Revised document after pre-bid meeting

DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

UVA WELLASSA UNIVERSITY

"SUPPLY, DELIVERY, AND INSTALLATION OF LABORATORY EQUIPMENT FOR THE FACULTY OF MEDICINE, UVA WELLASSA UNIVERSITY"

UWU/G/NCB/C/24/03

NATIONAL COMPETITIVE BIDDING

Bid Opening On	26th November 2024 - 2.30 p.m.
Bid Validity up to	91 days from 26th November 2024

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

CONTENTS

INVITATION FOR BIDS

"SUPPLY, DELIVERY, AND INSTALLATION OF LABORATORY EQUIPMENT FOR THE FACULTY OF MEDICINE, UVA WELLASSA UNIVERSITY"

UWU/G/NCB/C/24/03

The Chairman, Department Procurement Committee, on behalf of the Uva Wellassa University, invites sealed bids from eligible and qualified bidders for **"Supply, Delivery, and Installation of Laboratory Equipment for The Faculty of Medicine, Uva Wellassa University"** will be conducted through the National Competitive Bidding (NCB) procedure.

1. Bidder should have at least three 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. No: 055-2226475, Fax No: 055-2226633)**,** and inspect the bidding documents at the Supplies Division of the University between 9.00 am to 3.00 pm from **04th November 2024 to 26th November 2024 and up to 12.30 p.m. on 26th November 2024 .**
3. A complete set of bidding documents in English may be purchased by interested bidders on 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 17,630.00 in cash at the Shroff Counter of the University. The bidder can also download the biding documents from the University website www.uwu.ac.lk. Those who are obtaining bidding documents from the University website should submit the complete documents along with a Bank Draft drawn in favour of the "Vice Chancellor, Uva Wellassa University" for LKR 17,630.00 as non-refundable fee or the payments could be made to any branch of Bank of Ceylon, to the Uva Wellassa University, Account No: 3114820, and the original of the cash receipt/deposit slip to be attached with the bidding documents**.** The documents may be purchased until **12.30p.m. On 26th November 2024.**
4. Bids must be delivered to **Chairman, Department Procurement Committee, Uva Wellassa University, Passara Road, Badulla,** on or before **2.00 p.m. on 26th November 2024** Please indicate the "**"SUPPLY, DELIVERY, AND INSTALLATION OF LABORATORY EQUIPMENT FOR THE FACULTY OF MEDICINE, UVA WELLASSA UNIVERSITY" - UWU/G/NCB/C/24/03"**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,** valid for 120 days from the date of the bid opening. The Value of the Bid Security in the following.
    a. Package 01 - Anatomy Laboratory – 1,100,000.00
    b. Package 02 - Bio Chemistry Laboratory – 100,000.00
    c. Package 03 – Physiology - 80,000.00
6. Pre Bid meeting will be held at **10.00 a.m. 12th November 2024,** In the Board Room of Uva Wellassa University.
7. The bids shall be deposited in the 'Tender Box' available in the Registrar's Office of the University, or sent under Registered Cover to be received before the deadline to the address given in Clause No.5.
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
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 the Section I of the standard bidding document (NPA/Goods/SBD 01). The document is available at the website of NPA, 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 ITB.
[Instructions for completing the Bid Data Sheet are provided, as needed, in the relevant 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 EQUIPMENT FOR THE FACULTY OF MEDICINE, 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 bidders including, but not limited to, the following:** • **Business Registration Certificate** • **VAT Registration Certificate** • **List of client who use the Products and their contract details** • **Past 3 years relevant experience in the relevant Industry in Sri Lanka** (The bidder should have at least three years of experience in the relevant industry in Sri Lanka and should submit documents to prove experience in the industry.) • **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 : **90 days from 26th November 2024**	
ITB 20.1	Bid shall include a Bid Security in any of following ways (a) A Bank guarantee issued by a reputed bank operated in Sri Lanka. (b) Cash deposit at the Shroff Counter of the University (c) Cash deposit from any branch of Bank of Ceylon, to the Uva Wellassa University, Account No: 3114820, and the **cash receipt/deposit slip to be attached with the bidding documents.**	
ITB 20.2	The amount of the Bid Security: a. Package 01 - Anatomy Laboratory – 1,100,000.00 b. Package 02 - Bio Chemistry Laboratory – 100,000.00 c. Package 03 – Physiology - 80,000.00 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 EQUIPMENT FOR THE FACULTY OF MEDICINE, UVA WELLASSA UNIVERSITY" - UWU/G/NCB/C/24/03**	
ITB 23.1	For bid submission purposes, the Purchaser's address is:	
	Attention Address	**: Deputy Bursar/Stores & Supplies** **: Uva Wellassa University, Passara Road, Badulla**.
	The deadline for the submission of bids is	
	Date Time	**: 26th November 2024** **: 2.30 p.m.**
ITB 26.1	The bid opening shall take place at:	
	Address Date Time	**: Board Room, Uva Wellassa University, Passara Road, Badulla.** **: 26th November 2024** **: 2.30 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, from amongst those set out in Section III, Evaluation and Qualification Criteria: (a) Deviation in Delivery schedule: Option 2 _Please refer - **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: The Certificate from a Chartered Electrical Engineer 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]Purchaser will evaluate the bid item by item basis.	

Section III. Evaluation and Qualification Criteria

2. 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 Requirement. No credit will be given to earlier deliveries, and bids offering delivery beyond this range will be treated as nonresponsive. 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 (Free service & Pay service).

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

3. Evaluation Criteria (ITB 35.4):

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 whole bid. The local agent shall submit evidence of status, obligations, power of attorney and any other documentary evidence that he is duly authorized and eligible to bid on behalf of the manufacturer.

b. The bidders should also have previous experience of at least three years in relevant industry in the supply and also technical and financial capability necessary to perform the contract.

c. Draft service agreement for three year period (after the warranty period) should be submitted.

d. Bids will be rejected as non- responsive if documentary evidence in proof of above has not been 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.

4. 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

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

Table of Forms

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

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: [insertthe 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;

No	Description of Goods or related services	Qty	Unit price (inclusive of duties, sales and other taxes) Excluding VAT	No. Price per line item (Col.3x4)	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. Anatomy Laboratory									
1.01	Binocular microscope	10							
1.02	Bench Vice Medium size	2							
1.03	X ray illuminator	2							
1.04	mortuary chambers, 3 layers	2							
1.05	Tri-ocular microscope	1							
1.06	Multi viewing attachment eye piece	1							
1.07	Embalmbing set , Gravity pressure	1							
1.08	Band saw heavy - duty machine	1							
1.09	Gas cylinder with regulator burner	1							

1.1	Scalpel Handle No. 4 stainless steel	12							
1.11	Liston Bone Cutter	3							
1.12	Rib sheers	3							
1.13	Necropsy saw electrical	1							
1.14	Automatic Tissue processing machine	1							
1.15	Rotary Microtome with blades	1							
1.16	Oven to melt wax	1							
1.17	Wax embedding machine	1							
1.18	Embedding cassettes	20							
1.19	Microscopic slides 100/1 Pack	15 boxes							
1.20	Lens cleaning tissues	05 packs							
1.22	Fume hood	1							
1.23	Tissue Floating Water Bath	1							
1.24	Electronic balance	1							
1.25	Laboratory water distiller	1							
1.26	Centrifuge	1							
2	Biochemistry Laboratory								
2.01	Deionized water plant	1							
2.02	Homogenizer	1							
2.03	Magnetic Stirrers With Hot Plate	5							
2.04	Variable Volume Single Channel Pipette (1µl – 10µl)	5		11					
2.05	(10-100) µl Micro pipettes	5							

2.06	(100-1000) µl Micro pipettes	5							
2.07	(0.5-10) µl Micro pipettes	2							
2.08	Double beam Spectrophotometer (UV/Visible)	2							
2.09	Water Bath (Boiling)	1							
2.1	Heating mantle 500 ml	5							
2.11	Heating mantle 1000 ml	5							
2.12	Automated Multiparametric Agarose Gel Electrophoresis System	1							
2.13	Semi-automated urine analyzer (Urine Strip Reader)	1							
2.14	Binocular Microscope	10							
2.15	Glucometer	1							
3	Physiology								
3.01	Bell (for examination timing)	4							
3.02	Bicycle ergometer	2							
3.03	Sphygmomanometer - non mercury	10							
3.04	Evoke potential recording system	1							
3.05	Glucometer with strips	1							
3.06	micropipette	2							
3.07	Naubeur counting chamber	5							
3.08	ophthalmoscope	1							

