

**Maharshi Dayanand University Rohtak**

**Tender Notice**

Sealed tenders super-scribe as “tender for analytical instruments” addressed to Director, ACBT , M.D.University, Rohtak are invited for analytical instruments- Phase Contrast Microscope with Florescence attachment, Stereoscopic Microscope with Florescence and Photographic attachment, Scintillation Counter, CO2 Incubator, Elisa Reader, -86° c deep Freezer, High pressure Homogenizer, Laminar Flow, Spray Dryer, Falling Film Evaporator, Rising Film Evaporator, Liquid Nitrogen Holder, Orbital Shaker along with demand draft of earnest money @2% of quoted value in favour of Finance Officer, M.D.University Rohtak latest by 31.10.2008. The detail specification of equipments is available with ACBT. The above stated instruments should be validated by GMP/GLP/ISO/EC. The tender may be opened on 5.11.2008 at 11am in the centre.

Director

ACBT

**Advanced Centre for Biotechnology  
M.D.University, Rohtak-124001  
Haryana**

**Tender notice**

1. Sealed tenders super scribed as “Tender for scientific Instruments” should be sent.
2. The rates or the quotations/tender are to be sent in an envelop and this is put in another envelop which should be sealed.
3. The rates of S.T/C.S.T./Excise/Custom and other charges must be specified.
4. The rates of insurance, if any, should be specified. the firm will be required to submit original payee receipt along with the bill.
5. Please state the time period within the items will be supplied.
6. GUARANTEE PERIOD OF THE INSTRUMENT MUST BE MENTIONED.
7. Discount, if any, is to be given with the quotation/tender
8. Any other terms and condition must also be specified.

University stands exempted from the payment of Central Excise Duty/Central Import Duty, so quote rates in view of this. Necessary certificate will be supplied by the University when required. University may ask for Demonstration, whenever required. The date of negotiations, if necessary will be communicated accordingly after opening of tenders.

The tender for the following instruments are required:-

Name of items	Specification
Inverted Phase contrast Microscope with Florescence attachment (1)	<ol style="list-style-type: none"> <li>1. Optical System: Infinity Color corrected Optical System, built in transmitted halogen illumination stand</li> <li>2. Eyepiece: Widefield paired eyepiece of 10X/20 Br. Foc.</li> <li>3. Stage: Object traverser &amp; universal mounting frame</li> <li>4. Objectives: Plan Achromate, Long distance plan achromate(20x &amp;40x)</li> <li>5. Fluorescence Attachment and universal sliding condenser</li> <li>6. Image Analysis Software: Advanced Image acquisition software</li> </ol> <p>Note- Microscope, Digital Camera and Software should be of same make.</p>
Stereoscopic zoom Microscope with Florescence and Photographic attachment (1)	<ol style="list-style-type: none"> <li>1. Zoom Ratio: 8:1 with apochromatic stereo telescope system</li> <li>2. Zoom Range: 1X-8X</li> <li>3. Magnification: 10X-80X( with 1X objective and 10X eyepieces)</li> <li>4. Eyepiece: Wide field 10X(F.No. 23mm)</li> <li>5. Analysis Software</li> </ol> <p>Note- Microscope, Digital Camera and Software should be of same make and Microscope should be up gradable for fluorescence,</p>
Liquid Scintillation Counter(1)	<p>Should able to use for applications like DNA &amp; Protein Labeling, Radioimmunoassay, <sup>14</sup>CO<sub>2</sub>, H.Pylori Test, Wipe Tests, Radon in water, Luciferase Assays etc.</p> <p>Specification:-</p> <ol style="list-style-type: none"> <li>1. Detector- Photon Counting Photomultiplier tube</li> <li>2. Output; RS-232C to PC or thermal printer</li> <li>3. Dynamic range-200CPS-50000000CPS</li> <li>4. Counting time- 0.1seconds to 99999minutes</li> </ol> <p>Liquid Scintillation Counting-</p> <ol style="list-style-type: none"> <li>1. Efficiency-Up to 48% for 3H</li> </ol>

