

Republic of the Philippines Department of Health Philippine Institute of Traditional and Alternative Health Care (PITAHC)



## **BIDS AND AWARDS COMMITTEE (BAC)**

### BID BULLETIN NO. 1 s. 2022

#### SUPPLY, DELIVERY, AND INSTALLATION OF VARIOUS LABORATORY EQUIPMENT UNDER THE RESEARCH AND DEVELOPMENT PROJECT RENOVATION AND INTERIOR FIT-OUT OF PITAHC LABORATORY (Per Lot Basis)

(CB\_004-2022)

Issued pursuant to Sec. 22.5.1 of the 2016 Revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184 to clarify and/or amend certain provisions in the Bidding Documents issued for this project, considering the issues raised and clarifications made by prospective bidders during the Pre-Bid Conference held on 29 September 2022.

AFFECTED PROVISION(S)	CLARIFICATION	RESPONSE
	/REQUEST	
SECTION VII. TECHNICAL	Correction of the Technical	
SPECIFICATIONS, LOT 1,	Specifications of Lot 1, Item	Please refer to the attached
ITEM 1	1	Annex "A" Technical
PAGE 30		Specification for the changes in the technical requirement.
ULTRA-HIGH		-
PERFORMANCE LIQUID		
CHROMATOGRAPHY		
SECTION VII. TECHNICAL	Correction of the Technical	Please refer to the attached
SPECIFICATIONS, LOT 1,	Specifications of Lot 1, Item	Annex "A" Technical
ITEM 2,	2	Specification for the changes in the technical requirement.
SOLVENT FILTRATION		ine teenneur reguirement
SVSTEM (COMPATIBLE		~
WITH THE UHPLC)		
with the child()		





SECTION VII. TECHNICAL SPECIFICATIONS, LOT 1, ITEM 4 PAGE 43 ROTARY EVAPORATOR WITH CIRCULATING CHILLER AND VACUUM PUMP (COMPATIBLE WITH THE UHPLC)	Correction of the Technical Specifications of Lot 1, Item 4	Please refer to the attached Annex "A" Technical Specification for the changes in the technical requirement.
SECTION VII. TECHNICAL SPECIFICATIONS	Regarding the Technical Requirement indication compliance. □Yes □No □Alternative offer Do we need to tick both <u>NO</u> and <u>Alternative Offer</u> and indicate our specification?	No. As per the agreement, the suppliers no longer need to tick the <u>NO</u> . They only need to tick the <u>Alternative Offer</u> if they want to provide different specifications on the posted items and indicate the alternative offer specifications in the "Remarks" column. The specifications in Section VII are only the minimum requirements.
SECTION VII. TECHNICAL SPECIFICATIONS, TERMS AND CONDITION ITEM 1	Do we need for a schedule of site visit as required for your technical visit for certification required for your bidding?	Yes. Site inspection is one of the technical requirements. Prospective bidders may be allowed to conduct site inspection from 9a.m. to 4 p.m., Monday through Friday. Please coordinate to Mr. Jeff Domingo prior to the conduct of Site Inspection.
SECTION VII. TECHNICAL SPECIFICATIONS, LOT 1, ITEM 1 - ULTRA-HIGH PERFORMANCE LIQUID CHROMATOGRAPHY	Detector; Measurement range: 0.0001 to 4.000 AU Is a measurement range of >2AU acceptable?	<i>Retained requirement.</i> The supplier can offer higher detection limit above 4.000 AU, but it must also be able to detect the minimum range of 0.0001.





Section VII Technical	Environmental	
Specifications Lat 1		
Specifications, Lot 1	Specifications; Acoustic	The requirement will be changed
	noise [total system]: $\leq 65$	from $\leq 65$ dBA to $\leq 85$ dBA
	dBA	
	Can this specification be	
	omitted as this not relevant	
	to the performance of the	
	system? Also, this pertains	
	to a specific brand/model.	
Section VII. Technical	Dimension and Weight	Granted
Specifications, Lot 1, item 1 High-		or mitem
Performance Liquid	Can these specifications be	The requirements will be
Chromatography System	omitted as this pertains to a	omitted
s - p - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5 - 5	specific brand/model? This	ommen.
	will also limit the number of	
	hidders/brands that sould	
	narticinate with better	
	participate with better	
Section VII Technical	Dimensional Weight	Control
Section VII. Technical	Dimensions and weight,	Grantea.
Specifications, Lot 1, item 3	Features and Benefits	
Water Purification System		The requirements will be
	Can these specifications be	omitted.
	omitted as this pertains to a	
	specific brand/model (a	
	copy -paste of brochure) as	
	long as the main	
	specifications and functions	
	shall be met? This will also	
	limit the number of	
	bidders/brands that could	
	participate with better	
	overall specifications.	
Section VII. Technical	Dimensions and Weight	Granted.
Specifications, Lot 1, item 4		
Rotary Evaporator	Can these specifications be	The requirements will be
	omitted as this pertains to a	omitted.
	specific brand/model (a	
	copy -paste of brochure) as	
	long as the main	
	specifications and functions	
	shall be met? This will also	
	limit the number of	
	bidders/brands that could	
	participate with better	
	overall specifications	
Section VII Technical	Dimensions and Weight	Granted
Specifications Lot 1 item 4	Dimensions and weight	Grundu
Becirculating Chiller		
Recirculating Chiller		





	Can these specifications be omitted as this pertains to a specific brand/model (a copy -paste of brochure) as long as the main specifications and functions shall be met? This will also limit the number of bidders/brands that could participate with better overall specifications.	The requirements will be omitted.
Section VII. Technical	Dimensions and Weight	Granted.
Specifications, Lot 1, item 6	1	
Sonicator	Can these specifications be omitted as this pertains to a specific brand/model (a copy -paste of brochure) as long as the main specifications and functions shall be met? This will also limit the number of bidders/brands that could participate with better overall specifications.	The requirements will be omitted.





Pursuant to Section 22.5.2 of the 2016 Revised IRR of RA 9184, through the initiative of the PITAHC Bids and Awards Committee is issuing this bid bulletin to inform the prospective bidder(s) in modifying or amending the below-stated provision in the Bidding Documents:

FROM	ТО	
SECTION I: INVITATION TO BIDDERS AND SIMILAR PROVISIONS	SECTION I: INVITATION TO BIDDERS AND SIMILAR PROVISIONS	
Bids must be duly received by the BAC Secretariat through online or electronic submission as indicated below on or before <b>11 October 2022</b> , <b>Tuesday at</b> <b>12:00NN</b> . Late and manual bids submission shall not be accepted.	Bids must be duly received by the BAC Secretariat through online or electronic submission as indicated below on or before <b>14 October 2022, Friday at 12:00AM</b> . Late and manual bids submission shall not be accepted.	
Bid opening shall be on 11 October 2022, Tuesday at 1:30 PM at the given address below Zoom Teleconference. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.	Bid opening shall be on 14 October 2022, Friday at 10:00 AM at the given address below Zoom Teleconference. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.	
SECTION VI: SCHEDULE OF REQUIREMENTS PAGE 28		
Within Ninety (90) Calendar Days upon receipt of the PO and signing of contract from PITAHC	Within <b>One Hundred (100) Calendar</b> <b>Days</b> upon receipt of the PO and signing of contract from PITAHC.	
	Please refer to the attached Annex "B" for the Schedule of Requirements.	
SECTION VII. TECHNICAL SPECIFICATIONS, LOT 1, ITEM 1 PAGE 35		
ULTRA-HIGH PERFORMANCE LIQUID CHROMATOGRAPHY		
PHYSICAL/ENVIRONMENTAL SPECIFICATIONS		
xxx Inclusions:		
1 unit solvent filtration set-up: 300mL filter cup + 1000mL liquid collection tube with vacuum pump	The Item will be removed as requirement.	
VVV		





Amendments/inclusions/clarifications made herein shall be considered an integral part of the Bidding Documents.

For guidance and information of all concerned.

DR. FRANCIS VICENTE S, RAS BAC Chairperson

# **Technical Specifications**

LOT 1. Laboratory Equipment for the Ultra-High Performance Liquid Chromatography (UHPLC) Analysis	Compliance to Technical Specification (Check the corresponding space)	
ABC: Php 5,780,000.00		
Item 1. Ultra-High Performance Liquid Chromatography		
QTY: 1 unit	Brand and Model:	Remarks
		(Please check the A.O (√) and Specify if There is alternative offer of Specs) (Alternative Offer (A.O)
SYSTEM FEATURES		
Total system band spread, 4σ: ≤30 μL	Yes() No() A.O()	
Dwell volume (total system):	Yes() No() A.O()	
Path 1 ≤ 1450 μL	Yes() No() A.O()	
Path 2 ≤ 1150 μL	Yes() No() A.O()	
Gradient delay volume:		
Path 1 ≤ 1050 μL	Yes() No() A.O()	
Path 2 ≤ 750 μL	Yes() No() A.O()	
<b>Integrated leak management:</b> Leak sensors, as standard, and safe leak handling	Yes() No() A.O()	
<b>Quantum synchronization:</b> Injection synchronization between pump and injector enhances retention time reproducibility	Yes() No() A.O()	
<b>Operating flow rate range:</b> 0.001 to 5.000 mL/min, in 0.001 mL increments	Yes() No() A.O()	
Maximum operating range: 9500 psi up to 5.000 mL/min	Yes ( ) No ( ) A.O ( )	
<b>pH range:</b> 1 to 12.5	Yes() No() A.O()	
<b>Unattended operation:</b> Leak sensors and safe leak handling, full 96-hour diagnostic data display through console software	Yes() No() A.O()	

