

To

Sub: Quotation for the supply of Laboratory Instruments/Equipments.

Sirs,

Sealed quotation superscribing above mentioned file number are invited for the supply of Instruments/Equipments in **Rupees** as per specifications attached at **Annexure – II**.

2. The quotation should reach this office by 14.01.2011 at 5.00 pm.
3. The EMD details are mentioned in the annexure attached as **Annexure – I**. Item wise EMD should be submitted. The price should be quoted in item wise.
4. The quotation is to be submitted in two parts i.e. first sealed envelope will contain full information required to judge pre-qualification, earnest money, complete details and technical specification including leaflets and catalogues, List of credentials with documentary evidence i.e. purchase/work order etc, copy of Income Tax Return filed in the last two financial year PAN number, VAT/Sales Tax Registration No. Affidavit for not being black listed, Commercial terms & conditions etc. It shall be marked as "Pre-qualification technical specification" due on 17.01.2011 at 11.00 AM. The second envelope should contain only price and shall be marked "Price bid" The price bid of only those firms, whose bid are technically qualified in all respect will be opened, which will be informed on the same day or on a later date.
5. It may be noted that mere quoting of lowest rate will not entitle any firm to get the order. All the terms and conditions such as taxes, validity, guarantee period etc. should be clearly mentioned in the quotations. The quotation should be accompanied with technical literature.
6. The validity of the quotation would be for a minimum period of 90 days from the date of opening of the quotation. Rate quoted for a shorter period i.e. less than 90 will be rejected as non-responsive. However, the extension of the validity of quotation beyond 90 days will be subject to mutual agreement between Board and the supplier.
- 7 Bidder are requested to note that separate Technical bid and price bid should be submitted against each item for identify & Compilation. The description of item and item code number should be written on the top of each quotation. Separate bids for separate item should be submitted. The combined bids will not be considered.

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- 8 Earnest Money Deposit: The bidder are to deposit the "Earnest Money" alongwith the quotation in the form of Demand Draft in favour of "Central Pollution Control Board" Payable at Delhi as per details attached as Annexure – I. Those who are quoting more than one item should furnish Earnest Money separately (in item wise) No earnest money shall be accepted in any other form. Quotation shall not be entertained without earnest money. The Firm who seek exemption from depositing earnest money being small scale industry, being registered with NSIC, DGS&D and other Government agencies which entitles them for exemption must submit the valid Registration Certificate – cover the instrument offered by them alongwith the permissible value. The copy of Government Notification granting exemption from deposit of EMD must be submitted along with the Techno-commercial part of tender alongwith the bid. (EMD Exemption will be granted only to those items specified in the certificate of Registration).
- 9 The earnest money of the unsuccessful bidder will be returned on the same shape without any interest after the purchase is finalized or within three months from the opening of the quotation which ever is earlier. The earnest money of successful bidder will refunded without any interest within one month of the successful completion of supply & satisfactory installation of the system.
- 10 Payment Terms: 100% payment will released on supply and installation of the systems, on good and satisfactory condition and on furnishing performance security/Performance Bank Guarantee equivalent to 10% of the purchase order value till warranty period. The Performance Security / Bank Guarantee be furnished by the principal supplier or their authorized agent from any Nationalized Bank. No Proposal for advance payment will be allowed in any case. Proposal for Advance payment, document and payment through bank will not be considered. Hence no preference will be given for such advance payment proposals.
- 11 The supplier should attach a copy of financial bid/Proforma Invoice of the Instrument quoted (without cost/price figures) alongwith the technical bid to assess the item/components quoted in the bid. The rate for AMC for next five years after the warranty period should be mentioned in the Price Bids.
- 12 For the authorized Indian suppliers, supplying foreign origin/manufactured items, they are allowed to quote in Indian Rupees on FOR destination basis. The Board will not enter into any Trade Agreement such as high See Sale Deed etc. The Concessional Custom Duty and Excise Duty Exemption certificate will supplied. In that case, the normal Custom Duty applicable should borne by the supplier. The entire responsibility / charges upto destination should be borne by the supplier. Therefore, Excise Duty and Custom Duty excluded price should be quoted. Taxes, other levies, insurance, freight etc if any should be indicated separately. No C/D form will be issued against VAT/CST.

