

RAJENDRA MEMORIAL RESEARCH INSTITUTE OF MEDICAL SCIENCES
(INDIAN COUNCIL OF MEDICAL RESEARCH)
AGAM KUAN, PATNA – 800 007.

Tender Notice No./Store/SATDRC/01/2015-16

Dated: 27/07/2015

TENDER NOTICE FOR SCIENTIFIC EQUIPMENTS/INSTRUMENTS

Sealed Tenders/Bids (in two bid system i.e. Technical bids and Price bids) are invited for the purchase of Scientific Equipments/Instruments for the Samrat Ashoka Tropical Disease Research Centre, Patna.

Interested Manufactures/Reputed Suppliers/Firms/Registered firms having VAT/Sales Tax/Income Tax No. etc. may submit their Tenders/Bids latest by **28/09/2015 at 05:30 PM** through Registered/Speed Post addressed to the Director, RMRIMS (ICMR), Agamkuan, Patna – 800 007.

Tender documents for the above item can be obtained from the office of undersigned by depositing Rs.500/- for equipments with estimated value upto 10 lakh, Rs.2,000/- for the estimated value ranging 10 to 50 lakh and Rs.5,000/- for the estimated value above 50 lakh in form of Demand Draft in favour of Director, RMRIMS, Patna payable at Patna. The detail informations are available at Institute's website www.rmrim.org.in.

List of Equipments/Instruments

Sl. No.	Name of Equipments/Instruments	Quantity
1.	Coagulometer	1
2.	Blood Culture system	1
3.	Shaker for Automatic Blood Cell counter	1
4.	QBC Centrifugal Hematology System with Malaria Test Component	1
5.	Bilirubinometer	1
6.	Semi-Autoanalyser	1
7.	Automatic slide processing and cell staining system	2
8.	Cell Counter (fully automated) [5 parts]	1
9.	Cryostat Micro Tome	2
10.	Paraffin Embedding System	2
11.	Urine Chemistry Analyzer	1
12.	High Throughput PCR Machine	2
13.	Cold/ Refrigerated High Speed Centrifuge	5
14.	Cooling micro centrifuge	4
15.	Table Top Microcentrifuge machine	5
16.	Hot Air Oven	3
17.	Dry Bath	2
18.	Deep freezer (-20 ⁰ C)	10
19.	Deep freezer Horizontal (-70 ⁰ C)	3
20.	Refrigerator (4 ⁰ C)	10
21.	Digital Electronic Balance	6
22.	Single Pan Digital electronic Balance	5
23.	Gel documentation System	2
24.	Binocular Research Light Microscope	5
25.	Multichannel Pipette	3
26.	Adjustable Pipette and Multichannel	20

27.	Eppendorf Micropipette	3
28.	Pipette-Steeper (Vol.10-5000 micro)	1
29.	Cell harvester (Semi-Automated)	2
30.	B-Scintillation Counter	2
31.	Spectrophotometer	2
32.	Incubated Shaker	8
33.	Bacteriological Incubator	6
34.	Biological safety Cabinet	3
35.	Millipore Water Filtration System	5
36.	2D-gel electrophoresis System	1
37.	Vertical Slab Gel Electrophoresis Unit	3
38.	Submarine Gel Electrophoresis Unit Horizontal with power Pack	3
39.	Vacuum/heated slab gel dryer system (45'x34')	1
40.	Processor plus box for gel staining	1
41.	Tissue Homoginizer	2
42.	Autoclave Fully Automatic range (100-300 ⁰ C)	9
43.	Hot Plates and stirrer plate	2
44.	Computer with 0.5 KVA UPS	30
45.	Printer (Laser)	20
46.	Printer Colour	10
47.	Scanner	10

Administrative Officer

TECHNICAL SPECIFICATIONS OF INSTRUMENTS FOR SATDRC, PATNA

1. Coagulometer

Detection principles: LCD/LED Optical detection
Clotting: scattered light detection method
chromogenics: colorimetric method
immunoassay: latex-enhanced turbidimetric method

No. of detector channels: Clotting: ≥ 4 channels
chromogenics: ≥ 1 channel
immunoassay: ≥ 1 channel

Display: LED/LCD touch screen

PRINTER: Built-in thermal printer, prints data and graphics

Language: English, other language available on request

Power supply: 220V 50HZ

Features:-

Suitable for Whole blood, plasma or capillary citrated blood.

Highly sensitive and accurate mechanical detection.

Modern, compact design, ON-board sample and reagent incubation positions

Parameters

Clotting: PT, APTT, Fbg, TT, Coagulation Factor Assays (II, V, VII, VIII, IX, X, XI, XII), Lupus Anticoagulant (screening and confirmation), Protein C, Batroxobin

Chromogenics: AT III, Plasminogen, $\alpha 2$ -antiplasmin, Protein C, Heparin

Immunoassay: D-dimer, vWF: Ag

Minimal interference with icteric & lipaemic and haemolysed samples

Throughput: Minimum 60 tests per hour

Sample volumes: Microvolume procedures, min. 8-50 μ L for different tests

Auto-dilution function for accurate measurement of abnormal parameters.

Quality control: X- control/Levey-Jennings control, Multi-rule monitoring, Automatic calibration curves.

Data storage up to 600 samples/ max. 3,000 tests

Integrated bar code reader for fast, accurate sample loading

Built-in barcode reader for fast, accurate sample loading

STAT position for quick and easy emergency sample analysis

Fully programmable, allowing optimisation of existing tests and design of new test protocols

Characteristics

- Operation: automatic, continuous random access
- Reagent type: Open reagent system
- Performance: ≥ 4 channel

Should have a suitable U.P.S for back up power supply.

Upgradable

Arrange training of the technicians.

2. Blood Culture System

1. It should be fully automated, walk away and continuous monitoring system.
2. System should be capable of detecting growth of the pathogenic organisms from blood and sterile body fluids.
3. Detection principle should be based on sensitive Florescence/ Colorimetric/Pressure Difference Technology.
4. System should have minimum 100 to 120 sample positions.
5. System should be able to process minimum 15 fresh samples per day.
6. Should have media with Antibiotic Neutralizing agents for optimized recovery from various patients those are under treatment.
7. System should have Auto QC facility .
8. Should have minimum daily maintenance.
9. Should have special media for Paediatric samples and low volume sterile body fluid samples.
10. Should have Anaerobic media and Media for increased detection of partially phagocytosed organisms.
11. Should have media for optimal recovery of yeasts, fungi, and mycobacterium from blood samples.
12. Media should not have any masking effect for easier interpretation of Gram Staining of the positive isolates.
13. Should have special supplement for enhanced recovery of low volume sterile body fluids.
14. System should be supplied along with on line UPS with minimum 30 minutes back up.
15. Firm should provide minimum of five years warranty of the system and should provide free AMC for five years after the expiry of the warranty period.
16. Should provide following culture bottles(Free of cost) along with the system:
 - Pediatric Culture Bottle: 400.
 - Adult Aerobic culture bottle with Antibiotic Neutralising agent :400.
17. Training of the staff should be provided on site by the company with using their own consumables and reagents.
18. The company should have a team of well trained engineers who can provide the instrument service and maintenance same day support in Delhi.
19. The firm should provide 1-2 ton A.C. of reputed brand with suitable stabilizer along with the instrument free of cost.
20. In built bar code scanner.
21. Should have audible alarm and visible display for the positive culture.
22. Must have the listed Advanced algorithms:
 - i) Low Blood Volume
 - ii) Pediatric Specimens
 - iii) Slow growing organisms such as Haemophilus and Neisseria
 - iv) Provide Rapid Detection in Blood culture
 - v) Extended Delay Vial Entry Capability
22. Must be user friendly system with minimal daily, weekly, monthly, maintenance and calibration procedures. Please state times associated with these procedures.
23. Must have an on-board data tracking system.

