48, LR Khatian No. 1311, Mouza-Chakarbar,  
PO&PS Baruipur District South 24-Paraganas  
West Bengal 700144

*The technical bid is to be submitted by filing in Section I and II, duly signed by the authorized signatory in the 'Declaration of the Bidder'. Section III is to be left blank. incompleteness in filling up this form or failure to attach the required supporting data or documents, may result in rejection of the quotation.*

### Section I: Details of the Quotation

Quotation Submitted By	
Quotation Reference No.	
Date of submission of quotation	
Details of EMD submitted (if any)	
Full Address	
Name of principal supplier (if not self)	
Authorized contact person	
Designation	
Contact details	
List of supporting documents submitted along with the quotation	

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## Section II: Compliance with Technical Specifications

### BOD Incubator (2 Nos.)

*Against each point in the technical specification, compliance must be marked as YES / NO*

	Required Specification	Complying (Yes/No)	Remarks	Documentary Evidence Enclosed?
1	Capacity: 324 Liters			
2	Temperature Range: 5°C above ambient to 60°C			
3	Controller: Digital Display Electronic Controller			
4	Control Accuracy: +/- 0.1°C			
5	External Chamber: Mild steel Powder Coated/stainless Steel			
6	Inner Chamber: Stainless Steel			
7	Inner Acrylic Door: Inner full size see through Acrylic 8mm thick			
8	Air Circulation: By motorized Recirculation/Forced Air for temperature homogeneity			
9	Should have illumination lamp to work on 220/230 VAC			
10	Should have inbuilt stabilizer with sufficient capacity			
11	Distribution accuracy/Uniformity throughout the chamber : ± 0.3°C or better			
12	Number of Shelves: Minimum 4 Nos (Detachable)			
<b>Additional Terms and Conditions</b>				
13	A complete compliance statement (this sheet filled in), stating the status of compliance with each point in the technical specification, should necessarily accompany the quotation.			
14	A minimum of 5 users of the quoted model in India should be available. The list of these users, with full details of contact persons, addresses, telephone, mobile and email should be provided in table form.			

### Comprehensive Warranty

1	The warranty period should be 5 Years. All breakdown of the instrument should be addressed within 24 hours by an onsite visit.			
2	All parts of the instrument, accessories and supporting instruments should be covered under the warranty. If any accessory / spare part / consumable is not covered under the comprehensive warranty, then the itemised list of			

	such items, including their prices during the period 2014-15 and average lifetime of the items should be provided.			
3	The equipment should be installed at the proposed site, demonstrate the required objective of the test with the claimed limit of detection/quantification with the sample provided (as applicable).			
4	Training should be given to the staff at the site, for the operation of the instrument on demand			
5	Any accessory system(s) other than those mentioned in the technical specifications, that are required for satisfactory installation of the system should be quoted and supplied with the instrument.			
6	Agency commission: Agency commission if any will be paid to the Indian agent in rupees on receipt of the equipment and after satisfactory installation.			
7	Agency commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in tender even in case of Nil commission. The tender should indicate the percentage of Agency commission to be paid to the Indian agent.			

***Declaration by the Bidder***

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

Please see section III below for financial bid. **Section III is not to be filled in the Technical Bid.**

**Section III: Financial Bid**  
**BOD Incubator**

This sheet is to be attached as a covering sheet along with the formal technical bid of the quoted instrument. In case more than one instrument / model is quoted, separate sheets have to be attached with each quotation.

Financial Summary for the Instrument model : \_\_\_\_\_

Price Description		Price	Comments (if any)
Quoted Currency			
Total Instrument Cost	[a]		
Total cost of Supporting Instruments	[b]		
Comprehensive Warranty Charges	[c]		
Any other charges	[d]		
CIF Kolkata, Gujarat [a] + [b] + [c] + [d] =	[e]		
Conversion Factor to INR*	[f]		
Total Price in INR [e] x [f] =	[g]		
**Toal cost of Items quoted in INR =	[h]		
Final Price in INR = g + h =	[i]		

\* Use the conversion factor as on the date prior to the date of submission of the quotation and mention this date clearly.

\*\* Give full list of items quoted in Indian Rupees separately.

**Declaration by the Bidder**

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

**DATE**

## Bacteriological Incubator

### Technical Specifications

(To be submitted by the Bidder)

Quotation Reference: SB/QEL/PUR/**Kolkata**/Instruments/14 dated 3-2-2017

#### Location of Supply and Installation:

The Instrument(s) will be required to be delivered and installed at the following locations:

Spices Board Quality Evaluation Laboratory  
C/o Project Site, District Headquarter of South 24, Paraganas at Baruipur,  
JL No. 48, LR Khatian No. 1311, Mouza-Chakarbar,  
PO&PS Baruipur District South 24-Paraganas  
West Bengal 700144

*The technical bid is to be submitted by filing in Section I and II, duly signed by the authorized signatory in the 'Declaration of the Bidder'. Section III is to be left blank. incompleteness in filling up this form or failure to attach the required supporting data or documents, may result in rejection of the quotation.*

### Section I: Details of the Quotation

Quotation Submitted By	
Quotation Reference No.	
Date of submission of quotation	
Details of EMD submitted (if any)	
Full Address	
Name of principal supplier (if not self)	
Authorized contact person	
Designation	
Contact details	
List of supporting documents submitted along with the quotation	

**Section II: Compliance with Technical Specifications**

**Bacteriological Incubator  
(2 Nos.)**

*Against each point in the technical specification, compliance must be marked as YES / NO*

