

भा.कृ.अन्.प.- राष्ट्रीय कृषि उपयोगी सूक्ष्मजीव ब्यूरो

ICAR-NATIONAL BUREAU OF AGRICULTURALLY IMPORTANT MICROORGANISMS

पोस्ट व ग्राम - कुशमौर, मऊ (उ.प्र.) २७५१०३



Village & PO : Kushmaur, Mau 275103 (UP)

Tel : (0547) 2530080, FAX : (0547) 2530381, E-Mail : nbaimicar@gmail.com, (Web): www.nbaim.org.in

## F.No. 19/store/NBAIM/2016-17/Equipment

Date:28.07.2016

# Tender Notice

The Director, ICAR-National Bureau of Agriculturally Important Microorganism, Mau on behalf of the President, Indian Council of Agricultural Research, New Delhi invites duly filled and sealed tenders from the Manufacturer/registered firms for the purchase of below mention equipments.

Sr. No.	Equipment	Qty	EMD (In Rs.)	Tender fee (In Rs.)	Bid
1.	Horizontal Gel Electrophoresis systems(Mini, Midi and large with power pack	01	6000	500	
2.	Horizontal electrophoresis unit with power pack	03	10000	500	
3.	Gel Electrophoresis	01	6000	500	
4.	Electrophoresis system	01	6000	500	
5.	U.V /vis Transilluminator	01	2000	500	
6.	Gel documentation system	01	12000	500	Single bid
7.	Furniture and fixtures	As per required	5000	500	system would be followed
8.	Incubator Shaker with accessories and compatible stabilizer	01	15000	500	
9.	BOD Incubator	04	20000	500	
10.	Instrument table, work bench, cabinet slab shower and chair	As per required	10000	500	
11.	RT PCR	01	30000	500	
12.	High speed Refrigerated centrifuge	01	40000	500	
13.	HPLC	01	60000	500	
14.	Automatic Nitrogen Analyzer with accessories and compatible stabilizer	01	30000	500	Two bid system
15.	Temperature controlled centrifuge high speed with rotors	01	50000	500	

The tender documents alongwith detailed terms and conditions can be downloaded from our website i.e. www.nbaim.org.in, www.mgrportal.org.in & http://eprocure.gov.in/epublish/app. The tenders will be accepted by 25.08.2016 up to 11:00AM. The same will be opened at 11:30AM on the same day in the presence of bidders or their authorized representatives, if any. A DD of Rs. 500/- as tender fee i/r/o each item will be required, which is payable to The Director, ICAR Unit NBAIM, Mau payable at Maunath Bhanjan. Separate Tender forms along with tender cost & EMD will be required i/r/o each items. Tender form should be submitted to The Director, ICAR-National Bureau of Agriculturally Important Microorganism, Kushmaur Mau (U.P.) 275103 for above mentioned items on the scheduled date and time positively by speed post/courier/ in person. The Director, ICAR-NBAIM, Mau reserves all right to accept or reject any or all the tenders without assign any reason.



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# NOTICE INVITING TENDER THROUGH SINGLE BID SYSTEM

#### Sub: Purchase of Equipments (Single Bid) item no. 01 to 10 - reg.

Dear Sir,

We have a requirement of above said equipments for which Bids are invited to submit most competitive quotation for the same. The envelope containing the quotations should be superscripted as "TENDER FOR ITEMS (Name of items) & No. Tender should reach at The Director, ICAR-National Bureau of Agriculturally Important Microorganism, Kushmaur Mau (U.P.) - 275103 on 25.08.2016 up to 11:00 AM which will be opened at 11:30AM on 25.08.2016. A DD of Rs. 500/- as tender fee i/r/o each items will be required, which is payable to The Director, ICAR Unit NBAIM, Mau payable at Maunath Bhanjan. All the relevant details are given below:-

1. I.	Description of the goods required and	:	(As enclosed in Annexure-III)
II	the required quantity Guiding specification and other Technical	:	(As enclosed in Annexure-IV)
	Details		
III.	Terms of delivery (Delivery at site)	:	FOR ICAR-NBAIM, MAU
IV.	Delivery period for goods	:	Within 60 days from the date of the purchase order
V.	Erection/installation and commissioning (if required, depending on the goods ordered)	:	Completed within 07 (seven) days of delivery of the goods at site.
VI.	Terms of Inspection by the purchaser's representative	:	Indenting Officer
VII. T	raining of Purchaser's scientist/technician/operator for operating the equipments/goods ordered, as and if necessary	:	ICAR-NBAIM scientists/technicians/operator for operating the goods/equipments ordered, as and if necessary ICAR-NBAIM operator(s) is/are to be trained for a period of 02 days/weeks at Bureau premises/supplier's premises for successfully operating the goods purchased. The training shall be completed within 07 days of installation.

#### VIII. Price structure

- a. The tenderer shall quote for the complete requirement of equipments/goods & services and for the full quantity as shown against a serial number in the list of requirements in Annexure-III, the tenderers are, however, free not to quote against all the serial numbers mentioned in the List of Requirements (in case there are more than one serial number in the list of requirements).
- b. Specification quoted by the firm should essentially attach literature, leaflet/brochure of the equipments /items with the tender documents.
- c. All duties, taxes and levies pavable by the supplier under the contract shall be included in the quoted price. The purchaser will not pay any such duties, taxes and levies separately. However, VAT/S.T., as legally and contractually leviable, will be quoted separately by indicating the nature and the current rate of VAT/Sales Tax, as applicable at the time of quoting. The sales tax will be paid extra at actual at the time of supply provided the transaction of sale is legally liable to sales tax and the amount of the sales tax is contractually payable. If the supplier in its quotation does not ask for sales tax extra, the same shall not be paid even if asks for the same at the later date.
- d. The rates and prices quoted by the supplier shall remain firm and fixed during the currency of the contract and shall not be subject to variation on any account whatsoever, including statutory variations, if any. However, sales tax will be paid extra as per provision under Clause viii (c) above.

#### ix) Receipt of goods and Terms of Payment:

a. Payment terms for supply of goods, including erection/ installation and commissioning (as and when applicable). Immediately on receiving the goods at site, the purchaser will verify the quantities of the items supplied as specified in the delivery challan of the supplier and also check for any superficial damage etc. in the goods so supplied and issue a provisional receipt accordingly. If the goods supplied do not require erection/ installation and commissioning at site, the purchaser, within two working days of issue of the provisional receipt, will issue acceptance certificate(of the goods) to the supplier, provided the goods supplied are acceptable in terms of the contract. However, if the goods supplied also need erection/ installation and commissioning, the purchaser will issue acceptance certificate within two working days, after successful erection/ installation and commissioning.