Cycle time: ≤30 seconds inject-to-inject	
	Yes ( ) No ( ) A.O ( )
QUATERNARY SOLVENT MANAGER-R	
<b>Solvent capacity:</b> Blend up to four solvents in any combination (standard); total capacity of nine solvents with integrated solvent select valve (optional)	Yes ( ) No ( ) A.O ( )
<b>Number of fluidic paths:</b> Three (Path 1, Path 2, and waste), with multi-flow path technology (standard)	Yes() No() A.O()
<b>Dwell volume selection:</b> Automated with multi-flow path technology	Yes() No() A.O()
Solvent conditioning: Integrated vacuum degassing, four chambers	Yes ( ) No ( ) A.O ( )
<b>Gradient formation:</b> Low-pressure mixing, quaternary gradient	Yes ( ) No ( ) A.O ( )
<b>Gradient profiles:</b> 11 gradient curves [including linear, step (2), concave (4), and convex (4)]	Yes() No() A.O()
Check valves: Passive check valves	Yes ( ) No ( ) A.O ( )
Flow accuracy: +/- 1.0% at 0.5, 3.0, and 5.0 mL/min	Yes() No() A.O()
Flow precision: $\leq 0.075\%$ RSD or +/-0.020 min SD, whichever is greater, based on six replicates [60:40 water: methanol pre-mixed; 1.5 mL/min; alkylphenone mix; 24.0 µL injection volume; C18 2.7 µm, 4.6 x 50 mm; 35 °C; UV @254 nm]	Yes ( ) No ( ) A.O ( )
<b>Composition ripple:</b> ≤0.5 mAU [mobile phase containing 0.1% TFA in water/acetonitrile; 1.5 mL/min; C18 2.7 μm, 4.6 x 50 mm; 35 °C; UV @214 nm]	Yes() No() A.O()
<b>Composition accuracy:</b> +/- 0.5% absolute (full scale) from 5 to 95%; 0.5 to 5.0 mL/min [methanol; methanol with 5.0 mg/mL caffeine step gradient; UV @273 nm]	Yes ( ) No ( ) A.O ( )
Composition precision: +/- 0.15% RSD or 0.04 min SD, whichever is greater based on six replicate injections [60:40 water: methanol via technology that do automatic blend; 0.5 mL/min; alkylphenone mix; 24.0 $\mu$ L injection volume; C18 2.7 $\mu$ m, 4.6 x 50 mm; 35 °C; UV @254 nm]	Yes ( ) No ( ) A.O ( )
Compressibility compensation: Automatic and continuous	Yes() No() A.O()
Priming: Wet priming can run at flow rates up to 10 mL/mi	Yes() No() A.O()
Pump seal wash: Standard	Yes() No() A.O()
<b>Primary wetted materials:</b> 316L stainless steel, PPS, fluoropolymer, UHMWPE blend, sapphire, ruby, zirconia, DLC, PEEK and PEEK blend, titanium alloy	Yes() No() A.O()

SAMPLE MANAGER FTN-R	
<b>Injection volume range:</b> 0.1 to 50.0 $\mu$ L as standard	Yes() No() A.O()
Up to 1000.0 $\mu$ L with optional extension loops	Yes() No() A.O() Yes() No() A.O()
<b>Sample capacity:</b> 48-position, 2.00-mL vial holder (total capacity of 96 vials)	Yes ( ) No ( ) A.O ( )
Injection needle wash: Integral, active and programmable	
<b>Minimum sample required:</b> 3 μL residual, using total recovery 2-mL vials	Yes() No() A.O()
Accuracy (aspiration): +/- 0.2 μL	
<b>Linearity:</b> >0.999; 0.2 - 50.0 μL	Yes ( ) No ( ) A.O ( )
<b>Precision:</b> <1.0% RSD from 0.5 to 0.9 μL <0.5% RSD from 1.0 to 4.9 μL <0.25% RSD from 5.0 to 1000.0 μL	Yes ( ) No ( ) A.O ( )
Sample carryover: ≤0.002% [Caffeine] under UV conditions	Yes() No() A.O()
Advanced capabilities: Auto-dilution; auto-addition; load	Yes() No() A.O()
ahead	Yes() No() A.O()
Primary wetted materials: 316L stainless steel, gold plated stainless steel, polyimide, PEEK blend, DLC	
COLUMN HEATER/COOLER 30CM	
Column capacity: Single column, up to 7.8 mm l.D.; up to 300 mm length with filter or guard column; up to three columns with optional 3-position column selection valve	Yes() No() A.O()
Column selection: Up to three with optional 3-column selection valve (8-port, 9500 psi)	Yes ( ) No ( ) A.O ( )
Column compartment temperature: 30-cm CHC: 4.0 (or 15.0 °C below ambient, whichever is greater) to 65.0 °C	Yes() No() A.O()
Temperature accuracy: +/- 0.5 °C at the sensor Temperature stability: +/- 0.3 °C at the sensor	Yes() No() A.O()
Solvent conditioning: Passive pre-heating	Yes ( ) No ( ) A.O ( )
INSTRUMENT CONTROL	
Informatics compatibility: Chromatography Data System	Yes ( ) No ( ) A.O ( )
Communications: Ethernet	Yes() No() A.O()
Event input/output: Contact closure and/or TTL	.,
input/output	Yes() No() A.O()

<b>Connections INSIGHT:</b> Provides real-time monitoring and automatic notification of instrument performance and diagnostic information	Yes ( ) No ( ) A.O ( )
SOFTWARE SPECIFICATIONS	
The software must be Win10 64-bit compatible	Yes() No() A.O()
The software must be based around an Oracle database	Yes() No() A.O()
All actions performed on projects are tracked in the System Audit Trail	Yes ( ) No ( ) A.O ( )
The software must be 21 CFR Part 11 compliant ready	Yes ( ) No ( ) A.O ( )
No data should be overwritten in the database	Yes() No() A.O()
Can perform sophisticated applications such as:	Yes() No() A.O()
<ul> <li>Interactively creating and acquiring sample sets</li> </ul>	Yes ( ) No ( ) A.O ( )
Defining custom reports	Yes() No() A.O()
Defining custom reports	Yes() No() A.O()
<ul> <li>Creating and adding custom fields, and calculating custom database results</li> </ul>	Yes ( ) No ( ) A.O ( )
<ul> <li>Performing tracking and trending of results using the software database</li> </ul>	Yes ( ) No ( ) A.O ( )
Customize management of project information	Yes() No() A.O()
Customize report design and generation	Yes ( ) No ( ) A.O ( )
The software development and testing follows a documented software development lifecycle (SDLC).	Yes ( ) No ( ) A.O ( )
A data upgrade path is available between applications versions	Yes ( ) No ( ) A.O ( )
The Software must be ISO 9001 TickIT certified	Yes ( ) No ( ) A.O ( )
Comprehensive, context-sensitive	
Windows online help is supplied with the software application	Yes() No() A.O() Yes() No() A.O()
The vendor must maintain all development documentation, including Requirements, Functional Specifications, Source Code, Test Protocols and other information related to product life cycle.	Yes() No() A.O()
Automated qualification is available for Empower workstations, clients and acquisition servers.	Yes ( ) No ( ) A.O ( )
Custom programs that interact with or control Empower may be written using the Empower Toolkit.	Yes ( ) No ( ) A.O ( )

	Yes() No() A.O()
ENVIRONMENTAL SPECIFICATIONS	
Acoustic noise [total system]: ≤85 dBA	Yes() No() A.O()
<b>Operating temperature range:</b> 4.0 to 40.0 °C	Yes() No() A.O()
<b>Operating humidity range:</b> 20% to 80%, non-condensing	Yes() No() A.O()
ELECTRICAL SPECIFICATIONS	
Power requirements: 100 to 240 VAC	Yes() No() A.O()
Line frequency: 50 to 60 Hz	Yes() No() AO()
Power consumption	Yes() No() AO()
QSM: 200 VAC	$\operatorname{Yes}()$ No() AO()
SM FTN-R: 400 VAC CH: 50 W	
DETECTOR SPECIFICATIONSOPERATING	
SPECIFICATIONS	Yes() No() A.O()
Wavelength range: 190 to 700 nm Bandwidth: ≤5 nm	
Wavelength accuracy: ±1 nm (via Erbium filter) Wavelength	Yes ( ) No ( ) A.O ( )
linearity3: <5% at 2.5 AU propylparaben 257 pm	Yes() No() A.O()
Baseline noise 3 single wavelength: <5 x 10-6 AU 230 nm	
10 points/s, 1.0 s, 30-s segments, dry analytical flow cell	Yes() No() A.O()
Baseline noise,3 dual wavelength:≤35 x 10-6 AU, 230 nm,	Yes ( ) No ( ) A.O ( )
280 nm, 1 point/s, 2.0 s, 30-s segments, dry analytical flow cell	
<b>Drift:</b> ≤1 x 10-4 AU/ hour	Yes() No() A.O()
Measurement range: $0.0001$ to $4.0000$ AU	Yes() No() A.O()
Sampling rate: Un to 80 points/s	Yes ( ) No ( ) A.O ( )
OPTICAL COMPONENT SPECIFICATIONS	
<b>Light source:</b> Deuterium arc lamp Warranty: 2000 hours or 1 year (whichever comes first)	Yes ( ) No ( ) A.O ( )
Flow cell design: taperslit technology	Yes() No() A.O()
Path length: 10 mm (analytical cell)	Yes() No() A.O() Yes() No() A.O()
<b>Cell volume:</b> 16.3 μL (analytical cell)	Yes() No() A.O()
Pressure limit: 1000 psi (analytical cell)	Yes() No() A.O()