3.09	Otoscope	1							
3.1	perimeter	1							
3.11	Sahli Hemoglobinometer	2							
3.12	Pseudo isochromatic plates	4							
3.13	Spirometer	1							
3.14	Treadmill	1							
3.15	Two point discriminator	1							
3.16	Weight Scales	2							
3.17	Electric balance	1							
3.18	Mechanical mixer	2							
3.19	Snellen chart	3							
3.2	Westergren stand	5							
3.21	Nasogastric Intubation Model	1							
3.22	Digital rectal examination model	1							
3.23	Female pelvic examination simulator	1							
3.24	Catheterization simulator-male	1							
3.25	Catheterization simulator - female	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 Wellassa 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)]

Bid-Securing Declaration

*[The **Bidder** shall fill in this form in accordance with the instructions indicated in brackets]*

Date: ---------- *[insert date by bidder]*

Name of contract: "SUPPLY, DELIVERY, AND INSTALLATION OF LABORATORY EQUIPMENT FOR THE FACULTY OF MEDICINE, UVA WELLASSA UNIVERSITY"
Contract Identification No: - UWU/G/NCB/C/24/03

To: Chairman, Procurement Committee, Uva Wellassa University

We, the undersigned, declare that:

1. We understand that, according to instructions to bidders (hereinafter "the ITB"), bids must be supported by a bid-securing declaration;
2. We accept that we shall be suspended from being eligible for contract award in any contract where bids have being invited by any of the Procuring Entity as defined in the Procurement Guidelines published by National Procurement Agency of Sri Lanka, for the period of time of *three years* starting on *the latest date set for closing of bids of this bid,* if we:
   (a) withdraw our Bid during the period of bid validity period specified; or
   (b) do not accept the correction of errors in accordance with the Instructions to Bidders of the Bidding Documents; or
   (c) having been notified of the acceptance of our Bid by you, during the period of bid validity, (i) fail or refuse to execute the Contract Form, if required, or (ii) fail or refuse to furnish the performance security, in accordance with the ITB.
3. We understand this bid securing shall expire if we are not the successful bidder, upon the earlier of (i) our receipt of a copy of your notification to the Bidder that the bidder was unsuccessful; or (ii) twenty-eight days after the expiration of our bid.
4. We understand that if we are a JV, the Bid Securing Declaration must be in the name of the JV that submits the bid. If the JV has not been legally constituted at the time of bidding, the Bid Securing Declaration shall be in the names of all future partners as named in the letter of intent.

Signed *[insert signature(s) of authorized representative]* In the Capacity of *[insert title]*

Name *[insert printed or typed name]*

Duly authorized to sign the bid for and on behalf of *[insert authorizing entity]*

Dated on *[insert day]* day of *[insert month], [insert year]*

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

1. List of Goods and Delivery Schedule

Line 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 [*to be provided by the bidder*]**
1. Anatomy Laboratory – Package 01						
1.01	Binocular microscope	10				
1.02	Bench Vice Medium size	2				
1.03	X ray illuminator	2				
1.04	mortuary chambers, 3 layers	2				
1.05	Tri-ocular microscope	1				
1.06	Multi viewing attachment eye piece	1				
1.07	Embalmbing set , Gravity pressure	1				
1.08	Band saw heavy - duty machine	1				
1.09	Gas cylinder with regulator burner	1				
1.10	Scalpel Handle No. 4 stainless steel	12				
1.11	Liston Bone Cutter	3				
1.12	Rib sheers	3				
1.13	Necropsy saw electrical	1				
1.14	Automatic Tissue processing machine	1				
1.15	Rotary Microtome with blades	1				
1.16	Oven to melt wax	1				
1.17	Wax embedding machine	1				
1.18	Embedding cassettes	20				
1.19	Microscopic slides 100/1 Pack	15 boxes				

1.20	Lens cleaning tissues	05 packs				
1.22	Fume hood	1				
1.23	Tissue Floating Water Bath	1				
1.24	Electronic balance	1				
1.25	Laboratory water distiller	1				
1.26	Centrifuge	1				
2	**Biochemistry Laboratory – Package 02**					
2.01	Deionized water plant	1				
2.02	Homogenizer	1				
2.03	Magnetic Stirrers With Hot Plate	5				
2.04	Variable Volume Single Channel Pipette (1µl – 10µl)	5				
2.05	(10-100) µl Micro pipettes	5				
2.06	(100-1000) µl Micro pipettes	5				
2.07	(0.5-10) µl Micro pipettes	2				
2.08	Double beam Spectrophotometer (UV/Visible)	2				
2.09	Water Bath (Boiling)	1				
2.10	Heating mantle 500 ml	5				
2.11	Heating mantle 1000 ml	5				
2.12	Automated Multiparametric Agarose Gel Electrophoresis System	1				
2.13	Semi-automated urine analyzer (Urine Strip Reader)	1				
2.14	Binocular Microscope	10				
2.15	Glucometer	1				
3	**Physiology – Package 03**					
3.01	Bell (for examination timing)	4				
3.02	Bicycle ergometer	2				
3.03	Sphygmomanometer - non mercury	10				
3.04	Evoke potential recording system	1				
3.05	Glucometer with strips	1				

3.06	micropipette	2				
3.07	Naubeur counting chamber	5				
3.08	ophthalmoscope	1				
3.09	Otoscope	1				
3.10	perimeter	1				
3.11	Sahli Hemoglobinometer	2				
3.12	Pseudo isochromatic plates	4				
3.13	Spirometer	1				
3.14	Treadmill	1				
3.15	Two point discriminator	1				
3.16	Weight Scales	2				
3.17	Electric balance	1				
3.18	Mechanical mixer	2				
3.19	Snellen chart	3				
3.20	Westergren stand	5				
3.21	Nasogastric Intubation Model	1				
3.22	Digital rectal examination model	1				
3.23	Female pelvic examination simulator	1				
3.24	Catheterization simulator- male	1				
3.25	Catheterization simulator - female	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
[insert Service No]	***[insert description of Related Services]***	***[insert quantity of items to be supplied]***	***[insert unit for the items]***	***[insert name of the Place]***	***[insert required Completion Date(s)]***

1. If applicable

TECHNICAL SPECIFICATIONS

[The Technical specifications may be provided in the following format. The bidder shall fill the columns 6 and 7. Bidder's failure to provide the information requested in the columns 6 and 7may be a reason for the rejection of the bid. If any discrepancy is observed between the information provided by the bidder in the columns 6 and 7and the other technical information attached to the bid, the information provided herein shall takeprecedence.]

