



Republic of the Philippines

## DEPARTMENT OF SCIENCE AND TECHNOLOGY

Philippine Science High School – Zamboanga Peninsula Region Campus  
Cogon, Dipolog City



October 24, 2020

**Contract Identification Number** : 020-10-0289  
**Name of Contract** : TECHNICAL AND SCIENTIFIC EQUIPMENT (REBID)  
**Location of the Contract/Project** : Cogon, Dipolog City

---

### Supplemental/Bid Bulletin

#### Addendum No. 3

This Addendum No. 3 is issued to modify or amend an item in the Bidding Documents. This shall form an integral part of the Bidding Documents, to wit:

Particulars	References	Amendment/Addendum
1. Change of address from the school's temporary site to the school's permanent site	Supplemental/Bid Bulletin No. 1 and Supplemental/Bid Bulletin No. 2	<b>From:</b>  Dipolog Sports Complex, Olingan, Dipolog City  <b>To:</b>  Cogon, Dipolog City
2. Technical Specifications of the Project	TERMS OF REFERENCE FOR THE PROCUREMENT OF TECHNICAL AND SCIENTIFIC EQUIPMENT (SUPPLY, DELIVERY, INSTALLATION, AND TRAINING)	Texts highlighted in <b>red color</b> are addendum/modification.  Texts highlighted in <b>blue color</b> are no longer part of the specifications.  cf attached table

For guidance and information to all concerned.

**(Sgd). RRYAM A. JARALVE**  
BAC Chairperson

# ENCLOSURE No. 1

LOT 1				
Item No.	Quantity	Unit	ITEM DESCRIPTION	ITEM DESCRIPTION
1	1	Set	<p><b>Laboratory Furniture</b></p> <p><b>Two (2) Laboratory Rooms</b></p> <p>Specifications per Laboratory Room</p> <ul style="list-style-type: none"> <li>Six (6) Rectangular working tables with four (4) electrical outlets, water, and gas outlets, end-sink with faucet and rack dryer. <ul style="list-style-type: none"> <li>2m x 1.2m x 0.90m</li> <li>Phenolic Resin Top Typical Section</li> <li>Table Thickness: 20mm or better</li> <li>Chemical Resistant</li> <li>Scratch-resistant</li> <li>Safe to moisture</li> <li>UL Classified</li> <li>Fire-rated</li> <li>Anti-static material</li> <li>SEFA 8-1998 Chemical Resistant Testing Greengard Certified</li> <li>Phenolic Resin Technical Data on chemical resistance to acids, bases, salts halogens, organic chemicals, solvents and biological stains under 24 hours test with corresponding test result based on SEFA as well as the main reagents from the PSI or any American and European Testing Laboratory.</li> <li>Counter top test on material properties with corresponding test method on test result under En, STM and ISO</li> <li>With laminated finished based cabinet with breakdown as:</li> </ul> </li> </ul>	<p><b>Laboratory Furniture</b></p> <p><b>Two (2) Laboratory Rooms</b></p> <p>Specifications per Laboratory Room</p> <ul style="list-style-type: none"> <li>Six (6) Rectangular working tables with four (4) electrical outlets, water, and gas outlets, end-sink with faucet and rack dryer. <ul style="list-style-type: none"> <li>2m x 1.2m x 0.90m</li> <li>Phenolic Resin Top Typical Section</li> <li>Table Thickness: 20mm or better</li> <li>Chemical Resistant</li> <li>Scratch-resistant</li> <li>Safe to moisture</li> <li>UL Classified</li> <li>Fire-rated</li> <li>Anti-static material</li> <li>(SEFA 8 certification)</li> <li>Greenguard Certified</li> <li>ISO 14001 certified</li> <li>Phenolic Resin Technical Data on chemical resistance to acids, bases, salts halogens, organic chemicals, solvents and biological stains under 24 hours test with corresponding test result based on SEFA as well as the main reagents from the PSI or any American and European Testing Laboratory.</li> <li>With laminated finished based cabinet with breakdown as: <ul style="list-style-type: none"> <li>Dimension: 4800mm-length</li> <li>With powder coated finish metal base</li> </ul> </li> </ul> </li> </ul>

			<ul style="list-style-type: none"> <li>▪ Dimension: 4800mm-length</li> <li>▪ With powder coated finish metal base frame and legs with adjustable leveler.</li> <li>▪ Three (3) units hanging type one swing outdoor cabinet in hand grab type handle and adjustable shelf.</li> <li>▪ Two (2) units open type leg rooms</li> <li>▪ Two (2) units swing outdoors and fixed panel</li> <li>▪ Four (4) units two gang electrical outlets</li> </ul> <ul style="list-style-type: none"> <li>• One (1) Ducted Fume Hood with Vertical Sash <ul style="list-style-type: none"> <li>○ 2m x 0.8m x 2m (WxDxH) or better</li> <li>○ With by-pass grill</li> <li>○ Sash work height 500mm</li> <li>○ With airfoil</li> <li>○ With storage cabinet</li> <li>○ With controller for airflow and sash alarm</li> <li>○ With baffles</li> <li>○ With electrical receptacles</li> <li>○ With the safety valve for water and gas</li> <li>○ Chamber type duct</li> <li>○ With power supply, socket, fan switch, light switch</li> </ul> </li> </ul> <ul style="list-style-type: none"> <li>• 1 unit Eye washer</li> <li>• 1 unit Laboratory Shower</li> <li>• 1 unit Demonstration Table with, electrical outlet, water, and gas outlets, end-sink with faucet and rack dryer.</li> </ul>	<p>frame and legs with adjustable leveler.</p> <ul style="list-style-type: none"> <li>▪ Three (3) units hanging type one swing outdoor cabinet in hand grab type handle and adjustable shelf.</li> <li>▪ Two (2) units open type leg rooms</li> <li>▪ Two (2) units swing outdoors and fixed panel</li> <li>▪ Four (4) units two gang electrical outlets</li> </ul> <ul style="list-style-type: none"> <li>• One (1) Ducted Fume Hood with Vertical Sash <ul style="list-style-type: none"> <li>○ Within 1.5-2m x 0.8m x 2m (WxDxH) or better</li> <li>○ With by-pass grill</li> <li>○ Sash work height 500mm</li> <li>○ With airfoil</li> <li>○ With storage cabinet</li> <li>○ With controller for airflow and sash alarm</li> <li>○ With baffles</li> <li>○ With electrical receptacles</li> <li>○ With the safety valve for water and gas</li> <li>○ Chamber type duct</li> <li>○ With power supply, socket, fan switch, light switch</li> <li>○ Ducting up to roof top of 3-floor building</li> </ul> </li> </ul> <ul style="list-style-type: none"> <li>• 1-unit Eye washer</li> <li>• 1-unit Laboratory Shower</li> <li>• 1-unit Demonstration Table with, electrical outlet, water, and gas outlets, end-sink with faucet and rack dryer.</li> </ul>
--	--	--	--	--

