



DEPARTMENT OF BIOTECHNOLOGY
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Professor and Head

Date: 09.01.2018

Ref: BT/DKAR/2017/012/SPL

Dt. 09.01.18

Due Dt. 31.01.18

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.

Specifications for Inverted Fluorescence Microscope for Tissue Culture Studies

- Inverted bright field, phase contrast Microscope frame with two deck for fluorescence illuminator/ magnification changer/ right port
- Coded sextuple revolving nose piece
- Coaxial coarse & fine focus system with 0.01 mm, highly rigid vibration free frame
- Easy to use reproducible high end imaging system
- Suitable C- Mount adapter for mounting camera.
- 35mm dish holder position reproducibility by fixing dish on holder & stage
- Tilttable 100 watts halogen illumination pillar system with long working distance condenser. Blue, green & frost filter to be supplied. External 12V 100W halogen power supply unit with ON / OFF & Intensity control switch.
- Mechanical right hand stage with fixed handle. Enough travelling range for glass slide, 35mm dish as well as multiwell plate, stage stopper for time lapse or operation on stage.
- High-pressure mercury 130 W lamp with reflector with intensity adjustment (2000 hrs) with Six/ Eight position filter cube turret
- **Infinity Corrected Fluorite Objectives:**
 - Plan Fluorite 4X / N.A. 0.45
 - Plan Achromate Phase Objective 10X with N.A 0.25
 - Long working distance Phase objective 20X with N.A 0.45
 - Long working distance Fluorite Phase objective 40X with N.A 0.6
 - Long working distance Fluorite objective 100X with N.A.1.3
- **Magnification Changer 1X, 1.6X and 2X**
- **Fluorescence Filter cubes for UV (330 – 385), Blue (450 – 480) & Green (510 – 550) wave lengths excitation with Band pass filters.**
- Semi motorized system microscope with modular expandability
- Ability to record cell dynamics across a wide area or in several locations at once
- Smart control, high speed, use of near infra red light to minimize cell damage
- **Colour Cooled Scientific Camera:** High Resolution 20 Mega Pixel or more resolution with CCD/CMOS Color Camera with Peltier device cooling -10 degrees below ambient temperature & high quantum efficiency $\leq 60\%$, high speed with FPS 45, high sensitivity camera with low noise.

- **Software:** Acquisition and device control image analysis software with multichannel, Time lapse image stitching, AVI live, measurement & documentation.
- Additional Offline Image analyzing software for desktop or laptop license required- 1no.
- **Computer System:** 1 unit. Intel Pentium i5 Processor, 4GB RAM with 1TB HDD, DVD Writer, 22" TFT Monitor, key board and wireless mouse & all the necessary accessories to make the system functional. Windows 10 Professional Original Software
- **Warranty: Two years;** Onsite installation and demonstration.

Note: Microscope, Digital Camera and Image Analysis software are to be quoted from single manufacturers only.

Terms and Conditions:

Tender should be submitted in two bid system both technical and financial separately