

Amendment No.1

Date: 18.01.2014.

Subject: Amendment No.1 to the Tender Enquiry Document**Ref:Tender Enquiry No.: HLL/PCD/PMSSY/AIIMS-II/09/13-14 dated 19/12/2013**

The pre-bid meeting for the referred tender enquiry was held on 27/12/2013. Based on pre-bid discussions following amendments are being incorporated in the referred tender enquiry document.

Section I
Notice Inviting Tenders(NIT)**(1) For:-**

| S.No. | Name of Equipment | Department | Quantity per AIIMS | Total Quantity for 6 AIIMS | EMD (Rs) |
|-------|--------------------------------------|--------------|--------------------|----------------------------|----------|
| 8 | Tissue Homogenizer | Pharmacology | 1 | 6 | 3,000 |
| 24 | Student Electric Kymograph with drum | Pharmacology | 4 | 24 | 9,600 |
| 25 | Isolated Organ bath | Pharmacology | 4 | 24 | 9,600 |

Read as:

| S.No. | Name of Equipment | Department | Quantity per AIIMS | Total Quantity for 6 AIIMS | EMD |
|-------|---------------------|--------------|--------------------|----------------------------|------|
| 8 | Deleted | | | | |
| 24 | Deleted | | | | |
| 25 | Isolated Organ bath | Pharmacology | 2 | 12 | 4800 |

Section VI
List of Requirements**(1) For:-**

| S.No. | Name of Equipment | Department | Quantity per AIIMS | Total Quantity for 6 AIIMS | Warranty required | CMC required |
|-------|--------------------------------------|--------------|--------------------|----------------------------|-------------------|--------------|
| 8 | Tissue Homogenizer | Pharmacology | 1 | 6 | 5 years | yes |
| 24 | Student Electric Kymograph with drum | Pharmacology | 4 | 24 | 5 years | yes |
| 25 | Isolated Organ bath | Pharmacology | 4 | 24 | 5 years | yes |

Read as:

| S.No. | Name of Equipment | Department | Quantity per AIIMS | Total Quantity for 6 AIIMS | Warranty required | CMC required |
|-------|---------------------|--------------|--------------------|----------------------------|-------------------|--------------|
| 8 | Deleted | | | | | |
| 24 | Deleted | | | | | |
| 25 | Isolated Organ bath | Pharmacology | 2 | 12 | 5 years | yes |

Section – VII
Technical Specifications

Schedule no. 1
Tail Flick Analgesiometer

1. Existing Specification:

Para: 1.1 This Tail Flick Unit is required to perform rapid precise screening of analgesic drugs on the **rat tail**.

Read as:

Para: 1.1 This Tail Flick Unit is required to perform rapid precise screening of analgesic drugs on the **rat and mice tail**.

2. Existing Specification:

Para: 3.2 **Holder** should be available to be used with the **mouse**.

Read as:

Para: 3.2 **Restrainers** should be available to be used with **rat and mice**.

Schedule no. 2
Polygraph

1. Please read the existing item name as “Polygraph (Human)”

2. Existing Specification:

Para: 1.2 Ethernet Data Acquisition and analysis Software

Read as:

Para: 1.2 **Ethernet/High Speed USB** Data Acquisition and analysis Software.

3. Existing Specification:

Para: 1.4 Transducers and softwares for recording and analyzing plethysmography, GSR, Skin temperature, Continuous real-time beat-to-beat blood pressure, Non Invasive Cardiac Out Put, respiration, phonocardiogram and carotid pulse.

Read as:

Para: 1.4. Transducers and softwares for recording and analyzing plethysmography, GSR, Skin temperature, Continuous real-time beat-to-beat blood pressure, Non Invasive Cardiac Out Put, respiration, phonocardiogram and **pulse tonometer for carotid pulse, baroreflex sensitivity and total peripheral resistance recording**.

4. Existing Specification:

Para: 1.8 **Bio Harness** (transmitter / recorder) device with transmit range up to 100m, memory capacity 480 hours, 250 Hz sampling rate, radio band frequency

Read as:

Para: 1.8. **Wireless** (transmitter / recorder) device with transmit range up to 100m, memory capacity 480 hours, 250 Hz sampling rate, radio band frequency

5. Added Para:

Multi channel universal bio-amplifier for ECG, EMG, EEG, EOG (at least 8 channels) along with cardio axis analysis.