		<ul style="list-style-type: none"> <li>○ 2m x 1.2m x 0.90m</li> <li>• Side-tables with cabinets and lavatory</li> <li>• 4 Display Cabinets (2m x 1m x 0.5m)</li> <li>• 30 pcs Laboratory Stool</li> <li>• 1 unit tool case cabinet</li> <li>• 1 unit First-aid Cabinet</li> <li>• 1 unit Fire Blanket</li> <li>• 1 unit Chemical Spill Kit</li> <li>• 1 unit compressed gas holder</li> </ul>	<ul style="list-style-type: none"> <li>○ 2m x 1.2m x 0.90m</li> <li>• Side-tables with <b>base</b> cabinets and lavatory (<b>Please refer to floor plan</b>)</li> <li>• 4 Display Cabinets (2m x 1m x 0.5m)</li> <li>• 30 pcs Laboratory Stool <ul style="list-style-type: none"> <li>○ <b>Circular seat diameter – within 13"-15"</b></li> <li>○ <b>Diameter foot ring – within 16"-18"</b></li> <li>○ <b>Made from 18-gauge steel</b></li> <li>○ <b>Height within 24"-30"</b></li> </ul> </li> <li>• <b>1 unit tool case cabinet</b></li> <li>• 1 unit First-aid Cabinet (<b>5"x16"x27"</b>) <ul style="list-style-type: none"> <li>○ <b>Glass Cover</b></li> </ul> </li> <li>• 1 unit Fire Blanket</li> <li>• 1 unit Chemical Spill Kit <ul style="list-style-type: none"> <li>○ <b>Absorbent materials, such pillows, pads</b></li> <li>○ <b>Neutralizing materials (sodium bicarbonate for acids and citric acid for bases)</b></li> <li>○ <b>PPE (gloves and splash goggles)</b></li> </ul> </li> <li>• 1 unit compressed gas holder</li> </ul>
		<p><b>One (1) Chemical preparation room</b></p> <ul style="list-style-type: none"> <li>• Side table with lavatory <ul style="list-style-type: none"> <li>○ Phenolic Resin Top Typical Section</li> <li>○ Table Thickness: 20mm or better</li> <li>○ Chemical Resistant</li> <li>○ Scratch-resistant</li> <li>○ Safe to moisture</li> <li>○ UL Classified</li> <li>○ Fire-rated</li> <li>○ Anti-static material</li> <li>○ SEFA 8-1998 Chemical Resistant Testing Greengard Certified</li> <li>○ Phenolic Resin Technical Data on chemical resistance to acids, bases, salts halogens, organic chemicals, solvents and</li> </ul> </li> </ul>	<p><b>One (1) Chemical preparation and Laboratory Stockroom</b></p> <ul style="list-style-type: none"> <li>• Side table with lavatory <ul style="list-style-type: none"> <li>○ Phenolic Resin Top Typical Section</li> <li>○ Table Thickness: 20mm or better</li> <li>○ Chemical Resistant</li> <li>○ Scratch-resistant</li> <li>○ Safe to moisture</li> <li>○ UL Classified</li> <li>○ Fire-rated</li> <li>○ Anti-static material</li> <li>○ SEFA 8-1998 (<b>SEFA 8 certification</b>)</li> <li>○ <b>Greengard Certified</b></li> <li>○ <b>ISO 14001 certified</b></li> <li>○ Phenolic Resin Technical Data on chemical resistance to acids, bases, salts halogens, organic chemicals, solvents and</li> </ul> </li> </ul>

			<p>biological stains under 24 hours test with corresponding test result based on SEFA as well as the main reagents from the PSI or any American and European Testing Laboratory.</p> <ul style="list-style-type: none"> <li>○ Countertop test on material properties with corresponding test method on test result under En, STM and ISO</li> </ul> <ul style="list-style-type: none"> <li>• Chemical Reagent Cabinet (2m x 1m x 0.5m) with exhaust piping</li> <li>• Ducted Chemical Fume Hood with vertical sash <ul style="list-style-type: none"> <li>○ 1m x 0.8m x 2m (WxDxH) or better</li> <li>○ With by-pass grill</li> <li>○ Sash work height 500mm</li> <li>○ With airfoil</li> <li>○ With storage cabinet</li> <li>○ With controller for airflow and sash alarm</li> <li>○ With baffles</li> <li>○ With electrical receptacles</li> <li>○ With the safety valve for water and gas</li> <li>○ Chamber type duct</li> <li>○ With power supply, socket, fan switch, light switch</li> </ul> </li> </ul> <p>• Center Table with Reagent Rack</p> <p><b>One (1) Instrumentation Room</b></p> <ul style="list-style-type: none"> <li>• Solid Phenolic Resin Top table with electrical outlet, with drawers and hanging cabinets. <ul style="list-style-type: none"> <li>○ Phenolic Resin Top</li> </ul> </li> </ul>	<p>biological stains under 24 hours test with corresponding test result based on SEFA as well as the main reagents from the PSI or any American and European Testing Laboratory.</p> <ul style="list-style-type: none"> <li>○ Countertop test on material properties with corresponding test method on test result under En, STM and ISO</li> </ul> <ul style="list-style-type: none"> <li>• Chemical Reagent Cabinet (2m x 1m x 0.5m) with exhaust piping</li> <li>• Ducted Chemical Fume Hood with vertical sash <ul style="list-style-type: none"> <li>○ 1.5m-1.8m x 0.8m x 2m (WxDxH) or better</li> <li>○ With by-pass grill</li> <li>○ Sash work height 500mm</li> <li>○ With airfoil</li> <li>○ With storage cabinet</li> <li>○ With controller for airflow and sash alarm</li> <li>○ With baffles</li> <li>○ With electrical receptacles</li> <li>○ With the safety valve for water and gas</li> <li>○ Chamber type duct</li> <li>○ With power supply, socket, fan switch, light switch</li> <li>○ Ducting up to roof top of 3-floor building</li> </ul> </li> <li>• 10 Laboratory Cabinets (2m x 1m x 0.5m)</li> </ul> <p>• Center Table with Reagent Rackx</p> <p><b>One (1) Instrumentation Room</b></p> <ul style="list-style-type: none"> <li>• Solid Phenolic Resin Top table with electrical outlet, with drawers and hanging cabinets. <ul style="list-style-type: none"> <li>○ Phenolic Resin Top</li> </ul> </li> </ul>
--	--	--	--	---

			<p>Typical Section</p> <ul style="list-style-type: none"> <li>○ Table Thickness: 20mm or better</li> <li>○ Chemical Resistant</li> <li>○ Scratch-resistant</li> <li>○ Safe to moisture</li> <li>○ UL Classified</li> <li>○ Fire-rated</li> <li>○ Anti-static material</li> <li>○ SEFA 8-1998 Chemical Resistant Testing Greengard Certified</li> <li>○ Phenolic Resin Technical Data on chemical resistance to acids, bases, salts halogens, organic chemicals, solvents and biological stains under 24 hours test with corresponding test result based on SEFA as well as the main reagents from the PSI or any American and European Testing Laboratory.</li> <li>○ Countertop test on material properties with corresponding test method on test result under En, STM and ISO</li> </ul> <p><b>Service and Warranty</b></p> <ul style="list-style-type: none"> <li>- 1-year warranty on parts and services after commissioning and acceptance.</li> <li>- Provide detailed design layout and drawing based on the above specifications and floor plan.</li> <li>- Complete with necessary installation accessories for immediate operation and start-up</li> <li>- During the warranty period, the supplier must repair or replace any system component on-site at no charge. Labor and travel must be included in the warranty program.</li> <li>- Deliver, uncrate, set into place, make all the final connections and start-up of the laboratory furniture.</li> </ul>	<p>Typical Section</p> <ul style="list-style-type: none"> <li>○ Table Thickness: 20mm or better</li> <li>○ Chemical Resistant</li> <li>○ Scratch-resistant</li> <li>○ Safe to moisture</li> <li>○ UL Classified</li> <li>○ Fire-rated</li> <li>○ Anti-static material</li> <li>○ SEFA 8-1998 (SEFA 8 certification)</li> <li>○ Greenguard Certified</li> <li>○ Phenolic Resin Technical Data on chemical resistance to acids, bases, salts halogens, organic chemicals, solvents and biological stains under 24 hours test with corresponding test result based on SEFA as well as the main reagents from the PSI or any American and European Testing Laboratory.</li> <li>○ Countertop test on material properties with corresponding test method on test result under En, STM and ISO</li> </ul> <p><b>Service and Warranty</b></p> <ul style="list-style-type: none"> <li>- 1-year warranty on parts and services after commissioning and acceptance.</li> <li>- Provide detailed design layout and drawing based on the above specifications and floor plan.</li> <li>- Complete with necessary installation accessories for immediate operation and start-up</li> <li>- During the warranty period, the supplier must repair or replace any system component on-site at no charge. Labor and travel must be included in the warranty program.</li> <li>- Deliver, uncrate, set into place, make all the final connections and start-up of the laboratory furniture.</li> </ul>
--	--	--	--	--

