Amendment No.1

Date: 14/01/2014

Subject: Amendment No.1 to the Tender Enquiry Document

Ref:Tender Enquiry No.: HLL/PCD/PMSSY/AIIMS-II/10/13-14 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.

<u>Section – VII</u> Technical Specifications

Schedule no. 3 Microbiological Autoclave (Horizontal)

1.Existing specifications-

Para 7. The chamber, jacket, door and pipes should be made of stainless steel AISI 316 quality.

Read as:

Para 7. The chamber, jacket, door and pipes should be made of stainless steel **AISI 316 or higher quality.**

2.Existing specifications-

Para 12. Inbuilt boiler made of AISI 316 with low water protection system.

Read as:

Para 12. Inbuilt boiler made of **AISI 316 or higher quality** with low water protection system and automatic salt removal system.

Schedule no. 4 A Biosafety cabinet CLASS II A

1.Added Para -

- 1. Audio visual indicator to understand HEPA filter loading to be provided.
- 2. Drain pan should be made of stainless steel.

Schedule no. 4 B Biosafety Cabinet CLASS II TYPE B2

1.Existing specifications-

Para 4. Minimum internal dimensions (W x D x H) should be 900X500X600mm

Para 4. Minimum internal dimensions (W x D x H) should be 900-1250X 500-650X 600-700 mm

Schedule no. 5 CO2 Incubator

1.Existing specifications-

Communication protocols HL-7 for Networked environments to HIS

Read as:

Deleted

2. Existing specifications-

Interior lighting facility, insulated door fitted with heavy hinges handles locking, mechanical door lock.

Read as:

Insulated door fitted with heavy hinges handles locking mechanical door.

3. Existing specifications-

Temperature range: +5° C above ambient to +80°C

Read as:

Temperature range : Ambient +5 ° C to 50 ° C or above

4. Existing specifications-

Audiovisual Alarm to Indicate when temperature deviates more than 0.5°C from set point, and when program or time has finished, Alarm may be muted.

Read as:

Audio visual alarm to indicate when temperature deviates more than 0.5 °C and automatic shut off once temperature is corrected.

5.Existing specifications-

There should be a Membrane Keypad with LCD/LED to set and display operating parameters, current status, running time and alarm conditions for time and temperature.

Read as:

There should be a Membrane Keypad with LCD/LED to set and should be display of operating parameters such as temperature, clock time current status etc.

6.Existing specifications-

Air heated/Direct Heat with internal capacity 120 L to 200 L

Read as:

Air heated/Direct Heat with internal capacity 160 L to 200 L

7. Existing specifications-

Minimum of 4 adjustable shelves (or as per user requirement) with separate air tight doors should be available.

Minimum 4 adjustable shelves (or as per user requirement) with factory fitted separate air tight doors should be available.

8.Existing specifications-

CO₂ Range- 0-20%; CO₂ Accuracy: 1- 0.5%; CO₂ Inlet pressure 1.5 bars (app) and fast recovery after opening door.

Read as:

CO₂ Range- 0-20%; CO₂ Accuracy: 1- 0.5%; CO₂ Inlet pressure 1.5 bars (app) and fast recovery after opening door. **There should be a provision for CO₂ sensor.**

9.Added Para -

Fan assisted air convection should be provided

Schedule no. 6 Micro pipette adjustable 1 – 2.5 μl, 0.5 – 10 μl, 2-20ul, 10-100ul, 20 – 200 μl, 100- 1000ul capacity(Manual)

1.Added Para -

Should be US FDA/ European CE approved.

Schedule no. 7 Deep Freezer (-40 C)

1.Existing specifications-

Ultra Low Temperature Freezer – with operating temperature of (-40) Deg C having internal volume approximately 400 Litres, External casing should be powder coated galvanized sheet metal, non corrosive.

Read as:

Ultra Low Temperature Freezer – with operating temperature of (-40) Deg C having internal volume **365-450** Litres, External casing should be powder coated galvanized sheet metal, non corrosive.

2.Existing specifications-

Heated door sealing, lockable doors.

Read as:

Outer door designed to enable easy door opening, lockable doors.

4.Existing specifications-

Para C. Refrigeration:

ii. Cooling system with hermetic compressor & cascade compressor

ii. Cooling system: Hermetic design with single/cascade compressor.

5.Existing specifications-

Actual temperature display with at least 20mm LED display for better visibility.

Read as:

Actual temperature display should be of better visibility.

6.Existing specifications-

Key Board lockable Battery Powered.