24. Should have an audible and visual alarm system to alert technologist that a positive bottle has been detected.
25. Must be supported by a complete line of media which included but not limited to resin-based (including pediatric) media, media for recovery of yeast, fungi and mycobacteria..
26. Must have automated built in testing which provides continuous quality control of every well.
27. System must be compatible with Plastic Culture
28. Must not require connections or venting units, biohazard hood or special clothing.
29. Must allow direct draw sample collection for bottles.
30. Must be ergonomically designed to provide ease of access for loading and unloading of bottles.
Must have a Data Management System with a bar code scanning function to enter patient demographics.

All future software upgrades and necessary hardware to support such upgrades must be provided free of charge.

Must include power protection against power surges to protect equipment.

3. Shaker (Blood Mixer) for Automatic Blood Cell Counter

- To make blood homogenous by gentle mixing process and less shaking.
- Should have about four-six roller to mix the blood properly.
- It is essential pre - process for perfect result for RBC, WBC and platelet counting in Automatic Blood Cell Counter.
- Presence of simultaneous rotational and vertical motion of the rollers. The roller dimensions and the distance between them make it possible to put different tubes or bottles on them for being mixed.
- A washable protective tray under the rollers to easily collect and for maintaining hygiene, in case the samples suddenly spill.
- The body and paint of the hematology mixer should be resistant to most of the common laboratory acids and chemicals.
- **Technical Data :**

Vertical motion amplitude	~20 mm
Speed	40-60 rpm
Voltage	220-240 V
Power	20 W

4. QBC Centrifugal Hematology System with Malaria Test Component

I. QBC Centrifugal Hematology System for fast, simple and accurate results of nine clinically significant haematological parameters.

- Makes on-site hematology easy and affordable.
- Employs dry hematology technology using tubes that are internally coated with necessary reagents—no need for costly liquid reagents
- AccuTubes can be used for both venous and capillary blood samples
- Quantitative values from venous or capillary blood sample for nine parameters including Hematocrit (HCT); Hemoglobin (Hb); MCHC; White Blood Cell Count (WBC); Granulocyte Count/Percentage; Lymphocyte and Monocyte Count/Percentage.
- No routine maintenance or calibration necessary—a simple calibration check run daily to verify performance (liquid controls available separately).
- Optical Signature Analysis automatically scans collection tube eight times, eliminating subjective interpretation
- Printouts can include age-and sex-specific normal ranges and error messages to alert user to improper tube preparation, unusual sample results, or other irregular conditions
- Analyzer software contains hematology diagnostic reminders (HDR); users may select from several printed formats for test results: test values only, test values plus abbreviated HDR comments, and test values plus expanded HDR comments
- Suitable Printers & U.P.S included..

II. QBC Malaria Component:

- QBC Malaria Test is internally coated with fluorescent acridine orange stain to improve the visibility of malaria parasites; when excited by blue light (~460nm), parasites will fluoresce brightly against a dark background, as seen in the micrographs to the right
- ParaLens Advance attachment provides fluorescence capabilities to any light microscope through the use of a durable, long lasting LED light source; with simple setup and multiple power options.

PRINCIPLE: Based on centrifugation and fluorescence.

Sample volume: 2-50 µl blood sample.

QBC Malaria Test System with ParaLens Advance™, Microscope, and Centrifuge

- A complete transmission light microscope with epi-fluorescence microscopy system for malaria parasite staining and review
- Includes Research Grade Microscope with 4X, 10X, 40X and 100X objectives, ParaLens Advance microscope attachment with 60X objective, Capillary Centrifuge (120/230V, 50/60 Hz operation), and QBC Malaria Test (box of 2000):

A. Research Grade Microscope with 4X, 10X, 40X and 100X objectives

B. ParaLens Advance microscope attachment with 60X objective.

C. QBC™Centrifuge The QBC Capillary Centrifuge is an ultra-compact centrifuge, designed for centrifuging QBC tubes of patient blood samples for use in the QBC Autoread Plus or Malaria Test systems., the QBC Capillary Centrifuge

- Can centrifuge up to 20 samples at one time in 5 minutes.
- _ Rotor Capacity: 1 to 20 QBC™ tubes.
- _ Rotor Speed: 12,000 rpm ± 80 rpm.
- _ Nominal Relative Centrifugal Force (RCF): 14,387 x g.
- _ Timer: Electronic, 300 s spin, 15-20 s deceleration.
- _ Electro-Mechanical Safety Interlock: Lid remains locked until rotor stops.
- _ Operating Temperatures For QBC™ Hematology: 20 to 32 °C (68 to 90 °F).*
- For Parasite Detection: 16 to 37 °C (60 to 99 °F).*
- _ Functional Range:* Centrifuge Operation: 2 to 40 °C (36 to 104 °F).*
- _ Operating Relative Humidity: 0% to 80% for temperatures between +2 and 31 °C.
- _ Non-Operating Storage Temperature Limits: -26 to 66 °C (-15 to 150 °)

D. QBC™ Power Pack: The power supply accompanying or sold with the QBC™ Centrifuge bearing the GS mark.

5. Bilirubinometer (1)

- Photometer: Bi chromic
- Wavelength: 405nm to 578nm
- Sample type: Serum/ Plasma with capillary
- Sample Volume: 2/3-3/4 of total capillary volume
- Light source: LED
- Printer: Yes
- Display: Yes
- Test time: 5 seconds
- Measuring Range: 0-40 mg/dl
- Operating Range: AC 110- 240V, 50/60 Hz
- Operating Conditions: 0-50 °C
- Accuracy: ±5-10%

6. Semi-Autoanalyser (1)

- Method: Absorbance, Monochromatic, Bichromic, End point standard/factor, fixed time kinetic, multipoint Kinetics.
- Measurement Apparatus: Cuvettes (Removable), silicon photodiode
- Range of measurement: 0-2.5 A to 3.0A
Automatic Zero setting
Lamp source- Yes, Halogen

Lamp- 6V to 12V

- Programmable Volume: Yes
- Filter (nm): 340, 405, 505, 546, 578, 630 and additional free positions
- Power: Voltage- 100 to 240V
Frequency 50 to 60 Hz
- Temperature control: Yes RT, 25, 30, 37°C
- Thermostat: Yes
- Accuracy of Temperature: ± 0.1
- Display: Yes
- Printing option: Yes, both inbuilt and external.
- Data storage: Yes

7. Automatic Slide Processing and Cell Staining System (2)

- Reliable Automated slide staining,
- Able to stain upto 100 slides an hour.
- Eliminates labour-intensive manual staining while standardizing the process for optimal quality and error reduction.
- Easy to use platform that combines routine staining, special stain techniques, and coverslipping..all in one fully integrated system.
- Easily programmable staining protocols with maximum staining facility.
- Continuous loading of upto 60 slides per run (upto 500 slides an hour).
- Combination of three separate work stations for routine H & E stains, special stain methods and coverslipping.
- Capacity of simultaneous runs of H&E and special stains.
- Ability to set multiple loading and unloading stations based on slide volume.
 - Program upto 3 stations for continuous loading
 - Program upto five stations for efficient unloading.
- Two drying stations to reduce potential bottlenecks.
- Two optional heating stations for special stains like a PAS, Giemsa stain and mucicarmine stain.
- Compatible with histology and Cytology protocol including PAP.
- Touch sensitive colour menu screen.
- Adhesive backed polymer with Automated coverslipper.
- Suitable U.P.S. for power backup in the instrument and the accessories

8. CELL COUNTER (FULLY AUTOMATED) ANALYSER (5 PARTS) (1)

1. Fully Automated Comprehensive Hematology Analysis with 5 parts differential
 2. Should be with advanced and superior technology to improve the overall efficiency and maintain the highest degree of testing accuracy.
- .
2. Random access discrete analyzer for :
 - * CBC
 - * CBC + Differential Count
 - * CBC + Reticulocyte
 - * CBC + Reticulocyte and Differential Count.