The supplier will then send its invoice along with the purchaser's acceptance certificate and other accompanying documents to the paying authority for payment. The paying authority will release the full payment to the supplier as due in terms of the contract, within fifteen working days of receipt of supplier's invoice, purchaser's receipt certificate and other accompanying documents, provided the same are in order.

**B. Training of purchaser's scientist/technician/operator, if applicable -** Before release of payment to the supplier as per sub-para (a) above and a certificate required i/r/o successful completion of training of the operator(s) in terms of the contract.

# x) Paying Authority: The Assistant Finance & Accounts Officer, on behalf of the Director, ICAR-NBAIM.

xi) Liquidated Damage Clause: The purchaser reserves all right to accept or deny the extension of delivery period. If any time during the performance of the contract, the supplier encounters conditions hindering timely delivery of the goods, the supplier shall promptly inform the purchaser in writing the fact of the delay and the likely duration of the same. After receipt of supplier's communication, the purchaser shall decide as to whether to cancel the contract for the un-supplied portion after the existing delivery period, or to extend the delivery period suitably by issuing an amendment to the contract. If the supplier fails to deliver the goods and/or perform the services within the contractual delivery period for reasons other than circumstances beyond supplier's control (which will be determined by the purchaser) and the purchaser extends the delivery period, the purchaser will also deduct from the contract price, as liquidated damages, a sum equivalent to 0.5% (half per cent) of the delivered price of the delayed goods or unperformed services for each week of delay or part thereof until actual delivery or performance. The maximum limit of such deduction will, however, be 10% (ten percent) of the contract price of the delayed goods or services, after which the order will be treated, cancelled. The liquidated damage will also include damage due to delay in supply, installation and training. Further, during such delayed period of supply and/or performance, the supplier shall not be entitled to any increase in price and cost, whatsoever, on any ground. However, the purchaser shall be entitled to the benefit of any decrease in price and cost on any ground, whatsoever, of the goods & services, supplied during the period of delay. The purchaser's letter (to the supplier, with copies endorsed to other concerned) extending the delivery period will be subject to the above conditions.

#### xii) Warranty Clause: Manufacturer's standard warranty clause is acceptable.

**xiii) Dispute Resolution Mechanism**: If any dispute or difference arises between the purchaser and the supplier relating to any matter connected with the contract, the parties shall make every effort to resolve the same amicably by mutual discussions. However, if the parties fail to resolve the dispute or difference by such mutual discussion within 30 days, either the purchaser or the supplier may give notice to the other party of its intention to refer the same to arbitration. The arbitration shall commence thereafter. The arbitration shall be conducted by a sole arbitrator, who will be appointed by the Secretary, ICAR and the procedure to be followed in this respect will be as per the Indian Arbitration and Conciliation Act 1996. The venue of the arbitration shall be the place from where the contract is issued.

- 2. Bidders are also required to fulfill the following conditions and furnish the details as indicated in subsequent paragraphs.
- a. At the time of awarding the contract, the purchaser reserves the right to increase or decrease, the quantity of goods and services as specified in the List of Requirements, without any change in the unit price or other terms and conditions.
- b. Please furnish a certified copy of Bidder latest ITCC (Income Tax Clearance Certificate) or relevant supporting documents.

- c. Please indicate if Bidder is currently registered with any Govt. Organization and if registered, furnish all relevant details.
- d. Please states whether business dealings with Bidder firm presently stand banned by any Government organization and, if so, furnish relevant details.
- e. A supplier shall not submit more than one quotation for the same set of goods. No pooling should be done in association with any other supplier. Manufacturer authorization form is essential document in case of dealer/authorized agent quoting the tender.
- f. The supplier shall at all be responsible, at no cost to the purchaser, against all third party claims of infringement of patent, trademark or industrial design rights arising from the use of the goods or any part thereof, with respect to the goods quoted by the supplier in its offer.
- g. Correction or over-writing in the tender document is not permissible. The quotation(s) as well as the contract shall be written in English language. All correspondence and other documents pertaining to the quotation(s) and the contract, which the parties exchange, shall also be written in English. The quotation and all correspondence and documents relating to the quotation Exchanged between the bidder and the purchaser may also be written in Hindi language provided that the same is accompanied by an English translation, in which case, for the purpose of interpretation of the quotation, the English translation shall govern.
- h. The contract shall be governed by the laws of India and interpreted in accordance with such laws.
- i. The quotation/offer shall remain valid for acceptance for a period not less than 90 days after the specified date of opening of the offers.
- j. A DD as Earnest Money in favour of "The Director, ICAR Unit NBAIM, Mau" payable at Maunath Bhanjan is to be enclosed along with the quotation. No quotation shall be considered without the Earnest money deposit (EMD).
- k. In case, the successful bidder shows inability at any stage, after the contract is finalized and awarded for whatsoever reason(s), to honour the contract, the EMD/Performance Security deposited would be forfeited.
- 1. The firm to whom the tender will be awarded, will have to deposit the performance security equal to 5% of the total amount tentatively arrived till such time the period of contract expires. If the supply/services are not found to be satisfactory, the performance security is liable to be forfeited.
- m. PAN No./ TIN No. and other details should be provided in respective annexure.
- n. Mere declaration that specification is according to indenter's requirement would not be sufficient, unless & until supported by proper manufactures brochures.
- 3. The quotation shall be sealed in an envelope. The envelope shall be addressed to the purchaser and it should also bear the "Tender enquiry no. and the words "DO NOT OPEN BEFORE 11:30AM ON 25.08.2016". This envelope should then be put inside another envelope, which will also be duly sealed. The outer envelope will bear the full address of the purchaser. The supplier must ensure that its tender (i.e. quotation), duly sealed as above, reaches the purchaser at least one hour before the time and date of opening of tenders. The supplier may, at its choice, send the tender by regd. post or by speed post. Alternatively, the supplier may also hand delivery the tender to the purchaser in which case the purchaser shall give the supplier a receipt, indicating the time & date of receipt of the tender.

- 4. The tenders, which are received late by the purchaser will be ignored. Further, the purchaser does not accept any liability and responsibility for the tenders in case the same are not properly sealed and marked and/or sent as above.
- 5. The tenders, which are received on time (as per para 3 above), will be opened at ICAR-NBAIM Office, Mau at **11:30 AM on 25.08.2016**. The purchaser will open the tenders in the presence of the tender's duly authorized representatives, who choose to attend the tender opening.
- 6. The purchaser will evaluate and compare the quotations which are substantially responsive i.e. which are properly prepared and signed and meet the required terms & conditions, specifications etc. The purchaser will award the contract to the supplier whose quotation will be determined to be responsive and offering the best evaluated deal.
- 7. The Institute will not be held responsible for any sort of postal delay of any tender form received after stipulated date & time as specified above shall be deemed as summarily rejected. Tenders forms so received will be opened on the stipulated date & time in the presence of tenders or their authorized agents. The purchaser reserves the right to accept or reject any or all quotations at any time prior to or after supply order, without assigning any reason, whatsoever, and without incurring any liability or obligation, whatsoever, to the affected tenderer or tenders.
- 8. Please submit Bid quotation accordingly. Bidder shall sign all the pages of Bid quotation. Bidder price quotation may be furnished in the format enclosed as Annexure-V. Bidder are also required to return this original tender enquiry (all the pages), as it is, duly signed by Bidder on every page, for our record. Bidder may retain a photocopy of this tender enquiry for Bidder records.
- 9. The larger outer cover/ envelope should indicate **Tender Number**, **Name of the item and opening** date on the top of the right hand corner.