No	Specification	Bidder Response (Yes /No)	If 'No' Comment/s On the offer
1. ANATOMY LABORATORY – PACKAGE 01			
1.01	**Binocular microscope**		
	• Secured DIN WF 10x/18 mm eyepieces • Binocular head Siedentopf type, 30°/45° inclined, 360° rotatable • Forwarded quadruple revolving nosepiece on ball-bearings • Achromatic 4x, 10x, 40x, 100x oil immersion objectives • All optics are anti-fungus treated and anti-reflection coated for maximum light throughput • Coaxial coarse and fine adjustments with 100- 200 graduations • "Precision 12.5 µm, 2.5 mm per • rotation" • Total travel approximately 15 mm • Friction adjustment • Plain 123 x 128 mm stage with integrated 70 x 27 mm X-Y mechanical stage • Height adjustable Abbe condenser N.A. 1.25 with iris diaphragm and filter holder • External power supply 230 V (CE) • 1 W LED illumination with built-in rechargeable batteries • eyepiece pointers		
1.02	**Bench Vice Medium size**		
	Medium size		
1.03	**X ray illuminator**		
	470×545×40 mm		
1.04	**mortuary chambers, 3 layers**		
	~~• Voltage: 230V/50Hz/1PH~~ ~~Additional Tools Included: Allen wrench~~ ~~10 foot cord with hospital grade plug~~ ~~Weight with power cord 3.7 lbs~~ ~~Weight without power cord 3.2 lbs~~		

	• It is made of high-quality stainless steel, which is corrosion-resistant. Body tray multi row rolling wheel. • Adopt high quality door seal with strong anti-aging ability to increase the service life of the door. • Each chamber is individually temperature controlled. • Digital display for easy observation. • High precision computer temperature control system, accurate and stable operation. • Installation of universal casters on the box. • The insulation layer adopts integral foaming technology (CFC free), with high thermal retardation against cold loss. • Technical Specifications: o Capacity (Qty): 3 dead Bodies or 03 compartments for bodies ▪ Temperature; Preset : 1 ~ 5 °C, Low : less than or equal -18 °C • Compressor (Qty) : 3 • Dimension (W*D*H): 2480*810*1800 mm • Alarm Facility: High temperature alarm. Low temperature alarm. Sensors failure alarm. Door-opening alarm. Electricity failure alarm. Low back-up battery alarm. Low voltage alarm. • Should have a sturdy SS rack system with railings for easy movement of SS trays with castors constructed for heavy duty use. • Body tray size should be 2000mm X 600mm X 90mm • Should have standard hinged door with easy grip handle & standard key block. • Doors should be fitted with high quality rubber gaskets for air tight fittings with lock. • Noise levels should be below 50 dB • Should have internal lighting. • Should operate from 200 to 240V/50HZ power supply • Factory fitted refrigerator unit which can be directly monitor as the system is preferred • General Conditions • Manufacture standards certificates ISO/CE/FDA should be attached along with tender • The supplier should carry out all preventive maintenance by qualified technical staff • Each machine shall be supplied with comprehensive operation and Manuals printed in English • Spare parts availability should be minimum 5 years or better • The supplier must install & commission the equipment • Unit must carry a two year comprehensive warranty effective from the date of commissioning. The supplier must ensure a 95% uptime during this period.		

	• Bidders must provide documentary evidence on their technical capacity (trained staff, testing equipment for calibration & maintenance support as per manufacturer service/technical manuals) to carry out installation and service. • Bidders must support compliance to the given specifications with manufacturer's original brochures. • User/Technical/Maintenance manuals to be supplied. • Bidders should quote for a 5 year comprehensive post warranty maintenance contract. • Should have minimum 03 Years or better experience on installation and maintenance of said equipment.		
1.05	**Tri-ocular microscope**		
	• Secured DIN WF 10x/18 mm eyepieces with eyepiece pointers • Tri-ocular head Siedentopf type, 30° inclined, 360° rotatable • Forwarded quadruple revolving nosepiece on ball-bearings • Achromatic 4x, 10x, 40x, 100x oil immersion objectives • All optics are anti-fungus treated and anti-reflection coated for maximum light throughput • Coaxial coarse and fine adjustments with 100-200 graduations • "Precision 12.5 µm, 2.5 mm per • rotation" • Total travel approximately 15 mm • Friction adjustment • Plain 123 x 128 mm stage with integrated 70 x 27 mm X-Y mechanical stage • Height adjustable Abbe condenser N.A. 1.25 with iris diaphragm and filter holder • External power supply 230 V (CE) • 1 W LED illumination with built-in rechargeable batteries (WF 10 x18 eyepiece with pointer and rubber cup)		
1.06	**Multi viewing attachment eye piece**		
	Trinocular head with WF 10x/22mm eyepieces, 360° rotatable Four Binocular heads WF 10x/20mm eyepieces Multi-head attachment 4x, 10x, 40x, 100x (oil) IOS W-PLAN objectives X-LED3 illumination with variable control Compatible camera to obtain digital image into smart devices (smartboard, laptop, projectors and smart phone). 3 Year warranty		
1.07	**Embalming set , Gravity pressure**		
	stainless steel		

1.08	**Band saw heavy - duty machine**		
	Wheel diameter 400 mm Cutting width 380 mm Cutting Depth 400 mm Motor power 1.5 kw 2.0 hp Blade length 152" Max blade width 30 mm Dust connection 100 mm Wheel speed 980 rpm Nett weight 210 kg Dimensions 788x635xH1880mm Table height from 890mm Table dimensions 620 x 450mm		
1.09	**Gas cylinder with regulator burner**		
	12.5Kg		
1.10	**Scalpel Handle No. 4 stainless steel**		
	No.4		
1.11	**Liston Bone Cutter**		
	Stainless steel (30.5cm)		
1.12	**Rib sheers**		
	30.5cm		
1.13	**Necropsy saw electrical**		
	Voltage: 230V/60Hz/1PH Additional Tools Included: Allen wrench 10 foot cord with hospital grade plug Weight with power cord 3.7 lbs Weight without power cord 3.2 lbs		
1.14	**Automatic Tissue processing machine**		
	Dimensions 553mm x 514mm x 546mm (21.75" W x 20.25" D x 21.5" H) Microwave Power Range Continuous power from 100 - 750 watts Microwave Frequency 2.45 Ghz User Interface 7" Touchscreen Temperature Probe ±1°C Magnetic Stirrer Integrated, 0 - 3000rpm speed Exhaust 110 cfm capacity Vacuum System 20" Hg, 3 modes		

1.15	**Rotary Microtome with blades**		
	Features Universal cassette block holder with self-contained bubble level Cross roller guide rails for superior sectioning High-precision micro-drive feed system Balanced hand wheel Hand wheel may be locked in any position Full lateral movement of knife holder Safety knife guard with blade ejector Dovetail base for Knife Stage has gradations for identifying exact position of the Knife Stage Magnetically attached easy-to-clean waste tray Specifications Feed advance: 29mm Vertical stroke: 60mm Thickness 0 - 60µm		
	"Section thickness options: 0-10µm / 1µm advance 10-20µm / 2µm advance 20-60µm / 5µm advance" Trimming settings: 0-60µm Specimen retraction: ~28µm Specimen orientation: X/Y 8° Weight: 28kg Dimensions : 44 W x 54 D x 29 H cm		
1.16	**Oven to melt wax**		
	Working temperature range: + 20 °C above room temperature up to 300 °C Designed as tabletop "Horizontal forced air circulation results in temperature uniformity according to DIN 17052-1 better than +/− 5 °C in the empty oven" Stainless steel furnace housing Stainless steel chamber, alloy 304, rustresistant and easy to clean		
	Charging in multiple layers possible using removeable grids PID microprocessor control with self-diagnosis system Specifications -Tmax in °C : 300 Inner dimensions in mm (w* d* h) : 360* 300* 300 Volume in l : 30 Outer dimensions in mm W* D* H : 610* 570* 670 Connected load in kW : 2.1 Electrica connection : 1-phase Weight in kg : 45 Grids included : 1 Grids max. : 4 Max total load : 80		

1.17	**Wax embedding machine**		
	Fully programmable computer controls allow automatic system start and stop anytime "Temperature is controlled by microprocessors made in the USA and they are displayed using color-changing LEDs to enable clear visibility of working status" "Five heated areas, including Paraffin Chamber, Paraffin Dispenser, left and right Thermal Storage Compartments, and heating plate (working area), are individually controlled and work independently without interference from each other"		
	"Flexible heating mechanism overcomes the shortcomings of traditional technology that can result in excessive temperature differences. A system provides fast heating and precise temperature control. In addition, the dual-protection from overheating is safe, reliable and energy-saving" "Automatic memory and restoration functions: After startup, all preset temperature data are automatically stored in the system" Safe and reliable low-voltage illumination system Heated working plate and forceps wells make tissue embedding more convenient		
	Specifications Paraffin Chamber Capacity: 3 liter Temperature Range of Forceps Wells: 55 – 70℃ Temperature Range of Paraffin-melting Chamber: 55 – 70℃ Temperature Range of Thermal Storage Compartments: 55 – 70℃ Temperature Range of Heated Working Areas: 55 – 70℃ Temperature Range of Paraffin dispenser: 55 – 70℃ Temperature Control Precision: ±1%		
	Paraffin Flow Control: Paraffin flow control via finger touch plate and optional foot pedal Fully programmable ON/OFF control allows automatic system start and stop anytime weekly Working Temperature of Cryo-Module: ≤ -20℃ Working Voltage: AC 220V±10% 50Hz (standard model) Power: 650W		
1.18	**Embedding cassettes**		
	Features / Specifications Design maximizes open surface area to increase the fluid exchange Optimized writing surface for printing high-quality text Writing surface suitable for marking with marker pens and pencil A selection of colors available Base dimensions: 28.5 x 41 x 6mm		