Read as:

Key board should have battery power back up

7.Added Para-

External door should be lockable.

Schedule no. 8 Deep Freezer(-80° C)

1.Existing specifications-

Para 6. Freezers should have heated air vent and front panel air filter.

Read as:

Para 6. The door and front panel air filter should be there.

2.Existing specifications-

Para. 9: Freezer must have battery back - up and set point security through password protection for preventing unauthorized tampering.

Read as:

Para. 9: Freezer must have **battery back up for display** - up and set point security through password protection for preventing unauthorized tampering.

3. Existing specifications-

Para 13. Freezer must use CFC-FREE, HCFC-FREE **non flammable** refrigerants, and refrigeration system must be energy efficient and hermetically sealed cascade refrigeration system.

Read as:

Para 13. Freezer must use CFC-FREE, HCFC-FREE refrigerants, and refrigeration system must be energy efficient and hermetically sealed cascade refrigeration system.

4. Existing specifications-

OPERATING TEMPERTURE: Programmable -50°C up to -86°C with 1°C increment.

Read as:

OPERATING TEMPERTURE: Programmable -50°C up to -86°C with 1°C increment at 32 degree ambient.

Schedule no. 9 Electronic pipettes digitally adjustable

1.Existing specifications-

Volume- 10 -1000ul

Read as:

Volume range: **0.5-10 ul, 10-50 ul, 10-100ul, 100-1000ul.**

2.Added Para-

Should be US FDA/European CE approved.

Schedule no. 10 Pharmaceutical Refrigerator

1.Existing specifications-

Capacity (as per user requirement) 350-400 Litres.

Read as:

Capacity: 325-400 litres

Schedule no. 11 Vertical Laminar Flow Bench With Hepa Filter

1.Existing specifications-

Para 4. Should have LCD display to show measured parameters like Stage velocity, total using time, UV/FL lamp on/off

Read as:

Para 4. Should have **LCD/LED** display to show measured parameters like Stage velocity, total using time, UV/FL lamp on/off, Equipment should be on castor wheel for easy movability.

Schedule no. 14 Refrigerated Centrifuge

1.Existing specifications-

Para 20. Swing out rotor 4 place with MTP.

Read as:

Para 20. Swing out rotor **4 plates** with MTP.

2.Existing specifications-

Para2. Max speed: Atleast 14,000 rpm

Read as:

Para2. Max speed: Atleast 12,000 rpm or above

3. Existing specifications-

Para 9. Atleast 9 freely programmable Accel/Deaccl. curves with graphic display

Read as:

Deleted

4.Existing specifications-

Para 13. Magnetic rotor identification & imbalance sensor

Read as:

Electronic automatic rotor identification & imbalance sensor.

Schedule no. 17 Multi Channel Pipettes

1.Aded Para -

US FDA/ European CE approved.

Schedule no. 18 Laboratory Centrifuge

1.Existing specifications-

Para 1. Speed up to 6,000 RPM

Read as:

Para1. Speed range: 4000-6000 rpm

2.Existing specifications-

Para 2. Automatic rotor identification 450 angle type

Read as:

Para 2. Automatic rotor identification.

Schedule no. 20 Hot Air Oven

1.Existing specifications-

Para 3.6 Temperature Range- ambient to 250 deg C.

Read as:

Para 3.6 Temperature Range- +50 to 250 deg C.

Schedule no.21 Incubator

1.Existing specifications-

Para 11. Temperature range: +5° C to 80°C

Read as:

Para 11. Temperature range Ambient +5° C to 80°C

Schedule no. 26 Ultra pure (Nuclease free) Water Purifications System

1.Existing specifications-

Para C. 7. Reservoir of 50 L capacity.

Read as:

Para C. 7 Reservoir of 40-50 L capacity.

2.Existing specifications-

Para E. Unit should be FDA/CE approved

Read as:

Para E. Unit should be US FDA/European CE approved.

Schedule no. 27 FULLY AUTOMATED GEL DOCUMENTATION SYSTEM

1.Existing specifications-

Para 6. Multi-Channel image display facility

Read as:

RGB (Red/Blue/Green) lighting required along with appropriate filters for multiplexing. Filter wave length: Blue-465nm (range 445-485), Green 500 nm (range 500-550nm), red 635 nm (range 600-640nm), IR 740 nm.

2.Existing specifications-

Para 9. ChemiImaging system, Built in Motorized better wheel with touch pad control and virtual controls through software

Read as:

Para 9. ChemiImaging system: Built in Motorized filter wheel with touch pad control and virtual controls through software or fully automated intelligence system.