Encl: Annexure-I, II, III, IV, V

**Administrative Officer** 

Annexure-I

Name of the firm	:
<b>Registered/Postal Address</b>	:

1.	Phone number/Mobile number
2.	E-mail Address
3.	PAN No
4.	VAT/TIN no., if applicable
	Bank Details:
	Bank Name:
5.	Branch Address with Phone No.
	Account No.:
	Type of account (Current/Saving):
6.	RTGS/IFSC code & Branch

**Note:** Kindly furnish the following information along with Bid quotation:

The envelope shall be addressed to the purchaser and it should also bear the **"Tender enquiry no. and the words "Do not open before 11:30 AM on 25.08.2016**.

(Signature of the Proprietor /representative of the firm)

# MANUFACTURER'S AUTHORISATION FORM

То

The Director,
ICAR- National Bureau of Agriculturally Important Microorganisms
Kushmaur, Mau (U.P.) 275103
Ref: your Bidding Documents No
Dear Sir,
We, who are established and reputable manufacturers of
(Name and description of the goods offered in the bid) having factories at

We hereby extend our full guarantee and warranty as per clause xii of the General Conditions of Contract, read with modification, if any in the Special Conditions of contract for the goods and services offered for supply against this Bidding Document by the above firm.

Yours faithfully,

(Signature name and designation)

for and behalf of Messrs.....

[name & address of the manufacturers]

**Note**: This letter of authorization should be on the letter head of the manufacturing firm and should be signed by a person competent and having the power of attorney to legally bind the manufacturer. The authorization Certificate should be from the "Manufacturer" only and certificate from any other firm/person including OEM arrangements would not be accepted.

Annexure-II

(Printed on letter head of firm)

# TO WHOM IT MAY CONCERN

	We	hereb	у с	ertify	/	that	our	fir	m
									has
not	been	black	listed	by	any	Gover	nment,	or	semi
Government department in India.									

# (Signature of the Firm with Seal)

## Annexure-III

Sr. No.	Equipment	Qty	EMD (In Rs.)	Tender fee (In Rs.)	Bid
1.	Horizontal Gel Electrophoresis systems(Mini, Midi and large with power pack	01	6000	500	
2.	Horizontal electrophoresis unit with power pack	03	10000	500	
3.	Gel Electrophoresis	01	6000	500	
4.	Electrophoresis system	01	6000	500	
5.	U.V /vis Transilluminator	01	2000	500	Single bid
6.	Gel documentation system	01	12000	500	system would be followed
7.	Furniture and fixtures	As per required	5000	500	beronoweu
8.	Incubator Shaker with accessories and compatible stabilizer	01	15000	500	
9.	BOD Incubator	04	20000	500	
10.	Instrument table, work bench, cabinet slab shower and chair	As per required	10000	500	
11.	RT PCR	01	30000	500	
12.	High speed Refrigerated centrifuge	01	40000	500	
13.	HPLC	01	60000	500	
14.	Automatic Nitrogen Analyzer with accessories and compatible stabilizer	01	30000	500	Two bid system
15.	Temperature controlled centrifuge high speed with rotors	01	50000	500	

# LIST OF EQUIPMENTS REQUIRED

## TECHNICAL SPECIFICATION OF EQUIPMENTS REQUIRED - Technical specification should

be indicated point wise in their tender supported by leaflet or brochure/s.

# 1. Horizontal gel electrophoresis systems (Mini, midi and large with power pack)

## Basic unit with lid and connecting cords

Made of clear transparent single mould acrylic/polycarbonate Easy visibility of the dye Platinum electrodes Electrodes plug-in type **1. Should comprise the following components-**

# Mini Horizontal Gel electrophoresis unit with-

Combs of 10 or 15 wells

Comb thickness: 1.0/1.5 mm

Run up to 20 samples at once

## Midi Horizontal Gel Electrophoresis unit with-

Combs of 15 or 20 wells

Comb thickness: 1.0/1.5 mm

Run up to 40 samples at once

# Maxi Horizontal Gel electrophoresis System with-

Combs of 30 or 40 wells

Comb thickness: 1.0/1.5 mm

Run more than 80 samples at once

# 2. Power pack

- i. Output range to be programmable ; Volts: 10-300V or more, Power: 1-300W or more
- ii. Output type should be constant voltage, constant current, or constant power
- iii. Timer option should be present
- iv. Pause/resume function should be present
- v. Digital display
- vi. Automatic recovery after power failure should be present
- vii. Safety features : overvoltage protection
- viii. Number of output jackets should be at least 2 sets in parallel
- 3. Casting of the gel in casting unit Tape free casting; Comb height should be adjustable
- 4. All accessories should be quoted
- 5. On-site Warranty: 2 Yrs

# 2. <u>Horizontal electrophoresis unit with power pack</u> Specifications

## 1. Basic unit with lid and connecting cords

Made of clear transparent single mould acrylic/polycarbonate Easy visibility of the dye Platinum electrodes Electrodes plug-in type

# 2. Should comprise the following components-

Mini Horizontal Gel electrophoresis unit with-

Combs of 10 or 15 wells

Comb thickness: 1.0/1.5 mm

Run up to 20 samples at once

## Midi Horizontal Gel Electrophoresis unit with-

Combs of 15 or 20 wells

Comb thickness: 1.0/1.5 mm

Run up to 40 samples at once

# Maxi Horizontal Gel electrophoresis System with-

Combs of 30 or 40 wells

Comb thickness: 1.0/1.5 mm

Run more than 80 samples at once

# 3. Power pack

- i. Output range to be programmable ; Volts: 10-300V or more, Power: 1-300W or more
- ii. Output type should be constant voltage, constant current, or constant power
- iii. Timer option should be present
- iv. Pause/resume function should be present
- v. Digital display
- vi. Automatic recovery after power failure should be present
- vii. Safety features : overvoltage protection

viii. Number of output jackets should be at least 2 sets in parallel

- 4. Casting of the gel in casting unit Tape free casting; Comb height should be adjustable
- 5. All accessories should be quoted
- 6. On-site Warranty: 2 Yrs

