

ANNEXURE A

No. Project/MDRU – RIMS- 15

Imphal, the 9th June 2015

Item no. 1 Five part Auto Analyzer

Principals:

- Electrical impedance method with advanced SRV technologies for accurate & precise total count
- Diode based LASER Technology for 5 part differential
- Photometry – LED based technology for haemoglobin

Parameters:

24 parameters

WBC, RBC, HGB, HCT, MCV, MCH, MCHC, PLT, LYM#, MON#, NEU#, EOS#,
BAS#, LYM%, MON%, NEU%, EOS%, BAS%, RDW-SD, RDW-CV, PDW-SD, pDW-CV,
MPV, PCT

Plus

2 scatter – grams – WBC 5 part differential & WBC/BASO, 2 Histograms – RBC & PLT

Throughput:

60 tests / hour

Sample Volume:

110µl of whole blood in open & closed mode

Chambers

Dual chamber advanced system for higher accuracy & precision

Reagent system

3 Reagent System – Environment – friendly reagents

- Erbadil – Diff
- Erbalyse- 5P
- Erbaclean – 5P

Auto Clean Modes

- Unique ZAP* technologies with each analysis cycle
- Chemical cleaning of the aperture
- Back- flush using high – pressure

Data capacity:

1, 00, 000 results with all scatter- grams & histograms



Safety :

- Sampling using advanced sample holder.
- Optional auto sampler (upto 100 samples in 10 racks)

Peripheral ports (USB interface (4) & PS/2):

- Support for Host Computer
- Support for USB or PS/2 Keyboard (Optional)
- Support for External printers (Inkjet, Laserjet)

Data Back up:

USb Storage Device

User Interface & Display

- Full colour LCD/LED touch screen with high contrast ratio.
- Status LED

Dimension (WxDxH)

410 mm x 465 mm x 515 mm

Item No. 2

FLUORESCENCE MICROSCOPE

Optical system	:	Infinity corrected system
Focus	:	Vertical stage movement 25mm per coarse stroke Vertical stage movement 1micron per fine stroke Stage rotation of 270 degrees
Illuminator	:	Built-in-Koehler illumination for transmitted light 12V100W halogen bulb (pre-centered) Light ntensity justment entrally located so both hand Can be used to increase and decrease light Energy saving switch to off the Light when user moves away from the microscope Light preset switch for photography Built-in filters (LBD-IF, ND6, ND25)
Revolving nosepiece	:	Interchangeable Reversed Sextuple Nosepiece with DIC Slot for future up gradation to DIC technique.
Objectives	:	Semi Apo chromate 40X(N.A 0.75 & WD 0.51)
Observation tube	:	Super Wide field Trinocular head with Field no 25.5mm or better .C Mount adapters for attaching cameras must be provided.

Eyepiece : Super Wide field Eyepiece with Field No 25.5mm or Better and both should have dioptre adjustment facility.
Stage : Ceramic-coated coaxial stage with right hand low drive Control with stage size 150mmX185mm or better. Movement range must be 50mm in Y direction and 74mm in X direction or better
Condenser : Universal 8 position condenser with slots for attaching all optical elements for Phase, Dark Field and DIC attachments.

Reflected Fluorescence Attachment :

- Fluorescence illumination of 130Watts mercury metal halide with 8 or more position fluorescence turret.
- High quality Narrow band Filter for DAPI, FITC, TRITC, TEX RED

Camera : 5 megapixel CCD cooled 10bit camera, with maximum resolution 2560X1920, with peltier thermoelectric cooling 10 deg below ambient.

Imaging System : Intuitive user interface that contains all of the basic features needed to control the camera and capture images. Required features are: real time video preview, measurement and annotations, single capture and time lapse, automatic/manual white balance and exposure time control, drag and drop measurement data to excel and thumbnail worksheet. With fluorescence merging, time lapse and other advanced features.

Latest Branded : Pentium i5 Processor with 1TB Hard disk, 8 GB Ram and 24" TFT monitor with USB mouse and Key Board and Offline 1KVA Ups.