			<p><b>Training</b></p> <ul style="list-style-type: none"> <li>- The training should cover lectures and intensive hands-on operation. Basic and advanced troubleshooting and maintenance including the verification of lab furniture's performance should also be discussed. The training shall be conducted on-site.</li> </ul> <p><b>Documentation</b></p> <ul style="list-style-type: none"> <li>- Authenticated training certificate of Service Personnel from the manufacturer related to the installation, lab furniture maintenance, and troubleshooting.</li> <li>- Manufacturer's certificate of compliance and inspection.</li> <li>- 1 original copy and 1 photocopy of operating and service manuals in English.</li> <li>- Must provide the necessary information and test procedures required to prove that the lab furniture meets the specified requirements.</li> <li>- A certificate of qualification must also be issued.</li> </ul> <p><b>Testing and Acceptance</b></p> <ul style="list-style-type: none"> <li>- Acceptance testing will occur after completion of the training course and after the supplier states the system is installed and ready to perform in compliance with specifications.</li> <li>- If the system does not meet standard performance expectations, the Supplier will have one month to rectify the defects and clear the acceptance test, failing which, PSHS-ZRC reserve the right to get the equipment replaced by the Supplier at no extra cost to PSHS-ZRC. Succeeding conduct of the validation/qualification shall also</li> </ul>	<p><b>Training</b></p> <ul style="list-style-type: none"> <li>- The training should cover lectures and intensive hands-on operation. Basic and advanced troubleshooting and maintenance including the verification of lab furniture's performance should also be discussed. The training shall be conducted on-site.</li> </ul> <p><b>Documentation</b></p> <ul style="list-style-type: none"> <li>- Authenticated training certificate of Service Personnel from the manufacturer related to the installation, lab furniture maintenance, and troubleshooting.</li> <li>- <a href="#">Manufacturer's certificate of compliance and inspection.</a></li> <li>- 1 original copy and 1 photocopy of operating and service manuals in English.</li> <li>- Must provide the necessary information and test procedures required to prove that the lab furniture meets the specified requirements.</li> <li>- <a href="#">A certificate of qualification must also be issued.</a></li> </ul> <p><b>Testing and Acceptance</b></p> <ul style="list-style-type: none"> <li>- Acceptance testing will occur after completion of the training course and after the supplier states the system is installed and ready to perform in compliance with specifications.</li> <li>- If the system does not meet standard performance expectations, the Supplier will have one month to rectify the defects and clear the acceptance test, failing which, PSHS-ZRC reserve the right to get the equipment replaced by the Supplier at no extra cost to PSHS-ZRC. Succeeding conduct of the validation/qualification shall also</li> </ul>
--	--	--	--	--

			<p>be the responsibility and at the cost of the Supplier.</p> <p><b>Site Visitation</b></p> <ul style="list-style-type: none"> <li>- It is the supplier's responsibility to become thoroughly familiar with the site of the intended installation, to determine everything necessary to accomplish the installation. Failure of the supplier to make a site visit does not relieve the supplier of responsibility to fully understand what is necessary to accomplish a successful and complete installation. The supplier should quote all essential pre-installation requirements and utility requirements.</li> </ul>	<p>be the responsibility and at the cost of the Supplier.</p> <p><b>Site Visitation</b></p> <ul style="list-style-type: none"> <li>- It is the supplier's responsibility to become thoroughly familiar with the site of the intended installation, to determine everything necessary to accomplish the installation. Failure of the supplier to make a site visit does not relieve the supplier of responsibility to fully understand what is necessary to accomplish a successful and complete installation. The supplier should quote all essential pre-installation requirements and utility requirements.</li> </ul>
--	--	--	--	--

LOT 2				
Item No	Quantity	Unit	ITEM DESCRIPTION	ITEM DESCRIPTION
1	1	Set	<p><b>CNC Router (Full-size Gantry)</b></p> <p>Accessories include:            Spindles &amp; Routers            Bits and Collets            Automatic Tool Changer</p> <p>Vacuum Systems            Dust Collectors            Rotary Indexers            Enclosures            Production Aids</p> <p>Machine Specifications:            Cutting speed      10 in/s      (250 mm/s)            Jogging speed      30 in/s      (760</p>	<p><b>CNC Router (Full-size Gantry)</b></p> <p>Accessories include:            Spindles &amp; Routers            Bits and Collets            Automatic Tool Changer <b>with at least 10 slots</b></p> <p>Vacuum Systems            Dust Collectors            Rotary Indexers            Enclosure <b>is optional</b>            Production Aids</p> <p>Machine Specifications:            Cutting speed      10 in/s      (250 mm/s)            Jogging speed      30 in/s      (760</p>



		mm/s) Move speed (X, Y)      12 in/s      (305 mm/s) Move speed (Z)              6 in/s      (153 mm/s) Positioning speed (X, Y) 30 in/s      (760 mm/s) Positioning speed (Z)      15 in/s      (380 mm/s) Step resolution              0.0004"      (0.010 mm) Positional repeatability              0.002" (0,051 mm) Linear cutting power              150 lbs (68kg) X- and Y-axis drive system      Rack and pinion Z-axis drive system              Rack and pinion Input voltage              220V, 60Hz, 3- phase  Features:  Fast, closed-loop motors fitted with low- backlash, tapered-hob gear heads on all three axes (two on the X-axis) Tough precision linear bearings on the moving gantry and hardened steel rails for the x-axis. Reliable rack-and-pinion power transmission on each axis. Impressive cutting speeds of up to 600 inches per minute (depending on cutting bit and material) and rapid transit speeds of 1,800 inches per minute. Step resolution of .0004". The positional accuracy of +/- .002". Sealed Industrial UL Certified Control Box. Emergency Stop disconnect switch in the Control Box with integrated and cabled remote Emergency Stop Buttons. Z-zero Touch-Off Plate and XY Proximity Switches. software to run your CNC.  Dust Skirt ready to connect to your dust collector. Each new tool comes bundled with two powerful software programs to create	mm/s) Move speed (X, Y)      12 in/s      (305 mm/s) Move speed (Z)              6 in/s      (153 mm/s) Positioning speed (X, Y) 30 in/s      (760 mm/s) Positioning speed (Z)      15 in/s      (380 mm/s) Step resolution              0.0004"      (0.010 mm) Positional repeatability              0.002" (0,051 mm) Linear cutting power              150 lbs (68kg) X- and Y-axis drive system      Rack and pinion Z-axis drive system              Rack and pinion Input voltage              220V, 60Hz, 3- phase  Features: Should fit in 4ftx8ft plyboard Cut and movement area is 4ftx8ft Fast, closed-loop motors fitted with low- backlash, tapered-hob gear heads on all three axes (two on the X-axis) Tough precision linear bearings on the moving gantry and hardened steel rails for the x-axis. Reliable rack-and-pinion power transmission on each axis. Impressive cutting speeds of up to minimum 600 inches per minute (dependent on cutting bit and material) and rapid transit speeds of 1,800 inches per minute. Step resolution of .0004". The positional accuracy of +/- .002". Sealed Industrial UL Certified Control Box. Emergency Stop disconnect switch in the Control Box with integrated and cabled remote Emergency Stop Buttons. Z-zero Touch-Off Plate and XY Proximity Switches. software to run your CNC.  Dust Skirt ready to connect to your dust collector. Each new tool comes bundled with two
--	--	---	--