Schedule no. 3 **Electro Convulsimeter**

1. Read existing item name as “ Digital Electro Convulsimeter”

2. Existing Specification:

Para: 2.1 Should provide 50Hz Stimulus Current variable from **0.25mA to 360 mA** through three controls for producing minimal and Supra-maximal seizure in small animals

Read as:

Para: 2.1 Should provide 50Hz Stimulus Current variable from **0.25mA to 500 mA** through **touch panel** controls for producing minimal and Supra-maximal seizure in small animals

3. Existing Specification:

Para: 2.4 Should be supplied with corneal electrode pair (different cup size) and **eye clip** pair

Read as:

Para: 2.4 Should be supplied with corneal electrode pair (different cup size) and **ear clip** pair

4. Added Para:

Para: 2.5 Experiment data exported to PC or dedicated data acquisition software package.

Schedule no. 5 **Rota rod**

Existing Specification:

Para: 2.1 Microprocessor / microcontroller treadmill is required for **rats/mice**

Read as:

Para: 2.1 Microprocessor / microcontroller treadmill is required for **rat and mice**

Schedule no. 6
Photoactometer

1. Please read the item name as “Digital Photoactometer”

2. Existing Specification:

Para: 1.1 Solid State instrument for monitoring spontaneous & induced Ambulatory activity of laboratory animals.

Read as:

Para: 1.1 Solid State instrument for monitoring spontaneous & induced Ambulatory (**horizontal and vertical**) activity of laboratory animals.

3. Existing Specification:

Para: 1.2 Should produce electric shock of up to 100 volts for activating rats.

Para: 1.3 The stimulus is variable from 0 to 100v & indicating on meter.

Read as:

Deleted (both lines)

4. Added Para:

Para 1.4 Software must indicate fast and slow movements, fast and slow stereotypy and reaming.

Schedule no. 7
Elevated plus maze for rats/mice

Read item name as: “Video assisted Elevated plus maze for rats and mice”

Schedule no. 8
Tissue homogenizer

This Item is deleted from the tender.

Schedule no. 11
Digital spirometer

1. Existing Specification:

Para: 3.1 The system should be able to measure spirometry and flow volume parameters and sub divisions, Maximum Ventilation Volume(MVV),Lung Volume including TLC,RV& FRC by multi-breath closed circuit Helium Dilution.

Read as:

Para: 3.1. The system should be able to measure spirometry and flow volume parameters and sub divisions, Maximum Ventilation Volume (MVV), Lung Volume including TLC, RV& FRC by multi-breath closed circuit Helium Dilution/ **Nitrogen wash out.**

2. Existing Specification:

Para: 3.9 Helium Analyzer: Range 0-15% Helium Accuracy +/- 0.1 %

Read as:

Para: 3.9. Helium/Methane analyser: Range 0-15% Helium accuracy +/- 0.1 % or **Methane analyzer- Range 0-0.35% CH₄, accuracy +/- 0.1%**

3. Existing Specification:

Para: 4.2 Should be supplied complete with Gas mixture cylinders (at least 2 cubic metres)
a) Helium Cylinder-01

Read as:

Para: 4.2. **Helium/oxygen cylinder -01**

Schedule no. 12
Bicycle Ergometer

1. Existing Specification:

Para: 1. Should have LCD display

Read as:

Para: 1. Should have LCD display **with programmable protocols.**

2. Existing Specification:

Para: 9. Maximum user weight: Approximately **100 kg**

Read as:

Para: 9. Maximum user weight: Approximately **150 kg**

Schedule no. 13
Spectrophotometer UV-VIS, double beam

Read the following technical specification in place of the existing specification:

UV/Vis spectrometer with PC control

Solid Aluminum chassis for thermal and vibration stability

Optics:

Double beam sealed, quartz coated, with monochromator Grating
Concave holographic grating with 1000 lines/mm or better.

Detector: silicone photodiode or PMT photomultiplier

Sources: Pre-aligned deuterium and tungsten-halogen lamps with automatic switch over

Wavelength Range: 200-1100 nm or better

Stray Radiation/Light: <0.007%T at 220nm (Nal) or better

Wavelength Accuracy: Minimum +/- 0.2 nm at D2 peak, 656.1 nm or better.