* Nucleated RBCs in various combinations.

3. CBC should have following parameters:

WBC, RBC, Platelets, Hb., HCT, MCV, MCH, MCHC, RDW, MPV, PCT, PDW, MPV etc. and # of

LYM, MON, NEU, EOS, BAS, *ATL (# and %), *IMM (# and %), *

2. *Should perform WBC differential analysis in two channels using multiple technologies of impedance volume, and absorbance cyto-chemistry and resistivity volume to maximize resolution, specificity and efficiency.*

3. *Should use a Dual Focused Flow Cell to analyze WBC's for differential count*

4. Differential Count should have Lymphocytes, Monocytes, Neutrophils, Eosinophils and Basophils: both in absolute number and percentages.

5. Reticulocyte should have number as well as percentages and immature reticulocyte fraction.

6. Should have histogram and scatterogram.

7. Should detect and enumerate Nucleated Red Blood Cells without additional reagent.

8. Extended analysis time for Cytopenic samples.

9. Data Flagging System to Identify Abnormal Samples and immature cells.

10. Full quality control management system including Levey-Jennings diagrams

11. **Principle of Working:**

RBC/ Platelet count: Impedance / Optical Method/hydrodynamic focussing

Differential Parameters & Reticulocyte: Flow Cytometry, fully automated

12. Automatic start up, shut down and sample analysis.

13. Multichannel analysis for better resolution.

14. Throughput of at least 80 samples/ hour or more in all the five discrete analysis mode.

15. Should have autoloader: 50 samples or more at a time with shaker function.

16. Should have whole blood open vial and closed vial mode, Capillary mode/ Pre- dilute mode.

17. Automatic probe wipe .

18. Automatic Clot detection technology.

19. Should have user definable flagging system for various results.

20. Quality assurance system with calibrators & controls.

21. Should have Bar Code Generation and reader facility (External as well internal)

22. Appropriate compatible online UPS with 1/2 hour backup for equipment.

23. Latest branded computer with latest Windows software.

24. Storage of minimum 5000 sample data with histogram & scatterogram in differential colouring.

25. Linearity not less than 1,00000/cumm.

26. Compatible laser printer

27. Suitable UPS for power backup..

28. Three years warranty.

29. RS 232C port.

30.. Physical Infrastructure changes, if any, to be done by the firm.

31 Reagents & consumables, calibrators & controls to be supplied for 10,000 samples.

32. Company should quote *economical* rates for consumables & reagent pack required for running the equipment.

33. Increase productivity with on-board diagnostics and troubleshooting assistance and Receive top-quality customer support through telephone, on-line or on-site services.

34. Increase Testing Confidence with modern technology to eliminate unnecessary operator intervention such as manual WBC correction for making blood smears, sample dilution preparations and repeat testing.

9. CRYOSTAT MICROTOME (2)

Technical Specifications

CRYOSTAT MICROTOME for rapid freezing of human and animal body tissue, used for histopathological section, diagnosis, analysis and research.

- Open-top cryostat achieves chamber temperature of -10°C to -40°C.
- Stainless steel microtome with cross-roller bearings for horizontal/vertical specimen movements
- Fine section thickness from 1 to 100µm
- Trim section thickness from 5 to 500µm
- Selectable specimen retraction
- Fast freezing for 12-18 stations
- Horizontal feed of 28mm
- Vertical stroke of 60mm
- Motorized sectioning from 0 to 250mm/sec
- Convenient specimen holder
- Smooth fatigue free Hand wheel with Positive lock at 12 or 6 o'clock position
- Knife Holder, Cryostat Microtome:
 - Microtome Knives of size 100MM – 300MM
 - Can be used with SPENCERS blade holder
- Reverse Wheel for trimming with trimming thickness range 10~400µm Adjustable, Increment: 10µm, Increment: ±20%
- suitable stabilizer/ U.P.S. as per requirement for the equipment.

1. A M.C.

2. Standby machine if machine owned by the histo.lab. goes out of order.

10. Paraffin Embedding System (2)

- Automatic controlling procedure, time of power on/off can be reset in any time of each day of a week.
- Adopted with new-type heating element, heated quickly and evenly, and energy-saving.
- Temperature-measuring chip, high precision, stable performance, display as icon in the state of working.
- Paraffin tank, dispenser nozzle, left preservation box, right preservation box, embedding workstation can be separately controlled, work itself. Five different modes of controlling temperature and multiply over-heating protection, safe, reliable, and energy-saving.
- Automatic memorization, and self-recovery, reserving resetting temperature when starting up.
- Embedding center, cooling system, and heating table can be combined randomly.
- Cooling system adopted with new-type inverter compressor, cooling temperature should be adjusted freely.
- Range of setting temperature of cooling system is -35 C ~ -50 C.

- Small cooling plate makes embedding medium solidified quickly.
 - High capacity (approx. 5 liter) paraffin dispenser.
 - Low-voltage lighting system, safe and reliable, manual drive and foot-drive power on/off mode.
 - Workstation, forceps table can be heated, easy for embedding.
 - High-precision time indication, easy to reset.
 - technical parameters: adopted int'l advanced heating theory.
 - volume of paraffin dispenser: 5 liters.
 - range of temperature-control of forceps table: ambient~99 C
 - range of temperature in paraffin dispenser: ambient~99 C.
 - range of temperature in storing box: ambient~99 C.
 - range of temperature at workstation: ambient~99 C.
 - precision error : ±1%
 - mode of wax-flow: automatic soft-touching switch on/off, foot-operated control.
 - time reset: time of power on/off can be set freely in a week.
 - temperature of cryo-plate: ambient≤-20 C, protection requirement of time delay.
- Enjoy the function of power-off protection self-check and automatic correction
 - Auto prompting to preparing next sample and sample reaction time
 - Power supply 220V±22V 50Hz ±1Hz
 - Minimal lot-to-lot variance (no lot-specific calibration necessary)

11. Urine Chemistry Analyser (1)

: Semi automated microprocessor Controlled portable Urine Analyser for monitoring Day to day urinalysis.