		<p>CNC projects.</p> <p>Shipped as four ready-to-assemble modules. On-site assembly and training are available.</p> <p>Free Tech Support and User Forum.</p> <p><b>Service and Warranty</b></p> <ul style="list-style-type: none"> <li>- 1-year warranty on parts and services after commissioning and acceptance and 1-year free calibration and preventive maintenance on site.</li> <li>- Complete with necessary installation accessories for immediate operation and start-up</li> <li>- During the warranty period, the supplier must repair or replace any system component on-site at no charge. Labor and travel must be included in the warranty program.</li> <li>- Deliver, uncrate, set into place, make all the final connections and start-up of the instrument</li> <li>- Calibration certificate traceable to international standards.</li> </ul> <p><b>Training</b></p> <ul style="list-style-type: none"> <li>- The training should cover lectures on the theory and principles of the instrument, its applications, software applications, data process, and interpretation, as well as intensive hands-on operation. Basic and advanced troubleshooting and maintenance including the verification of equipment's performance should also be discussed. The training shall be conducted on-site.</li> </ul> <p><b>Documentation</b></p> <ul style="list-style-type: none"> <li>- Authenticated training certificate of Service Personnel from the manufacturer related to the installation, equipment</li> </ul>	<p>powerful software programs to create CNC projects.</p> <p>Shipped as four ready-to-assemble modules. On-site assembly and training are available.</p> <p>Free Tech Support and User Forum.</p> <p><b>Service and Warranty</b></p> <ul style="list-style-type: none"> <li>- 1-year warranty on parts and services after commissioning and acceptance and 1-year free calibration and preventive maintenance on site.</li> <li>- Complete with necessary installation accessories for immediate operation and start-up</li> <li>- During the warranty period, the supplier must repair or replace any system component on-site at no charge. Labor and travel must be included in the warranty program.</li> <li>- Deliver, uncrate, set into place, make all the final connections and start-up of the instrument</li> <li>- Calibration certificate traceable to international standards.</li> </ul> <p><b>Training</b></p> <ul style="list-style-type: none"> <li>- The training should cover lectures on the theory and principles of the instrument, its applications, software applications, data process, and interpretation, as well as intensive hands-on operation. Basic and advanced troubleshooting and maintenance including the verification of equipment's performance should also be discussed. The training shall be conducted on-site.</li> </ul> <p><b>Documentation</b></p> <ul style="list-style-type: none"> <li>- Authenticated training certificate of Service Personnel from the manufacturer related to the installation, equipment</li> </ul>
--	--	---	--

			<p>maintenance, and troubleshooting.</p> <ul style="list-style-type: none"> <li>- Manufacturer's certificate of compliance and inspection.</li> <li>- 1 original copy and 1 photocopy of operating and service manuals in English.</li> <li>- Must provide the necessary information and test procedures required to prove that the instrument meets the specified requirements.</li> <li>- Test data and calibration certificates of the calibrating instruments used must be attached. A certificate of qualification must also be issued.</li> <li>- Brochure with pictures must be provided during bid opening.</li> </ul> <p><b>Testing and Acceptance</b></p> <ul style="list-style-type: none"> <li>- Acceptance testing will occur after completion of the training course and after the supplier states the system is installed and ready to perform in compliance with specifications.</li> <li>- If the system does not meet standard performance expectations, the Supplier will have one month to rectify the defects and clear the acceptance test, failing which, PSHS-ZRC reserve the right to get the equipment replaced by the Supplier at no extra cost to PSHS-ZRC. Succeeding conduct of the validation/qualification shall also be the responsibility and at the cost of the Supplier.</li> </ul>	<p>maintenance, and troubleshooting.</p> <ul style="list-style-type: none"> <li>- <a href="#">Manufacturer's certificate of compliance and inspection.</a></li> <li>- 1 original copy and 1 photocopy of operating and service manuals in English.</li> <li>- Must provide the necessary information and test procedures required to prove that the instrument meets the specified requirements.</li> <li>- Test data and calibration certificates of the calibrating instruments used must be attached. A certificate of qualification must also be issued.</li> <li>- Brochure with pictures must be provided during bid opening.</li> </ul> <p><b>Testing and Acceptance</b></p> <ul style="list-style-type: none"> <li>- Acceptance testing will occur after completion of the training course and after the supplier states the system is installed and ready to perform in compliance with specifications.</li> <li>- If the system does not meet standard performance expectations, the Supplier will have one month to rectify the defects and clear the acceptance test, failing which, PSHS-ZRC reserve the right to get the equipment replaced by the Supplier at no extra cost to PSHS-ZRC. Succeeding conduct of the validation/qualification shall also be the responsibility and at the cost of the Supplier.</li> </ul>
--	--	--	---	---

LOT 3				
Item No	Quantity	Unit	ITEM DESCRIPTION	ITEM DESCRIPTION
1	1	Unit	<p><b>DRYING OVEN, 220 V</b></p> <p>Specifications: Volume capacity is at least 50 liters; the Number of shelves is 3 or more and should be adjustable, Setting temperature 15 to 300°C or better, Stainless steel interior and housing, with natural convection, stainless steel door and insulated with tempered glass observation window, LED display.</p> <p><b>Service and Warranty</b></p> <ul style="list-style-type: none"> <li>- 1-year warranty on parts and services after commissioning and acceptance and 1-year free calibration and preventive maintenance on site</li> <li>- Complete with necessary installation accessories for immediate operation and start-up</li> <li>- During the warranty period, the supplier must repair or replace any system component on-site at no charge. Labor and travel must be included in the warranty program.</li> <li>- Deliver, uncrate, set into place, make all the final connections and start-up of the instrument</li> <li>- Calibration certificate traceable to international standards.</li> </ul> <p><b>Training</b></p> <ul style="list-style-type: none"> <li>- The training should cover lectures on the theory and principles of the instrument, its applications, software applications, data procession, and interpretation, as well as intensive hands-on operation.</li> </ul>	<p><b>DRYING OVEN, 220 V</b></p> <p>Specifications: Volume capacity is at least 50 liters; the Number of shelves is 2 or more and should be adjustable, Setting temperature 15 to 300°C or better, Stainless steel interior and housing, with natural convection, stainless steel door and insulated with tempered glass observation window, LED display. Temperature Precision within 0.01°C-0.1°C, Thermal Fluctuation within 0.1°C-0.5°C, Ambient Temperature within 3-45°C. With over temperature protection.</p> <p><b>Service and Warranty</b></p> <ul style="list-style-type: none"> <li>- 1-year warranty on parts and services after commissioning and acceptance and 1-year free calibration and preventive maintenance on site</li> <li>- Complete with necessary installation accessories for immediate operation and start-up</li> <li>- During the warranty period, the supplier must repair or replace any system component on-site at no charge. Labor and travel must be included in the warranty program.</li> <li>- Deliver, uncrate, set into place, make all the final connections and start-up of the instrument</li> <li>- Calibration certificate traceable to international standards.</li> </ul> <p><b>Training</b></p> <ul style="list-style-type: none"> <li>- The training should cover lectures on the theory and principles of the instrument, its applications, software applications, data procession, and interpretation, as well as intensive hands-on operation.</li> </ul>

