# INDIAN AGRICULTURAL RESEARCH INSTITUTE, REGIONAL STATION, INDORE -452001

#### UNDER POSTAL CERTIFICATE

No. DBT/IARI-RS-Indore/

Dated 30 October, 2010

Dear Sirs,

## Sub: Invitation of quotation for supply of following items of goods / equipment

1. Sealed competitive quotation are invited by the undersigned for the following items of goods/equipments.

#### Brief Description of the Item

Quantity

#### I. PCR Machine Thermal Cycler

ONE

- 1. Licenced Thermal cycler machine with Power Supply: 220-230 volt, 50-60 Hz
- 2. Should have 96 well × 0.2 ml PCR tube block and/or 384 well × 0.2 ml PCR tube block.
- 3. Should have temperature Gradient 30-80°C and Temperature Range 4-99°C
- 4. Temperature accuracy range  $\leq \pm 0.2^{\circ}$ C and Peltier Circuit Technology
- 5. Heated Lead with adjustable temp control
- 6. Heating rate ≥5°C and Cooling rate ≥3.5°C
- 7. Memory for saving programme ≥500
- 8. Auto restart after power failure and Block Temp uniformity ±0.4 degree or less
- 9. Linear Gradient Speed more than 3°C and Lid temp range upto 105-110 degree programmable
- 10. Real Time Graphical Display and Should be upgradable to Real Time PCR
- 11. Data station for storage and analysis of PCR data and Protocol auto writer
- 12. Branded 2KVA online UPS with one hour back-up and the system should have mechanism to avoid reaction mixture evaporation.

With original Company literature from principal company clearly verifying all specifications and user list must be supplied and **Warranty**: One year from the date of installation and CMC for next two years should be included.

#### GRADIENT PCR THERMATRAL

#### **Interchangeable Thermal Blocks**

Blocks of Nickel coated aluminum make having one No. of 96  $\times$  0.2 ml Block and two No. of combi-blocks of 48 x 0.2 ml and 48  $\times$  0.5 ml blocks with six or higher independent rapid response temperature sensors, Traceability Calibration using NIST traceable standards. Peltier based Thermal engine with 12 independent or higher temperatures for optimization of gradient temp experiments.

#### Temperature range of block:

Temperature Range 4 to 99 °C; Temperature accuracy, better than ±0.4°C Temperature Gradient Linear Gradient spread over 3-30°C

Temperature Range for Gradient 30-90°C and Complete Auto Restart facility.

#### 1. System-

- a. Standard Horizontal Gel Unit with removable casting tray.
- b. Casting gates with integrated silicone seals.

  Gel Size-25X30 cm/ with 26 x 16, 26 x 24 and 26 x 32cm or all three gel trays the multiSUB Screen horizontal gel unit having a 672 maximum sample capacity per gel.
- c. Sample Number/No. of wells-26 and 52 per comb
- d. Buffer Recirculation Ports available in the tank and Safety Lid with Cable.
- e. Combs should be multi-channel pipette compatible.
- f. UV Transparent trays of above sizes with fluorescent rulers and maximum comb slot- 12

#### 2. Power Supply-

- a. 300 V, 1000mAmps,150 Watts
- b. Outputs: 4 (In Parallel Mode) with LED Display
- c. Suitable for Vertical Gel System also.
- d. Timer which can be set to automatically terminate the run when allocated time has elapsed.
- e. Programming: Easy and User Friendly with membrane keypads
- f. Automatic Cross Over and recovery after power failure.
- g. Safety: Protection against any overload including short circuit.

International Certification of Safety Required.

3. Warranty and Service-One Year Warranty

III. <u>Tissue Lyser</u> ONE

# Specifications

- Bead Mill based tissue lyser for low -to medium throughput samples disruption
- Speed range of 15 to 50 HZ (900-3000 oscillations/ minutes).
- Runtime of 1 second to 1 hours 59 minutes
- Display and control panel for speed and time
- Temperature range: 15 to 25°C
- 100-120/220-240 V, 50/60 Hz

#### Accessories

- Stainless steel beads -5 mm (200nos), Stainless steel Baeds 7 mm (200nos)
- Beads acid- washed , 150-600μm ( 20grms) Single Bead dispenser, 5mm
- Capacity to hold ~100 beads single bead dispenser, 7 mm capacity to hold ~50 bread suitable 2 ml microcentrifuges tubes (1000 nos)
- TissueLyser Adapter Set 2 x 24 (2 sets of adapter plates and 2 racks for use with 2 ml microcentrifuge tubes on the TissueLyser II)
- TissueLyser Adapter Set 2 x 96 (2 sets of adapter plates for use with Collection Microtubes (racked) on the TissueLyser II)

IV. Autoclave ONE

Capacity: 50 Litres, Material: Stainless Steel, Heat Source: Internal Electric Element 230V 110V - AC 50Hz - 2.0kW, Electronic Thermostatic Control, Design Pressure: 1.3 bar (18 psi Design Temperature: 0-125°C, H T Pressure: 2.0 bar (30 psi), S W Pressure: 1.3 bar (18 psi) Maximum Working Temperature: 121°C, Variable Temperature: 100°C-121°C, Variable Time: 1 minute - 99 minutes, lid locking devices and electrical safety in compliance with EMC regulations.

V. <u>Centrifuge</u> ONE

Power supply: 230 V / 50 or 60 Hz 230 V / 50 or 60 Hz

Having refrigerated facility having separate rotor for 2.0/1.5 ml  $\times$  30 and 50 ml  $\times$  6/8.

