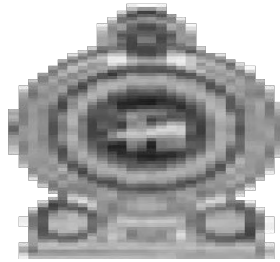


DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA



# THE MINISTRY OF EDUCATION

## Higher Education Division

### CONSTRUCTION OF FACULTY OF MEDICINE PROJECT AT THE SABARAGAMUWA UNIVERSITY OF SRI LANKA *(Funded by The Saudi Fund for Development)*

### Procurement of Supply, Delivery & Fixing of Laboratory Furniture

MOHE/FOM/SUSL/NCB/2023/01

BIDDING DOCUMENT

Bid Opening on	31/01/2024
Bid Validity up to	30/04/2024

**Client**

The Project Director  
Construction of Faculty of Medicine Project at the Sabragamuwa University of Sri Lanka  
Ministry of Education  
Higher Education Division  
No.18 Ward Place  
Colombo 07  
Sri Lanka .

## 2. Technical Specifications and Bidders response”

The bidder shall follow the following technical requirement and other requirement.

	Item No	Name and Minimum Requirement	Quantity	Bidder 's Response (Yes/No)	If “ NO”, Offer of the Bidder
<b>PHARMACOLOGY LAB</b>					
<b>TECHNICAL SPECIFICATION</b>					
<b>Package 1</b>		<b>REQUIRED ITEM SPECIFICATION</b>	<b>Quantity</b>		
	<b>1.</b>	<b>WALL MOUNTED CUPBOAR</b>	<b>1</b>		
		SIZE: 600 (L) X 300 (W) X 600 (H) mm			
		Cupboard made of steel sheets with epoxy powder coated paint.			
		Metallic parts treated and epoxy powder coated with thickness not less than 75µm in order to prevent from corrosion and chemical effects			
		Minimum thickness of metal sheet is 0.8 mm.			
		Sliding glass doors with minimum of one shelf			
	<b>2</b>	<b>UNDER BENCH CUPBOARD FOR WALL COUNTER TOP</b>	<b>10</b>		
		SIZE: 600 (L) X 600 (W) X 900 (H) MM			
		Steel Sheet to fabricate with steel treated against corrosion and strong chemicals. Epoxy coating minimum 70microns. Doors should be open more than 180 degrees.			
		Doors and drawers should be double skinned in order to reduce noise levels.			
		D type stainless steel handle			

		Structures should not have any tack welding points to prevent corrosion  500mm wide Under bench cabinet with 1 adjustable shelf & 1 door with lock			
	<b>3</b>	<b>WORK SURFACE / WORK TOPS</b>	<b>2</b>		
		SIZE: 1800 (L) X 1500 (W) X 800 (H) MM			
		All work surfaces should be manufactured in European countries to maintain the high quality and standards. Manufacture authorization letter should be attached			
		Chemical resistant Solid Phenolic Resin worktop with 15mm thickness or above, Both surface should be electron beam cured			
		Should provide independent testing laboratory report certifying that the Chemical resistant Solid Phenolic Resin worktop meets or exceeds the test criteria such mentioned below;  Resistance to scratching according to the EN 438-2 ( rating should be 5 or above at 6N)  Resistance to Fire according to the ASTM- D 84-01  Resistance to boiling water according to the EN 438-2 ( rating should be 5 or above)  Resistance to wet heat according to the EN 12721 2 ( rating should be 5 or above)  Resistance to dry heat according to the EN 438-2 ( rating should be 4 or above)  Resistance to staining according to the EN 438-2 ( rating should be 4 or above)  Resistance to impact according to the EN			

		<p>438-25 ( drop height should be 180cm or more)</p> <p>Light fastness according to the EN 438-2 ( rating should be 6 or above)</p> <p>Flexural strength according to the EN ISO 178 ( 150Mpa or above)</p> <p>Resistance to crazing according to the EN 438-2 ( rating should be 5 or above)</p> <p>Density according to the EN 323 (1.35g/cm<sup>3</sup> or above)</p> <p>Hygienic certificate according to the ISO 14644-1</p> <p>Should provide independent testing laboratory report certifying that the Phenolic laminate work surface meets or exceeds the chemical resistance properties against mentioned below;</p> <p>Acetic acid (AR) 98% ( No effect)  Hydrochloric acid (AR) 37% ( No effect)  Hydrochloric acid (AR) 48% ( Excellent )  Nitric Acid (AR) 70% ( No effect)  Phosphoric acid (AR) 85% ( No effect)  Sulfuric acid (AR) 96% ( No effect)  Ammonium Hydroxide (AR) 25% ( Excellent )  Sodium Hydroxide (AR) 40% ( No effect)  Acetone (AR) ( No effect)  Benzene (AR) ( No effect)  Formaldehyde (AR) 37% ( No effect)  Methylene Chloride (AR) ( No effect)  Trichloroethylene (AR) ( No effect)  Chloroform (AR) ( No effect)</p>			
	<b>4</b>	<b>UNDER BENCH CUPBOARD</b>	<b>2</b>		
		SIZE: 2100 (L) X 750 (W) X 900 (H) MM			
		<p>Steel Sheet to fabricate with steel treated against corrosion and strong chemicals. Epoxy coating minimum 70microns. Doors should be open more than 180 degrees. (500mm wide Under bench cabinet with 1 adjustable shelf &amp; 1 door with lock)</p>			

	Doors and drawers should be double skinned in order to reduce noise levels. (Minimum two drawer sets per row)			
	D type stainless steel handle			
	Structures should not have any tack welding points to prevent corrosion			
<b>5</b>	<b>REAGENT SHELVES ON THE BENCH</b>	<b>1</b>		
	SIZE: 6 (L) X 4 (W) X 2.5 (H) ft.			
	The reagent rack shall be made of 2mm thick epoxy powder coated material with vertical section 100x 50 mm size,			
	Reagent shelves Should be fixed between two media columns, Shelve space variable and should be adjustable by the user without any tools, Two shelves for each side with epoxy coated front & rear protectors, Shelves base should cover with phenolic resin work top to prevent any corrosion			
<b>6</b>	<b>WATER FITTINGS</b>	<b>6</b>		
	Three way water tap Color schemes of handles of all taps and valves are in accordance with DIN 12920 Made of brass; should be epoxy resin coated. Maximum working pressure should be at least 10 Bar for water taps Should be leak tested should be tested water tightness & pressure resistance characteristics and Hydraulic characteristic according to the BS 5412-1996 and third party certificate should be attached			
<b>7</b>	<b>GAS FITTINGS</b>	<b>2</b>		
	Two way gas tap Color schemes of handles of all taps and valves are in accordance with DIN 12920 Made of brass; should be epoxy resin coated. Maximum working pressure should be at least 7 Bar for gas taps Should be leak tested			

		should be tested water tightness & pressure resistance characteristics and Hydraulic characteristic according to the BS 5412-1996 and <b><i>third party certificate should be attached</i></b>			
	<b>8</b>	<b>CHEMICAL STORAGE</b>	<b>1</b>		
		<b>SIZE:1000 (L) X 450 (W) X 1600 (H) mm</b>			
		Polypropylene chemical storage cabinet (With suitable chemical resistant centrifugal blower with sufficient capacity and ducting)			
	<b>9</b>	<b>STORAGE CUPBOARD</b>	<b>1</b>		
		<b>SIZE:900 (L) X 450 (W) X 1800 (H) mm</b>			
		White or light grey color approved by the end user Structure should be treated or galvanize steel with epoxy coating with high temperature treated Steel thickness to be 0.8-1.0 mm Double opening door with viewing window with transparent glass Four or more stainless steel adjustable shelves			
	<b>10</b>	<b>LABORATORY STOOL</b>	<b>10</b>		
		Fire retardant polyurethane injection foam seat 20cm adjustable gas lift stainless steel, base five finger base Should comply with ANSI-BIFMA X 5.1-2002 standard and third party certificate should be attached 45cm dia or better stainless steel foot ring 60cm dia or better aluminum base and durable nylon castors Performance should cover minimum of below specifications, Base Test for proof load minimum 100kg( 1000N), Swivel Test – Cyclic- No loss of serviceability for 60,000cycles of rotation 360 ° under a 100kg weight			