# 3. Horizontal Gel Electrophoresis

# • Basic unit with lid and connecting cords

Made of clear transparent single mould acrylic/polycarbonate Easy visibility of the dye Platinum electrodes Electrodes plug-in type • Should comprise the following components-

Mini Horizontal Gel electrophoresis unit with-

Combs of 10 or 15 wells

Comb thickness: 1.0/1.5 mm

Run up to 20 samples at once

Midi Horizontal Gel Electrophoresis unit with-

Combs of 15 or 20 wells

Comb thickness: 1.0/1.5 mm

Run up to 40 samples at once

# Maxi Horizontal Gel electrophoresis System with-

Combs of 30 or 40 wells

Comb thickness: 1.0/1.5 mm

Run more than 80 samples at once

• Power pack

- i. Output range to be programmable ; Volts: 10-300V or more, Power: 1-300W or more
- i. Output type should be constant voltage, constant current, or constant power
- ii. Timer option should be present
- iii. Pause/resume function should be present
- iv. Digital display
- v. Automatic recovery after power failure should be present
- vi. Safety features : overvoltage protection
- vii. Number of output jackets should be at least 2 sets in parallel
- Casting of the gel in casting unit Tape free casting; Comb height should be adjustable
- All accessories should be quoted
- On-site Warranty: 2 Yrs

# 4. Electrophoresis system

## **Specifications**

- Horizontal Electrophoresis Unit suitable for nucleic acid separation;
- Work with disposable gel cassettes or chips with a combination of electrophoresis and transillumination having a built-in light for separation and detection in real time
- Facility to Photograph the gels at the bench, without DNA damaging.
- Should have facility to recover samples directly
- Suitable for sample screening to check up to 24 or more PCR or restriction fragments quickly.
- Suitable power supply unit with built in timer capable to function at 220 V 50 Hz Ac supply. Should have LED display and toggle between volts, current ant time.
- Quote with all necessary accessories and one set of consumables with the equipment.
- The equipment should be supplied with the heavy duty devices to maintain the ambient temperature of working area (approx. 400 sq feet).
- The original catalogue and manufacturer authorization is necessary
- Warranty- 2 years minimum.

# 5. <u>UV/Vis Transilluminator</u>

- 1. Illuminator should have source for both white light and UV light for visualization of protein and nucleic acids
- 2. Adjustable UV blocking cover
- 3. Provision to accommodate 6 tubes of 8 watts or better
- 4. Filter area: 20 cm X 20 cm or more
- 5. It should come with all accessories like UV face shield, UV goggles
- 6. Two years warranty

Optional:

1. Quote for a set of spare UV tube lights (unit price to be quoted)

## 06. Gel Documentation System

- 1. CCD camera resolution (H x V) : 1.4 M Pixels or higher
- 2. Illumination modes: Trans- UV and Epi white
- 3. Filter holder: 3 positions. 2 for filters and 1 without filter
- 4. Excitation source: Ultraviolet and white light
- 5. Transillumination area: 20 cm X 20 cm or more
- 6. Software: Customized report generation, including images, data and analysis of results, lane profile analysis, molecular weight calculations
- Computer: Branded system with i5 processor, 4 GB RAM, 1 TB hard disk, 21" TFT monitor, wireless keyboard, mouse, combo drive, pre-installed Windows OS, branded printer Two years warranty

# **<u>7. Furniture and fixtures</u>**

Sl.	Items	Specifications	Quantity
No.	1. Furniture &		Required
	Fixtures		
1	Chairs	Low neck, black colour, revolving and movable,	4 pcs
		durable, height adjustable	
2	Stool	Revolving with seat cushion, movable, height	4 pcs
		adjustable	-
3	Floor box Fixture	36"X15"30"(L X W X H)	6 pcs
		Steel body high gaze (brown colour) partitioned	-
		with 2 self, fitted with double door system of	
		wooden board (tick colour) with lock & handle.	
4	Wall box Fixture	48" X 24" X 10" (L X H X W)	1 pcs
		Steel body high gaze (brown colour) partitioned	
		with 2 halves, fitted with double door system of	
		wooden board (tick colour) with lock & handle.	
5	Wall box Fixture	36" X 24" X 10" (L X H X W)	2 pcs
		Steel body high gaze (brown colour) partitioned	
		with 2 halves, fitted with double door system of	
		wooden board (tick colour) with lock & handle	
6	Wall box Fixture	30" X 24" X 10" (L X H X W)	3 pcs
		Steel body high gaze (brown colour) partitioned	
		with 2 halves, fitted with double door system of	
		wooden board (tick colour) with lock & handle	

# 8. Incubator shaker with accessories and compatible stabilizer

# **Specifications**

- 1) Microprocessor controlled programmable incubator shaker with digital control of parameters.
- 2) Shaking speed: 40 to 300 RPM or better
- 3) Universal slide out platform.
- 4) Temperature Range: Should be able to work from 5 to 60  $^{\circ}$ C temperature range
- 5) Temperature Accuracy:  $\pm 0.5^{\circ}$ C
- 6) Facility for incubation of stationery cultures apart from the shaking cultures
- 7) Should have shelves for added incubating or storing capability.
- 8) Alarm should indicate when temperature deviates from set point, and when timer operation has expired.
- 9) Universal platform with clamps for variable sizes to hold at least 16 flasks of 250 ml or more.
- 10) Unit price of clamps for holding flasks of 100 ml, 250 ml, 500 ml, 1000 ml, 2000 ml and 5000 ml should be provided.
- 11) Should quote the provision for maintenance of lab temperature below ambient for proper functioning of instrument
- 12) Machine to be provided with a compatible Voltage Stabilizer
- 13) 2 years warranty
- 14) Original company literature with offered specifications should be enclosed & Authorization certificate to be provided.

# 9. BOD Incubator

- 1. Body made of stainless steel. It should be double walled
- 2. Facility for incubation of cultures on removable shelves
- 3. Temperature range: 5-60°C or more
- 4. Temperature accuracy:  $\pm 1.0$  °C
- 5. PID controller for temperature control
- 6. Provision for forced air circulation inside chamber
- 7. To be provided with compatible stabilizer
- 8. Capacity: 150 lt. Or more
- 9. Warranty: 2yrs.