1.19	**Microsopic slides 100/1 Pack**		
	Normal glass slides for micrscopes		
1.20	**Lens cleaning tissues**		
	Normal glass slides cleaning tissues		
1.21	~~Eyepiece pointers~~ ~~(WF 10 x18 eyepiece with pointer and rubber cup)~~		
1.22	**Fume hood**		
	Frameless vertical rising sash • 04 ft width • 24" (61 cm) deep clear interior • 24" clear sash opening • Standard 43" (110.5 cm) tall full view sash area • Easy conversion from CAV to VAV use • Chemically resistant polypropylene • High Performance perforated rear baffle • Designed to safely capture and contain at 60-100 FPM • Chain & sprocket sash mechanism for ease in operation • Tempered glass sash with full-length formed steel handle for a neat, clean appearance and streamline air passage • polypropylene round duct collar(s) transitions • Duct in one floor • 3 years warranty		
1.23	**Tissue Floating Water Bath**		
	• Temperature Set Range: (Ambient +5°C) to 65°C • Operating Temperature Range: 20ºC to 30ºC • Temperature accuracy: ± 0.3ºC at 55ºC • Stability: ± 0.2ºC Capacity 2L		
	• Supply Voltage Range: • 145702 and 145951 : 115V ± 10%, 60 Hz • 145702-2 and 145951-2 : 230V ± 10%, 50/60Hz • Power Rating:272W • Heating Rate: Ambient to 55°C within 45 minutes		
1.24	**Electronic and analytical balance**		
	Features: • Humanized design, novel design and five-side full-transparent windshield. • A new-generation electromagnetic balance weighing sensor guarantees high precision. • Application programs such as automatic fault detection, four-point linear calibration and over-load protection. • Ultra-large LCD display brings clearer and more comfortable visual sense to operate. Function: • Multiple functions guarantee easy and reliable operation, including auto-counting, unit conversion (metric carat, gold ounce, etc.), stability, full-scale faring, zero-memory, etc.		

	• Built-in RS232C output interface guarantees direct connection to external equipment such as computer and printer.		
	• Built-in lower weighing hook guarantees convenient use. Power Supply: • AC110/220V±10%, 50/60Hz; Power Cord, no battery. Standard Accessories: Balance body, adapter, weight, windshield, cleaning cloth, tweezers and brush. Readability: 0.1mg,200g scale size: Φ80mm, N.W:6.8Kg (approx.), Calibration: Auto Calibration		
1.25	**Laboratory water distiller**		
	• Capacity: 4L/hr • Water Consumption: 1:10 • Configuration: Automated control • Water type: regular water • Power: 220V;2.5kW single phase • Dimensions: 365×368×845mm • Weight: 9Kg (Approx.)		
1.26	**Centrifuge**		
	Large capacity liquid samples Ventilated temperature Audio and visual notification system Superior safety features Available fixed-angle and swing-bucket rotors Sample Volume 15 mL (8 NoS) / 50 mL (4 NoS) RPM – 4000 Time-setting spin up to 99 hrs 59 min 10sec Dimensions (WxDxH): 438 x 532 x 374 mm		
2.Biochemistry Laboratory – Package 02			
2.01	**Deionized water plant/ Distill water feed**		
	Flow Rate: This model provides a continuous flow rate of at least 1.0 L/min, suitable for routine laboratory operations.		
	Conductivity: The system ensures high-quality water production with a conductivity range of 0.055µs/cm, ideal for sensitive biochemistry experiments.		
	Resistivity: It delivers ultrapure water with a resistivity of 1-10 MΩ·cm, maintaining consistency in water purity.		
	Membrane Retention: Featuring an advanced filtration system, the unit offers approximately 99% retention of germs, bacteria, and particles, ensuring contaminant-free water.		
	Built-in Pretreatment System: Equipped with an integrated activated carbon filter and hardness stabilization unit, combined with a reverse osmosis (RO) module for initial purification.		

	Storage Tank: The system comes with a 6-liter storage tank, ensuring a ready supply of deionized water for immediate use.		
	Power Requirements: The unit operates on standard power input of 230V/50Hz.		
	Automatic Recirculation: To prevent bacterial growth in the dispenser tubing, the system includes automatic water recirculation, maintaining optimal water hygiene.		
	Microprocessor-Controlled: Fully automated with a microprocessor control system, the plant offers user-friendly operations and enhanced monitoring capabilities.		
	Real-time Clock and Code-Protected OS: The operating system is code-protected, with a real-time clock for accurate time-stamped recordings.		
	Display: The unit features an alphanumeric LCD display, providing clear and precise readouts of system parameters and water quality metrics.		
	Purification Set: The system includes a comprehensive purification set containing highly pure absorptive materials and ion exchange resins for advanced water deionization.		
	Conductivity Measuring Cell: It is equipped with a conductivity measuring cell for real-time water quality monitoring.		
	Temperature Sensor: A high-precision platinum chip temperature sensor with an accuracy of ± 0.1°C ensures water temperature stability during use.		
	01 Year Warranty		
2.02	**Homogenizer**		
	The homogenizer shall be a self-contained benchtop/manual system, capable of carrying out manual homogenization processes with precise control. The system shall include a stand to facilitate stable and hands-free operation.		
	The unit shall feature a suitable power supply with a 160-watt motor capable of supporting speeds ranging from 8,000 to 30,000 rpm, enabling effective homogenization across various sample types.		
	The unit shall include an overheat motor protector to safeguard the motor during prolonged or intense usage, ensuring longevity and safety.		
	The homogenizer shall have a capacity range of 1 ml to 250 ml, allowing for versatile sample preparation across a wide variety of biochemical and biological applications.		
	The unit shall include a 10 mm generator (shaft) for effective homogenization of samples. The system shall allow interchangeable shafts for flexibility in sample size and type.		
	The system shall come with a stand of dimensions W250 × D250 × H400 mm and a total weight of 1.6 kg, providing stability and ease of use on any laboratory benchtop.		

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	The unit shall include a complete package comprising the homogenizer stand, and suitable shaft, supporting sample volumes from 1 ml to 250 ml.		
	The unit should provide multiple homogenization settings, allowing for precise control over speed, force, and duration depending on sample type and experimental needs.		
	The homogenizer shall have safety features including a safety lock on the stand to ensure stable operation during homogenization.		
	The system shall be user-friendly, with manual controls that allow for intuitive and precise operation. The unit should have clear speed and duration indicators for monitoring during the homogenization process.		
	The unit shall warrant for a period of more than 01 Year warrantyfrom the date of successful installation, covering all parts and labor and including preventive maintenance during the period of validity.		
	The local representative shall offer a service agreement for an additional four years after the warranty period, with the costs of such contracts quoted separately.		
	A startup kit with the necessary components (e.g., sample holders, shafts) shall be provided with the unit. The prices for consumables and reagents shall be quoted separately and remain valid for 5 years from the date of commissioning.		
	The equipment shall be supplied with complete operating and service manuals in English.		
	On-site training for the operation and maintenance of the unit shall be provided as part of the procurement.		
	Any specific operational requirements or environmental conditions needed for the equipment shall be clearly mentioned in the offer and quoted separately.		
	The bidder shall submit a statement of compliance (or otherwise) for every clause in this specification, supported by printed illustrated technical literature to demonstrate conformity with the requirements.		
2.03	**Magnetic Stirrers With Hot Plate**		
	The magnetic stirrer with hot plate shall be a **self-contained system** designed for simultaneous heating and stirring of liquid samples in laboratory environments, suitable for a wide range of chemical and biochemical applications.		
	The unit shall have a **variable speed range** from **100 to 1500 rpm**, allowing precise control over stirring speeds for various sample viscosities and volumes.		
	The hot plate shall be capable of heating up to **550°C**, providing fast and consistent heating for a wide range of applications requiring controlled temperature environments.		