	<b>Required Specification</b>	<b>Complying (Yes/No)</b>	<b>Remarks</b>	<b>Documentary Evidence Enclosed?</b>
1	Size of the Incubator should be 605 mm W; 605 mm D & 910 mm H with a total volume of 32 Ltrs and suitable for 8 racks.			
2	Double walled inside made of thick stainless steel and outside of Mild Steel duly painted with epoxy powder coating.			
3	The gap of 75mm between two walls should be fitted with pure mineral wool.			
4	Synthetic rubber gasket must be provided on the door for better grip.			
5	Door should have a glass window outside .			
6	Heating elements should be placed in ribs at the bottom and sides.			
7	Two adjustable air ventilators must be placed near the top of the sides.			
8	The temperature must be controlled by an Electronic Micro processed Temperature Controller cum Indicator from few °C above ambient to 70°C with sensitivity of ± 0.1 °C supplied with two pilot lamps.			
9	Should have an air circulating fan to maintain uniform temperature throughout the incubator.			
10	Should have perforated quality stainless steel shelves (minimum 4 Nos.) adjustable at any level.			
11	Should have cord with plug to work on 220/230 volts A.C.			
<b>Additional Terms and Conditions</b>				
13	A complete compliance statement (this sheet filled in), stating the status of compliance with each point in the technical specification, should necessarily accompany the quotation.			
14	A minimum of 5 users of the quoted model in India should be available. The list of these users, with full details of contact persons, addresses, telephone, mobile and email should be provided in table form.			

**Comprehensive Warranty**

1	The warranty period should be 5 Years. All breakdown of the instrument should be addressed within 24 hours by an onsite visit.			
2	All parts of the instrument, accessories and supporting instruments should be covered under the warranty. If any accessory / spare part / consumable is not covered under the comprehensive warranty, then the itemised list of such items, including their prices during the period 2014-15 and average lifetime of the items should be provided.			
3	The equipment should be installed at the proposed site, demonstrate the required objective of the test with the claimed limit of detection/quantification with the sample provided.			
4	Training should be given to the staff at the site, for the operation of the instrument on demand			
5	Any accessory system(s) other than those mentioned in the technical specifications, that are required for satisfactory installation of the system should be quoted and supplied with the instrument.			
6	Agency commission: Agency commission if any will be paid to the Indian agent in rupees on receipt of the equipment and after satisfactory installation.			
7	Agency commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in tender even in case of Nil commission. The tender should indicate the percentage of Agency commission to be paid to the Indian agent.			

***Declaration by the Bidder***

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

Please see section III below for financial bid. **Section III is not to be filled in the Technical Bid.**

### **Section III: Financial Bid** **Bacteriological Incubator**

This sheet is to be attached as a covering sheet along with the formal technical bid of the quoted instrument. In case more than one instrument / model is quoted, separate sheets have to be attached with each quotation.

Financial Summary for the Instrument model : \_\_\_\_\_

Price Description		Price	Comments (if any)
Quoted Currency			
Total Instrument Cost	[a]		
Total cost of Supporting Instruments	[b]		
Comprehensive Warranty Charges	[c]		
Any other charges	[d]		
CIF Kolkata, Gujarat [a] + [b] + [c] + [d] =	[e]		
Conversion Factor to INR*	[f]		
Total Price in INR [e] x [f] =	[g]		
**Toal cost of Items quoted in INR =	[h]		
Final Price in INR = g + h =	[i]		

\* Use the conversion factor as on the date prior to the date of submission of the quotation and mention this date clearly.

\*\* Give full list of items quoted in Indian Rupees separately.

#### **Declaration by the Bidder**

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

**DATE**



## Stomacher

### Technical Specifications

(To be submitted by the Bidder)

Quotation Reference: SB/QEL/PUR/[Kolkata](#)/Instruments/14 dated 3-2-2017

#### Location of Supply and Installation:

The Instrument(s) will be required to be delivered and installed at the following locations:

Spices Board Quality Evaluation Laboratory  
C/o Project Site, District Headquarter of South 24, Paraganas at Baruipur,  
JL No. 48, LR Khatian No. 1311, Mouza-Chakarbar,  
PO&PS Baruipur District South 24-Paraganas  
West Bengal 700144

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### Section I: Details of the Quotation

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Quotation Reference No.	
Date of submission of quotation	
Details of EMD submitted (if any)	
Full Address	
Name of principal supplier (if not self)	
Authorized contact person	
Designation	
Contact details	
List of supporting documents submitted along with the quotation	

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## Section II: Compliance with Technical Specifications

### Stomacher

***Against each point in the technical specification, compliance must be marked as YES / NO***

	Required Specification	Complying (Yes/No)	Remarks	Documentary Evidence Enclosed?
1	Dimensions: 330mm wide x 355 mm deep x 300 mm high			
2	Voltage supply: 220-250V			
3	Supply frequency: 50-60 Hz			
4	Plug Top Fuse: F5A			
5	Insulation: Class 1 (Earthed)			
6	Installation: Over voltage Category II			
7	Pollution : Pollution degree II			
8	Duty Cycle: Continuous			
9	Rated Load: 140W			
10	Disposable bag size: 177mm x 304 mm			
11	Minimum capacity : 80 ml			
12	Maximum capacity: 400 ml			
13	Maximum sample temperature: 60°C			
14	Ambient Operating Temperature: 10-35°C			
15	Operating Relative Humidity range: 10-89%			
16	Adjustable timer settings : 0 seconds - 90 minutes			
17	Paddle speeds : 200 rpm; 230 rpm; 260 rpm			
18	Paddle Clearance : 0-10 mm			
	<b>Additional Terms and Conditions</b>			
19	A complete compliance statement (this sheet filled in), stating the status of compliance with each point in the technical specification, should necessarily accompany the quotation.			
20	A minimum of 5 users of the quoted model in India should be available. The list of these users, with full details of contact persons, addresses, telephone, mobile and email should be provided in table form.			