- Adopt high-luminosity
 - Cold light source testing technology, with little power consumption
 - Long life-span and low failure rate.
 - Large LCD display and menu-driven friendly interface.
 - Long shelf life, High brightness, cold light source.
 - New type optical sensors; high sensitivity and accuracy, good anti-interference ability.
 - Automatically revise the effect of PH value to the results of specific gravity.
 - Installed high speed and low noise thermal printer internally
 - **Test theorem: Reflectance photometer**
- ***Test Throughput*** : Approx. 600 tests / hour /operating manually
 - ***Sample identification: Sample Id via manual entry, barcode reader or download from host.***
 - ***Test Parameter*** : Protein, Glucose, Ketones , Urobilinogen , Bilirubin, Blood , nitrite, Leukocytes, Colour, . Specific gravity, pH, Turbidity, Colour, RBC, WBC, **Casts and Bacteria. Flagged Parameters:** Crystals, Yeast cells, Non-squamous epithelial cells (SRC), Path Casts and Sperm
 - ***Certificates CE,UL,CB,CUL***

- **Measuring System** Reflectance Photometer, Wavelengths 470 nm, 555 nm, 620nm
- **Memory Capacity** ≥ 1000 sample, 3 x100 controls
- **Display** LCD touch screen (90x120 mm)
- **Printer** Built in high speed, width 57mm
- **Interfaces** RS 232 serial interface to barcode reader, sediment terminal Standard RS-232 interface for data exchange & system software updating when connected with PC
- **Operating temp** : 15~30°C, relative humidity < 70%

Reaction time: 25-30 seconds

- Power supply 220V \pm 22V 50Hz \pm 1Hz
- Minimal lot-to-lot variance (no lot-specific calibration necessary)
- Three conventional units for choice: international, regular system of units and symbol system.
 - Diagnostically relevant sensitivity
 - Each item has a normal range which can be set by user easily; Results exceeding the range will be marked when output.

Report way:

- Alternative to report half-quantitative thickness or +/- grads system, alternative to legal measurement unit or traditional unit, available to indication of exceptional value
- Enjoy the function of power-off protection self-check and automatic correction
- Equipped with standard serial interface and standard RS232 interface can link with external computer and printer
- Free choice to testing paper type produced by different factories

12. High Throughput PCR Machine (2)

1. Format: 96 well Thermal Cycler with 6 separate peltier blocks to provide independent temperature zones to run six different assays with varying annealing temperatures at the same time.
2. Each block to accommodate 16 wells and having the ability to set up PCR with a specific temperature differential of upto 5 degree centigrade between blocks.
3. Run up to 6 seperate temperatures in the same plate with user defined time.
4. On board Tm calculator facility to approximate the optimal annealing temperature.
5. Ramp Rate: Max sample Ramp rate 3.35 ⁰C/sec, max Bloc Ramp Rate 3.9⁰C/sec.

6. Block temperature accuracy; $\pm 0.25^{\circ}\text{C}$ (35°C to 99.9°C)
7. Block temperature uniformity: $< 0.5^{\circ}\text{C}$ (20 sec after reaching 95°C).
8. Block temperature range: $4-99.9^{\circ}\text{C}$
9. Sample capacity: 1x96 well plate, 96x0.2 ml tubes
10. Standard and Fast run modes in a single instrument with the ability to use 0.2 ml/0.1 ml PCR tubes or micro-well plates.
11. The system should support PCR volumes ranging from 10 to 80 micro litres.
12. Mouse or stylus free navigation capability with VGA colour touch screen allowing for easy intuitive graphical user interface programming.
13. Choice of saving the methods upto 800 to the instrument or unlimited to a USB memory stick.
14. Programmable heated lid cover from for efficient PCR optimisation.
15. Scalability: Capability to interlink upto 11 PCR system via a single Ethernet hub.
16. Security: The system should have the ability to store most important methods on a memory stick.
17. Portability: The system should have a USB port to transfer methods from one machine to another.
18. System should allow easy product updates via USB port.
19. The machine should be duly certified/authorised for PCR process and the vendor should produce the certificate for the same.
20. All necessary optimised reagents and plastic ware for standard and fast thermal cycling should be made available by the vendor.
21. The system must be provided with a compatible voltage stabiliser.

13. Cold/Refrigerated High Speed Centrifuge with multiple rotor (5)

- Provided with fixed angle rotor for 1.5 ml microfuge tubes and maximum speed $> 20000 \times g$.
- Provided with fixed angle rotor for 50 ml falcon tubes with adapter for 5 ml and 15 ml tubes maximum speed $> 15000 \times g$.
- Provided with swing out rotor with sealable round bucket and appropriate adaptors to accommodate 50 ml and 15 ml tubes maximum speed $> 4500 \times g$.
- Temperature range: 0 to 4°C .
- Maintenance: Noisless, Brushless motor drive, stainless steel bowl.
- Large size digital display with programmable selection of run parameters (rpm, rcf, time, acceleration and deceleration).
- Imbalance sensor, self diagnostic error message and audible alarm with running time up to 3 hrs.
- Motorized lid locks and emergency lid unlocking facility.
- Provided with an automatic voltage stabilizer.
- Standard optional 96 well plate rotor with speed range 200-4500 rpm.

14. Cooling Micro-centrifuge (4)

- Speed range: 10000-12000 rpm approx.
- Temperature control range: 0°C - 40°C
- Provided with fixed angle rotor for 1.5/2.0 ml microcentrifuge tubes.
- Provided with fixed angle rotor for minimum 4 X 30 ml falcon tubes and appropriate adaptor for time and speed.
- Noiseless brushless motor drive.
- Programmable display for time and speed.
- Imbalance sensor, self diagnostic error message & audible alarm.
- Power supply -230 V/50 Hz.

15. Table top Microcentrifuge machine (5)

- Maximum RCF- 15000xg or more
- Temperature control range: 0°C - 40°C
- Power supply- 230 V/50 Hz
- Rotors:
 - Fixed angle rotor with 24 wells capacity for 0.5ml, 1.5ml and 2ml microcentrifuge tubes, with lid and 0.2ml PCR tube adaptors.

16. Hot air oven (3)

- Equipped with Microprocessor control, programme storage and digital display.
- >100 litres chamber volume
- Temperature range : ambient +10°C to 200°C
- Removal shelf supports
- Inner casing of corrosion resistant stainless steel
- Heat conduction by natural convention
- Power requirements: 230 V, 50 Hz
- With a temperature sensor
- With a voltage stabilizer

17. Dry bath (Ligation Chamber) (2)

- Temperature control range from +4°C to 90°C with cooling device.
- Temperature control: 1°C
- Accuracy: 0.1°C
- Digital display with timer
- Able to accommodate 0.2ml, 0.5ml and 1.5ml centrifuge tubes.

18. Deep Freezer (-20°C) (10)

- Upright Vertical.
- Microprocessor controlled & with digital display window and error alarm.

- Capacity: 250-300 L.
- Provided with height regulating selves (3 or more)/Boxes.
- Temperature: -20°C at ambient temperature
- Low noise level.
- CFC & HCFC free refrigeration.
- Rust free exterior and corrosion free interior.
- With suitable servo controlled voltage stabilizer with time delayed calibration.
- Power input: 220 ± 10V single phase.
- Key lock system.