			<p>Basic and advanced troubleshooting and maintenance including the verification of equipment's performance should also be discussed. The training shall be conducted on-site.</p> <p><b>Documentation</b></p> <ul style="list-style-type: none"> <li>- Authenticated training certificate of Service Personnel from the manufacturer related to the installation, equipment maintenance, and troubleshooting.</li> <li>- Manufacturer's certificate of compliance and inspection.</li> <li>- 1 original copy and 1 photocopy of operating and service manuals in English.</li> <li>- Must provide the necessary information and test procedures required to prove that the instrument meets the specified requirements.</li> <li>- Test data and calibration certificates of the calibrating instruments used must be attached. A certificate of qualification must also be issued.</li> </ul> <p><b>Testing and Acceptance</b></p> <ul style="list-style-type: none"> <li>- Acceptance testing will occur after completion of the training course and after the supplier states the system is installed and ready to perform in compliance with specifications.</li> <li>- If the system does not meet standard performance expectations, the Supplier will have one month to rectify the defects and clear the acceptance test, failing which, PSHS-ZRC reserve the right to get the equipment replaced by the Supplier at no extra cost to PSHS-ZRC. Succeeding conduct of the validation/qualification shall also be the responsibility and at the cost of the Supplier.</li> </ul>	<p>Basic and advanced troubleshooting and maintenance including the verification of equipment's performance should also be discussed. The training shall be conducted on-site.</p> <p><b>Documentation</b></p> <ul style="list-style-type: none"> <li>- Authenticated training certificate of Service Personnel from the manufacturer related to the installation, equipment maintenance, and troubleshooting.</li> <li>- <a href="#">Manufacturer's certificate of compliance and inspection.</a></li> <li>- 1 original copy and 1 photocopy of operating and service manuals in English.</li> <li>- Must provide the necessary information and test procedures required to prove that the instrument meets the specified requirements.</li> <li>- Test data and calibration certificates of the calibrating instruments used must be attached. A certificate of qualification must also be issued.</li> </ul> <p><b>Testing and Acceptance</b></p> <ul style="list-style-type: none"> <li>- Acceptance testing will occur after completion of the training course and after the supplier states the system is installed and ready to perform in compliance with specifications.</li> <li>- If the system does not meet standard performance expectations, the Supplier will have one month to rectify the defects and clear the acceptance test, failing which, PSHS-ZRC reserve the right to get the equipment replaced by the Supplier at no extra cost to PSHS-ZRC. Succeeding conduct of the validation/qualification shall also be the responsibility and at the cost of the Supplier.</li> </ul>
--	--	--	--	--

			<b>Site Visitation</b> <ul style="list-style-type: none"> <li>- It is the supplier's responsibility to become thoroughly familiar with the site of the intended installation, to determine everything necessary to accomplish the installation. Failure of the supplier to make a site visit does not relieve the supplier of responsibility to fully understand what is necessary to accomplish a successful and complete installation. The supplier should quote all essential pre-installation requirements and utility requirements.</li> </ul>	<b>Site Visitation</b> <ul style="list-style-type: none"> <li>- It is the supplier's responsibility to become thoroughly familiar with the site of the intended installation, to determine everything necessary to accomplish the installation. Failure of the supplier to make a site visit does not relieve the supplier of responsibility to fully understand what is necessary to accomplish a successful and complete installation. The supplier should quote all essential pre-installation requirements and utility requirements.</li> </ul>
2	1	Set	<b>UV-VIS Spectrophotometer-Double beam, 220V</b>  Wavelength range: 190 - 1100nm Spectral bandwidth: 0.5nm – 5nm Photometric mode: Transmittance, Absorbance Photometric range: -0.3-3.0 Abs Photometric Accuracy: $\pm 0.002$ Abs at 0.5 Abs, $\pm 0.004$ Abs at 1.0 Abs, $\pm 0.006$ Abs at 2.0 Abs Photometric Repeatability: $< \pm 0.001$ Abs at 0.5 Abs, $< \pm 0.001$ Abs at 1 Abs, $< \pm 0.003$ Abs at 2 Abs Baseline flatness: $< \pm 0.0006$ Abs (1000 to 190 nm one hour after light source turned on) Noise level: $< 0.00005$ Abs (700 nm) Detector: Silicon Photo diode Compartment: reference and sample compartment analyze simultaneously for 6 samples or more. Stray light: $< 0.02\%$ at 220nm (NaI), $< 1.0\%$ nm (KCl)  Inclusions UV-Vis Spectrophotometer workstation: UV Probe Software Complete UV-Vis Spectrophotometer Accessories: Quartz cuvette, 10mm path length –	<b>UV-VIS Spectrophotometer-Double beam, 220V</b>  Wavelength range: 190 - 1100nm Spectral bandwidth: 0.5nm – 5nm Photometric mode: Transmittance, Absorbance Photometric range: -0.3-3.0 Abs Photometric Accuracy: $\pm 0.002$ Abs at 0.5 Abs, $\pm 0.004$ Abs at 1.0 Abs, $\pm 0.006$ Abs at 2.0 Abs Photometric Repeatability: $< \pm 0.001$ Abs at 0.5 Abs, $< \pm 0.001$ Abs at 1 Abs, $< \pm 0.003$ Abs at 2 Abs Baseline flatness: $< \pm 0.0006$ Abs (1000 to 190 nm one hour after light source turned on) Noise level: $< 0.00005$ Abs (700 nm) Detector: Silicon Photo diode Compartment: reference and sample compartment analyze simultaneously for 6 samples or more. Stray light: $< 0.02\%$ at 220nm (NaI), $< 1.0\%$ nm (KCl)  Inclusions UV-Vis Spectrophotometer workstation: UV Probe Software Complete UV-Vis Spectrophotometer Accessories: Quartz cuvette, 10mm path length –

		<p>(2pcs), complete PC system and printer with continuous ink, O/S: Microsoft Windows 10, Hard Disk Drive: 1TB, Monitor: 21.5" LED Color monitor or better, Processor: i7, 32G RAM PC controlled or stand-alone placement of memory possible in PC, built-in and USB 1nm bandwidth.</p> <p><b>Service and Warranty</b></p> <ul style="list-style-type: none"> <li>- 1-year warranty on parts and services after commissioning and acceptance and 1-year free calibration and preventive maintenance on site</li> <li>- Complete with necessary installation accessories for immediate operation and start-up</li> <li>- During the warranty period, the supplier must repair or replace any system component on-site at no charge. Labor and travel must be included in the warranty program.</li> <li>- Deliver, uncrate, set into place, make all the final connections and start-up of the instrument</li> <li>- Calibration certificate traceable to international standards.</li> </ul> <p><b>Training</b></p> <ul style="list-style-type: none"> <li>- The training should cover lectures on the theory and principles of the instrument, its applications, software applications, data procession, and interpretation, as well as intensive hands-on operation. Basic and advanced troubleshooting and maintenance including the verification of equipment's performance should also be discussed. The training shall be conducted on-site.</li> </ul> <p><b>Documentation</b></p> <ul style="list-style-type: none"> <li>- Authenticated training certificate of Service Personnel from the manufacturer related to the installation, equipment</li> </ul>	<p>(2pcs), complete PC system and printer with continuous ink, O/S: Microsoft Windows 10, Hard Disk Drive: 1TB, Monitor: 21.5" LED Color monitor or better, Processor: i7, 32G RAM PC controlled or stand-alone placement of memory possible in PC, built-in and USB 1nm bandwidth.</p> <p><b>Service and Warranty</b></p> <ul style="list-style-type: none"> <li>- 1-year warranty on parts and services after commissioning and acceptance and 1-year free calibration and preventive maintenance on site</li> <li>- Complete with necessary installation accessories for immediate operation and start-up</li> <li>- During the warranty period, the supplier must repair or replace any system component on-site at no charge. Labor and travel must be included in the warranty program.</li> <li>- Deliver, uncrate, set into place, make all the final connections and start-up of the instrument</li> <li>- Calibration certificate traceable to international standards.</li> </ul> <p><b>Training</b></p> <ul style="list-style-type: none"> <li>- The training should cover lectures on the theory and principles of the instrument, its applications, software applications, data procession, and interpretation, as well as intensive hands-on operation. Basic and advanced troubleshooting and maintenance including the verification of equipment's performance should also be discussed. The training shall be conducted on-site.</li> </ul> <p><b>Documentation</b></p> <ul style="list-style-type: none"> <li>- Authenticated training certificate of Service Personnel from the manufacturer related to the installation, equipment maintenance, and</li> </ul>
--	--	--	---