	<b>11</b>	<b>TROLLEY WITH CASTOR WHEELS</b>	<b>01</b>		
		<b>SIZE:1800 (L) X 600 (W) X 750 (H) mm</b>			
		Stainless steel construction with 1" tube			
	<b>12</b>	<b>EMERGENCY SHOWER AND EYE WASH - SINK INCLUDED).</b>	<b>01</b>		
		Floor mounted Emergency shower with self-draining shower and Eye wash shall be have a foot paddle for easy operation. ABS shower head and epoxy coated steel pull rod epoxy coated steel bowl and rubber eye wash cups.			
		<b>Eye wash:</b> Eyewash with foot paddle for emergency operation.			
		<b>Sink: 04 Nos</b> Drop in polypropylene sink, Chemical resistant. Dimensions approx. 550mm x 400 mm x 230 mm. Color -Black Chemical resistant sinks should be injection molded as one piece from polypropylene copolymer to ensure a consistent quality. The sink should not have any sharp corners inside. Dimensions approx. 550mm x 400 mm x 230 mm. Color -Black All sinks shall be supplied with polypropylene bottle trap			
	<b>13</b>	<b>FIRE EXTINGUISHERS</b>			
		9L water fire extinguisher with all accessories including wall brackets	2		
		2kg CO2 fire extinguisher with all accessories including wall brackets	2		
		1 x 3kg dry powder fire extinguisher with all accessories including wall brackets	2		
	<b>14</b>	<b>LAB WASTE WATER DRAINAGE SYSTEM</b>	<b>1</b>		
		Water supply to Laboratory sink taps and laboratory waste water drainage system should be made with appropriate chemical resistant (where needed ) pipes of appropriate diameters and thickness			

		with necessary valves and other fittings should be coupled to the service pick-up points provided in the laboratory building.			
	15	<b>LP GAS SUPPLY SYSTEM FOR GAS STANDOUTS ON LAB BENCHES</b> Gas taps should be connected to the pick-up points provided in LP Gas supply system within the Laboratory premises & new gas cage should be provided as per the drawing. LP gas leak detector should be incorporate with the system.	2		
	16	<b>ELECTRICAL WIRING SYSTEM FOR TEACHER TABLES, WALL BENCHES &amp; STUDENT WORK TABLES</b> Electrical wiring including appropriate casing to the electrical power sockets of the tables & benches should be connected to the relevant service pick-up points provided in the laboratory building	1		
	17	<b>MICROSCOPE STORAGE CABINET SIZE: 1200 (L) X 700 (W) X 1900 (H) mm</b>	1		
		Capacity should be 1400 LitersHumidity Range should be in 10%-50% RHIt should be Recovers to ≤ 20% RH within 2 hours after accessing door for 30 seconds or less.External Dimensions should be 120*193.5*66 cm (W*H*D)Internal Dimensions should be 110*174*61 cm (W*H*D).There should be 3 x Anti-Static Shelf Type availableIt should be available three Tier Side by Side Anti-Static Glass Doors.Power Consumption should be Avg. 44 Watts.02 locks and 2 keys should be available.Hygrometer Type:  It should be available Digital TESTO Thermal Hygrometer.Anti-static Glass doors should be available. There should be Anti-static Paint on Body and Shelves. Anti-static Caster should be available.1 M Ω Ground Wire should be available.			
<b>PARASITOLOGY LAB</b>					



Package 2	1	REAGENT SHELVES ON THE WALL	3		
		SIZE: 900 (L) X 450 (W) X 1800 (H) mm			
		Should be fixed between two media columns			
		Shelve space variable and should be adjustable by the user without any tools  Three shelves for each side with epoxy coated front & rear protectors			
		Shelves base should cover with phenolic resin work top to prevent any corrosion			
	2	WALL MOUNTED CUPBOARD	10		
		SIZE: 900 (L) X 450 (W) X 1800 (H) MM			
		Cupboard made of steel sheets with epoxy powder coated paint.			
		Metallic parts treated and epoxy powder coated with thickness not less than 75µm in order to prevent from corrosion and chemical effects.			
		Minimum thickness of metal sheet is 0.8 mm.			
		Sliding glass doors with minimum of one shelf			
	3	UNDER BENCH CUPBOARD FOR WALL COUNTER TOPS	16		
		SIZE: 2100 (L) X 750 (W) X 900 (H) MM			

		Steel Sheet to fabricate with steel treated against corrosion and strong chemicals. Epoxy coating minimum 70microns. Doors should be open more than 180 degrees.			
		Doors and drawers should be double skinned in order to reduce noise levels.			
		D type stainless steel handle			
		Structures should not have any tack welding points to prevent corrosion  500mm wide Under bench cabinet with 1 adjustable shelf & 1 door with .			
	<b>4</b>	<b>Work Surface / work tops ( Physical Properties)</b>	<b>6</b>		
		<b>SIZE: 4500 (L) X 600 (W) X 1800 (H) MM</b>			
		All work surfaces should be manufactured in European countries to maintain the high quality and standards. Manufacture authorization letter should be attached			
		Chemical resistant Solid Phenolic Resin worktop with 15mm thickness or above, Both surface should be electron beam cured			
		Should provide independent testing laboratory report certifying that the Chemical resistant Solid Phenolic Resin worktop meets or exceeds the test criteria such mentioned below;  Resistance to scratching according to the EN 438-2 ( rating should be 5 or above at			

	<p>6N)</p> <p>Resistance to Fire according to the ASTM- D 84-01</p> <p>Resistance to boiling water according to the EN 438-2 ( rating should be 5 or above)</p> <p>Resistance to wet heat according to the EN 12721 2 ( rating should be 5 or above)</p> <p>Resistance to dry heat according to the EN 438-2 ( rating should be 4 or above)</p> <p>Resistance to staining according to the EN 438-2 ( rating should be 4 or above)</p> <p>Resistance to impact according to the EN 438-25 ( drop height should be 180cm or more)</p> <p>Light fastness according to the EN 438-2 ( rating should be 6 or above)</p> <p>Flexural strength according to the EN ISO 178 ( 150Mpa or above)</p> <p>Resistance to crazing according to the EN 438-2 ( rating should be 5 or above)</p> <p>Density according to the EN 323 (1.35g/cm<sup>3</sup> or above)</p> <p>Hygienic certificate according to the ISO 14644-1</p>			
	<p>Should provide independent testing laboratory report certifying that the Phenolic laminate work surface meets or exceeds the chemical resistance properties against mentioned below;</p> <p>Acetic acid (AR) 98% ( No effect)</p> <p>Hydrochloric acid (AR) 37% ( No effect),Hydrochloric acid (AR) 48% ( Excellent ) ,Nitric Acid (AR) 70% ( No effect),Phosphoric acid (AR) 85% ( No effect),Sulfuric acid (AR) 96% ( No effect),Ammonium Hydroxide (AR) 25% ( Excellent ),Sodium Hydroxide (AR) 40% ( No effect),Acetone (AR) ( No effect),Benzene (AR) ( No effect),Formaldehyde (AR) 37% ( No</p>			

		effect),Methylene Chloride (AR) ( No effect),Trichloroethylene (AR) ( No effect),Chloroform (AR) ( No effect)			
	<b>5</b>	<b>REAGENT SHELVES ON THE BENCH</b>	2		
		<b>SIZE: 1800 (L) X 1500 (W) X 800 (H) MM</b>			
		The reagent rack shall be made of 2mm thick epoxy powder coated material with vertical section 100x 50 mm size, Reagent shelves Should be fixed between two media columns, Shelf space variable and should be adjustable by the user without any tools, Two shelves for each side with epoxy coated front & rear protectors, Shelves base should cover with phenolic resin work top to prevent any corrosion			
	<b>6</b>	<b>WATER FITTINGS</b>	7		
		Two way gas tap  Color schemes of handles of all taps and valves are in accordance with DIN 12920  Made of brass; should be epoxy resin coated.  Maximum working pressure should be at least 10 Bar for gas taps  Should be leak tested  should be tested water tightness & pressure resistance characteristics and Hydraulic characteristic according to the BS 5412-1996 and <i>third party certificate should be attached</i>			
	<b>7</b>	<b>GAS FITTINGS</b> Two way gas tap  Color schemes of handles of all taps and valves are in accordance with DIN 12920  Made of brass; should be epoxy resin coated.  Maximum working pressure should be at least 7 Bar for gas taps  Should be leak tested  should be tested water tightness &	1		

