

**DEMOCRATIC SOCIALIST REPUBLIC OF
SRI LANKA**



UVA WELLASSA UNIVERSITY

**SUPPLY, DELIVERY AND INSTALLATION OF LABORATORY
AND TEACHING EQUIPMENT FOR THE YEAR – 2026,
FACULTY OF ANIMAL SCIENCE AND EXPORT
AGRICULTURE, UVA WELLASSA UNIVERSITY**

UWU/G/NCB/C/26/06

NATIONAL COMPETITIVE BIDDING

Bid Opening On	27 th May 2026 - 2.00 p.m.
Bid Validity up to	91 days from 27 th May 2026

Uva Wellassa University,
Passara Road,
Badulla,
Sri Lanka.

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INVITATION FOR BIDS
SUPPLY, DELIVERY AND INSTALLATION OF LABORATORY AND TEACHING
EQUIPMENT FOR THE YEAR – 2026, FACULTY OF ANIMAL SCIENCE AND EXPORT
AGRICULTURE, UVA WELLASSA UNIVERSITY.
UWU/G/NCB/C/26/06

The Chairman, Department Procurement Committee, on behalf of the Uva Wellassa University, hereby invites sealed bids from eligible and qualified bidders for the **“SUPPLY, DELIVERY AND INSTALLATION OF LABORATORY AND TEACHING EQUIPMENT FOR THE YEAR – 2026, FACULTY OF ANIMAL SCIENCE AND EXPORT AGRICULTURE, UVA WELLASSA UNIVERSITY”** The procurement will be conducted through the National Competitive Bidding (NCB) procedure.

1. Bidders should have at least three (03) years of experience in the relevant field in Sri Lanka.
2. Interested eligible bidders may obtain further information from the Deputy Bursar (Supplies), Uva Wellassa University, Passara Road, Badulla, (Tel.: 055-2226475, Fax No: 055-2226633), and inspect the bidding documents at the Supplies Division of the University between 9.00 a.m. and 3.00 p.m. from **7th May 2026 to 26th May 2026, and up to 12.30 p.m. on 27th May 2026.**
3. A complete set of bidding documents in English may be purchased by interested bidders upon submission of a written application to the Deputy Bursar (Supplies), Uva Wellassa University, Passara Road, Badulla, and upon payment of a non-refundable fee of LKR 12,000.00 in cash at the Shroff Counter of the University. The bidder can also download the bidding documents from the University website: www.uwu.ac.lk. Those who are obtaining bidding documents from the University website must submit the complete documents together with a **Bank Draft** drawn in favour of the **“Vice Chancellor, Uva Wellassa University”** for LKR 12,000.00 as the non-refundable fee. Alternatively, payment may be made to any branch of Bank of Ceylon, to **Uva Wellassa University, Account No: 3114820**, with the original receipt/deposit slip attached to the bidding documents. The documents may be purchased until **12.30 p.m. on 27th May 2026.**
4. Bids must be delivered to the **Chairman, Department Procurement Committee, Uva Wellassa University, Passara Road, Badulla**, on or before **2.00 p.m. on 27th May 2026.** Please indicate the **“SUPPLY, DELIVERY AND INSTALLATION OF LABORATORY AND TEACHING EQUIPMENT FOR THE YEAR – 2026, FACULTY OF ANIMAL SCIENCE AND EXPORT AGRICULTURE, UVA WELLASSA UNIVERSITY - UWU/G/NCB/C/26/06”** on the top left-hand corner of the envelope.
5. All bids must be accompanied by a **Bid Security** addressed to the **Chairman, Department Procurement Committee, Uva Wellassa University, Passara Road, Badulla**, valid for 91 days from the date of bid opening. The Value of the Bid Security shall be **LKR 720,000.00**
6. A Pre-Bid meeting will be held at **2.00 p.m. on 13th May 2026** at the Board Room of Uva Wellassa University.
7. The completed bids shall be deposited in the ‘Tender Box’ available at the Registrar’s Office of the University, or sent by Registered Post to the address given in Clause No.5, ensuring receipt before the deadline.
8. Late bids will be rejected. Bids will be opened immediately after the closing of bids, in the presence of the bidders or their authorized representatives who choose to attend the bid opening, at the Board Room of the Uva Wellassa University.

Chairman
Department Procurement Committee
Uva Wellassa University
Passara Road, Badulla, Sri Lanka
Tel/ Fax No: 055-2226475, 055-2226633

Section I. Instructions to Bidders (ITB)

This Bidding Document is based on the Standard Bidding Document for National Competitive Bidding (NPA/Goods/SBD 01). Section I will not be provided with this bidding document. Bidders are instructed to refer to Section I of the Standard Bidding Document (NPA/Goods/SBD 01) available on the **National Procurement Agency (NPA)** website: www.npa.gov.lk

Section II. Bidding Data Sheet (BDS)

The following specific data for the goods to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions herein shall prevail over those in the ITB.

[Instructions for completing the Bid Data Sheet are provided, as necessary, in the corresponding ITB Clauses.]

Clause Reference	A. General
ITB 1.1	The Purchaser is: Uva Wellassa University
ITB 1.1	The name and identification number of the Contract are: “SUPPLY, DELIVERY AND INSTALLATION OF LABORATORY AND TEACHING EQUIPMENT FOR THE YEAR – 2026, FACULTY OF ANIMAL SCIENCE AND EXPORT AGRICULTURE, UVA WELLASSA UNIVERSITY”
ITB 2.1	The source of funding is: GOSL
ITB 4.4	Foreign bidders are allowed to participate in bidding: Not allowed
	B. Contents of Bidding Documents
ITB 7.1	For clarification of bid purposes only, the Purchaser’s address is: Attention: Deputy Bursar/ Supplies & Stores Address: Uva Wellassa University, Passara Road, Badulla. Telephone: 055-2226475 E-mail: supply@uwu.ac.lk
	C. Preparation of Bids
ITB 11.1 (e)	The Bidder shall submit the following additional documents: A complete company profile of the bidder, including but not limited to the following: <ul style="list-style-type: none"> • Business Registration Certificate • VAT Registration Certificate • List of clients who use the products and their contact details • Past three (03) years of relevant experience in the industry in Sri Lanka (The bidder should have at least three years of experience in the industry in Sri Lanka and should submit documents to prove this experience) • Manufacturer’s Authorization. • Certificate of Registration under Public Contract Act. • Financial Statements
ITB 15.1	The bidder shall quote the local expenditure in Sri Lankan Rupees.
ITB 18.1 (b)	After-sales service is: Required

ITB 19.1	The bid shall be valid for: 91 days from 27th May 2026								
ITB 20.1	Bid shall include a Bid Security in any of the following ways: (a) A bank guarantee issued by a reputed bank operating in Sri Lanka. (b) A cash deposit at the Shroff Counter of the University (c) A cash deposit from any branch of the Bank of Ceylon, to Uva Wellassa University, Account No: 3114820, with the cash receipt/deposit slip attached to the bidding documents.								
ITB 20.2	The amount of the Bid Security is Rupees 720,000.00 Beneficiary: Vice Chancellor, Uva Wellassa University. The validity period of the bid security shall be 120 days from the closing date of the bid.								
D. Submission and Opening of Bids									
ITB 22.2 (c)	The inner and outer envelopes shall bear the following identification marks: “SUPPLY, DELIVERY AND INSTALLATION OF LABORATORY AND TEACHING EQUIPMENT FOR THE YEAR – 2026, FACULTY OF ANIMAL SCIENCE AND EXPORT AGRICULTURE, UVA WELLASSA UNIVERSITY - UWU/G/NCB/C/26/06”								
ITB 23.1	For bid submission purposes, the Purchaser’s address is: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Attention</td> <td>: Deputy Bursar/Stores & Supplies</td> </tr> <tr> <td>Address</td> <td>: Uva Wellassa University, Passara Road, Badulla.</td> </tr> </table> The deadline for the submission of bids is <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Date</td> <td>: 27th May 2026</td> </tr> <tr> <td>Time</td> <td>: 2.00 p.m.</td> </tr> </table>	Attention	: Deputy Bursar/Stores & Supplies	Address	: Uva Wellassa University, Passara Road, Badulla.	Date	: 27th May 2026	Time	: 2.00 p.m.
Attention	: Deputy Bursar/Stores & Supplies								
Address	: Uva Wellassa University, Passara Road, Badulla.								
Date	: 27th May 2026								
Time	: 2.00 p.m.								
ITB 26.1	The bid opening shall take place at: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Address</td> <td>: Board Room, Uva Wellassa University, Passara Road, Badulla.</td> </tr> <tr> <td>Date</td> <td>: 27th May 2026</td> </tr> <tr> <td>Time</td> <td>: 2.00 p.m.</td> </tr> </table>	Address	: Board Room, Uva Wellassa University, Passara Road, Badulla.	Date	: 27th May 2026	Time	: 2.00 p.m.		
Address	: Board Room, Uva Wellassa University, Passara Road, Badulla.								
Date	: 27th May 2026								
Time	: 2.00 p.m.								
E. Evaluation and Comparison of Bids									
ITB 34.1	Domestic preference shall not be a bid evaluation factor.								
ITB 35.3(d)	The adjustments shall be determined using the following criteria, among those set out in Section III, Evaluation and Qualification Criteria: (a) Deviation in Delivery schedule: Option 2 -Please refer to CC 26.1 (b) Deviation in payment schedule: Not applicable (c) The cost of major replacement components, mandatory spare parts, and service: Applicable								
ITB 35.4	The following factors and methodology will be used for evaluation: Acceptance Committee Report should be produced after the installation								
ITB 35.5	Bidders shall be allowed to quote for one or more lots. [refer to Section III, Evaluation and Qualification Criteria]. The Purchaser will evaluate the bid on an item-by-item basis.								

Section III. Evaluation and Qualification Criteria

1. Evaluation Criteria (ITB 35.3 (d))

The Purchaser's evaluation of a bid may take into account, in addition to the Bid Price quoted in accordance with ITB Clause 14, one or more of the following factors as specified in ITB Sub-Clause 35.3(d) and in BDS referring to ITB 35.3(d), using the following criteria and methodologies.

(a) Delivery schedule

Option 2

The goods covered under this invitation are required to be delivered within an acceptable range of weeks specified in the Schedule of Requirements. No credit will be given to earlier deliveries, and bids offering delivery beyond this range will be treated as non-responsive. Within this acceptable range, an adjustment per week, as specified in the Bid Data Sheet, will be added, for evaluation purposes only, to the bid price of bids offering deliveries later than the earliest delivery period specified in the Section V, Schedule of Requirements.

(b) Deviation in payment schedule. **Not applicable**

(c) Cost of major replacement components, mandatory spare parts, and service:

The required spare parts for the goods covered under this invitation shall be available for at least five years of period and after sales service (both free and paid services).

(d) Specific additional criteria: **None**

2. Evaluation Criteria (ITB 35.4):

(a) A bid may be submitted by any reputed supplier of **Laboratory Equipment**, registered business in Sri Lanka, or any accredited local agent who takes fullest responsibility for the entire bid. The local agent shall submit documentary evidence of their status, obligations, power of attorney, and any other supporting documents confirming that they are duly authorized and eligible to bid on behalf of the manufacturer.

(b) Bidders shall have a minimum of three years' prior experience in the relevant industry, in the supply and also technical and financial capability necessary to perform the contract.

(c) A draft service agreement for three-year period (after the warranty period) shall be submitted with the bid.

(d) Bids will be rejected non-responsive if the required documentary evidence in support of the above criteria is not provided.

(e) If an Agent submits bids on behalf of more than one supplier, unless each such bid is accompanied by a separate Bid Form for each bid, and a bid security when required for each bid, and authorization from the respective Manufacturer, and valid vendor certificate, all

such bids will be rejected as non- responsive.

- (f) Bidders should possess the Certificate of Business Registration issued by a Governmental Authority/ Registrar of Companies/ Provincial Registrar of Business in the relevant category.
- (g) Bidders shall register the Contract under Public Contract Act and submit the certificate of registration (ITB 11.1(e)).
- (h) Bidders offering goods under their own brand names should provide along with their bids a current certification/s of quality; Bid not complying with this requirement may be treated as non - responsive.
- (i) Having a service center in Badulla or Uva Province will be considered as an added qualification.

3. Multiple Contracts (ITB 35.5)

The Purchaser shall award multiple contracts to the Bidder that offers the lowest evaluated combination of bids (one contract per bid) and meets the post-qualification criteria (this Section III, Sub-Section ITB 37.2 Post-Qualification Requirements)

The Purchaser shall:

- (a) Evaluate only lots or contracts that include items per lot and quantity per item
- (b) Take into account: The lowest-evaluated bid for each lot

4. Domestic Preference (ITB 34.1) – Applicable to Procurement Guideline -7.7.1

5. Post qualification Requirements (ITB 37.2)

After determining the lowest-evaluated bid in accordance with ITB Sub-Clause 36.1, the Purchaser shall carry out the post qualification of the Bidder in accordance with ITB Clause 37, using only the requirements specified. Requirements not included in the text below shall not be used in the evaluation of the Bidder's qualifications.

- (a) Financial Capability: The Bidder shall furnish documentary evidence that it meets the following financial requirement(s): [list the requirement(s)]
- (b) Experience and Technical Capacity: The Bidder shall furnish documentary evidence to demonstrate that it meets the following experience requirement(s): [list the requirement(s)]
- (c) The Bidder shall furnish documentary evidence to demonstrate that the Goods it offers meet the following usage requirement: [list the requirement(s)]

Section IV. Bidding Forms

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Bid Submission Form

[The Bidder shall fill in this Form in accordance with the instructions indicated No alterations to its format shall be permitted and no substitutions shall be accepted.]

Date: [insert date (as day, month and year) of Bid Submission]

No.: [insert number of bidding process]

To: Chairman,
Department Procurement Committee
Uva Wellassa University
Passara Road
Badulla

We, the undersigned, declare that:

- a. We have examined and have no reservations to the Bidding Documents, including Addenda No.: [insert the number and issuing date of each Addenda];
- b. We offer to supply in conformity with the Bidding Documents and in accordance with the Delivery Schedules specified in the Schedule of Requirements the following Goods and Related Services [* insert a brief description of the Goods and Related Services];
- c. The total price of our Bid without VAT, including any discounts offered is: [insert the total bid price in words and figures];
- d. The total price of our Bid including VAT, and any discounts offered is: [insert the total bid price in words and figures];
- e. Our bid shall be valid for the period of time specified in ITB Sub-Clause 18.1, from the date fixed for the bid submission deadline in accordance with ITB Sub-Clause 23.1, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- f. If our bid is accepted, we commit to obtain a performance security in accordance with ITB Clause 43 and CC Clause 17 for the due performance of the Contract;
- g. We have no conflict of interest in accordance with ITB Sub-Clause 4.3;
- h. Our firm, its affiliates or subsidiaries—including any subcontractors or suppliers for any part of the contract—has not been declared blacklisted by the National Procurement Agency;
- i. We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed.
- j. We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.

