



BIDDING DOCUMENT

MINISTRY OF CITY PANNING, WATER SUPPLY AND HIGHER
EDUCATION

UNIVERSITY OF COLOMBO

ACCELERATING HIGHER EDUCATION EXPANSION AND
DEVELOPMENT OPERATION (AHEAD)

Credit/Grant #:6026-LK/8743-LK

PP. REF .NO:

Package 01 - AHEAD/NCB/RA1/FOT/2019/01 - Supply, Delivery, Installation and Commissioning of Lab & Teaching Equipment - Faculty of Technology

Package 02 - AHEAD/NCB/DOR2/FOM/2019/01 - Supply, Delivery, Installation and Commissioning of MultiparametricFlowcytometer - Faculty of Medicine

Package 03 - AHEAD/NCB/ELTA-ELSE/F/SCI/2019/01 - Supply, Delivery, Installation and Commissioning of ICT Equipment for Faculty of Science, University of Colombo

Package 04 - AHEAD/NCB/ELTS-ELSE/F/SCI/2019/02 - Supply, Delivery and Installation of Audio Visual and Video Equipment – Faculty of Science

Deadline for the Submission of Bid	29 th August 2019
Bid Validity up to	29 th November 2019
Bid Security – Package 01	Rs. 675,000.00
Package 02	Rs. 163,000.00
Package 03	Rs. 100,000.00
Package 04	Rs. 50,000.00
Bid Security validity Period	27 th December 2019
Bid security addressed to (Beneficiary)	Vice Chancellor

Client

Accelerating Higher Education Expansion and Development(AHEAD)
University of Colombo,
No. 94, CumarathungaMunidasa Mawatha,
Colombo 03,
Sri Lanka.

CONTENTS

Content

Page Nos.

Volume 01

Section I : Instruction to Bidders (ITB)

Section VI :Conditions of Contract (CC)

Section VIII: Contract Forms

Volume 02

Section II: Bidding Data Sheet (BDS)

Section III: Evaluation and Qualification Criteria

Section IV: Bidding Forms

Section V: Schedule of Requirements

Section VII: Contract Data

VOLUME 01



INVITATION FOR BIDS

UNIVERSITY OF COLOMBO
MINISTRY OF CITY PLANNING, WATER SUPPLY AND HIGHER EDUCATION.
ACCELERATING HIGHER EDUCATION EXPANSION AND DEVELOPMENT(AHEAD) PROJECT

CREDIT/GRANT#:6026-LK/8743-LK

SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF LAB & TEACHING EQUIPMENT FOR FACULTY OF TECHNOLOGY, FACULTY OF MEDICINE AND ICT EQUIPMENT AND AUDIO VISUAL AND VIDEO EQUIPMENT FOR FACULTY OF SCIENCE, UNIVERSITY OF COLOMBO.

- 1.The democratic socialist Republic of Sri Lanka has received a loan from the International Development Agency of world bank toward the cost of AHEAD project and it intends to apply part of the proceeds of this loan to payments under the contract for Supply, Delivery, Installation and Commissioning of Lab & Teaching Equipment For Faculty Of Technology, Supply, Delivery, Installation and Commissioning of Multiparametric Flowcytometer for Faculty of Medicine And Supply, Delivery, Installation and Commissioning of ICT Equipment And Audio Visual And Video Equipment For Faculty Of Science, University Of Colombo.
2. Chairman, Department Procurement Committee (Major), University of Colombo, Colombo 03, invites sealed bids from eligible bidders for Supply, Delivery, Installation and Commissioning of Lab & Teaching Equipment For Faculty Of Technology, Supply, Delivery, Installation and Commissioning of Multiparametric Flowcytometer for Faculty of Medicine And Supply, Delivery, Installation and Commissioning of ICT Equipment And Audio Visual And Video Equipment For Faculty Of Science, University of Colombo.
3. Bidder should have at least Five years' experience in the relevant field in Sri Lanka.
4. Bidding will be conducted through the National Competitive Bidding (NCB) procedure.
5. Interested eligible bidders may obtain further information from the Deputy Director procurement/AHEAD Project (Contact No. 011-2595953) of the University of Colombo, and inspect the bidding documents at the OTS Office of the University from 9.00 a.m. to 3.30 p.m. from 05/08/2019 to 28/08/2019 free of charge or visit university website <http://www.cmb.ac.lk> to inspect the document.
6. A complete set of bidding documents in English may be purchased by interested bidders on submission of a written application to the Deputy Director Procurement, AHEAD Project University of Colombo and upon payment of a non-refundable fee of Rupees 4,000/- to the University of Colombo Main Collection Account, by using account number as 505170600013 from any people's bank. The documents may be purchased until 3.30 p.m. from 05.08.2019 to 28.08.2019.
7. Bids must be delivered in duplicate to the address below, on or before 2.30 p.m. on 29.08.2019 Please indicate the **Procurement Name and the number** Specified in the below table on top of the left corner of the envelop.

