University Department of Biotechnology

2nd floor Life Science Bldg, University of Mumbai,

Vidyanagari, santacruz (E),

Mumbai 400098, India

Tender Notice BT/BRNS/2013

Separate sealed Tenders for purchase of following items are invited, for and on behalf of University of Mumbai by the Head I/C Department of Biotechnology, University of Mumbai under the BRNS, DAE project sanction No. 2012/37B/50/BRNS.

Item no. 1. BT/BRNS/2013/01: thermal cycler

Item no. 2. BT/BRNS/2013/02: temperature controlled shaker incubator

Tender Document containing terms and conditions and technical specifications are available by paying Rs 500/-in cash/demand draft drawn in favour of 'Finance and Accounts officer, University of Mumbai.' in the Office of the University Dept. of Biotechnology, 2nd floor Life Science Bldg. and/or Staff Room, Ground Floor, Dept. of Biotechnology, Vidyanagri, Santacruz (E), Mumbai 400098, on all working days (except 2nd and 4th Saturday, Sunday & Public holidays) till 13th September 2013 between 11.00 a.m. & 4.00 p.m. Terms & conditions and technical specifications can also be downloaded from http://www.mu.ac.in.

The tender bids duly complete in all respects, along with the necessary documents should be submitted to the above mentioned address, on or before 16th September 2013 by 4.00 p.m.

Right to reject any or all tenders, without assigning any reason is reserved by the University of Mumbai.

मुंबई विद्यापीठ

University Dept of Biotechnology, 2nd floor Life Science Bldg, Vidyanagri, Santacruz (E), Mumbai 40098
Tel- 022-26526053

Email- arath09@gmail.com

Tender Document
No: Biotech/BRNS/2013

(BT/BRNS/2013/01 &BT/BRNS/2013/02)

Part A- Terms and Conditions
(Common to BT/BRNS/2013/01 & BT/BRNS/2013/02)

Part B- Specifications
Part C- Specification Analysis

Price- Rs 500/- (non-refundable)

Important Dates (applicable to BT/BRNS/2013/01 & BT/BRNS/2013/02):

Last date of Sale of Tender Document	13th September 2013, 4.00 pm
Last Date of Receiving sealed Bids:	16th September 2013, 4.00 pm

University Dept of Biotechnology,
2nd floor Life Science Bldg,
University of Mumbai, Santacruz (E)
Vidyanagri, Mumbai 400098

Separate Sealed Tender bids for **THERMAL CYCLER and TEMPERATURE CONTROLLED SHAKER INCUBATOR** for the Dept of Biotechnology are invited for and on behalf of University of Mumbai by the head of the dept so as reach in the office latest by 16th September 2013 by 4.00 pm.

Tender Document containing terms and conditions and technical specifications are available in the Office of the University Dept. of Biotechnology, 2nd floor Life Science Bldg. and/or Staff Room, Ground Floor, Dept. of Biotechnology, University of Mumbai, Vidyanagri, Santacruz (E), Mumbai 400098, on all working days (except 2nd and 4th Saturday, Sunday & Public holidays) till 13th September 2013 between 11.00 a.m. & 4.00 p.m. Terms & conditions and technical specifications can also be downloaded from http://www.mu.ac.in.

The tender bids duly complete in all respects, along with the necessary documents should be submitted to the above mentioned address, on or before 16th September 2013 by 4.00 p.m.

The Right to reject any or all tenders, without assigning any reason is reserved by the University of Mumbai.

I/c Head Dept of Biotechnology
University of Mumbai

Part A - Terms and Conditions

Qantity-1 (One)

Terms and Conditions of Supply:

1. Last date and time for acceptance of bids is 16th September 2013 upto 4.00 p.m

2. Suppliers shall submit the following documents along with their quotations.

(a) Income- Tax clearance certificate from the Income-Tax Officer concerned, certifying that the tenderer has cleared all the Income-Tax dues.

(b) Suppliers should be either manufacturer or authorized dealer of the said equipment and should submit the proof for the same. Also, the suppliers should state whether they are a Proprietary Firm, Partnership Firm or a Private/Public Limited Company and furnish the proof of the same.

(c) The names of the organizations and laboratories to which similar equipment have supplied.

(d) Earnest Money Deposit shall be in the form of a Demand Draft drawn in favour of **"Finance and Accounts officer, University of Mumbai, Fort Campus Mumbai 400032"** on any Scheduled/ Nationalized Bank, payable at Mumbai. The amount of Earnest Money Deposit shall be 3% of the cost of supply subject to maximum Rs 1 lakh.