Signed: [insert signature of person whose name and capacity are shown]

In the capacity of [insert legal capacity of person signing the Bid Submission Form]

Name: [insert complete name of person signing the Bid Submission Form]

Duly authorized to sign the bid for and on behalf of: [insert complete name of Bidder]

Dated on _____ day of _____, _____ [insert date of signing]

Price Schedule

- Note: 1. Unless otherwise allowed under ITB Clause 15, the bidders are required to quote the prices under 'A' columns;
 2. Bidders may quote prices under 'B' columns only if the ITB Clause 15 provides provisions to bid in foreign currencies for the line item
 3. Purchaser is advised to fill columns 1,2 and 3 before issuing the bidding document and delete this note 3;

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10
Item	Description of Goods or related services	Quantity	Unit price (inclusive of duties, sales, and other taxes) excluding VAT	Price per line item (Col.3×4)	Transportation, insurance, and other related services to deliver the goods to their final destination	Total price excluding VAT (Col 5+6)	Discounted total price (if any) excluding VAT	VAT	Total Price Including VAT (Col. 7 or 8+9)
1	Distillation Unit No 1	2							
2	Chest Freezer (Curved Glass Top)	1							
3	Chest Freezer	1							
4	Deep Fryer	1							
5	Top Loading Balance No 1	1							
6	Haugh Meter	1							
7	Microplate reader	1							
8	Portable Multipara meter	2							
9	Gel Electrophoresis	1							
10	Two door side by side refrigerator with freezer	1							
11	Trinocular stereo microscope with camera (Dissecting Microscope)	1							
12	Hot plate magnetic stirrer	2							
13	Top loading balance No 2	1							
14	Vortex mixer No 1	2							
15	Bench top pH meter No 1	1							

16	Sonicator/Sonicator Bath No 1	1							
17	Mini Centrifuge spin and down	1							
18	Binocular Microscope	10							
19	Sieve set	1							
20	Solar Power System	1							
21	Rotary Evaporator	1							
22	Splash Back for Existing Double Basin Sink (03 units)	3							
23	Portable Biogas Unit	1							
24	Dual Purpose Laminar Flow	1							
25	Vacuum Pump for SUGOLD Model-DZF Vacuum oven	1							
26	Vortex Mixture No 2	1							
27	Autoclave with dryer	1							
28	Laboratory Water Distillation Plant/Distilled water small plant No 2	1							
29	Air Condition Machine Type 1 - 24000 BTU	1							
	Air Condition Machine Type 2 - 36000 BTU	1							
30	Wet & Dry Vacuum Cleaner	1							
31	Orbital Shaker	1							
32	Magnetic Stirrer	1							
33	Shoe Cover Dispenser	1							
34	Sonication Bath No 2	1							
35	Centrifuge	1							
36	Drying Oven	2							

37	Conductivity Meter	1							
38	Automated Withering Trough	1							
39	Orthodox Roller	1							
40	FBD Dryer	1							
41	Acclimatization Chamber								
42	pH Meter No 2	1							
43	Rotary Rheometer	1							
44	Vacuum Pump	1							
45	Sonicator Bath/ Ultra Sonicator Cleaner No 3	2							
46	Agitator Mixer	1							
47	Colorimeter	1							

Bid Security (Guarantee)

(this Bank Guarantee form shall be filled in accordance with the instructions indicated in brackets)
.....insert issuing agency's name, and address of issuing branch or office.....

Beneficiary: Vice Chancellor, Uva Wellasa University, Passara road, Badulla

Date: ----- *[insert (by issuing agency) date]*

BID GUARANTEE No.: ----- *[insert (by issuing agency) number]*

We have been informed that -----
[name of the Bidder] (herein after called "the Bidder") has submitted to you its bid dated -----
[date] (herein after called "the Bid") for the execution of -----
----- *[insert name of Contract]* under Contract No. -----

Furthermore, we understand that, according to your conditions, Bids must be supported by a Bid Guarantee.

At the request of the Bidder, we ----- *[insert name of issuing agency]*
here by irrevocably undertake to pay you any sum or sums not exceeding in total an amount of -----
----- *[insert amount in figures]* - -----
----- *[insert amount in words]* upon receipt by us of your first demand in writing accompanied by a written statement stating that the bidder is in breach of its obligation(s) under the bid conditions, because the bidder:

- (a) Has withdrawn its bid during the period of bid validity specified; or
- (b) Does not accept the correction of errors in accordance with the Instructions to Bidders (hereinafter "the ITB"); or
- (c) Having been notified of the acceptance of its bid by the Employer during the period of bid validity, (i) fails or refuses to execute the Contract Form, if required, or (ii) fails or refuses to furnish the Performance Security, in accordance with the ITB.

This Guarantee shall expire: (a) if the Bidder is the successful bidder, upon our receipt of copies of the Contract signed by the Bidder and of the Performance Security issued to you by the Bidder; or (b) if the Bidder is not the successful bidder, upon the earlier of (i) the successful bidder furnishing the performance security, otherwise it will remain in force up to ----- *(insert date)*

Consequently, any demand for payment under this Guarantee must be received by us at the office on or before that date.

.....
[Signature of authorized representative(s)]

Manufacturer's Authorization

[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer. The Bidder shall include it in its bid, if so indicated in the BDS.]

Date: [insert date (as day, month and year) of Bid Submission]

No.: [insert number of bidding process]

To: [insert complete name of Purchaser]

WHEREAS

We [insert complete name of Manufacturer], who are official manufacturers of [insert type of goods manufactured], having factories at [insert full address of Manufacturer's factories], do hereby authorize [insert complete name of Bidder] to submit a bid the purpose of which is to provide the following Goods, manufactured by us [insert name and or brief description of the Goods], and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with Clause 27 of the Conditions of Contract, with respect to the Goods offered by the above firm.

Signed: [insert signature(s) of authorized representative(s) of the Manufacturer]

Name: [insert complete name(s) of authorized representative(s) of the Manufacturer]

Title: [insert title]

Duly authorized to sign this Authorization on behalf of: [insert complete name of Bidder]

Dated on _____ day of _____, _____ [insert date of signing]

Section V. Schedule of Requirements

Contents

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1. List of Goods and Delivery Schedule

Item No	Description of Goods	Quantity	Final (Project Site) Destination as specified in BDS	Delivery Date ¹		
				Earliest Delivery Date	Latest Delivery Date	Bidder's offered Delivery date [<i>to be provided by the bidder</i>]
1	Distillation Unit No 1	2				
2	Chest Freezer (Curved Glass Top)	1				
3	Chest Freezer	1				
4	Deep Fryer	1				
5	Top Loading Balance No 1	1				
6	Haugh Meter	1				
7	Microplate reader	1				
8	Portable Multipara meter	2				
9	Gel Electrophoresis	1				
10	Two door side by side refrigerator with freezer	1				
11	Trinocular stereo microscope with camera (Dissecting Microscope)	1				
12	Hot plate magnetic stirrer	2				
13	Top loading balance No 2	1				
14	Vortex mixer No 1	2				
15	Bench top pH meter No 1	1				
16	Sonicator/Sonicator Bath No 1	1				
17	Mini Centrifuge spin and down	1				
18	Binocular Microscope	10				

19	Sieve set	1				
20	Solar Power System	1				
21	Rotary Evaporator	1				
22	Splash Back for Existing Double Basin Sink (03 units)	3				
23	Portable Biogas Unit	1				
24	Dual Purpose Laminar Flow	1				
25	Vacuum Pump for SUGOLD Model-DZF Vacuum oven	1				
26	Vortex Mixture No 2	1				
27	Autoclave with dryer	1				
28	Laboratory Water Distillation Plant/Distilled water small plant No 2	1				
29	Air Condition Machine Type 1 - 24000 BTU	1				
	Air Condition Machine Type 2 - 36000 BTU	1				
30	Wet & Dry Vacuum Cleaner	1				
31	Orbital Shaker	1				
32	Magnetic Stirrer	1				
33	Shoe Cover Dispenser	1				
34	Sonication Bath No 2	1				
35	Centrifuge	1				
36	Drying Oven	2				
37	Conductivity Meter	1				
38	Automated Withering Trough	1				
39	Orthodox Roller	1				

40	FBD Dryer	1				
41	Acclimatization Chamber					
42	pH Meter No 2	1				
43	Rotary Rheometer	1				
44	Vacuum Pump	1				
45	Sonicator Bath/ Ultra Sonicator Cleaner No 3	2				
46	Agitator Mixer	1				
47	Colorimeter	1				

2. List of Related Services and Completion Schedule

[This table shall be filled in by the Purchaser. The Required Completion Dates should be realistic and consistent with the required Goods Delivery Dates]

Service	Description of Service	Quantity ¹	Unit	Place where Services shall be performed	Final Completion Date(s) of Services
<i>[insert Service No]</i>	<i>[insert description of Related Services]</i>	<i>[insert quantity of items to be supplied]</i>	<i>[insert unit for the items]</i>	<i>[insert name of the Place]</i>	<i>[insert required Completion Date(s)]</i>

1. If applicable

Technical Specifications


[The Technical specifications may be provided in the following format. The bidder shall fill the columns 6 and 7 (last two columns). Bidder's failure to provide the information requested in the columns 6 and 7 may be a reason for the rejection of the bid. Bidders shall submit authentic technical data sheets, catalogues, or manufacturer's literature for all quoted items. The bidder must clearly highlight or indicate the specific parameters that demonstrate compliance with each specification stated in the bidding document. If any discrepancy is observed between the information provided by the bidder in the columns 6 and 7 and the other technical information attached to the bid, the information provided herein shall take precedence.]

No	Name of the Item	Specification		Qty	Bidder's Compliance	
					Yes/ No	If "No", Bidder's Response
		Inner chamber and heating element made of stainless steel or equivalent; housing made of stainless steel with epoxy or equivalent coating				
		Compact design with easily removable parts for cleaning.				
		Water Quality Specifications (Approx.)	1. Conductivity: Min. 1.6 μ S/cm at 25 °C			
			2. Resistivity: 0.5 – 2 M Ω ·cm at 25 °C			
			3. pH: 5–7 at 25°C			
		Control panel with general power switch and indicator lights				
		Adjustable water feed connection				
		Cooling water drain outlet adaptable to containers				
		Safety Features	1. Automatic cut-off of heating element in case of cooling 2. water failure, with auto-restart when cooling is restored			
			2. Solenoid valve: Cut off water when there is no power			
			3. Overheating cut-off			
			4. Silicone gasket sealing			
			5. Earthed electrical system			
		Optional accessory: Flow limiter for optimized water usage.				
		Power supply	230 V, 50/60 Hz			
		Warranty	Minimum 3 years			
		Make	Please specify			
		Model	Please specify			
		Country of Origin	Please specify			

		A manufacturer Authorization Letter should be provided				
		Brand name, Product Catalog, Catalog page and Model no should be available. Requested specification should be stated in the Catalog page and product web site.				
		If you fail to fulfill the requested specification by the university [equipment supplies with wrong specification] the equipment would be rejected after goods delivery to the university.				
02	Chest Freezer (Curved Glass Top)	Type	Chest Freezer type with glass top Integrated Handle	1		
		Compressor	Direct cooling			
		Capacity	350L-400L			
		Shall use R-600a (Isobutane) refrigerant or an equivalent energy-efficient and environmentally friendly refrigerant compliant with international safety standards				
		Shall be equipped with an inverter-type compressor or equivalent technology to ensure energy-efficient and stable operation				
		Mechanical temperature control				
		Four-Sided Refrigeration				
		Power supply	230V,50Hz			
		Temperature	-18°C			
		Compressor Warranty	Minimum 5 years			
		Comprehensive Warranty	Minimum 3 years			
		Brand name, Product Catalog and Model no should be available. Requested specification should be stated in the Catalog page and product web site.				
		If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.				
		Make	Please specify			
		Model	Please specify			
		Country of Origin	Please specify			
Country of Manufacturing	Please specify					

03	Chest Freezer	Make	Please specify	1		
		Model	Please specify			
		Country of Origin	Please specify			
		Country of Manufacturing	Please specify			
		Capacity	350L-400L			
		Temperature	-18°C			
		Voltage	220-230 V, 50 Hz			
		Number of Doors:	2			
		Lock & Key Should be available				
		Handles	External handles or equivalent			
		Cooling	Multi-surface/five-surface cooling			
		Shall use R-600a (Isobutane) refrigerant or an equivalent energy-efficient and environmentally friendly refrigerant compliant with international safety standards.				
		Shall be equipped with an inverter-type compressor or equivalent technology to ensure energy-efficient and stable operation.				
		Inner Cabinet Material	Embossed PCM or equivalent			
		Outer Cabinet Material	PCM or equivalent			
		6 universal castors				
		Balance hinge or equivalent				
		Condenser Tube Material	Mild steel (MS) or stainless steel tube			
		Power-on Indicator	Green light			
		Door Open Indicator Light				
		Fast Freeze Control Knob				
		Condenser Fan				
		Convertible Function				
		Cabinet Partition				
		Compressor Warranty	Minimum 5 years			
		Comprehensive Warranty	Minimum 3 years			
		A manufacturer Authorization Letter should be provided				
		Brand name, Product Catalog and Model no should be available. Requested specification should be stated in the Catalog page and product web site.				
		If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.				

04	Deep Fryer	Make	Please specify	1		
		Model	Please specify			
		Country of Origin	Please specify			
		Country of Manufacturer	Please specify			
		Type	Electric fryer 10L double			
		Accessories	Two rugged stainless-steel wire baskets with handles			
		Material of the body and tanks: Corrosion-resistant stainless steel (Grade 316 or equivalent				
		Thickness:Outer housing: 0.7–1.0 mm (or equivalent gauge) ; Inner tanks:0.9–1.2 mm (or equivalent gauge)				
		Controls & Features	Thermostat, temperature controller, micro switch, and power switch			
		Oil Capacity	Approx. 8–10 L per tank			
		Operating Temperature Range	Approx. 50–200 °C (thermostatically controlled)			
		Voltage	220–230 V, 50 Hz			
		Power	Approx. 3 kW + 3 kW			
		Warranty	Minimum 1 year for the heating element			
		Brand name, Product Catalog and Model no should be available. Requested specification should be stated in the Catalog page and product web site.				
If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.						
05	Top Loading Balance No 1	Make	Please specify	1		
		Model	Please specify			
		Country of Origin	Please specify			
		Country of Manufacturer	Please specify			
		Weighing Range	0.01 g – 6,200 g			
		Weighing Plate Size	Approx. 160–170 × 160–170 mm			
		Readability	0.01 g			
		Temperature Range (Permissible Operating)	Approx. 5–35°C			
		Connectivity	RS232C and USB port (for printer or data output)			
		Accessories	Optional glass draft shield			
		Applications: Should be suitable for standard laboratory weighing and general balancing purposes				
		Warranty	Minimum 3 years			

		A manufacturer Authorization Letter should be provided			
		Brand name, Product Catalog and Model no should be available. Requested specification should be stated in the Catalog page and product web site.			
		If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.			
06	Haugh Meter	Make		1	
		Model			
		Country of Origin			
		Country of Manufacturer			
		Measurement parameters	Max measurement height :1'' or 25mm		
			Max micrometer error : 0.0002''		
			Resolution : 0.0005''/0.01mm		
		Power supply	1 Lithium battery , type CR2032		
		Mean Battery Life	4400 hours		
		High contrast LCD display			
		Warranty	Minimum 2 years		
		Applications	Extremely precise and friendly to use		
		A manufacturer Authorization Letter should be provided			
		Brand name, Product Catalog and Model no should be available. Requested specification should be stated in the Catalog page and product web site.			
		If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.			
		Drawing			
					

07	Microplate reader	Make	Please specify	1		
		Model	Please specify			
		Country of Origin	Please specify			
		Country of Manufacturer	Please specify			
		Detection Modes	Absorbance			
		Read Methods	END point kinetic, well area scanning			
		Micro plate type 6 to 96 well plates				
		The instrument shall able to adjust at least to 50°C for broader assay compatibility				
		It should have Shaken facility – Linear				
		Instrument and software shall support to normal and rapid mode to read the wells less than 40 seconds or better.				
		The software shall support to control the instruments and analysis of data.				
		Light Source	Thungsten Halogen			
		Wavelength Selection	Filters Based			
		Wave length range	340 – 750 nm			
		Dynamic Range	0 to 4.0 OD Normal and			
		Rapid read	0 to 3.0 OD			
		Resolution	0.001 OD or better			
		Filter wheel capacity	5 positions or better			
		Following Filters shall be supplied - 340,405,450,490,630 (UV configuration), Please specify the filters if any changes				
		OD accuracy	(96-well) Normal read Mode ± 1.0% ± 0.010 OD from 0.000 to 2.000 OD at 405 nm ± 3.0% ± 0.010 OD from 2.000 OD to 3.000 OD at 450 nm			
		OD repeatability	(96-well) Normal read			

			Mode ± 0.5% ± 0.005 OD from 0.000 to 2.000 OD at 405 nm ± 1.5% ± 0.005 OD from 0.000 to 2.000 OD at 340nm			
		Connectivity	1 USB for computer 1 USB for Printer			
		Power	100 – 240V			
		Dimension	420 x 380 x 180 mm			
		Instrument shall be certified – CE Certificate				
		The instrument shall supply along with compatible Laptop installed analysis software.				
		Display	Colour touch screen			
		Warranty	Shall not be less than 12 months			
		Letter from manufacturer for 10 years spare parts availability				
		A manufacturer Authorization Letter should be provided				
		Brand name, Product Catalog and Model no should be available. Requested specification should be stated in the Catalog page and product web site.				
		If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.				
08	Portable Multipara meter	Measuring Parameters	pH/mv, ORP, EC, TDS, Resistivity, Salinity, DO, ATM (Optional)	2		
		PH	Range	Approx. -2.00 to 20.00 pH		
			Resolution	0.1, 0.01 pH		
			Accuracy	±0.01 pH		
		mV	Range	Approx. -2000.0 to 2000.0 mV		
			Resolution	0.1		
			Accuracy	±0.3 mV or ±0.1%		
		Conductivity	Range	Approx. 0.000 µS/cm to 500 µS/cm		
			Resolution	0.001 µS/cm minimum preferable, various with range selection		

		Accuracy	±1.0% FS		
	TDS	Range	Approx. 0.00 ppm - 300 ppt		
		Resolution	0.01 ppm minimum Preferrable, various with range selection		
		Accuracy	±1.0% FS		
	Resistivity	Range	Approx. 5.00 $\Omega \cdot \text{cm}$ ~20.00 $M\Omega \cdot \text{cm}$		
		Resolution	0.01 $\Omega \cdot \text{cm}$ minimum		
		Accuracy	±1.0% FS		
	DO	Range	Approx. 0.00 to 50.00ppm		
		Resolution	0.01ppm		
		Accuracy	±0.1ppm		
	Temperature	Range	Approx. -5 to 110 °C		
		Resolution	0.1 °C		
		Accuracy	±0.2 °C		
	Salinity Accuracy (25°C/77°F): ±2% of reading or ±0.01 PSU whichever is greater				
	Temperature Compensation	ATC, MTC			
	Display	Backlit LCD display			
	Waterproof				
	Warranty	Approx. 2 years for the meter Minimum 6 months for the probe			
	Power Supply	1.5V AA batteries (4)			
	Make	Please specify			
	Model	Please specify			
	Country of Origin	Please specify			
	Country of Manufacturing	Please specify			
	A manufacturer Authorization Letter should be provided				
	Brand name, Product Catalog, Catalog page and Model no should be available. Requested specification should be stated in the Catalog page and product web site.				
	If you fail to fulfill the requested specification by the university [equipment supplies with wrong specification] the equipment would be rejected after goods delivery to the university.				