19. Deep Freezer Horizontal (-70) (3)

- Upright vertical
- Microprocessor controlled with display window and error alarm.
- Capacity: 300 to 400 liters.
- Temp.: -80 °C at ambient temp.
- Two stage compressor/dual cooling system
- High efficient hermetic type compressors (cascade refrigeration)
- Low noise level
- CFC and HCFC free refrigeration
- Rust free exterior and corrosion free interior
- With suitable servo controlled voltage stabilizer with time delayed calibration
- Power input: 220± 10 V single phase
- Key lock system with alarm
- With 3 or more stainless steel shelves, storage racks and/or drawers
- With liquid nitrogen backup system

20. Refrigerator 4°C (10)

1. Capacity : 320 - 400 lt
2. Height : 1650 - 1750 mm
3. Width : 650 – 700 mm
4. Depth : 700 – 750 mm
5. Refrigerator must come standard with 4 adjustable shelves.
6. Refrigerator must have double door system
7. Refrigerator must contain door alarm, Anti-Bacterial Gasket and moist balance system
8. Refrigerator must use a 1hp compressor, R-134a.
Digital temp. control

21. Digital Electronic Balance (6)

1. Weighing Capacity : 200 g or more
2. Readability : 0.1 mg or 0.0001 g
3. Repeatability : ±0.1 mg or less
4. Linearity : Less than ± 0.2 mg
5. Stabilization time : Less than 20 seconds

6. Pan : Stainless steel weighing pan with removable dust and spill rings
7. Pan size : 80-100 mm
8. Calibration : Internal
9. Display : High contrast LCD
10. Certification: GLP compliant and ISO certified
11. Cover : Pan should be covered by glass from all sides
12. Guarantee/Warranty: One year

22. Single pan digital electronic balance (5)

General:

Tender is invited from reputed original manufacture or their authorized agents/dealers only. Information regarding installation in India and satisfactory service and maintenance may be forwarded with all the details for verification.

Technical:

1. **Single pan analytical balance** with highest accuracy for weighing processes.
2. Readouts to have at least four decimal places.
3. Equipped with a draft shield chamber to eliminate interfering ambient effects.
4. Weighing range: 0.01-60 g
5. Readability: 0.1 mg
6. Calibration: external
7. Display: LCD display
8. Verification interval: 0.001 g
9. Pan size: 80-100 mm
10. Power supply: 210-240V/50-60 Hz

23. Gel Documentation System (2)

1. Applicable for gel documentation, densitometry, fluorescence or chemiluminescence.
2. Image capture:- Epi-white, UV transilluminator, chemiluminiscene/florescence.
3. Image size:- 15 cm x 35 cm or more
4. Excitation source: < 330 nm UV transilluminator, trans white and Epi-white light
5. Image exposure:- Automatic & manual
6. Emission filter:- Standard
7. Imaging Area:- 15cm x 35cm or more
8. Filter: 4 slots, Motorized
9. Camera: 16 bit, 4 megapixel or more, CCD
10. Pixel density:- > 4000

11. Lens: 50mm, f/0.95
12. Data station: Internal or external with printer, storage capacity 250 GB, supplemented with all accessories (CPU, Monitor, Key Board, Mouse, UPS and operating system software) for external data station.
13. Suitable operating software for image analysis, molecular weight, densitometry, volumetry, light intensity.
14. Image format conversion facility or compatibility with third party software.

24. Binocular Light Microscope (5)

- Eye piece: Paired Eye piece 5X, 10X
- Objectives: Plan Achromatic objectives 4X, 10X, 20X, 100X
- -30°C inclined binocular tube with inter-papillary distance 48-75 mm (approx.)
- Double layer Mechanical stage with travelling range (approx.) 76 mm(X) x 30 mm (Y)
- Light system- Halogen Lamp 6V. 30 W/LED illuminator equivalent to 30W
- In built illuminator equivalent to 30W
- In built illumination
- Condenser-Abbe type
- Co-Axial focusing system.

25. Multichannel Pipette (3 sets)

Volume range: 5-50 μ l

Increment: 0.1 μ l

Accuracy: ± 5 -1.5%

Precision: 2 to 0.7%

Volume: 30-300 μ l

Increment: 1-5 μ l

Accuracy: ± 5 -1.0%

Precision: 2 to 0.3%

26. Adjustable Pipette and Multichannel (20 sets)

Volume range: 5-50 μ l

Increment: 0.1 μ l

Accuracy: $\pm 5 - 1.5\%$

Precision: 2 to 0.7%

Volume: 30-300 μl

Increment: 1-5 μl

Accuracy: $\pm 5 - 1\%$

Precision: 2 to 0.3%

27. Micropipette (3 sets)

1. Volume range: 0.2 to 2 μl

Increments: 0.002 μl

Inaccuracy: $\pm 0.02-0.05 \mu\text{l}$

2. Volume: 1-10 μl

Increments: 0.1-0.02 μl

Accuracy: $\pm 0.05-0.1 \mu\text{l}$

3. Volume: 10-100 μl

Increments: 0.1-0.2 μl

Inaccuracy: $\pm 0.1-1.0 \mu\text{l}$

4. Volume: 100-1000 μl

Increment: 0.1-1.0 μl

Inaccuracy: $\pm 5-10 \mu\text{l}$

28. Pipette-Stepper (Vol. 10- 5000 μl) (1)

1. Volume: 10-5000 μl

Accuracy: ± 2 to 0.5%

Precision: ± 2 to 0.5%

29. Cell harvester (Semi-automated) (2)

a. Harvesting facility for deep well micro titer plates

b. Microwell plates with 8x 12=96 wells

- c. Filtering area 9 mm
- d. Serviceable wash tips and O ring
- e. **Counter compatibility:** Both (Liquid Scintillation & Wallac b Plate Counter) well harvested programmable
- f. **Outlet Number:** 2 Hot/cold
- g. **Inlets:** 3
- h. **Harvest wash flow:** continuous and pulsed
- i. **Harvest programing:** fully programmable
- j. Includes dual head models

30. β -Scintillation counters (2)

- a. Detector: Advance photomultiplier and single-photon counting photomultiplier tube (PMT)
- b. Reproducibility: +/-1% counting Efficiency
- c. Count Rate: up to 3.999.999 CPM with MCA
- d. Efficiency: ^3H -60% & above, ^{14}C -95% & above
- e. Internal Lead shield for LSC
- f. Alfa-beta separation ability
- g. Power requirement: Voltage 100-240 VAC, 50-60 Hz
- h. Ambient Temperature: 15-35⁰C
- i. Power failure recovery: Automatic
- j. Relative humidity: 30%-85%

31. Spectrophotometer (2)

- a. Photosystem: Double Beam
- b. Wavelength range: 190-900nm or better
- c. spectral bandwidth: 0.5-4.0nm
- d. Wave Length Accuracy: $\pm 0.1\text{nm}$ to $\pm 0.3\text{nm}$
- f. Stray light at 220nm: 0.05% or less
- g. Wavelength reproducibility: $\pm 0.1\text{nm}$ or better
- h. Scan rate: 300 nm/min or above
- i. Photometric accuracy: $\pm 0.005\text{A}$ or better
- j. Photometric repeatability: $\pm 0.001\text{A}$
- k. Quartz Cuvettes: 1.0 ml, 0.5ml, 0.1ml (atleast one pair of each) with microcuvette holder

- l. Detector: Photomultiplier tube/Silicon photodiode
- j. Base line correction: Automatic
- k. Photometric Range; 1 to +2.5 Abs
- L. PC: Core 2 duo, 2.4 GHz, 4 GB ram, > 160Gb hDD, DVD/R/w 17' SVGA color monitor. Graphics card with laser Jet Printer and 1one 2 Kva UPS.
- M. Operating Software for spectrum analysis, data processing, Photometric, quantitative and kinetics analysis etc.