(e) VAT Registration No. s
(f) Technical specifications offered by the Supplier.
(g) Technical compliance table
(h) Propriety certificate, if any

3. The rates should be mentioned in the **Schedule** attached with the Tender Document. Each page of the tender shall be signed in full and stamped with the seal by the supplier. The supplier must clearly state in what capacity he or she is signing the tender.

4. The supplier shall submit the tender in two envelopes. The first envelope (Technical Bid) shall contain all the documents referred to in **para two above** and sealed. The second envelope (Commercial Bid) shall contain the **Schedule,** in which the supplier shall register the rates of supply. The second envelope shall also, likewise, be sealed. Both the envelope then should be put together, and shall be sealed in an envelope, and shall prescribed time and date. The Technical Bid shall be opened first to ensure that supplier have submitted all the requisite documents.

If the Technical Bids are not in order or are deficient in some respect, the commercial bids in respect of such tenders shall not be opened. The date and time of opening the financial bids shall be announced immediately after opening all the Technical bids.

5. Tender bids not accompanied by the requisite amount of Earnest Money Deposit are liable to be rejected
6. The Earnest Money Deposit paid by the supplier shall be forfeited, if the supplier fails to pay the necessary security deposit in the event of his tender being accepted.

7. The amount of Security Deposit/Performance Guarantee shall be 5 % of the cost. In case of successful tenderer the amount of Earnest Money Deposit shall be converted in Security Deposit/Performance Guarantee. Security Deposit/Performance Guarantee shall be refunded after the warranty period is over. The Security Deposit/Performance Guarantee can be paid in the form of a Bank Guarantee from a scheduled bank.

8. Supplier should read carefully all the instructions and terms and conditions, etc before registering rates in prescribed schedule of the tender. Taxes and duties etc., should be shown separately.

9. The offers made by the suppliers shall be open for acceptance within 120 days after the last date of submission of tender.

10. **The Technical Documents shall be opened by the Principal Investigator for the BRNS-DAE project sanction No. 2012/37B/50/BRNS in the presence of the Head of the department of Biotechnology at the Staff Room, Ground Floor, Dept of Biotechnology**, **University of Mumbai,** Vidyanagri, Santacruz (E) for those bids for which minimum three Vendors have participated. The tenderers or their authorized representatives shall be allowed to be present at the time of opening of the tenders. Financial bids of only qualified tenderers shall be opened.

Tender opening (if minimum 3 bids are received), first extension of two weeks starts, if less than 3 bids are received in the 1st extension, last date of the first extension (opening of the technical bids on the same day, if 3 bids received), second extension of the second week starts if less than bids are received in the first extension, last date of second extension (opening of technical bids on same day even if less than 3 bids are received.)

The date and time of opening the bids (technical as well as financial) shall be announced on the Mumbai University website after the last date of the receipt of the tenders.

11. In case of imported items/equipments, the rates should be quoted in the light of exemptions enjoyed by educational institutions. University is exempted from the payment of Octroi and the necessary certificate/form can be issued by the University. The customs duty applicable to the University of Mumbai is maximum 5% of the invoice.

12. Technical specifications of the instruments/equipments/articles are given in **Annexure** to these papers (Part B). Vendors are required to fill the Part C appropriately after studying the technical specifications as in Part B

13. The delivery, installation & operational training of the instruments/equipment should be completed within 3 months from placing of the order, in case of the imported equipment and within 15 days if the instrument/equipment is made in India. No extension shall be granted to the contractors/suppliers for the period of delivery, under any circumstances.

14. If the supplier fails to deliver the article as per the delivery schedule, the University of Mumbai shall be free to procure the balance/undelivered supply, at the risk and cost of the

supplier, from other such suppliers

15. The goods, articles, materials supplied by the supplier shall be accepted after inspection by an officer authorized by the competent authority. No articles/materials which do not conform to the specifications laid down in the terms and conditions or damaged in transit be accepted

16. The bills of the suppliers shall be paid by the University after all the materials /articles/equipments have been received, inspected as above.

17. Vendor must submit Compliance statement in tabular form comparing each specification of the quoted item with that given in the Tender Document part B. The Vendor also must supply a soft copy of the Table only Microsoft in word 2003 format.

18. If the equipment is imported and requires PC, printer other peripherals, they can be bought from India and should be of International brand such as HP. The monitor should LCD/TFT screen. The printer should be LaserJet printer. The processor should be Intel Core2 Duo. The amount quoted for the items bought in India, installation; servicing etc. can be in Indian Rupees and the imported items can be quoted in foreign currency.

19. The warranty period shall preferably be for three years.

20. As the suppliers shall be responsible for the supply and installation (wherever necessary) of equipment at Mumbai, the cost towards insurance until destination in the University, shall be borne by suppliers.

21. In the event of any breach of the terms and conditions of the supply, the University of Mumbai may terminate the contract placed with the supplier and forfeit the security deposit or the supplier.