09	Gel Electrophoresis	Type	Horizontal		1		
		Accessories Mandatory	Buffer tank with electrodes, casting trays, combs, power supply with cables				
		Unit Dimensions	Approx. (W x L x H): 15-18 x 25-30 x 8-10 cm				
			Casting Gel Sizes: 15 x 15 cm; 14 x 7 cm; 7 x 7 cm approximately				
			Buffer volume: 400-600 mL approx.				
			Max. samples: 210 approx.				
			combs with 1mm – 2 mm thickness	1 - 08 tooth			
				1 - 16 tooth			
				1 - 20 tooth			
			Well volume: 10-40 uL approx.	1 - 28 tooth			
		Power supply	Output voltage				
			range/increments: 5-250V/1V				
			Output current				
			range/increment:10-3000mA/10mA				
			Output power				
			range/increments: 1-300W/1W				
			Timer: 1 min to 99h 59 min or continuous approx.				
	Should be Programmable 10 steps/program, 20 program memory						
	Dimensions (W x L x H): 7.6 x 9.9 x 3.2 in/19 x 25 x 8 cm approximately						
Input power supply	230V /50Hz						
Warranty	Should have 2 years manufacturer warranty period						
Make	Please specify						
Model	Please specify						
Country of Origin	Please specify						
Country of Manufacturing	Please specify						

		A manufacturer Authorization Letter should be provided				
		Brand name, Product Catalog, Catalog page and Model no should be available. Requested specification should be stated in the Catalog page and product web site.				
		If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.				
10	Two door side by side refrigerator with freezer	Type	Double Door Side by Side Refrigerator	1		
		Fruit Case	Yes			
		Compressor	Inverter tech (Digital Inverter Compressors)			
		Vegetable Case	Yes			
		Freezer	Should be available (e.g., one side freezer)			
		Capacity	Approx. 600 L			
		Dimension (W x H x D)	Approx. 80-100 cm x 160-180 cm x 60-70 cm			
		Cooling system	Twin/Dual Cooling systems			
		Power Supply	230V /50Hz			
		Warranty	1 year warranty minimum			
		Make	Please specify			
		Model	Please specify			
		Country of Origin	Please specify			
		Country of Manufacturing	Please specify			
					Brand name, Product Catalog and Model no should be available. Requested specification should be stated in the Catalog page and product web site.	
		If you fail to fulfill the requested specification by the university [equipment supplies with wrong specification] the equipment would be rejected after goods delivery to the university.				
11	Trinocular stereo microscope with camera (Dissecting Microscope)	Observation method	Brightfield	1		
		Optical system	Infinity Corrected Optical System			
		Head	Trinocular, 30 360 rotating			
		Split Ratio	Approx. 50/50			
		Interpupillary distance (mm)	Approx. 50-75			
		Dioptric adjustment	On left tube			
		Eyepieces	10x/22 mm, Higher eye point with fixing screws			
		Nosepiece	Quintuple and Bi-directional			
		Objective type	IOS W-PLAN			
		Parfocal distance (mm)	45			

	Standard objectives	4x/0.10, W.D. 17.3 mm		
		10x/0.25, W.D. 10 mm		
		40x/0.65, W.D. 0.54 mm		
		100x/1.25 (Oil), W.D. 0.13 mm		
		100x/1.25 (Water), W.D. 0.13 mm		
	Oil and Water immersion should be available			
	Focusing System	Coaxial coarse and fine with focus memory lock		
	Fine resolution (µm)	Approx. 2		
	Fine total travel (per single rotation) (mm)	Approx. 0.2		
	Fine graduations	Approx. 100		
	Coarse total travel (mm)	Approx. 25		
	Stage Type	Double layer, rackless		
	Vernier scale accuracy (mm)	Approx. 0.1		
	Condenser Type	Swing-out, Centrabale and removable Abbe condenser with focusable by rack and pinion with aperture scale		
	Condenser Numerical aperture (N.A.)	Approx. 0.2/0.9		
	Transmitted Illumination	Full Kohler illumination		
		X-LED		
		With manual light control facility		
	LED life time	Long life more than 65,000 hours		
	Light source power (W)	Approx. 3.6		
	Power Supply	230V /50Hz		
	Warranty	Should have Ten years [10 years] manufacturer warranty period		
	Spare parts availability	10 years		
	User reference list	10 years		
	Make	Please specify		

	Model	Please specify		
	Country of Origin	Please specify		
	Country of Manufacturing	Please specify		
	Instrument should be European CE Certified			
	A manufacturer Authorization Letter should be provided			
	Brand name, Product Catalog and Model no should be available. Requested specification should be stated in the Catalog page and product web site.			
	If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.			
	Camera and Microscope should be provided in same brand and should be compatible each other			
Camera Specifications	USB Camera resolution (MP)	Approx. 8.3		
	Camera resolution (n° of pixels: W x H)	Approx. 3840x2160		
	Color / Monochrome	Color		
	Sensor Size	Approx. 1/1.8"		
	Sensor Technology	CMOS		
	Acquisition technology	Rolling Shutter		
	Pixel Size (um)	Approx. 2.0 x 2.0		
	Frame rate full resolution (fps)	Approx. 45@3840x2160		
	Frame rate other resolution (fps)	Approx. 70@1920x1080		
	Exposure time	Approx. 0.02 msec - 15 sec		
	IR filter	Should be available		
	C-Mount	Should be supplied with compatible C Mount adaptor		
	Camera accessories	Calibration slide		
		USB cable (approx. 1.5-2.0m)		
	Camera Software Should be supplied free of charge from the same manufacturer	Image analyzing software Compatible with Windows 7 Windows 8 Windows 10 (32Bit) Windows 10 (64Bit) Osx (MAC Osx) starting from 10.7.5		

			Linux			
		Warranty; (Microscope & Camera both)	Min. 02 years			
		Accessories and Spare Parts Availability of equipment	Guarantee of availability of all accessories and spare parts is required for a minimum of 10 years after purchase of equipment.			
		User reference list (Preferrable)	Min. 10 years			
		Make	Please specify			
		Model	Please specify			
		Country of Origin	Please specify			
		Country of Manufacturer	Please specify			
		Instrument should be European CE Certified				
		A manufacturer Authorization Letter should be provided				
		Brand name, Product Catalog and Model no should be available. Requested specification should be stated in the Catalog page and product web site.				
		If you fail to fulfill the requested specification by the university [equipment supplies with wrong specification] the equipment would be rejected after goods delivery to the university.				
12	Hot plate magnetic stirrer	Work plate size	Minimum (W x D): 184x184mm (7 inch)	2		
		Work plate material	Glass ceramic			
		Motor type	Brushless DC motor			
		Stirring positions	1			
		Speed range	100-1500rpm resolution ± 1 rpm			
		Speed display	LCD			
		Temperature display	LCD			
		Heating temperature range	Room Temp. - 550°C, increment 1°C			
		Temperature control accuracy	$\pm 1^\circ\text{C} (< 100^\circ\text{C}) \pm 1\% (> 100^\circ\text{C})$			
		Overheating protection	Approx. 580°C			
		Temperature display accuracy	$\pm 0.1^\circ\text{C}$			
		External temperature sensor accuracy	(± 0.2)			

		“Hot” warning	50°C			
		Motor rating input	18W			
		Motor rating output	10W			
		Heating output	1000W			
		Permissible ambient temperature and humidity	5-40°C, 80% RH			
		Power supply	200-240V 50/60Hz			
		Warranty	Min. 2 years			
		Make	Please specify			
		Model	Please specify			
		Country of Origin	Please specify			
		Country of Manufacturer	Please specify			
		A manufacturer Authorization Letter should be provided				
		Brand name, Product Catalog and Model no should be available. Requested specification should be stated in the Catalog page and product web site.				
		If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.				
13	Top loading balance No 2	Capacity [Max]	1000 g	1		
		Resolution	0.01 g			
		Calibration	Automatic Internal			
		Pan size	Approx. Ø 160 mm			
		Response time (sec.)	≤3 sec			
		Repeatability	0.01 g			
		Linearity	± 0.02 g			
		Minimum Load	500 mg			
		Display	LCD			
		Tare Range (Subtractive)	Approx. up to 1000 g			
		Span Drift In +10...+30°C	± 4 ppm/°C			
		Working Temperature	5 - 35°C			
		Power Supply	~230Vac. 50/60Hz, output 24V			
		Power Consumption	(Max): 2 Watt			
		Warranty	2 years			
		Make	Please specify			
		Model	Please specify			
		Country of Origin	Please specify			

		Country of Manufacturer	Please specify				
		A manufacturer Authorization Letter should be provided					
		Brand name, Product Catalog and Model no should be available. Requested specification should be stated in the Catalog page and product web site.					
		If you fail to fulfill the requested specification by the university [equipment supplies with wrong specification] the equipment would be rejected after goods delivery to the university.					
14	Vortex mixer No 1	Range of Rotation	1000 – 2800 rpm	2			
		Amplitude	Approx. 3mm				
		Time Setting	Timing display				
		Run Mode	Touch operation/Continuous				
		Capacity	Variety of test tubes, including the tubes up to 50 ml				
		Motor Type	Shaded pole motor				
		Operation Mode	Continuous, inching				
		Consumption	~60W				
		Power Supply	~220V 50/60Hz				
		Size	Approx. (W×D×H) :197x135x156 mm				
		Warranty	2 years				
		Make	Please specify				
		Model	Please specify				
		Country of Origin	Please specify				
		Country of Manufacturer	Please specify				
					A manufacturer Authorization Letter should be provided		
		Brand name, Product Catalog and Model no should be available. Requested specification should be stated in the Catalog page and product web site.					
		If you fail to fulfill the requested specification by the university [equipment supplies with wrong specification] the equipment would be rejected after goods delivery to the university.					
15	Bench top pH meter No 1	Measuring Parameters	pH, EC, TDS, Temperature	1			
		pH	Range		2.00 to 16.00 approx.		
			Resolution		0.01 pH		
			Accuracy		±0.01 pH		
		EC	Range		0.00 to 19.99 μS/cm 20.0 to 199.9 μS/ cm		

			200 to 1999 $\mu\text{S}/\text{cm}$ 2.00 to 19.99 mS/cm 20.0 to 199.9 mS/cm			
		Resolution	0.01 $\mu\text{S}/\text{cm}$ 0.1 $\mu\text{S}/\text{cm}$ 1 $\mu\text{S}/\text{cm}$ 0.01 mS/cm 0.1 mS/cm			
		Accuracy	$\pm 1\%$ f.s.			
TDS		Range	0.00 to 9.99 ppm 10.0 to 99.9 ppm 100 to 999 ppm 1.00 to 9.99 ppt 10.0 to 99.9 ppt			
		Resolution	0.01 ppm 0.1 ppm 1 ppm 0.01 ppt 0.1 ppt			
Temperature		Range	-9.9 to 120 °C (pH range) 0.0 to 100.0°C (EC range)			
		Resolution	0.1°C			
		Accuracy	± 0.5 °C			
		Calibration up to	3-point calibration			
		Make	Please specify			
		Model	Please specify			
		Country of Origin	Please specify			
		Country of Manufacturer	Please specify			
		Microprocessor-based benchtop meter				
		Automatic temperature compensation				
		Auto-ranging feature of the EC and TDS ranges				
		Calibration timeout alarm, GLP feature, automatic HOLD feature				
		Relative mV feature				
		Probe with a built-in temperature sensor				
		pH and conductivity solutions should be provided				
		Warranty	Minimum 2 years			
		A manufacturer Authorization Letter should be provided				

		Brand name, Product Catalog and Model no should be available. Requested specification should be stated in the Catalog page and product web site.			
		If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.			
16	Sonicator/Sonicator Bath No 1	Ultrasonic Power (W)	Max 240	1	
		Heating Power(W)	Max 500		
		Capacity (L)	Max 10L		
		Tank Size (L*W*H)	mm 300x240x150		
		External Size (L*W*H)	mm 330x270x310		
		Transducer	Qty (PCS) 4		
		Ultrasonic Freq	(KHz) 10		
		Temperature Setting (°C)	Max 80		
		Timer Setting	1-30 mins		
		Carrying Handle	Yes		
		Cleaning Basket	Yes		
		Stainless steel material for basket, body and cover	Yes		
		Flow control valve	Yes		
		Air cooling fin design	Yes		
		Display	Digital LED display		
		Warranty	2 years		
		Additional info			
		Make	Please specify		
		Model	Please specify		
		Country of Origin	Please specify		
		Country of Manufacturer	Please specify		
A manufacturer Authorization Letter should be provided					
Brand name, Product Catalog and Model no should be available. Requested specification should be stated in the Catalog page and product web site.					
If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.					