		<p>maintenance, and troubleshooting.</p> <ul style="list-style-type: none"> <li>- Manufacturer's certificate of compliance and inspection.</li> <li>- 1 original copy and 1 photocopy of operating and service manuals in English.</li> <li>- Must provide the necessary information and test procedures required to prove that the instrument meets the specified requirements.</li> <li>- Test data and calibration certificates of the calibrating instruments used must be attached. A certificate of qualification must also be issued.</li> </ul> <p><b>Testing and Acceptance</b></p> <ul style="list-style-type: none"> <li>- Acceptance testing will occur after completion of the training course and after the supplier states the system is installed and ready to perform in compliance with specifications.</li> <li>- If the system does not meet standard performance expectations, the Supplier will have one month to rectify the defects and clear the acceptance test, failing which, PSHS-ZRC reserve the right to get the equipment replaced by the Supplier at no extra cost to PSHS-ZRC. Succeeding conduct of the validation/qualification shall also be the responsibility and at the cost of the Supplier.</li> </ul> <p><b>Site Visitation</b></p> <ul style="list-style-type: none"> <li>- It is the supplier's responsibility to become thoroughly familiar with the site of the intended installation, to determine everything necessary to accomplish the installation. Failure of the supplier to make a site visit does not relieve the supplier of responsibility to fully understand what is necessary to accomplish a successful and</li> </ul>	<p>troubleshooting.</p> <ul style="list-style-type: none"> <li>- <a href="#">Manufacturer's certificate of compliance and inspection.</a></li> <li>- 1 original copy and 1 photocopy of operating and service manuals in English.</li> <li>- Must provide the necessary information and test procedures required to prove that the instrument meets the specified requirements.</li> <li>- Test data and calibration certificates of the calibrating instruments used must be attached. A certificate of qualification must also be issued.</li> </ul> <p><b>Testing and Acceptance</b></p> <ul style="list-style-type: none"> <li>- Acceptance testing will occur after completion of the training course and after the supplier states the system is installed and ready to perform in compliance with specifications.</li> <li>- If the system does not meet standard performance expectations, the Supplier will have one month to rectify the defects and clear the acceptance test, failing which, PSHS-ZRC reserve the right to get the equipment replaced by the Supplier at no extra cost to PSHS-ZRC. Succeeding conduct of the validation/qualification shall also be the responsibility and at the cost of the Supplier.</li> </ul> <p><b>Site Visitation</b></p> <ul style="list-style-type: none"> <li>- <a href="#">It is the supplier's responsibility to become thoroughly familiar with the site of the intended installation, to determine everything necessary to accomplish the installation. Failure of the supplier to make a site visit does not relieve the supplier of responsibility to fully understand what is necessary to accomplish a successful and</a></li> </ul>
--	--	--	---



			complete installation. The supplier should quote all essential pre-installation requirements and utility requirements.	complete installation. The supplier should quote all essential pre-installation requirements and utility requirements.
3	1	set	<p><b>Digital Rotary Evaporator, 220V</b></p> <p>Specifications:  <b>Bath:</b>  Heating Capacity – 1300W or better  Temp. range heating bath – 20-210°C  Temp. accuracy bath - <math>\pm 1^{\circ}\text{C}</math>, or better  Material Heating Bath – Stainless Steel  Volume Heating Bath – 4.5 liters, maximum  Display- Digital LCD</p> <p><b>Rotary Evaporator</b>  Display rotation speed range – 10-280 rpm or better  Display – Digital LCD that indicates rotation speed, heating bath, and vapor temperature  Height adjustment – 155mm, or better  Condensing surface – 2,200 <math>\text{cm}^2</math>  Inclusions: Diagonal coil condenser, vapor tube for the diagonal condenser, 1L receiving flask, 1L evaporator flask, feed tube with stopcock, vacuum seal, conical clip, spherical joint clip</p> <p><b>Vacuum Pump</b> – Variable vacuum, flowrate 19L/min</p> <p><b>Cooler System</b>  Cooling Capacity – 400W or better  Temp. range - -20 to 30°C  Capacity – 2 liters or better  Pump rate – 8 L/min or better</p> <p><b>Service and Warranty</b></p> <ul style="list-style-type: none"> <li>- 1-year warranty on parts and services after commissioning and acceptance and 1-year free calibration and preventive maintenance on site</li> <li>- Complete with necessary</li> </ul>	<p><b>Digital Rotary Evaporator, 220V</b></p> <p>Specifications:  <b>Bath:</b>  Heating Capacity – 1300W or better  Temp. range heating bath – within 20-210°C  Temp. accuracy bath - <math>\pm 1^{\circ}\text{C}</math>, or better  Material Heating Bath – Stainless Steel  Volume Heating Bath – 4.5 liters, maximum  Display- Digital LCD</p> <p><b>Rotary Evaporator</b>  Display rotation speed range – 10-280 rpm or better  Display – Digital LCD that indicates rotation speed, heating bath, and vapor temperature  Height adjustment – 155mm, or better  Condensing surface – 2,200 <math>\text{cm}^2</math>  Inclusions: Diagonal coil condenser, vapor tube for the diagonal condenser, 1L receiving flask, 1L evaporator flask, feed tube with stopcock, vacuum seal, conical clip, spherical joint clip</p> <p><b>Vacuum Pump</b> – Variable vacuum, flowrate 19L/min</p> <p><b>Cooler System</b>  Cooling Capacity – 400W or better  Temp. range - -20 to 30°C  Capacity – 2 liters or better  Pump rate – 8 L/min or better</p> <p><b>Service and Warranty</b></p> <ul style="list-style-type: none"> <li>- 1-year warranty on parts and services after commissioning and acceptance and 1-year free calibration and preventive maintenance on site</li> <li>- Complete with necessary</li> </ul>

			<p>installation accessories for immediate operation and start-up</p> <ul style="list-style-type: none"> <li>- During the warranty period, the supplier must repair or replace any system component on-site at no charge. Labor and travel must be included in the warranty program.</li> <li>- Deliver, uncrate, set into place, make all the final connections and start-up of the instrument</li> <li>- Calibration certificate traceable to international standards.</li> </ul> <p><b>Training</b></p> <ul style="list-style-type: none"> <li>- The training should cover lectures on the theory and principles of the instrument, its applications, software applications, data procession, and interpretation, as well as intensive hands-on operation. Basic and advanced troubleshooting and maintenance including the verification of equipment's performance should also be discussed. The training shall be conducted on-site.</li> </ul> <p><b>Documentation</b></p> <ul style="list-style-type: none"> <li>- Authenticated training certificate of Service Personnel from the manufacturer related to the installation, equipment maintenance, and troubleshooting.</li> <li>- Manufacturer's certificate of compliance and inspection.</li> <li>- 1 original copy and 1 photocopy of operating and service manuals in English.</li> <li>- Must provide the necessary information and test procedures required to prove that the instrument meets the specified requirements.</li> <li>- Test data and calibration certificates of the calibrating instruments used must be</li> </ul>	<p>installation accessories for immediate operation and start-up</p> <ul style="list-style-type: none"> <li>- During the warranty period, the supplier must repair or replace any system component on-site at no charge. Labor and travel must be included in the warranty program.</li> <li>- Deliver, uncrate, set into place, make all the final connections and start-up of the instrument</li> <li>- Calibration certificate traceable to international standards.</li> </ul> <p><b>Training</b></p> <ul style="list-style-type: none"> <li>- The training should cover lectures on the theory and principles of the instrument, its applications, software applications, data procession, and interpretation, as well as intensive hands-on operation. Basic and advanced troubleshooting and maintenance including the verification of equipment's performance should also be discussed. The training shall be conducted on-site.</li> </ul> <p><b>Documentation</b></p> <ul style="list-style-type: none"> <li>- Authenticated training certificate of Service Personnel from the manufacturer related to the installation, equipment maintenance, and troubleshooting.</li> <li>- <a href="#">Manufacturer's certificate of compliance and inspection.</a></li> <li>- 1 original copy and 1 photocopy of operating and service manuals in English.</li> <li>- Must provide the necessary information and test procedures required to prove that the instrument meets the specified requirements.</li> <li>- Test data and calibration certificates of the calibrating instruments used must be</li> </ul>
--	--	--	--	--