Wetted materials: 316 stainless steel, fused silica, PEEK, Tefzel	Yes ( ) No ( ) A.O ( )
ELECTRICAL SPECIFICATIONS	
Power requirements: 100 to 240 VAC	Yes() No() A.O()
Line frequency: 50 to 60 Hz	Yes() No() A.O()
Power consumption: 195 VA (nominal)	Yes() No() A.O()
Inputs: Four event inputs	Yes() No() A.O()
<b>Outputs:</b> Four outputs (2 analog, 2 event)	Yes ( ) No ( ) A.O ( )
PHYSICAL/ENVIRONMENTAL SPECIFICATIONS	
<b>Operating temperature range:</b> 4 to 40 °C (39.2 to 104 °F)	Yes ( ) No ( ) A.O ( )
<b>Operating humidity range:</b> 20% to 80%, non-condensing Audible noise: <58 dBA	Yes ( ) No ( ) A.O ( )
Inclusions:	
1 unit table for the system	
<ul> <li>System Start-up Kit (contains the Solvent Tray and any miscellaneous tools and components (excluding connective tubing) to properly install the system for all core configurations.)</li> </ul>	Yes() No() A.O()
= 1  pc (18  Colump 2.7  um 4.6  y 50  mm)	Yes() No() A.O()
<ul> <li>2 ml. Glass Vial with pre-slit Senta (Pack of 100)</li> </ul>	Yes() No() A.O()
Start-un solution	Yes() No() A.O()
<ul> <li>Info Set for the system</li> </ul>	Yes ( ) No ( ) A.O ( )
• 1 unit computer set-up with the following	
specifications:	Yes() No() AO()
RAM: At least 8GB	$\operatorname{Yes}()$ No() AO()
ROM: 1TB SSD	Yes() No() AO()
Processor: Intel Core i5	Yes() No() A.O()
OS: Win 10 Pro or Win 11 Pro Monitor: 22 inch display	Yes() No() A.O()
Tower type: SFF or mini Tower	Yes ( ) No ( ) A.O ( )
With standard IQ/OQ/PQ	
QUATERNARY SOLVENT MANAGER-R	

<ul> <li>The pump must be capable of delivering aqueous and organic solvents at operating pressures up to 9,500 PSI (655 bar).</li> </ul>	Yes ( ) No ( ) A.O ( )
• The pump must have integrated vacuum degassing of all mobile phase lines.	Yes ( ) No ( ) A.O ( )
• The pump must provide quaternary solvent blending of up to four solvents.	Yes ( ) No ( ) A.O ( )
<ul> <li>The pump must have an optional solvent selection valve for automated and unattended selection of up to six solvents.</li> </ul>	Yes ( ) No ( ) A.O ( )
• The pump must support flow ramping, settable from 0.01 to 30.00 minutes to gradually reach flow rates up to 5.000 mL/min.	Yes ( ) No ( ) A.O ( )
• The pump must be able to support flow rates as low as 0.001 mL/min and as high as 5.000 mL/min.	Yes() No() A.O()
• The pump must be capable of reaching a maximum operating pressure of 9,500 PSI (655 bar) over its entire flow rate range.	Yes() No() A.O()
<ul> <li>The pump must automatically synchronize with the injection start to enhance retention time reproducibility.</li> </ul>	Yes ( ) No ( ) A.O ( )
<ul> <li>The pump must have automatic and continuous compressibility compensation for the solvents, requiring no user intervention.</li> </ul>	Yes ( ) No ( ) A.O ( )
• The pump must have integrated and programmable pump seal wash.	Yes() No() A.O()
<ul> <li>The pump must contain the ability to automatically select between multiple dwell volumes (Fluidic Paths) by user selection within the instrument method editor.</li> </ul>	Yes ( ) No ( ) A.O ( )
<ul> <li>The pump must be able to program both isocratic and gradient methods.</li> </ul>	Yes ( ) No ( ) A.O ( )
• The pump must be able to program gradient methods directly in terms of pH and percent organic.	Yes() No() A.O()
• The pump must be able to program gradient methods directly in terms of pH and salt concentration.	Yes ( ) No ( ) A.O ( )
• The pump must have a flow accuracy of +/- 1.0%.	Yes() No() A.O()
<ul> <li>The pump must have a flow precision of ≤0.075% RSD or +/- 0.02 min SD, whichever is greater.</li> </ul>	Yes() No() A.O()

•	The pump must be capable to deliver a minimum of eleven gradient curve profiles [including linear, step (2), concave (4), and convex (4)]. The pump must have a pressure pulsation of ≤1.0% or 25 psi, whichever is greater. The pump must have a compositional precision of 0.15% RSD or +/- 0.04 min SD, whichever is greater.	Yes ( ) Yes ( ) Yes ( )	No() No() No()	A.O() A.O() A.O()	
SAMPL	E MANAGER – FLOW THROUGH NEEDLE-R				
•	The Injector must be capable of injecting samples dissolved in aqueous and/or organic solvents at operating pressures up to 9,500 PSI (655 bar).	Yes ( )	No ( )	A.O ( )	
•	The injector must have an integrated and programmable needle wash.	Yes ( )	No ( )	A.O ( )	
•	The injector must have measurable carryover of less than 0.002% or less (measured by UV).	Yes ( )	No ( )	A.O ( )	
•	The injector must aspirate samples with an accuracy of +/- 0.2 $\mu\text{L}.$	Yes ( )	No ( )	A.O ( )	
•	The sample compartment temperature must be settable from 4 to 40°C (if equipped).	Yes ( )	No ( )	A.O ( )	
•	The injector must have the ability to automatically dilute samples.	Yes ( )	No ( )	A.O ( )	
•	The injector must have the ability to automatically withdraw from several sample vials and dispense into a single vial.	Yes ( )	No ( )	A.O ( )	
•	The injector must be capable of injection volumes from 0.1 to 1000.0 $\mu\text{L}.$	Yes ( )	No()	A.O ( )	
•	The sample compartment must be able to accommodate both HPLC Vials and/or well plates (96 / 384 well)	Yes ( )	No ( )	A.O ( )	
•	The injector precision must be equal to or less than 1.0% RSD from 0.5 to 0.9 $\mu$ L; 0.5% RSD from 1.0 to 4.9 $\mu$ L; and <0.25% RSD from 5.0 to 1000.0 $\mu$ L.	Yes ( )	No ( )	A.O ( )	
•	The injector linearity shall be equal to or better than 0.999 correlation coefficient over its entire injection range	Yes ()	No()	A.O ( )	
THERM HEATIN	IAL COLUMN MANAGEMENT PASSIVE PRE- NG				

•	The column compartment connective fittings must be reusable and adjustable and withstand pressures up	Yes()	No ( )	A.O ( )
•	to 9,500 PSI and 5.0 mL/min	Yes ( )	No()	A.O ( )
•	The column compartment must be able to support columns up to 30 cm in length	Yes ( )	No ( )	A.O ( )
•	The column compartment must be able to accommodate columns as wide as 7.8 mm ID	Yes ( )	No ( )	A.O ( )
•	The column compartment must support optional column selection, up to 3 columns	Yes ( )	No()	A.O ( )
•	The column compartment must be able to cool down to 4 °C	Yes ( )	No()	A.O ( )
•	The column compartment must be able to heat up to 90 °C	Yes ( )	No ( )	A.O ( )
•	The column compartment must have temperature accuracy of +/- 0.5 °C	Yes ()	No()	A.O ( )
•	The column compartment must have temperature stability of +/- 0.3 $^{\circ}\mathrm{C}$	Yes ()	No()	A.O ( )
•	Heat time, as measured at the column temperature probe, shall not exceed 35 minutes when heating from ambient to 60°C ± 2°C for the CH/C (no flow)	Yes()	No ( )	A.O ( )
•	Cool time, as measured at the column temperature probe, shall not exceed 30 minutes when cooling from 60°C to 20°C ± 2°C for the CHC (no flow)	Yes()	No ( )	A.O ( )
•	Heat time, as measured at the column temperature probe, shall not exceed 30 minutes when heating from 60°C to 20°C for the CH/C	Yes ()	No ( )	A.O ( )
•	The system must support the columns designed and developed for the system by the same manufacturer	Yes ( )	No()	A.O ( )
Syste	n Specification			
•	The system must support an automated start-up program which readies the system by automatically	Yes ()	No()	A.O ( )
•	priming solvent lines and the fluidic paths			
•	The system flow path must be compatible with a pH range of 1 to 12.5	Yes()	No()	A.O ( )
•	Total system bandspread (4 $\sigma$ ) for the system must be $\leq$ 30 $\mu$ L	Yes()	No()	A.O ( )
		Yes ( )	No()	A.O ( )

•	The total system dwell volume, as measured at the 50% point in a step gradient, must be $\leq$ 1,450µL for one fluidic path and $\leq$ 1,150µL for a second fluidic path	Yes ( )	No ( )	A.O ( )	
•	The gradient delay volume, as measured at the lift-off point in a step gradient, must be	Yes ( )	No ( )	A.O ( )	
	<ul> <li>≤1,050 µL for one fluidic path and ≤750 µL for the second fluidic path</li> </ul>	Yes ( )	No()	A.O ( )	
•	The system must support leak sensors. Drips shall be managed through a drip tray which shall direct all	Yes ( )	No ( )	A.O ( )	
•	leaks to either the front or rear of the instrument and then into a suitable waste container	Yes ( )	No ( )	A.O ( )	
•	The system must support fully integrated diagnostics with 96 hours of diagnostic data preserved. Data channels need to include individual pump piston pressures, system pressure, sample compartment temperature, column temperature and ambient temperature. The software must provide full maintenance information such as counters for total solvent usage, number of injectionsetc.	Yes ( )	No ( )	A.O ( )	
•	The total system must have a combined audible noise of no greater than 65 dBA	Yes ( )	No ( )	A.O ( )	
•	The system must have software that is capable of providing real-time monitoring and automatic notification instrument performance as well as diagnostic information for expedited problem resolution and minimized down time.	Yes ( )	No ( )	A.O ( )	
•	The system shall have a minimum of two fluidic paths by default in which two distinctly different dwell volumes exist that differ by a minimum of 200 $\mu$ L.	Yes ( )	No ( )	A.O ( )	
•	The system must be capable of automatically synchronizing or decoupling, the injection start from the start of the gradient	Yes ( )	No ( )	A.O ( )	
TUV D	ETECTOR SPECIFICATIONS				
•	The UV/Vis detector must have the ability to set the sampling/data rate and filter time constants independently to maximize resolution and sensitivity	Yes ( )	No ( )	A.O ( )	
•	The UV/Vis detector must have a standard analytical flow cell with a volume of not more than $10\mu L$ to	Yes ( )	No()	A.O ( )	