17	Mini Centrifuge spin and down	Features – LCD Screen	Shows RPM/ RCF, time, rotor spinning and lid Status.	1		
			Speed programming in 100 RPM/100 xg steps.			
			Timer from 30 sec. to 999 min. programmable in 1 sec. steps or hold position.			
			Timer with countdown at set time.			
			Several acoustic and visual messages showing the user the situation of the device			
		Max. speed	14000 RPM			
		Voltage/Frequency	220-230 V/50-60 Hz			
		Consumption	180 W			
		Microprocessor controlled				
		PC connection by USB.				
		Induction motor maintenance free (brushless).				
		Noise level: below 60 dB.				
		"Start, short spin, stop, open lid, speed, time and RPM/RCF switch				
		Option RPM/ RCF adjustment along the run				
		Automatic lid opening				
		Last values remain in memory				
		Low height for easy access				
		Lid provided with security systems	Automatic lid lock system, motorized			
			Emergency lid-lock release			
			Locking and protection against opening along the run.			
Lid dropping protection						
Port in the lid for calibration and operation checking						
Ergonomic design that allows close the lid effortless.						
Unbalance detection and switch off.						
Rotors can be removed with the lid closed.						
Hermetic lids.						
Rotors and adapters autoclavable, easy to install by the user						

			Ventilation system to reduce temperature increasing.			
		Available Rotors	Rotor type – 01			
			ROTOR: ANGLE FIXED 45°			
			Max. Capacity: 16 x 0.2 ml.			
			RPM Max.: 15.000			
			RCF Max. (xg): 13.080			
			Rotor Type – 02			
			ROTOR: ANGLE FIXED 30°			
			Max. Capacity: 12 x 1.5-2 ml.			
			RPM Max.: 15.000			
			RCF Max. (xg): 15.596			
		Warranty	2 years			
		Additional info				
		Make	Please specify			
		Model	Please specify			
		Country of Origin	Please specify			
		Country of Manufacturer	Please specify			
		A manufacturer Authorization Letter should be provided				
		Brand name, Product Catalog and Model no should be available. Requested specification should be stated in the Catalog page and product web site.				
		If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.				
18	Binocular Microscope	Observation method	Brightfield	10		
		Optical system	Infinity corrected			
		Head	Binocular, 360 rotating			
		Interpupillary distance (mm)	48-75			
		Dioptric adjustment	Should be on both tubes			
		Eyepieces	10x, Higher eye point			
			with fixing screws			

	Field Number	20mm		
	Nosepiece	Quadruple, Reversed, Bi-Directional		
	Objective type	PLAN Achromatic		
	Objectives	Should be anti-fungus treated		
	Standard objectives	4x/0.10, W.D. 16.8 mm		
		10x/0.25, W.D. 5.8 mm		
		40x/0.65, W.D. 0.43 mm		
		100x/1.25 (Oil), W.D. 0.13 mm		
		100x/1.25 (Water), W.D. 0.13 mm		
	Oil and Water immersion should be available			
	Focusing System	Coaxial and Fine		
	Stage Dimensions	At least 150x135		
	Condenser Type	Single Position Centrable Abbe condenser with focusable by rack and pinion and 1.25NA		
	Light source and power (W)	X-LED 3.6W		
	Lifetime of Power source	More than 65,000hours		
	Power Supply	250V /50Hz		
	Should include	Dust cover		
		Immersion oil-10ml		
		Tension adjustment tool		
		Microscope Slide packs(72/Pk)*01		
	Warranty	Should have Ten years [10 years] manufacturer warranty period		
	Spare parts availability	10 years		
	User reference list	More than 10 years		
	Additional info			
	Make	Please specify		
	Model	Please specify		
	Country of Origin	Please specify		
	Country of Manufacturer	Please specify		
	Instrument should be European CE Certified			
	A manufacturer Authorization Letter should be provided			
	Brand name, Product Catalog and Model no should be available. Requested specification should be stated in the Catalog page and product web site.			

		If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.				
19	Sieve set	Material:	Frame: Brass	1		
			Mesh: Stainless Steel			
		Sieve openings include	5.00 mm			
			4.00 mm			
			3.00 mm			
			2.00 mm			
			1.00 mm			
			600 µm			
			500 µm			
			400 µm			
			300 µm			
			250 µm			
			125 µm			
			63 µm			
	Accessories:	Stainless steel lid and receiver pan				
	Application:	Wet and dry sieving for microplastic, sediments and seaweed-associated particulate analysis.				
	Warranty:	1-year warranty				
20	Solar Power System	Performance Requirements		1		
		System Overview				
		System Type:	Off-grid			
		Nominal Power Output:	3 kW (AC)			
		System Voltage:	230–240 V AC single-phase (for residential)/ 400 V AC three-phase (for commercial)			
		Daily Energy Yield:	(~12–15 kWh/day)			
		Photovoltaic (PV) Modules				
		Type:	Crystalline Silicon (Monocrystalline)			
		Rated Power:	(450–500 ±3% W per module)			
		Efficiency:	(≥ 20% (mono) / ≥ 17% (poly))			
		Maximum System Voltage:	1,000 V DC (grid-tied)			
		Temperature Coefficient:	≤ -0.35%/°C (power)			
		Front Glass:	(Tempered, low-iron, anti-reflective)			
		Frame:	(Anodized aluminum, corrosion-resistant)			

	Junction Box:	(IP65, with bypass diodes)			
	Connector Type:	(MC4 compatible)			
	Expected Life:	25 years			
	Solar Inverter				
	Type:	String inverter			
	Rated Capacity:	(3 kW AC)			
	Input DC Voltage Range:	(200–600 V DC)			
	Maximum DC Power:	(3.3–3.6 kW)			
	Maximum Efficiency:	(≥ 98%)			
	Output Voltage:	(230 V AC, 50 Hz (single-phase))			
	THD (Total Harmonic Distortion):	(≤ 3%)			
	Display & Communication:	(LCD / Wi-Fi / Bluetooth / RS485 / App monitoring)			
	Mounting Structure				
	Type:	ground-mounted			
	Material:	Hot-dip galvanized			
	Design Wind Load:	≥ 150 km/h			
	Corrosion Protection:	(Anti-corrosion coating / anodized aluminum)			
	Module Tilt:	(Adjustable, ±10° for seasonal optimization)			
	Balance of System (BOS)				
	DC Cabling:	(UV-resistant, PV-grade, double-insulated (≥1.5 mm ²))			
	Connectors:	(MC4 or equivalent)			
	AC Cabling:	(Copper conductor, insulated for 230–240 V, compliant with local electrical codes)			
	Combiner Box:	(IP65, with DC fuses, surge protection, and monitoring points)			
	Monitoring and Control				
	Display & Communication:	(LCD / Wi-Fi / Bluetooth / RS485 / App monitoring)			
	Protection & Safety				
	DC reverse polarity protection				
	DC and AC overcurrent protection				
	Overvoltage protection				
	Overtemperature protection				

	Surge protection Device (SPD)for DC and AC sides				
	Isolation switch for maintenance				
	Earthing: As per IEC 60364 / local code				
	Earth fault detection				
	Anti-Islanding: (automatically shuts down the inverter when the utility grid supply fails)	Must comply with IEEE 1547 / IEC 62116			
	Structure must prevent module slipping, provide grounding points				
	Accessories				
	Environmental Conditions				
	Operating Temperature:	(10°C to 40°C)			
	Relative Humidity:	(≤80% non-condensing)			
	Compliance and Documentation				
	ISO 9001, ISO 14001				
	IEC 61215 and IEC 61730 for modules, IEC 62109 and IEEE 1547 for inverter safety and grid interconnection, and IEC 60364 for installation.				
	RoHS				
	System design and layout drawing				
	Single-line wiring diagram				
	Product datasheets and certificates				
	Factory test reports (modules and inverter)				
	Installation and operation manual				
	Commissioning and performance test report				
	End-of-life module recycling compliance				
	Warranty:				
	Inverter:	10 years			

		Solar panel	Performance warranty 25 yrs			
			Product warranty 12 yrs			
		Balance of system:	2 yrs			
		Additional Information:				
		Make:	Please specify			
		Model:	Please specify			
		Country of origin/Manufacture	Please specify			
21	Rotary Evaporator	Motor		1		
		Principle	DC			
		Speed Range:	(5 – 300 rpm (or better)			
		Increment Steps:	± (1 rpm)			
		Heating Bath				
		Temperature Range:	(Ambient to 180 °C (oil)			
		Temperature Stability:	(±0.5 °C)			
		Heat output	(Approx. 1300 W)			
		Tank Material:	(Stainless steel inner tank)			
		Filling Volume:	4 L			
		Vacuum System				
		Vacuum pump	Resistant to Corrosive Gases and Chemicals			
		Maximum vacuum	700 mmHg or better			
		Maximum flow rate	18L/ min			
		Mortar rotation	1450 RPM			
		Material	PTFE material			
		Motor Mechanism	No lubricant required			
			Driven direct by motor			
		External vacuum pump interface				
		Vacuum control:	Manual			
		Chiller				
		Tank volume	4L			
		Temperature control range	- 20C [Minus Twenty] to Room Temperature			
		Display temperature resolution	0.1 C			
		Refrigerant	134A			

	Recirculation function	Should be available		
	Condenser			
	Type:	Double Spiral Design Vertical Glass Condenser		
	Material:	(Borosilicate glass)		
	Cooling surface optimized for efficient condensation	Minimum 1400 cm ²		
	Cooling medium:	Water recirculating chiller compatible		
	Evaporation Flask			
	Material:	(Borosilicate glass- Type Boro 3.3)		
	Receiving Flask			
	Material:	(Borosilicate glass)		
	Sizes:	(Matching evaporation flask series)		
	Seals & Gaskets:	PTFE		
	User Interface & Controls			
	Digital Display:	Speed Range, Heating Tem. Range		
	Control Panel:	(PID microprocessor, Tactile buttons/keypad)		
	Preset Programs:	(Optional memory for common solvent profiles)		
	Language:	English (menu text)		
	Accessories (Standard)			
	Evaporation flask	1		
	Receiving flask	1		
	Condenser (vertical or coil)	1		
	Clamps and support rings			
	Power Supply:	Single-phase 220/240V, 50-60 Hz		
	Environmental Conditions			
	Operating Temperature:	(10°C to 40°C)		
	Relative Humidity:	(≤80% non-condensing)		
	Compliance and Documentation			
	Protection class [Ingress Protection]	DIN EN 60529-IP 20		
	User manual			
	Warranty:	Should have 2 years warranty		
	Additional Information:			
	Make:	Please specify		
	Model:	Please specify		

		Country of origin/Manufacture	Please specify		
		Instrument should be European CE Certified			
		Brand name, Product Catalog, Catalog page and Model no should be available. Requested specification should be stated in the Catalog page and product web site.			
		If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.			
22	Splash Back for Existing Double Basin Sink (03 units)			3	
		Material:	Stainless Steel 304		
		Guage	18/20		
		Height:	1.25 Feet		
		Width:	33 inch		
		Drawing: attached			

23	Portable Biogas Unit	Type:	Portable	1		
		Performance Requirements				
		Daily Feed Input:	(2-10 kg organic waste)			
		Daily Biogas Output:	(0.5–2.0 m ³ /day)			
		Methane Content:	(55-65%)			
		Digester Tank				
		Working volume:	(500 L)			
		Material:	(UV-stabilized HDPE (preferred)/Linear Low-Density Polyethylene (LLDPE)/Fiberglass Reinforced Plastic (FRP))			
		Wall Thickness:	(6 mm)			
		Pressure Rating:	(8–15 kPa)			
		Gas Storage System				
		Type:	(Integrated gas dome)			
		External flexible gas bag				
		Double-membrane low-pressure storage				
		Storage Capacity:	(0.5–2 m ³)			
		Gas Outlet Port:				
		Fittings:	(brass)			
		Non-return valve included				
		Gas Processing Components				
		Moisture Removal				
		Condensate trap				
		Water drain valve				
		H₂S Scrubber				
		Iron oxide filter cartridge				
		Replaceable filter media				
		Optional activated carbon filter				
		Gas Pressure Regulation				
		Low-pressure regulator (2–5 kPa)				
		Safety pressure relief valve (≥ 12 kPa)				
		Flame arrester				
Safety Specifications						

		Integrated pressure relief valve			
		Flame arrester at gas outlet			
		Gas leak detection port			
		Gas piping rated for methane			
		Anti-overpressure membrane			
		Environmental Conditions			
		Operating Temperature:	(10°C to 40°C)		
		Relative Humidity:	(≤80% non-condensing)		
		Compliance and Documentation			
		CE			
		ISO 9001			
		ISO14001			
		User manual			
		Warranty:	1 Year		
		Additional Information:			
		Make:	Please specify		
		Model:	Please specify		
		Country of origin/Manufacture	Please specify		
		A manufacturer Authorization Letter should be provided			
		Brand name, Product Catalog, Catalog page and Model no should be available. Requested specification should be stated in the Catalog page and product web site.			
		If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.			
24	Dual Purpose Laminar Flow	Performance Requirements		1	
		Airflow			
		Mode	Vertical		
		Airflow Velocity:	(0.30 – 0.60 m/s		
		Workroom air velocity control	A quiet and with 7 steps adjustable		

	Velocity precision	±0.05 m/s			
	Filtration				
	Final Filter	(HEPA, Efficiency: >99.97% @ 0.3 µm			
	Filter efficiency	Fed Std. 209E Class100 ISO 5			
	HEPA differential pressure	0-500Pa			
	Construction & Materials				
	Work side	Double			
	Work Surface:	Stainless steel			
	Cabinet outer structure	Powder coated cold			
	Side Panels:	Glass Windows on left and right Side			
	Work Zone				
	Work Area Width more than (mm)	1400			
	Illumination & Utilities				
	Lighting:	(LED illumination ≥ 300 lux at work surface, Diffused, glare-free lighting)			
	UV Sterilization:	Standard with high efficiency UV Light			
	Power:	220/240V , 50/60Hz			
	Controls & Monitoring				
	Control Panel				
	Display	LED			
	Monitoring				
	Velocity level Display	Should be indicated			
	Base stand	Combined base stand with castors			
	Power Supply:	Single-phase 220/240V, 50-60 Hz			
	Standard	Class 100 ISO 5 air cleanliness within the work zone as per Std 209E			
	Compliance and Documentation				
	CE				
	ISO				
	Warranty:	2 Years			
	Additional Information:				

		Make:	Please specify			
		Model:	Please specify			
		Country of origin/Manufacture	Please specify			
		Conditions				
		A manufacturer Authorization Letter should be provided				
		Brand name, Product Catalog, Catalog page and Model no should be available. Requested specification should be stated in the Catalog page and product web site.				
		If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.				
25	Vacuum Pump for SUGOLD Model-DZF Vacuum oven	Type	Oil-sealed rotary vane vacuum pump two-stage preferred	1		
		Flow Rate:	4–8 CFM range			
		Ultimate Vacuum:	≤ 1–5 Pa			
		Motor Power	0.25–0.5 HP			
		Voltage	220–240 V, 50 Hz			
		Inlet Port	3/8" SAE flare or compatible			
		Construction:	Aluminum alloy housing			
		Features	Anti-suck-back valve, oil sight glass, air-cooled motor			
		Warranty:	(1-3 Years)			
		Additional Information:				
		Make:	Please specify			
		Model:	Please specify			
		Country of origin/Manufacture	Please specify			
		A manufacturer Authorization Letter should be provided				

		Inlet/Outlet Ports Should be compatible with SUGOLD Model-DZF Vacuum oven				
		Brand name, Product Catalog, Catalog page and Model no should be available. Requested specification should be stated in the Catalog page and product web site.				
		If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.				
26	Vortex Mixture No 2	Performance Requirements		1		
		Overview				
		The vortex mixer shall be suitable for rapid mixing of liquids in test tubes, microtubes, and small laboratory containers through orbital motion.				
		The unit shall support:				
		Operating Modes:	Both Touch (momentary) operation mode and Continuous operation modes are needed			
		Variable speed control				
		Interchangeable mixing heads				
		Tube Compatibility	(Microcentrifuge tubes (0.5–2 mL)/Test tubes (up to 30 mm diameter)/Small culture tubes)			
		Maximum Load	(≤ 0.5 kg (standard head))			
		Construction & Materials				
		Housing				
		Material:	powder-coated steel			
		Chemical-resistant surface				
		Non-corrosive finish				
Easy-to-clean exterior						
Base						
Heavy-duty metal base for stability						

	Anti-slip rubber feet			
	Vibration-dampening design			
	Mixing Head			
	Cup head made of durable rubber or silicone			
	Resistant to chemicals and wear			
	Removable and replaceable			
	Mixing			
	Motion:	(Orbital motion (circular vibration))		
	Speed range:	(300 -3000 rpm		
	Orbit Diameter:	(3.6 mm to 5 mm)		
	Speed Control:	Digital control		
	Speed Accuracy:	(±5% of set speed)		
	Motor			
	Type:	Brushless DC motor		
	Safety & Protection			
	No exposed moving parts			
	Non-slip base			
	Stable low-center-of-gravity design			
	Overcurrent protection			
	Thermal overload protection			
	Noise Level:	≤ 60 dB		
	Electrical protection:	Complies with IEC/CE standards, the unit must be connected to a receptacle with proper grounding		
	Power Supply:	(Single-phase 220/240V, 50-60 Hz)		
	Environmental Conditions			
	Operating Temperature:	(10°C to 40°C)		
	Relative Humidity:	(≤80% non-condensing)		
	Accessories			
	Multi-tube platform			
	Microplate adapter			
	Foam insert holder			
	Flat pad attachment			
	Compliance and Documentation			

		IEC			
		ISO 9001			
		CE Marking (EU)			
		RoHS			
		User manual			
		Warranty:	Minimum 1 Year		
		Additional Information:			
		Make:	Please specify		
		Model:	Please specify		
		Country of origin/Manufacture	Please specify		
		A manufacturer Authorization Letter should be provided			
		Brand name, Product Catalog, Catalog page and Model no should be available. Requested specification should be stated in the Catalog page and product web site.			
		If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.			
27	Autoclave with dryer	Sterilizing Temperature	103°C-140°C up to	1	
		Usable Temperature	Dissolving: 40°C-100°C, Warming: 40°C-60°C		
		Operation Patterns	A Heating, Serialization, Exhaust		
			B Heating, Serialization, Exhaust, Warming		
			C Dissolving, Warming		
		Dryer	Warm air drying		
			Warm flow through 0.2 micro meter - Micro filter		
		Capacity & Configuration:			
		Capacity:	(60L -65L)		
		Orientation Options:	Vertical (top-loading)		
		Safety Systems			
		Inter Lock System			