3. Existing specifications-

Para 5. Zoom lens: 10 mm -100mm, High efficiency Diopter lens

Read as:

Para 5. Zoom lens 12-75 mm, High efficiency Diopter lens

4. Existing specifications-

Para11. Dual Epi-white, Dual Epi-UV light & Chroma Blue light illumination

Read as:

Para11. Dual Epi-white, Dual Epi-UV light & Blue light illumination

5.Existing specifications-

Para 9. ChemiImaging system, Built in Motorized better wheel with touch pad control and virtual controls through software

Read as:

Para 9. ChemiImaging system, Built in Motorized **filter wheel** with touch pad control and virtual controls through software

Schedule no. 28 U.V/Visual Spectrophotometer

1. Existing Specification:

Para: 4. Detector Type **CCD**

Read as:

Para: 4. Detector Type CCD/PDA

2. Existing Specification:

Para: 5. Wavelength Range 230-900 nm

Read as:

Para: 5. Wavelength Range 230-1000 nm

Schedule no. 29 Gradient PCR Machine

Existing Specification:

Para: 6. Sample temperature ramp rate (cooling/heating) better than $1 - 3^{\circ}$ C

Read as:

Para: 6. Sample temperature ramp rate (cooling/heating) better than $1 - 4^{\circ}$ C

Schedule no. 30 Refrigerated Microcentrifuge

1. Existing Specification:

Para: 2. Max speed: 13,000- 14,000 rpm. Max RCF: approx 20,000- 22,000 x g

Read as:

Para: 2. Max speed: 13,000- 15,000 rpm. Max RCF: approx 20,000- 22,000 x g

2. Existing Specification:

Para: 4. Time selection: 1 min to 59 min or hold

Read as:

Para: 4. Time selection: 1 min to 99 min or continous.

3. Existing Specification:

Para: 11. Angle rotor **Polypropylene** 24 x 1.5 ml. or Dual row rotor with same capacity/Volume

Read as:

Para: 11. Angle rotor **Polypropylene/metallic** 24 x 1.5 ml. or Dual row rotor with same capacity/Volume

4. Existing Specification:

Para: 12. Polysulfone lid or equivalent

Read as:

Para: 12. **Aerosol tight Polysulfone** lid or equivalent

Schedule no. 35 Liquid Nitrogen Drum

Existing Specification:

Para: 6. Should be CE or BIS approved product.

Read as:

Para: 6. Tanks should be as per ASME specification complying safety norms.

Schedule no. 37 Binocular Microscope For Faculty

1. Existing Specification:

Para: 4. Eyepieces with pointer (paired and compensating) 10X (FOV 22)

Read as:

Para: 4. Eyepieces with pointer (paired and compensating) 10X (FOV 20 or more)

2. Added Para:

Microscope should have trinocular tube for attaching the camera.

Schedule no. 38 Binocular Microscope (For students)

Existing Specification:

Para: 1. Student upright Binocular Microscopes (with inbuilt light source & imported achromatic optics)

Read as:

Para: 1. Student upright Binocular Microscopes (with inbuilt light source & good quality plan achromatic optics)

Schedule no. 39 Dark Ground Microscope With Phase Contrast

Existing Specification:

Para: 6. Condenser: Abbe (N.A. 1.1), for **4x–100x**

Read as:

Para: 6. Condenser: Abbe (N.A. 1.1), for 4x, 10x, 40x, 100x with oil

Schedule no. 41 AUTOMATED RAPID TB CULTURE & DRUG SENSITIVITY SYSTEM

Existing Specification:

Para: 20. **Latest Work-station** with relevant software should be provided with computer system having 3rd generation i5 processor, 4 GB RAM, 500 GB hard disk, keyboard, mouse, 21" TFT monitor of reputed make and suitable UPS

Read as:

Para: 20. Latest Work-station/in built work station with relevant software should be provided with computer system having 3rd generation i5 processor, 4 GB RAM, 500 GB hard disk, keyboard, mouse, 21" TFT monitor of reputed make and suitable UPS with atleast ½ hours back up.

Schedule no. 45 Orbital Shaking Incubator

1. Existing Specification:

Para: 6. Shaking assembly **electric pulley mechanism**

Read as:

Para: 6. Shaking assembly electric pulley mechanism/ triple eccentric drive system

2. Existing Specification:

Para: 8. Clamps to be provided for 2L, 1L, 500 ml, 250 ml and 100 ml flasks

Read as:

Para: 8. Clamps to be provided for 2L, 1L, 500 ml, 250 ml and 100 ml flasks – 2 nos of each size

3. Existing Specification:

Para: 19. UV germicidal facility

Read as:

Para: 19. To be provided with UV lamp.