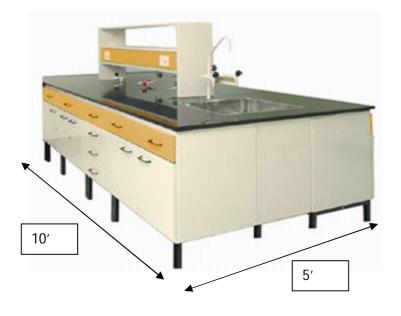
# 10.Instrument table work bench cabinet slab shower and chair

Lab furniture specification:

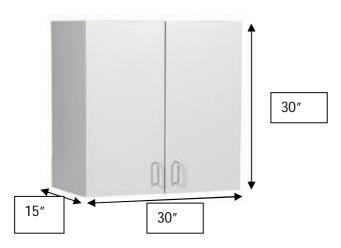
- 1. Modular lab Bench 16 Units:
  - unit size 10'x2.5'; accommodate the instruments / laboratory equipment's.
  - Provision of electrical outlets at regular intervals of 2 feet.
  - Keyboard facility and CPU shelf. Made up of high grade mild steel with epoxy powder coating for long-lasting durability with timeless aesthetic appeal.
  - The cabinets below should have Double-pan sound-deadened door and drawer heads.
  - The door should be on knuckle stainless steel hinges, Front baked-on epoxy powder-coated finish.
  - Top should be of Epoxy/ Moulded.
  - Colour Combination white/off white with blue front panels and dark grey/black top.
  - Design is indicative



- 2. Modular lab Bench (Island type) 4 Units:
  - Island type size 10'x5';
  - Accommodate the instruments / laboratory equipment's.
  - Provision of electrical outlets at regular intervals of 2 feet. Keyboard facility and CPU shelf.
  - Utilities for water with sink.
  - Made up of high grade mild steel with epoxy powder coating for long-lasting durability with timeless aesthetic appeal.
  - The cabinets below should have Double-pan sound-deadened door and drawer heads.
  - The door should be on knuckle stainless steel hinges, Front baked-on epoxy powder-coated finish.
  - Top should be of Epoxy/ Moulded.
  - Colour Combination white/off white with blue front panels and dark grey/black top.
  - Design is indicative



- 3. Wall cabinets 32 units:
  - size 30"x30"15" with two racks inside
  - Accommodate laboratory chemicals, plasticwares, glasswares.
  - Made up of high grade mild steel with epoxy powder coating for long-lasting durability with timeless aesthetic appeal.
  - The cabinets below should have Double-pan sound-deadened door.
  - The door should be on knuckle stainless steel hinges, Front baked-on epoxy powder-coated finish.
  - Colour Combination white/off white with blue front panels and dark grey/black top.
  - Design is indicative





- 4. Emergency shower with eye wash for lab: one Unit
- 5. Executive office chair: 3 Pcs.
  - Length (21 inches), Width (25 inches), Height (44 inches),
  - Primary Material: Metal
  - Color: Black, Style: Traditional

# Annexure V

# Format of Price Quotation

~						TAXES		
S. No.	Name of Equipment(s)	Make and model	Qty.	Price	VAT/SAT	Other charges, if any	Total amount	
1.								

Total in words: .....

• We confirm that our offer will remain valid or acceptance for 60 days after the date of opening of tenders.

(Sign & Seal of the tendering firm with address with date and place)



भा.कृ.अन्.प.- राष्ट्रीय कृषि उपयोगी सूक्ष्मजीव ब्यूरो

ICAR-NATIONAL BUREAU OF AGRICULTURALLY IMPORTANT MICROORGANISMS



पोस्ट व ग्राम - कुशमौर, मऊ (उ.प्र.) २७५१०३

Village & PO : Kushmaur, Mau 275103 (UP)

Tel : (0547) 2530080, FAX : (0547) 2530381, E-Mail : nbaimicar@gmail.com, (Web): www.nbaim.org.in

# NOTICE INVITING TENDER THROUGH TWO BID SYSTEM

#### Sub: Purchase of Equipments item no. 11 to 15 through two bid system - reg.

Dear Sir,

We have a requirement of above said equipments for which Bids are invited to submit Bidder most competitive quotation for the same. The envelope containing the quotations should be superscripted as **''TENDER FOR ITEMS (Name of items) & No.** Tender should reach at The Director, ICAR- National Bureau of Agriculturally Important Microorganism, Kushmaur Mau (U.P.) - 275103 on **25.08.2016 till 11:00 AM** which will be opened at **25.08.2016 at 11:30AM.** A DD of Rs. 500/- as tender fee i/r/o each items will be required, which is payable to The Director, ICAR Unit NBAIM, Mau payable at Maunath Bhanjan. All the relevant details are given below:-

I.	Description of the goods required and	:	(As enclosed in Annexure-VIII)
II	the required quantity Guiding specification and other Technical	:	(As enclosed in Annexure-IX)
	Details		
III.	Terms of delivery (Delivery at site)	:	FOR ICAR-NBAIM, MAU
IV.	Delivery period for goods	:	Within 60 days from the date of the purchase order
V.	Erection/installation and commissioning (if required, depending on the goods ordered)	:	Completed within 07 (seven) days of delivery of the goods at site.
VI.	Terms of Inspection by the purchaser's representative	:	Indenting Officer
VII.	Training of Purchaser's operator(s) for operating the goods ordered, as and if necessary	:	ICAR-NBAIM operator (s) for operating the goods ordered, as and if necessary ICAR-NBAIM operator(s) is/are to be trained for a period of 02 days/weeks at Directorate premises/supplier's premises for successfully operating the goods purchased. The training shall be completed within 07 days of installation.

#### VIII. Price structure

- a. The tenderer shall quote for the complete requirement of goods & services and for the full quantity as shown against a serial number in the list of requirements in Annexure-VIII, the tenderer are, however, free not to quote against all the serial numbers mentioned in the List of Requirements (in case there are more than one serial number in the list of requirements).
- b. Specification quoted by the firm should be attached literature, leaflet/brochure of the equipments /items with the tender documents essentially.
- c. All duties, taxes and levies payable by the supplier under the contract shall be included in the quoted price. The purchaser will not pay any such duties, taxes and levies separately. However, VAT/S.T., as legally and contractually leviable, will be quoted separately by indicating the nature and the current rate of VAT/Sales Tax, as applicable at the time of quoting. The sales tax will be paid extra at actual at the time of supply provided the transaction of sale is legally liable to sales tax and the amount of the sales tax is contractually payable. If the supplier in its quotation does not ask for sales tax extra, the same shall not be paid even if asks for the same at the later date.
- d. The rates and prices quoted by the supplier shall remain firm and fixed during the currency of the contract and shall not be subject to variation on any account whatsoever, including statutory variations, if any. However, sales tax will be paid extra as per provision under Clause viii (c) above.

#### ix) Receipt of goods and Terms of Payment:

a. Payment terms for supply of goods, including erection/ installation and commissioning (as and when applicable). Immediately on receiving the goods at site, the purchaser will verify the quantities of the items supplied as specified in the delivery challan of the supplier and also check for any superficial damage etc. in the goods so supplied and issue a provisional receipt accordingly. If the goods supplied do not require erection/ installation and commissioning at site, the purchaser, within two working days of issue of the provisional receipt, will issue acceptance certificate(of the goods) to the supplied also need erection/ installation and commissioning, the purchaser will issue acceptance certificate within two working days, after successful erection/ installation and commissioning. The

supplier will then send its invoice along with the purchaser's acceptance certificate and other accompanying documents to the paying authority for payment. The paying authority will release the full payment to the supplier as due in terms of the contract, within fifteen working days of receipt of supplier's invoice, purchaser's receipt certificate and other accompanying documents, provided the same are in order.