### Comprehensive Warranty

1	The warranty period should be 5 Years. All breakdown of the instrument should be addressed within 24 hours by an onsite visit.			
2	All parts of the instrument, accessories and supporting			

	instruments should be covered under the warranty. If any accessory / spare part / consumable is not covered under the comprehensive warranty, then the itemised list of such items, including their prices during the period 2014-15 and average lifetime of the items should be provided.			
3	The equipment should be installed at the proposed site, demonstrate the required objective of the test with the claimed limit of detection/quantification with the sample provided.			
4	Training should be given to the staff at the site, for the operation of the instrument on demand			
5	Any accessory system(s) other than those mentioned in the technical specifications, that are required for satisfactory installation of the system should be quoted and supplied with the instrument.			
6	Agency commission: Agency commission if any will be paid to the Indian agent in rupees on receipt of the equipment and after satisfactory installation.			
7	Agency commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in tender even in case of Nil commission. The tender should indicate the percentage of Agency commission to be paid to the Indian agent.			

***Declaration by the Bidder***

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

Please see section III below for financial bid. **Section III is not to be filled in the Technical Bid.**

**Section III: Financial Bid**  
**Stomacher**

This sheet is to be attached as a covering sheet along with the formal technical bid of the quoted instrument. In case more than one instrument / model is quoted, separate sheets have to be attached with each quotation.

Financial Summary for the Instrument model : \_\_\_\_\_

Price Description		Price	Comments (if any)
Quoted Currency			
Total Instrument Cost	[a]		
Total cost of Supporting Instruments	[b]		
Comprehensive Warranty Charges	[c]		
Any other charges	[d]		
CIF Kolkata, Gujarat [a] + [b] + [c] + [d] =	[e]		
Conversion Factor to INR*	[f]		
Total Price in INR [e] x [f] =	[g]		
**Toal cost of Items quoted in INR =	[h]		
Final Price in INR = g + h =	[i]		

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\*\* Give full list of items quoted in Indian Rupees separately.

**Declaration by the Bidder**

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SIGNATURE OF TENDERER

SEAL OF THE COMPANY

**DATE**

## Biosafety Cabinets

### Technical Specifications

(To be submitted by the Bidder)

Quotation Reference: SB/QEL/PUR/**Kolkata**/Instruments/14 dated 3-2-2017

#### Location of Supply and Installation:

The Instrument(s) will be required to be delivered and installed at the following locations:

Spices Board Quality Evaluation Laboratory  
C/o Project Site, District Headquarter of South 24, Paraganas at Baruipur,  
JL No. 48, LR Khatian No. 1311, Mouza-Chakarbar,  
PO&PS Baruipur District South 24-Paraganas  
West Bengal 700144

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### Section I: Details of the Quotation

Quotation Submitted By	
Quotation Reference No.	
Date of submission of quotation	
Details of EMD submitted (if any)	
Full Address	
Name of principal supplier (if not self)	
Authorized contact person	
Designation	
Contact details	
List of supporting documents submitted along with the quotation	

## Section II: Compliance with Technical Specifications

### Biosafety Cabinets (CLASS II - Type B2) (2 Nos)

**Against each point in the technical specification, compliance must be marked as YES / NO**

	Required Specification	Complying (Yes/No)	Remarks	Documentary Evidence Enclosed?
1	<u>Cleanliness Level</u> : CLASS 100 (ISO 5 for particle sizes 0.5 μ < 3530 particles/M <sup>3</sup> of air at both at Rest & Operation Condition as per ISO 14644 -1(ISO 5 replaces Class 100 US-FS 209 E) Conforming to NSF/ANSI 49,USA & En12469 standards.			
2	<u>Size</u> : Ft (w x d x h) 3 x 2 x 2			
3	<u>Air Balancing</u> : 100% Exhaust & 0% Re-Circulation			
4	<u>Particle retention</u> : 0.3 micron particles with typical efficiency of >99.997%			
5	<u>Velocity</u> : 90 fpm at initial set point			
6	<u>Noise level</u> : 65 decibel on "A" scale ± 5 as per NSF 49			
7	Pressure Differential: 0-25 mm Magnehelic Gauge			
8	<u>Ultra violet lamp</u> : 3 feet, 30Watt - Original - Philips, Holland make - 1 No.			
9	<u>Illumination</u> : 4 feet, 40 Watt, Fluorescent tube - 2 Nos (or) suitable CFL Lamps			
10	<u>Power supply</u> : 230 V, Single Phase, 50 Hz			
11	<u>Material of Construction</u> : Cabinet made from Galvanized Iron 18 SWG sheet metal with polyurethane paint coated finish and bottom will be supported with MS with PU coated modular stand which can be adjustable for height with leveling legs.			
12	<u>Working Table</u> : Removable type tabletop, made of perforated IS 304 Stainless Steel - satin finished, underneath provided with drain-pan to collect & dispose off liquid wastes			
13	<u>Working Area</u> : The entire working zone is lined with IS 304 grade stainless steel materials with joint free coving on corners for easy cleaning			
14	<u>Front door</u> : Made of clear 5 mm thick Acrylic / Polycarbonate sheet - vertical sliding, while opening the door UV Lamp will be cut "OFF" and while closing the door UV Lamp will be "ON" automatically.			