Schedule no. 47 Anaerobic Work Station With Gas Cylinder Complete

Added Para:

Accurate temperature control: $+5 - 45 \deg C$ with automatic humidity control without dry spot.

Schedule no. 48 Real Time PCR

1.Existing specifications-

Para 6. Melt Curve Resolution at least 0.1°C

Read as:

Para 6. Software for melt curve analysis to be quoted along with equipment.

2. Existing specifications-

Para 9. LCD screen **or** attached computer capable of displaying and programming parameters.

Read as:

Para 9. LCD screen **and** attached computer capable of displaying and programming parameters.

Added Para. Suitable online UPS with ½ hr backup and Printer & probe design software to be provided.

Schedule no.52 Fluorescent Microscope

1.Existing specifications-

Para 3: Mech. Tube Length of 200 mm with parafocal distance of 60 mm

Read as:

Para 3: Mechanical Tube Length should be from 180/200 mm and with parafocal distance of **45/60** mm.

2. Existing specifications-

Para 4: Siedentopf design super wide filed Trinocular eyepiece tube which should be inclined at 25 degree angle with field of vision (F.O.V.) 25 mm or better.

Read as:

Para 4: Siedentopf design super wide filed Trinocular eyepiece tube which should be inclined at 25 degree angle with field of vision (F.O.V.) should be 22mm/25 mm or better.

3.Existing specifications-

Para 5: Should be anti-fungus type 10X (2pcs) eyepiece lens with both sides Diopter adjustment (F.O.V. 25mm) should be Anti Fungus type High numerical aperture (N A) Apochromatic objective (Japanese/ German type) Objective N.A W.D. 4X 0.10mm 30mm 10X 0.30mm 16.0mm 40X 0.75mm 0.72mm 100x Oil 1.30mm 0.2mm

Read as:

Para 5: Should be anti-fungus type 10X (2pcs) eyepiece lens with both sides Diopter adjustment (F.O.V. 25mm) should be Anti Fungus type High numerical aperture (N A) **plan achromatic objective** (Japanese/ German type) Objective N.A W.D. 4X 0.10mm 30mm 10X 0.30mm 16.0mm 40X 0.75mm 0.72mm 100x Oil 1.30mm 0.2mm.

Schedule no. 53 Refrigerated Shaker

1.Existing specifications-

Para5. Temperature range: 0°C-60°C; with accuracy +0.5°C at 37°C

Read as:

Para5. Temperature range: 5°C-60°C; with accuracy +0.5°C at 37°C

2. Existing specifications-

Para 8 Platform size approx. 450x450mm

Read as:

Para 8 Platform size approx. 450x450mm (2 nos each for 2L, 1L, 500mL, 100mL flasks)

Added Para: The unit should be USFDA or European CE approved.

Schedule no. 54

Inverted Research Microscope for Bright field, Phase Contrast, fluorescence, along with High Resolution Digital Image Analysis System

1.Existing specifications-

Para A: Microscope body with Infinity optical corrected optical system, Extendable optical free space up to 80 mm for attaching other attachment in future, facility **for 2 way** (100:0, 20/80 left port) or more light distribution of light, up/down focusing, side port for attaching digital camera upgradable to one additional port for another camera, binocular tube with built-in to one additional port for another camera, binocular tube with built-in Bertrand lens & dark slide shutter along with dioptre adjustment facility.

Para A: Microscope body with Infinity optical corrected optical system, Extendable optical free space up to 80 mm for attaching other attachment in future, facility **for 3 way** (100:0, 50:50, 0:100 left port) or more light distribution of light, up/down focusing, side port for attaching digital camera upgradable to one additional port for another camera, binocular tube with built-in to one additional port for another camera, binocular tube with built-in Bertrand lens & dark slide shutter along with dioptre adjustment facility **suitable for tissue culture.**

2. Existing specifications-

Para C: 12V 100W Pre-centred Halogen Illumination

Read as:

Para C: Illumination: LED

3. Existing specifications-

Para G: Apochromatic Objectives suitable for Bright field/Phase Contrast/fluorescence/ DIC Observation with facility of cover glass correction.

Read as:

Para G: Plan achromatic Objectives suitable for Bright field/Phase Contrast/fluorescence/ DIC Observation with facility of cover glass correction.

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