



**DEPARTMENT OF PHARMACOLOGY
UNIVERSITY OF HEALTH SCIENCES**

Khayaban-e-Jamia Punjab, Lahore 54600, Pakistan.
Phone: +92-42 111 33 33 66 Ext.360, Fax: +92-42-39230870, E-mail: pharmacology@uhs.edu.pk

Ref no.UHS/Pharma/22/27

Date: 21/03/2022

To

The In-charge Purchase Cell,
University of Health Sciences,
Lahore.

Subject: Technical Evaluation for Purchase of Lab Equipment of Pharmacology Department for the Year 2020-2021

Sr. No	Description and Specifications	HA Shah	World Wide	Scientific Technical Corporation	Pakistan Hospital	Ayyan Molecular Products	New Chemical Center
1	Automated Cell Counter with fluorescence channels <ul style="list-style-type: none">Automated Cell Counter with fluorescence capabilities (with at least with two interchangeable fluorescence channels that can easily be changed)Count cells in bright-field, dual fluorescence cell counterReport and measuring fluorescent protein expression, apoptosis, and cell viability using fluorescent reagents in 30-50 secondsTouch screen, equipped with	Qualified	Not Qualified (Fluorescence cubes are not quoted)	Qualified	Qualified	Not Qualified (Wi-Fi connectivity is missing, Fluorescence detection not mentioned.)	Not Quoted



**DEPARTMENT OF PHARMACOLOGY
UNIVERSITY OF HEALTH SCIENCES**

Khayaban-e-Jamia Punjab, Lahore 54600, Pakistan.

Phone: +92-42 111 33 33 66 Ext.360, Fax: +92-42-39230870, E-mail: pharmacology@uhs.edu.pk

Ref no.UHS/Pharma/22/

Date: 21/03/2022

<p>fluorescence cellular assays, pre-dilution calculator, cell-splitting calculator, showing results in histogram, print report with cell counting results, save FCS (Flow Cytometry Standard) files, <u>WiFi</u>-enabled cloud connection.</p> <ul style="list-style-type: none">• With reusable slide (3 Units), Reusable Slide Holder (3 Units), Trypan Blue Stain (0.4%, 2x1 mL), Green/Red Viability Stain (100 assays), Blue Nuclear Stain (100 assays), Red Dead Cell Stain (100 assays)• Fluorescence Channels/light cubes including DAPI, GFP, YFP, RFP, Texas Red, Cy5, Cy7, with fluorescence light cube removal tool.• 100-240VAC, 50/60Hz						
--	--	--	--	--	--	--



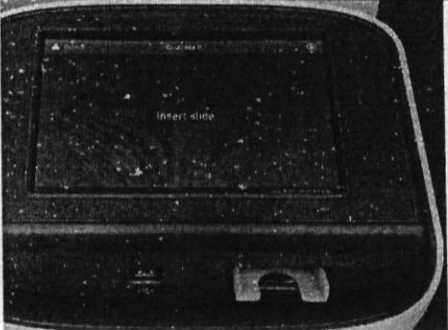
**DEPARTMENT OF PHARMACOLOGY
UNIVERSITY OF HEALTH SCIENCES**

Khayaban-e-Jamia Punjab, Lahore 54600, Pakistan.

Phone: +92-42 111 33 33 66 Ext.360, Fax: +92-42-39230870, E-mail: pharmacology@uhs.edu.pk

Ref no.UHS/Pharma/22/

Date: 21/03/2022

							
2	<p>Electrical Resistance System epithelial voltohm-meter</p> <ul style="list-style-type: none"> • Fitted with chopstick electrodes. • Portable instrument that fits into laminar flow hoods. • Measurements do not compromise sterility or damage cells on the membrane, reliably measures membrane potential and resistance of epithelial cells in culture. • Accessories include a replacement (fixed) electrode set, adjustable electrode set and a specialized electrode set for use with 96 cell 	Not Quoted	Not Quoted	Not Quoted	Not Quoted	Not Quoted	Qualified



**DEPARTMENT OF PHARMACOLOGY
UNIVERSITY OF HEALTH SCIENCES**

Khayaban-e-Jamia Punjab, Lahore 54600, Pakistan.

