

IB 2024- 31 PROCUREMENT OF VARIOUS LABORATORY EQUIPMENT FOR THE COLLEGE OF MEDICINE

End User: College of Medicine

Source of Fund: 2023 GAA Capital Outlay- FLR

Delivery Period: 15 calendar days

Bidding by: line item

Total ABC: 1,445,000.00

List of items

1. 1 unit ANALYTICAL BALANCE – 186,000.00

- Capacity: 0.0001g - 120g.
- Repeatability (Standard Deviation): ≤ 0.0001 g.
- Linearity: ± 0.0002 g.
- Stabilization time: within approx. 3.0 seconds under laboratory conditions
- Resolution: 0.0001 g.
- Operating Temperature and Humidity Limits: 5-40°C 20-85%*2
- Minimum Operating Temperature: $\pm 5^\circ\text{C}$
- Maximum Operating Temperature: $\pm 40^\circ\text{C}$
- Temperature Coefficient for Sensitivity: (10-30°C) $\pm 2\text{ppm}/^\circ\text{C}$
- Pan size: at least $\Phi 91$
- Weighing room size: at least 162mm(L)x 171mm(W)x 225mm(H)
- Main Body Dimension at least 345mm(L)x 215mm(W)x 345mm(H)
- Weight: at least 7 kg
- Voltage: 220V, 50Hz
- Cal. Weight: 1A Internal Calibration
- Preferably with AVR 3000kva
- With enclosure (clear)

2. 1 unit FUME HOOD - 450,000.00

Description: Constructed with 1.2mm galvanized steel. Vertical front window with 4.0mm safety glass.

Specifications:

Dimension: at least 47.44 inches x 33.46 inches x 92.52 inches (W x D x H)

PP sink: at least 10.24 inches x 5.51 inches x 8.66 inches (W x D x H)

Remote Control valve for water:

Valve unit: Ceramic work head, 90° turn Plastic washer avoids abrasion on the surface of the fume hood during installation.

The valve can be removed in front of the fume hood for easy maintenance

- (1) Control valve for gas
- (1) Water outlet
- (1) Gas outlet
- (1) Axial flow blower: Installed on top of the FH

Included Accessories:

1. at least 12.7mm solid homogenous phenolic worktop with edges.
2. PP sink with water faucet, Two sets of gas cock with remote control valves.
3. Two units of electric outlets on both sides, 220~230V, 16A.
4. Fluorescent lamp, explosion proof.
5. LCD control panel: light switch, fan control, alarm system for airflow.
6. Axial flow fan: 1600m³/h, ϕ 250mm, manual adjust damper.
7. Preferably with AVR (3000kva)
8. Water inlet and outlet installation
9. Gas inlet
10. Industry Standard Exhaust ducting with motor

3. 1 unit COLONY COUNTER -200,000.00

- Dimensions: at least 360 x 300 x 180 (mm)
- Lightning: Matrix LED (White Light)
- Digital Display: 3 digits
- Counting Range: 0-999
- Compatible Petri dish: 50-150mm
- Input Voltage (frequency): AC 220V (50Hz)
- Input Power: 40W
- Magnification: 3-9 Times
- Protective class: IP21
- Permissible relative moisture: 80%
- Permissible ambient temperature: 5-50°C
- Net. Weight: at least 5.0Kg
- Preferably with AVR 3000kva
- It will beep while counting, which can avoid wrong counting.
- Unique up-light source makes it convenient to count bacteria that are hard to observe.

4. 1 unit HOT PLATE (LED HOTPLATE) – 55,000.00

- LED display shows temperature
- Max. Temperature range: 300°C.
- Min. Temperature range: 40°C.
- The “HOT” warning will be flashing when the work plate temperature is above 50°C even the hotplate is turned off
- Dimension of work plate: at least 184×184mm (7inch)
- Work plate material: Glass ceramic
- Voltage Frequency: 220V,50Hz
- Heating Power: 1000W
- Heating temperature range: Room temp.~550°C, increment 5°C
- Control accuracy of work plate: \pm 10°C
- Safety temperature: 580°C
- Temperature display: LED
- Temperature display accuracy: \pm 1°C
- External temperature sensor: PT1000 (\pm 0.5°C)
- Heating warning: 50°C
- Protection class: IP2X
- Over all Dimension: at least 215×360×112mm [W x D x H]

- Weight: at least 4.5kg
- Permissible ambient temperature and humidity: 5-40°C, 80%
- Preferably with AVR 3000kva

5. 1 unit HOT AIR OVEN – 108,000.00

- Dimension: at least 605 x 605 x 110 (mm) (WxDxH)
- Capacity: 20 liters
- Temperature range: 50 °C – 160 °C.
- Temperature accuracy: $\pm 0.5^{\circ}\text{C}$ or $\pm 1^{\circ}\text{C}$
- Temperature uniformity: ± 2.0 at 100°C
- No. of Shelves: 5
- Voltage: 220V, 50Hz
- Heater operates temperature: 50- 300°C
- Volume of the chamber ranges: at least 20L
- Preferably with AVR 3000kva
- Inside Material Stainless for oven
- Outside Material Powder Coated steel

6. 1 unit LCD DIGITAL MAGNETIC HOTPLATE STIRRER WITH TIMER – 70,000.00

- Over all Dimension: at least 8.2 inches (W) x 14.2 inches (D) x 4.1 inches (H)
- Heating Surface dimension: at least 7.25 inches x 7. 5 inches
- Brushless DC motor is maintenance free and explosion-proof
- Digital temperature control with Max. temperature at 250°C
- Digital temperature control with Min. temperature at 50°C
- Digital speed control with Max. speed up to 1500rpm
- Digital speed control with Min. speed up to 50rpm
- Max. stirring quantity of H₂O at at least 2L
- Safety circuits provide overheating protection
- The HOT warning will flash when the plate temperature is above 50°C even the hotplate is turned off
- Range timer: 1min to 99h59min. LCD display
- Temperature sensor with accuracy at $\pm 0.2^{\circ}\text{C}$
- Stainless steel work plate with ceramic coating
- Spin bar size: at least 1inch x 5/16 inch
- 2 pcs. Included spin bar

7. 1 unit PORTABLE ELECTRONIC BALANCE – 47,000.00

- Dimension: over all at least 210mm (L) x 192mm (W) x 54mm (H)
- Capacity: 420g
- Readability: 0.1g
- Pan size: at least 120mm
- Pan construction: Stainless steel
- Linearity: $\pm 0.2\text{g}$
- Operating Ambient Temperature: 10-30°C
- Temperature Coefficient Sensitivity: ± 10
- Units of Measurement: ounce troy, pennyweight, gram, ounce
- Display: LED
- Power Requirement: 220V, 50Hz.

8. 1 unit FULLY AUTOMATIC AUTOCLAVE – 329,000.00

- Dimension: at least 24.41 inches (L) x 26.77inches (W) x 40.94 inches (H)
- Electronic Digital Timer Range: 0-99min.
- Volume: 24L
- Voltage: 220V, 50HZ
- Power: 2.0KW
- Overpressure auto- discharging at 0.145- 0.165Mpa
- Working Temperature: 129°C
- Vacuum Degree: 0.098 MPA
- Provided with built in safety valve, pressure gauge, pressure release valve
- Pressure is adjustable to: 5-20 psi \pm 1
- With automatic pressure switch
- Low water level cut off
- Made up of stainless-steel plate
- Preferably with compatible AVR 3000kva