			<p>attached. A certificate of qualification must also be issued.</p> <p><b>Testing and Acceptance</b></p> <ul style="list-style-type: none"> <li>- Acceptance testing will occur after completion of the training course and after the supplier states the system is installed and ready to perform in compliance with specifications.</li> <li>- If the system does not meet standard performance expectations, the Supplier will have one month to rectify the defects and clear the acceptance test, failing which, PSHS-ZRC reserve the right to get the equipment replaced by the Supplier at no extra cost to PSHS-ZRC. Succeeding conduct of the validation/qualification shall also be the responsibility and at the cost of the Supplier.</li> </ul> <p><b>Site Visitation</b></p> <ul style="list-style-type: none"> <li>- It is the supplier's responsibility to become thoroughly familiar with the site of the intended installation, to determine everything necessary to accomplish the installation. Failure of the supplier to make a site visit does not relieve the supplier of responsibility to fully understand what is necessary to accomplish a successful and complete installation. The supplier should quote all essential pre-installation requirements and utility requirements.</li> </ul>	<p>attached. A certificate of qualification must also be issued.</p> <p><b>Testing and Acceptance</b></p> <ul style="list-style-type: none"> <li>- Acceptance testing will occur after completion of the training course and after the supplier states the system is installed and ready to perform in compliance with specifications.</li> <li>- If the system does not meet standard performance expectations, the Supplier will have one month to rectify the defects and clear the acceptance test, failing which, PSHS-ZRC reserve the right to get the equipment replaced by the Supplier at no extra cost to PSHS-ZRC. Succeeding conduct of the validation/qualification shall also be the responsibility and at the cost of the Supplier.</li> </ul> <p><b>Site Visitation</b></p> <ul style="list-style-type: none"> <li>- It is the supplier's responsibility to become thoroughly familiar with the site of the intended installation, to determine everything necessary to accomplish the installation. Failure of the supplier to make a site visit does not relieve the supplier of responsibility to fully understand what is necessary to accomplish a successful and complete installation. The supplier should quote all essential pre-installation requirements and utility requirements.</li> </ul>
--	--	--	--	--

4	25	Units	<p><b>Binocular Microscope</b></p> <p>Body-interchangeable, inclined binocular body, 360° rotatable head, Eyepieces-highest quality 10X wide-angle anti-fungus field eyepiece. Objective-parfocal, antifungals coated 4x, 10x, 40x and 100x (oil immersion) with plan achromatic correction. Stage horizontal mechanical stage preferably 100 x 140 mm with fine graduations designed with convenient coaxial adjustment for slide manipulation preferable through 30x70 mm. Substage-abbe condenser focusable, continuously variable iris diaphragm. Illuminator-built-in LED light source with adjustable white light. Should provide dust cover and immersion oil. Electrical safety certification. Should work with input 220Vac supply.</p> <p><b>Service and Warranty</b></p> <ul style="list-style-type: none"> <li>- 1-year warranty on parts and services after commissioning and acceptance and 1-year free calibration and preventive maintenance on site</li> <li>- Complete with necessary installation accessories for immediate operation and start-up</li> <li>- During the warranty period, the supplier must repair or replace any system component on-site at no charge. Labor and travel must be included in the warranty program.</li> <li>- Deliver, uncrate, set into place, make all the final connections and start-up of the instrument</li> <li>- Calibration certificate traceable to international standards.</li> </ul> <p><b>Training</b></p> <ul style="list-style-type: none"> <li>- The training should cover lectures on the theory and principles of the instrument, its applications, software applications, data procession, and interpretation, as well as</li> </ul>	<p><b>Binocular Microscope</b></p> <p>Body-interchangeable, inclined binocular body, 360° rotatable head, Eyepieces-highest quality 10X wide-angle anti-fungus field eyepiece. Objective-parfocal, antifungals coated 4x, 10x, 40x and 100x (oil immersion) with plan achromatic correction. Stage horizontal mechanical stage preferably 100 x 140 mm with fine graduations designed with convenient coaxial adjustment for slide manipulation preferable through 30x70 mm. Substage-abbe condenser focusable, continuously variable iris diaphragm. Illuminator-built-in LED light source with adjustable white light. Should provide dust cover and immersion oil. Electrical safety certification. Should work with input 220Vac supply.</p> <p><b>Service and Warranty</b></p> <ul style="list-style-type: none"> <li>- 1-year warranty on parts and services after commissioning and acceptance and 1-year free calibration and preventive maintenance on site</li> <li>- Complete with necessary installation accessories for immediate operation and start-up</li> <li>- During the warranty period, the supplier must repair or replace any system component on-site at no charge. Labor and travel must be included in the warranty program.</li> <li>- Deliver, uncrate, set into place, make all the final connections and start-up of the instrument</li> <li>- Calibration certificate traceable to international standards.</li> </ul> <p><b>Training</b></p> <ul style="list-style-type: none"> <li>- The training should cover lectures on the theory and principles of the instrument, its applications, software applications, data procession, and interpretation, as well as</li> </ul>
---	----	-------	--	--

			<p>intensive hands-on operation. Basic and advanced troubleshooting and maintenance including the verification of equipment's performance should also be discussed. The training shall be conducted on-site.</p> <p><b>Documentation</b></p> <ul style="list-style-type: none"> <li>- Authenticated training certificate of Service Personnel from the manufacturer related to the installation, equipment maintenance, and troubleshooting.</li> <li>- Manufacturer's certificate of compliance and inspection.</li> <li>- 1 original copy and 1 photocopy of operating and service manuals in English.</li> <li>- Must provide the necessary information and test procedures required to prove that the instrument meets the specified requirements.</li> <li>- Test data and calibration certificates of the calibrating instruments used must be attached. A certificate of qualification must also be issued.</li> </ul> <p><b>Testing and Acceptance</b></p> <ul style="list-style-type: none"> <li>- Acceptance testing will occur after completion of the training course and after the supplier states the system is installed and ready to perform in compliance with specifications.</li> <li>- If the system does not meet standard performance expectations, the Supplier will have one month to rectify the defects and clear the acceptance test, failing which, PSHS-ZRC reserve the right to get the equipment replaced by the Supplier at no extra cost to PSHS-ZRC. Succeeding conduct of the validation/qualification shall also be the responsibility and at the cost of the Supplier.</li> </ul>	<p>intensive hands-on operation. Basic and advanced troubleshooting and maintenance including the verification of equipment's performance should also be discussed. The training shall be conducted on-site.</p> <p><b>Documentation</b></p> <ul style="list-style-type: none"> <li>- Authenticated training certificate of Service Personnel from the manufacturer related to the installation, equipment maintenance, and troubleshooting.</li> <li>- Manufacturer's certificate of compliance and inspection.</li> <li>- 1 original copy and 1 photocopy of operating and service manuals in English.</li> <li>- Must provide the necessary information and test procedures required to prove that the instrument meets the specified requirements.</li> <li>- Test data and calibration certificates of the calibrating instruments used must be attached. A certificate of qualification must also be issued.</li> </ul> <p><b>Testing and Acceptance</b></p> <ul style="list-style-type: none"> <li>- Acceptance testing will occur after completion of the training course and after the supplier states the system is installed and ready to perform in compliance with specifications.</li> <li>- If the system does not meet standard performance expectations, the Supplier will have one month to rectify the defects and clear the acceptance test, failing which, PSHS-ZRC reserve the right to get the equipment replaced by the Supplier at no extra cost to PSHS-ZRC. Succeeding conduct of the validation/qualification shall also be the responsibility and at the cost of the Supplier.</li> </ul>
--	--	--	--	--