	The unit shall be able to **stir volumes up to 5 liters**, ensuring versatility for both small and large sample volumes, with consistent stirring performance across all sample sizes.		
	The system shall include a **high-performance motor** and **magnetic coupling**, ensuring smooth and quiet operation while maintaining sample integrity during stirring.		
	The magnetic stirrer shall feature **dual controls** for independent adjustment of stirring speed and temperature, ensuring precise control of both parameters to suit different experimental requirements.		
	The system shall have a **ceramic-coated hot plate surface**, offering superior chemical resistance, durability, and excellent heat conductivity, ensuring uniform heating and long-lasting performance.		
	The unit shall include an **integrated temperature sensor** with an external **PT100 probe** for accurate temperature monitoring of the sample, ensuring precise temperature control.		
	The unit shall feature **overheating protection** to prevent accidental damage to both the device and the sample, enhancing safety during extended use.		
	The unit shall have an **LED or digital display** to provide real-time feedback on temperature and stirring speed, allowing easy monitoring of the system's operation.		
	The magnetic stirrer shall have an **adjustable safety temperature setting**, allowing users to predefine the maximum temperature to ensure sample safety and prevent overheating.		
	The system shall include a **stainless steel housing** or chemically resistant casing to withstand harsh laboratory conditions, including exposure to corrosive chemicals.		
	The magnetic stirrer with hot plate shall be supplied with **standard accessories**, including a **PTFE-coated stir bar** and **external temperature probe** for efficient heat and stir control.		
	The unit shall warrant for a period of **01 or more Year warranty**, covering full parts and labor, with preventive maintenance during the period of validity.		
	The local representative shall provide a **service agreement** option for an additional **four years post-warranty**, with costs quoted separately.		
	A **startup kit** containing essential items such as stir bars, temperature probes, and other necessary accessories shall be provided with the unit. The prices for consumables shall be quoted separately and remain valid for at least **5 years** from the date of successful commissioning.		
	The system shall be supplied with **complete operating and service manuals** in English.		
	If the equipment requires **specific operational or environmental conditions**, they shall be clearly stated in the offer, and the necessary provisions quoted separately.		
	The bidder shall submit a **statement of compliance** (or otherwise) with each clause of this specification, supported by printed technical literature to substantiate compliance.		

2.04	**Variable Volume Single Channel Pipette (1µl – 10µl)**		
	The pipette needs to be of Single Channel type with a volume Range of 1µl – 10µl		
	The Pipette needs to be of Non-metallic construction to ensure ease of use.		
	The pipette needs to be fully autoclavable.		
	Should have a large volume display with an Advance Volume Gearing Method to ensure accuracy of volume.		
	The construction material of the pipette needs to be resistant to the following		
	Moisture, UV Light, Reagents		
	The inaccuracy should not exceed ±.0.1 at 10µl		
	The design should be user friendly & should be able to avoid Repetitive Strain Injuries.		
	Should be designed to place a personal ID tag. (preferable)		
2.05	**(10-100) µl Micro pipettes**		
	The pipette needs to be of Single Channel type with a volume Range of 1µl – 10µl		
	The Pipette needs to be of Non-metallic construction to ensure ease of use.		
	The pipette needs to be fully autoclavable.		
	Should have a large volume display with an Advance Volume Gearing Method to ensure accuracy of volume.		
	The construction material of the pipette needs to be resistant to the following		
	Moisture, UV Light, Reagents		
	The inaccuracy should not exceed ±.0.1 at 10µl		
	The design should be user friendly & should be able to avoid Repetitive Strain Injuries.		
	Should be designed to place a personal ID tag.		
2.06	(100-1000) µl Micro pipettes		
	The pipette needs to be of Single Channel type with a volume Range of 1µl – 10µl		
	The Pipette needs to be of Non-metallic construction to ensure ease of use.		
	The pipette needs to be fully autoclavable.		
	Should have a large volume display with an Advance Volume Gearing Method to ensure accuracy of volume.		
	The construction material of the pipette needs to be resistant to the following		
	Moisture, UV Light, Reagents		
	The inaccuracy should not exceed ±.0.1at 10µl		
	The design should be user friendly & should be able to avoid Repetitive Strain Injuries.		
	Should be designed to place a personal ID tag.		

2.07	**(0.5-10) µl Micro pipettes**		
	The pipette needs to be of Single Channel type with a volume Range of 1µl – 10µl		
	The Pipette needs to be of Non-metallic construction to ensure ease of use.		
	The pipette needs to be fully autoclavable.		
	Should have a large volume display with an Advance Volume Gearing Method to ensure accuracy of volume.		
	The construction material of the pipette needs to be resistant to the following		
	Moisture, UV Light, Reagents		
	The inaccuracy should not exceed ±.1 at 10µl		
	The design should be user friendly & should be able to avoid Repetitive Strain Injuries.		
	Should be designed to place a personal ID tag.		
2.08	**Double beam Spectrophotometer (UV/Visible)**		
	The double beam spectrophotometer (UV/Visible) shall be a **self-contained system**, designed for precise measurement of absorbance and transmittance in samples across the ultraviolet and visible light spectrum, suitable for various biochemical applications.		
	The unit shall operate within a **wavelength range of 190 nm to 1100 nm**, covering both UV and visible spectrums to support a wide range of biochemical and molecular biology analyses.		
	The system shall have a **spectral bandwidth of 1 nm**, ensuring high resolution and allowing for the detection of fine absorption peaks critical in biochemical assays.		
	The spectrophotometer shall feature a **dual-beam optical system**, providing simultaneous measurement of sample and reference, ensuring accuracy and stability over time, with continuous real-time comparison for more reliable data.		
	The photometric accuracy of the unit shall be **±0.003 Abs at 1.0 Abs** and photometric repeatability shall be **±0.002 Abs**, ensuring highly precise and reproducible results for all types of sample analyses.		
	The unit shall include **deuterium and tungsten-halogen lamps** as light sources, providing stable and accurate illumination for measurements in both the UV and visible regions.		
	The spectrophotometer shall feature a **large LCD display or touchscreen interface** for intuitive user control, providing real-time readouts of absorbance, transmittance, and wavelength values.		
	The system shall offer multiple operational modes, including **absorbance, transmittance, concentration, and wavelength scanning**, allowing users to perform a variety of spectrophotometric experiments efficiently.		
	The unit shall feature **automatic wavelength calibration**, ensuring precise and reliable wavelength positioning for accurate measurement every time.		

	The sample compartment shall be equipped with **cuvette holders** compatible with standard 10 mm pathlength cuvettes, with flexibility to accommodate various cuvette sizes and sample volumes as required.		
	The spectrophotometer shall have an onboard **data storage capacity** capable of holding at least 1000 measurement datasets and 50 standard curves, providing ample storage for long-term data logging and retrieval.		
	The system shall include **USB and RS-232 connectivity**, allowing for external data transfer to a computer or printer for advanced analysis or documentation purposes.		
	The spectrophotometer shall be compatible with **PC software** for extended data analysis, graphical plotting, and generation of customized reports, improving laboratory productivity and efficiency.		
	The unit shall have an integrated **temperature control system**, maintaining consistent internal temperatures to ensure accurate readings under variable environmental conditions.		
	The spectrophotometer shall come with **safety features** such as overheat protection and automatic lamp cutoff to enhance both user safety and equipment durability.		
	The unit shall be supplied with a **more than 01 Year warranty**, covering parts and labor, with preventive maintenance included during the warranty period.		
	The local representative shall offer a **service agreement** for an additional **four years** after the warranty period, with the cost quoted separately for continued service and maintenance.		
	A **startup kit** including essential accessories such as cuvettes, power cables, and user manuals shall be provided. The prices for consumables shall be quoted separately and guaranteed for at least **5 years** post-commissioning.		
	The system shall be delivered with **comprehensive operation and service manuals** in English.		
	On-site training shall be provided to lab personnel for both the operation and maintenance of the spectrophotometer.		
	If the system requires **specific environmental or operational conditions**, these shall be explicitly stated in the offer and quoted separately.		
2.09	**Water Bath (Boiling)**		
	The boiling water bath shall be a **self-contained unit**, designed for heating samples uniformly and maintaining precise temperature control for various laboratory applications, including sample sterilization and preparation.		
	The unit shall have a **temperature range of ambient+5°C to 100°C**, with an accuracy of **±0.5°C**, ensuring reliable and consistent heating for diverse experiments.		
	The boiling water bath shall feature a **digital temperature display** for easy monitoring, allowing users to set and view the temperature in real-time.		
	The unit shall have a **heating power of more than 1,000 watts**, enabling rapid heating and consistent temperature maintenance for efficient sample processing.		