**B. Training of purchaser's operator(s), if applicable -** Before release of payment to the supplier as per sub-para (a) above and a certificate required i/r/o successful completion of training of the operator(s) in terms of the contract.

## x) Paying Authority: The Assistant Finance & Accounts Officer, on behalf of the Director, ICAR-NBAIM.

xi) Liquidated Damage Clause: The purchaser reserves all right to accept or deny the extension of delivery period. If any time during the performance of the contract, the supplier encounters conditions hindering timely delivery of the goods, the supplier shall promptly inform the purchaser in writing the fact of the delay and the likely duration of the same. After receipt of supplier's communication, the purchaser shall decide as to whether to cancel the contract for the un-supplied portion after the existing delivery period, or to extend the delivery period suitably by issuing an amendment to the contract. If the supplier fails to deliver the goods and/or perform the services within the contractual delivery period for reasons other than circumstances beyond supplier's control (which will be determined by the purchaser) and the purchaser extends the delivery period, the purchaser will also deduct from the contract price, as liquidated damages, a sum equivalent to 0.5% (half per cent) of the delivered price of the delayed goods or unperformed services for each week of delay or part thereof until actual delivery or performance. The maximum limit of such deduction will, however, be 10% (ten per cent) of the contract price of the delayed goods or services, after which the order will be treated, cancelled. The liquidated damage will also include damage due to delay in supply, installation and training. Further, during such delayed period of supply and/or performance, the supplier shall not be entitled to any increase in price and cost, whatsoever, on any ground. However, the purchaser shall be entitled to the benefit of any decrease in price and cost on any ground, whatsoever, of the goods & services, supplied during the period of delay. The purchaser's letter (to the supplier, with copies endorsed to other concerned) extending the delivery period will be subject to the above conditions.

#### xii) Warranty Clause: Manufacturer's standard warranty clause is acceptable.

**xiii) Dispute Resolution Mechanism**: If any dispute or difference arises between the purchaser and the supplier relating to any matter connected with the contract, the parties shall make every effort to resolve the same amicably by mutual discussions. However, if the parties fail to resolve the dispute or difference by such mutual discussion within 30 days, either the purchaser or the supplier may give notice to the other party of its intention to refer the same to arbitration. The arbitration shall commence thereafter. The arbitration shall be conducted by a sole arbitrator, who will be appointed by the Secretary, ICAR and the procedure to be followed in this respect will be as per the Indian Arbitration and Conciliation Act 1996. The venue of the arbitration shall be the place from where the contract is issued.

2. Bidder are also required to fulfill the following conditions and furnish the details as indicated in subsequent paragraphs.

- a. At the time of awarding the contract, the purchaser reserves the right to increase or decrease by up to 25%, the quantity of goods and services as specified in the List of Requirements, without any change in the unit price or other terms and conditions.
- b. Please furnish a certified copy of Bidder latest ITCC (Income Tax Clearance Certificate) or relevant supporting documents.
- c. Please indicate if Bidder is currently registered with any Govt. Organization and if registered, furnish all relevant details.
- d. Please states whether business dealings with Bidder firm presently stand banned by any Government organization and, if so, furnish relevant details.
- e. A supplier shall not submit more than one quotation for the same set of goods. No pooling should be done in association with any other supplier. Manufacturer authorization form is essential document in case of dealer/authorized agent quoting the tender.
- f. The supplier shall at all times be responsible, at no cost to the purchaser, against all third party claims of infringement of patent, trademark or industrial design rights arising from the use of the goods or any part thereof, with respect to the goods quoted by the supplier in its offer.
- g. Correction or over-writing in the tender document is not permissible. The quotation(s) as well as the contract shall be written in English language. All correspondence and other documents pertaining to the quotation(s) and the contract, which the parties exchange, shall also be written in English. The quotation and all correspondence and documents relating to the quotation Exchanged between the bidder and the purchaser may also be written in Hindi language provided that the same is accompanied by an English translation, in which case, for the purpose of interpretation of the quotation, the English translation shall govern.
- h. The contract shall be governed by the laws of India and interpreted in accordance with such laws.
- i. The quotation/offer shall remain valid for acceptance for a period not less than 90 days after the specified date of opening of the offers.
- j. A DD as Earnest Money in favour of "**The Director, ICAR Unit NBAIM, Mau payable at Maunath Bhanjan**" is to be enclosed along with the quotation. No quotation shall be considered without the earnest money deposit (EMD).
- k. In case, the successful bidder shows inability at any stage, after the contract is finalized and awarded for whatsoever reason(s), to honour the contract, the EMD/Performance Security deposited would be forfeited.
- 1. The firm to whom the tender will be awarded, will have to deposit the performance security equal to 5% of the total amount tentatively arrived till such time the period of contract expires. If the supply/services are not found to be satisfactory, the performance security is liable to be forfeited.
- m. PAN No./ TIN No. and other details should be provided in respective annexure.

n. Mere declaration that specification is according to indenter's requirement would not be sufficient,

unless & until supported by proper manufactures brochures.

- 3. The quotation shall be sealed in an envelope. The envelope shall be addressed to the purchaser and it should also bear the "Tender enquiry no. and the words "DO NOT OPEN BEFORE 11:30 AM ON 25.08.2016". This envelope should then be put inside another envelope, which will also be duly sealed. The outer envelope will bear the full address of the purchaser. The supplier must ensure that its tender (i.e. quotation), duly sealed as above, reaches the purchaser at least on hour before the time and date of opening of tenders. The supplier may, at its choice, send the tender by regd. post or by speed post. Alternatively, the supplier may also hand deliver the tender to the purchaser in which case the purchaser shall give the supplier a receipt, indicating the time & date of receipt of the tender.
- 4. The tenders, which are received late by the purchaser will be ignored. Further, the purchaser does not accept any liability and responsibility for the tenders in case the same are not properly sealed and marked and/or sent as above.
- 5. The tenders, which are received on time (as per para 3 above), will be opened at ICAR-NBAIM Office, Mau at **11:30AM on 25.08.2016.** The purchaser will open the tenders in the presence of the tender's duly authorized representatives, who choose to attend the tender opening.
- 6. The purchaser will evaluate and compare the quotations which are substantially responsive i.e. which are properly prepared and signed and meet the required terms, conditions, specifications etc. The purchaser will award the contract to the supplier whose quotation will be determined to be responsive and offering the best evaluated deal.
- 7. The Institute will not be held responsible for any sort of postal delay any tender form received after stipulated date & time as specified above shall be deemed as summarily rejected. Tenders forms so received will be opened on the stipulated date & time in the presence of tenders or their authorized agents. The purchaser reserves the right to accept or reject any or all quotations at any time prior to or after supply order, without assigning any reason, whatsoever, and without incurring any liability or obligation, whatsoever, to the affected tenderer or tenders.
- 8. Please submit Bid quotation accordingly. Bidder shall sign all the pages of Bid quotation. Bid price quotation may be furnished in the format enclosed as Annexure-X. Bidder are also required to return this original tender enquiry (all the pages), as it is, duly signed by Bidder on every page, for our record. Bidder may retain a photocopy of this tender enquiry for Bidder records.
- 9. The larger outer cover/ envelope should indicate Tender Number, Name of the item and opening date on the top of the right hand corner.
- 10. Other terms and conditions:

#### SUBMISSION OF BID

The Bidding Process shall be in two parts, viz.