Package No.	Items	Bid Security
01	Lab & Teaching Equipment - Faculty of Technology AHEAD/NCB/RA1/FOT/2019/01	Rupees Six Hundred Seventy-Five Thousand (Rs. 675,000.00)
02	Multiparametric Flowcytometer - Faculty of Medicine AHEAD/NCB/DOR2/FOM/2019/01	Rupees One Hundred Sixty Three Thousand (Rs.163,000.00)
03	ICT Equipment - Faculty of Science AHEAD/NCB/ELTS-ELSE/F/SCI/2019/01	Rupees One Hundred Thousand (Rs.100,000.00)
04	Audio Visual and Video Equipment – Faculty of Science - AHEAD/NCB/ELTS-ELSE/F/SCI/2019/02	Rupees Fifty Thousand (Rs.50,000.00)
Visit university website http://www.cmb.ac.lk to inspect the document.		

8. All bids must be accompanied by an unconditional, on demand Bid Security from any commercial bank registered under the Central Bank as specified in the above Table.
9. The bids shall be deposited in the 'Tender Box' available in the Registrar's Office of the University of Colombo or sent under registered cover to be received before the deadline at the address given below. Late bids will be rejected. The bids will be opened immediately after closing of the Bids on 29.08.2019 in the presence of the bidders or their authorized representatives who choose to attend the bid opening.

The Chairman
Department Procurement Committee (Major)
University of Colombo.
94, CumaratungaMunidasa Mawatha,
Colombo 3.

Section I

Instructions to Bidders

ITB shall be read in conjunction with the Section II, Bidding Data Sheet (BDS), which shall take precedence over ITB.

	A. General
1. Scope of Bid	<p>1.1 The Purchaser indicated in the Bidding Data Sheet (BDS), issues these Bidding Documents for the supply of Goods and Related Services incidental thereto as specified in Section V, Schedule of Requirements. The name and identification number of this procurement are specified in the BDS. The name, identification, and number of lots (individual contracts), if any, are provided in the BDS.</p> <p>1.2 Throughout these Bidding Documents:</p> <p>(a) the term “in writing” means communicated in written form by mail (other than electronic mail) or hand delivered with proof of receipt;</p> <p>(b) if the context so requires, “singular” means “plural” and vice versa; and</p> <p>(c) “Day” means calendar day.</p>
2. Source of Funds	<p>2.1 Payments under this contract will be financed by the source specified in the BDS.</p>
3. Ethics, Fraud and Corruption	<p>3.1 The attention of the bidders is drawn to the following guidelines of the Procurement Guidelines published by National Procurement Agency:</p> <ul style="list-style-type: none">▪ Parties associated with Procurement Actions, namely, suppliers/contractors and officials shall ensure that they maintain strict confidentiality throughout the process;▪ Officials shall refrain from receiving any personal gain from any Procurement Action. No gifts or inducement shall be accepted. Suppliers/contractors are liable to be disqualified from the bidding process if found offering any gift or inducement which may have an effect of influencing a decision or impairing the objectivity of an official. <p>3.2 The Purchaser requires the bidders, suppliers, contractors, and consultants to observe the highest standard of ethics during the procurement and execution of such contracts. In pursuit of this policy:</p> <p>(a) “corrupt practice” means the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution;</p> <p>(b) “fraudulent practice” means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract;</p>