	The water bath shall include **over-temperature protection** to prevent overheating and ensure user safety during operation.		
	The interior shall be constructed of **stainless steel**, providing durability and resistance to corrosion, ensuring long-term use and easy cleaning.		
	The unit shall be designed to accommodate **multiple samples** simultaneously, with a **capacity of at least 5 liters**, allowing for versatility in various applications.		
	The boiling water bath shall feature **insulated walls** to minimize heat loss, improving energy efficiency and maintaining stable temperatures.		
	The unit shall have a **user-friendly control panel** with intuitive buttons for setting and adjusting temperature and time, along with a clear Digital display for ease of use.		
	The boiling water bath shall include **multiple safety features**, such as a **safety lid**, to prevent splashing and accidental burns during operation.		
	The unit shall be equipped with **anti-dry protection**, automatically shutting off the heating element if the water level falls below a safe threshold.		
	The boiling water bath shall have a **power supply of 230V/50Hz**, compatible with standard laboratory electrical systems.		
	The unit shall come with a **01 Year or more**, covering parts and labor, with preventive maintenance included during the warranty period.		
	The local representative shall offer a **service agreement** for an additional **four years** after the warranty period, with the cost quoted separately for ongoing service and maintenance.		
	A **startup kit** including necessary accessories such as sample holders, lids, and user manuals shall be provided with the unit. Prices for additional consumables shall be quoted separately and guaranteed for at least **5 years** post-commissioning.		
	The system shall be delivered with **comprehensive operation and service manuals** in English.		
	On-site training shall be provided for laboratory personnel regarding the operation and maintenance of the boiling water bath.		
	If the equipment requires **specific environmental or operational conditions**, these shall be clearly stated in the offer and quoted separately.		
	The bidder shall submit a **statement of compliance** (or otherwise) for every clause in this specification and provide original technical literature to substantiate conformity.		
2.10	**Heating mantle 500 ml**		
	The heating mantle shall be a **self-contained unit**, designed for efficient and uniform heating of samples in round-bottom flasks with a capacity of **500 ml**.		
	The unit shall provide a **temperature range of ambient to 300°C**, allowing for versatile applications in various biochemical experiments.		
	The heating mantle shall feature **digital temperature control**, with an accuracy of **±1°C**, ensuring precise heating according to experimental requirements.		

	The mantle shall be equipped with a **heat-resistant outer casing**, constructed from durable materials to prevent heat loss and ensure user safety during operation.		
	The heating element shall be a **uniformly distributed winding**, providing even heating and preventing hot spots that could damage samples or equipment.		
	The unit shall have a **built-in safety thermostat** to prevent overheating, automatically shutting off power if the temperature exceeds the set limit.		
	The heating mantle shall be compatible with **standard 500 ml round-bottom flasks**, featuring a **well-insulated design** to minimize heat loss and enhance energy efficiency.		
	The mantle shall include an **LED display** for easy monitoring of temperature settings and a user-friendly interface for intuitive operation.		
	The unit shall have a **power rating of 300 watts**, allowing for rapid heating while maintaining consistent temperature levels.		
	The heating mantle shall come with a **01 Year or more**, covering parts and labor, with preventive maintenance included during the warranty period.		
	The local representative shall offer a **service agreement** for an additional **four years** after the warranty period, with the cost quoted separately for ongoing service and maintenance.		
	A **startup kit** shall be provided, including essential accessories such as a user manual and safety guidelines. The prices for additional consumables shall be quoted separately and guaranteed for at least **5 years** post-commissioning.		
	The system shall be delivered with **comprehensive operation and service manuals** in English.		
	On-site training shall be provided for laboratory personnel regarding the operation and maintenance of the heating mantle.		
	If the equipment requires **specific environmental or operational conditions**, these shall be clearly stated in the offer and quoted separately.		
	The bidder shall submit a **statement of compliance** (or otherwise) for every clause in this specification and provide original technical literature to substantiate conformity.		
2.11	**Heating mantle 1000 ml**		
	The heating mantle shall be a **self-contained unit**, designed for efficient and uniform heating of samples in round-bottom flasks with a capacity of **1000 ml**.		
	The unit shall provide a **temperature range of ambient to 300°C**, allowing for versatile applications in various biochemical experiments.		
	The heating mantle shall feature **digital temperature control**, with an accuracy of **±1°C**, ensuring precise heating according to experimental requirements.		
	The mantle shall be equipped with a **heat-resistant outer casing**, constructed from durable materials to prevent heat loss and ensure user safety during operation.		

	The heating element shall be a **uniformly distributed winding**, providing even heating and preventing hot spots that could damage samples or equipment.		
	The unit shall have a **built-in safety thermostat** to prevent overheating, automatically shutting off power if the temperature exceeds the set limit.		
	The heating mantle shall be compatible with **standard 1000 ml round-bottom flasks**, featuring a **well-insulated design** to minimize heat loss and enhance energy efficiency.		
	The mantle shall include an **LED display** for easy monitoring of temperature settings and a user-friendly interface for intuitive operation.		
	The unit shall have a **power rating of 300 watts**, allowing for rapid heating while maintaining consistent temperature levels.		
	The heating mantle shall come with a **01 Year or more**, covering parts and labor, with preventive maintenance included during the warranty period.		
	The local representative shall offer a **service agreement** for an additional **four years** after the warranty period, with the cost quoted separately for ongoing service and maintenance.		
	A **startup kit** shall be provided, including essential accessories such as a user manual and safety guidelines. The prices for additional consumables shall be quoted separately and guaranteed for at least **5 years** post-commissioning.		
	The system shall be delivered with **comprehensive operation and service manuals** in English.		
	On-site training shall be provided for laboratory personnel regarding the operation and maintenance of the heating mantle.		
	If the equipment requires **specific environmental or operational conditions**, these shall be clearly stated in the offer and quoted separately.		
	The bidder shall submit a **statement of compliance** (or otherwise) for every clause in this specification and provide original technical literature to substantiate conformity.		
2.12	**Automated Multiparametric Agarose Gel Electrophoresis System**		
	The unit shall be capable to self-contained, such as complete system should automatically carry out all the different electrophoresis testing including sample application, migration, incubation.		
	The unit shall have a suitable power supply unit capable of supplying voltage up to 350V and 100mA for standard module and for ISO-focalization module voltage up to 1500V and 10mA.		
	The unit shall have the highest level of performance in Agarose gel.		
	The unit shall have facilities to perform Protein, Haemoglobins,		
	Migration parameters can be regulated with either constant current, constant voltage or constant power.		
	The unit should be user-friendliness and all of the system function's ability to read easily. The unit should have color LCD touchscreen and the LCD screen will also indicate the different steps of migration and staining throughout the gel processing.		