15	<u>Side Panels:</u> Both the sidewalls are made from double layered outer GI & inner stainless steel with return-air plenum in between. Edges are perforated to avoid entry of room air into the work zone and exit of contaminated air in to the room and such contaminated air is sucked through this full height perforation at the edges of the sidewalls.			
16	<b>HEPA Filter</b>			
17	Media Ultra clean glass fiber paper – imported			
18	Supply Air & Exhaust Type Mini-Pleated constructions			
19	Retention 0.3 micron			
20	Efficiency 99.997% to 0.3 microns as per IEST-RP-CC001.3 USA			
21	Pressure drop 12 mm WG			
22	Grade H14 rating			
23	<b>PRE Filter</b>			
24	Media Non woven - synthetic polyester			
25	Retention 10 - 15 micron			
26	Efficiency 90%			
27	Pressure drop 6mm WG			
28	Grade F7 rating			
29	Supply Air Blower: Which consists of dynamically & statically balanced aluminum centrifugal impeller driven by an Single phase, 1440-RPM motor, enclosed in a PU coated GI casing, suitably suspended in a pair of springs & connected to the filter chamber through flexible canvas duct inside the cabinet.			
30	Exhaust Blower: Suitable displacing capacity having a static of 60 mm WG and made of mild steel and directly driven by a single phase, 1440-RPM motor. The exhaust motor & blower unit will be connected to the cabinet through an exhaust duct made of rigid PVC pipe.			
31	Exhaust Duct: The exhaust air will be sending out through an exhaust duct made of 125 mm dia rigid PVC pipe. Suitable canopy will be provided at the end of the duct.			
32	ON/OFF Controls: “ON/OFF” soft touch switch controller for the blower, UV lamp, Day light lamp.			
33	UV / Door integration: Apart from an independent control switch, the closing / opening operation of front door is integrated with the UV on / off. The UV will automatically switch “off” when the front doors opened; likewise, the UV will switch “on” automatically when the door is closed. This will avoid accidental exposure of UV rays to the users’ as UV rays are harmful to the skin.			

34	<p>Note: The following test should be carried out at the time of installation and the corresponding calibration certificate should be provided.</p> <ol style="list-style-type: none"> <li>1. Laser Particle Count test to confirm the cleanliness level</li> <li>2. Velocity Measurement Test to adjust required velocity</li> <li>3. Differential pressure measurement to confirm the HEPA filter condition</li> </ol>			
35	<p>The following certificate should be provided with each unit:</p> <ol style="list-style-type: none"> <li>1. Design Qualification (DQ)</li> <li>2. Installation Qualification (IQ)</li> <li>3. Operational Qualification (OQ)</li> <li>4. Performance Qualification (PQ)</li> <li>5. Test Certificate for Mini-Pleat HEPA Filters</li> <li>6. Calibration Certificate for Pressure Gauge</li> <li>7. Calibration Certificate for Air Velocity Anemometer, Laser Particle Counter Test Certificate &amp; Report</li> <li>8. Warranty Certificate</li> </ol>			
<b>Additional Terms and Conditions</b>				
48	A complete compliance statement (this sheet filled in), stating the status of compliance with each point in the technical specification, should necessarily accompany the quotation.			
49	A minimum of 5 users of the quoted model in India should be available. The list of these users, with full details of contact persons, addresses, telephone, mobile and email should be provided in table form.			

### Comprehensive Warranty

1	The warranty period should be 5 Years. All breakdown of the instrument should be addressed within 24 hours by an onsite visit.			
2	All parts of the instrument, accessories and supporting instruments should be covered under the warranty. If any accessory / spare part / consumable is not covered under the comprehensive warranty, then the itemised list of such items, including their prices during the period 2014-15 and average lifetime of the items should be provided.			
3	The equipment should be installed at the proposed site, demonstrate the required objective of the test with the claimed limit of detection/quantification with the sample provided.			
4	Training should be given to the staff at the site, for the operation of the instrument on demand			
5	Any accessory system(s) other than those mentioned in the technical specifications, that are required for satisfactory installation of the system should be quoted and supplied with the instrument.			
6	Agency commission: Agency commission if any will be paid to the Indian agent in rupees on receipt of the equipment and after satisfactory installation.			



7	Agency commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in tender even in case of Nil commission. The tender should indicate the percentage of Agency commission to be paid to the Indian agent.			
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***Please sign the declaratio on the next page.***

***Declaration by the Bidder***

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

Please see section III below for financial bid. **Section III is not to be filled in the Technical Bid.**

**Section III: Financial Bid**  
**Biosafety Cabinets**  
**(2 Nos.)**

This sheet is to be attached as a covering sheet along with the formal technical bid of the quoted instrument. In case more than one instrument / model is quoted, separate sheets have to be attached with each quotation.

Financial Summary for the Instrument model : \_\_\_\_\_

Price Description		Price	Comments (if any)
Quoted Currency			
Total Instrument Cost	[a]		
Total cost of Supporting Instruments	[b]		
Comprehensive Warranty Charges	[c]		
Any other charges	[d]		
CIF Kolkata, Gujarat [a] + [b] + [c] + [d] =	[e]		
Conversion Factor to INR*	[f]		
Total Price in INR [e] x [f] =	[g]		
**Toal cost of Items quoted in INR =	[h]		
Final Price in INR = g + h =	[i]		

\* Use the conversion factor as on the date prior to the date of submission of the quotation and mention this date clearly.

\*\* Give full list of items quoted in Indian Rupees separately.

**Declaration by the Bidder**

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

**DATE**

## Water Bath Serological

### Technical Specifications

(To be submitted by the Bidder)

Quotation Reference: SB/QEL/PUR/**Kolkata**/Instruments/14 dated 3-2-2017

#### Location of Supply and Installation:

The Instrument(s) will be required to be delivered and installed at the following locations:

Spices Board Quality Evaluation Laboratory  
C/o Project Site, District Headquarter of South 24, Paraganas at Baruipur,  
JL No. 48, LR Khatian No. 1311, Mouza-Chakarbar,  
PO&PS Baruipur District South 24-Paraganas  
West Bengal 700144

*The technical bid is to be submitted by filing in Section I and II, duly signed by the authorized signatory in the 'Declaration of the Bidder'. Section III is to be left blank. incompleteness in filling up this form or failure to attach the required supporting data or documents, may result in rejection of the quotation.*

### Section I: Details of the Quotation

Quotation Submitted By	
Quotation Reference No.	
Date of submission of quotation	
Details of EMD submitted (if any)	
Full Address	
Name of principal supplier (if not self)	
Authorized contact person	
Designation	
Contact details	
List of supporting documents submitted along with the quotation	