32. Incubated Shaker (8)

- With shaker and temperature control range of +10 °C to °60 C equipped with cooling refrigerator
- Speed range 15-300 rpm
- Platform accommodating 100ml, 250ml, and 500 ml/ 1-L flasks (at least four 500 ml flasks time).
- The double-walled construction, with 1.25" of insulation and a triple-paned, evacuated viewing glass window, minimizes heat loss.
- Efficient circulation system to ensure optimum temperature uniformity throughout the chamber.
- Temperature: Microprocessor-controlled with platinum RTD.
- Temperature: digitally controlled with membrane key pad
- Temperature uniformity(± 0.5 deg at 37⁰ C)
- Automatic on/off with power to retain parameter.
- Programmable Timer up to 99 hours.
- Powder coated steel.
- Variable speed control.
- Smooth and quiet shaking. Shaking should stop on opening of door.
- Accessories: platforms, clamps (for various flask size), spring racks to hold tubes in horizontal, angled, upright position.
- Rack distance adjustable.
- Power supply: 210V to 240V
With suitable Automatic Voltage stabilizer

33. Bacteriological Incubater (6)

- Microprocessor controlled
- Forced Air Convection
- Inner Body - Stainless Still
- Inner Door - Glass/ Transparent Material
- Capacity - 250 lt approx.
- Should be completed with 3 or more removable shelves
- At ambient temp. Range 15°C to 60°C with ± 1 C accuracy

- Compressor with CFC and HCFC free
- With Suitable Voltage stabilizer with time delayed calibration
- Power input: 220 ± 10 volt single Phase

34. Biological (Biosafety) cabinet (3)

- Dimension (inner) : 1800x900x1250 (WxDxH mm) or more
- Visual and audible alarm: For low air flow and velocity, Flow malfunction
- LCD display: microprocessor increases fan speed gradually in filter resistance
- Air velocity : 0.35-0.50 m/s
- Air flow volume : 1100 meter cube/hrs or more
- Exhaust Filter: 99.999% efficiency ULPA/HEPA filter 0.3 µm
- Down flow filter: 99.999% efficiency ULPA/HEPA filter 0.3 µm
- Microprocessor controller with air velocity, cabinet temperature, UV lamp hour meter, Filter change date, visual and audible alarm for low air flow velocity, flow malfunction.
- Illumination: 1100 lux
- Fans: centrifugal high efficiency fan with speed control.
- Utility device: UV lamp, FL lamp, Air/Gas stop cock.
- Material (inner): stainless steel AISI 301.
- Material (outer): Electro-galvanized steel with epoxy powder coating.
- Electric supply: 220 V, 50/60 HZ
- Movable stand with automatic voltage stabilizer for voltage range 220±20 V

35. Water Filtration/ purification System (5)

- With prefilter to remove iron
- High density reverse osmosis membrane
- Product water quality-
- UltraPure water (Cell Culture and Electrophoresis grade)
- Resistance:~18.2 Megaohm.cm,
- Bacteria: <1cfu/ml
- TOC<_5 ppb
- Particulate (size > 0.22 µm)
- Flow rate: 1L/min
- RNase and DNase:<5pg/ml
- With onsite Validation/Calibration facility
- Automatic display of status and alarms.
- Power supply: 240V. 50/60 Hz

- Working Temp: 4-40°C
- System Weight: Less than 30 Kg (Approx)

36. 2-D GEL ELECTROPHORESIS SYSTEM (1)

First dimension

1. Isoelectric focusing system with platinum/gold plate plated electrodes.
2. Focusing and rehydration/equilibration trays capable of accommodation IPG strips of length 7 cm, 11 cm, 13 cm, 18 cm and 24 cm.
3. Integrated power supply of 1000 volts(or more) programmable for time and voltage with digital display,
4. Other accessories such as wicks, sample cups etc must be provided along with 2 packs of IPG strips of all available lengths.

Second dimension

1. Vertical gel electrophoresis capable of running up to 12 gels of 1mm thickness and accommodating 17 or 18 cm IPG strips.
2. Appropriate cooling facility (inbuilt or external) should be provided with the system.
3. Power pack with programmable voltage, current and run time should provided with system. It should have facility for automatic recovery after power failure and overload detection.
4. Other accessories required for manual gel casting such as casting module, glass plates, notched plates, combs and spacers must be provided.

Gel imaging system and image analysis software

1. Gel imaging system equipped with CCD camera , UV and white light illumination facility, appropriate trays and filters has to be provided .
2. The image analysis software having image import and spot matching facility has to be provided.

One computer and UPS from reputed company with specification deemed essential for installing software, image acquisition, storage and analysis has to be provided.

Minimum specifications include Windows 7, RAM 2GB, HDD250GB, LED display, third generation Intel i4 Processor.

37. Vertical Slab gel electrophoresis unit (3)

- For running medium size gel with 1 mm thickness.
- Runs al least 2 gels simultaneously.
- Should be able to accommodate 11 cm IPG strips for 2-D applications.
- Should be provided with the gel casting stand to aalow casting of upto 2 gels.

- A complete range of combs for 10 and 15 wells.
- Able to run pre cast gel.

Power pack :-

- Output range – 10-300V, 0.01-0.4 A,10-75W or more.
- Constant current or voltage option with timer .
- No load detection,sudden load change detection,short circuit detection.
- Display-LED

Accessories :-

- Glass plates 3 packs and 1 mm spacer plates- 2 pack extra.

38. Submarine Gel Electrophoresis unit horizontal with power pack (3)

- Cell size(W*L*H)	9.2*25.5*5.6 cm
- Gel tray size (UV Transparent) With casting gates and gel caster.	7*7 cm(have two slots for fixed height)
- Base buffer volume	270 ml
- Bromophenol Blue	4.5cm/hr
- Comb with 8 well and 15 well	8 well(1.5 mm fixed height) 15 well(32 samples/run)

Power Pack basis,

1. Volts	: 10-300 V
2. Current	: 4-400 mA
3. Power	: 75 W(maximum)
4. Display	: 3 digits led
5. Dimention	: 21×24.5x6.5 cm
6. Weight	: 1.1 kg
7. Timer	: 1-999min
8. Operating Zcondition	: 0-40 ⁰ C,0-95% humidity
9. Output Jacks	: 4 sets in parallel

- Convenient leak proof casting tray fast gel casting without tape.
- Multichannel pipette compatible comb.
- Coolant insulated buffer chamber.

39. Vacuum/heated slab gel drier (1)

Drying Surface	33 x 45 cm
Gel Capacity	16 mini (8 x 7cm) gel

	9 criterion (13.3 x 8.7 cm) gel
	2 large (20 x 20 cm) gel
	1 sequencing gel
Operating Temp	40-80°C
	5 min-9 hrs
	3 programmable cycles
	(For PAGE, Sequencing, Gradient)
LED Display	Dryer Temp.
Dimension	55 x 50 x 11 cm
Weight	9.8 kg
Porous Gel Support	35 x 45 cm
Transparent Sedling Gas kit	35 x 45 cm
Filter paper backing, Cellophane membrane Backing, Sequencing Gel Filter.	
Gel Drying Solution	
Vaccum Pump: Oil free, piston powered, quiet and low vibrations, with moisture trap system	
	Max vacuum up to 85 kPa,

40. Processor plus box for gel staining (1)

Automated Gel Stainer Processor Plus is a novel fluid delivery system that automates acrylamide gel staining and Western blot processing. The automated gel capabilities of Gel Stainer Processor Plus include multiple pre-programmed and user-defined protocols for proteins and nucleic acids. A choice of small and large format tray sizes accommodates about 1-6 mini gels or 1-2 standard size gels for Silver or Coomassie Blue-staining.