		Electro mechanical lock system			
		Double check system of lid close			
		Over pressure detector			
		Over Temperature Detector			
		Water lack preventer			
		Sensor breaks indicator			
		Abnormal Time Indicator			
		Safety valve breaker for slight leakage			
		Over current & Short circuit			
		Power Supply:	Three phase 220/240V, 50-60 Hz		
		Environmental Conditions			
		User manual			
		Warranty:	Should have 2-year warranty		
		Additional Information:			
		Make:	Please specify		
		Model:	Please specify		
		Country of origin/Manufacture	Please specify		
		A manufacturer Authorization Letter should be provided			
		Brand name, Product Catalog, Catalog page and Model no should be available. Requested specification should be stated in the Catalog page and product web site.			
		If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.			
28	Laboratory Water Distillation Plant/Distilled water small plant No 2	Capacity:	(4 Liters/hr)	1	
		Water Quality:			
		Conductivity:	3.0-4.0 $\mu\text{S cm}^{-1}$ (With treated water - 1.5-2.0 $\mu\text{S cm}^{-1}$)		
		pH	5.5 – 6.0		
		Other	(Pyrogen-free)		

		Construction Material:			
		Boiling chamber:	(High-quality Stainless Steel (SS 304) Borosilicate Glass)		
		Condenser:	High-quality Stainless Steel (SS 304) or Borosilicate Glass		
		Heating Element:	High-graded Stainless Steel or Silica-sheathed (quartz) immersion heaters		
		Cover:	(Stainless steel/Powder coated)		
		Operation:	(Automatic, with auto-fill and auto-shutoff when the storage tank is full), (Cut-off water supply when there is no power supply)		
		Safety Features:			
		Overheat Protection:	Automatic shutdown if the temperature exceeds the safe limits		
		Dry-Run Protection:	Automatic shut-off when the water level falls too low.		
		Pressure Relief:	Valves to prevent hazardous pressure buildup		
		Electrical Safety:	Complies with IEC/CE standards, the unit must be connected to a receptacle with proper grounding		
		Cooling Water Consumption:	(~ 10 liters cooling/L of D. water)		
		Type:	Bench-top		
		Power Supply:	Single-phase 220/240V, 50-60 Hz		
		Warranty:	2-3 Years		
		Additional Information:			
		Make:	Please specify		
		Model:	Please specify		
		Country of origin/Manufacture	Please specify		
		A manufacturer Authorization Letter should be provided			
		Brand name, Product Catalog, Catalog page and Model no should be available. Requested specification should be stated in the Catalog page and product web site.			

		If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.			
29	Air Condition Machine Type 1 24000 BTU	Performance Requirements		1	
		Cooling Performance			
		Nominal Cooling Capacity	(24,000 BTU/hr)		
		Indoor airflow:	(900 – 1,200 m ³ /h)		
		Coverage Area	(Approx. 35 – 60 m ²)		
		Power consumption:	Less than 2.5 kW		
		System Type	(Split-type wall-mounted system)		
		Compressor Type	(Rotary		
		Inverter-driven	(Dual Inverter)		
		Refrigerant System			
		Refrigerant Type	R32 (low GWP refrigerant)		
		Refrigerant Control	Electronic expansion valve (inverter models)/ (Capillary tube (fixed-speed models)		
		Refrigerant Piping			
		Liquid line: 6.35 mm (1/4")			
		Gas line: 15.88 mm (5/8")			
		Maximum piping length: ≥ 20 m			
		Maximum height difference: ≥ 10 m			
		Indoor Unit Specifications			
		Construction			
		High-impact ABS plastic casing			
		Washable air filters			
		Anti-corrosion evaporator coating (blue/gold fin)			
		Noise Level			
		Low speed:	≤ 45 dB		
		High speed:	≤ 55 dB		
		Fan Speeds			
		Minimum 3-speed fan			
Auto fan mode					

		<i>Air Distribution</i>			
		Motorized vertical swing			
		Manual or automatic horizontal swing			
		Outdoor Unit Specifications			
		<i>Casing</i>			
		Galvanized steel with powder coating			
		Anti-corrosion protection			
		<i>Condenser</i>			
		Copper tube with aluminum fins			
		Hydrophilic coating			
		<i>Noise Level</i>	≤ 55 – 60 dB		
		<i>Protection</i>			
		Weatherproof design (IPX4 minimum)			
		Anti-rust coating			
		Control System			
		<i>Controller</i>			
		Wireless remote controller (IR)			
		LED or hidden display panel			
		<i>Functions</i>			
		Timer (24-hour programmable)			
		Sleep mode			
		Turbo/Quick cooling mode			
		Eco mode			
		Auto restart after power failure			
		Low Refrigerant Detection			
		Auto Clean			
		Ocean Black Protection			
		Self-diagnosis function			
		Safety & Protection			
		Overvoltage/undervoltage protection			
		Compressor thermal protection			
		Surge protection recommended			
		Overcurrent protection			
		Noise Level:	≤ 60 dB		

	Electrical protection:	Complies with IEC/CE standards, the unit must be connected to a receptacle with proper grounding		
	Power Supply:	(Single-phase 220/240V, 50-60 Hz)		
	Operating Conditions			
	<i>Cooling Mode</i>			
	Outdoor temperature range:	(18°C to 52°C)		
	<i>Heating Mode (if heat pump)</i>			
	Outdoor temperature range:	(-5°C to 24°C)		
	<i>Indoor Operating Range</i>	(16°C to 30°C adjustable setpoint)		
	Accessories			
	Micro Dust Protection Filter			
	Anti-bacterial Filter			
	Installation and After Service			
	Compliance and Documentation			
	IEC			
	ISO 9001			
	CE Marking (EU)			
	RoHS			
	User manual			
	Warranty:	(2 Years or above)		
	Additional Information:			
	Make:	Please specify		
	Model:	Please specify		
	Country of origin/Manufacture	Please specify		
	A manufacturer Authorization Letter should be provided			
	Brand name, Product Catalog, Catalog page and Model no should be available. Requested specification should be stated in the Catalog page and product web site.			
	If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be			

		rejected after goods delivery to the university.			
Air Condition Machine Type 2 36000 BTU	Performance Requirements		1		
	Cooling Performance				
	Nominal Cooling Capacity	(36,000 BTU/hr)			
	Indoor airflow:	(1000 – 2000 m ³ /h)			
	Coverage Area	(Approx. 35 – 60 m ²)			
	Power consumption:	Less than 4.5 kW			
	System Type	(Split-type wall-mounted system)/ (Ceiling cassette type)			
	Compressor Type	(Rotary)			
	Inverter-driven	(Dual Inverter)			
	Refrigerant System				
	Refrigerant Type	R32 (low GWP refrigerant)			
	Refrigerant Control	Electronic expansion valve (inverter models)/ (Capillary tube (fixed-speed models))			
	Refrigerant Piping				
	Liquid line: 9.52mm (3/8")				
	Gas line: 19mm (3/4")				
	Maximum piping length: ≥ 20 m				
	Maximum height difference: ≥ 10 m				
	Indoor Unit Specifications				
	Construction				
	High-impact ABS plastic casing				
	Washable air filters				
	Anti-corrosion evaporator coating (blue/gold fin)				
	Noise Level				
	Low speed:	≤ 55 dB			
	High speed:	≤ 60 dB			
	Fan Speeds				
	Minimum 3-speed fan				
	Auto fan mode				
	Air Distribution				
	Motorized vertical swing				

	Manual or automatic horizontal swing			
	Outdoor Unit Specifications			
	<i>Casing</i>			
	Galvanized steel with powder coating			
	Anti-corrosion protection			
	<i>Condenser</i>			
	Copper tube with aluminum fins			
	Hydrophilic coating			
	<i>Noise Level</i>	≤ 55 – 60 dB		
	<i>Protection</i>			
	Weatherproof design (IPX4 minimum)			
	Anti-rust coating			
	Control System			
	<i>Controller</i>			
	Wireless remote controller (IR)			
	LED or hidden display panel			
	<i>Functions</i>			
	Timer (24-hour programmable)			
	Sleep mode			
	Turbo/Quick cooling mode			
	Eco mode			
	Auto restart after power failure			
	Low Refrigerant Detection			
	Auto Clean			
	Ocean Black Protection			
	Self-diagnosis function			
	Safety & Protection			
	Overvoltage/undervoltage protection			
	Compressor thermal protection			
	Surge protection recommended			
	Overcurrent protection			
	Noise Level:	≤ 60 dB		

		Electrical protection:	Complies with IEC/CE standards, The unit must be connected to a receptacle with proper grounding				
		Power Supply:	(Single-phase 220/240V, 50-60 Hz)				
		Operating Conditions					
		<i>Cooling Mode</i>					
		Outdoor temperature range:	(18°C to 52°C)				
		<i>Heating Mode (if heat pump)</i>					
		Outdoor temperature range:	(-5°C to 24°C)				
		<i>Indoor Operating Range</i>	(16°C to 30°C adjustable set point)				
		Accessories					
		Micro Dust Protection Filter					
		Anti-bacterial Filter					
		Installation and After Service					
		Compliance and Documentation					
		IEC					
		ISO 9001					
		CE Marking (EU)					
		RoHS					
		User manual					
		Warranty:	(2 Years or above)				
		Additional Information:					
		Make:	Please specify				
		Model:	Please specify				
		Country of origin/Manufacture	Please specify				
		A manufacturer Authorization Letter should be provided					
		Brand name, Product Catalog, Catalog page and Model no should be available. Requested specification should be stated in the Catalog page and product web site					
		If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university					
30	Wet & Dry Vacuum Cleaner	Performance Specifications		1			
		Motor/Power/Wattage	1400 W or higher				
		Capacity:	25 Liters or higher				
		Functional Features					
		Wet & dry suction capability					

	Blower function			
	Automatic shut-off for wet cleaning			
	Thermal Protectionf Motor,			
	Double Insulated Motor Housing,			
	IPX4 Splash-Resistant Rating,			
	Secure Hose and Tank Locking Mechanism,			
	Stable Anti-Tip Design,			
	Dust Filtration System			
	Filter Cleaning System:	Automatic		
	Construction & Materials			
	Tank Material:	(High-impact Polypropylene (PP))		
	Head Material:	(High-strength ABS)		
	Motor Housing:	(Heat-resistant plastic)		
	Caster Wheels:	(360° swivel heavy-duty wheels)		
	Handle:	(Ergonomic top carry handle)		
	Attachments	Universal Nozzle, Crevice Nozzle, and Floor Nozzle Within Easy Reach.		
	Dust bag	5-Piece Fleece Filter Bag Pack		
	Power supply	Corded. 5m or above		
	Safety Features:			
	Low-noise operation	(≤75 dB)		
	Electrical Safety:	Complies with IEC/CE standards, The unit must be connected to a receptacle with proper grounding		
	Accessories			
	Flexible suction hose (1.5 – 3.0 meters)			
	Extension wands			
	Floor brush (wet & dry combination)			
	Crevice nozzle			
	Round brush			
	Upholstery nozzle			
	Foam filter (wet use)			
	Cartridge filter (dry use)			
	Power Supply:	Single-phase 220/240V, 50-60 Hz		
	Compliance and Documentation			

		CE / ISO / RoHS compliant			
		User manual			
		Warranty:	2 Years or above		
		Additional Information:			
		Make:	Please specify		
		Model:	Please specify		
		Country of origin/Manufacture	Please specify		
		A manufacturer Authorization Letter should be provided			
		Brand name, Product Catalog, Catalog page and Model no should be available. Requested specification should be stated in the Catalog page and product web site.			
		If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.			
31	Orbital Shaker	Performance Requirements		1	
		Speed Range:	(10 – 300 rpm)		
		Speed Accuracy:	(±1 rpm or ±1%)		
		Shaking features	Advance dual shaking features		
		Motion Type	Orbital and reciprocal motion types should be available [Operating both motion types]		
		Load Capacity	Medium: 7 kg		
		Timer			
		Range:	1 min – 999 min		
		Platform Size	Medium: 350 × 350 mm		
		Type	Bench-top platform shaker		
		Display	TFT Digital Display On-Touch Control		
		Electrical Protection			
		Overload			

		Short circuit			
		Electrical Safety:	The unit must be connected to a receptacle with proper grounding		
		Power Supply:	Single-phase 220/240V, 50-60 Hz		
		Compliance and Documentation			
		IEC/CE			
		ISO 9001			
		User manual			
		Warranty:	Should have Two-years		
		Additional Information:			
		Make:	Please specify		
		Model:	Please specify		
		Country of origin/Manufacture	Please specify		
		Conditions			
		A manufacturer Authorization Letter should be provided			
		Product experience	The bidder should have minimum of 08 years' experience in selling the quoted similar products in Sri Lanka (attach proof)		
		Brand name, Product Catalog, Catalog page and Model no should be available. Requested specification should be stated in the Catalog page and product web site.			
		If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.			
32	Magnetic Stirrer	Type	(Magnetic Stirrer with Hot Plate)	1	
		Stirring			
		Capacity	2 L		
		Speed	(100 – 1500 rpm)		
		Speed Accuracy	(±5%)		

		Heating			
		Heating range	Room temp to 350 °C		
		Control Accuracy	(±1°C)		
		Temperature Uniformity	(±2°C)		
		Heating Power	(300–1000 W)		
		Temperature Sensor	(PT100 / Thermocouple)		
		Stir Bars Compatibility			
		PTFE-coated magnetic stir bars			
		Sizes:	(10 mm to 60 mm)		
		Configuration:	(Octagonal or cylindrical)		
		Construction and Materials			
		Housing material	Should be chemical resistant		
		Top plate	Should be chemical resistant		
		PID-controlled temperature regulation			
		Drive System			
		Brushless DC motor (preferred)			
		Low-noise operation (<50 dB)			
		Long service life (>10,000 hours)			
		Stable torque at low speeds			
		Anti-slip magnetic coupling			
		Control System			
		Display	Digital LED		
		Digital speed setting			
		Digital temperature setting			
		Timer (0–999 min)			
		Overheat protection alarm			
		Error diagnostics			
		Safety Systems			
		Over-temperature protection			
		Residual heat warning indicator			
		Short circuit protection			
		Motor overload protection			
		Anti-slip feet			
		Insulated internal wiring			

	Electrical Safety:	(Complies with IEC/CE standards, The unit must be connected to a receptacle with proper grounding)			
	Power Supply:	(Single-phase 230V, 50 Hz)			
	Environmental Conditions				
	Operating Temperature:	(10°C to 40°C)			
	Relative Humidity:	(≤80% non-condensing)			
	Compliance and Documentation				
	IEC				
	ISO 9001				
	CE Marking (EU)				
	RoHS				
	User manual				
	Warranty:	1 Year			
	Additional Information:				
	Make:	Please specify			
	Model:	Please specify			
	Country of origin/Manufacture	Please specify			
	A manufacturer Authorization Letter should be provided				
	Brand name, Product Catalog, Catalog page and Model no should be available. Requested specification should be stated in the Catalog page and product web site.				
	If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.				