	The unit shall warrant for a period of not less than more than one year or more from the date of successful installation on full parts and labour basis. Such warranty shall also include servicing and preventive maintenance during the period of validity.		
	The local representative shall be able to sign a service agreement for four years after the period of warranty and the cost of such contract shall be quoted separately.		
	A startup kit required to carry out the complete operation with necessary all items sample trays or racks, reagent containers, etc. shall be provided with the unit. The prices for the above reagents and consumables shall be quoted separately and the prices shall be valid for at least for 5 years (Euro Price list) from the date of successful commissioning of the system.		
	Complete and detailed set of operation and service manuals in English shall be supplied with each unit.		
	On-site training shall be provided for operation and maintenance of the machine.		
	If the equipment needs specific operational requirements and environmental conditions, they shall be clearly mentioned in the offer and shall be quoted separately for such arrangements.		
	The bidder shall submit a statement of compliance (or otherwise) in respect of every clause in this specification. The bidder shall also provide printed illustrated original technical literature to substantiate the conformity with the same.		
2.13	**Semi-automated urine analyzer (Urine Strip Reader)**		
	The unit shall operate on the power supply of 230+10% 50 Hz single phase.		
	The unit shall have the capability of testing following parameters using a single strip.		
	Urobilinogen, Bilirubin, Ketone, blood, Protein, Nitrite, Leukocytes, glucose, Specific gravity, pH, Ascorbic acid, Creatinine, Micro Albumin, Calcium		
	The Vitamin C shall not interfere the estimation of chemical parameters.		
	Test Principle: Photoelectric Colorimetric and the Test Wavelength shall be 525 nm ,572nm,610 nm & 660 nm		
	The unit shall have a test through put of more than 100 samples per hour.		
	The Unit shall have a Data Memory of more than 1000 test results and 50 quality control results.		
	Test results to be automatically rectified from effects of non-specificity, pH, specific gravity & color		
	The Equipment shall have a built-in thermal printer		
	The unit cost of test strips to be indicated in the pro forma invoice		

2.14	**Binocular Microscope**		
	The binocular microscope shall be a high-quality optical instrument designed for biological and laboratory applications, providing clear and detailed imaging for a variety of samples.		
	The microscope shall feature binocular eyepieces with a standard 30^0 /45^0 inclined offering a comfortable viewing angle with a field of view of at least 18/22mm, enhancing user ergonomics during extended use.		
	The unit shall have a magnification range from 40x to 1000x, achieved through a combination of 4x, 10x, 40x, and 100x objective lenses, allowing for versatile observation of both low and high magnification samples.		
	The microscope shall be equipped with achromatic lenses to minimize chromatic aberration and improve image clarity across the visible spectrum.		
	The optical system shall utilize LED illumination, providing bright and consistent light with adjustable intensity for optimal viewing conditions. The light source shall have a long lifespan and energy efficiency.		
	The unit shall include a mechanical stage with a travel range of at least 70mm x 50mm, equipped with stage clips to securely hold slides in place during observation.		
	The microscope shall have a coaxial coarse and fine focusing mechanism, allowing for precise adjustments with a focus depth of 0.002mm, ensuring accurate focusing on the specimen.		
	The body of the microscope shall be constructed from durable metal with a dust-resistant design, ensuring longevity and reliability in laboratory environments.		
	The microscope shall include a built-in eyepiece pointer, facilitating easy identification of specific points of interest on the slide.		
	The unit shall have a more than more than one year warranty, covering parts and labor, with preventive maintenance included during the warranty period.		
	The local representative shall offer a service agreement for an additional four years after the warranty period, with the cost quoted separately for ongoing service and maintenance.		
	A startup kit shall be provided, including essential accessories such as dust covers, lens cleaning tissues, and a user manual. Prices for additional consumables shall be quoted separately and guaranteed for at least 5 years post-commissioning.		
	The system shall be delivered with comprehensive operation and service manuals in English.		
	On-site training shall be provided for laboratory personnel regarding the operation and maintenance of the binocular microscope.		
	If the equipment requires specific environmental or operational conditions, these shall be clearly stated in the offer and quoted separately.		

	The bidder shall submit a statement of compliance (or otherwise) for every clause in this specification and provide original technical literature to substantiate conformity.		
2.15	**Glucometer**		
	The glucometer shall be a portable, easy-to-use device designed for accurate and efficient measurement of blood glucose levels in clinical and laboratory settings.		
	The unit shall feature a large, backlit LCD display, providing clear readings with a resolution of at least 0.1 mmol/L for enhanced visibility, even in low-light conditions.		
	The glucometer shall have a measurement range of 0.6 to 33.3 mmol/L, accommodating a wide variety of blood glucose levels to meet the needs of different patients.		
	The device shall require a minimal blood sample size of 0.5 µL, enabling quick and less painful testing.		
	The glucometer shall provide results within 5 seconds, ensuring rapid assessment and timely decision-making.		
	The unit shall include strip ejector functionality, allowing for hygienic disposal of test strips without direct contact, minimizing the risk of contamination.		
	The glucometer shall support auto-coding of test strips to ensure accurate readings without the need for manual coding.		
	The device shall have memory storage for at least 500 test results, enabling easy tracking of glucose levels over time, with date and time stamps for each reading.		
	The glucometer shall feature a USB interface for easy data transfer to a computer or mobile device for further analysis and record-keeping.		
	The unit shall be powered by a long-lasting lithium battery, providing at least 1000 tests per battery, ensuring reliability and reducing the need for frequent battery replacements.		
	The glucometer shall come with a more than more than one year warranty, covering parts and labor, with preventive maintenance included during the warranty period.		
	The local representative shall offer a service agreement for an additional four years after the warranty period, with the cost quoted separately for ongoing service and maintenance.		
	A startup kit shall be provided, including essential accessories such as test strips, lancets, and a user manual. Prices for additional consumables shall be quoted separately and guaranteed for at least 5 years post-commissioning.		
	The system shall be delivered with comprehensive operation and service manuals in English.		

	On-site training shall be provided for laboratory personnel regarding the operation and maintenance of the glucometer.		
	If the equipment requires specific environmental or operational conditions, these shall be clearly stated in the offer and quoted separately.		
	The bidder shall submit a statement of compliance (or otherwise) for every clause in this specification and provide original technical literature to substantiate conformity.		
3	**Physiology – Package 03**		
3.01	**Bell (for examination timing)**		
	• Metal base • Clear tone • Chrome plated • 2 year warranty		
3.02	**Bicycle ergometer**		
	Different resistance levels Contact and telemetry heart rate monitoring LCD display Maximum user weight 120kg		
3.03	**Sphygmomanometer - non mercury**		
	• 0-300 mmHg manometer • Diameter – 150 mm • Supplied with Bladder, Bandage cuff in Adult size, Control valve & Inflation bulb • New flexible shock mount resists damage to gauge • Clear white face with sharp black scale • Dark Colour pointer gives precise indication • Fitted with bandage style latex free cuff • Tough bright white Metal construction with cuff basket and handle • Lightweight and all easy to clean • Warranty – 02 Year		
3.04	**Evoke potential recording system**		
	2 Bipolar high dynamic recording channels for EMG/NCS, upgradable to 4 channels 20 Monopolar channels for all kind of EP/ERP 22 channels for EEG/VEEG acquisition High signal quality (low noise, high sensitivity for a large dynamic, high CMRR) Wide band for EEG and EMG channels Integrated five channels electrical stimulator Integrated acoustic and visual stimulators for all kind of EP 2 Trigger channels to be connected with external stimulators, such as TMS equipment Available software packages of Galileo Suite EMG/NCS EP ERP EEG		
3.05	**Glucometer with strips**		
	GLUCOMETER with STRIPS – SPECIFICATIONS • Should be a hand held meter		

	• Should require no routine maintenance • Should have reading range/linearity from 20 to 600 mg/dl • Should have a maximum reading time of less than 10 seconds		
	• Should use electrochemical technology • Should use a minimum blood sample less than 1.5µl • Should have a LCD display • Should have measuring unit in mg/dl. • Should have wide operating temperature • Should have a minimum memory of 50 • Should have life time replacement offer • Should have easy code entry technique • Battery should be replaceable without using any tools. • Should have facility to ensure accuracy of measurements. • Should be supplied with three types of control solutions of each at least20ml GLUCOSE STRIPS Should be able to use capillary blood samples. • Should have a minimum 4 months shelf life after opening the strip vial. • All strips should have at least one year expiry date from the date of supply. • 50 strips should be supplied along with the equipment. • Strips should be available in the local market.		
3.06	**micropipette**		
	• Autoclavable 5ml • Volume display • Covers volume range from 0.1ml		
3.07	**Naubeur counting chamber**		
	Crystal slide with a counting chamber		
3.8	**ophthalmoscope**		
	Should be rechargeable battery with Charger / mains operated. Should have halogen / LED light source Should have red-free filters Should have small and large spot sizes, fixation targets, slit aperture, hemi-spot and cobalt blue filter Should have wheel control with lens powers ranging from +20D to -35D in single diopter steps up to 10D and 5D steps above that. Should have illuminated lens dial. Should have rubber brow rest. Should have dust free optics and a spherical optical system Should be supplied with a carrying case. If halogen lamp is used, then the following additional accessories should be supplied Bulb – 1 no Bulb holder Bulb cover		