			<b>Site Visitation</b> <ul style="list-style-type: none"> <li>- It is the supplier's responsibility to become thoroughly familiar with the site of the intended installation, to determine everything necessary to accomplish the installation. Failure of the supplier to make a site visit does not relieve the supplier of responsibility to fully understand what is necessary to accomplish a successful and complete installation. The supplier should quote all essential pre-installation requirements and utility requirements.</li> </ul>	<b>Site Visitation</b> <ul style="list-style-type: none"> <li>- It is the supplier's responsibility to become thoroughly familiar with the site of the intended installation, to determine everything necessary to accomplish the installation. Failure of the supplier to make a site visit does not relieve the supplier of responsibility to fully understand what is necessary to accomplish a successful and complete installation. The supplier should quote all essential pre-installation requirements and utility requirements.</li> </ul>
5	1	Unit	<b>Human Skeleton Model</b> <ul style="list-style-type: none"> <li>• Height: 168cm or more</li> <li>• Hanged or platformed base with wheels.</li> <li>• Complete human adult bones.</li> </ul>	<b>Human Skeleton Model</b> <ul style="list-style-type: none"> <li>• Height: 168cm or more</li> <li>• Hanged or platformed base with wheels.</li> </ul> <p>Complete human adult bones.</p>
6	5	Set	<b>Laboratory Micropipette Kit</b> <b>Per set must have the following:</b> <ul style="list-style-type: none"> <li>• 4 units of adjustable single channel micropipette (0.5-10µL, 10-100µL, 100-1000 µL, 1000-5000 µL)</li> <li>• With digital display and tip ejector</li> <li>• Rotatable piston for volume adjustment</li> <li>• With pipette stand for 4 or more pipettes</li> <li>• 8 racks of sterile tips ( 2 racks for 10µL, 2 racks for 100µL, 2 racks for 200µL, 2 racks for 1000µL )</li> <li>• Tip Ejector collar and Tip cone must be made of chemical-resistant material.</li> </ul> <b>Service and Warranty</b> <ul style="list-style-type: none"> <li>- 1-year warranty on parts and services after commissioning and acceptance.</li> <li>- Provide detailed design layout</li> </ul>	<b>Laboratory Micropipette Kit</b> <b>Per set must have the following:</b> <ul style="list-style-type: none"> <li>• 4 units of adjustable single channel micropipette (0.5-10µL, 10-100µL, 100-1000 µL, 1000-5000 µL)</li> <li>• With digital display and tip ejector</li> <li>• Rotatable piston for volume adjustment</li> <li>• With pipette stand for 4 or more pipettes</li> <li>• 8 racks of sterile tips ( 2 racks for 10µL, 2 racks for 100µL, 2 racks for 200µL, 2 racks for 1000µL )</li> <li>• Tip Ejector collar and Tip cone must be made of chemical-resistant material.</li> </ul> <b>Service and Warranty</b> <ul style="list-style-type: none"> <li>- 1-year warranty on parts and services after commissioning and acceptance.</li> <li>- Provide detailed design layout</li> </ul>

			<p>and drawing based on the above specifications and floor plan.</p> <ul style="list-style-type: none"> <li>- Complete with necessary installation accessories for immediate operation and start-up</li> <li>- During the warranty period, the supplier must repair or replace any system component on-site at no charge. Labor and travel must be included in the warranty program.</li> <li>- Deliver, uncrate, set into place, make all the final connections and start-up of the instrument</li> </ul> <p><b>Training</b></p> <ul style="list-style-type: none"> <li>- The training should cover lectures and intensive hands-on operation. Basic and advanced troubleshooting and maintenance including the verification of lab furniture's performance should also be discussed. The training shall be conducted on-site.</li> </ul> <p><b>Documentation</b></p> <ul style="list-style-type: none"> <li>- Authenticated training certificate of Service Personnel from the manufacturer related to the installation, lab furniture maintenance, and troubleshooting.</li> <li>- Manufacturer's certificate of compliance and inspection.</li> <li>- 1 original copy and 1 photocopy of operating and service manuals in English.</li> <li>- Must provide the necessary information and test procedures required to prove that the lab furniture meets the specified requirements.</li> <li>- A certificate of qualification must also be issued.</li> </ul> <p><b>Testing and Acceptance</b></p> <ul style="list-style-type: none"> <li>- Acceptance testing will occur after completion of the training course and after the supplier</li> </ul>	<p>and drawing based on the above specifications and floor plan.</p> <ul style="list-style-type: none"> <li>- Complete with necessary installation accessories for immediate operation and start-up</li> <li>- During the warranty period, the supplier must repair or replace any system component on-site at no charge. Labor and travel must be included in the warranty program.</li> <li>- Deliver, uncrate, set into place, make all the final connections and start-up of the instrument</li> </ul> <p><b>Training</b></p> <ul style="list-style-type: none"> <li>- The training should cover lectures and intensive hands-on operation. Basic and advanced troubleshooting and maintenance including the verification of lab furniture's performance should also be discussed. The training shall be conducted on-site.</li> </ul> <p><b>Documentation</b></p> <ul style="list-style-type: none"> <li>- Authenticated training certificate of Service Personnel from the manufacturer related to the installation, lab furniture maintenance, and troubleshooting.</li> <li>- <a href="#">Manufacturer's certificate of compliance and inspection.</a></li> <li>- 1 original copy and 1 photocopy of operating and service manuals in English.</li> <li>- Must provide the necessary information and test procedures required to prove that the lab furniture meets the specified requirements.</li> <li>- <a href="#">A certificate of qualification must also be issued.</a></li> </ul> <p><b>Testing and Acceptance</b></p> <ul style="list-style-type: none"> <li>- Acceptance testing will occur after completion of the training course and after the supplier</li> </ul>
--	--	--	---	---

			<p>states the system is installed and ready to perform in compliance with specifications.</p> <ul style="list-style-type: none"> <li>- If the system does not meet standard performance expectations, the Supplier will have one month to rectify the defects and clear the acceptance test, failing which, PSHS-ZRC reserve the right to get the equipment replaced by the Supplier at no extra cost to PSHS-ZRC. Succeeding conduct of the validation/qualification shall also be the responsibility and at the cost of the Supplier.</li> </ul>	<p>states the system is installed and ready to perform in compliance with specifications.</p> <ul style="list-style-type: none"> <li>- If the system does not meet standard performance expectations, the Supplier will have one month to rectify the defects and clear the acceptance test, failing which, PSHS-ZRC reserve the right to get the equipment replaced by the Supplier at no extra cost to PSHS-ZRC. Succeeding conduct of the validation/qualification shall also be the responsibility and at the cost of the Supplier.</li> </ul>
--	--	--	--	--