Item No. 3 HPLC System with Accessories

Sl. No	Brief Specification	Qty
	HPLC System with accessories Consist of the following:	1 set
1.	HPLC Pump	1
2.	Sample Injector (Auto Sampler)	1
3.	Detector	1
4.	Software	1
5.	Column	1
6.	Column Compartment	
7.	Water Purification System (HPLC grade)	
8.	Micro Syringe - 10µl / 25µl	

Technical Specification of HPLC with Accessories

<p>HPLC Pump</p>	<p>HPLC Pump Combines the most important aspects of HPLC performance – accuracy, reliability , pulse – free eluent delivery and proven functionality. An easy-to-read display and keypad user interface enable error-free programming. Automatic purge, flow calibration and on board diagnostics enhance confidence in results</p> <ul style="list-style-type: none"> ➤ Precise stepper motor control (48 steps/μl resolution) of dual reciprocating pistons to ensure pulse free solvent delivery ➤ Programmable flow rate range: 0.001 – 10,... ml/min in 0.001 ml/min increments ➤ Maximum operating pressure: 6000 psi ➤ Automatic seal wash and auto – priming ➤ Flow precision: 0.1% RSD ➤ Compressibility compensation: Programmable ➤ Flow Calibration: Programmable ➤ The flush front panel design and tactile keypad for error- free programming of pump parameter including flow rate, operating pressure limits, compressibility compensation, purge mode, calibration and diagnostics. ➤ Operating pressure limits: Programmable high and low pressure limits, user selectable in psi, bar, kPa ➤ Pressure Ripple <2.0% ➤ Plunger guiding system: Floating, Self aligning mount ➤ Primary wetted surface materials: 316 ➤ Stainless Steel, Sapphire, reinforced fluorocarbon polymer
<p>Rheodyne 77251 and Stand Kit</p>	<p>Rheodyne 77251 and stand Kit</p> <ul style="list-style-type: none"> ➤ Range 1 μl to 5 ml for analytical to preparative use ➤ Premounted on standalone panel ➤ Supplied with 25 μl syringe ➤ MBB flow path designed assures continuous solvent flow during the injection cycle ➤ Zero hold-up needle port ➤ Built inn inkjet signal switch ➤ Accepts standards Waters fittings ➤ Pressure limit set of 5000 psi, adjustable upto 7000 psi maximum ➤ 5 μl, 20 μl, 50 μl, 200 μl Loops Comes with Rheodyne Injector
<p>UV/ Visible Detector</p>	<p>UV/ Visible Detector</p> <p>Designed to provide the highest performance in UV/ Visible Detection,</p> <ul style="list-style-type: none"> ➤ Wave Length Range: 190 to 700 nm ➤ Bandwidth: 5 nm ➤ Wavelength Accuracy: 1 nm (via patented Erbium filter) ➤ Wavelength repeatability: 0.1 nm ➤ Linearity: <5% at 2.5 AU propylparaben, 257 nm ➤ Baseline noise, single wavelength:<5 x 10⁻⁶AU, dry cell 230 nm, 10 Hz, 1.0s ➤ Baseline noise dual wavelength: <12 x 10⁻⁶AU, dry cell 230, 280 nm, 1 Hz, 2.0S ➤ Measurement range : 0.0001 to 4.0000 AU ➤ Data acquisition: Up to 80 Hz ➤ Light Source: Deuterium arc lamp, warranty: 2000 hours or 1 year warranty (whichever comes first) ➤ Flow Cell design: Patented Taper Slit ➤ Path length: 10mm (analytical cell)

	<ul style="list-style-type: none"> ➤ Cell volume: 10µL (analytical cell) ➤ Pressure limit: 1000psi (analytical cell) ➤ Wetted materials: 316 stainless steel, fused silica, FEP, PEEK ➤ Power requirements: 100 to 240VAC ➤ Line frequency: 50 to 60 Hz ➤ Power consumption: 185VA (normal) ➤ Outputs: Four event inputs ➤ Operating temperature: 4-40°C (30-147°F) ➤ Operating humidity: <95% non-condensing
Advance Software	<p>Advance Software</p> <p>Breeze 2 Software offers user-friendly technology allowing you to acquire, process and report LC analyses, converting high-quality and accurate results into the answers you require. It simplifies the complete management of your chromatographic process and data, providing reliable information so you can make informed and accurate decisions efficiently.</p> <ul style="list-style-type: none"> ➤ Measurement of retention times and component identification ➤ Automatic peak detection, peak area measurement and baseline correction facilities ➤ Software has archive restore facility with the capability to rebuild all the projects and their relations of the project as they were up to the last archival. ➤ Software has able to analysis GPC data
Coloumn	<p>SunFire C18 5 µm 4.6 x 150 mm coloumn</p> <p>SunFire C18 coloumn, 100 A, 5 µm, 4.6 x 150mm, 1/pkg</p>



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