		pressure resistance characteristics and Hydraulic characteristic according to the BS 5412-1996 and <i>third party certificate should be attached</i>			
	<b>8</b>	<b>CHEMICAL STORAGE CABINET</b>	6		
		<b>SIZE: 1000 (L) X 450 (W) X 1600 (H) mm</b>			
		Polypropylene chemical storage cabinet  (With suitable chemical resistant centrifugal blower with sufficient capacity and ducting)			
	<b>9</b>	<b>STORAGE CUPBOARD</b>	3		
		<b>SIZE: 900 (L) X 450 (W) X 1800 (H) mm</b>			
		White or light grey color approved by the end user			
		Structure should be treated or galvanize steel with epoxy coating with high temperature treated			
		Steel thickness to be 0.8-1.0 mm			
		Double opening door with viewing window with transparent glass			
		Four or more stainless steel adjustable shelves			
	<b>10</b>	<b>TEACHER TABLE</b>	1		
		<b>SIZE: 1600 (L) X 730 (W) X 600 (H) mm</b>			
		All work surfaces should be manufactured in European countries to maintain the high quality and standards. Manufacture authorization letter should be attached.			

		Chemical resistant Solid Phenolic Resin worktop with 15mm thickness or above, Both surface should be electron beam cured			
		<p>Should provide independent testing laboratory report certifying that the Chemical resistant Solid Phenolic Resin worktop meets or exceeds the test criteria such mentioned below;</p> <p>Resistance to scratching according to the EN 438-2 ( rating should be 5 or above at 6N)</p> <p>Resistance to Fire according to the ASTM- D 84-01</p> <p>Resistance to boiling water according to the EN 438-2 ( rating should be 5 or above)</p> <p>Resistance to wet heat according to the EN 12721 2 ( rating should be 5 or above)</p> <p>Resistance to dry heat according to the EN 438-2 ( rating should be 4 or above)</p> <p>Resistance to staining according to the EN 438-2 ( rating should be 4 or above)</p> <p>Resistance to impact according to the EN 438-25 ( drop height should be 180cm or more)</p> <p>Light fastness according to the EN 438-2 ( rating should be 6 or above)</p> <p>Flexural strength according to the EN ISO 178 ( 150Mpa or above)</p> <p>Resistance to crazing according to the EN 438-2 ( rating should be 5 or above)</p> <p>Density according to the EN 323 (1.35g/cm<sup>3</sup> or above)</p> <p>Hygienic certificate according to the ISO 14644-1</p> <p>Should <b><i>provide independent testing laboratory report</i></b> certifying that the Phenolic laminate work surface meets or</p>			

	<p>exceeds the chemical resistance properties against mentioned below;  Acetic acid (AR) 98% ( No effect)  Hydrochloric acid (AR) 37% ( No effect),Hydrochloric acid (AR) 48% ( Excellent ) ,Nitric Acid (AR) 70% ( No effect),Phosphoric acid (AR) 85% ( No effect),Sulfuric acid (AR) 96% ( No effect),Ammonium Hydroxide (AR) 25% ( Excellent ),Sodium Hydroxide (AR) 40% ( No effect),Acetone (AR) ( No effect),Benzene (AR) ( No effect).Formaldehyde (AR) 37% ( No effect),Methylene Chloride (AR) ( No effect),Trichloroethylene (AR) ( No effect),Chloroform (AR) ( No effect)</p> <p>500mm wide Under bench sink cabinet</p> <p>polypropylene copolymer sink (320 x 320 mm) with polypropylene bottle trap</p> <p>single cold water standout</p> <p>13 Amp, 220/230V double electrical socket pedestal box.</p>			
<b>11</b>	<b>LABORATORY STOOL</b>	<b>22</b>		
	<b>SIZE: 1500 (L) X 750-800 (W) X 2100-2200 (H) mm</b>			
	Fire retardant polyurethane injection foam seat			
	20cm adjustable gas lift stainless steel, base five finger base			
	Should comply with ANSI-BIFMA X 5.1-2002 standard and third party certificate should be attached			
	45cm dia or better stainless-steel foot ring.			
	60cm dia or better aluminum base and durable nylon castors			
	Performance should cover minimum of below specifications, Base Test for proof load minimum 100kg( 1000N), Swivel Test – Cyclic- No loss of serviceability for 60,000cycles of rotation 360 ° under a			

		100kg weight			
	<b>12</b>	<b>FUME CUPBOARD</b>	<b>1</b>		
		Construction- Both interior and exterior polypropylene. Wall thickness should be minimum of 7.5 mm			
		Under bench cabinet should be fully polypropylene construction suitable for storage of acids and bases			
		Front sash-Vertically rising single piece front sash of toughened glass (Minimum thickness should be 5 mm and should be able to adjust the opening size)			
		Sash opening minimum 800 mm			
		External dimension including base cabinet (WxDxH)-1500x750-800 x 2100-2200 mm (Approximately)			
		Internal dimension of work chamber (WxDxH)-1300x 500-600 x850-900 mm (Approximately)			
		Accessories-1 no of fully covered fluorescent lamp, water tap (controller should be outside the inner chamber), polypropylene sink,1 no of gas tap (controller should be outside the inner chamber) 2 nos. of water proof power sockets			
		Work top-solid highly chemical resistant (H <sub>2</sub> SO <sub>4</sub> and HNO <sub>3</sub> ) material. (Preferred phenolic or epoxy)  Air velocity-0.4-0.5 m/s to be maintained across the phase.Noise level-Less than 70dB			



	<p>Fan Controller-Microprocessor controller with LCD display</p> <p>Exhaust system-Externally fixed centrifugal blower resistant to strong acid and bases (H<sub>2</sub>SO<sub>4</sub> and HNO<sub>3</sub>) and ducting up to safer level</p> <p>Motor-should be speed adjustable</p>			
<b>13</b>	<b>TROLLEY WITH CASTOR WHEELS</b>	<b>1</b>		
	<b>SIZE: 1800 (L) X 600 (W) X 750(H) mm</b>			
	Stainless steel construction with 1" tube			
<b>14</b>	<b>EMERGENCY SHOWER (EYE WASH AND SINK INCLUDED)</b>	<b>3</b>		
	<p>Floor mounted Emergency shower with self-draining shower and Eye wash shall be have a foot paddle for easy operation. ABS shower head and epoxy coated steel pull rod epoxy coated steel bowl and rubber eye wash cups.</p> <p><b>Eye wash-1 Nos:</b>Eyewash with foot paddle for emergency operation.</p> <p><b>Sink-3 Nos :</b> Drop in polypropylene sink, Chemical resistant. Dimensions approx. 550mm x 400 mm x 230 mm. Color - Black</p> <p>Chemical resistant sinks should be injection molded as one piece from polypropylene copolymer to ensure a consistent quality. The sink should not have any sharp corners inside.</p> <p>Dimensions approx. 550mm x 400 mm x 230 mm. Color -Black All sinks shall be supplied with polypropylene bottle trap.</p>			
<b>15</b>	<b>FIRE EXTINGUISHERS</b>			
	-9L water fire extinguisher with all accessories including wall brackets.	2		
	-2kg CO <sub>2</sub> fire extinguisher with all accessories including wall brackets	2		
	-1 x 3kg dry powder fire extinguisher			