33	Shoe Cover Dispenser	Overview		1		
		Capacity:	(Shoe cover refill cartridge (up to 100 Pairs))			
		Hands-free shoe cover application device				
		Type	Automatic			
		Application:	Hygienic dispensing and fitting of disposable shoe covers			
		Successful Application Rate	(≥ 98%)			
		Application Time	(≤ 2 seconds)			
		Slip Resistance				
		Easy-to-load	Shoe Cover Box slides into the dispenser.			
		Easy to use:	LED smart guide with LED light guides wearer exactly where to place their foot; light will turn off when the shoe cover is correctly fitted.			
		Fault detection:	The Intelligent software automatically detects the malfunctions and displays the corresponding malfunction code.			
		Construction and Materials:				
		Outer Body				
		Material:	ABS high-impact plastic			
		Surface:	(Smooth, easy to disinfect)/(Scratch-resistant)			
		Motor (Automatic Type)				
		Type	(Low-noise DC motor)			
		Internal Frame				
		Material:	(Galvanized steel/ SS304)			
		Shoe Cover Cartridge				
		High-strength polypropylene frame				
		Replaceable disposable refill packs				
		Shoe Cover Compatibility				
		Material:	PE (Polyethylene)			
		Elastic band closure				
		Thickness:	25–50 microns			
		Universal fit (up to shoe size EU 46 / US 12)				
Safety Systems						
Non-slip base pads						

		Stable wide platform			
		Electrical overload protection			
		Anti-pinch mechanism			
		Enclosed moving parts			
		Child-safe design			
		Smart safety feature	Detects when foot is removed and reloads new shoe cover with infrared sensors. Hidden Retractor protects feet from being nipped when a foot is placed inside.		
		Electrical Safety:	(Complies with IEC/CE standards, The unit must be connected to a receptacle with proper grounding)		
		Power Supply:	(Single-phase 230V, 50 Hz)		
		Environmental Conditions			
		Operating Temperature:	(10°C to 40°C)		
		Relative Humidity:	(≤80% non-condensing)		
		Compliance and Documentation			
		IEC			
		ISO 9001			
		CE Marking (EU)			
		RoHS			
		User manual			
		Warranty:	1 Year		
		Additional Information:			
		Make:	Please specify		
		Model:	Please specify		
		Country of origin/Manufacture	Please specify		
		A manufacturer Authorization Letter should be provided			
		Brand name, Product Catalog, Catalog page and Model no should be available. Requested specification should be stated in the Catalog page and product web site.			
		If you fail to fulfill the requested specification by the university			

		[equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.			
34	Sonication Bath No 2	Ultrasonic System;		1	
		Ultrasonic Frequency:	(35–40 kHz)		
		Ultrasonic Power Output:	(100–300 W, adjustable)		
		Operation Mode/Power Control:	(Continuous or pulse mode, adjustable intensity)		
		Uniformity:	(Even ultrasonic distribution throughout bath)		
		Bath and Tank:			
		Tank Capacity:	(10 liters)		
		Tank Material:	Stainless steel (SUS 304 or equivalent), corrosion-resistant		
		Internal Dimensions:	Please specify		
		Drain Valve:	Preferred		
		Lid:	(Removable stainless steel)		
		Housing Material:	(Powder-coated steel)		
		Temperature Control (if needed)			
		Heating Function:	(built-in heater)		
		Temperature Range:	(Ambient +5°C to 60–80°C)		
		Temperature Accuracy:	(±2°C)		
		Temperature Display:	(Digital LED/LCD display)		
		Timer and Controls			
		Timer Range:	(1–99 minutes/ continuous operation)		
		Control Panel:	(Digital)		
		Display:	(Time, temperature, and power status)		
		Safety Features:			
		Overload and short-circuit protection			
		Overheating protection			
		Low-noise operation	≤60 dB		
		Insulated housing			
		Electrical Safety:	Complies with IEC/CE standards, The unit must be connected to a receptacle with proper grounding		
Accessories					

		Sample racks and baskets	Removable mesh basket (Stainless Steel) for beakers,Stainless Steel handle, heat resistant			
		Test tube racks	Stainless Steel			
		Drain hose				
		Power Supply:	Single-phase 220/240V, 50-60 Hz			
		Environmental Conditions				
		Operating Temperature:	(10°C to 40°C)			
		Relative Humidity:	(≤80% non-condensing)			
		Installation:	(Bench-top)			
		Compliance and Documentation				
		CE / ISO / RoHS compliant				
		User manual and calibration certificate				
		Warranty:	Minimum 1Year			
		Additional Information:				
		Make:	Please specify			
		Model:	Please specify			
		Country of origin/Manufacture	Please specify			
		A manufacturer Authorization Letter should be provided				
		Brand name, Product Catalog, Catalog page and Model no should be available. Requested specification should be stated in the Catalog page and product web site.				
		If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.				
35	Centrifuge	Speed Range		1		
		Maximum Speed:	(14,500 RPM)			
		Speed Increment:	(10 RPM)			
		Speed Accuracy:	(±20 RPM)			
		Acceleration Time:	(≤ 20 seconds (to max speed, unloaded))			
		Deceleration Time:	(Programmable braking (soft, normal, fast))			
		Short spin key for brief spin				
		Air flow to minimize sample heating during the run				
		Relative Centrifugal Force (RCF)				
		Maximum RCF:	(Up to 21,000 × g (depending on rotor))			

	RCF Adjustment:	(Direct RCF input)		
	RCF Accuracy:	(±5%)		
	Timer			
	Range:	(1 second to 99 hours 59 minutes)		
	Continuous Mode:	(Yes)		
	Timer Accuracy:	(±1 second)		
	Mechanical Design Specifications			
	Construction			
	Housing:	Powder-coated steel		
	Chamber:	(Stainless steel (AISI 304 or equivalent), corrosion-resistant)		
	Lid:	(Reinforced composite with metal hinge support)		
	Motor			
	Type:	Brushless DC motor		
	Drive System:	(Direct drive)		
	Rotor Types			
		(Fixed-angle rotor (24 × 1.5/2.0 mL tubes typical))		
	Rotor			
	Material	Aluminum alloy		
	Autoclavable (121°C, 20 min)			
	Rotor Recognition:	(Automatic rotor detection)		
	Rotor Lid Should be chemical resistant			
	Safety Systems			
	Automatic lid lock during operation			
	Lid release only when rotor stops completely			
	Imbalance detection system (auto shutdown)			
	Accessories			
	Standard rotor			
	Tube adapters (various sizes)			
	Rotor wrench			
	Power cord			
	Power Supply:	Single-phase 220/240V, 50-60 Hz		

		Compliance and Documentation			
		European CE Marking certified			
		User manual			
		Warranty:	2 Years		
		Additional Information:			
		Make:	Please specify		
		Model:	Please specify		
		Country of origin/Manufacture	Please specify		
		Conditions			
		Back up machine should be provided [when machine break down during warranty period]			
		Brand name, Product Catalog, Catalog page and Model no should be available. Requested specification should be stated in the Catalog page and product web site.			
		If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.			
36	Drying Oven	Overview		2	
		The laboratory drying oven shall be an electrically heated, microprocessor-controlled unit capable of maintaining precise and uniform temperature conditions within a defined working chamber.			
		Temperature Specifications			
		Temperature Range:	(Ambient +5°C to 250°C)		
		Resolution:	(0.1°C)		
		Temperature Accuracy:	(±1°C at 100°C), (±2°C at maximum rated temperature)		

	Temperature Stability:	(±0.5°C after equilibrium), (±3°C at maximum rated temperature)		
	Heat-Up Time:	(≤ 30 minutes to reach 150°C (empty chamber))		
	Capacity:	500 L		
	Construction & Materials			
	Outer Body			
	Material:	(Powder-coated mild steel/stainless steel)		
	Corrosion-resistant finish			
	Inner Chamber			
	Material:	(AISI 304 stainless steel)		
	Smooth, rounded corners for easy cleaning			
	Scratch and corrosion resistant			
	Seamless or TIG-welded construction			
	Heater			
	Power	5 kW		
	Heating Element Type	(Tubular electric resistance heater)		
	Sheathed heating elements			
	Air-heating design			
	Resistance Wire			
	Material:	(Nickel-Chromium alloy (NiCr 80/20))		
	Maximum operating temperature:	(≥ 1100°C (element core))		
	Sheath Material			
	Stainless steel (AISI 304)			
	Corrosion-resistant			
	Insulation			
	Material:	(High-density mineral wool/Ceramic fiber)		
	Thickness:	(Minimum 50 mm)		
	Heat loss minimized for energy efficiency			
	Door Assembly			
	Single front-opening door			
	Door switch to disable heating when opened			
	Shelving			
	Removable stainless steel wire shelves			

		Minimum 4 shelves included			
		Adjustable shelf positions			
		Load capacity:	(≥ 20 kg per shelf)		
		Air Circulation System			
		Type	Convective		
		Fan			
		Stainless steel impeller			
		High-temperature rated motor			
		Located outside chamber airflow path where possible			
		Display			
		Digital display LED			
		Dual display (Set temperature / Actual temperature)			
		Temperature alarm indication			
		Timer Function			
		Programmable timer:	(1 minute to 999 hours)		
		Delay start option			
		Safety & Protection			
		Over-Temperature Protection			
		Independent mechanical thermostat (Class 2 safety)			
		Adjustable safety cut-off			
		Audible and visual alarm			
		Door Safety			
		Heating disabled when door is opened (optional interlock)			
		Thermal Protection			
		Overheat cut-off relay			
		Redundant temperature sensing			
		Electrical Protection			
		Overcurrent protection			
		Short-circuit protection			
		Grounding terminal			

		Complies with IEC/CE standards, The unit must be connected to a receptacle with proper grounding			
		Power Supply:	(Single-phase 220/240V, 50-60 Hz)		
		Environmental Conditions			
		Operating Temperature:	(10°C to 40°C)		
		Relative Humidity:	(≤80% non-condensing)		
		Accessories			
		Additional shelves			
		Temperature validation kit			
		Compliance and Documentation			
		Calibration certificate			
		IEC			
		ISO 9001			
		CE Marking (EU)			
		RoHS			
		User manual			
		Warranty:	1 Years		
		Additional Information:			
		Make:	Please specify		
		Model:	Please specify		
		Country of origin/Manufacture	Please specify		
		A manufacturer Authorization Letter should be provided			
		Brand name, Product Catalog, Catalog page and Model no should be available. Requested specification should be stated in the Catalog page and product web site.			
37	Conductivity Meter	Measurements		1	
		pH			
		mV (ORP)			
		Temperature			
		Conductivity			
		TDS			

	Optional: Ion concentration (ISE mode)			
	Measurement Specifications			
	pH Measurement			
	Measurement Range:	(-2.000 to 16.000 pH)		
	Resolution:	(0.1 / 0.01 / 0.001 selectable)		
	Accuracy:	(±0.001 pH (±1 digit))		
	Repeatability:	(±0.001 pH)		
	Temperature Compensation:	Manual		
	Calibration Points:	(1–5-point calibration)		
	Calibration Recognition:	(Automatic buffer recognition (NIST, DIN, custom))		
	Supported buffers:	(pH 1.68, pH 4.01, pH 6.86, pH 7.00, pH 9.18, pH 10.01)		
	mV / ORP Measurement			
	Range:	(±2000.0 mV)		
	Resolution:	(0.1 mV)		
	Accuracy:	(±0.2 mV)		
	Offset Adjustment:	(±200 mV)		
	Temperature Measurement			
	Range:	(-10.0 to 120.0 °C)		
	Resolution:	(0.1 °C)		
	Accuracy:	(±0.2 °C)		
	Compensation Range:	(-10–110 °C)		
	Conductivity			
	Range	0 to 200 mS		
	Resolution	0.01 µS to 0.1 mS		
	Accuracy	±1 % full scale		
	Calibration	Auto; one point per range		
	TDS			
	Range	0 to 200 ppt (TDS factor 1.0)		
	Resolution	0.01 ppm to 0.1 ppt		
	Accuracy	±1 % full scale		
	Calibration	Manual; 1 point/range		
	Response Characteristics			
	Warm-up Time:	(≤ 30 seconds)		

	Stabilization Time:	(≤ 3 seconds (typical))		
	Drift:	(< 0.002 pH/hour)		
	Response Time (95%):	(< 5 seconds)		
	Mechanical/Construction/ Design Specifications			
	Housing Material:	(ABS or chemically resistant polymer)		
	Display:	(Digital, LCD)		
	Keypad:	membrane keys		
	Electrode Holder:	(Adjustable arm included)		
	User Interface & Software			
	Display Features			
	Switch between pH, mV, conductivity and TDS with a press of a button			
	Calibration status indicator			
	Electrode slope & offset display			
	Stability indicator			
	Real-Time Clock	Time and date stamp on calibration and stored		
	Date/time stamp			
	Data Management			
	Internal Memory:	(≥ 500 data sets)		
	Data Logging:	(Manual, timed interval, or auto-stable)		
	USB port:			
	RS232 interface			
	Optional Ethernet			
	Printer support			
	Calibration Features			
	Automatic buffer recognition (NIST/DIN/custom)			
	Electrode diagnostics:			
	Slope (% efficiency)			
	Offset (mV)			
	Calibration reminder (time-based or usage-based)			
	Acceptable slope range:	(95% – 105%)		
	Electrode Compatibility			

	The meter shall support:			
	Combination pH electrodes			
	Refillable electrodes			
	Double junction electrodes			
	ORP electrodes			
	ISE electrodes			
	Connector types:	(BN/C (standard))		
	Safety Systems			
	Safety & Protection			
	Overvoltage protection			
	Reverse polarity protection			
	Input short-circuit protection			
	ESD protection (± 8 kV contact discharge)			
	Electrical Safety:	Complies with IEC/CE standards, The unit must be connected to a receptacle with proper grounding		
	Accessories			
	pH electrode:			
	Structural design:	(Combination: Electrode-all-in one)		
	Junction Type:	Double Junction		
	Body Material:	Glass Body		
	Temperature probe			
	Electrode holder arm			
	Stirrer			
	Buffer solutions:	(pH 4.01, pH 7.00, pH 10.01)		
	Electrolyte x 20 ml, Standard solution			
	Power adapter			
	USB cable			
	Conductivity Electrode/TDS			
	Power Supply:	Two AA batteries (included), >100 hours (without backlight)		
	AC adapter	Single-phase 220/240V, 50-60 Hz		
	Environmental Conditions			
	Operating Temperature:	(10°C to 40°C)		
	Relative Humidity:	($\leq 80\%$ non-condensing)		

		Compliance and Documentation				
		Calibration certificate				
		User manual				
		Warranty:	(1Year)			
		Additional Information:				
		Make:	Please specify			
		Model:	Please specify			
		Country of origin/Manufacture	Please specify			
		A manufacturer Authorization Letter should be provided				
		Brand name, Product Catalog, Catalog page and Model no should be available. Requested specification should be stated in the Catalog page and product web site.				
If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.						
38	Automated Withering Trough	Performance		1		
		Assure desired and even wither				
		Withering temperature	(25-35 °C)			
		hygrometric difference	(2-4 °C)			
		Mechanical and Electrical				
		Trough				
		Capacity	38 kg			
		Length	5 feet			
		Width	3 feet			
Plenum chamber volume	35 feet ³					
Trough Bottom	Lined with a mesh (size)					

	Material (Body)	(Stainless Steel Grade 304/equivalent corrosion-resistant alloy)		
	Thickness:	(≥ 1.2 mm)		
	Finish:	Smooth, food-grade polish		
	Material (Frame & Support)	(Mild steel with anti-corrosion paint or powder coating)		
	Rigid, vibration-resistant			
	Heating Unit			
	Duct heaters with temperature controller			
	Power	(3-6 kW)		
	Heating Elements:	(Stainless steel finned tubular heaters)		
	Maximum temperature	80°C		
	Temperature adjustment	by 1°C		
	Temperature controller with monitor			
	Uniform temperature distribution	(±2°C across airflow)		
	Air Distribution			
	Installed inline between blower and trough			
	Uniform air mixing chamber before entering leaf bed			
	Insulated air ducting:	(minimum 25 mm insulation thickness)		
	Fan capacity	min of 840 cfm		
	Fan type	Axial flow		
	Motor	1 hp 3 phase		
	VFD	Yes		
	Hygrometer (to read dry and wet bulb difference)			
	Construction			
	<input type="checkbox"/> Exterior - needed to be with rust proofed mild steel with textured stoved finish			
	<input type="checkbox"/> Interior – rust proofed mild steel, welded seams Shelves			

	<input type="checkbox"/> Shelves – anodized welded Aluminium section shelf on telescopic ball bearing mounted slides, sides to match wither baskets			
	Trough Wall Configuration			
	Walls extending above the mesh layers must be tapered inward to minimize air leakage around the edges and to direct airflow uniformly through the mesh layers			
	Automation in withering trough			
	VSD to control the speed of the fan or frequency of the motor			
		60 Hz, 230 V		
		3 phases		
		Programmable with display (with English interphase)		
		Control by potentiometer and external voltage		
	Load cell setup to measure the weight change of the tea leave			
		Maximum weight 50 kg		
		Cantilever type		
		IP65 protection		
		Precision 50-100 g		
		Load Cell Indicator with English interphase (Minimum 4 load cell reading display ability)		
	K-type thermocouple with display			
	Control Panel			
	Main power switch			
	Heater ON/OFF indicator			
	Temperature display (digital)			
	Adjustable thermostat knob or keypad			
	Heater stage indicators			
	Display with English interphase			
	Data logging capability			
	Safety Features			