SOLVENT FILTRATION SET-UP WITH VACUUM PUMP SOLVENT FILTRATION SET-UP	
QTY: 1 unit	Brand and Model:
Item 2. Solvent Filtration System (compatible with the UHPLC)	
The UV/Vis detector must have a wavelength accuracy of better than or equal to ±1nm	Yes ( ) No ( ) A.O ( )
The UV/Vis detector must have an optical bandwidth of 5nm or less	Yes() No() A.O()
• The UV/Vis detector must be able to collect up to two (2) independent data channels simultaneously	Yes ( ) No ( ) A.O ( )
• The UV/Vis detector must have a means to scan the entire wavelength range of the detector to determine Lambda Max for a given static sample	Yes() No() A.O()
• The UV/Vis detector must have a noise specification of less than or equal to 5x10-6 AU in single wavelength mode	Yes() No() A.O()
• The UV/Vis detector must have a linear range that does not deviate by more than five percent (5%) up to 2.5AU	Yes ( ) No ( ) A.O ( )
• The UV/Vis detector must have a wavelength range of 190nm-700nm that can be covered by the use of a single deuterium lamp	Yes() No() A.O()
• The UV/Vis detector flow cells shall be simple to replace in a cartridge form with finger tight fittings	Yes() No() A.O()
• The UV/Vis detector must perform an optics and electronic diagnostic routine upon power-up	Yes ( ) No ( ) A.O ( )
• The UV/Vis detector must be able to acquire data at up to eighty (80) points per second	Yes ( ) No ( ) A.O ( )
• The UV/Vis detector must have a means to optimize lamp performance automatically and without user intervention. This compensates for lamp degradation over time without the need to frequently replace the lamp.	Yes ( ) No ( ) A.O ( )
• The UV/Vis detector must have optional flow cells for optimizing detection for a wide range of applications	Yes() No() A.O()
minimize peak dispersion of UHPLC separations with a path length of 10mm	

200 ml filter our	$V_{ee}()$ $N_{e}()$ $AO()$
1000 mL liquid collection tube	Ves() No() AO()
VACUUM PUMP SPECIFICATION	
Adjustable OII-Free Diaphragm Vacuum Pumps, Vacuum Range 0.01-0.085 MPa Power 90 W with Waste Reservoir	Yes() No() AO()
Easy to use design	Yes() No() AO()
Oil-free, no contamination	Yes() No() A.O()
Lightweight, small footprint Resistant to erosion, resistant to acidic/basic reagents	Yes() No() A.O()
	Yes() No() A.O()
Item 3. Water Purification System (compatible with the	
UHPLC)	
QTY: 1 unit	Brand and Model:
TYPE 2 WATER	
Make-Up Flow Rate (@15 °C / 59 °F): 10L/Hr	Yes() No() A.O()
Water Quality (@25 °C / 77 °F): > 5MΩ∙cm	Yes() No() AO()
Dispense Flow Rate: ≥ 2 L/min	
Bacteria*: <0.01 CFU/ml	Yes() No() A.O()
TOC****: <30 ppb	Yes() No() A.O()
	Yes() No() A.O()
TYPE 1 WATER	
Water Quality (@25 °C / 77 °F): 18.2MΩ∙cm	Yes ( ) No ( ) A.O ( )
Dispense Flow Rate: ≥ 2 L/min	Yes() No() A.O()
Bacteria*: <0.01	Yes() No() A.O()
CFU/ml TOC****: < 5ppb	Yes() No() A.O()
System Requirements FEED WATER	
Feed Water Type: Tap / Potable Water Pressure: Bar / PSI 0.5 - 6 / 7.25 - 87 Conductivity: µS/cm < 2000 µs/cm @ 25 °C	Yes() No() A.O()
   Temperature: °C / °F 5 - 40 / 41 - 104	Yes() No() A.O()
Free chlorine: ppm < 3	Yes() No() A.O()
Silt Density Index: SDI < 12 pH: 4 - 10	Yes() No() A.O()
UNIT SPECIFICATIONS	
	Yes() No() A.O()

Power Supply: 100 - 240 V ~ ; 50/60 Hz	
Power Supply Output: (Main Unit) 200 VA	Yes() No() A.O()
Power Supply Output: (Pre-treatment) 75 VA	Yes() No() A.O()
Type 2 Water Applications	Yes ( ) No ( ) A.O ( )
Buffer & Media Preparations	Yes ( ) No ( ) A.O ( )
Sample Dilution & Reagent Preparation Spectrophotometry	Yes() No() A.O()
Protein Electrophoresis Cytology & Histology Glassware Washing & Rinsing	Yes ( ) No ( ) A.O ( )
Type 1 Water Applications	
Molecular Biology, Immunology & Pharmacology Electrochemistry	Yes ( ) No ( ) A.O ( )
Critical Cell & Tissue Culture	Yes ( ) No ( ) A.O ( )
(GF) AAS, HPLC, IC, ICP-MS, GC, MS	Yes() No() A.O()
DNA Sequencing	Ves() No() AO()
Genomics & Proteomics	
Electrical Requirements	Yes ( ) No ( ) A.O ( )
Power Input: 100-240V AC, 50/60Hz	Yes() No() A.O()
Power Requirements for MU: 200 W	Yes() No() AO()
Power Requirements for PT: 75 W (with feed water booster pump *)	Yes() No() A.O()
Fuse MU: T 4AL 250V, PT: T 3.15AL 250V	
Laboratory Environment Requirements	Yes() No() A.O()
Altitude: < 2500m	
Ambient Temperature: 5-40 °C (41-104 °F)	Yes() No() A.O()
Relative Humidity: < 80%	Yes ( ) No ( ) A.O ( )
	Yes() No() A.O()
Inclusions: 1 unit 3 KVa AVR	Yes ( ) No ( ) A.O ( )

Item 4. Rotary Evaporator with Circulating Chiller and Vacuum Pump (compatible with the UHPLC)	
QTY: 1 unit	Brand and Model:
Type of cooling: vertical	Yes ( ) No ( ) A.O ( )
<b>Cooling surface:</b> 1500 cm <sup>2</sup>	Yes ( ) No ( ) A.O ( )
Motor principle: DC	Yes() No() A.O()
Speed range: 5-280 rpm	Yes() No() A.O()
Reversible direction of rotation: yes	Yes ( ) No ( ) A.O ( )
Lift: motor	Yes() No() AO()
Stroke: 140mm	Yes() No() A.O()
Heating temperature range: room temp 180 °C	Yes() No() A.O()
Heat output: 1350 W	Yes() No() A.O()
Set temperature resolution: $\pm 1$ K	Yes ( ) No ( ) A.O ( )
Filling volume max.: 4L	Yes ( ) No ( ) A.O ( )
Heating temperature range: room temp 180 °C	Yes ( ) No ( ) A.O ( )
Timer: yes	Yes ( ) No ( ) A.O ( )
Permissible ambient temperature: 5 - 40 °C	Yes ( ) No ( ) A.O ( )
Permissible relative humidity: 80 %	Yes() No() A.O()
Protection class according to DIN EN 60529: IP 20	Yes ( ) No ( ) A.O ( )
RS 232 interface: yes	
<b>Voltage:</b> 220 – 240V	Yes() No() AO()
Frequency: 50/60 Hz	Yes() No() AO()
Power input: 1400 W	Yes() No() AO()
Package inclusion:	
Main unit	Yes ( ) No ( ) A.O ( )
Heating bath	Yes ( ) No ( ) A.O ( )
Glassware vertical	Yes() No() A.O()
Vapor tube	Yes() No() A.O()
• Seal	Yes() No() A.O()
Woulff bottle	Yes ( ) No ( ) A.O ( )
Support pole	Yes ( ) No ( ) A.O ( )

1 unit RECIRCULATING CHILLER/COOLER TECHNICAL SPECIFICATIONS		
Filling volume: 1.7- 2.6 L	Yes() No() AO()	
Pump connections: M10x1 female		
Barbed fittings inner diameter: 8/10 mm	Yes() No() A.O()	
Temperature Values Working temperature range: -10+40 °C	Yes() No() A.O()	
Temperature stability: ±0.5 °C	Yes() No() A.O()	
Setting the resolution of the temperature display: 0.1 °C Temperature display resolution: 0.1 °C	Yes() No() A.O() Yes() No() A.O()	
Ambient temperature: +5 +40 °C		
Return flow temperature max.: +80 °C	Yes() No() A.O() Yes() No() A.O()	
Performance values Medium: Water Glycol	Yes() No() A.O()	
°C: 20, 15, 10, 5, 0, -5, -10		
kW*: 0.25, 0.24, 0.22, 0.21, 0.18, 0.09, 0.06		
Refrigerant: R134a	Ves() No() AO()	
Global Warming Potential: 1430	Yes() No() A.O()	
Filling volume: 113 g	Yes() No() A.O()	
Carbon dioxide equivalent: 0.162 t	Yes ( ) No ( ) A.O ( )	
Pump capacity flow rate: 15 L/min	Yes() No() A.O()	
Pump capacity flow pressure: 0.35 bar Power: 3A	Ves() No() AO()	
Bath tank: Stainless steel		
Cooling of compressor: 1-stage Air Other: 59dbA	Yes() No() A.O()	
<b>Classification according to DIN12876-1:</b> Classification I (NFL)	Yes() No() A.O()	
IP Code according to IEC 60529: IP 20		
Pump type: Centrifugal Pump Electronics	Yes() No() A.O()	
Temperature control: PID1	Yes() No() AO()	
Temperature display: LED	Yes() No() A.O()	
Temperature: Keypad	Yes() No() A.O()	
Environmentally friendly operation with low energy consumption	Yes ( ) No ( ) A.O ( )	
	1	1

