



**DEPARTMENT OF BIOTECHNOLOGY**  
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Dr. D. KARUNAGARAN

Professor and Head

Date: 17.03.2016

Ref: BT/GUHA/2015/040/SPL

Dt. 17.03.16

Due Dt.30.03.16

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.

## Equipment: qPCR/ RT-PCR – IVD certified

### Specifications:

Open system – should be able to work with external plastic-ware and reagents

#### Capacity:

Interchangeable blocks

0.2 ml tubes, 1288-tube strips, 96-well plate

384-well plate (optional and interchangeable)

Reaction volume: 10 – 50  $\mu$ l

#### Heating block:

Peltier based heating and cooling

Maximum heating ramp rate: 4  $^{\circ}$ C / sec or more

Temperature range: 4 - 95  $^{\circ}$ C

Temperature accuracy:  $\pm$  0.2  $^{\circ}$ C

Temperature uniformity:  $\pm$  0.4  $^{\circ}$ C

Lid temperature: upto 95  $^{\circ}$ C or more

Gradient range: 30 – 95  $^{\circ}$ C

#### Detection:

Excitation source: LEDs

Excitation filters: 5 or more

Detection: 5 or more photodiodes or CCD camera

Should be able to add new dyes or filters by user

Wavelength range: 450 to 700 nm

Multiplexing: 5 targets per well or more without the need of reference dye

Pre-programmed detection for SYBR Green, Fluorescein, FAM, HEX, VIC, JOE, TAMRA, TET, Cy5, LC Red, Rhodamine, Cyan 500, DABCYL & T Red

Sensitivity: 1 copy of ds DNA

Dynamic range: 10 logs

Scan time: 12 sec or less

**Software:**

Continuous monitoring of fluorescence and temperature

Qualitative and quantitative analyses of concentration, melting curve T<sub>m</sub>, genotyping, HRM, etc.

Should allow multiple users to maintain secure individual accounts

**Others:**

Communication: USB 2.0

Certification: CE, IVD (FDA), IQ, OQ

Compatible with liquid handling system and robotic plate loaders

Should have service in Chennai

Should have supplied to IIT Madras before or give a reference from a reputed lab in Chennai.

**Important Instructions to bidder:**

The tenders should be submitted under Two- Bid system (i.e) Technical bid and financial bid in separate envelopes.

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**HEAD OF THE DEPARTMENT**