

The University of Burdwan



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Date: 15.05.2017

Tender Notice

Tender Title:

Sealed quotations are invited from the interested vendors for the following items needed for a DST SERB, Govt. India sponsored Research Grant (PI: Dr. Sujit Roy), Department of Botany, BU.

Tender No: DST-SERB/SR/Bot/BU/17

Tender Date: 15/05/2017

Last date of Tender Submission: **30.05.2017**

Items:

1. Refrigerated cold centrifuge (1 No.)

General specifications:

- Only branded indigenous make is acceptable.
- Must combines the features of micro centrifuge and multi-purpose bench-top centrifuge machine (rotor versatility) in a single instrument, with the capacity of the machine should be 200mL at an RCF of 29,102 x g.

Technical Specifications:

- Maximum speed should be up to 20,000 RPM
- Minimum speed - 100 RPM
- Maximum gravitational field should be 29,102 x G
- Should accommodate the maximum Volume of 200 mL (4 x 50mL) along with 24 x 1.5 -2.0 ml capacity.

5. The Rotor must have the following specificity:
4x50/15ml or 24 x 1.5/2 ml Angle Rotor. Suitable for 4nos.15 or 4nos.50ml sample spin at Max R.P.M:11,000 and Max R.C.F:10,200 x g, with max sample Volume of 200ml. Rotor must be made of pure Aluminium for better heat transfer.
6. Speed Range: 100 – 20,000RPM
7. Speed control / Display /Setting should be Digital
8. Display should be in 4 line LCD Display for current and Pre-set values. Simultaneous display of R.P.M. and corresponding R.C.F.
9. Motor must be maintenance-free brushless drive motor
10. User Interface must be associated with Operating Panel with buttons
11. Chamber and Rotor: Chamber must be made of stainless steel. Rotors should be made of pure Aluminium for better temperature conductivity.
12. Linear Acceleration and Deceleration curves must range between 0-9.
13. Quadratic Acceleration and Deceleration curves range should be between 10-19.
14. Braking system: Dynamic Electric Braking system must be provided (Acoustic signal at the end of the run).
15. Temperature range should be between -10°C to 40°C, temperature sensor should be placed at the bottom of Rotor head to display the sample temperature.
16. Dimensions (Dx L x H) should be 524 x 650 x 355 mm.
17. Instrument net weight should not exceed 60-65 KGs (143lbs).
18. Must be associated with Condensate Drain.
19. Noise level during maximum speed should not exceed approx. 56 db (A).
20. The instrument should be functional with 230 Volts, 50 Hz and 15 AMP in single Phase.
21. Total Power consumption should be around 750 watts.
22. Must comply the ISO 13485 norms.
23. Running time should be 99:59:59 (HH:MM:SS).
24. Additional features should include –
 - (a) Real time clock and calendar facility.
 - (b) History of at least last nine runs for user traceability.
 - (c) Eco-shut off engages after 8 hours of non-use for reducing energy consumption and extending compressor life
 - (d) Availability of on screen Rotor library.
 - (e) Availability of detailed run history for trouble-shooting.
 - (f) The instrument must be associated with error detection facility.
 - (g) Availability of quick cooling programme facility.
 - (h) Quick or pulse spin facility must be available.
 - (i) Availability of multiple programmes.
25. The quotation should include recent installation report from well known research laboratories/Institutions.
26. Warranty: One year's comprehensive warranty starting from the date of successful installation and commissioning is essential.
27. The manufacturer must have a strong service setup in Kolkata and adjoining areas.

2. Double Beam UV VIS Spectrophotometer (1 No.)

Specifications

1. Make: SHIMADZU, Model: UV-1800
2. Should be equipped with Microprocessor based UV-VIS Spectrophotometer with high resolution LCD display and dedicated soft keypad, for operation on 220V / 50Hz.
3. Should be equipped with Stand-alone operation as well as PC controlled operation is must.
4. True double beam optics must be equipped with aberration corrected concave blazed holographic grating in Czerny – Turner mounting for high energy throughput and high quality monochromatic light.
6. Should be provided with Wide wavelength range of 1,100 nm to 190 nm
7. Must have the capacity of High resolution 1 nm spectral bandwidth over entire wavelength range.
8. Wavelength setting and display in steps of 0.1nm
9. Wavelength accuracy of + 0.1nm for D 2 spectral line
10. Wavelength reproducibility of + 0.1nm
11. Variable wavelength scanning speed of 3,000 nm/min to 2 nm/min
12. Ultra low stray light of < 0.02%T at 220 nm with NaI filter
13. Should be equipped with wide Photometric range of -4 to +4 Abs and 0 to 400 %T
14. Must be equipped with High Photometric Accuracy of + 0.002 Abs at 0.5 Abs
15. High Photometric Repeatability of < +0.001 Abs at 0.5 Abs
16. Very low baseline drift of 0.0003 Abs/hour
15. High baseline flatness of +0.0006 Abs over entire wavelength
17. Ultra low Photometric noise of < 0.00005 Abs
18. Dual source – high intensity Tungsten-Halogen and Deuterium lamp with automatic changeover

19. High sensitivity matched pair Silicon Photodiode detector
20. 5 USB ports for high speed PC and printer connectivity, data storage and transfer through USB pen drive
21. Guaranteed compliance with all Pharmacopoeial requirements
22. Built in validation program, diagnostic and security functions
23. All operational modes must be as standard – Photometric; Spectrum; Quantitation; Kinetics, Time Scan, DNA and Protein Quantitation in stand alone and PC mode. Additionally
24. Multi-Component measurement facility must be available in stand-alone mode.
25. Large sample compartment compatible with wide range of accessories
26. Must supply one pair of 10mm path length Quartz Cuvettes as a standard supply
27. Compatible PC and offline UPS must be offered as optional items.
28. 12 month warranty must be provided from the date of installation
29. Price must be quoted in Indian Rupees & FOR Destination basis (including all taxes).
30. No other currency will be accepted. 100% payment after successful installation.
31. The quotation should include recent installation report from well known research laboratories/Institutions.
32. Warranty: One year's comprehensive warranty starting from the date of successful installation and commissioning is essential.
33. The manufacturer must have a strong service setup in Kolkata and adjoining areas.