Protocol entry and editing should be simple with up to approx. 30 steps allowed per protocol. A removable protocol key, which stores one protocol should protect critical protocols from accidental alteration.

1. Automated system for gel staining and blot processing
2. Multiple pre-programmed and user-defined protocols included for proteins and nucleic acids.
3. Small and/or large format tray sizes to accommodate about 1-6 mini gels or 1-2 standard size gels for Silver or Coomassie Blue- staining.
4. Automated staining of Coomassie or silver stain gels for proteins and nucleic acid analysis.
5. Suitable for Blots prepared for chromogenic detection and high sensitivity ECL detection
6. Control programming of protocol, volume, solution and processing time
7. Designed for high quality consistent processing with every use
8. Power cord & suitable UPS should be available

41. Tissue Homogenizer (2)

- a. Sample feed size range: 1mm to 8 mm
- b. System should perform a wide variety of sample preparation at wide range of pH.
- c. System should be suitable for dry and wet grinding.
- d. System should not create noise more than 65 dB (A).
- e. Availability of local service engineers and service facility would be preferred.
- f. Electric Power should be 220V AC, 50/60 Hz
- g. System has 2 years warranty and CE-conform.
- h. System should have on/off knob, LED display for precise monitoring.
- i. There should no cross-contamination.

42. Autoclave fully automated (9)

Technical specifications:

- I. Chamber volume: 110 liter or more
- II. All joints are argon welded & polished to mirror finish
- III. Hydraulically die pressed lid of SS 304
- IV. Chamber hydro tested at 60 psi
- V. All accessible part used are of stainless steel SS 304
- VI. Heating system: SS 304 water immersion heater. Specially designed to save electricity & increased life
- VII. Sterilizing temp: 105-132°c
- VIII. Sterilizing time: 0-99 min
- IX. Controlling: through digital temp controller (saves electricity) with inbuilt timer.
- X. Safety item; safety valve-20 PSI, extra safety valve-25 PSI
- XI. **Standard Feature:**
 - a. Manual vacuum breaker
 - b. Pressure gauge
 - c. Release/exhaust valve
 - d. Silicon rubber gasket
 - e. Wire mesh basket
 - f. Pedal free easy lift of top lid as it reduces working height to a great extent, smooth, vibration free and jerk free operation
 - g. Operating temp range: 105-135°c
 - h. Operating pressure range- 0-2190 kpa
 - i. Temp control- digital
 - j. Heat source- 1.5 KW- 2.0 KW electric heater
 - k. Timer control- display
 - l. Dimension- 248*740 mm
 - m. Capacity of chamber- 25-60°c, weight- 50-80 kg

Accessories required:

- a. Stainless steel basket

b. Water level sensor

43. HOT PLATE with MAGNETIC STIRRER (2)

- Digital setting and control of both temperature and speed.
- Supplied complete with temperature probe for accurate control of liquid temperature
- Biocote for Antimicrobial Protection .
- Advance safety for features :
 - Flashing “Hot” warning light .
 - Independent safety circuit to protect against overheating .

- Max. stirring capacity,litres* : 10
- Stirrer speed : 100-1200
- Max. plate temp., with probe 0C : 450 0C
- Max. liquid temp., with probe 0C : 2000C
- Plate dimentions,mm : 18 cm to 26 cm(18*18 cm2 or 26*26 cm2)
- Heated area,mm : 18cm to 26 cm(18*18 cm2 or 26*26 cm2)
- Heated power : 500 W
- Plate Material : Glass ceramic
- Display resolution : 10C
- Control accuracy with probe : +- 0.50 C
- Net weight ,kg : 3.4
- Dimensions,mm :190*300*110
- Electrical supply : 230 V,50/60Hz,750W
- IP Rating : 32

- Temterature Probe,Stainless Steel
- Retott Rod,600*12mm
- Protective Cover

44. Computer with 0.5 KVA UPS (30)

- **Processor:** Intel® Core™ i5-4130T 35W
- **Memory-** 4GB DDR3; extendable 16 GB (upto 1600 MHz) Max two sockets (1 Free slot)
- **Storage:** 500 GB 7200 rpm HDD Standard SATA interface.
- **OS-** Microsoft Windows/ DOS
- **Screen-** 19.5- 21.5” LED
- **Ethernet-** 10/100/1000 GB Ethernet
- **Key Board & Mouse-** Preferred full size key board & optical mouse of same OEM
- **Graphics-** Integrated Intel HD
- **I/O Front ports-** Two USB 2.0, one microphone (stereo, 3.5mm), one headphone/ microphone comb jack (stereo, 3.5mm)

- **Rear Ports:** Two USB 2.0, Two USB 3.0, Ethernet (RJ-45), VGA DB-15, Display Port connector, one port serial, Parallel (optional)
- **Dimensions-** 400 mm x 160 mm x 397 mm (W x D x H)
- **Weight-** 6-7.5 Kg
- **Power supply-** 180 Watt
- **Security-** USB Individual disabler or enable, Kensington Slot, Padlock Loop,
- **Warranty-** 3 years onsite.
- Built-in Wi-Fi 802.11^b/g/n

45. Laser Printer (20)

- Print speed black: Normal: Up to 25 ppm
- Print Quality black (best): up to 1200x1200 dpi
- Print technology: Laser
- First Print out time (FPOT): 6-8.8 sec.
- Wireless capability: Yes, built-in WiFi 802.11 b/g/n
- Compatibility operating systems: All windows/DOS/Linux/Mac
- Paper handling input, standard: 250 sheet input tray
- Monthly duty cycle: 8,000 pages- 15000 pages
- Minimum dimensions (WxDxH): 379-384 x 280-293 x 243-250 mm
- Media sizes supported: All
- Energy efficiency: ENERGY STAR qualified, EPEAT
- Weight: 5-8 kg
- Warranty: 3 Years next business day exchange support

46. Colour Printer (10)

- Print quality black (best): 1000 x 1200 dpi or above
- Print technology: colour
- First print out tile (EPOT): 17-22 secs.
- Wireless capability: Yes, built-in WiFi 802.11 b/g/n
- Compatibility operating systems: All Windows/DOS/Linux/Mac
- Monthly duty cycle: upto 15000 pages
- Minimum dimensions (W x D x H): 468 x 305 x 152 mm
- Media sizes supported: All
- Energy efficiency: ENERGY STAR qualified, EPEAT
- Weight: 5-7 kg
- Warranty: 3 Years

47. Scanner (10)

- **Scan size (flatbed):** maximum 216 x 311 mm
- **Scan resolution:** ≥600 dpi
- **Scanning speed:** 7.5-8.5 secs. Per page
- **Colour scanning:** Yes
- **Media sizes supported:** All
- **Weight:** 4-6 kg
- **Warranty:** 3 Years

List of Equipments/Instruments for
Samrat Ashoka Tropical Disease Research Centre