No side vents, instruments can be placed right next to other equipment	Yes ( ) No ( ) A.O ( )
All wetted parts made of stainless steel or high grade plastic	Yes ( ) No ( ) A.O ( )
Large, bright LED display	Yes() No() A.O()
Compact design	
Splash-proof keypad	Yes() No() A.O()
Easy filling and Drain tap easily accessible	Yes() No() A.O()
1 UNIT VACUUM PUMP	
Basic vacuum pump	
For dry, oil-free applications	Yes ( ) No ( ) A.O ( )
Slim line, compact design and long service life	Yes() No() A.O()
Straightforward servicing and simple maintenance	Yes() No() A.O()
• Diaphragm pump that is highly resistant to chemicals as all parts that come into contact with gas are made of PTFE or PTFE compounds	Yes() No() A.O()
Scope of delivery	
Basic vacuum pump	Yes() No() A.O()
Vacuum hose	Yes() No() AO()
• Silencer	
Y hose connector 8 mm	Yes() No() A.O()
TECHNICAL DATA	Yes ( ) No ( ) A.O ( )
Pump rate max. (50/60Hz): 1.7 m³/h	Yes() No() A.O()
Pump rate max. (50/60Hz): 28.3 l/min	Yes() No() A.O()
Final pressure without gas ballast: 7 mbar	Yes ( ) No ( ) A.O ( )
Final pressure with gas ballast: 15 mbar	Yes() No() A.O()
Suction levels: 2	Yes() No() A.O()
Cylinder: 2	Yes() No() A.O()
Connection diameter suction side: 10 mm	
Connection diameter pressure side: 10 mm	Yes() No() A.O()

Gas ballast valve: yes	Yes() No() A.O()
Input pressure: 7 - 1050 mbar	Yes ( ) No ( ) A.O ( )
Speed (50Hz): 1380 rpm	Yes() No() A.O()
Speed (60Hz): 1680 rpm	Yes() No() A.O()
Noise at low. Pressure: 65 dB(A)	Yes() No() A.O()
Mode automatic: yes	Yes() No() A.O()
Mode manual: yes	Yes ( ) No ( ) A.O ( )
Mode pump %: yes	Yes ( ) No ( ) A.O ( )
Mode program: yes	Yes ( ) No ( ) A.O ( )
Permissible ambient temperature: 10 - 40 °C Permissible relative humidity: 80 %	Yes ( ) No ( ) A.O ( )
Protection class according to DIN EN 60529: IP 54	Yes() No() A.O()
Voltage: 230 V	Yes ( ) No ( ) A.O ( )
Frequency: 50/60 Hz Power Input: 180 W	Yes() No() A.O()
Item 5. Vortex Mixer (compatible with the UHPLC)	
Item 5. Vortex Mixer (compatible with the UHPLC) QTY: 1 unit	Brand and Model:
Item 5. Vortex Mixer (compatible with the UHPLC)         QTY: 1 unit         Powerful and stable motion	Brand and Model: Yes ( ) No ( ) A.O ( )
Item 5. Vortex Mixer (compatible with the UHPLC)         QTY: 1 unit         Powerful and stable motion         Speed range with at least 3000 rpm	Brand and Model:           Yes ( )         No ( )         A.O ( )           Yes ( )         No ( )         A.O ( )
Item 5. Vortex Mixer (compatible with the UHPLC)QTY: 1 unitPowerful and stable motionSpeed range with at least 3000 rpmRubber feet with shock absorber	Brand and Model:           Yes () No () A.O ()           Yes () No () A.O ()           Yes () No () A.O ()
Item 5. Vortex Mixer (compatible with the UHPLC)QTY: 1 unitPowerful and stable motionSpeed range with at least 3000 rpmRubber feet with shock absorberUniversal rack can be used for several kinds of tubes	Brand and Model:           Yes ( )         No ( )         A.O ( )           Yes ( )         No ( )         A.O ( )           Yes ( )         No ( )         A.O ( )           Yes ( )         No ( )         A.O ( )           Yes ( )         No ( )         A.O ( )
Item 5. Vortex Mixer (compatible with the UHPLC)QTY: 1 unitPowerful and stable motionSpeed range with at least 3000 rpmRubber feet with shock absorberUniversal rack can be used for several kinds of tubesTemperature resistance between 5°C to 40°C	Brand and Model:         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )
Item 5. Vortex Mixer (compatible with the UHPLC)QTY: 1 unitPowerful and stable motionSpeed range with at least 3000 rpmRubber feet with shock absorberUniversal rack can be used for several kinds of tubesTemperature resistance between 5°C to 40°CItem 6. Sonicator (compatible with the UHPLC)	Brand and Model:         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )
Item 5. Vortex Mixer (compatible with the UHPLC)QTY: 1 unitPowerful and stable motionSpeed range with at least 3000 rpmRubber feet with shock absorberUniversal rack can be used for several kinds of tubesTemperature resistance between 5°C to 40°CItem 6. Sonicator (compatible with the UHPLC)QTY: 1 unit	Brand and Model:         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Brand and Model:       Image: Comparison of the second sec
Item 5. Vortex Mixer (compatible with the UHPLC)QTY: 1 unitPowerful and stable motionSpeed range with at least 3000 rpmRubber feet with shock absorberUniversal rack can be used for several kinds of tubesTemperature resistance between 5°C to 40°CItem 6. Sonicator (compatible with the UHPLC)QTY: 1 unitTank Capacity (Liters/Gallons): 9.5/2.5	Brand and Model:         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Brand and Model:       Yes ( )       No ( )         Yes ( )       No ( )       A.O ( )
Item 5. Vortex Mixer (compatible with the UHPLC)QTY: 1 unitPowerful and stable motionSpeed range with at least 3000 rpmRubber feet with shock absorberUniversal rack can be used for several kinds of tubesTemperature resistance between 5°C to 40°CItem 6. Sonicator (compatible with the UHPLC)QTY: 1 unitTank Capacity (Liters/Gallons): 9.5/2.5Frequency: 40 kHz	Brand and Model:         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Brand and Model:       Yes ( )       No ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )
Item 5. Vortex Mixer (compatible with the UHPLC)QTY: 1 unitPowerful and stable motionSpeed range with at least 3000 rpmRubber feet with shock absorberUniversal rack can be used for several kinds of tubesTemperature resistance between 5°C to 40°CItem 6. Sonicator (compatible with the UHPLC)QTY: 1 unitTank Capacity (Liters/Gallons): 9.5/2.5Frequency: 40 kHzDrain: yes Voltage: 230/240	Brand and Model:         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Brand and Model:       Yes ( )       No ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )

Various R&D Laboratory Equipment         Total ABC: 5,278,500.00         Lot 2. Upright Ultra Low Freezer (-80°C)         Php 990,000.00	Compliance to Technical Specification (Check the corresponding space)	Remarks (Please check the A.O (✓) and Specify if There is alternative offer of Specs) (Alternative Offer (A.O)
QTY: 1 unit	BRAND/MODEL:	
Upright model ultra-low freezer Cooling Type: Direct cooling Refrigerant: HFC or Mixed HC/HFC blended Noise Lever (dB): 50 Temperature setting range: -50°C to -85°C Maximum cooling performance: should be -86°C at ambient temperature (30°C) Effective capacity: at least 500 Liters Main body constructed of electro-galvanized (zinc-coated) stainless steel tray Inner door, insulated with stainless steel frames Type Compressors, 1100W Refrigerant: HFC (Hydro Fluorocarbon) Filterless design condenser Fully programmable microprocessor and eye level control panel Audible and visible alarms for temperature, door ajar, power, failure and system failure Lockable outer door latch to allow a padlock to be attached Inclusion: 1 unit AVR – 5KVA 1 piece scraper 1 set of keys 2 pairs of cryogloves Lot 3. Single-Channel Micro Pipettors with Carousel	Yes() No() A.O() Yes() No() A.O()	
Lot 3. Single-Channel Micro Pipettors with Carousel Php 120,000.00		
QTY: 2 sets	BRAND/MODEL:	

<b>Set of 3</b> pipettes in package combined with linear stand and matching tips covering volume consists of:	Yes() No() A.O()	
• 2- 20µl	Yes() No() A.O()	
• 20- 200µl	Yes() No() A.O()	
• 100-1000 μi	Yes() No() A.O() Yes() No() A.O()	
Carousel or Pipette Back		
<ul> <li>1 set of Pipette Tips for 20 μl</li> </ul>	Yes() No() A.O()	
<ul> <li>1 set of Pipette Tips for 200 μl</li> </ul>	Yes() No() A.O()	
• 1 set of Pipette Tips for 1000 μl	Yes() No() A.O() Yes() No() A.O()	
vvarranty: Minimum of 1 year		
	Yes() No() A.O()	
Lot 4. Biosafety Cabinet		
Php 475,000.00		
QTY: 1 unit	BRAND/MODEL:	
Class: II, Type A2, NSF49	Yes() No() A.O()	
Filter: ULPA or H14 filter with 99.99 efficiency against 0.3um	Yes() NO() A.O()	
particles	Yes() No() AO()	
efficiency at 0.1-0.3 μm		
<b>Power:</b> 220-240V, AC, 50Hz	Yes ( ) No ( ) A.O ( )	
Other Features:		
LCD/LED Display Panel Microprocessor Control System with QuickStart Mode and Standby Mode,	Yes() No() A.O()	
adjustable UV sterilization timer, audible and visual		
<ul> <li>Power Socket, Gas Cock Receptacles, BSC stand</li> </ul>	Yes ( ) No ( ) A.O ( )	
With inclusions:		
<ul> <li>Germicidal UV Lamp</li> <li>LIPS (5KVA) or a corresponding KVA as per</li> </ul>	Yes() No() AO()	
requirement of the BSC		
Lot 5. Ductless Fumehood with standard accessories		
Php 250,000.00		
QTY: 1 unit	BRAND/MODEL:	
Air Velocity: in range of 0.3~0.8m/s	Yes() No() A.O()	
Noise: ≤60dB	Yes() No() A.O()	
Other Features:		
Built-in centrifugal blowers with adjustable speed		