3. Thermal cycler (PCR machine) (1 No.)

Specifications:

1. Model: SimpliAmp™ Thermal Cycler - A24811, Make: Applied Biosystems
2. Must be with Compact design
3. Should be equipped with Large color LCD touch screen simplifies operations
4. Should contain VeriFlex™ Blocks to provide independent temperature zones for better accuracy.

5. Block format - 96-well, 0.2 mL VeriFlex™ Blocks
6. PCR volume range: 10–100 µL
7. Reaction speed – should be Enabled to run Fast chemistry with Controllable ramp rate
8. Necessary Program features - Program overwrite protection, Auto restart facility (after power outages), Edit program during experiment, One-touch incubation
9. VeriFlex™ Blocks range should be 10°C (5°C zone-to-zone, with 3 VeriFlex™ zones)
10. Temperature accuracy : ±0.25°C (35–99.9°C)
11. Max block ramp rate: 4°C/sec
12. Max sample ramp rate: 3°C/sec
13. Temperature range: 0-100.0°C
14. Temperature uniformity: <0.5°C (30 sec after reaching 95°C)
15. Temperature calibration: Calibrated to standards traceable to the National Institute of Standards and Technology
16. Dimensions (H x W x D): 21.0 cm (8.3 in) x 24.0 cm (9.5 in) x 46.0 cm (18.1 in)
17. Weight: 8.3 kg (18.3 lb)
18. Instrument memory: USB and on-board memory
19. Display interface: 8 inch color TFT LCD
20. Power: 100-240 V, 50–60 Hz, max. 600 W
21. Data connectivity: Ethernet or Wi-Fi
22. The quotation should include recent installation report from well known research laboratories/Institutions.
23. Warranty: One year's comprehensive warranty starting from the date of successful installation and commissioning is essential.
24. The manufacturer must have a strong service setup in Kolkata and adjoining areas.

4. Mini-PROTEAN Tetra Cell Protein gel apparatus (1 No.)

Specifications:

1. Make : Bio-Rad, Model - Mini-PROTEAN Tetra Cell
2. The gel apparatus must be equipped with 10-well, 1.00 mm thickness, 2-gel system including 5 combs, 1 set of glass plates (5 short plates and 5 spacer plates), casting stands, 2 casting frames, sample loading guide, electrode assembly, tank, lid with power cables, mini cell buffer dam (Cat no.165-8003FC) with a 10% TGX Stain-Free “FastCast” kit (cat no.161-0182) Upgradeable to 4 gels (Proprietary nature)

Technical Specifications:

1. Number of gels: 1- 2 (patented sealing mechanism)
2. Cell (tank and lid with power cables): 1
3. 10-well combs: 5 (do not inhibit polymerization & have built –in ridges) (Proprietary nature)
4. 1 mm spacer plates (5 plates per box): 1 box
5. Short plates (5 plates per box): 1 box
6. Casting stands: 2
7. Casting frames: 4

8. Precast gels: Mini-PROTEAN or Ready Gel precast gels (Proprietary nature)
9. Handcast gels: Handcast using Mini-PROTEAN glass plates
10. Total buffer volume for 2 gels, ml: 800
11. Typical run time for SDS-PAGE: 35-45 min (at 200 V constant)
12. Gel format: Mini
13. Buffer dam: 1
14. The quotation should include recent installation report from well known research laboratories/Institutions.
15. Warranty: One year's comprehensive warranty starting from the date of successful installation and commissioning is essential.
16. The manufacturer must have a strong service setup in Kolkata and adjoining areas.

5. Mini Trans-Blot Module (1 No.)

Specifications:

1. Make: Bio-Rad, Model: Mini Trans-Blot Module without lower buffer tank and lid (cat no.170-3935)
2. Ability to transfer two 10x7.5 cm gels in 1 hr.
3. Color-Code Cassettes & electrodes to ensure proper orientation of the gel during transfer
4. Blue-Cooling unit to absorb heat generated during rapid transfer
5. Placement of wire electrodes 4 cm apart for strong electrical fields & efficient protein transfer
6. The quotation should include recent installation report from well known research laboratories/Institutions.
7. Warranty: One year's comprehensive warranty starting from the date of successful installation and commissioning is essential.
8. The manufacturer must have a strong service setup in Kolkata and adjoining areas.

General Terms & Conditions:

1. All prices should be quoted in INR only.
2. Prices are to be quoted inclusive of VAT and delivery charges, if any. Incomplete items will be rejected.
3. Sealed Envelope containing quotation should be super scribed as "Quotation for Tender No" for DST-SERB Research Grant, Dr. Sujit Roy Dept. of Botany, B. U."
4. Tender No. should be mentioned on the envelope positively.
5. Warranty One year additional / extended warranty for 2nd year, beyond the 1st year's warranty.
6. Payments terms: Payment will be made after successful installation of the instruments.
7. Delivery schedule: After receipt of the work order the materials should be delivered within one month & if any defect of the supplied items is found, it should be replaced immediately from vendor's side.

Submission of Quotations:

Quotations may be submitted to: Dr. Sujit Roy, Dept. of Botany, Golapbag, The University of Burdwan, Burdwan, Pin: 713104, WB **on or before 30.05.2017 between 11.00 A.M. and 5.00 P.M.**