		with all accessories including wall brackets	2		
	16	<b>WATER &amp; LAB WASTE WATER DRAINAGE SYSTEM</b>  Water supply to Laboratory sink taps and laboratory waste water drainage system should be made with appropriate chemical resistant (where needed ) pipes of appropriate diameters and thickness with necessary valves and other fittings should be coupled to the service pick-up points provided in the laboratory building	7		
	17	<b>LP GAS SUPPLY SYSTEM FOR GAS STANDOUTS ON LAB BENCHES</b>	1		
		Gas taps should be connected to the pick-up points provided in LP Gas supply system within the Laboratory premises & new gas cage should be provided as per the drawing. LP gas leak detector should be incorporate with the system			
	18	<b>ELECTRICAL WIRING SYSTEM FOR TEACHER TABLES, WALL BENCHES &amp; STUDENT WORK TABLES</b>	3		
		Electrical wiring including appropriate casing to the electrical power sockets of the tables & benches should be connected to the relevant service pick-up points provided in the laboratory building.			
<b>PATHOLOGY LAB</b>					
<b>Package 3</b>	1	<b>REAGENT SHELVES ON THE WALL</b>	3		
		<b>SIZE: 900 (L) X 450 (W) X 1800 (H) mm</b>			
		Should be fixed between two media columns			
		Shelve space variable and should be			

		adjustable by the user without any tools			
		Three shelves for each side with epoxy coated front & rear protectors			
		Shelves base should cover with phenolic resin work top to prevent any corrosion			
	<b>2</b>	<b>WALL MOUNTED CUPBOARD</b>	<b>2</b>		
		<b>SIZE: 900 (L) X 450 (W) X 1800 (H) mm</b>			
		Cupboard made of steel sheets with epoxy powder coated paint.			
		Metallic parts treated and epoxy powder coated with thickness not less than 75µm in order to prevent from corrosion and chemical effects.			
		Minimum thickness of metal sheet is 0.8 mm.			
		Sliding glass doors with minimum of one shelf			
	<b>3</b>	<b>UNDER BENCH CUPBOARD FOR WALL COUNTER TOPS</b>	<b>10</b>		
		<b>SIZE: 2100 (L) X 750 (W) X 900 (H) MM</b>			
		Steel Sheet to fabricate with steel treated against corrosion and strong chemicals. Epoxy coating minimum 70microns. Doors should be open more than 180 degrees.			
		Doors and drawers should be double skinned in order to reduce noise levels.			
		D type stainless steel handle			
		Structures should not have any tack welding points to prevent corrosion			

		500mm wide Under bench cabinet with 1 adjustable shelf & 1 door with lock			
<b>4</b>	<b>WORK SURFACE / WORK TOPS (PHYSICAL PROPERTIES)</b>  <b>SIZE: 7000(L) X 600 (W) X 1800 (H) MM, 5000(L) X 600 (W) X 1800 (H) MM</b>	<b>5</b>			
	All work surfaces should be manufactured in European countries to maintain the high quality and standards. Manufacture authorization letter should be attached				
	Chemical resistant Solid Phenolic Resin worktop with 15mm thickness or above, Both surface should be electron beam cured				
	<p>Should provide independent testing laboratory report certifying that the Chemical resistant Solid Phenolic Resin worktop meets or exceeds the test criteria such mentioned below;</p> <p>Resistance to scratching according to the EN 438-2 ( rating should be 5 or above at 6N)</p> <p>Resistance to Fire according to the ASTM- D 84-01</p> <p>Resistance to boiling water according to the EN 438-2 ( rating should be 5 or above)</p> <p>Resistance to wet heat according to the EN 12721 2 ( rating should be 5 or above)</p> <p>Resistance to wet heat according to the EN 12721 2 ( rating should be 5 or above)</p> <p>Resistance to staining according to the EN 438-2 ( rating should be 4 or above)</p> <p>Resistance to impact according to the EN 438-25 ( drop height should be 180cm or</p>				

	<p>more)</p> <p>Light fastness according to the EN 438-2 ( rating should be 6 or above)</p> <p>Flexural strength according to the EN ISO 178 ( 150Mpa or above)</p> <p>Resistance to crazing according to the EN 438-2 ( rating should be 5 or above)</p> <p>Density according to the EN 323 (1.35g/cm<sup>3</sup> or above)</p> <p>Hygienic certificate according to the ISO 14644-1</p>			
	<p>Should provide independent testing laboratory report certifying that the Phenolic laminate work surface meets or exceeds the chemical resistance properties against mentioned below:</p> <p>Acetic acid (AR) 98% ( No effect)  Hydrochloric acid (AR) 37% ( No effect),  Hydrochloric acid (AR) 48% ( Excellent ) ,  Nitric Acid (AR) 70% ( No effect),  Phosphoric acid (AR) 85% ( No effect),  Sulfuric acid (AR) 96% ( No effect),  Ammonium Hydroxide (AR) 25% ( Excellent ) ,  Sodium Hydroxide (AR) 40% ( No effect),  Acetone (AR) ( No effect),  Benzene (AR) ( No effect),  Formaldehyde (AR) 37% ( No effect),  Methylene Chloride (AR) ( No effect),  Trichloroethylene (AR) ( No effect),  Chloroform (AR) ( No effect)</p>			
<b>5</b>	<b>WATER FITTINGS</b>	<b>8</b>		
	Three way water tap			
	Color schemes of handles of all taps and valves are in accordance with DIN 12920			
	Made of brass; should be epoxy resin			

		coated.  Maximum working pressure should be at least 10 Bar for water taps			
		Should be leak tested			
		should be tested water tightness & pressure resistance characteristics <b>and</b> Hydraulic characteristic according to the BS 5412-1996 and third party certificate should be attached			
	<b>6</b>	<b>CHEMICAL STORAGE CABINET</b>	2		
		<b>SIZE: 1000 (L) X 450 (W) X 1600 (H) MM</b>			
		Polypropylene chemical storage cabinet  (With suitable chemical resistant centrifugal blower with sufficient capacity and ducting)			
	<b>7</b>	<b>STORAGE CUPBOARD</b>	2		
		<b>SIZE: 900 (L) X 450 (W) X 1800 (H) MM</b>			
		White or light grey color approved by the end user			
		Structure should be treated or galvanize steel with epoxy coating with high temperature treated			
		Steel thickness to be 0.8-1.0 mm			
		Double opening door with viewing			

		window with transparent glass			
		Four or more stainless steel adjustable shelves			
	<b>8</b>	<b>DISPLAY RACK</b>	<b>2</b>		
		<b>SIZE: 900 (L) X 450 (W) X 1800 (H) MM</b>			
		Structure should be treated or galvanize steel with epoxy coating with high temperature treated			
		Steel thickness to be 0.8-1.0 mm			
		Six or more adjustable shelves			
	<b>9</b>	<b>TEACHER TABLE</b> <b>SIZE: 1600 (L) X 730 (W) X 600 (H) MM</b>	<b>2</b>		
		<i>SAME MATERIAL SPECIFICATIONS AS THE STUDENT WORK STATION TOP (Lot 3 Item No.4)</i>			
		<i>500mm wide Under bench cabinet with 1 adjustable shelf &amp; 1 door with lock</i>			
		<i>500mm wide Under bench sink cabinet</i>			
		<i>polypropylene copolymer sink (320 x 320 mm) with polypropylene bottle trap</i>			
		<i>single cold water stand out</i>			
		<i>13 Amp, 220/230V double electrical socket pedestal box</i>			
	<b>10</b>	<b>LABORATORY STOOL</b>	<b>72</b>		
		Fire retardant polyurethane injection foam seat			
		20cm adjustable gas lift stainless steel, base five finger base			
		Should comply with ANSI-BIFMA X 5.1-2002 standard and third party certificate			

		should be attached			
		45cm dia or better stainless steel foot ring  60cm dia or better aluminum base and durable nylon castors			
		Performance should cover minimum of below specifications, Base Test for proof load minimum 100kg( 1000N), Swivel Test – Cyclic- No loss of serviceability for 60,000cycles of rotation 360 ° under a 100kg weight			
	<b>11</b>	<b>FUME CUPBOARD</b>  Construction- Both interior and exterior polypropylene. Wall thickness should be minimum of 7.5 mm  Under bench cabinet should be fully polypropylene construction suitable for storage of acids and bases  Front sash-Vertically rising single piece front sash of toughened glass (Minimum thickness should be 5 mm and should be able to adjust the opening size)  Sash opening minimum 800 mm  External dimension including base cabinet (WxDxH)-1500x750-800 x 2100-2200 mm (Approximately)  Internal dimension of work chamber (WxDxH)-1300x 500-600 x850-900 mm (Approximately)  Accessories-1 no of fully covered fluorescent lamp, water tap (controller should be outside the inner chamber), polypropylene sink,1 no of gas tap (controller should be outside the inner chamber) 2 nos. of water proof power sockets  Work top-solid highly chemical resistant (H2SO4 and HNO3) material. (Preferred phenolic or epoxy)  Air velocity-0.4-0.5 m/s to be maintained	<b>1</b>		