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The rate for specification mentioned in the annexure will only be considered and rates quoted for any other kind of specifications will not be considered. Therefore, it is advised to see the specifications carefully and quote the rate accordingly. The quotation should be free from over writing and erasures. Corrections/additions, if any, should be attested by authorized person. The bidders are requested to quote the rate item wise on FOR CPCB.

Arithmetical error will be rectified on the following basis. If there is discrepancy between the unit price and total price, that is obtained by multiplying the unit price prevail and the total price shall be corrected. If there is discrepancy in words and figures, the amount in words will prevail.

No quotation will be accepted after the closing date i.e. 14.01.2011 at 5. p.m.

- 13 The charges towards Training, installation transportation insurance, freight and other levies/charges etc. should clearly be mentioned. The Instruments are to be installed at CPCB, HQ Delhi.
- 14 If the last date of, submission and opening of Tenders falls on any Government declared holiday s, the next working day at the same time will be considered last dated of the same.
- 15 The warranty period for item Sl. No.1,2,3,4, for three years & for item No. 5 for five year from the date of installation.
- 16 The Chairman, Central Board reserves the right to cancel any or all the quotations without assigning any reason thereof.
- 17 The quotation may either sent through Registered post or drop in the Tender Box kept in the Material Section, first floor.
- 18 All correspondence in this regard may be addressed to the Admn. Officer (Material), CPCB.
- 19 **Important:** The instruments offered are to be supplied with in 30 days from the date of issue of the purchase order.
- 20 Typographical and clerical errors are subject to corrections.

Yours faithfully,

(M. Varghese)
Administrative Officer (M)

Encl:- Detailed Technical Specification for item

Copy to :

1. The Director & I/c. PCP – for information.
2. Office Order File
3. ACO & I/c. Finance - for information.

SCHEDULE OF EARNEST MONEY

Sl. No.	Item Code No.	Instruments	QTY	EMD Details
1.	01	High Speed Refrigerated Centrifuge (benchtop)	1	25,000.00
2.	02	High Speed Refrigerated Centrifuge (large volume)	1	25,000.00
3.	03	Laminar Airflow Bench	1	3,000.00
4.	04	UV-Visible Spectrophotometer	1	25,000.00
5.	05	Incubator Shaker	1	30,000.00

HIGH SPEED REFRIGERATED CENTRIFUGE (Bench / Table Top)

High speed refrigerated bench top/table top universal centrifuge.

- EFC free refrigeration system.
- Preculling function with direct button.ø
- Temperature range:- 10oC to +40oC.
- Motor capacity should be 31 (4*750 ml.)
- Compatible with various fixed angle and swing out rotors.
- Maximum speed range up to 18000 rpm or more.
- Maximum REF:25,000 or more
- Memory :- 9 hrs, 99 min plus HOLD
- Profiles:- 9 acceleration/ 10 braking.
- Language selection, motorized lid latch.
- Auto lock. 3rd rotor locking, spin imbalance detection..
- Maximum capacity of 3 litre (4 x 750) ml or more.
- Microprocessor/controller controlled speed, time, g-force and temperature.
- Motor:- Direct, brushless induction, low profile.
- Sealed, low noise, fast cooling system with environmental friendly refrigerant. Stainless steel or rust proof centrifuge chamber.
- Rust proof external construction.
- Auto imbalance detection and cut off switch with alarm.
- Auto lid open cut off switch and emergency lid lock release.
- Easy rotor changing and tool kit.
- Automatic, active rotor identification.
- Illuminated indicators and large backlit display.
- Fixed angle rotor 24 x2 mL, 12 x 15 mL, 6 x 50 mL and 4 x 250 ml with complete accessories.
- Automatic functioning of speed and timing with alarm at completion..
- One portable diaphragm based vacuum pump with following features to be provided with filtration assemble ó
 - * Oil free diaphragm based vacuum pump ideal for vacuum filtration.
 - * Corrosion free diaphragm material and long operating life.
 - * Steady and continuous operation with self cooling mechanism.
 - * Low noise, low power consumption and high operating efficiency.
 - * Small foot print, light weight, highly portable and sturdy corrosion free construction.