<ul> <li>LED Lamp and UV Lamp for decontamination</li> <li>Waterproof Socket</li> <li>Materials:         <ul> <li>Motorized, toughened glass, anti-UV Front Window</li> <li>Cold-rolled steel with anti-bacteria powder coating Exterior Body</li> <li>Chemical resistant work table</li> <li>Waterproof socket</li> </ul> </li> <li>Inclusions:         <ul> <li>Standard Accessories</li> <li>UPS (5KVA) or a corresponding KVA as per requirement</li> </ul> </li> </ul>	Yes ()       No ()       A.O ()         Yes ()       No ()       A.O ()
Lot 6. Hotplate Magnetic Stirrer	
Php 55,000.00	
QTY: 1 unit	BRAND/MODEL:
<ul> <li>Feature: <ul> <li>Adjustable programmable speed</li> <li>Adjustable heat control</li> <li>Fixed safety circuit</li> <li>LED Display for temperature</li> <li>Ceramic set-up plate material</li> <li>Protection class according to DIN EN 60529 IP 21</li> </ul> </li> <li>Speed range: 100 - 1500 rpm or higher</li> <li>Stirring bar length: max. 80 mm</li> <li>Heating temperature range: 50 - 500 °C or higher</li> <li>Permissible ambient temperature: 5 - 40 °C</li> <li>Permissible relative humidity: at least 80 %</li> </ul>	Yes() No() A.O() Yes() No() A.O()
Lot 7. Moisture Analyzer	
Php 115,000.00	
QTY: 1 unit	BRAND/MODEL:
Maximum Capacity: 110g or higher Readability: 1.0 mg (0.001g) /0.01% MC Repeatability: 0.15% (2g sample) 0.05% (10g sample) Heating technology: Halogen Lamp Feature: • Switch off: Fully Automatic, Timed, Free • Programmable Temperature range: 50-200°C (1°C increments)	Yes() No() A.O() Yes() No() A.O() Yes() No() A.O() Yes() No() A.O() Yes() No() A.O() Yes() No() A.O() Yes() No() A.O()

Display: LCD Backlit	Yes() No() A.O()
Display functions: User guidance, progress indicator	Yes() No() A.O()
Connectivity: RS232	Yes ( ) No ( ) A.O ( )
Lot 8. pH meter with HBM sensor	
Php 38,500.00	
QTY: 1 unit	BRAND/MODEL:
Feature:       • Halogen lamp/HBM sensor         • LCD/LED Display         • Aluminum shell/Stainless steel chamber         Max. Capacity: 110g         Readability: 0.01g         Pan size: 90mm         Heating source: Halogen Lamp         Temperature Range: 40°C - 199°C         Communication/Connectivity: RS232         Accuracy: 0.01g         Power supply: 220V	Yes()       No()       A.O()         Yes()       No()       A.O()
Lot 9. Keingerated Centriluge	
Php 650,000.00	
QTY: 1 unit	BRAND/MODEL:
<ul> <li>Speed: RCF at least 200 - 5000 x g RCF/RPM adjustable</li> <li>Capacity: <ul> <li>36-56 x 15 ml conical tubes</li> <li>16-28 x 50 ml conical tubes</li> </ul> </li> </ul>	Yes() No() A.O() Yes() No() A.O() Yes() No() A.O()

<ul> <li>Adapter for 15ml conical tube x 4 or 50ml conical tube x 4</li> <li>UPS (5KVA) or a corresponding KVA as per requirement</li> <li>Steel table stand</li> </ul>	Yes() No() A.O() Yes() No() A.O() Yes() No() A.O()	
Lot 10. Autoclave		
Php 350,000.00		
QTY: 1 unit	BRAND/MODEL:	
<b>Temperature (Max. press.):</b> in range between 100°C-140°C (0.24 - 0.28 MPa)	Yes() No() A.O()	
<ul> <li>Feature:</li> <li>Stainless steel material body</li> <li>LED Microprocessor programmable control</li> <li>Safety device:</li> </ul>	Yes() No() A.O() Yes() No() A.O()	
<ul> <li>Lid interlock</li> <li>Lid opening/closing detection</li> <li>Water lack prevention</li> <li>Over temperature prevention</li> <li>Over pressure prevention</li> <li>Sensor breakage detection</li> <li>Memory backup</li> <li>Leakage breaker</li> <li>Pressure safety valve</li> <li>Vacuum pump protection circuit</li> </ul>	Yes() No() A.O() Yes() No() A.O()	
<ul> <li>2 sets of Safety gloves</li> <li>UPS (5KVA) or a corresponding KVA as per requirement</li> </ul>	Yes() No() A.O() Yes() No() A.O()	
Lot 11. Top-loading Balance		
Php 75,000.00		
QTY: 1 unit	BRAND/MODEL:	
Capacity x Readability: 5200 g x 0.1 g or higher Response Time (average): 1.5 seconds or lower Selectable Weight Units: g, kg, ct, lb, oz, ozt, tlh, tls, tlt, Gn, dwt, mg, /lb, tlc, mom, K, tol, bat, and MS.	Yes() No() A.O() Yes() No() A.O() Yes() No() A.O()	
<ul> <li>Programmable</li> <li>LED or LCD with backlit display</li> <li>Inclusions:         <ul> <li>Standard Equipment</li> </ul> </li> </ul>	Yes() No() A.O() Yes() No() A.O()	
AC Adapter	Yes() No() A.O()	

Lot 12. Analytical Balance		
Php 100,000.00		
QTY: 1 unit	BRAND/MODEL:	
Selectable Weight Units: Carat, Custom, Grain, Gram, Hong Kong Tael, Kilogram, Mesghal, Milligram, Momme, Newton, Ounce, Ounce Troy, Pennyweight, Pound, Singapore Tael, Taiwan Tael, Tical, Tola	Yes() No() A.O()	
<ul> <li>LED or LCD with Backlight display</li> <li>Metal base with plastic top housing and removable stainless steel pan</li> <li>Glass draft shield</li> </ul>	Yes() No() A.O() Yes() No() A.O() Yes() No() A.O() Yes() No() A.O()	
<ul> <li>Integrated weigh-below-hook</li> <li>Security bracket</li> <li>Calibration lock and in-use cover</li> </ul>	Yes() No() A.O() Yes() No() A.O() Yes() No() A.O()	
<ul><li>Standard Equipment</li><li>AC Adapter</li></ul>	Yes() No() A.O() Yes() No() A.O()	
Lot 13. Waterbath		
Php 95,000.00		
QTY: 1 unit	BRAND/MODEL:	
Tank Capacity: 10-20 Liters Material: with Body made of Stainless steel 304 grade, corrosion resistant	Yes() No() A.O() Yes() No() A.O()	
Additional Features: • digital display (LED) of set and actual temperature (0.1%C resolution) and of (remaining) programmed time	Yes() No() A.O()	
<ul> <li>LEDs for indication of programmed status</li> <li>Voltage: 120V/230V kV: 0.35/0.35</li> </ul>	Yes() No() A.O()	
Inclusion: • Cover	Yes() No() A.O() Yes() No() A.O()	
UPS corresponding to KVA as per requirement	Yes ( ) No ( ) A.O ( )	
Lot 14. Air Forced Oven		
Php 100,000.00		
QTY: 1 unit	BRAND/MODEL:	
Capacity: 50-120 Liters	Yes() No() A.O()	

Temperature Range: 50-200°C or higher	Yes() No() A.O()
Temperature Precision: 0.1°C	Yes() No() A.O()
Temperature Fluctuation: ±1°C	Yes() No() A.O()
Timing Range: 1-9999min	Yes() No() A.O()
No. of Shelves : at least 2 pcs	Yes() No() A.O()
Material: Fully insulated stainless-steel door	Yes() No() A.O()
Other features:	
<ul> <li>Microprocessor PID with twin temperature display ("Actual" and "Set Point" displays)</li> <li>With air circulation exchange</li> </ul>	Yes() No() A.O() Yes() No() A.O()
<b>Power Supply:</b> 110-240 VAC, 50/60Hz	
Inclusions:	Tes() 140() A.O()
<ul> <li>2 sets of safety gloves</li> <li>UPS corresponding to KVA as per requirement</li> </ul>	Yes() No() A.O() Yes() No() A.O()
Lot 15. Microcentrifuge	
Php 175,000.00	
QTY: 1 unit	BRAND/MODEL:
Max. Capacity: 24 x 1.5 - 2.0 ml or higher	Yes() No() A.O()
Max. RPM / RCF: 10,000 - 14,000 / 15000 - 18,845	Yes() No() A.O()
Max. Spin Column Kits: at least 18	Yes() No() A.O()
Max. Pediatric Tubes: at least 12	Yes() No() AO()
Feature: Temperature Control Ambient	res() NO() A.O()
Lot 16. Eyewash and Shower Combination with Pedal	
Php 30,000.00	
QTY: 1 piece	BRAND/MODEL:
ABS coating except for Shower Head	Yes() No() A.O()
Shower Head: ABS PLASTIC	Yes() No() A.O()
Material: Stainless steel	Yes() No() A.O()
Water Inlet Size: RC 1 ¼ inch thread	Yes() No() A.O()
Water Outlet Size: RC 1 ¼ inch thread	Yes() NO() A.O()
Design pressure: at least 0.8Mpa	$\frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}$
Working Pressure: 0.2Mpa-0.4Mpa or higher	Yes() No() AO()
Water Medium: Health Standard Water	Yes() No() A.O()
Lot 17. Laboratory table with sink	
Php 400,000.00	