		<p>across the phase</p> <p>Noise level-Less than 70dB</p> <p>Fan Controller-Microprocessor controller with LCD display</p> <p>Exhaust system-Externally fixed centrifugal blower resistant to strong acid and bases (H<sub>2</sub>SO<sub>4</sub> and HNO<sub>3</sub>) and ducting up to safer level</p> <p>Motor-should be speed adjustable</p>			
	<b>12</b>	<p><b>TROLLEY WITH CASTOR WHEELS</b></p> <p><b>SIZE: 1800 (L) X 600 (W) X 750 (H) MM</b></p> <p>Stainless steel construction with 1" tube</p>	<b>2</b>		
	<b>13</b>	<b>EMERGENCY SHOWER AND EYE WASH -SINK INCLUDED)</b>	<b>2</b>		
		Floor mounted Emergency shower with self-draining shower and Eye wash shall be have a foot paddle for easy operation.			
		ABS shower head and epoxy coated steel pull rod epoxy coated steel bowl and rubber eye wash cups			
		<b>Eye wash:</b> Eyewash with foot paddle for emergency operation.			
		<b>Sink-2 Nos :</b> Drop in polypropylene sink, Chemical resistant. Dimensions approx. 550mm x 400 mm x 230 mm. Color - Black			
		Chemical resistant sinks should be injection molded as one piece from polypropylene copolymer to ensure a consistent quality. The sink should not have any sharp corners inside.			
		Dimensions approx. 550mm x 400 mm x 230 mm. Color -Black All sinks shall be			

		supplied with polypropylene bottle trap.			
	<b>14</b>	<b>FIRE EXTINGUISHERS</b>			
		9L water fire extinguisher with all accessories including wall brackets.	<b>2</b>		
		9L water fire extinguisher with all accessories including wall brackets.	<b>2</b>		
		-1 x 3kg dry powder fire extinguisher with all accessories including wall brackets	<b>2</b>		
	<b>15</b>	<b>WATER &amp; LAB WASTE WATER DRAINAGE SYSTEM</b>	<b>1</b>		
		Water supply to Laboratory sink taps and laboratory waste water drainage system should be made with appropriate chemical resistant (where needed ) pipes of appropriate diameters and thickness with necessary valves and other fittings should be coupled to the service pick-up points provided in the laboratory building			
<b>MICROBIOLOGY LAB</b>					
<b>Package 4</b>	<b>1</b>	<b>REAGENT SHELVES ON THE WALL</b>	<b>6</b>		
		<b>SIZE:900 (L) X 450 (W) X 1800 (H) mm</b>			
		Should be fixed between two media columns			
		Shelve space variable and should be adjustable by the user without any tools			
		Three shelves for each side with epoxy coated front & rear protectors			
		Shelves base should cover with phenolic			

		resin work top to prevent any corrosion			
<b>2</b>	<b>WALL MOUNTED CUPBOARD</b>		12		
	<b>SIZE: 900 (L) X 450 (W) X 1800 (H) mm</b>				
	Cupboard made of steel sheets with epoxy powder coated paint.				
	Metallic parts treated and epoxy powder coated with thickness not less than 75µm in order to prevent from corrosion and chemical effects.				
	Minimum thickness of metal sheet is 0.8 mm.				
	Sliding glass doors with minimum of one shelf				
<b>3</b>	<b>UNDER BENCH CUPBOARD FOR WALL COUNTER TOPS</b>		52		
	<b>SIZE: 2100 (L) X 750 (W) X 900 (H) MM</b>				
	Steel Sheet to fabricate with steel treated against corrosion and strong chemicals. Epoxy coating minimum 70microns. Doors should be open more than 180 degrees.				
	Doors and drawers should be double skinned in order to reduce noise levels.				
	D type stainless steel handle				
	Structures should not have any tack welding points to prevent corrosion				
	500mm wide Under bench cabinet with 1 adjustable shelf & 1 door with lock				

	<b>4</b>	<b>WATER FITTINGS</b>	<b>4</b>		
		Three way water tap			
		Color schemes of handles of all taps and valves are in accordance with DIN 12920			
		Made of brass; should be epoxy resin coated.			
		Maximum working pressure should be at least 10 Bar for water taps			
		Should be leak tested			
		should be tested water tightness & pressure resistance characteristics and Hydraulic characteristic according to the BS 5412-1996 and third party certificate should be attached			
	<b>5</b>	<b>GAS FITTINGS</b>	<b>8</b>		
		Two way gas tap			
		Color schemes of handles of all taps and valves are in accordance with DIN 12920			
		Made of brass; should be epoxy resin coated.			
		Maximum working pressure should be at least 7 Bar for gas taps			
		Should be leak tested			
		should be tested water tightness & pressure resistance characteristics and Hydraulic characteristic according to the BS 5412-1996 and third party certificate should be attached			
	<b>6</b>	<b>CHEMICAL STORAGE CABINET SIZE: 1000(L) X 450 (W) X 1600 (H) MM</b>	<b>3</b>		
		Polypropylene chemical storage cabinet			

		(With suitable chemical resistant centrifugal blower with sufficient capacity and ducting)			
	<b>7</b>	<b>STORAGE CUPBOARD</b>	<b>2</b>		
		<b>SIZE: 900 (L) X 450 (W) X 1600 (H) MM</b>			
		Structure should be treated or galvanize steel with epoxy coating with high temperature treated			
		Steel thickness to be 0.8-1.0 mm			
		Double opening door with viewing window with transparent glass: SIZE: 900 (L) X 450 (W) X 1800 (H) MM			
		Four or more stainless steel adjustable shelves			
		Structure should be treated or galvanize steel with epoxy coating with high temperature treated			
		Steel thickness to be 0.8-1.0 mm			
		Six or more adjustable shelves			
	<b>8</b>	<b>TEACHER TABLE</b>	<b>4</b>		
		<b>SIZE: 1800 (L) X 600 (W) X 900 (H) MM</b>			
		<i>SAME MATERIAL SPECIFICATIONS AS THE STUDENT WORK STATION TOP (Lot 4 Item No3)</i>			
		<i>500mm wide Under bench cabinet with 1 adjustable shelf &amp; 1 door with lock</i>			
		<i>500mm wide Under bench sink cabinet</i>			
		<i>polypropylene copolymer sink (320 x 320 mm) with polypropylene bottle trap</i>			
		<i>single cold water standout: 1600 x 730 x 600mm</i>			
		<i>13 Amp, 220/230V double electrical</i>			