	<ol style="list-style-type: none"> <li>2. Max count rate-2000000CPM</li> <li>3. Samples: Microtubes, LSC vial or test tubes</li> </ol>
CO2 Incubator (1)	<ol style="list-style-type: none"> <li>1. Internal Volume-150ltrs + 170 ltrs</li> <li>2. Temp. range- ambient+3°C to 55° C with six sided heating , with control accuracy of ±0.1°C</li> <li>3. CO2 control range-0.2 to 20% or better,</li> <li>4. Should have HEPA filter on CO2 inlet</li> <li>5. Humidity control-95%rH or more. Recovery time for humidity loss during door opening for 30 seconds upto 95%rH should not be more then 30 minutes</li> <li>6. System should be supplied with heat resistant TCD sensor/\$R\$CO2 sensor</li> <li>7. Large viewing window with display system</li> <li>8. having data storage for CO2, temperature etc.</li> <li>9. System should be supplied with built-in automatic decontamination routine at 90°C and high humidity, where along with the inner chamber, all the accessories i.e. air circulation fan, shelves and its support, sensor etc should be decontaminated, FDA validation certified</li> <li>10. Alarm for indicating low water level</li> <li>11. Size:- External- 637x867x766mm, Internal- 470x607x530mm</li> </ol> <p>Interior should be made of Stainless steel with rounded corner for easy cleaning</p>
ELISA READER with Washer (1)	<ol style="list-style-type: none"> <li>1. Spectral Range-400-750nm, Readout Range- 0-3.5Abs</li> <li>2. Accuracy-+/-2%, not more than 0.008Abs</li> <li>3. Precision- CV&lt;0.5%, not more than 0.008Abs</li> <li>4. Linearity: +/- 2% or 0.007 Abs</li> <li>5. Filters: 8 slot filter wheel with 3 filters</li> <li>6. Half Band width of Filters:3-9nm</li> <li>7. Reading Speed: Notr more than 6 seconds entire 96 well plate</li> <li>8. Shaking: Linear Shaking, 3 speeds</li> <li>9. Display: 2x20 character alphanumeric LC display</li> <li>10. Optical System: Quartz Tungsten Halogen lamp</li> <li>11. Onboard software: Single/dual wavelength endpoint, single wavelength kinetic, two point measurements, Ranged, Greyscale, Threshold, point to point, Linear Regression, Cubic Spline, Cut off calculations.</li> <li>12. Onboard memory: minimum 64 assay protocols, retained blank &amp; retained curve fits</li> <li>13. Window based software,</li> <li>14. Programming: Program Cards, 4-Wash Program Cards, 1- Programmable card</li> <li>15. Both Reader and washer should be IVD compliant</li> </ol> <p>Wash heads; 8 or 12 way Coaxial , Wash Volume: 50-750ul in 50ul increments, Residual Volume: &lt;5ul per well</p>
-86° C Deep Freezer Horizontal(1)	<ol style="list-style-type: none"> <li>1. Capacity-484litrs</li> <li>2. Interior Dimension-670x480x1490mm, Exterior-1040x808x2130mm</li> <li>3. Air cooled refrigeration system and compressor</li> <li>4. Automatic voltage boost compensates for low voltage and brown out condition</li> <li>5. Solid state control system with adjustable temp. set point</li> <li>6. Digital temp. display, Push button set point display, Key operated main power switch</li> <li>7. Tepm. Safety alarm with battery backup and audible warning</li> <li>8. High capacity air cooled condenser with dual condenser fans, aerodynamically shaped fan blades, CFC free refrigerants</li> <li>9. Downfeed evaporator for most efficient refrigerant flow.</li> <li>10. Washable condenser filter,</li> </ol>
High Pressure Homogenizer(1)	<ol style="list-style-type: none"> <li>1. The equipment should be used for Cell lysis (mammalian/plant/e-coli/yeast/bacteria), Pro and Eukaryotic cells</li> <li>2. Maximum homogenizing pressure: 1500 bar</li> <li>3. Maximum flow rate: 165ml/min or 10L/hour.</li> </ol> <p>Maximum process volume: 20-25ml with SS low volume feeder</p>

Laminar Flow(4)	<ol style="list-style-type: none"> <li>Made out of best quality board &amp; all exterior surfaces covered with laminated mic sheet,</li> <li>Work tables made of S.S. 316 table top,</li> <li>Complete with HEPA filters &amp; Prefilters, Motor blower, Static pressure inclined Manometer, Cock for Gas, Air or vacuum line,</li> <li>Front &amp; side doors are made of Plexiglas transparent thick sheet duly framed</li> <li>Built-in UV tube work table is illuminated by fluorescent light,</li> <li>Front door can be kept full open/half open,</li> <li>Safety attachments of international standards.</li> </ol> <p>Working Area= 1800x600x600mm, Sitting capacity= 2. Size of HEPA=900x600x150mm x2 filters,</p>
Spray Dryer(1)	<ol style="list-style-type: none"> <li>5Kg capacity single stage,</li> <li>Disc atomizer pore size 3-4mm with product collect hopper</li> <li>Portable type with all supporting accessories</li> </ol> <p>Made of SS 316</p>
Falling Film Evaporator(1)	<ol style="list-style-type: none"> <li>25Kg /hrs capacity</li> <li>Having the facility of circulation evaporation</li> <li>Particle size 5 to 60% with all the accessories for heating</li> </ol> <p>Made of SS 316</p>
Rising Film Evaporator(1)	<ol style="list-style-type: none"> <li>Pumping and recycling facility</li> <li>25Kg /hrs capacity</li> <li>Having the facility of circulation evaporation</li> <li>Particle size 5 to 60% with all the accessories for heating</li> </ol> <p>Made of SS 316</p>
Liquid Nitrogen plant(1)	<p>15 Ltrs for 24hrs and an internal storage capacity of 30ltrs With helium compressor with adequate capacity for cooling helium compressor, Liquid Nitrogen generator, Air Compressor, water cooler of Nitrogen gas generator,</p>
Orbital Shaker(3)	<ol style="list-style-type: none"> <li>Having movement incorporating Triple Eccentric Pin with Counter Balance done,</li> <li>Drive should be permanent Magnet DC Motor with toothed belt,</li> <li>Temp. PID based microprocessor control for temp. control through key board with visual and audio alarm for temp. over/under shoot. Temp Sensor: PT 100,</li> <li>Universal tray to accommodate 25 Nos. of 250ml/16Nos. of 500ml/9Nos. of 1000ml /4Nos.of 2000ml,</li> <li>Shaking Frequency:- 30-350RPM, Shaking Motion:- Orbital,</li> <li>Shaking Deviation: +-2% of set value, diameter of Orbital Motion:-25mm,</li> <li>Universal Tray Size:420x420mm,</li> <li>Temp. Range: - 5° to 80°C, Temp. Accuracy: ±0.1 C @ 30°C to 50°C range, RPM and Temp. Indication= Digital</li> </ol>

**Director**