Band-pass/Band width: Variable bandwidth setting

Scan speed: 2000nm/min

Photometric Accuracy: +/-0.005 A at 1A or better

Photometric Reproducibility (at 1A): 0.001 A (MAXIMUM DEVIATION OF 10 MEASUREMENTS) or better

Photometric Stability (at 1A): 0.00015A/h (at 500nm for 1.0 sec) or better

Baseline Flatness (1nm slit): ±0.001A or better

Photometric Noise Level at 500nm (1nm Slit): 0.0001 A RMS or better

Cuvette chambers to hold 4 cuvettes, 1 for blank, 3 samples for samples with matching cuvettes.

Standard Accessories: 1. Quartz cuvette of 10mm path length.

Local Accessories: Suitable PC, Printer and Online UPS are to be offered with the system.

Standard, Safety and Training

1. Should be FDA/UL/CE/BIS approved product.
2. Manufacture should have ISO 9001 certificate for quality standards.
4. On site comprehensive training for lab staff and support services till customer satisfaction with the system.
5. Installation testing: Supplier of the instrument must provide free installation , commissioning and testing
6. User/Technical/Maintenance manuals to be supplied in English.
8. Certificate of Calibration and Inspection.
9. List of Equipment available for providing calibration and routine Preventive maintenance support as per manufacturer service/maintenance manual.
10. Compliance report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number of original catalogue/data sheet. Any point, if not substantiated with authenticated catalogue/manual will not be considered.
11. Current user/performance list to be provided and demonstration covering all aspects has to be provided
12. Validation document should supply by vendor etc IQ,QQ, PQ.
13. Surge Protector is to be quoted and supplied with the instruments.

Schedule no. 14

Deep Freezer (-20 deg C)

1. Existing Specification:

Para: 3.1 Capacity: **350L or more**

Read as:

Para: 3.1 Capacity: **325L or more**

Schedule no. 15

Computerized cardiopulmonary exercise testing system with treadmill for humans

1. Existing Specification:

Para: A. 7. System should have oxygen & CO2 analyzer with response time less than **80 m secs**.

Read as:

Para: A. 7. System should have oxygen & CO2 analyzer with response time less than **150 m secs**.

2. Existing Specification:

Para: A.13. The system should have the following:

I. Body plethysmography supplement.

II. PFT Supplement: FRC – Helium and Diffusion single breath

Read as:

Para: A.13. The system should have the following:

PFT supplement : FRC- **Helium/Nitrogen washout/Methane and diffusion single breath**

Schedule no. 18

Critical flicker fusion apparatus

1. Existing Specification:

Para: 2.2 Analog Input: 3.5mm mono phone plug with voltage range from 0.1 - 10 V for 1.0 - 100.0Hz flicker rate

Read as:

Para: 2.2 Analog Input: 3.5mm mono phone plug with voltage range from 0.1 - 10 V for 1.0 - 100.0Hz flicker rate **5 – 50 flashes/ second**

Schedule no. 19

FHPLC (Fast High Pressure Liquid Chromatography)

1. Existing Specification:

Para: B. 4. Composition ripple : < 1.0 mAU

Read as:

Deleted

2. Existing Specification:

Para: C. 3. Injection volume range : 1 µl to 1000 µl

Read as:

Para: C. 3. Injection volume range should be within **0.1 to 100 µl**

3. Existing Specification:

Para: C. 3. Linearity: > 0.999

Read as:

Deleted

4. Existing Specification:

Para: C. 7. Sample carryover : < 0.004%

Read as:

Para: C. 7. Sample carryover : < **0.005%**

5. Existing Specification:

Para: F. 4. Linearity range: ≤ 5%, **propylparaben at 257 nm**

Read as:

Para: F. 4. Linearity range: ≤ 5%

6. Existing Specification:

Para: F. 5. Optical resolution: 1.2 nm,

Read as:

Para: F. 5. Optical resolution: 1.2 nm or **better**

7. Existing Specification:

Para: F. 6. Digital resolution: 1.2 nm/ pixel

Read as:

Para: F. 6. Digital resolution: 1.2 nm/ pixel or **better**

8. Existing Specification:

Para: F. 10. Cell volume: 500 nl

Read as:

Para: F. 10. Cell volume: 500 nl - **10 µl.**

9. Existing Specification:

Para: F. 9. Flow cell design: Light-guiding

Read as:

Deleted

10. Existing Specification:

Para: E. Columns: BEH Amide, BEH C18, BEH C8, BEH Phenyl, of 1.7µm

Read as:

Para: E. Columns: Amide, C18, C8, Phenyl of 1.7/1.8 µm

11. Existing Specification:

G. 9. Up gradable for automated method development Software & should be able to control other detectors manufactured by Waters.

Read as:

Para: G. 9. Upgradable for automated method development

12. Added Para:

Fluorescence Detector:

- i. Light Source: Xe lamp with standard wattage;
- ii. Wave length Range : 200-900 nm;
- iii. Wave length Accuracy: ±1 nm;
- iv. Reproducibility: ± 0.2nm;
- v. Excitation Wavelength: 200 nm to 700 nm;
- vi. Emission Wavelength: 280 nm 900 nm;
- vii. Wavelength Scanning: Scanning of Excitation and Emission wavelengths;
- viii. Flow cell volume: standard Analytical cell;
- ix. Pressure: 2Mpa;
- x. Sensitivity: 500:1 (tangent method),700:1 (Baseline method)

Schedule no. 20 **Water Purification System**

1. Existing Specification:

Para: 11. The system should be table top model with **on line TOC** & LCD display facility, flow rate up to 1.5 L/min, Dual purification cartridges with organic absorbents, ion exchange resins and membrane processes to purify the water to 18.2 mega ohms, in order to satisfy ASTM TYPE 1, ISO 3696 and USP Specification, The system should have a pure water recirculation system to maintain consistent peak quality.

Read as:

Para: 11. The system should be table top model with **on line conductivity** & LCD display facility, flow rate up to 1.5 L/min, Dual purification cartridges with organic absorbents, ion exchange resins and membrane processes to purify the water to 18.2 mega ohms, in order to satisfy ASTM TYPE 1, ISO 3696 and USP Specification, The system should have a pure water recirculation system to maintain consistent peak quality.

2. Existing Specification:

Para: 12. SOFTWARE WITH P.C. AND PRINTER

Read as:

Deleted.

3. Existing Specification

Para: 7. Particle using 0.2 µm filter: less than 20 particle/100 ml

Read as:

Para: 7. **Particles as per ASTM is =< 1particle/ml**

4. Added Para:

RO System:

- 1) Resistivity: > 5 megaohms. Cm
- 2) TOC = < 30 PPb
- 3) Product recovery : upto (25-40 %)
- 4) Flow rate = 15 - 20 lph or more
- 5) Conductivity: < 0.2uS/cm

Schedule no. 22 **Electrolyte analyzer**

1. Existing Specification

Para:1. The instrument should be able to measure the following ions: - Lithium, Potassium, Sodium, Calcium, Chloride

Read as:

Para: 1. The instrument should be able to measure the following ions: - Lithium, Potassium, Sodium, Calcium, Chloride **with single aspiration/injection of sample directly from test tube, sample cup & vacuum tubes without changing / inter changing the electrode.**

2. Existing Specification

Para: 6.Should have a **LCD display** and facility to print the output

Read as:

Para: 6.Should have facility to display the result and facility to print.

3. Existing Specification

Para: 8.Should have internal memory to store **at least last 10 readings**

Read as:

Para: 8.Internal memory should be **more than 500 patients results.**

4. Existing Specification

Para: 12. Auto save function for storing data in case of power cut

Read as:

Deleted

5. Added Para: Auto sampler upgradation facility should be available.

Schedule no. 23
ECG Machine 12 Channel

Existing Specification

Para: 15. Tremendous ECG data can be saved in built-in SD card

Read as:

Para: 15.Tremendous ECG data can be saved in built in SD card **or in internal memory.**

Schedule no. 24
Student electric kymograph

This Item is deleted from the tender.