22. **Proprietary certificate, if any, should be included in the technical bid.**

23**.** The basic operator training should be provided by the competent Engineer during the time of installation

24. Charges for AMC after one year of warranty for next four years (minimum 4 visits per year) should be clearly mentioned separately as optional item. A list of all the necessary accessories required to make the unit functional should be provided. Names and phone numbers of the persons responsible for Sales and Service for this territory should be mentioned.

SCHEDULE TO TENDER

Note:

1. Tenderers are advised to read carefully the Terms and Conditions of supply and "the Instructions to the Tenderers" before recording the rates in this schedule.
2. No erasures or overwriting shall be allowed, unless they are authenticated under the full signature and the seal of the tenderer.
3. The Rates shall be FOR, at destinations/godowns/places indicated in the delivery

Item no	Description of goods with details of specifications	Number/ quantity	Price/Rate per Unit	Taxes	Duties	etc

Signature of the Tenderer
Seal of the Firm

PART B

THERMAL CYCLER SPECIFICATIONS

Thermal Cycler Specifications:	
Sample capacity	Universal Block for 96 x 0.2ml PCR Tube, 71 x 0.5 ml PCR Tube, One 8x12 PCR plate
Temperature range	4–99°C
Temperature accuracy	±0.2°C
Temperature uniformity	±0.3°C at 20-72°C and ±0.4°C at 95°C
Maximum ramp rate, °C/sec	3
Average ramp rate, °C/sec	2.5
Input power	230V, 50–60 Hz;700 W maximum
Display	Coloured LCD 11.6 x 8.7 cm (5.7")
USB Port	2 USB port & Ethernet port
Memory for protocol on board	700 programs
Dimensions(W x D x H)	25 x 41.2 x 32.1 cm
Weight	Approximately 11.0 kg
Upscaling option	Option to connect up to TWO Independent blocks
Gradient	
Gradient accuracy	±0.2°C of programmed temperature
Row uniformity	±0.5°C well-to-well (within row) within 30sec
Gradient range	30–99°C
Temperature differential range	1–20°C
Gradient optimization	Possible in all three steps (Denaturation, Annealing & Extension)
Number of temperatures	Gradient PCR, capable of testing 12 different temperatures simultaneously across a gradient range of 1 - 20° C
Gradient technology	Steady slope technology to keep ramp rates identical in both gradient and normal operation
Temperature control	Heating and cooling via Peltier technology/Triple Circuit Technology,
Lid descent and closing	Flex lid technology with Thermal sample Protection
PCR options	Preprogrammed template for easy selection from 16 temperature protocols viz. 2 step PCR, 3 Step PCR, Gradient PCR, Long Range PCR, Low volume PCR, RT, RT-PCR, Incubation, Cycle sequencing, Touch down PCR, Hot Start PCR, Hot Start PCR manual, Large volume PCR, Nested cycles
Calibration	Calibration as per International standards
Compliance	RoHS compliance
Additional options	Log book function for error messages and new calibration
	Optional Self-test dongle to check functionality of all 6 peltier elements
	E-mail notification
Additional Requirement with the machine	Mini Centrifuge with separate RMP and RCF settings,
	Suitable UPS supplied with the instrument

PART C

Tick the appropriate specifications whether provided or not in the columns as below and highlight the specifications if provided in the equipment brochures that are to be attached.

Thermal Cycler Specifications		**Whether specification is met by the machine (cross the one NOT APPLICABLE)**
Sample capacity	Universal Block for 96 x 0.2ml PCR Tube, 71 x 0.5 ml PCR Tube, One 8x12 PCR plate	Yes/No
Temperature range	4–99°C	Yes/No
Temperature accuracy	±0.2°C	Yes/No
Temperature uniformity	±0.3°C at 20-72°C and ±0.4°C at 95°C	Yes/No
Maximum ramp rate, °C/sec	3	Yes/No
Average ramp rate, °C/sec	2.5	Yes/No
Input power	230V, 50–60 Hz;700 W maximum	Yes/No
Display	Coloured LCD 11.6 x 8.7 cm (5.7")	Yes/No
USB Port	2 USB port & Ethernet port	Yes/No
Memory for protocol on board	700 programs	Yes/No
Dimensions(W x D x H)	25 x 41.2 x 32.1 cm	Yes/No
Weight	Approximately 11.0 kg	Yes/No
Upscaling option	Option to connect up to TWO Independent blocks	Yes/No
Gradient		
Gradient accuracy	±0.2°C of programmed temperature	Yes/No
Row uniformity	±0.5°C well-to-well (within row) within 30sec	Yes/No
Gradient range	30–100°C	Yes/No
Temperature differential range	1–20°C	Yes/No
Gradient optimization	Possible in all three steps (Denaturation, Annealing & Extension)	Yes/No
Number of temperatures	Gradient PCR, capable of testing 12 different temperatures simultaneously across a gradient range of 1 - 20° C	Yes/No