- Speed of evacuation: 12/20/30 L/minutes
- Ultimate pressure: 250/300 m bar.
- Graduated upper section with a capacity of 500 mL/
- Membrane holding base with fritted glass support

Technical Specifications For High Speed Refrigerated Centrifuge (Large Volume)

- High speed refrigerated universal centrifuge.
- CFC free refrigeration system.
- Precooling function with direct button.
- Temperature range: -10°C to + 40 °C.
- Motor capacity should be 5l to 10l.
- Compatible with various fixed angle and swing out rotors.
- Maximum speed range up to 18000 rpm or more.
- Maximum RCF: 25,000 or more.
- Memory :- 99 programs(5 with direct access key)
- Timer :- 9 hrs ,99 min plus HOLD
- Profiles: - 9 acceleration/ 10 braking.
- Language selection, motorized lid latch.
- Auto lock.3rd rotor locking, spin imbalance detection..
- Microprocessor/ controller controlled speed, time, g-force and temperature.
- Motor:- Direct, brushless induction, low profile.
- Sealed, low noise, fast cooling system with environmental friendly refrigerant.
- Stainless steel or rust proof centrifuge chamber.
- Rust proof external construction.
- Auto imbalance detection and cut off switch with alarm.
- Auto lid open cut off switch and emergency lid lock release.
- Easy rotor changing and tool kit.
- Automatic, active rotor identification.
- Illuminated indicators and large backlit display.
- Fixed angle rotor 100 x 100 mL, 250 x 20 ml, 125 x 40ml, 250 x 40 ml with complete accessories.
- Automatic functioning of speed and timing with alarm at completion.
- Moisture removal function
- Swing arm rotor 8 x 100mL with necessary adaptors.
- Motor and chamber overheating protection.
- Compact and small foot print.
- Power requirement: - single phase, AC 220 V, 50 Hz.
- Spares and consumables: all spares and consumables for 2 years operation should be provided.
- Warranty: 3 years warranty of instrument after installation.
- Annual maintenance contract should be provided.

LAMINAR FLOW BENCH

Laminar Flow Bench Type	:	Horizontal Laminar flow confirming to class 100 conditions of the U.S. Federal Standard 290 B to provide an environment where air supply is free of bacteria, fungi, pollen and practically all air borne dirt.
Material of construction	:	Main body and rear Panel should be perfectly electro galvanized steel or mild steel, oven baked epoxy power coated finish
Front & Side Door	:	Made up of transparent thick Perspex sheet or U.V. resistant thick poly-carbonate sheet
Work Table size	:	Work Table with work top of Stainless Steel 304
Principal	:	Double filtration of Air
Pre-filters	:	Pre filter of dry fiber washable type with frame on all sides confirming to the international standards 209 E
HEPA filters	:	HEPA filter with atleast 99.97% efficiency for particulates of 0.3 micron or larger size on all the sides. Made up of glass fiber with pleats back and fro in an anodized aluminum frame. DOP tested for leaks and certified
Air Flow output	:	90 ± 20 FRM (feet per minute)
Pressure Display	:	Preferably Digital static pressure indicator for air flow measurement (Option: In case , it could not be supplied then inclined static pressure manometer for air flow measurement may quoted).
Noise Level	:	Less than 65 db on 'A' scale at work area
Fluorescent Lamp / UV Lamp	:	Normal working fluorescent lights 120 cm length. The light intensity should exceed 800 – 1000 Lux / 75-90 feet candles at work area. Imported germicidal ultraviolet light of Philips (Holland) or reputed make. UV light intensity >40 micro watt / sq. cm over the work areq.
Vibration	:	Less than 0.00005 cm average displacement of work table .
Motor Blower	:	Dynamically balanced Heavy duty 0.25 HP or more high RPH electric motor blower assembly operating on 220 ± 10 volts / 50 ± 5% Hz AC power supply.
Gas cock/ burner, switches &	:	Provision for gas cock / burner. Industrial

Indicator		switches and Indicator lamps for blower motor fluorescent lamp and UV lamp.
Accessories	:	One no. additional Ultra Violet Lamp, digital static pressure display, Air / Vacuum petcock and burner to be provided. User / Technical / Maintenance Manual in English to be provided.
Calibration / Certification	:	The HEPA filter and Digital pressure meter should be certified calibrated from NABL Accredited Calibrated Laboratory. The certificate be provided alongwith the equipment. The laminar flow bench should be calibrated for Particle Count within flow bench area from NABL Accredited Calibration Laboratory / NIST certified.