Sl. No.	Name of Equipments	Quantity	EMD 3% (in Rs.)
1.	Coagulometer	1	7,500.00
2.	Blood Culture system	1	30,000.00
3.	Shaker for Automatic Blood Cell counter	1	1,500.00
4.	QBC Centrifugal Hematology System with Malaria Test Component	1	25,500.00
5.	Bilirubinometer	1	4,500.00
6.	Semi-Autoanalyser	1	15,000.00
7.	Automatic slide processing and cell staining system	2	72,000.00
8.	Cell Counter (fully automated) [5 parts]	1	66,000.00
9.	Cryostat Micro Tome	2	21,000.00
10.	Paraffin Embedding System	2	27,000.00
11.	Urine Chemistry Analyzer	1	2,250.00
12.	High Throughput PCR Machine	2	42,000.00
13.	Cold/ Refrigerated High Speed Centrifuge	5	60,000.00
14.	Cooling micro centrifuge	4	24,000.00
15.	Table Top Microcentrifuge machine	5	22,500.00
16.	Hot Air Oven	3	9,000.00
17.	Dry Bath	2	6,000.00
18.	Deep freezer (-20 ⁰ C)	10	1,20,000.00
19.	Deep freezer Horizontal (-70 ⁰ C)	3	45,000.00
20.	Refrigerator (4 ⁰ C)	10	4,500.00
21.	Digital Electronic Balance	6	27,000.00
22.	Single Pan Digital electronic Balance	5	22,500.00
23.	Gel documentation System	2	48,000.00
24.	Binocular Research Light Microscope	5	37,500.00
25.	Multichannel Pipette	3	450.00

26.	Adjustable Pipette and Multichannel	20	21,000.00
27.	Eppendorf Micropipette	3	4,500.00
28.	Pipette-Stepper (Vol.10-5000 micro)	1	1,500.00
29.	Cell harvester (Semi-Automated)	2	4,500.00
30.	B-Scintillation Counter	2	9,000.00
31.	Spectrophotometer	2	24,000.00
32.	Incubated Shaker	8	60,000.00
33.	Bacteriological Incubator	6	27,000.00
34.	Biological safety Cabinet	3	27,000.00
35.	Millipore Water Filtration System	5	52,500.00
36.	2D-gel electrophoresis System	1	21,000.00
37.	Vertical Slab Gel Electrophoresis Unit	3	18,000.00
38.	Submarine Gel Electrophoresis Unit Horizontal with power Pack	3	27,000.00
39.	Vacuum/heated slab gel dryer system (45'x34')	1	12,000.00
40.	Processor plus box for gel staining	1	15,000.00
41.	Tissue Homoginizer	2	36,000.00
42.	Autoclave Fully Automatic range (100-300 ⁰ C)	9	94,500.00
43.	Hot Plates and stirrer plate	2	6,000.00
44.	Computer with 0.5 KVA UPS	30	36,000.00
45.	Printer (Laser)	20	21,000.00
46.	Printer Colour	10	18,000.00
47.	Scanner	10	45,000.00

RAJENDRA MEMORIAL RESEARCH INSTITUTE OF MEDICAL SCIENCES
(INDIAN COUNCIL OF MEDICAL RESEARCH)
AGAM KUAN, PATNA – 800 007.

TERMS & CONDITIONS

1. EMD in the form of Demand Draft, in favour of Director, RMRIMS, Patna payable at SBI, Agamkuan, Patna (code-07878) from any scheduled bank, EMD in any other form will not be acceptable. **The EMD must be enclosed with Technical Bid. EMD cost only be seen in the list of Equipment/Instruments.**
2. Tender evaluation will be done in two stages. i.e. (i) Technical bid (ii) Price bid. Each bid to be submitted in separate sealed envelopes super scribed as Technical bid & Price bid.
3. The Technical bids will be opened on 30/09/2015 at 11:00 AM in the Institute premises. Tenderers/Bidders/or their representatives may present on the day of Tender opening date.
4. Financial bid of technically qualified parties will be opened in presence of parties after evaluation of technical bid so it will be informed to successful technical bidders on telephonically or through E-mail.
5. Technical bid should contain :-
 - (a) Name of items with specification, makes/ brands of the items and model No.
 - (b) Literature & Catalogues in support of the item quoted must be enclosed. **(Original Brochure)**
 - (c) Performance certificate of equipment will be preferred.
 - (d) Current authorisation letter i.e. a valid letter of authorisation from the principal manufacturer.
 - (e) Attested photocopy of valid license for stockist and distributorship as applicable should be provided.
 - (f) The EMD in form of Bank Draft must be enclosed with Technical Bid.**
6. Price bid should contain:-
 - (a) Should be submitted in a separate sealed envelope super scribing the word “Price bid” mentioning tender enquiry number and date.
 - (b) The rates quoted should be inclusive of Excise Duty and exclusive of VAT/ Sales Tax and Other incidental charges. The rates of VAT/ sales tax (State & Central) chargeable may however, be given separately. No VAT/ Sales tax or other charges will be payable if not mentioned in the tender or not applicable under the relevant laws. For imported items the quoted rate should be on **FOB basis**.
 - (c) Bidder will quote firm rates. No condition like discount in price, free goods/ incentives will be accepted towards finalization of the tenders. Rates should be according to a unit.
 - (d) While quoting rates, enquiry no. of the tender must be indicated and rates should be quoted.

7. The tender documents should be typed. Any cutting/ overwriting must be signed by the tenderer otherwise the rates in r/o that particular item may not be considered.
8. Each and every page of the tender must be numbered and signed by the tenderer along with seal of the firm.
9. Security Deposit:- If bidder is awarded purchase order letter, The bidder should submit Bank Guarantee from a nationalized bank of 10% of the cost of the Equipments/Instruments indemnifying the RMRIMS against all losses incurred by the RMRIMS during the guarantee period i.e. 24 months from the date of installation.
10. The bidder should clearly indicate the guarantee/ warranty status of each item i.e. main equipment, standard accessories, optional etc. (Consumables/Non-consumable items etc.). Current rate list of all replacements must be submitted in the price bid.
11. **Gurantee/ Warranty: The bidder will give a comprehensive warranty of trouble free functioning of 36 months including spares. After 36 months the firm will provide maintenance services free of cost for another 24 months and institute will pay only for spares and accessories. After 5 years, the firm has to provide AMC for a minimum period of five years with an undertaking even if the manufacturer/company is sold/transferred/merged with another company and the service will not be interrupted. This undertaking has to be submitted after satisfactory installation alongwith the bills. Firms violating the warranty/guarantee clause are liable for proceeding of black-listing.**
12. THE RATES QUOTED WILL BE TAKEN AS FIRM AND FINAL.
13. The tenderer are bound to supply the store during the validity of tender at the approved rates.
14. The firms may be asked to deliver the goods in instalments/ fixed interval against the order of the full year. In case firm fails to deliver the particular instalments at its scheduled time, this office reserves the right to procure the item in the open market and the excess expenditure incurred will have be borne by the company.

15. EXCLUSIVE RIGHT OF DIRECTOR:-

Director, RMRIMS, Patna has the full and exclusive right to accept or reject any or all the tenders without assigning any reasons, whatsoever. No enquire, verbal or written shall be entertained in respect of acceptance/ rejection of the tender.

Administrative Officer