Max. rotational speed: 14 000 rpm

Max. centrifugal force: 20 800 rcf 20 800 rcf

Max. density of material to be centrifuged: 1.2 g/ml

Permitted ambient temperature during operation: 2°C to 40°C

Permitted maximum relative air humidity: 75%

Degree of contamination 2% Noise level < 65 dB (A)

Adapters for standard test tubes and other required adapters and accessories.

#### VI. Mini Centrifuge

ONE

Dials and a digital display, rpm/rcf setting as required, Separate short-spin key, Max. rcf:  $16,110 \times g$ , Maintenance-free drive, Space-saving design, 24-position standard rotor for 1.5/2.0 ml tubes (adapters available for 0.2 ml, 0.4 ml, 0.5 ml and 0.6 ml tubes); autoclavable; also available with an aerosol-tight lid\* 36-position special rotor for 0.5 ml tubes (adapters should be available for 0.2 ml tubes).

Temperature setting range from 0°C to 40°C, Temperature of 4 °C maintained exactly, even at maximum speed. Stand-by cooling, Fast Cool: from room temperature to 4 °C in max. 16 minutes, Motorized lid latch.

#### VII. <u>Upright Freezer: (-80°C)</u>

ONE

Temperature Range: -40°C to -85°C Capacity: 25 cubic ft. / 710 litres

Dimensions:

Exterior  $w \times d \times h : 49" \times 35.5" \times 79" \text{ (cm } 124 \times 90 \times 201)$ Interior  $w \times d \times h : 34" \times 25" \times 51" \text{ (cm } 86 \times 63 \times 130)$ 

Temperature Control, Alarm System, Remote Alarm Relay, Refrigeration System, Voltages Available - 230/60/1 - 220/50/1, ETL Electrical Approval

### VIII. <u>Upright Freezer : (-20°C)</u>

ONE

Temperature Range : -10°C to -30°C

Capacity: 20.6 cubic ft.

# IX. <u>Multichannel micropipettes</u>

TWO

One : 0.5 to 10.0 Volume range ( $\mu$ l) electronic of 12 – channel One : 10 – 100 Volume range ( $\mu$ l) electronic of 12 – channel

\*Where ISI certification marked goods are available in market, procurement should generally be limited to goods with those or equivalent marking only.

#### 2. Quoted Price:

- (a) The bidder shall quote for items separately in the enclosed quotation format.
- (b) All duties, taxes and other levies payable by the bidder (other than Sales tax/VAT on the finished goods)
- (c) The rates quoted for each item shall be for the duration of the Contract and shall not be subject to adjustment.
- (d) Rate of partial quantity of an item is not acceptable.
- (e) Corrections if any shall be made by crossing out, initialing dating and rewriting.
- (f) Telex or facsimile quotations are not acceptable.

Note: Quotation format to be used when evaluation is to be done for each item separately.

4. Each bidder must submit only one quotation in respect of one item.

#### 5. Validity of quotations:

The quotation shall remain valid for a period not less than 45 days after the deadline fixed for submission of quotations.

#### 6. **Evaluation of quotations:**

The Purchaser will evaluate and compare the quotations to be substantially responsive, i.e. which are properly signed, and conform to the terms and conditions and specifications in the following manner.

- (a) The evaluation will be done excluding the sales tax/VAT. If the bidder has included the sales tax/VAT in his quotation for the item rate, it will be treated as though it is exclusive of the sales tax/VAT and no down loading of sales tax/VAT will be made.
- (b) The evaluation would be done for all the items put together. The items for which no rates have been quoted would be treated as zero and the total amount would be computed accordingly. The bidder who has quoted for partial quantity of any one or more item(s) would be treated as non- responsive. Purchaser will award the contract to the responsive bidder whose total cost for all the items put together is the lowest.

#### 7. Award of contract:

- (a) The Purchaser will award the contract to the bidder whose quotation has been determined to be substantially responsive and who has offered the lowest price as per Para 6(b) above.
- (b) The Purchaser reserves the right at the time of contract award to increase or decrease the quantities of items indicated Para 2 above by 25% without any change in the unit price or any other terms and conditions.
- (c) The Purchaser prior to the expiration of the quotation validity period will notify the bidder whose quotation is accepted of the award of contract .The terms of the accepted offer shall be incorporated in the Purchase order.
- (d) Normal commercial warranty/guarantee shall be applicable to the supplied goods.
- (e) Payment shall be made immediately after the delivery of the goods and their acceptance.
- (f) Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of the contract.

#### 8. Last date and time of receipt of quotations:

You are requested to submit the sealed quotations superscribed on the envelope as "Quotations for the supply of goods/equipment" due on 22 November, 2010, Latest by 2:30 hours on 22 November, 2010.

We look forward to receiving your quotations and thank you for your interest in this project.

Yours sincerely,

Asstt.Admn. Officer IARI-Regional Station, Indore-452 001 (M.P.)

# FORMAT OF QUOTATION (Separate form to filled for each item)

Sl. Brief description of Brief specifications Quantity Unit Unit Total Total No. of goods/equipment (Rs.) in (Rs.) in amount amount figures words in figures in words

Gross total Cost: Rs	, ,		
Rs			(in words)
We agree to supply the above goods in of Rs (in figures) period specified in the Invitation for Q	Rs		
We also confirm that the normal comp goods.	nercial warranty/guarant	teeof month sh	all apply to the offered
		(Bidder)	
	Name :		
	Signature:		
	Date :		