	Over-temperature protection (thermal cut-out at ~55°C)			
	Airflow interlock (heater operates only when blower is running)			
	Fire-resistant insulation			
	Appropriate covering for moving parts			
	MCB / MCCB			
	Emergency stop switch			
	Electrical Safety:	Complies with IEC/CE standards, The unit must be connected to a receptacle with proper grounding		
	Environmental Conditions			
	Operating Temperature:	(20°C to 50°C)		
	Relative Humidity:	(≤80% non-condensing)		
	Compliance and Documentation			
	CE			
	ISO			
	ASTM			
	IEC			
	RoSH			
	User Manual			
	Warranty:	Minimum 2 years		
	Additional Information:			
	Make:	Please specify		
	Model:	Please specify		
	Country of origin/Manufacture	Please specify		
	A manufacturer Authorization Letter should be provided			
	Brand name, Product Catalog, Catalog page and Model no should be available. Requested specification should be stated in the Catalog page and product web site.			
	If you fail to fulfill the requested specification by the university			

		[equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.				
39	Orthodox Roller	Performance		1		
		Rupture leaf cells to Initiate oxidation				
		Shape leaves into twisted orthodox style				
		Express leaf juices uniformly				
		Maintain leaf integrity without excessive cutting				
		Mechanical and Construction				
		Roller				
		Capacity	(10 kg of withered tea leaf)			
		Diameter:	(500–600 mm)			
		Rolling Table				
		Material:	(Food-grade Stainless Steel SS316)			
		Thickness:	(≥ 2 mm)			
		Finish:	(Mirror or satin polish ($R_a \leq 0.8 \mu\text{m}$))			
		Centre cone	(Brass material, modified Rettie cone).			
		Type	(Rettie cone)			
		Material:	(Food-grade Stainless Steel (SS316))			
		Height				
		Battens				
		No of battens	10			
		Type	(Crescent)			
		Depth:	(3–6 mm)			
		Pressure Cap				
		Material:	(Food-grade Stainless Steel)			
Mounting:	(Central shaft-guided)					
Pressure Application:	(Manual screw mechanism)					
Pressure cap weight have to be moved along its beam to apply different pressure application						
Adjustable rolling pressure:	(0–150 kg downward force)					
Gradual pressure increase capability						

	Pressure Control Mechanism:	(Manual screw-thread pressure system			
	Barell				
	Material:	(Food-grade Stainless Steel)/(Brass)			
	Tickness	(≥1.2 mm)			
	Finish:	(Mirror or satin polish (Ra ≤ 0.8 μm)			
	Table frame:				
	Material:	(Heavy-duty cast iron)			
	Frame Thickness:	(≥ 5 mm structural supports)			
	Vibration Dampers:	(Anti-vibration rubber pads)			
	Base Type:	(Floor-mounted with leveling bolts)			
	Needs to be with cast iron and steel pivot joints on ball bearing races				
	Central Shaft				
	Material:	(SS304)/(SS316)			
	Diameter:	(30–40 mm)			
	Mounting:	(Sealed bearing housing)			
	Bearing Type:	(Food-grade sealed ball bearings)			
	Alignment:	(Precision machined)			
	Driving mechanism (crankshafts/gears)				
	Motor:				
	Type:	(Totally Enclosed Fan-Cooled (TEFC) induction motor)			
	Power:	(1.5 – 2 HP)			
	Speed:	(1500 RPM)			
	Gearbox:				
	Type:	(helical gearbox)			
	Output Speed:	(40–65 RPM (adjustable)			
	Speed Control:	Variable Frequency Drive (VFD)			
	Torque Rating:	(Sufficient for full 10 kg load without stalling)			
	Transmission:				
	Coupling	(Direct coupling/Food-grade belt-driven system with protective guard)			
	Fully enclosed drive assembly				
	Control Panel				
	ON/OFF main switch				

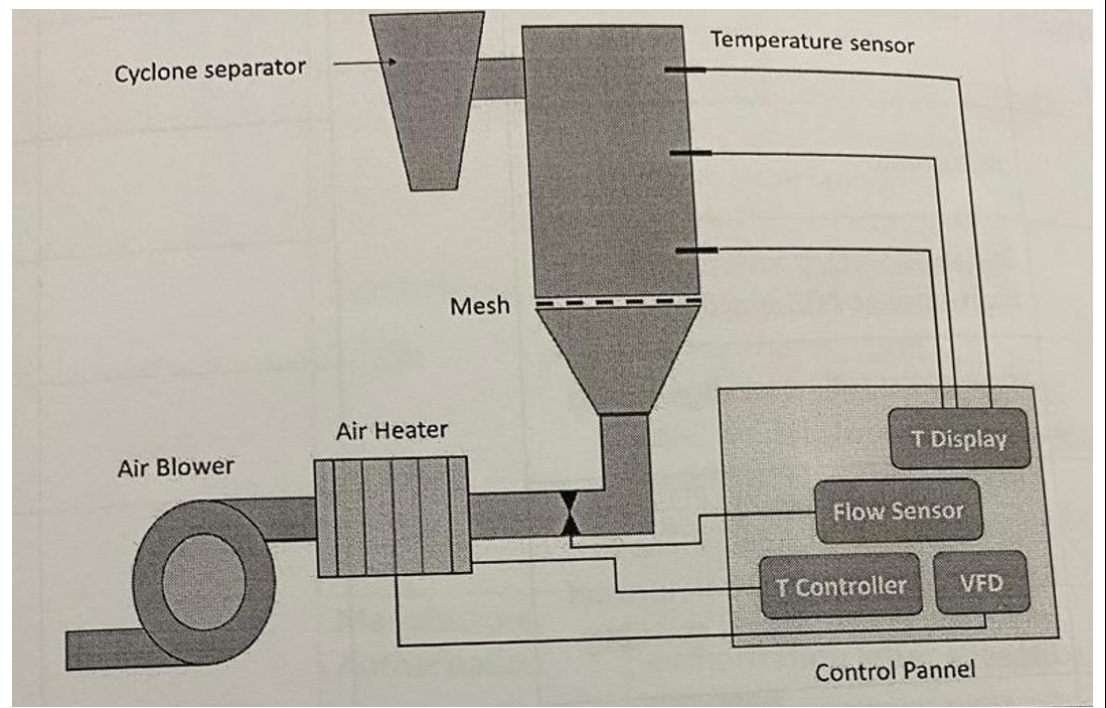
		Speed Control Knob (VFD)			
		Timer (0–60 min adjustable)			
		Pressure adjustment indicator			
		Safety Features			
		Full motor guard			
		Enclosed gear system			
		Emergency stop switch			
		Interlock on rolling cap			
		Thermal motor protection			
		Overload protection relay			
		Short-circuit protection			
		Electrical Safety:	Complies with IEC/CE standards, The unit must be connected to a receptacle with proper grounding		
		Environmental Conditions			
		Operating Temperature:	(20°C to 50°C)		
		Relative Humidity:	(≤80% non-condensing)		
		Compliance and Documentation			
		CE			
		ISO			
		IEC			
		User Manual			
		Warranty:	Minimum 1 Year		
		Additional Information:			
		Make:	Please specify		
		Model:	Please specify		
		Country of origin/Manufacture	Please specify		
		A manufacturer Authorization Letter should be provided			
		Brand name, Product Catalog, Catalog page and Model no should be available. Requested specification should be stated in the Catalog page and product web site.			

		If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.				
40	FBD Dryer	Performance Requirements		1		
		Batch Capacity:	8–15 kg wet tea per batch			
		Drying the 'Dhool' with about 55–65% moisture to produce made tea with about 3% moisture				
		Drying time	(15–25 minutes)			
		Rapid and even moisture removal				
		Minimizing scorching and case hardening				
		Uniform Drying	(±0.5% moisture)			
		Mechanical Design Specifications				
		<i>Drying Chamber</i>				
		Material:	(SS304 (standard))			
		Finish:	(Food-grade polish ($R_a \leq 0.8 \mu\text{m}$))			
		Welding:	(TIG welded, ground smooth)			
		Configuration	(Rectangular fluidization chamber)			
		Removable product container				
		<i>Air Distributor Plate</i>				
		Material:	(SS304 perforated plate)			
		Hole Diameter:	(1.5–3 mm)			
		Open Area:	(8–15%)			
		Uniform hole distribution				
		Removable for cleaning				
<i>Heating System</i>						
Electric Heater						
Power Rating	(12–18 kW)					
Type	(Finned tubular heaters)					
Temperature Range	(Up to 200°C)					

	Temperature measurement	(K-type thermocouple with display at three different heights)			
	Blower System				
	Type	(Centrifugal blower)			
	Airflow	(50-100 CFM)			
	Motor Power	(2-3 HP)			
	Static Pressure	(300-600 Pa)			
	Flow sensor	(Hot wire anemometer type air flow sensor)			
	Exhaust & Dust Collection				
	Type	Cyclone separator			
	Adjustable exhaust damper				
	Structural Frame				
	Material:	Mild Steel with powder coating			
	Heavy-duty support frame				
	Anti-vibration pads				
	Floor-mounted design				
	Control System				
	Main power switch				
	PID temperature controller				
	Digital temperature display				
	Batch timer (0-60 min)				
	Blower speed control	VFD			
	Safety Systems				
	Over-temperature cutoff				
	Heater interlock with blower				
	Emergency stop button				
	Thermal insulation (50 mm mineral wool)				
	Earthing & overload protection				
	Fire-resistant insulation				
	Electrical Safety:	(Complies with IEC/CE standards, The unit must be connected to a receptacle with proper grounding)			
	Power Supply:	(3-phase 400 V, 50 Hz)			
	Environmental Conditions				
	Operating Temperature:	(10°C to 40°C)			

Relative Humidity:	(≤80% non-condensing)
Compliance and Documentation	
IEC	
ISO 9001	
CE Marking (EU)	
User manual	
Warranty:	(1-3 Years)
Additional Information:	
Make:	Please specify
Model:	Please specify
Country of origin/Manufacture	Please specify

Expected Design – A similar design as shown in the figure below



		A manufacturer Authorization Letter should be provided			
		Brand name, Product Catalog, Catalog page and Model no should be available. Requested specification should be stated in the Catalog page and product web site.			
		If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.			
41	Acclimatization Chamber	Dimensions	Height - 6.6 Ft		
			Width - 4.6 Ft		
			Depth – 2 Ft		
		Roof	Plastic Green Sheet		
		light	4' long tube light provisions for each shelf		
		Switch	Separate switch for each tube light		
		Door	Lockable		
		Covering Material	Should be covered four sides with 3mm thick transparent durable sheet		
		Fabrication Description	Structure should be with white color powder coated steel box bars 25 x 25mm		
			Three Stainless steel 1mm sheet 4.6 x 2 ft for shelves		
			Movable and lockable wheels (Clusters Wheels)		
			Shelf base supports		
			Three stainless steel shelves		
			Distance between each shelf 1.5Ft		
			Stand height - 2Ft		
			Air holes diameter - 1.5 cm		
			Additional Information:		
	Make:	Please specify			
	Model:	Please specify			

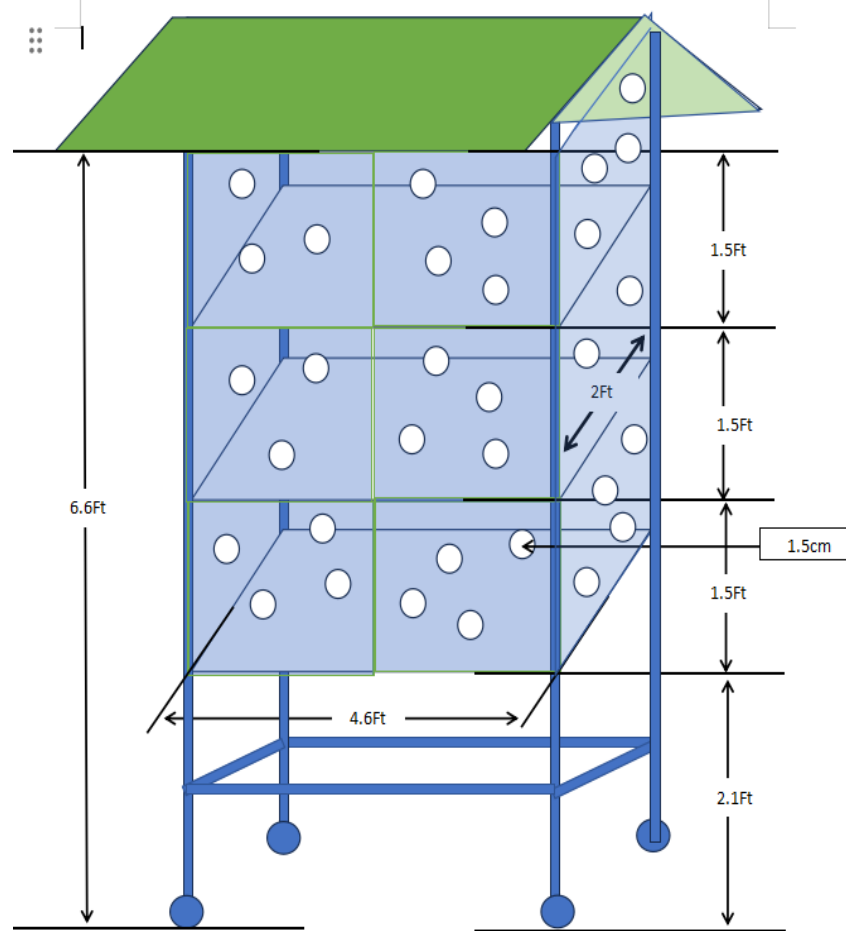
Country of origin/Manufacture | Please specify

A manufacturer Authorization Letter should be provided

Brand name, Product Catalog, Catalog page and Model no should be available. Requested specification should be stated in the Catalog page and product web site.

If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.

Expected design is given below.



42	pH Meter No 2	Performance Requirements		1		
		Measurements				
		pH				
		mV (ORP)				
		Temperature				
		Measurement Specifications				
		pH Measurement				
		Measurement Range:	(-2.000 to 16.000 pH)			
		Resolution:	0.01			
		Accuracy:	(±0.01 pH (±1 digit))			
		Calibration Points:	(1–5 point calibration)			
		Calibration Recognition:	(Automatic buffer recognition (NIST, DIN, custom))			
		mV / ORP Measurement				
		Range:	(±2000.0 mV)			
		Resolution:	(0.1 mV)			
		Accuracy:	(±0.2 mV)			
		Offset Adjustment:	(±200 mV)			
		Temperature Measurement				
		Range:	(-10.0 to 120.0 °C)			
		Resolution:	(0.1 °C)			
		Accuracy:	(±0.2 °C)			
		Compensation Range:	(0–100 °C)			
		User Interface & Software				
		Display Features	LCD			
		Simultaneous display: pH, mV, temperature				
		Calibration status indicator				
Electrode slope & offset display						
Stability indicator						
Date/time stamp						
Safety Systems						
Safety & Protection						
Overvoltage protection						
Reverse polarity protection						