## Section II: Compliance with Technical Specifications

### Water Bath Serological (3 Nos.)

***Against each point in the technical specification, compliance must be marked as YES / NO***

	Required Specification	Complying (Yes/No)	Remarks	Documentary Evidence Enclosed?
1	Size of the bath should be 605 mm L; 300 mm W & 15mm D with a total volume of 32 Ltrs and suitable for 8 racks.			
2	Double walled inside, made of Stainless Steel and outside of Mild Steel Sheet duly painted with epoxy powder coating.			
3	Should have 25 mm mineral wool insulation on five sides .			
4	Heating element made of Copper Nickel plated tabular type and approximately extend to full length of the water bath.			
5	Temperature range above room temperature to 100° C with an accuracy of $\pm 0.1^{\circ}\text{C}$ .			
6	Temperature control by Electronic Digital Temperature Controller-cum-Indicator			
7	Control panel should consist of two neon pilot lights which indicates control cycles as well as the main heater switch and temperature control knob.			
8	The water bath should have perforated and removable diffuser shelves.			
9	Should have Stainless Steel cover, brass drain plug, cord with plug to work on 220/230 volts A.C.			
10	Must be provided with Stirrer of 1/20 H.P. Supported by High Speed motor with stainless steel stirring rod and blade provided with speed regulator.			
11	Lid of water bath should be made of Stainless steel of 304 quality.			
<b>Additional Terms and Conditions</b>				
12	A complete compliance statement (this sheet filled in), stating the status of compliance with each point in the technical specification, should necessarily accompany the quotation.			
13	A minimum of 5 users of the quoted model in India should be available. The list of these users, with full details of contact persons, addresses, telephone, mobile and email should be provided in table form.			
14	Full warranty details for the instrument, with the list of items covered under the warranty, should be provided.			

*Please sign the declaration on the next page.*

***Declaration by the Bidder***

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

Please see section III below for financial bid. **Section III is not to be filled in the Technical Bid.**

**Section III: Financial Bid**  
**Water Bath Serological**  
**(3 Nos.)**

This sheet is to be attached as a covering sheet along with the formal technical bid of the quoted instrument. In case more than one instrument / model is quoted, separate sheets have to be attached with each quotation.

Financial Summary for the Instrument model : \_\_\_\_\_

Price Description		Price	Comments (if any)
Quoted Currency			
Total Instrument Cost	[a]		
Total cost of Supporting Instruments	[b]		
Comprehensive Warranty Charges	[c]		
Any other charges	[d]		
CIF Kolkata, Gujarat [a] + [b] + [c] + [d] =	[e]		
Conversion Factor to INR*	[f]		
Total Price in INR [e] x [f] =	[g]		
**Toal cost of Items quoted in INR =	[h]		
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\*\* Give full list of items quoted in Indian Rupees separately.

**Declaration by the Bidder**

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

**DATE**

## Hot Air Oven

### Technical Specifications

(To be submitted by the Bidder)

Quotation Reference: SB/QEL/PUR/**Kolkata**/Instruments/14 dated 3-2-2017

**Location of Supply and Installation:**

The Instrument(s) will be required to be delivered and installed at the following locations:

Spices Board Quality Evaluation Laboratory  
C/o Project Site, District Headquarter of South 24, Paraganas at Baruipur,  
JL No. 48, LR Khatian No. 1311, Mouza-Chakarbar,  
PO&PS Baruipur District South 24-Paraganas  
West Bengal 700144

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### Section I: Details of the Quotation

Quotation Submitted By	
Quotation Reference No.	
Date of submission of quotation	
Details of EMD submitted (if any)	
Full Address	
Name of principal supplier (if not self)	
Authorized contact person	
Designation	
Contact details	
List of supporting documents submitted along with the quotation	

## Section II: Compliance with Technical Specifications

### Hot Air Oven (2 Nos.)

***Against each point in the technical specification, compliance must be marked as YES / NO***

	Required Specification	Complying (Yes/No)	Remarks	Documentary Evidence Enclosed?
1	Inner Chamber Dimensions: 450 × 450× 450mm			
2	Inner Chamber Construction: Stainless steel			
3	No. of Shelves Minimum 3 (Detachable stainless steel)			
4	Temperature Range: Ambient to 250°C			
5	Temperature Sensitivity: ±1°C			
6	Electric Supply: Single Phase 220 Volts, AC Supply			
7	Heater Supply: 1000 watt Single Phase			
8	Overall Dimension of the Unit: 622(W) × 660(D) × 889(H)mm			
9	It should have Digital Temperature Indicator cum controller and timer			
10	Should be provided with air circulating fan			
11	Provision for inserting thermometer and air ventilation			
Additional Terms and Conditions				
12	A complete compliance statement (this sheet filled in), stating the status of compliance with each point in the technical specification, should necessarily accompany the quotation.			
13	A minimum of 5 users of the quoted model in India should be available. The list of these users, with full details of contact persons, addresses, telephone, mobile and email should be provided in table form.			
14	Complete warranty information along with the list of items covered under the warranty should be provided.			

#### ***Declaration by the Bidder***

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY  
DATE

Please see section III below for financial bid. **Section III is not to be filled in the Technical Bid.**



**Section III: Financial Bid**  
**Hot Air Oven**  
**(2 Nos.)**

This sheet is to be attached as a covering sheet along with the formal technical bid of the quoted instrument. In case more than one instrument / model is quoted, separate sheets have to be attached with each quotation.