Gradient technology	Steady slope technology to keep ramp rates identical in both gradient and normal operation	Yes/No
Temperature control	Heating and cooling via Peltier technology/Triple Circuit Technology,	Yes/No
Lid descent and closing	Flex lid technology with Thermal sample Protection	Yes/No
PCR options	Preprogrammed template for easy selection from 16 temperature protocols viz. 2 step PCR, 3 Step PCR, Gradient PCR, Long Range PCR, Low volume PCR, RT, RT-PCR, Incubation, Cycle sequencing, Touch down PCR, Hot Start PCR, Hot Start PCR manual, Large volume PCR, Nested cycles	Yes/No
Calibration	Calibration as per International standards	Yes/No
Compliance	RoHS compliance	Yes/No
Additional options	Log book function for error messages and new calibration	Yes/No
	Optional Self-test dongle to check functionality of all 6 peltier elements	Yes/No
	E-mail notification	
Additional Requirement with the machine	Mini Centrifuge with separate RMP and RCF settings,	Yes/No
	Suitable UPS supplied with the instrument	Yes/No

PART B
TEMPERATURE CONTROLLED SHAKER INCUBATOR SPECIFICATIONS

Specifications for Temperature controlled shaker incubator	
Construction	Double walled highly insulated with PUF
Inner Chamber	Made of SS304, Stainless Steel, with four shelf positions.
Outer Chamber	Made of MS with epoxy powder coating, treated with anti-corrosive primer
Outer Door	Double walled duly insulated with magnetic strip gasket with proper sealing
Inner Door	See- through acrylic door
Insulation	Non-hygroscopic glass fibre wool insulation
Air Circulation	A pair of multi-vane blower fan of Aluminium having brass shaft.
Heating System	Sealed air heaters made of nickel-chromium resistance wire.
Cooling System	Refrigeration compressor, CFC free
Temperature Range	5ºc to 60ºC ± 0.5ºC / 1ºC
Temperature display	Electronic Controller with Digital Display.
Mode of Temp. Control	Microprocessor based Temperature Controller with pt100 probe
Speed Range	Variable between 40 to 200 rpm.
Speed Indication/Display	Digital RPM meter
Stroke	Orbital Rotary Motion of 25mm.
Drive Motor	Direct Current, Ball Bearing Type.
Capacity	9, 250ml flasks
Power supply	220 Volts
Platform	Lotus shaped clamps for 9*250ml flasks
Safety Device	Inbuilt against load shedding
Locking device	Inbuilt
Additional Requirements	Voltage Stabilizer, provision of platform for keeping culture plates

PART C

Tick the appropriate specifications whether provided or not in the columns as below and highlight the specifications if provided in the equipment brochures that are to be attached.

Specifications for Temperature controlled shaker incubator		**Whether specification is met by the machine (cross the one NOT APPLICABLE)**
Construction	Double walled highly insulated with PUF	Yes/No
Inner Chamber	Made of SS304, Stainless Steel, with four shelf positions.	Yes/No
Outer Chamber	Made of MS with epoxy powder coating, treated with anti-corrosive primer	Yes/No
Outer Door	Double walled duly insulated with magnetic strip gasket with proper sealing	Yes/No
Inner Door	See- through acrylic door	Yes/No
Insulation	Non-hygroscopic glass fibre wool insulation	Yes/No
Air Circulation	A pair of multi-vane blower fan of Aluminium having brass shaft.	Yes/No
Heating System	Sealed air heaters made of nickel-chromium resistance wire.	Yes/No
Cooling System	Refrigeration compressor, CFC free	Yes/No
Temperature Range	5ºC to 60ºC ± 0.5ºC / 1ºC	Yes/No
Temperature display	Electronic Controller with Digital Display.	Yes/No
Mode of Temp. Control	Microprocessor based Temperature Controller with pt100 probe	Yes/No
Speed Range	Variable between 40 to 200 rpm.	Yes/No
Speed Indication/Display	Digital RPM meter	Yes/No
Stroke	Orbital Rotary Motion of 25mm.	Yes/No
Drive Motor	Direct Current, Ball Bearing Type.	Yes/No
Capacity	9, 250ml flasks	Yes/No
Power supply	220 Volts	Yes/No
Platform	Lotus shaped clamps for 9*250ml flasks	Yes/No
Safety Device	inbuilt against load shedding	Yes/No
Locking device	inbuilt	Yes/No
Additional Requirements	Voltage Stabilizer, provision of platform for keeping culture plates	Yes/No