	Input short-circuit protection			
	ESD protection (± 8 kV contact discharge)			
	Electrical Safety:	Complies with IEC/CE standards, The unit must be connected to a receptacle with proper grounding		
	Accessories			
	pH glass electrode			
	Temperature probe			
	Electrode holder arm			
	Stirrer			
	Buffer solutions:	(pH 4.01, pH 7.00, pH 10.01)		
	Electrolyte x 20 ml, Standard solution			
	Power adapter			
	Software and USB cable			
	Conductivity cell			
	Membrane caps 02			
	Power Supply:	Single-phase 220/240V, 50-60 Hz		
	Data Out put	PC directly via USB		
	Memory Function	Recalls up to 150 points		
	Stirring should be available			
	Compliance and Documentation			
	Calibration certificate			
	User manual			
	Warranty:	Minimum 1 Year		
	Additional Information:			
	Make:	Please specify		
	Model:	Please specify		
	Country of origin/Manufacture	Please specify		
	A manufacturer Authorization Letter should be provided			
	Brand name, Product Catalog, Catalog page and Model no should be available. Requested specification should be			

		stated in the Catalog page and product web site.				
		If you fail to fulfill the requested specification by the university [equipment supply with wrong specification] the equipment would be rejected after goods delivery to the university.				
43	Rotary Rheometer	Overview:	Rotary Rheometer with measurements modes: Controlled stress (CS), Controlled strain (CR), Oscillatory shear (SAOS/LAOS), Creep and recovery, Flow and viscoelastic measurements.	1		
		Type:	Benchtop rotational rheometer with oscillatory capability			
		Measured Properties:	Storage modulus (G') – elasticity Loss modulus (G'') – viscosity Complex viscosity (η)* Yield stress (σ_y) Phase angle (δ)			
		Strain Range:	0.01% - 100% or higher			
		Frequency Range:	0.01 – 100 Hz			
		Torque:	Minimum torque: ~200 $\mu\text{N}\cdot\text{m}$ or lower Maximum torque: ~125 $\text{mN}\cdot\text{m}$			
		Angular Velocity (Shear Rate Capability):	Angular velocity range: ~10 ⁻⁸ to 157 rad s^{-1} Suitable for both very low shear (gel/solid-like materials) and high shear flow studies Custom fixtures for gels, pastes, and soft solids			
		Strain/Displacement Resolution	Angular resolution: < 10 nanoradians Normal Force Range: 0-10 N (to measure sample compression and normal stress effects) Normal force resolution: ~0.004 N			
		Temperature Control	Peltier plate system Range :0 -100 °C Accurate temperature stability : \pm 0.1 °C			
		Geometries & Accessories:	Preferred Geometries for Soft Gels :Vane geometry, Cone–plate geometry, optional geometries-Parallel plate			
		Weight:	~45kg			
Dimensions (W x H x D):	442 mm x 725 mm x 596 mm or similar					

		Sample Application:	Measurement of viscoelastic properties (storage modulus G' , loss modulus G''), yield stress, and viscosity of protein starch gels and other soft food systems- Liquids, gels, pastes, dispersions, emulsions, polymer melts, starch gels, and food printing inks.		
		User Interface & Controls:	Digital Display: Rotation speed, bath temperature, runtime Control Panel (Optional): (PID microprocessor, Tactile buttons/keypad) Preset Programs: (Optional memory for common solvent profiles) Language: English (menu text)		
		Data Acquisition & Software:	Software :Required relevant software Functions :Real-time G' , G'' , and complex viscosity plots 01 6,000,000 6,000,000 SAOS and LAOS amplitude/frequency sweeps Flow curve analysis, yield stress determination Lissajous curve analysis for nonlinear viscoelasticity Export in CSV, Excel, and graphical formats		
		Safety Features:	Over-temperature protection Dry-run protection (water bath) Emergency stop switch Lockable support stand		
		Electrical Safety:	Complies with IEC/CE standards, The unit must be connected to a receptacle with proper grounding		
		Stability	Anti-vibration feet for sensitive low-torque measurements		
		Accessories (Standard) :	:Need all other required accessories for standard operation		
		Power Supply	Single-phase 220/240V, 50-60 Hz		
		Environmental Conditions	Operating Temperature :(10°C to 40°C) Relative Humidity: ($\leq 80\%$ non-condensing)		
		Compliance and Documentation	E / ISO / RoHS compliant: Optional User manual		
		Warranty:	(2-3 Years)		

44	Vacuum Pump	Overview:	The vacuum pump shall be a Oil free, Chemical resistant, diaphragm vacuum pump compatible with water & organic solvents and with PTFE wetted materials.	1		
		Pump Type:	Power: 90 W - 100W Pumping Speed: 30 - 35 L/min			
		Ultimate Vacuum (Pressure)	Ultimate vacuum: (Max. vacuum - 95 -100mbar)			
		Mechanical & Structural Characteristics :	diaphragm vacuum pump for laboratory filtration of aqueous and organic solvents mixtures using filter papers			
		Safety & Protection	Thermal overload protection Noise: ≤55 db Electrical protection: Complies with IEC/CE standards, The unit must be connected to a receptacle with proper grounding			
		Power Supply:	(Single-phase 220/240V, 50-60 Hz)			
		Environmental Conditions	Operating Temperature: (10°C to 40°C)			
		Accessories Compliance and Documentation	IEC ISO 9001 CE Marking (EU) RoHS User manual			
		Warranty:	1 Years			
45	Sonicator Bath/ Ultra Sonicator Cleaner No 3	Ultrasonic System:	Ultrasonic Frequency: (35-40 kHz) Ultrasonic Power Output: (100–300 W, adjustable) Operation Mode/Power Control: pulse mode, adjustable intensity Uniformity: (Even ultrasonic distribution throughout bath	2		
		Bath and Tank:	Tank Capacity: 5 L Tank Material: Stainless steel (SUS 304 or equivalent), corrosion resistant			

			Drain Valve: Needed		
			Lid: (Removable stainless steel)		
		Housing Material:	(Powder-coated steel)		
		Temperature Control	Heating Function: (built-in heater) Temperature Range: (Ambient +5°C to 60)		
			Temperature Accuracy: ($\pm 2^{\circ}\text{C}$) Temperature Display: (Digital LED display)		
		Timer and Controls	Timer Range: 1–99 minutes		
			Control Panel: (Digital)		
			Display: (Time, temperature, and power status)		
		Safety Features:	Overload and short-circuit protection		
			Overheating protection		
			Low-noise operation : ≤ 60 dB		
			Insulated housing		
			Electrical Safety: Complies with IEC/CE standards, The unit must be		
			connected to a receptacle with proper grounding		
		Accessories	Sample racks and baskets: Removable mesh basket (Stainless Steel) for beakers, Stainless Steel handle, heat resistant Test tube holders		
			Sound-reducing enclosure		
		Power Supply:	Single-phase 220/240V, 50-60 Hz		
		Environmental Conditions	Operating Temperature: (10°C to 40°C)		
			Relative Humidity: ($\leq 80\%$ non-condensing)		
		Installation:	(Bench-top)		

		Compliance and Documentation	CE / ISO / RoHS compliant			
			User manual and calibration certificate			
		Warranty:	1 Year			
		Additional Information:	Make: Please specify			
			Model: Please specify			
			Country of origin/Manufacture: Please specify			
46	Agitator Mixer	Performance Requirements:	Speed Range: 100 – 1200 RPM (variable)	1		
			Speed Accuracy: (± 1 rpm or $\pm 1\%$)			
			Capacity: 01 Litre			
			Motor Power: 150 W – 250 W			
		Timer	Range: (1 min – 99 min/ continuous mode)			
			Countdown with automatic stop			
			Audible alarm at cycle completion			
		Impeller Type:	Paddle, Optionally anchor/turbine			
		Application:	Mixing of liquids, slurries, or semi-solid materials			
		Construction & Materials:	Shaft Material: Food-grade stainless steel (304/316)			
			Motor: 150 W – 250 W (maintenance-free)			
			Feet: (Anti-slip rubber feet or leveling feet)			
			Type: Bench-top vertical agitator mixer			
		Control System:	Speed control : Digital speed			

			Over-speed detection and correction: Cleanability: Easy disassemble, sanitary design Display : LED, Digital display for speed and time		
		Safety Features :	Overload protection Motor overheat protection Anti-slip platform surface Noise Level: ≤ 60 dB Balanced drive mechanism for low vibration Stable operation at maximum rated load		
		Electrical Protection:	Overload Short circuit Electrical Safety: The unit must be connected to a receptacle with proper grounding		
		Power Supply:	Single-phase 220/240V, 50-60 Hz		
		Environmental Conditions:	Operating Temperature: (10°C to 40°C) Relative Humidity: (≤80% non-condensing)		
		Compliance and Documentation	RoHS Compliant: IEC/CE: ISO 9001:		

			User manual			
		Warranty:	Minimum 3 years			
		Additional Information				
47	Colorimeter	Measurement area :	Ø 50 mm	1		
		Measurement geometry :	0° viewing angle, diffuse illumination			
		Light source	Pulsed xenon lamp			
		Detector	Silicon photocell			
		Color systems				
		Color difference formula :	ΔE^*ab and user-defined formulas			
		Inter-instrument agreement :	$\Delta E^*ab \leq 0.8$			
			$L^*a^*b^*$, L^*C^*h , XYZ, Yxy and others			
		Repeatability	$\Delta E^*ab \leq 0.07$			
		Measurement time	Approx. 1 second			
		Calibration	User calibration function			
		Judgment function	PASS / WARN / FAIL			
		Data storage				
		measuring head only :	Up to 1,000 measurements			
		with DP-400 :	Up to 2,000 measurements			
		Target color storage	Up to 100 target colors			
		PC connection	Detachable			
		Data processor	Direct connection supported with optional software			
		Printer	DP-400			
		Display	Large LCD with backlight			
		Display languages :	6 languages (including English, Japanese)			
		Graph display :	Color-difference graph (with DP-400)			
		Text entry	Cellular phone-type text input			
		Power supply	Rechargeable battery / AC adapter			
Accessories	Accessories for powder, paste, opaque liquids					
	Standard accessories included					
Data compatibility	Compatible with CR-300 / CR-310 series					

		Typical applications	Large, uneven, textured surfaces; powders, pastes, food, textiles			
		Warranty	Minimum 1 year from date of supply			
		Additional Information				
		User manual :	To be supplied (hard copy or soft copy)			
		Installation & commissioning:	Needed			
		Training :	Basic operational training is needed			
		Spare parts availability :	Minimum 5 years			
		Compliance standards :	ISO / CIE compliant			
		After sale service	Authorized service support is needed			
		Make:	Please specify			
		Model:	Please specify			
		Country of origin/Manufacture:	Please specify			

Section VI. Conditions of Contract (CC)

This Bidding Document is based on the standard bidding document for National Competitive Bidding (NPA/Goods/SBD 01). Section VI will not be provided with this bidding document. Bidders are instructed to refer the Section VI of the standard bidding document (NPA/Goods/SBD 01). The document is available at the website of NPA, www.npa.gov.lk

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.

CC 1.1(i)	The Purchaser is: Uva Wellassa University
CC 1.1 (m)	The Project Site(s)/Final Destination(s) is/are: Uva Wellassa University, Passara Road, Badulla
CC 8.1	For notices, the Purchaser's address shall be: Deputy Bursar Uva Wellassa University, Passara Road, Badulla. 055-2226475/ 055-2226633
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: For Goods offered within Sri Lanka Payment shall be made in Sri Lankan Rupees within thirty (30) 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. <ul style="list-style-type: none"> a) No Advance payment applicable for this contract b) Up to a maximum of ninety (90) percentage of the Contract Price, shall be paid on receipt of the Goods and confirm by the evaluation committee. c) Ten (10) percentage of the Contract price will be hold as Retention for a period of 12 months from the date of commissioning of equipment d) The Retention shall be paid on completion of Twelve (12) months. During that Period supplier shall correct all defects and confirmed by the purchase or his agent.
CC 17.1	A Performance Security – 10% Performance security may be in any of the following way <ul style="list-style-type: none"> (a) A Bank guarantee issued by a reputed bank operated in Sri Lanka. (b) Cash deposit at the Shroff Counter of the University
CC 26.1	The liquidated damage (Late Delivery) shall be: If the supplier fails to deliver any or all of the goods by the date(s) specified above the purchaser may deduct from the payment a sum equivalent to 0.05% of the delivered price of the delayed good, for each day of delay.
CC 26.1	The maximum amount of liquidated damages shall be: 10 % from the contract sum.
CC 27.3	The warranty shall remain valid for a period of time specified with the specifications.
CC 27.6	The supplier shall remedy the defects within 3 Months from the date of information by the purchaser.

Section VIII. Contract Forms

Table of Forms

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3. Guarantee for Advance Payment.....	104

Contract Agreement

THIS CONTRACT AGREEMENT is made

the [insert: number] day of [insert: month], [insert: year].

BETWEEN

(1) [Insert complete name of Purchaser], a [insert description of type of legal entity, for example, an agency of the Ministry of..... or corporation and having its principal place of business at [insert address of Purchaser] (hereinafter called “the Purchaser”), and

(2) [Insert name of Supplier], a corporation incorporated under the laws of [insert: country of Supplier] and having its principal place of business at [insert: address of Supplier] (hereinafter called “the Supplier”).

WHEREAS the Purchaser invited bids for certain Goods and ancillary services, viz., [insert brief description of Goods and Services] and has accepted a Bid by the Supplier for the supply of those Goods and Services in the sum of [insert Contract Price in words and figures, expressed in the Contract currency (ies)] (hereinafter called “the Contract Price”).

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.

2. The following documents shall constitute the Contract between the Purchaser and the Supplier, and each shall be read and construed as an integral part of the Contract:

- (a) This Contract Agreement
- (b) Contract Data
- (c) Conditions of Contract
- (d) Technical Requirements (including Schedule of Requirements and Technical Specifications)
- (e) The Supplier’s Bid and original Price Schedules
- (f) The Purchaser’s Notification of Award
- (g) [Add here any other document(s)]

3. This Contract shall prevail over all other Contract documents. In the event of any discrepancy or inconsistency within the Contract documents, then the documents shall prevail in the order listed above.

4. In consideration of the payments to be made by the Purchaser to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Purchaser to provide the Goods and Services and to remedy defects therein in conformity in all respects with the provisions of the Contract.

5. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the Goods and Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of Democratic Socialist Republic of Sri Lanka on the day, month and year indicated above.

For and on behalf of the Purchaser
Signed: [insert signature]
in the capacity of [insert title or other appropriate designation]
in the presence of [insert identification of official witness]

For and on behalf of the Supplier
Signed: [insert signature of authorized representative(s) of the Supplier]
in the capacity of [insert title or other appropriate designation]
in the presence of [insert identification of official witness]

Performance Security

[The issuing agency, as requested by the successful Bidder, shall fill in this form in accordance with the instructions indicated] ----- [Issuing Agency's Name, and Address of Issuing Branch or Office]

Beneficiary: Vice Chancellor, Uva Wellassa University, Passara Road, Badulla

Date:-.....--

Performance Bid Guarantee No.:

We have been informed that ----- [Name of Supplier] (hereinafter called "the Supplier") has entered into Contract No. ----- [Reference number of the contract] dated ----- with you, for the ----- Supply of ----- [name of contract and brief description] (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required. At the request of the Supplier, we ----- [name of Agency] hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of -----

[Amount in figures] (-----) [amount in words], such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of your first demand in writing accompanied by a written statement stating that the Contractor is in breach of its obligation(s) under the Contract, without your needing to prove or to show grounds for your demand or the sum specified therein. This guarantee shall expire, no later than the day of, 20.. [Insert date, 28 days beyond the scheduled completion date including the warranty period] and any demand for payment under it must be received by us at this office on or before that date.

[Signature(s)]

Guarantee for Advance Payment

[The issuing agency, as requested by the successful Bidder, shall fill in this form in accordance with the instructions indicated.]

Date: [insert date (as day, month, and year) of Bid Submission]

ICB No. and title: [insert number and title of bidding process]

[issuing agency's letterhead]

Beneficiary: Vice Chancellor, Uva Wellassa University, Passara Road, Badulla

ADVANCE PAYMENT GUARANTEE No.: [insert Advance Payment Guarantee no.]

We, [insert legal name and address of issuing agency], have been informed that [insert complete name and address of Supplier] (hereinafter called "the Supplier") has entered into Contract No. [insert number] dated [insert date of Agreement] with you, for the supply of [insert types of Goods to be delivered] (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, an advance is to be made against an advance payment guarantee.

At the request of the Supplier, we hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of [insert amount(s) in figures and words] upon receipt by us of your first demand in writing declaring that the Supplier is in breach of its obligation under the Contract because the Supplier used the advance payment for purposes other than toward delivery of the Goods.

It is a condition for any claim and payment under this Guarantee to be made that the advance payment referred to above must have been received by the Supplier on its account [insert number and domicile of the account]

This Guarantee shall remain valid and in full effect from the date of the advance payment received by the Supplier under the Contract until [insert date].

[Signature(s) of authorized representative(s) of the issuing agency]

Check List

No	Required Specification	Bidder's Offer			
		Conformity		Page No	Remark
		Yes	No		
1	Company Profile				
2	Business Registration				
3	VAT Registration				
4	List of Clients				
5	Past Three Year Experience in the industry				
6	Manufacturer Authorization				
7	Public Contract Act				
8	Bid Security				
9	Forms of Bids				
10	Price Schedule				
11	Bid Document Fee (Non – Refundable)				
12	Financial Statement				
Status					

“Bidders must fill above Check List”

Duly authorized for signed on behalf of
(Name of the Bidder)

Name :

Signature :

Designation :