Financial Summary for the Instrument model : \_\_\_\_\_

Price Description		Price	Comments (if any)
Quoted Currency			
Total Instrument Cost	[a]		
Total cost of Supporting Instruments	[b]		
Comprehensive Warranty Charges	[c]		
Any other charges	[d]		
CIF Kolkata, Gujarat [a] + [b] + [c] + [d] =	[e]		
Conversion Factor to INR*	[f]		
Total Price in INR [e] x [f] =	[g]		
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\*\* Give full list of items quoted in Indian Rupees separately.

**Declaration by the Bidder**

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

**DATE**

## Colony Counter

### Technical Specifications

(To be submitted by the Bidder)

Quotation Reference: SB/QEL/PUR/**Kolkata**/Instruments/14 dated 3-2-2017

#### Location of Supply and Installation:

The Instrument(s) will be required to be delivered and installed at the following locations:

Spices Board Quality Evaluation Laboratory  
C/o Project Site, District Headquarter of South 24, Paraganas at Baruipur,  
JL No. 48, LR Khatian No. 1311, Mouza-Chakarbar,  
PO&PS Baruipur District South 24-Paraganas  
West Bengal 700144

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### Section I: Details of the Quotation

Quotation Submitted By	
Quotation Reference No.	
Date of submission of quotation	
Details of EMD submitted (if any)	
Full Address	
Name of principal supplier (if not self)	
Authorized contact person	
Designation	
Contact details	
List of supporting documents submitted along with the quotation	

**Section II: Compliance with Technical Specifications**

**Colony Counter**

***Against each point in the technical specification, compliance must be marked as YES / NO***

	<b>Required Specification</b>	<b>Complying (Yes/No)</b>	<b>Remarks</b>	<b>Documentary Evidence Enclosed?</b>
1	Bench colony counter for the rapid and accurate counting of bacterial colonies with adjustable magnifier (120 mm), pressure operated hand held marking pen assembly for marking and non-marking counting.			
2	Counting modes: - Manual push button or pen probe click action count( Marking pen probe counting)			
3	Accepts petridishes up to 120mm diameter, with a centering adaptor for standard 90mm dishes			
4	Digital LED display up to 9999 with audible count and last count recall			
5	Illumination by fluorescent lamp 22W			
6	Zero reset button			
7	Dimensions 34 x 27 x 14cm			
8	Power supply at 240v 50 Hz			
<b>Additional Terms and Conditions</b>				
9	A complete compliance statement (this sheet filled in), stating the status of compliance with each point in the technical specification, should necessarily accompany the quotation.			
10	A minimum of 5 users of the quoted model in India should be available. The list of these users, with full details of contact persons, addresses, telephone, mobile and email should be provided in table form.			
11	The full warranty information with details of parts covered under the warranty should be provided.			

***Declaration by the Bidder***

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

Please see section III below for financial bid. **Section III is not to be filled in the Technical Bid.**

### **Section III: Financial Bid** **Colony Counter**

This sheet is to be attached as a covering sheet along with the formal technical bid of the quoted instrument. In case more than one instrument / model is quoted, separate sheets have to be attached with each quotation.

Financial Summary for the Instrument model : \_\_\_\_\_

Price Description		Price	Comments (if any)
Quoted Currency			
Total Instrument Cost	[a]		
Total cost of Supporting Instruments	[b]		
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\*\* Give full list of items quoted in Indian Rupees separately.

#### **Declaration by the Bidder**

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SIGNATURE OF TENDERER

SEAL OF THE COMPANY

**DATE**

## Binocular Microscope

### Technical Specifications

(To be submitted by the Bidder)

Quotation Reference: SB/QEL/PUR/**Kolkata**/Instruments/14 dated 3-2-2017

#### Location of Supply and Installation:

The Instrument(s) will be required to be delivered and installed at the following locations:

Spices Board Quality Evaluation Laboratory  
C/o Project Site, District Headquarter of South 24, Paraganas at Baruipur,  
JL No. 48, LR Khatian No. 1311, Mouza-Chakarbar,  
PO&PS Baruipur District South 24-Paraganas  
West Bengal 700144

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### Section I: Details of the Quotation

Quotation Submitted By	
Quotation Reference No.	
Date of submission of quotation	
Details of EMD submitted (if any)	
Full Address	
Name of principal supplier (if not self)	
Authorized contact person	
Designation	
Contact details	
List of supporting documents submitted along with the quotation	

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## Section II: Compliance with Technical Specifications

### Binocular Microscope

***Against each point in the technical specification, compliance must be marked as YES / NO***

	Required Specification	Complying (Yes/No)	Remarks	Documentary Evidence Enclosed?
1	Should have Maintenance-free, sealed brass shaft focus mechanism			
2	Shall have Siedentopf-design binocular head			
3	Should have Coaxial focus mechanism for intuitive control			
4	Shall be fitted with LED illumination, white light suitable for lower energy consumption with variable intensity control			
5	Should have good optical performance as a result of the illumination, objective, viewing tube, and eyepiece optimization system			
6	Shall have Spring-loaded, high-magnification objectives to prevent broken specimen slides			
7	E1 Achromat 4x, 10x, 40x, and 100x oil immersion objectives with 4-position nose-piece			
8	Size, 17" H x 12" W x 16" D			
9	A Nylon Dust Cover			
10	Should have the compatibility to attach to a digital camera to take photographs			
<b>Additional Terms and Conditions</b>				
9	A complete compliance statement (this sheet filled in), stating the status of compliance with each point in the technical specification, should necessarily accompany the quotation.			
10	A minimum of 5 users of the quoted model in India should be available. The list of these users, with full details of contact persons, addresses, telephone, mobile and email should be provided in table form.			