		<i>socket pedestal box:</i>			
	<b>9</b>	<b>LABORATORY STOOL</b>	<b>120</b>		
		Fire redundant polyurethane injection foam seat			
		20cm adjustable gas lift stainless steel, base five finger base  Connections of all the services should be done by the furniture supplier.			
		Should comply with ANSI-BIFMA X 5.1-2002 standard and third party certificate should be attached			
		45cm dia or better stainless steel foot ring			
		60cm dia or better aluminum base and durable nylon castors			
		Performance should cover minimum of below specifications, Base Test for proof load minimum 100kg( 1000N), Swivel Test – Cyclic- No loss of serviceability for 60,000cycles of rotation 360 ° under a 100kg weight			
	<b>10</b>	<b>EMERGENCY SHOWER (EYE WASH AND SINK INCLUDED)</b>	<b>1</b>		
		Floor mounted Emergency shower with self-draining shower and Eye wash shall be have a foot paddle for easy operation.			
		ABS shower head and epoxy coated steel pull rod epoxy coated steel bowl and rubber eye wash cups			
		<b>Eye wash-:</b> Eyewash with foot paddle for emergency operation.  <b>Sink:</b> Drop in polypropylene sink, Chemical resistant. Dimensions approx. 550mm x 400 mm x 230 mm. Color -			

		Black .Chemical resistant sinks should be injection molded as one piece from polypropylene copolymer to ensure a consistent quality. The sink should not have any sharp corners inside.			
		Dimensions approx. 550mm x 400 mm x 230 mm. Color -Black All sinks shall be supplied with polypropylene bottle trap			
	<b>11</b>	<b>FIRE EXTINGUISHERS</b>			
		-9L water fire extinguisher with all accessories including wall brackets.	<b>2</b>		
		-2kg CO2 fire extinguisher with all accessories including wall brackets.	<b>2</b>		
		-1 x 3kg dry powder fire extinguisher with all accessories including wall brackets.	<b>2</b>		
	<b>12</b>	<b>WATER &amp; LAB WASTE WATER DRAINAGE SYSTEM</b>  Water supply to Laboratory sink taps (13 sink & Taps) and laboratory waste water drainage system should be made with appropriate chemical resistant (where needed ) pipes of appropriate diameters and thickness with necessary valves and other fittings should be coupled to the service pick-up points provided in the laboratory building.	<b>2</b>		
	<b>13</b>	<b>LP GAS SUPPLY SYSTEM FOR GAS STANDOUTS ON LAB BENCHES.</b>  Gas taps should be connected to the pick-up points provided in LP Gas supply system 03 Systems (06 Benches) within the Laboratory premises & new gas cage should be provided as per the drawing. LP gas leak detector should be incorporate with the system	<b>03</b>		
	<b>14</b>	<b>ELECTRICAL WIRING SYSTEM FOR TEACHER TABLES, WALL BENCHES &amp; STUDENT WORK TABLES</b>  (01 Teaching Table, 15 Wall benches & Student Work Table) Electrical wiring including appropriate casing to the	<b>03</b>		

		electrical power sockets of the tables & benches should be connected to the relevant service pick-up points provided in the laboratory building			
<b>FORENSIC &amp; TOXICOLOGY LAB</b>					
<b>Package 5</b>	<b>1</b>	<b>REAGENT SHELVES ON THE WALL</b>	<b>3</b>		
		<b>SIZE: 900(L) X 450 (W) X 1800 (H) MM</b>			
		Should be fixed between two media columns			
		Shelve space variable and should be adjustable by the user without any tools			
		Shelves base should cover with phenolic resin work top to prevent any corrosion			
	<b>2</b>	<b>WALL MOUNTED CUPBOARD</b>	<b>2</b>		
		<b>SIZE: 900(L) X 450 (W) X 1800 (H) MM</b>			
		Cupboard made of steel sheets with epoxy powder coated paint.			
		Metallic parts treated and epoxy powder coated with thickness not less than 75µm in order to prevent from corrosion and chemical effects.			
		Minimum thickness of metal sheet is 0.8 mm.			
		Sliding glass doors with minimum of one shelf			
	<b>3</b>	<b>WORK SURFACE / WORK TOPS (PHYSICAL PROPERTIES)</b>	<b>2</b>		
		<b>SIZE: 4500 (L) X 600 (W) X 1800 (H) mm</b>			
		All work surfaces should be manufactured in European countries to maintain the high quality and standards			
		Manufacture authorization letter should be attached			



		Chemical resistant Solid Phenolic Resin worktop with 15mm thickness or above, Both surface should be electron beam cured			
		<p>Should provide independent testing laboratory report certifying that the Chemical resistant Solid Phenolic Resin worktop meets or exceeds the test criteria such mentioned below;</p> <p>Resistance to scratching according to the EN 438-2 ( rating should be 5 or above at 6N)</p> <p>Resistance to Fire according to the ASTM- D 84-01</p> <p>Resistance to boiling water according to the EN 438-2 ( rating should be 5 or above)</p> <p>Resistance to wet heat according to the EN 12721 2 ( rating should be 5 or above)</p> <p>Resistance to dry heat according to the EN 438-2 ( rating should be 4 or above)</p> <p>Resistance to staining according to the EN 438-2 ( rating should be 4 or above)</p> <p>Resistance to impact according to the EN 438-25 ( drop height should be 180cm or more)</p> <p>Light fastness according to the EN 438-2 ( rating should be 6 or above)</p> <p>Flexural strength according to the EN ISO 178 ( 150Mpa or above)</p> <p>Resistance to crazing according to the EN 438-2 ( rating should be 5 or above)</p> <p>Density according to the EN 323 (1.35g/cm<sup>3</sup> or above)</p> <p>Hygienic certificate according to the ISO 14644-1</p> <p>Should provide independent testing laboratory report certifying that the Phenolic laminate work surface meets or</p>			

	<p>exceeds the chemical resistance properties against mentioned below:</p> <p>Acetic acid (AR) 98% ( No effect)  Hydrochloric acid (AR) 37% ( No effect),Hydrochloric acid (AR) 48% ( Excellent ) ,Nitric Acid (AR) 70% ( No effect)</p> <p>Phosphoric acid (AR) 85% ( No effect),Sulfuric acid (AR) 96% ( No effect),Ammonium Hydroxide (AR) 25% ( Excellent ),Sodium Hydroxide (AR) 40% ( No effect),Acetone (AR) ( No effect),Benzene (AR) ( No effect),Formaldehyde (AR) 37% ( No effect).Methylene Chloride (AR) ( No effect),Trichloroethylene (AR) ( No effect),Chloroform (AR) ( No effect)</p>			
<b>4</b>	<b>WATER FITTINGS</b>	6		
	Three way water tap			
	Color schemes of handles of all taps and valves are in accordance with DIN 12920			
	Made of brass; should be epoxy resin coated.			
	Maximum working pressure should be at least 10 Bar for water taps			
	Should be leak tested			
	should be tested water tightness & pressure resistance characteristics and Hydraulic characteristic according to the BS 5412-1996 and third party certificate should be attached			
<b>5</b>	<b>GAS FITTINGS</b>	2		
	Two way gas tap			
	Color schemes of handles of all taps and valves are in accordance with DIN 12920			
	Made of brass; should be epoxy resin coated.			
	Maximum working pressure should be at			

		least 7 Bar for gas taps			
		Should be leak tested			
		should be tested water tightness & pressure resistance characteristics and Hydraulic characteristic according to the BS 5412-1996 and third party certificate should be attached			
<b>6</b>		<b>CHEMICAL STORAGE CABINET</b>	2		
		<b>SIZE: 1000(D) X 450 (W) X 1600(H) MM</b>  Polypropylene chemical storage cabinet  (With suitable chemical resistant centrifugal blower with sufficient capacity and ducting)			
<b>7</b>		<b>STORAGE CUPBOARD</b>	2		
		<b>SIZE: 900 (D) X 450(W) X 1800(H) MM</b>			
		Exterior dimension approx			
		White or light grey color approved by the end user  Structure should be treated or galvanize steel with epoxy coating with high temperature treated			
		Steel thickness to be 0.8-1.0 mm			
		"Double opening door with viewing window with transparent glass			
		Four or more stainless steel adjustable shelves			
<b>8</b>		<b>LABORATORY STOOL</b>	50		
		Fire retardant polyurethane injection foam seat 20cm adjustable gas lift stainless steel, base five finger base			
		Fire retardant polyurethane injection foam seat 20cm adjustable gas lift stainless steel, base five finger base			
		45cm dia or better stainless steel foot ring 60cm dia or better aluminum base and durable nylon castors Performance			