Phone: +92-42 111 33 33 66 Ext.360, Fax: +92-42-39230870, E-mail: pharmacology@uhs.edu.pk

Ref no.UHS/Pharma/22/

Date: 21/03/2022

4	<p>IsoFreeze PCR Rack For 96 x 0.1 or 96 x 0.2 ml tubes with snap top or screw cap, Maintains a sample temperature of less than 4°C for approx. 4 hours, Dramatic change to contrasting color at 7°C, Dimensions (rack + lid): 70 x 105 x 146 mm, Color changes from purple (cold) to pink (warm), Color changes from green (cold) to yellow (warm), Packaging unit: 1 rack with lid</p>	Qualified	Qualified	Not Quoted	Not Quoted	Qualified	Not Quoted
5	<p>Mini Centrifuge</p> <ul style="list-style-type: none"> • Frequency 50/60 Hz • Net Weight (1.41-1.5 kg) • 2 Rotors to Accommodate 0.2, 0.5, 1.5, 2 mL microcentrifuge Tubes, PCR Strip Tubes • Voltage 110-220 V • Capacity 12 x 2 mL • Max. Speed = 12,500 rpm • Max. RCF = 9,800 x g • Noise Level = 51-53 dB(A) • Temperature Range= Ambient temperature • Certifications/Compliance =CSA, CE, UL 	Qualified	Qualified	Not Quoted	Not Quoted	Qualified	Qualified



**DEPARTMENT OF PHARMACOLOGY
UNIVERSITY OF HEALTH SCIENCES**

Khayaban-e-Jamia Punjab, Lahore 54600, Pakistan.

Phone: +92-42 111 33 33 66 Ext.360, Fax: +92-42-39230870, E-mail: pharmacology@uhs.edu.pk

Ref no.UHS/Pharma/22/

Date: 21/03/2022

	<ul style="list-style-type: none"> Designed for quick and pulse spins Tool-free, quick rotor exchange 						
6	<p>Micropipette Stand</p> <ul style="list-style-type: none"> Provide safe and convenient storage for manual and electronic pipettes. Multi-stand Preferably grey color Hold 6 manual pipettes Compatible with all brands 	Qualified	Qualified	Not Quoted	Not Quoted	Not Quoted	Qualified
7	<p>Vacuum aspiration system Includes: Hand held aspirating device 3L Glass bottle, Lid with quick couplings and level detection, Tubing set with filter, Mains adapter: 100-240VAC, 50/60Hz, VACUBOY hand operator with 1-channel SS adapter 40 mm. Flow rate: 8 L/min. Maximum Pressure: -300 to -600 mbar (adjustable)</p>	Not Qualified (Wrong item quoted)	Qualified	Qualified	Not Quoted	Qualified	Qualified



**DEPARTMENT OF PHARMACOLOGY
UNIVERSITY OF HEALTH SCIENCES**

Khayaban-e-Jamia Punjab, Lahore 54600, Pakistan.
Phone: +92-42 111 33 33 66 Ext.360, Fax: +92-42-39230870, E-mail: pharmacology@uhs.edu.pk

Ref no.UHS/Pharma/22/

Date: 21/03/2022

<ul style="list-style-type: none">• Suitable for Biosafety level 1, 2 and 3 labs. Comply with the stringent user safety guidelines for handling contaminated solutions.• Includes integrated vacuum pump, complete with collection bottle, bottle handle, tubing set with filter, mains adapter• Base with internal vacuum pump 2 Liter, Polycarbonate Collection Bottle (autoclavable and break resistant) Antibacterial / Hydrophobic Filter Silicone Tubing Handheld Vacuum Pipette 2 Pipette cone adapters.• Self-closing connectors to avoid escape of drops or aerosols• All-in-one system includes all necessary components• Integrated pump / valve is switched off automatically when the vacuum is established in the bottle• Noise of the integrated pump is well below 65 dB(A)• Quick tubing connectors speed up						
--	--	--	--	--	--	--



DEPARTMENT OF PHARMACOLOGY
UNIVERSITY OF HEALTH SCIENCES

Khayaban-e-Jamia Punjab, Lahore 54600, Pakistan.
Phone: +92-42 111 33 33 66 Ext.360, Fax: +92-42-39230870, E-mail: pharmacology@uhs.edu.pk

Ref no.UHS/Pharma/22/

Date: 21/03/2022

<ul style="list-style-type: none">• Type = Benchtop Centrifuge• Includes 12 x 1.5/2.0mL rotor, 32 x 0.2mL rotor (singles or 4 x 8 strip), 0.2mL adapters (set of 12), 0.5mL adapters (set of 12), Universal power adapter 110-240V 50/60 Hz with 4 interchangeable plug types• Electrical Requirements 110/240 V 50/60 Hz• Warranty = 2 Years• Run Time = 1sec to 30min (1sec increments); Quick Spin• Standards IEC 61010-1, IEC 61010-2-020• Dimensions (HWD) 4.4 x 6.7 x 8 in. (11.4 x 17.1 x 20.3 cm)• Easy operation, with back-lit, customizable display that can be set for rpm or RCF.• Safety features including imbalance and tilt safety cut-out, as well as safety interlock lid designed to prevent opening while rotor is turning						
---	--	--	--	--	--	--



**DEPARTMENT OF PHARMACOLOGY
UNIVERSITY OF HEALTH SCIENCES**

Khayaban-e-Jamia Punjab, Lahore 54600, Pakistan.
Phone: +92-42 111 33 33 66 Ext.360, Fax: +92-42-39230870, E-mail: pharmacology@uhs.edu.pk