### Comprehensive Warranty

1	The warranty period should be 5 Years. All breakdown of the instrument should be addressed within 24 hours by an onsite visit.			
2	All parts of the instrument, accessories and supporting instruments should be covered under the warranty. If any accessory / spare part / consumable is not covered under the comprehensive warranty, then the itemised list of			

	such items, including their prices during the period 2014-15 and average lifetime of the items should be provided.			
3	The equipment should be installed at the proposed site, demonstrate the required objective of the test with the claimed limit of detection/quantification with the sample provided.			
4	Training should be given to the staff at the site, for the operation of the instrument on demand			
5	Any accessory system(s) other than those mentioned in the technical specifications, that are required for satisfactory installation of the system should be quoted and supplied with the instrument.			
6	Agency commission: Agency commission if any will be paid to the Indian agent in rupees on receipt of the equipment and after satisfactory installation.			
7	Agency commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in tender even in case of Nil commission. The tender should indicate the percentage of Agency commission to be paid to the Indian agent.			

***Declaration by the Bidder***

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SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

Please see section III below for financial bid. **Section III is not to be filled in the Technical Bid.**



### **Section III: Financial Bid** **Binocular Microscope**

This sheet is to be attached as a covering sheet along with the formal technical bid of the quoted instrument. In case more than one instrument / model is quoted, separate sheets have to be attached with each quotation.

Financial Summary for the Instrument model : \_\_\_\_\_

Price Description		Price	Comments (if any)
Quoted Currency			
Total Instrument Cost	[a]		
Total cost of Supporting Instruments	[b]		
Comprehensive Warranty Charges	[c]		
Any other charges	[d]		
CIF Kolkata, Gujarat [a] + [b] + [c] + [d] =	[e]		
Conversion Factor to INR*	[f]		
Total Price in INR [e] x [f] =	[g]		
**Toal cost of Items quoted in INR =	[h]		
Final Price in INR = g + h =	[i]		

\* Use the conversion factor as on the date prior to the date of submission of the quotation and mention this date clearly.

\*\* Give full list of items quoted in Indian Rupees separately.

#### **Declaration by the Bidder**

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SIGNATURE OF TENDERER

SEAL OF THE COMPANY

**DATE**

## Autoclaves

### Technical Specifications

(To be submitted by the Bidder)

Quotation Reference: SB/QEL/PUR/**Kolkata**/Instruments/14 dated 3-2-2017

#### Location of Supply and Installation:

The Instrument(s) will be required to be delivered and installed at the following locations:

Spices Board Quality Evaluation Laboratory  
C/o Project Site, District Headquarter of South 24, Paraganas at Baruipur,  
JL No. 48, LR Khatian No. 1311, Mouza-Chakarbar,  
PO&PS Baruipur District South 24-Paraganas  
West Bengal 700144

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### Section I: Details of the Quotation

Quotation Submitted By	
Quotation Reference No.	
Date of submission of quotation	
Details of EMD submitted (if any)	
Full Address	
Name of principal supplier (if not self)	
Authorized contact person	
Designation	
Contact details	
List of supporting documents submitted along with the quotation	

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## Section II: Compliance with Technical Specifications

### Autoclaves (3 Nos)

*Against each point in the technical specification, compliance must be marked as YES / NO*

	Required Specification	Complying (Yes/No)	Remarks	Documentary Evidence Enclosed?
1	Should be electrically operated, standard vertical pattern made of stainless steel.			
2	Boiler should be constructed of heavy stainless steel, outer is of heavy gauge mild steel painted in grey hammertone supplied with pedal lifting arrangement.			
3	Size: Inner Diameter x Height (550 X 750 MM); Volume in Ltrs: 187			
4	Rating: 6.0 KW			
5	Automatic with Digital Microprocessor based Temperature controller cum indicator to set the desired temperature and time needed for sterilization.			
6	Microprocessor based water level cut off and pressure cut off switch.			
7	Pressure Accuracy: 0.3 PSI			
8	Temperature Accuracy: ±0.5°C			
9	Lid should be made of heavy stainless steel with steam tight joint containing stainless steel rings, pressure gauge, steal release cock and safety valve.			
10	The operating pressure should be 15 lb pressure/Sq. Inch.			
11	Should be electrically heated by means of superior quality immersion heater.			
12	Should provide suitable size perforated stainless steel work basket.			
13	The instrument should be supplied with plug and cord, ready for use on 220/230 V.			
Additional Terms and Conditions				
9	A complete compliance statement (this sheet filled in), stating the status of compliance with each point in the technical specification, should necessarily accompany the quotation.			
10	A minimum of 5 users of the quoted model in India should be available. The list of these users, with full details of contact persons, addresses, telephone, mobile and email should be provided in table form.			

### Comprehensive Warranty

1	The warranty period should be 5 Years. All breakdown of the instrument should be addressed within 24 hours by an onsite visit.			
2	All parts of the instrument, accessories and supporting instruments should be covered under the warranty. If any accessory / spare part / consumable is not covered under the comprehensive warranty, then the itemised list of such items, including their prices during the period 2014-15 and average lifetime of the items should be provided.			
3	The equipment should be installed at the proposed site, demonstrate the required objective of the test with the claimed limit of detection/quantification with the sample provided.			
4	Training should be given to the staff at the site, for the operation of the instrument on demand			
5	Any accessory system(s) other than those mentioned in the technical specifications, that are required for satisfactory installation of the system should be quoted and supplied with the instrument.			
6	Agency commission: Agency commission if any will be paid to the Indian agent in rupees on receipt of the equipment and after satisfactory installation.			
7	Agency commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in tender even in case of Nil commission. The tender should indicate the percentage of Agency commission to be paid to the Indian agent.			

### *Declaration by the Bidder*

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

Please see section III below for financial bid. **Section III is not to be filled in the Technical Bid.**

**Section III: Financial Bid**  
**Autoclaves**  
**(3 Nos.)**

This sheet is to be attached as a covering sheet along with the formal technical bid of the quoted instrument. In case more than one instrument / model is quoted, separate sheets have to be attached with each quotation.