Schedule no. 25
Isolated organ bath

1. Existing Specification

Para: 1.1 The isolated organ bath should provide accurate recording of isometric or isotonic tissue contraction / release

Read as:

Para: 1.1 The isolated organ bath (**Single chamber**) should provide accurate recording of isometric or isotonic tissue contraction / release

2. Existing Specification:

Para: 1.9 The system should be supplied with all essential accessories like one muscle chamber, temperature equilibrating coil, holder, supporting rod, isometric and isotonic transducers.

Read as:

Para: 1.9 The system should be supplied with all essential accessories like one muscle **chamber with stimulator**, temperature equilibrating coil, holder, supporting rod, isometric (tension 0-50g) and isotonic (**Range: 0.1 – 2cm**) transducers.

3. Existing Specification:

Para: 1.10 Should be supplied with a suitable data acquisition system & software

Read as:

**Para: 1.10. Should be supplied with 4 channel data acquisition system
Stimulator- constant voltage range- 0- 10V
Dose response curve should be plotted automatically
compatible computer, printer & printing paper**

Schedule no. 26
Lab. Centrifuge Machine

1. Existing Specification

Para: 3.7 RPM : Maximum 15,000

Read as:

Para: 3.7 RPM: Maximum **15,000 ; RCF 25,800 x g**

2. Existing Specification

Para: 4.1 Centrifuge complete with Swing and basic rotors and four buckets- 01 set.

Read as:

Para: 4.1. Centrifuge complete with swing out **basic rotors and four buckets – 01 set**

Schedule no. 28
Cardiac Monitor

1. Existing Specification:

Para: 1. Minimum 15 inches multi colored **Touch screen** LCD/TFT display.

Read as:

Para: 1. Minimum 15 inches multi colored LCD/TFT display.

2. Existing Specification:

Para: A. 2. Separate CPU/Module rack/New modular technology.

Para: A. 5. Parameter modules freely exchangeable between all the monitors.

Para: A. 10. Central station for bedside monitors with independently controlled. 17" multi-color TFT/LED Monitor,

Para: A. 13. Colour LCD/TFT Slave monitors- 21 inches in ICU - one per central station

Para: A. 15. Modular with 15 inches or more multi-color TFT/LED Display with touch screen.

Para: A.16. Monitoring Parameters - ECG, Respiration, NIBP, SpO2 and temperature.

Para: A. 17. Digital and six waves/traces display.

Para: A.21. Able to fix with bed/ trolley.

Para:B.4. IBP : Include four nos. per monitor of reusable pressure transducer with bracket, holder and 100 nos. Disposable domes per monitor.

Para: C 4. The supplier shall provide environment friendly furniture and wall fittings for the entire system. Cabling has to be provided by the supplier

Para: D.2. Suitable UPS with maintenance free batteries for minimum one-hour back up should be supplied with the system.

Read as:

Deleted.

3. Existing Specification:

Para: B.8 Necessary **mounting solution/ mounting** on any pendant for monitors

Read as:

Para: B.8. Necessary **wall mounting** solution to be provided

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Schedule no. 32
Autoimmunostainer

Existing Specification:

Para: 15. The system should be fully automated and process IHC, ISH, **SISH** and FITC tests independently or simultaneously

Read as:

Para: 15. The system should be fully automated and process IHC, ISH, and FITC tests independently or simultaneously

Schedule no. 34
Technical specification of fast western blot apparatus.

Existing Specification:

Para: 12. Refrigerated water re-circulator-

- a. A thermostatic water re-circulator should provide reliable and reproducible temperature control by circulating constant temperature water to blotting apparatus.
- b. Working temperature of circulating water: from **-10 °C to 90 °C**
- c. Capacity of tank: **minimum 3 litres**
- d. Pump flow rate: **Minimum 12 L per min**
- e. Pump capacity (pressure): **0.32 bar or more**

Read as:

Para: 12. Refrigerated water re-circulator-

- a. A thermostatic water re-circulator should provide reliable and reproducible temperature control by circulating constant temperature water to blotting apparatus.
- b. Working temperature of circulating water: **0 °C to 90 °C**
- c. Capacity of tank: **minimum 2 litres**
- d. Pump flow rate: **Minimum 10 L per min or more**
- e. Pump capacity (pressure): **0.2 bar or more**

All other terms and conditions of the tender enquiry remain unaltered.