Ref no.UHS/Pharma/22/

Date: 21/03/2022

	bottle removal						
8	<p>Induction chamber for rats</p> <ul style="list-style-type: none"> • Size 24*12*18cm • or use with EZ-Anesthesia • Seal gasket ensures no gas leakage • Simple locking snap latch • Gas exhaust outlet port connects to charcoal filter • Heavy-duty, acrylic • Non-skid bottom • Includes Filter Connection outlet hose. 	Not Quoted	Not Quoted	Not Quoted	Not Quoted	Not Quoted	Not Quoted
9	<p>First aid medical box with complete kit</p> <p>Aluminium briefcase style Rust free, durable, 2 year warranty</p> <p>Size (LxWxH): 12in x 9in x 6in</p> <p>Equipped with Povidine Solution (60 ml bottle), Panadol Tab (20 Tab.), Disprin Tab (10 Tab.), Ponstan Tab (10 Tab.), Voltrex Gel (20 g), Polyfax Skin</p>	Not Quoted	Not Quoted	Not Quoted	Not Quoted	Not Quoted	Not Quoted



**DEPARTMENT OF PHARMACOLOGY
UNIVERSITY OF HEALTH SCIENCES**

Khayaban-e-Jamia Punjab, Lahore 54600, Pakistan.
Phone: +92-42 111 33 33 66 Ext.360, Fax: +92-42-39230870, E-mail: pharmacology@uhs.edu.pk

Ref no.UHS/Pharma/22/

Date: 21/03/2022

	Ointment (20 g), Adhesive Plaster Tape (2.5cmx2.0m, 01 Nos), Sani Plast / Hi Plast (20 Nos), Cotton (2 medium size packs), Crape Bandage 4" (2 Nos), Dettol (50 ml), Spirit (120 ml), Alcohol Pads / Medi Swabs (20 Nos), Face Mask (10 Nos), Digital Thermometer-Certeza/Citizen/equivalent (01), Glucose Monitor-Certeza/Citizen/equivalent (01), BP Monitor -Certeza/Citizen/equivalent, Stethoscope -Certeza/Littmann/equivalent, Pulse Oximeter -Certeza/Citizen/equivalent						
10	Tissue organ bath Digital display for temperature control system Fine tune system for oxygen supply Central supply of oxygen and solutions (tyrode solution etc.), refill and drain of solution through semi-automatic system. 100-240VAC, 50/60Hz	Not Quoted	Not Quoted	Not Quoted	Not Quoted	Not Quoted	Not Quoted
11	Toll kit Includes Double-headed hammer, ratchet screwdriver, needle-node pliers, wrench,	Not Quoted	Not Quoted	Not Quoted	Not Quoted	Not Quoted	Not Quoted



**DEPARTMENT OF PHARMACOLOGY
UNIVERSITY OF HEALTH SCIENCES**

Khayaban-e-Jamia Punjab, Lahore 54600, Pakistan.
Phone: +92-42 111 33 33 66 Ext.360. Fax: +92-42-39230870, E-mail: pharmacology@uhs.edu.pk

Ref no.UHS/Pharma/22/

Date: 21/03/2022

	<p>paper cutter, measuring tape, magnetic bit set packed in simple stylish cabinet of durable carbon steel body Partition of storage box up to lid and nail storage area to prevent mixing.</p>						
12	<p>Electronic Pipette Controller/Filler</p> <ul style="list-style-type: none"> • For use with serological and volumetric pipettes • Large, backlit LCD display provides visual confirmation of remaining battery charge and speed settings • Choose from eight speeds with a simple "+" or "-" to adjust pipetting speed which is displayed on the LCD. • Rechargeable lithium-ion battery offers long runtime per charge while eliminating battery memory problems • Battery has rapid charge rate of 80% in one hour and delivers up to 15 hours of continuous operation before recharge • Autoclavable pipette adapter for sterile applications. 	Qualified	Qualified	Not Quoted	Not Quoted	Not Quoted	Qualified



**DEPARTMENT OF PHARMACOLOGY
UNIVERSITY OF HEALTH SCIENCES**

Khayaban-e-Jamia Punjab, Lahore 54600, Pakistan.
Phone: +92-42 111 33 33 66 Ext.360, Fax: +92-42-39230870, E-mail: pharmacology@uhs.edu.pk

Ref no.UHS/Pharm/22/

Date: 21/03/2022

	<ul style="list-style-type: none">• Operation while recharging is possible.• Lightweight, well-balanced and ergonomic design that allows for fatigue-free pipetting• Lightweight, well-balanced and ergonomic design that allows for fatigue-free pipetting						
Total Estimated Budget			3,500,000				

**Prof. Dr. Muhammad Shahzad
Head Department of Pharmacology**

No Complaint Shall be entertained after 07 days of display of Technical Evaluation report.

**Dr. Uruj Zehra
Convener**

**Lt.Col. (R). Dr. Khalid Rahim
Member**

Dr. Allah Rakha