Financial Summary for the Instrument model : \_\_\_\_\_

Price Description		Price	Comments (if any)
Quoted Currency			
Total Instrument Cost	[a]		
Total cost of Supporting Instruments	[b]		
Comprehensive Warranty Charges	[c]		
Any other charges	[d]		
CIF Kolkata, Gujarat [a] + [b] + [c] + [d] =	[e]		
Conversion Factor to INR*	[f]		
Total Price in INR [e] x [f] =	[g]		
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**Declaration by the Bidder**

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SIGNATURE OF TENDERER

SEAL OF THE COMPANY

**DATE**

10  
**pH Meter**

**Technical Specifications**

(To be submitted by the Bidder)

**Quotation Reference: SB/QEL/PUR/Kolkata/Instruments/14 dated 3-2-2017**

**Location of Supply and Installation:**

**The Instrument(s) will be required to be delivered and installed at the following locations:**

Spices Board Quality Evaluation Laboratory C/o Project Site, District Headquarter of South 24, Paraganas at Baruipur, JL No. 48, LR Khatian No. 1311, Mouza-Chakarbar, PO&PS Baruipur District South 24-Paraganas West Bengal 700144
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**Section I: Details of the Quotation**

Quotation Submitted By	
Quotation Reference No.	
Date of submission of quotation	
Details of EMD submitted (if any)	
Full Address	
Name of principal supplier (if not self)	
Authorized contact person	
Designation	
Contact details	
List of supporting documents submitted along with the quotation	

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## Section II: Compliance with Technical Specifications

### pH Meter

***Against each point in the technical specification, compliance must be marked as YES / NO***

	Required Specification	Complying (Yes/No)	Remarks	Documentary Evidence Enclosed?
1	pH Range: 0 to 14			
2	pH Resolution: 0.001 pH			
3	pH Stability : 0.002 pH per hour			
4	pH Relative Accuracy: $\pm 0.002 \text{ pH} \pm 1 \text{ Digit}$			
5	pH Slope: 85% to 115%			
6	pH Standard Buffers: 1.679, 4.004, 7.000, 9.183, 12.454 (NIST traceable)			
7	pH Buffer Deviation: $\pm 0.5 \text{ pH}$			
8	mV Range: 0 to $\pm 1999.9 \text{ mV}$			
9	mV Resolution: 0.1 mV			
10	mV Accuracy: $\pm 0.5 \text{ mV} \pm 1 \text{ Digit}$ or $\pm 0.05\%$ of reading			
11	Temperature Compensation: Auto/Manual			
12	Temperature Range: 0 to 99°C			
13	Temperature Resolution: 0.1°C			
14	Temperature Accuracy: $\pm 0.5 \text{ }^\circ\text{C} \pm 1 \text{ Digit}$			
15	Display: 2 line, 20 - Character alphanumeric LCD			
16	Annunciation: Individual LED with keys for calibration, pH, ABS mV REL mV and Print			
17	Printer Port: Suitable to connect to a digital Printer			
18	Power: 230 V AC $\pm 10\%$ , 50 Hz			
19	Dimensions: 250 (W) X205 (D) X75(H) mm			
20	Accessories: pH Electrode (Combined); Temperature probe (PT-100 Sensor), Electrode Stand & Clamp			
Additional Terms and Conditions				
9	A complete compliance statement (this sheet filled in), stating the status of compliance with each point in the technical specification, should necessarily accompany the quotation.			
10	A minimum of 5 users of the quoted model in India should be available. The list of these users, with full details of contact persons, addresses, telephone, mobile and email should be provided in table form.			

### Comprehensive Warranty

1	The warranty period should be 5 Years. All breakdown of the instrument should be addressed within 24 hours by an onsite visit.			
2	All parts of the instrument, accessories and supporting instruments should be covered under the warranty. If any accessory / spare part / consumable is not covered under the comprehensive warranty, then the itemised list of such items, including their prices during the period 2014-15 and average lifetime of the items should be provided.			
3	The equipment should be installed at the proposed site, demonstrate the required objective of the test with the claimed limit of detection/quantification with the sample provided, if applicable.			
4	Training should be given to the staff at the site, for the operation of the instrument on demand			
5	Any accessory system(s) other than those mentioned in the technical specifications, that are required for satisfactory installation of the system should be quoted and supplied with the instrument.			
6	Agency commission: Agency commission if any will be paid to the Indian agent in rupees on receipt of the equipment and after satisfactory installation.			
7	Agency commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in tender even in case of Nil commission. The tender should indicate the percentage of Agency commission to be paid to the Indian agent.			

### *Declaration by the Bidder*

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

DATE

Please see section III below for financial bid. **Section III is not to be filled in the Technical Bid.**



**Section III: Financial Bid**  
**pH Meter**

This sheet is to be attached as a covering sheet along with the formal technical bid of the quoted instrument. In case more than one instrument / model is quoted, separate sheets have to be attached with each quotation.

Financial Summary for the Instrument model : \_\_\_\_\_

Price Description		Price	Comments (if any)
Quoted Currency			
Total Instrument Cost	[a]		
Total cost of Supporting Instruments	[b]		
Comprehensive Warranty Charges	[c]		
Any other charges	[d]		
CIF Kolkata, Gujarat [a] + [b] + [c] + [d] =	[e]		
Conversion Factor to INR*	[f]		
Total Price in INR [e] x [f] =	[g]		
**Toal cost of Items quoted in INR =	[h]		
Final Price in INR = g + h =	[i]		

\* Use the conversion factor as on the date prior to the date of submission of the quotation and mention this date clearly.

\*\* Give full list of items quoted in Indian Rupees separately.

**Declaration by the Bidder**

It is hereby declared that, the details given above are correct as pertaining to the quoted model, and all data and reports required for substantiation technical claims have been submitted.

SIGNATURE OF TENDERER

SEAL OF THE COMPANY

**DATE**