



DEPARTMENT OF BIOTECHNOLOGY
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MUKESH DOBLE
Professor and Head

Date: 17.01.2014

Ref: BT/SMAH/2013/85/SPL

Dt. 17.01.14

Due Dt.30.01.14

1. Quotations are invited in duplicate for the various items shown below/overleaf/ enclosed list.
2. The quotations duly sealed and super scribed on the envelope with the reference No. and due date, should be addressed to the undersigned so as to reach him on or before the due date stipulated above.
3. The quotations should be valid for sixty days from the due date and the period of delivery required should also be clearly indicated.
4. If the item is under DGS & D Rate Contract, Rate Contract Number and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the rate contract price. If so, please send copy of the R.C. (Please note that we are not Direct Demanding Officers).
5. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples if called for should be submitted free of charges and collected back at the supplier's expenses.
6. **Local Firms:** Quotations should be for free delivery to this Institute. If quotations are for Ex-Godown, delivery charges should be indicated separately.
7. **Firms outside Chennai:** Quotations should be for F.O.R Chennai. If F.O.R. Consigner stationer freight charges by passenger train/lorry transport must be indicated. If Ex-Godown, Packing, forwarding and freight charges must be indicated.
8. The rates of Sales/General Taxes and the percentage of such other taxes legally leviable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for Sales/General Taxes will be admitted at any stage and on any ground whatsoever. **The taxes leviable should take into consideration that we are entitled to have concessional sales tax applicable to non-government educational institutions run with no profit motive for which a Concession. Sales tax certificates will be issued at the time of final settlement of the bill.**
9. Goods should be supplied carriage paid and insured.
10. Goods shall not be supplied without an official supply order.
11. **Payment:** Every attempt will be made to make payment within 30 days from the date of receipt of bill/acceptance of goods, whichever is later.

Specification for Shaking co2 incubator 2 NOS

- Direct Heating system with Six-Sided heating effect
- Should have a co2 range 0.2 to 20%
- The shaking orbit 2.5 cm
- Shaking speed 25-400 RPM
- Should have advanced Touch screen control.
- Sealed inner glass door should be available.
- High Temperature disinfection facility to prevents bacterial contamination.
- Should have universal platform to accommodate various sized flasks 125ml,250 ml,500 ml , 1L and 2L.
- Various sized clamps should be quoted separately.
- Should be possible to stack to another unit.
- Stationary shelf for accomadating adherent cultures.
- Sampling port for convenient co2 Gas analysis.
- 25mm access port for adding additional prob

BENCHTOP MODEL REFRIGERATED STACKABLE INCUBATOR SHAKER 2 NOS

Temperature: 20°C Below ambient to 80°C with a minimum set point of 4 Degree

Accuracy and control: $\pm 0.1^\circ\text{C}$ AT 37°C with nominal uniformity of $\pm 0.25^\circ\text{C}$

Speed: 25- 400 rpm, ± 1 RPM

Orbit: 1" (2.54cm)

Platform: Universal Platform: 18" Wide X 18" Deep (46cm x 46cm)

Rack: One Stainless Steel rack comes as standard for the Incubation.

The shaker should have provision for stackable in future.

Drive Mechanism: Triple-eccentric counterbalanced drive in cast iron housing with 9 permanently lubricated ball bearings. Driven by solid-state brushless DC motor.

Time and parameters: 4 modes

1. Speed and temperature continuous
2. Shaker should be set to run form 0.1 to 99.9 hours
3. On- board firm ware can program multiple parameters to temp and speed.
4. Shaker control and data logging via RS 232 and remote computer running conventional lab management software or hyper terminal.

Programmable controller automates parameter changes on a timed basis. Holds upto 4 programs, 15 steps each.

Automatic Restart: Starts automatically after door opening and closing or power failure.

Acceleration circuit: Prevents sudden start and stop, sensor shuts off temperature when high-temp limit is exceeded.

Set point should to be retained.

Alarms: Audible and Visible

Large, easy to read display screen: Screen Size: 5” x 2 ¾ “ (12.7x 6.98 cm.) A single knob selects all operating conditions and quickly.

Capable of holding different size of flask in the universal platform like 125ml, 250ml, 500ml, 1L, 2L, 2.8L,

Sticky Tape along with sticky Pad should be quoted.

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