		should cover minimum of below specifications, Base Test for proof load minimum 100kg( 1000N), Swivel Test – Cyclic- No loss of serviceability for 60,000cycles of rotation 360 ° under a 100kg weight			
<b>9</b>	<b>EMERGENCY SHOWER AND EYE WASH - SINK INCLUDED</b>		2		
	Floor mounted Emergency shower with self-draining shower and Eye wash shall be have a foot paddle for easy operation				
	ABS shower head and epoxy coated steel pull rod epoxy coated steel bowl and rubber eye wash cups				
	<b>Eye wash:</b> Eyewash with foot paddle for emergency operation.				
	<b>Sink-5 Nos:</b> Drop in polypropylene sink, Chemical resistant. Dimensions approx. 550mm x 400 mm x 230 mm. Color - Black				
	Chemical resistant sinks should be injection molded as one piece from polypropylene copolymer to ensure a consistent quality. The sink should not have any sharp corners inside.				
	Dimensions approx. 550mm x 400 mm x 230 mm. Color -Black All sinks shall be supplied with polypropylene bottle trap				
<b>10</b>	<b>Fire Extinguishers</b>				
	-9L water fire extinguisher with all accessories including wall brackets.	<b>1</b>			
	-2kg CO2 fire extinguisher with all accessories including wall brackets	<b>1</b>			
	-1 x 3kg dry powder fire extinguisher with all accessories including wall brackets	<b>1</b>			
<b>11</b>	<b>WATER &amp; LAB WASTE WATER DRAINAGE SYSTEM</b>		2		
	Water supply to Laboratory sink taps and laboratory waste water drainage system				

		should be made with appropriate chemical resistant (where needed ) pipes of appropriate diameters and thickness with necessary valves and other fittings should be coupled to the service pick-up points provided in the laboratory building			
	<b>12</b>	<b>LP GAS SUPPLY SYSTEM FOR GAS STANDOUTS ON LAB BENCHES</b>  Gas taps should be connected to the pick-up points provided in LP Gas supply system within the Laboratory premises & new gas cage should be provided as per the drawing. LP gas leak detector should be incorporate with the system	1		
	<b>13</b>	<b>ELECTRICAL WIRING SYSTEM FOR TEACHER TABLES, WALL BENCHES &amp; STUDENT WORK TABLES</b>  Electrical wiring including appropriate casing to the electrical power sockets of the tables & benches should be connected to the relevant service pick-up points provided in the laboratory building	1		
<b>GENERAL SPECIFICATION BIDDER'S REQUIREMENTS / QUALIFICATION FOR ALL LAB FURNITURES</b>					
		Bidders are invited to visit the laboratory and propose suitable design. Design consider as a one of the critical evaluation criteria			
		Proposed design should accommodate existing equipment and analyses and should have the provision for future proposed equipment.			
		Design should be state of the art and should address the aesthetic appearance of the laboratory			
		Design should comply with Scientific Equipment and Furniture Association (SEFA) guidelines			

		Critical components of the product should be manufactured at local manufacturing plant for repainting or replacement which may require in future			
		In house interior designer with scientific exposure should certify the final design.			
		<b><u>Structure</u></b>			
		Structure to fabricate with steel treated against corrosion and strong chemicals. Minimum thickness to be 1.8-2 mm and epoxy coating minimum 70 microns. All benches should be modular type.			
		Structure of the reagent table should fabricated by 100x 50 x 1.8-2 mm or better thickness square steel tube or steel sheet to maintain the strength of the table.			
		Structure of the side table should fabricated by 50x 40 x 1.8 -2 mm or better thickness square steel tube or steel sheet to maintain the strength of the table.			
		All systems can be easily detached and arranged according to the requirement, should be able to interchange the units to adapt to any altered requirement in future.			
		Structures should not have any tack welding points to prevent corrosion			
		The supporting structure of the modular work bench should have adjustable levelling feet or caster wheels			
		All benches should be in standing work height of 900 mm unless stated.			
		Instrument table should have heavy duty caster wheels			
		Discussion table should have castor wheels and C frame structure			
		<b><u>Service column</u></b>			

		Panels should have adjustable, interchangeable panels on front face.			
		All the services including electrical and gas should be lay though this service panel			
		Electrical sockets should insert on front face of the adjustable cassette. That should not insert on the side column.			

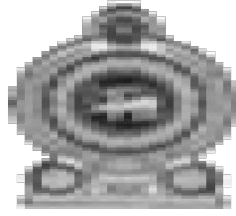
## Section VII

### Contract Data

The Following Contract Data Shall supplement and / or amend the conditions of contract (CC). Whenever there is a conflict, the provisions herein shall prevail over those in the CC.

CC1.1 (i)	The Purchaser is :- Project Director, Construction of Faculty of Medicine Project at the Sabragamuwa University of Sri Lanka
CC 1.1 (m)	The Project Site(s) / Final Destinations (s) is / are :- Sabaragamuwa University of Sri Lanka ,,Faculty of Medicine (Para Clinical Building) , Newtown, Rathnapura
CC 8.1	For notices, the purchaser' s address  Attention :- Project Director, Construction of Faculty of Medicine Project at the Sabragamuwa University of Sri Lanka  Address :- Ministry of Education, Higher Education Division, No.18 Ward Place, Colombo 07 Sri Lanka  Telephone :- 077 -3721021 (Project Director)  077 - 3050698 (Project Procurement Officer)
CC 11	Goods shall be supplies in compliance with the quality and the specification given.
CC 15.1	CC 15.1 – The method and conditions of payment to be made to the Supplier under this Contract shall be as follows:  A: For Goods offered within Sri Lanka  Payment shall be made in Sri Lanka Rupees within sixty (60) days of presentation of claim supported by a certificate from the Purchaser declaring that the Goods have been delivered and that all other contracted Services have been performed.  (i) On Delivery: up to a maximum of ninety (90) percentage of the Contract price, shall be paid on receipt of the Goods. (ii) On Acceptance: the remaining ten(10) percentage of the Contract price shall be paid to the Supplier within 01 year after the certification of acceptance or the submission of a retention bond for covering the 01-year from the delivery. (iii) Payment will be made by SWIFT transfer.
CC 17.1	A Performance Security – 10% (90days)
CC 26.1	The liquidated damage shall be : 2% per week
CC 26.1	The maximum amount of liquidated damages shall be : 10%





## **THE MINISTRY OF EDUCATION**

### **Higher Education Division**

### **PROCUREMENT NOTICE**

#### **Supply, Delivery and Fixing of Laboratory Furniture for Faculty for Medicine , the Sabragamuwa University of Sri Lanka (MOHE/FOM/SUSL/NCB/2023/01)**

The Democratic Socialist Republic of Sri Lanka has received a loan from the Saudi Fund for Development of the Kingdom of Saudi Arabia towards the cost of Construction of the Proposed Medical Faculty of Sabaragamuwa University at Ratnapura, and intends to apply part of the proceeds of this loan to payments under the Loan No :**15 / 751**.

The Project Director, Construction of Faculty of Medicine Project at the Sabragamuwa University of Sri Lanka, Ministry of Education, Higher Education Division, No.18 Ward Place, Colombo 07, Sri Lanka now invites sealed Bid from eligible and qualified Bidders for Supply, Delivery & Fixing of Laboratory Furniture for Faculty of Medicine to the Sabaragamuwa University of Sri Lanka as described below.