QTY: 1 unit	BRAND/MODEL:
Type: Laboratory Furniture Material: Metal Size: Custom-made, L*1500*850mm Metal Type: Galvanized Steel Structure: C-frame Steel & Wood Structure Worktop: Acid/Chemical resistant 15 mm/19mm/20mm thickness Epoxy Resin/Marble/Ceramic Cabinet: The cabinet is made of 18mm thickness good quality MDF melamine chipboard and all joints are water proofed by	Yes()       No()       A.O()         Yes()       No()       A.O()
<ul> <li>2mm thickness good quality PVC.</li> <li>Reagent Shelf:         <ul> <li>Modules column of reagent shelf is made of cold-rolled steel coating with epoxy resin powder.</li> <li>Shelves are made of 12mm thickness reinforced glass</li> </ul> </li> <li>Accessories:</li> </ul>	Yes() No() A.O() Yes() No() A.O()
<ul> <li>Hinge of Cabinet: 304 stainless steels</li> <li>Slide Rail of Drawer: three sections slide rail</li> <li>Handle: Integrated with door and drawer/Plastic/304 stainless steel</li> <li>Screw: stainless steel screw</li> <li>Faucet: Brass body with ceramic valve core coated with epoxy resin powder.</li> <li>Sink: PP Sink/Ceramic Sink/Epoxy Resin Sink with tube drying stand</li> <li>Socket: Electric Sockets</li> <li>With provision for Gas Line</li> </ul>	Yes() No() A.O() Yes() No() A.O()
Lot 18. Simple Inverted Microscope	
Php 350,000.00	
QTY: 1 piece	BRAND/MODEL:

Optical system: Infinity corrected optics	Yes() No() A.O()
Observation tube: Binocular head, 360° rotable	Yes() No() A.O()
<b>Eyepiece(s):</b> 10X, with pointer, lockable	Yes() No() A.O()
<b>Revolving nosepiece:</b> Quintuple nosepiece, rotating and locking at every objective.	Yes ( ) No ( ) A.O ( )
<b>Objectives:</b> 4X, 10X, 20X, 40X	Yes() No() A.O()
Stage: Plain stage with metal and glass stage inserts	Yes() No() A.O()
Condenser: Focusable and center able condenser	Yes() No() A.O()
Focus mechanism: Coaxial coarse and fine focusing system	Yes() No() A.O()
Illumination: LED light source	Yes() No() AO()
Transformer: Internal	
Power supply: 100-240V (CE)	Yes() No() A.O()
Accessories included:	
Dust cover	Yes() No() AO()
Power cord	Yes() No() AO()
Centering telescope     Centering keys	Yes() No() A.O()
Centering keys     Spare fuse	Yes() No() A.O()
Camera port support	Yes () No () A.O ()
UPS corresponding to KVA as per requirement	Yes() No() A.O()
	Yes ( ) No ( ) A.O ( )
Lot 19. Laboratory Incubator	
Php 150,000.00	
Php 150,000.00 QTY: 1 unit	BRAND/MODEL:
Php 150,000.00 QTY: 1 unit Capacity: at least 50 Liters or higher	BRAND/MODEL: Yes() No() A.O()
Php 150,000.00         QTY: 1 unit         Capacity: at least 50 Liters or higher         Temperature range: Minimum 5°C above ambient         temperature, max 100°C	BRAND/MODEL:           Yes ( )         No ( )         A.O ( )           Yes ( )         No ( )         A.O ( )
Php 150,000.00         QTY: 1 unit         Capacity: at least 50 Liters or higher         Temperature range: Minimum 5°C above ambient         temperature, max 100°C         Temperature Fluctuation: T +/- 0.1-0.3C	BRAND/MODEL:       Yes() No() A.O()       Yes() No() A.O()       Yes() No() A.O()
Php 150,000.00         QTY: 1 unit         Capacity: at least 50 Liters or higher         Temperature range: Minimum 5°C above ambient         temperature, max 100°C         Temperature Fluctuation: T +/- 0.1-0.3C         Material:	BRAND/MODEL:       Yes ( )     No ( )
Php 150,000.00         QTY: 1 unit         Capacity: at least 50 Liters or higher         Temperature range: Minimum 5°C above ambient         temperature, max 100°C         Temperature Fluctuation: T +/- 0.1-0.3C         Material:         • Fully insulated stainless-steel door with 2-point locking	BRAND/MODEL:         Yes() No() A.O()
Php 150,000.00         QTY: 1 unit         Capacity: at least 50 Liters or higher         Temperature range: Minimum 5°C above ambient         temperature, max 100°C         Temperature Fluctuation: T +/- 0.1-0.3C         Material:         • Fully insulated stainless-steel door with 2-point locking (compression door lock)	BRAND/MODEL:         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )
Php 150,000.00         QTY: 1 unit         Capacity: at least 50 Liters or higher         Temperature range: Minimum 5°C above ambient         temperature, max 100°C         Temperature Fluctuation: T +/- 0.1-0.3C         Material:         • Fully insulated stainless-steel door with 2-point locking (compression door lock)         • Inner glass door rear zinc-plated steel	BRAND/MODEL:         Yes () No () A.O ()
Php 150,000.00         QTY: 1 unit         Capacity: at least 50 Liters or higher         Temperature range: Minimum 5°C above ambient         temperature, max 100°C         Temperature Fluctuation: T +/- 0.1-0.3C         Material:         • Fully insulated stainless-steel door with 2-point locking (compression door lock)         • Inner glass door rear zinc-plated steel         Features:	BRAND/MODEL:         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )         Yes ( )       No ( )       A.O ( )
Php 150,000.00         QTY: 1 unit         Capacity: at least 50 Liters or higher         Temperature range: Minimum 5°C above ambient         temperature, max 100°C         Temperature Fluctuation: T +/- 0.1-0.3C         Material:         • Fully insulated stainless-steel door with 2-point locking (compression door lock)         • Inner glass door rear zinc-plated steel         Features:         • 2-point door seal         • Inner glass door for viewing (observing of samples)	BRAND/MODEL:         Yes () No () A.O ()
Php 150,000.00         QTY: 1 unit         Capacity: at least 50 Liters or higher         Temperature range: Minimum 5°C above ambient         temperature, max 100°C         Temperature Fluctuation: T +/- 0.1-0.3C         Material:         • Fully insulated stainless-steel door with 2-point locking (compression door lock)         • Inner glass door rear zinc-plated steel         Features:         • 2-point door seal         • Inner glass door for viewing/observing of samples         • Microprocessor PID with twin temperature display ("Actual" and "Set Point" displays)	BRAND/MODEL:         Yes () No () A.O ()
Php 150,000.00         QTY: 1 unit         Capacity: at least 50 Liters or higher         Temperature range: Minimum 5°C above ambient         temperature, max 100°C         Temperature Fluctuation: T +/- 0.1-0.3C         Material:         • Fully insulated stainless-steel door with 2-point locking (compression door lock)         • Inner glass door rear zinc-plated steel         Features:         • 2-point door seal         • Inner glass door for viewing/observing of samples         • Microprocessor PID with twin temperature display ("Actual" and "Set Point" displays)         Power Supply: 110-240 VAC, 50/60Hz	BRAND/MODEL:         Yes () No () A.O ()
Php 150,000.00         QTY: 1 unit         Capacity: at least 50 Liters or higher         Temperature range: Minimum 5°C above ambient         temperature, max 100°C         Temperature Fluctuation: T +/- 0.1-0.3C         Material:         • Fully insulated stainless-steel door with 2-point locking (compression door lock)         • Inner glass door rear zinc-plated steel         Features:         • 2-point door seal         • Inner glass door for viewing/observing of samples         • Microprocessor PID with twin temperature display ("Actual" and "Set Point" displays)         Power Supply: 110-240 VAC, 50/60Hz         Inclusion: UPS corresponding to KVA as per requirement	BRAND/MODEL:         Yes () No () A.O ()         Yes () No () A.O ()
Php 150,000.00         QTY: 1 unit         Capacity: at least 50 Liters or higher         Temperature range: Minimum 5°C above ambient         temperature, max 100°C         Temperature Fluctuation: T +/- 0.1-0.3C         Material:         • Fully insulated stainless-steel door with 2-point locking (compression door lock)         • Inner glass door rear zinc-plated steel         Features:         • 2-point door seal         • Inner glass door for viewing/observing of samples         • Microprocessor PID with twin temperature display ("Actual" and "Set Point" displays)         Power Supply: 110-240 VAC, 50/60Hz         Inclusion: UPS corresponding to KVA as per requirement	BRAND/MODEL:         Yes () No () A.O ()         Yes () No () A.O ()

Php 750,000.00		
QTY: 1 unit	BRAND/MODEL:	
<ul> <li>Type: <ul> <li>Compact</li> <li>Benchtop</li> <li>Laboratory scale freeze dryers for research applications</li> </ul> </li> <li>Feature: <ul> <li>With automatic vacuum control for faster freeze drying with reproducible results</li> <li>Touchscreen programming with large backlit LCD/LED readout</li> <li>Auto start-up and shutdown routines programmable</li> <li>Automatic defrosting function</li> <li>Stainless steel condenser</li> <li>Side mounted vacuum and drain connections with valves</li> </ul> </li> </ul>	Yes() No() A.O() Yes() No() A.O()	
TERMS AND CONDITIONS	res() NO() A.O()	
<ul> <li>Terms of Conditions:</li> <li>1. The Supplier/s shall inspect the site premises to consider all the conditions that may directly or indirectly affects the works, measure any existing work, and verify all the given dimensions. A Certificate of Site Inspection shall be issued by the PITAHC End-User and the said certificate shall be submitted as part of the technical proposal.</li> <li>2. The Supplier/s shall ensure that all equipment must be brand new, in good condition and are properly calibrated upon turn over. A Certificate of Calibration shall be submitted to PITAHC End-user as part of the requirements.</li> <li>3. The Supplier/s shall provide a guarantee letter from the manufacturer starting the availability of supplies, spare parts and accessories for the next five (5) years.</li> <li>4. The Supplier/s shall provide technical assistance of a trained service engineer 24/7 in the event of equipment breakdown or malfunction during the warranty period, the supplier shall provide a functioning service or replacement unit until such time that the equipment has been repaired.</li> <li>6. All equipment except for Micro Pipettors, shall have at least three (3) years warranty on parts and free service preventive maintenance and calibration during warranty period. The warranty period shall commence from the date</li> </ul>		