Part-I: Qualifying documents and Technical Bid

Part- II: Financial Bid

#### **SUBMISSION OF BIDS:**

The proposal must consist of two separate envelopes as follows:

#### "Qualifying documents and Technical Bid"

The First envelope must enclose the following documents and should be marked in bold letter as "Qualifying documents and Technical Bid".

- 1. A brief description of the firm and an outline of recent experience in assignments of a similar nature
- 2. Proof of registration central or State Govt. or equivalent
- 3. Proof of Sales Tax Registration, PAN Card Details
- 4. Copy of Income tax & sales tax return
- 5. List of user Departments with their contact number/ address,
- 6. Firm / Companies has to give an undertaking, that his/ her firm/ company is not barred or black listed & also declare that his company is having no legal case by any department or institute
- 7. Firm / Companies may have to give technical presentation in front of a committee or official, if need be.
- 8. A DD of Rs. 500/- as tender fee and Earnest Money (as indicate in the list Equipment) i/r/o each items will be required, which is payable to The Director, ICAR Unit NBAIM, Mau payable at Maunath Bhanjan.
- 9. Technical specification of Equipment for which tender has been submitted. Technical specification should be indicated point wise in their tender supported by leaflet or broacher/s.

**"FINANCIAL BID"** - The second envelope must enclose Financial Bids envelope superscribing "FINANCIAL BID". Both the bids will be sealed in a bigger envelope and super scribed as "Tender for...... (Name of equipment)". The bid document should be properly numbered and signed on each page by the authorized signatory of the company under company seal and submitted in proper manner.

Bids with all the relative annexure and the detailed proposal of the bidders solicited herewith in this document should be submitted to stipulate date of Submission of Bid.

#### **Evaluation of Technical Bid**

The Technical bid will be examined by ICAR-NBAIM which may call for clarifications/additional information from the bidders.

#### Validity of Proposal

Financial Bid of the bidders who have been short-listed by the Evaluation Committee will only be opened. The price quoted in Financial Bid should be inclusive of all taxes, duties, transpiration and any other charges. No price escalation on any ground whatsoever will be entertained during the period of validity of the rates.

#### **INSTRUCTIONS TO THE BIDDER**

#### General Terms & Conditions of the Quotation

- Any incomplete or ambiguous terms/conditions/quotes will be declared as disqualify.
- ICAR-NBAIM reserves the right to accept/ reject any or all Proposal/s without assigning any reason thereof.
- ICAR-NBAIM reserves the right to stop the process at any stage and go in for fresh bidding without assigning any reasons thereof.
- Bidder should provide details of their Fax, email and full address(s) to ensure that replies to Bids could be conveyed promptly.
- Please read the term & conditions laid down in this document carefully.
- Please fill in the relevant information in the blanks provided.
- Please sign in full by the Authorized Signatory (ies) with company seal in all the relevant Annexure and return the complete set in sealed cover.
- Bids not fulfilling any or all of the conditions prescribed or which are incomplete are liable to be rejected.
- No consideration will be given to bids received after the time stipulated above. Any extension of time shall be sole discretion of ICAR-NBAIM.
- The firm should not have been black listed by any Govt. Bodies/ PSUs etc.

Encl: Annexure-VI, VII, VIII, IX, X

(Ajay Kumar Soni) Administrative Officer

Name of the firm	:
Registered/Postal Address	:

1.	Phone number/Mobile number	
2.	E-mail Address	
3.	PAN No	
4.	VAT/TIN no., if applicable	
	Bank Details:	
	Bank Name:	
5.	Branch Address with Phone No.	
	Account No.:	
	Type of account (Current/Saving):	
6.	RTGS/IFSC code & Branch	

**Note:** Kindly furnish the following information along with Bid quotation:

The envelope shall be addressed to the purchaser and it should also bear the "Tender enquiry no. and the words "Do not open before 11:30AM on 25.08.2016.

(Signature of the Proprietor /representative of the firm)

(Printed on letter head of firm)

# TO WHOM IT MAY CONCERN

We hereby certify that our firm has not been black listed by any Government, or semi

Government department in India.

(Signature of the Firm with Seal)

# MANUFACTURER'S AUTHORISATION FORM

То		
The Director,		
ICAR- National Bureau	of Agriculturally Important Microorganisms	\$
Kushmaur, Mau (U.P.)	275103	
Ref: your Bidding Documen	its Nodated.	
Dear Sir,		
We	, who are established and repu	itable manufacturers of
(Name	e and description of the goods offered in the	bid) having factories at
submit a bid, negotiate (as	hereby (name and a and if necessary) and conclude the contract Documents for the above goods manufactured	with you against your

We hereby extend our full guarantee and warranty as per clause xii of the General Conditions of Contract, read with modification, if any in the Special Conditions of contract for the goods and services offered for supply against this Bidding Document by the above firm.

Yours faithfully,

(Signature name and designation)

for and behalf of Messrs.....

[name & address of the manufacturers]

**Note**: This letter of authorization should be on the letter head of the manufacturing firm and should be signed by a person competent and having the power of attorney to legally bind the manufacturer. The authorization Certificate should be from the "Manufacturer" only and certificate from any other firm/person including OEM arrangements would not be accepted.

# Annexure-VIII

LIST OF	F EQIPMENT	REQUIRED
---------	------------	----------

1.	RT PCR	01	30000	500	
2.	High speed Refrigerated centrifuge	01	40000	500	
3.	HPLC	01	60000	500	
4.	Automatic Nitrogen Analyzer with accessories and compatible stabilizer	01	30000	500	Two bid system
5.	Temperature controlled centrifuge high speed with rotors	01	50000	500	

**TECHNICAL SPECIFICATION OF EQIPMENT REQUIRED** – Technical specification should be indicated point wise in their tender supported by leaflet or brochure/s.

