



**CHRISTIAN COLLEGE**  
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Tender No – CCC/DSTFIST/2015/2

**[Kindly enclose a signed copy of this document along with the TENDER DOCUMENT]**

**PURCHASE OF RESEARCH EQUIPMENTS FOR ZOOLOGY**

- **THERMAL CYCLER ( PCR MACHINE)**
- **UV-TRANS ILLUMINATOR WITH PROTECTIVE COVER**
- **UPRIGHT FREEZER**
- **GEL DOCUMENTATION UNIT**
- **ELECTROPHORESIS UNIT**
- **REFRIGERATED MICRO CENTRIFUGE**
- **ELECTRONIC BALANCE**
- **ZOOM STEREO MICROSCOPE**

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The soft copy of TENDER FORMS can be obtained by contacting Dr. Hysen Thomas. . In such cases separate DD for the cost of Tender forms and EMD drawn in favour of Principal, Christian College, Chengannur payable at CANARA Bank Chengannur, Alappuzha District Kerala should be enclosed with the Tender Document.

Cost of Tender Form: Rs 2400+ Rs. 120

EMD: Rs. 16000/-

Last Date of Sale of Tender Forms: 10/10/2015 02:00 pm

Last Date of Submission of Tenders 10/10/2015 04:00 pm

Date of Opening Tender: 11/10/2015 10:00 am at Audio Visual Room, Christian College, Chengannur

## LIST AND SPECIFICATION OF ITEMS

### 1. THERMAL CYCLER ( PCR MACHINE)

Sample capacity 96 wells × 0.2 mL (tube strips or 96-well plate), Step-based graphical programming, instant incubation, USB port communication, VGA color touch screen, 500 typical programs onboard, temperature range 4 - 100 °C, Accuracy ± 0.5 °C, up to 110°C heat lid, ramp rate up to 4.0 °C / s, 1 to 100 µL reaction volume with gradient capability. UPS for the PCR machine (1.5 KVA)

### 2. UV-TRANS ILLUMINATOR WITH PROTECTIVE COVER

Filter size 21 × 26 cm, high quality UV Lamps 6x302 nm - 8 Watts, wave length 300-312 nm, UV range 0 -9, 000 µW/cm<sup>2</sup>, transmitting area 200×200, Volt/Hz 100-115/60, No. of tubes 4 × 8W, temperature range 5-40°C , single intensity, safety certifications. Acrylic face shield, better UV protection, air proof frame, cooling fan, permanently installing the safety cover.

### 3. UPRIGHT FREEZER

Gross freezer capacity 200- 220 litres, net freezer capacity 175- 195 litres, Low Noise level, minimum 20 hours power failure safe storage, super fast freezing.

### 4. GEL DOCUMENTATION UNIT

Gel Doc Imaging System with Software, High Image resolution for resolving closely spaced bands on a gel or blot, Compatibility with other software packages (JPEG file Export).

### 5. ELECTROPHORESIS UNIT

Power supply, Gel casting unit and all accessories including, combs, spacers, glass plates, buffer chambers etc.

### 6. REFRIGERATED MICRO CENTRIFUGE

1.5/2.0 mL tubes Capacity, Angular rotor head, Stepless speed regulator with zero start interlock, Digital speed indicator, Dynamic brake, Imbalance cutout, Digital Temperature controller cum indicator. 20000 rpm. Precise speed control and reproducibility. Voltage Stabiliser for the above. Separate rotors of varying capacity.

### 7. ELECTRONIC BALANCE

Capacity: 220 gms, Minimum Display : 0.1mg, Expanded piece counting function, Comparator function, Formulation mode, Windows Direct Communications Function, Standard accessories: Battery holder, protective key pad cover and spare batteries.

### 8. ZOOM STEREO MICROSCOPE

Zoom Ratio 1:7, Objective Zoom Range 0.65 - 4.5x, Paired, Widefield Eyepieces, SWF10x/22mm, 360° rotatable Eyepiece tube, Magnification Range : 6.5X – 45X with 10X eyepiece, With in-built Light Stand (Incident / Transmitted/ Fluorescence Lamp). With in-built Light Stand (Incident : 6V15W Lamp / Transmitted : 5W Fluorescence

Lamp). Optional Accessories: Photo attachment for hzoom, Co- axial focusing system, spare eyepieces, Auxilliary objectives, polarizer and analyzer for observation under polarized light.

For any clarification regarding tendering process kindly contact

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