UV – VISIBLE SPECTROPHOTOMETER (PC-Controlled)

Specifications		
Type	:	Double beam, automatic scanning
Light source	:	Tungsten-halogen and deuterium
Wavelength range	:	Should cover 190-1100 nm range
Wavelength accuracy	:	Better than or equal to ± 0.2 nm
Wavelength repeatability	:	Better than or equal to ± 0.1 nm
Band pass range	:	2 nm or smaller
Scan speed	:	5 TO 3000 NM/MIN
Photometric drift	:	0.0003 absorbance units/hour at 340 nm
Slew speed	:	10,000 nm/min
Power Requirement	:	220 VAC \pm 25%, 47 to 53 Hz

Accessories

PC, compliant for operation control and monitoring of UV – Spectrophotometer and accessory modules

Colour monitor

Printer

Software performing analysis at least as per DIN/ISO/US-EPA, calibration, blank correction, data import, data export, data handling and reporting, quality control protocols, computer based training

Essential spare parts for five year of operation

Voltage stabilizer

Dust cover

Operation manual

Matching cuvettes (2 pairs).

Condition & Requirements

The supplier shall do installation, commissioning and training in operational use. At least 5 years of after sale service shall be guaranteed.

shaker incubator

- Should easily accommodate four 250 ml, four 500 ml, four 1L flasks, two 4L flasks, or two 5L flasks.
- Variable speed from 40 to 400rpm, controlled by a rotary dial monitored accurately by a traditional tachometer
- Easy-to-read LED digital temperature display
- Perform timed studies with timed operation from 1 to 60 minutes or operate shaker in continuous mode
- Monitor and control chamber temperature range with $\pm 0.1^{\circ}\text{C}$ accuracy at 37°C
- Over temperature safety feature with independent thermostat provides additional backup by controlling heat if main temperature controller fails
- Triple eccentric drive handles heavy loads, uniform agitation and continuous 24 hr. operation, even at high speeds
- Side drain system permits easy access and clean up of spills
- Drip pan built into the chamber floor under the platform contains spills
- Clear, scratch-resistant lid for sample viewing
- With foot pedal for hands-free operation and retractable casters for portability
- Optional shelf provides additional storage space and convenience when switching flasks
- Access ports provided through side of cabinet wall for probes, thermocouples or sensors
- Optional gassing manifold enables direct gassing to flasks for anaerobic cultures
- Platforms should be provided.
- **Warranty and Service Offering:** Five-year warranty on parts, one year labor and lifetime on drive mechanism.

Temperature Accuracy	$\pm 0.1^{\circ}\text{C}$ at 37°C
Motor	Triple eccentric drive
Capacity	four 250 ml, four 500 ml, four 1L flasks, two 4L flasks, and two 5L flasks
Orbit	1 in. (2.5cm)
Platform L x W	30 x 18 in. (76 x 46cm)
Load Capacity	34kg
Electrical Requirements	240V 50/60Hz

Overall L x W x H	32 x 41 x 41 in. (81.3 x 104.1 x 104.1cm)
Shipping Weight	512 lb. (232.2kg)

Safety features:

- Acceleration/deceleration circuit prevents sudden starts and stops
- Speed-limiting sensor slows agitation to safe speed when overload or imbalance is detected
- Cutout switch stops agitation when lid is opened
- Thermostat fail-safe shuts off heater if high temperature limit is exceeded
- Audible/visual alarms alert operator to expired time and to deviations from temperature ($\pm 0.1^{\circ}\text{C}$) and speed (± 5 rpm) setpoints.