1. Bidding will be conducted through the National Competitive Bidding (NCB) Procedure.
2. Bidder should have at least Three years' experience in the relevant field in Sri Lanka. The Bidder should have completed minimum of one medical /chemical laboratory project not less than LKR 20 Million as the Main Contractor with similar nature and complexity during the last 3 years. The Bidder should have minimum amount of liquid assets and/or credit facilities net of other contractual commitments which may be under the contract shall be not less than 1/3 of offered bid price.
3. To obtain further information and inspect the Bidding Documents, bidders should contact:  
The Project Director, Construction of Faculty of Medicine Project at the Sabragamuwa University of Sri Lanka, Ministry of Education, Higher Education Division, No.18 Ward Place, Colombo 07, Sri Lanka(Contact No +094 773 721 021/**proofficer-fomsab@mohe.gov.lk .**  
)
4. A Complete set of the soft copy of the of bidding documents in English may be purchased by interested bidders on the submission of a written application to the "The Project Director, Construction of Faculty of Medicine Project at the Sabragamuwa University of Sri Lanka", and deposit of a non – refundable fee of Rupees 5,000.00/= to the account of Construction

of Faculty Medicine Project @ Sabaragamuwa University of Sri Lanka, Account No 0007040656 maintain at Bank of Ceylon ( Branch :453 -Torrington Square) . The document/s (One document for all lots) will be sent only via email after producing the bank deposit slip to email **prooficer-fomsab@mohe.gov.lk** . from 08/01/2024. No liability will be accepted for loss or late delivery.

5. Bids must be delivered in duplicate to be addressed **Project Director, Construction of Faculty of Medicine Project at the Sabragamuwa University of Sri Lanka, Ministry of Education, Higher Education Division, No.18 Ward Place, Colombo 07 Sri Lanka** on or before **2.00 pm on 31/01/2024** please indicate ", **Supply, Delivery and Fixing of Laboratory Furniture for Faculty for Medicine - (MOHE/FOM/SAB/NCB/2023/01)- 31/01/2024** " on the left hand corner of the envelope.
6. All bids must be accompanied by a Bid Security addressed to the **The Project Director, Construction of Faculty of Medicine Project at the Sabragamuwa University of Sri Lanka**, valid for 120 days (up-to 2024-05-30) from the date of the bid opening specified in the following Table.

Type	Serial No	Items	QTY (Nos)	Bid Security (Rs) (Package Wise)
<b>Laboratory Furniture</b>				
		<b>PHARMACOLOGY LAB</b>		
Package 1	1	WALL MOUNTED CUPBOARD-	01	100,000.00
	2	UNDER BENCH CUPBOARD FOR WALL COUNTER TOPS	10	
	3	WORK SURFACE / WORK TOPS	02	
	4	UNDER BENCH CUPBOARD	02	
	5	REAGENT SHELVES ON THE BENCH	01	
	6	WATER FITTINGS	06	
	7	GAS FITTINGS	02	
	8	CHEMICAL STORAGE CABINET	01	
	9	STORAGE CUPBOARD	01	
	10	LABORATORY STOOL	10	
	11	TROLLEY WITH CASTOR WHEELS	01	
	12	EMERGENCY SHOWER AND EYE WASH ( sinks included)	01	
	13	FIRE EXTENGUISHERS	06	
	14	LAB WASTE WATER DRAINAGE SYSTEM	01	
	15	LP GAS SUPPLY SYSTEM FOR GAS STANDOUTS ON LAB BENCHES	02	
	16	ELECTRICAL WIRING SYSTEM FOR TEACHER TABLES, WALL BENCHES & STUDENT WORK TABLES	01	
	17	MICROSCOPE STORAGE CABINET	01	
		<b>PARASITOLOGY LAB</b>		
Package e 2	1	REAGENT SHELVES ON THE WALL	03	
	2	WALL MOUNTED CUPBOARD	10	

	3	UNDER BENCH CUPBOARD FOR WALL COUNTER TOPS	16	300,000.00
	4	WORK SURFACE / WORK TOPS	06	
	5	REAGENT SHELVES ON THE BENCH	02	
	6	WATER FITTINGS	07	
	7	GAS FITTINGS	01	
	8	CHEMICAL STORAGE CABINET	06	
	9	STORAGE CUPBOARD	03	
	10	TEACHER TABLE	01	
	11	LABORATORY STOOL	22	
	12	FUME CUPBOARD	01	
	13	TROLLEY WITH CASTOR WHEELS	01	
	14	EMERGENCY SHOWER	03	
	15	FIRE EXTINGUISHERS	06	
	16	WATER & LAB WASTE WATER DRAINAGE SYSTEM	07	
	17	LP GAS SUPPLY SYSTEM FOR GAS STANDOUTS ON LAB BENCHES	01	
	18	ELECTRICAL WIRING SYSTEM FOR TEACHER TABLES, WALL BENCHES & STUDENT WORK TABLES	03	
	<b><i>PATHOLOGY LAB</i></b>			150,000.00
Package 3	1	REAGENT SHELVES ON THE WALL	03	
	2	WALL MOUNTED CUPBOARD	02	
	3	UNDER BENCH CUPBOARD FOR WALL COUNTER TOPS	10	
	4	WORK SURFACE / WORK TOPS	05	
	5	WATER FITTINGS	08	
	6	CHEMICAL STORAGE CABINET	02	
	7	STORAGE CUPBOARD	02	
	8	DISPLAY RACK	02	
	9	TEACHER TABLE	02	
	10	LABORATORY STOOL	72	
	11	FUME CUPBOARD	01	
	12	TROLLEY WITH CASTOR WHEELS	02	
	13	EMERGENCY SHOWER AND EYE WASH (sink included)	02	
	14	FIRE EXTENGUISHERS	06	
	15	WATER & LAB WASTE WATER DRAINAGE SYSTEM	01	
Package 4	<b><i>MICROBIOLOGY LAB</i></b>			250,000.00
	1	REAGENT SHELVES ON THE WALL	06	
	2	WALL MOUNTED CUPBOARD	12	
	3	UNDER BENCH CUPBOARD FOR WALL COUNTER TOPS	52	
	4	WATER FITTINGS	04	
	5	GAS FITTINGS	08	
	6	CHEMICAL STORAGE CABINET	03	
	7	STORAGE CUPBOARD	02	
	8	TEACHER TABLE	04	

	9	LABORATORY STOOL	120	
	10	EMERGENCY SHOWER	01	
	11	FIRE EXTINGUISHERS	06	
	12	WATER & LAB WASTE WATER DRAINAGE SYSTEM	02	
	13	LP GAS SUPPLY SYSTEM FOR GAS STANDOUTS ON LAB BENCHES	03	
	14	ELECTRICAL WIRING SYSTEM FOR TEACHER TABLES, WALL BENCHES & STUDENT WORK TABLES	03	
	<b>FORENSIC &amp; TOXICOLOGY LAB</b>			
Package 5	1	REAGENT SHELVES ON THE WALL	03	100,000.00
	2	WALL MOUNTED CUPBOARD	02	
	3	WORK SURFACE / WORK TOPS	02	
	4	WATER FITTINGS	06	
	5	GAS FITTINGS	02	
	6	CHEMICAL STORAGE CABINET	02	
	7	STORAGE CUPBOARD	02	
	8	LABORATORY STOOL	50	
	9	EMERGENCY SHOWER AND EYE WASH (SINK INCLUDED)	02	
	10	FIRE EXTINGUISHERS	03	
	11	WATER & LAB WASTE WATER DRAINAGE SYSTEM	02	
	12	LP GAS SUPPLY SYSTEM FOR GAS STANDOUTS ON LAB BENCHES	01	
	13	ELECTRICAL WIRING SYSTEM FOR TEACHER TABLES, WALL BENCHES & STUDENT WORK TABLES	01	

7. Pre Bid meeting will be held on 23/01/2024 at 10.00 am in the Board Room , Faculty of Medicine of Sabaragamuwa University of Sri Lanka or via the Zoom meeting platform.
8. The bids shall be deposited in the 'Tender Box' available in the The Project Director's Office , Higher Education Division, No.18 Ward Place, Colombo 07. Sri Lanka, or sent under Registered post to be received on or before the deadline to the address given in Clause No.5 .
9. Late bids will be rejected. Bids will be opened soon after closing in the presence of the Bidders' representatives who choose to attend.

The Project Director  
Construction of Faculty of Medicine Project at the Sabragamuwa University of Sri Lanka  
Ministry of Education, Higher Education Division  
No.18 Ward Place  
Colombo 07, Sri Lanka