# 1. RT PCR

# **Specifications**

- Real-time PCR cycler with 2 channels (green, yellow).
- The real time system should have the optics to look at Green and Yellow. With Green the excitation is 470+/-10 and detection at 510 +/-5. With the yellow it is  $530 \pm 5$  and detection 557+/-5.
- Thermal resolution of 0.02°C or better
- Temperature range, 35 to 99°C or better; Temperature accuracy, ±0.5°C, Temperature uniformity, ±0.02°C; Ramp rate >5°C/s heating, >8°C/s cooling
- Detector: Photomultiplier or equivalent
- Should have facility for programmed protection
- Equipment should work with tubes 0.2 ml and/or strip tubes 0.1 ml or rotor-Disc or capillaries.
- Warranty: two years-on site
- 2. High Speed refrigerated centrifuge

#### **Specifications**

- Real-time PCR cycler with 2 channels (green, yellow).
- The real time system should have the optics to look at Green and Yellow. With Green the excitation is 470+/-10 and detection at 510 +/-5. With the yellow it is  $530 \pm 5$  and detection 557+/-5.
- Thermal resolution of 0.02°C or better
- Temperature range, 35 to 99°C or better; Temperature accuracy, ±0.5°C, Temperature uniformity, ±0.02°C; Ramp rate >5°C/s heating, >8°C/s cooling
- Detector: Photomultiplier or equivalent
- Should have facility for programmed protection
- Equipment should work with tubes 0.2 ml and/or strip tubes 0.1 ml or rotor-Disc or capillaries.
- Warranty: two years-on site

# 3. HPLC

**1. Delivery System** - Quaternary Low Pressure Gradient Pump with dual reciprocating pistons in series.

- Flow rate range : 0.1–10 mL/min or better
- Flow rate accuracy :  $\pm 0.1\%$
- Flow precision : < 0.05% RSD
- Pressure range : 9000 psi or better
- Proportioning accuracy : ±0.5% (of full scale)
- Solvent degassing : Built-in, minimum 4-channels

**2.\_Thermostated Column Compartment ;\_**Temperature Range :  $5 \degree C$  to  $80 \degree C$  (maximum  $18 \degree C$  below ambient ), Temperature Accuracy :  $\pm 0.5 \degree C$ , Temperature Stability :  $\pm 0.1 \degree C$ , Temperature Precision:  $\pm 0.1 \degree C$ , Column Identification System for columns.

# 3. Auto sample injector

- Injection volume range: 0.1-100 µl or better
- Injection volume precision <0.25% RSD or better
- Sample capacity: 100 or more
- 200 Sample vials should be provided with equipment
- •

# 4. PDA Detector and Fluorescence detector

- PDA Detector
- Fluorescence detector: Wavelength Range : Excitation200-800 nm or better , Emission 265-900 nm or better
- Wavelength Accuracy : ±5 nm or better
- Absorbance Range : -2.0 to +4.0 AU, 20 bit resolution
- Light Source : Pre-aligned Deuterium and Tungsten lamps or equivalent

# 5. Chromatography software

- Chromatography data system for control, acquisition, processing, & reporting software.
- Chromatography Software package should be Oracle based.
- It should have flexible reporting as users desires for complete chromatography information Reporting.
- It should also record the instrument event such as injection, complete instrument settings, changes & conditions in real time.
- Software should have 3rd party interfacing facility.
- Audit Trail and Auto Peak Processing features.

6. Columns – C18, C8 along with guard columns, also column applicable for Carbohydrate and Fatty acids.

7. Suitable UPS System for above system

8. Branded PC with the capacity of 8/16 GB RAM, 1 or more TB storage capacity with 5th generation processors and Colour Laserjet Printer for operating HPLC system

9. Heavy duty ambient temperature maintaining systems capable to maintain the temperature of working area.

- 10. Training for operation of system to minimum two persons
- 11. Warranty: at least 2 years comprehensive warranty.

# 4. Automatic Nitrogen Analyzer

- 1. Microprocessor controlled programmable Distillation Unit for analysis of Kjeldahl Nitrogen, Protein Nitrogen, Nitric Nitrogen (after reduction), Phenols etc. according to official procedures.
  - I. Automatic alkali addition, water dilution, distillation, RS-232/USB connectivity to a printer or PC for data storage
  - II. Reagent tanks fitted with proper capping and reagent sensors.
  - III. Reagent sensors for Water/Alkali/Waste /Receiver
  - IV. Auto waste removal.
  - V. Safety features for operator safety, like safety door and tube in place safety.
  - VI.Distillation Time:Starting from 4 minutesVII.Measuring Range:0.1to 200 mg NitrogenVIII.Nitrogen Reproducibility:≤ 1%
  - IX. Recovery : > 99.5%
- 2. <u>Block digestor (as per below specification) with all the accessories and catalyst tablets.</u>
  - I. Number of samples: 08
  - II. Temperature range : 100 to 400 degree C or more
  - III. Accuracy : ± 1.0°C
  - IV. Temperature readout : digital
  - V. Over temperature protection
- VI. Selectable Time : 001 to 999 minutes
- VII. Safety : Over temperature cut off
- VIII. Test Tube: 40 numbers of 250 ml.
- 3. All accessories like digestion tubes, catalyst tablets, reagent tanks etc required for smooth functioning of the equipment to be quoted.
- 4. Should have official standard procedures like AOAC, EPA, DIN to simply validation
- 5. Original company literature must be supplied.
- 6. Should be supplied with compatible SERVO stabilizer
- 7. Warranty: Two years from the date of installation.

# Optional

- 1. Scrubber to neutralize the corrosive fumes during acid digestion (to be quoted separately if not part of the complete syste)
- 2. Sample grinding mill for sample preparation with small particle size.

# 5. Temperature Controlled centrifuge high speed with rotors

- 1. Microprocessor controlled
- 2. Machine should be able to maintain temperature ranging from -9 to  $+40^{\circ}$ C
- 3. Machine should have a capacity and space for running angle rotors and swing bucket rotors

- 4. Speed: 25000 x g (RCF) or more
- 5. Fixed angle rotor for 6 x 50 ml culture tubes
- 6. Adaptor for 15/30 ml culture tubes for fixed angle rotor of 6 x 50 ml culture tubes
- 7. Digital display
- 8. Power: 220-240 V, 50/60 Hz
- 9. Imbalance or over speed detection
- 10. Lid lock and interlock facility
- 11. Should be supplied with heavy duty ambient temperature maintaining systems
- 12. Technical features should be supported by original literature
- 13. Warranty at least 2 years from installation

# Annexure X

# **Format of Price Quotation**

				Price	TAXES		
	Name of I Equipment(s)		Qty.		VAT/SAT	Other charges, if any	Total amount
1.							

Total in words: .....

• We confirm that our offer will remain valid or acceptance for 60 days after the date of opening of tenders.

(Sign & Seal of the tendering firm with address with date and place)