	7.	of acceptance by PITAHC after installation, testing and commissioning. The Supplier/s shall provide documents on the equipment Installation Qualification (IQ), Operational Qualification (OQ) and Performance Qualification (PQ). These documents shall be submitted to PITAHC as part of the deliverables.	
	l. We Fo the 1.	INSTALLATION, TESTING, AND COMMISSIONING ORKS ritems that require installation, testing, and commissioning, Winning Supplier/s shall: Provide watchmen to guard the site and its premises throughout the duration of the project including during work suspension or time extensions;	
	2.	Provide site protections, board up, and signs for the installation;	
	3.	Replace the work damaged due to failure to provide protection, without cost to PITAHC;	
	4.	Leave the premises clean, neat and orderly, and remove stains, spots, blemishes and other dirt from the finished work;	
	5.	<ul> <li>Ensure proper storage of materials by:</li> <li>a. Stacking of all tools and materials in a stable and self-supporting manner, and removing all nails and sharp objects on all reusable lumber before storage; and</li> </ul>	
		<ul> <li>Removing dust-producing materials from the project site as directed by PITAHC;</li> </ul>	
	6.	Keep all access ways including stairways and passageways, free from obstructions and installation materials at all times;	
	7.	Taking due care to protect the existing structures which may be affected by the work to be implemented;	
	8.	Thoroughly cleaning the project site including all areas disturbed by installation, testing, and commissioning activities;	
	9.	Ensure that the workforce shall consist of skilled and competent workers who regularly engage or specialize in their respective fields of work (Must be in service or line of business for at least 3 years);	
I	10	Ensure that all installations shall conform to the provisions	

of the National Building Code of the Philippines (PD 1096), Electrical Engineering Law (RA 7920), Mechanical Engineering Law (RA 5336), Plumbing Code (RA 1378), Fire Code (RA 9514), and other laws covering ordinances and regulations;	
11. Any additional expense incurred during installation must be shouldered by the Supplier/s. The Supplier/s shall include extra installation costs it may incur in their Price Bid Form;	
12. Constantly coordinate between the PITAHC End-user to ensure conformity of the requirements;	
13. Ensure that the standard safety procedures, minimum public health standards prescribed by the Department of Health (DOH), and such related protocols or guidelines issued by the appropriate government agencies shall be applied and complied with;	
14. Ensure that the workers are in proper safety attire/uniform and shall be worn at all times while in the building premises;	
15. Ensure the safety of its personnel as well as the PITAHC personnel for the duration of the installation, and that first aid kits are available at the site;	
16. In the event that a personnel/worker manifests any symptom of COVID-19, he/she shall be prohibited from entering the PITAHC building, and shall be replaced by another personnel/worker;	
<ul> <li>17. The following are prohibited acts shall be observed by the Supplier/s and its workers when they are inside the PITAHC building, premises, work and storage areas for the duration/delivery of the project/item/s: <ul> <li>a. Smoking;</li> <li>b. Drinking alcoholic beverages;</li> <li>c. Using illegel drugs and other prohibited</li> </ul> </li> </ul>	
<ul> <li>c. Using lilegal drugs and other prohibited substances;</li> <li>d. Gambling of any type;</li> <li>e. Carrying items determined by PITAHC as "deadly instruments";</li> </ul>	
<ul> <li>f. Sleeping in the project site;</li> <li>g. Having meals and/or snacks within the project work areas; and</li> <li>h. Using the elevator unnecessarily except when transporting installation materials to the project areas or in case of emergency.</li> </ul>	

18. Coordinate to PITAHC the various parts of the trades of work including any approved sub-contracted work;	
19. Employ competent professionals and laborers to oversee the installation work.	
II. SUBMITTALS (IF APPLICABLE)	
The Supplier/s shall be required to submit:	
1. A list of materials needed for installation, testing, and commissioning;	
2. The catalogue or manual from the manufacturer and/or dealer, indicating the specifications of items installed, tested, and commissioned;	
3. The following for approval by the PITAHC End User:	
a) Shop drawings for all work requiring fabrication; and b) Mock-ups of fabricated item.	
III. CLOSE-OUT (IF APPLICABLE)	
The Supplier/s shall submit as-built plans of items installed, tested, and commissioned, duly signed and sealed by the concerned trade professionals in three (3) sets of reproducible A3 size copies. The electronic copy of the as-built plans shall also be submitted.	
IV. LAYOUT, MARKINGS AND ELEVATIONS (IF APPLICABLE)	
The Supplier/s shall:	
1. Indicate the layout of electrical, mechanical, ventilation, and plumbing connections; and	
2. Establish floor and wall elevations with corresponding markings for approval by the PITAHC End User before any fabricated items are installed.	
V. FORMWORKS AND SCAFFOLDING (IF APPLICABLE)	
The Supplier/s shall supply and install sufficient forms, scaffoldings, bracings and staging, if applicable.	

VI. ARCHITECTURAL WORKS (IF APPLICABLE)	
Whenever applicable, for items that require installation, testing, and commissioning, the Supplier/s is/are responsible for:	
A. PAINTING WORKS	
<ol> <li>Painting of all surfaces - wood, plastered walls and soffits, cement boards - as indicated in the plans;</li> <li>Application of skim coat to all masonry and concrete surfaces to be painted;</li> <li>Application of two-coat red lead primer to all steel and metal surfaces;</li> <li>Color selection of surfaces shall be approved by the PITAHC End User prior to painting; and</li> <li>All painting works in accordance with the plans and specifications.</li> </ol>	
B. SPECIAL CONSTRUCTION	
Construction of all steel and aluminum works in accordance with the best practices of the steel and aluminum industry.	
VII. ELECTRICAL, MECHANICAL, VENTILATION, AND PLUMBING WORKS (IF APPLICABLE)	
For items that require installation, testing, and commissioning, the Supplier/s shall:	
<ol> <li>Provide and tap the system conforming to the aforementioned provisions;</li> <li>Follow the plans, specifications and scope of works to complete the project and render it to be operational;</li> </ol>	
<ol> <li>Furthan and install other supporting indentals and equipment deemed necessary to complete the project; and</li> <li>Conduct testing and commissioning for the air- conditioning units, exhaust fans, and smoke data store</li> </ol>	
detectors.	
VIII. CONSTRUCTION CLEARANCES (IF APPLICABLE)	
The Supplier/s shall secure from the PITAHC End user the following clearances prior to commencing the requisite work for items that require installation, testing, and commissioning:	
<ol> <li>Plumbing fixtures, accessory installation clearance         <ul> <li>verification of location and adherence to design specifications of plumbing roughing-ins;</li> </ul> </li> </ol>	

2.	Electrical fixture, device, equipment installation clearance – verification of location and adherence to design specifications of electrical roughing-ins; and	
3.	Mechanical fixture, device, equipment installation clearance – verification of location and adherence to design specifications of mechanical roughing- ins.	

[Bidders must state here either "Comply" or "Not Comply" against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of "Comply" or "Not Comply" must be supported by evidence in a Bidders Bid and crossreferenced to that evidence. Evidence shall be in the form of manufacturer's un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidder's statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the applicable laws and issuances.]

**Conforme:** 

\_\_\_\_\_

Company Name

Date

Name of the Representative and signature

# Section VI. Schedule of Requirements

The delivery schedule expressed as weeks/months stipulates hereafter a delivery date which is the date of delivery to the project site.

Lot(s)	Description	Quanti	Delivered,
		ty	Weeks/Months
	Laboratory Equipment for the U	ltra-High	
	Performance Liquid Chromatography (	UHPLC)	Within One Hundred
		1 4	(100) Calendar Days
	Oltra-High Performance Liquid	1 unit	and signing of contract
	Solvent Filtration System	1 unit	from PITAHC
1	Water Durification System	1 unit	
·	Potomy Even onoton with Circulating Chiller	1 unit	
	Kotary Evaporator with Circulating Chiller		
	Vortex Mixer	1 unit	
	Sonicator	I unit	
	Various Laboratory Equipment		
2	Upright Ultra Low Freezer (-80°C)	1 unit	
3	Single-Channel Micro Pipettors with Carousel	2 sets	Within One Hundred
4	Biosafety Cabinet	1 unit	(100) Calendar Days
5	Ductless Fumehood with standard accessories	1 unit	upon receipt of the PO
6	Hotplate Magnetic Stirrer	1 unit	and signing of contract
7	Moisture Analyzer	1 unit	from PITAHC
8	pH meter with HBM sensor	1 unit	
9	Refrigerated Centrifuge	1 unit	
10	Autoclave	1 unit	
11	Top-loading Balance	1 unit	
12	Analytical Balance	1 unit	
13	Waterbath	1 unit	
14	Air Forced Oven	1 unit	
15	Microcentrifuge	1 unit	
16	Eyewash and Shower Combination with Pedal	1 piece	
17	Laboratory table with sink	1 unit	
18	Simple Inverted Microscope	1 piece	
19	Laboratory Incubator	1 unit	
20	Lyophilizer	1 unit	

Delivery Site: East Avenue Medical Center Compound PITAHC Bldg. Matapang St. Brgy. Central, Quezon City

## **Conforme:**

Name of the Representative And Signature Company Name

Date