3.09	**Otoscope**		
	Die-cast housing of copper-aluminum alloy, chrome coated Measurement temperature without ATC: 20 °C Measurement temperature range with ATC: 10 °C – 30 °C		
	Packing dimensions WxDxH 215x94x65 mm (depending on the model) Dimensions of the box: 205x75x55 mm (depending on the model) Product length: approx. 130 – 200 mm (depending on the model) Net weight approx. 135 – 600 g		
3.10	**perimetry**		
	Maximum temporal range (degrees) 60° (monocular) / 160° (binocular) Stimulus duration (ms) 200 Stimulus size Goldmann III Visual field testing distance (cm) 25 Stimulus intensity (maximum) 10,000 ASB Background illumination 31.5 ASB Test methods Standard Automated Perimetry (SAP), white-on-white Screening tests/patterns Suprathreshold – single stimulus 3 levels (26, 68, 136 points) Suprathreshold – multiple stimulus 3 levels (26, 68, 136 points) Esterman (Driving) Groups 1 and 2 (EU standard) Customised tests Test locations can be manually added to all suprathreshold tests Threshold tests/patterns ZATA Standard – threshold central 10-2; 24/30-2 (extendable in-test) ZATA Fast – threshold central 10-2; 24/30-2 (extendable in-test) Average testing times Suprathreshold – single ~90 seconds per eye Suprathreshold – multiple stimulus <60 seconds per eye ZATA Standard – threshold central ~4 minutes per eye Fixation control Fixation target Single or 4-point LED diamond pattern Heiji-Krakau Yes Video eye monitor Yes Software features Patient management database MS Windows compatible; networkable Practice management integration EMR compatibility (parameter passing and text file) Hemifield Analysis Yes Progression Analysis Yes HFA data import Yes Languages ENG, CHI, key European languages Connectivity DICOM Yes (images) Ethernet Yes, via connected computer Database backup Removable, network or cloud storage Dimensions Weight (kg) 13.5		

	Measures (W x D x H / mm) 440 x 400 x 452 Classification Mains operated Yes Medical device Class 1 Applied part Type B Standards CE Yes FDA Yes		
3.11	**Sahli Hemoglobinometer**		
	• Kit consists of Comparator Holder black. The back of the holder is fitted with milky colour acrylic screen. In front of the holder there are three windows. The two side windows are fitted with colour standard strips. The middle window is meant for the square tube for colour comparison. • The dimensions of the windows: height 3 cms. Appox, width 0.5 cm appox. • Square H.B. Tubes : 2 • H.B. Pipettes : 1 • Amber colour glass bottle : 1 • Glass Stirrer : 1 • Dropper with teat : 1 • Cleaning Brush : 1 • Spare latex tubing one meter :1		
3.12	**Pseudo isochromatic plates**		
	ishihara test book with 38 pseudoisochromatic plates		
3.13	**Spirometer**		
	Desktop spirometer LCD screen Internal memory Bidirectional digital turbine flowmeter Test FVC/SVC, MVV		
3.14	**Treadmill**		
	• Maximum weight 115kg • Power 2 HPP • Maximum speed 14km/hour • Contact pulse measurement • Transport wheels • Vertical folding • monitor		
3.15	**Two point discriminator**		
	• measure stationary and moving two point discrimination • innervation density from 1-25mm • single point and double point testing		

3.16	**Weight Scales**		
	• Capacity : 160 kg • Accuracy : 100 g • Platter Size: 350 mm x 300 mm (Tolerance +/- 10%) • The scale should be made up of heavy duty. Cast iron structure Platform with powder coated frames. • The Electronic Adult Weighing Scale should incorporate following features for user-friendly Convenience. • Display: LED / LCD: 5 digit with min. height 14 mm. • TARE facility with zero function. • HOLD function to lock the weight. • MEMORY function, to keep the last weight in memory. • The Scale should have inbuilt rechargeable battery backup for minimum of 8 hrs. • Should operate on mains 220-240Vac, 50 Hz single phase. • The Scale should be as per BIS specifications. The scale should have ISI mark		
3.17	**Electric balance**		
	1 Capacity shall not be less than 200g 2 Readability 0.1mg 3 Repeatability 0.1mg 4 Linearity 0.3mg 5 Stabilization time shall be not higher than 3 seconds 6 Pan size 90mm or near		
	7 Stainless steel platform should be available 8 Square draft shield with all glass panels, including three sliding doors shall be available 9 Level indicator should be placed in front panel for easy viewing 10 Balance should have three selectable environmental settings 11 The balance should have menu lock facility to lock menus including calibration 12 The balance should have integral security lock 13 The balance shall have RS232 or better communication port 14 Weight below hook shall be available for density measurement 15 The balance should have stability indicator 16 The balance should have auto tare facility 17 The balance should have parts counting and percentage weighing application modes 18 CE and ISO certificates should be available 19 Documentary evidence of requested specification should be provided by marking on manufacturer literature		
3.18	**Mechanical mixer**		
	• The unit shall incorporate a user friendly mechanism that prevent mixer from slipping and creeping due to a vibration. • Speed control should vary to a maximum speed of not less than 3,100 rpm, and provides gentle or vigorous overtaxing for mixing needs.		

	• Should function with “Touch” mode for intermittent operation & “Switch” mode for continuous mixing. • Should equip with 2 interchangeable mixing head rubber cup head for conventional single tube mixing & platform pad for multiple tubes minimum 8 tubes (16 mm tube and 9 mm tube holders) • Warranty should not be less than 12 months with good after sale service		
3.19	**Snellen chart**		
	22 x 11 x 0.2 inches, with hand pointer and eye occluder		
3.20	**Westergren stand**		
	for ESR measurement , with tube		
3.21	**Nasogastric Intubation Model**		
	model shows a median section through nose, mouth, pharynx, trachea, esophagus and stomach. Plastic feeding tubes or catheters may be passed through the nose or mouth into the esophagus and stomach		
3.22	**Digital rectal examination model**		
	Normal prostate to be palpated, Life-like rectum is palpable up to 7cm depth High-fidelity sphincter resistance and feeling of rectum wall allows excellent hands-on DRE training before examining actual patients		
3.23	**Female pelvic examination simulator**		
	• Full size adult female lower torso with relevant internal anatomic landmarks • Bi-manual pelvic examination • Palpation of normal and pregnant uteri • Vaginal examination, including insertion of speculum • Visual recognition of normal and abnormal cervix		
3.24	**Catheterization simulator- male**		
	catheter can be inserted in the urethral orifice, passed through the urethra, and into the bladder. When the bladder is successfully entered, artificial urine (water) will flow from the catheter. The student will feel the normal restrictions caused by the mucosal folds, bulbous urethra, and the internal urethral sphincter, just prior to entrance into the bladder. The experience teaches proper positioning and movement of the penis to allow the catheter to pass easily with a minimum of discomfort to the patient		
3.25	**Catheterization simulator - female**		
	constructed with a bladder reservoir, patient urethra, and a valve simulating the internal urethral sphincter. The normal feeling of resistance and pressure will be experienced as a catheter is passed through the urethra, past the sphincter, and into the bladder. When the catheter enters the bladder, artificial urine (water) will flow from the catheter just as in a real patient, and the cuff must be completely deflated before the catheter is removed		

Section VI. Conditions of Contract

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. 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 (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

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 it 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 be filled above check List"

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

Name : ……

Signature : ……

Designation : ……