	<p>(c) “collusive practice” means a scheme or arrangement between two or more bidders, with or without the knowledge of the Purchaser to establish bid prices at artificial, noncompetitive levels; and</p> <p>(d) “Coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of a contract.</p> <p>3.3 If the Purchaser found any unethical practices as stipulated under ITB Clause 3.2, the Purchaser will reject a bid, if it is found that a Bidder directly or through an agent, engaged in corrupt, fraudulent, collusive or coercive practices in competing for the Contract in question.</p>
<p>4. Eligible Bidders</p>	<p>4.1 All bidders shall possess legal rights to supply the Goods under this contract.</p> <p>4.2 A Bidder shall not have a conflict of interest. All bidders found to have conflict of interest shall be disqualified. Bidders may be considered to have a conflict of interest with one or more parties in this bidding process, if they:</p> <p>(a) are or have been associated in the past, with a firm or any of its affiliates which have been engaged by the Purchaser to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the goods to be purchased under these Bidding Documents; or</p> <p>(b) submit more than one bid in this bidding process. However, this does not limit the participation of subcontractors in more than one bid.</p> <p>4.3 A Bidder that is under a declaration of ineligibility by the National Procurement Agency (NPA), at the date of submission of bids or at the date of contract award, shall be disqualified. The list of debarred firms is available at the website of NPA, www.npa.gov.lk.</p> <p>4.4 Foreign Bidder may submit a bid only if so stated in the in the BDS.</p>
<p>5. Eligible Goods and Related Services</p>	<p>5.1 All goods supplied under this contract shall be complied with applicable standards stipulated by the Sri Lanka Standards Institute (SLSI). In the absence of such standards, the Goods supplied shall be complied to other internationally accepted standards.</p>
	<p>B. Contents of Bidding Documents</p>
<p>6. Sections of Bidding Documents</p>	<p>6.1 The Bidding Documents consist of 2 Volumes, which include all the sections indicated below, and should be read in conjunction with any addendum issued in accordance with ITB Clause 8.</p> <p>Volume 1</p> <ul style="list-style-type: none"> • Section I. Instructions to Bidders (ITB) • Section VI. Conditions of Contract (CC) • Section VIII. Contract Forms

	<p>Volume 2</p> <ul style="list-style-type: none"> • Section II. Bidding Data Sheet (BDS) • Section III. Evaluation and Qualification Criteria • Section IV. Bidding Forms • Section V. Schedule of Requirements • Section VII. Contract Data • Invitation for Bid <p>6.2 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Documents. Failure to furnish all information or documentation required by the Bidding Documents may result in the rejection of the bid.</p>
7. Clarification of Bidding Documents	<p>7.1 A prospective Bidder requiring any clarification of the Bidding Documents including the restrictiveness of specifications shall contact the Purchaser in writing at the Purchaser's address specified in the BDS. The Purchaser will respond in writing to any request for clarification, provided that such request is received no later than ten (10) days prior to the deadline for submission of bids. The Purchaser shall forward copies of its response to all those who have purchased the Bidding Documents, including a description of the inquiry but without identifying its source. Should the Purchaser deem it necessary to amend the Bidding Documents as a result of a clarification, it shall do so following the procedure under ITB Clause 8.</p>
8. Amendment of Bidding Documents	<p>8.1 At any time prior to the deadline for submission of bids, the Purchaser may amend the Bidding Documents by issuing addendum.</p> <p>8.2 Any addendum issued shall be part of the Bidding Documents and shall be communicated in writing to all who have purchased the Bidding Documents.</p> <p>8.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their bids, the Purchaser may, at its discretion, extend the deadline for the submission of bids, pursuant to ITB Sub-Clause 23.2</p>
	C. Preparation of Bids
9. Cost of Bidding	<p>9.1 The Bidder shall bear all costs associated with the preparation and submission of its bid, and the Purchaser shall not be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.</p>
10. Language of Bid	<p>10.1 The Bid, as well as all correspondence and documents relating to the Bid (including supporting documents and printed literature) exchanged by the Bidder and the Purchaser, shall be written in English language.</p>
11. Documents Comprising the	<p>11.1 The Bid shall comprise the following:</p>

<p>Bid</p>	<p>(a) Bid Submission Form and the applicable Price Schedules, in accordance with ITB Clauses 12, 14, and 15;</p> <p>(b) Bid Security or Bid-Securing Declaration, in accordance with ITB Clause 20;</p> <p>(c) documentary evidence in accordance with ITB Clauses 18 and 29, that the Goods and Related Services conform to the Bidding Documents;</p> <p>(d) documentary evidence in accordance with ITB Clause 18 establishing the Bidder's qualifications to perform the contract if its bid is accepted; and</p> <p>(e) any other document required in the BDS.</p>
<p>12. Bid Submission Form and Price Schedules</p>	<p>12.1 The Bidder shall submit the Bid Submission Form using the form furnished in Section IV, Bidding Forms. This form must be completed without any alterations to its format, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested.</p>
<p>13. Alternative Bids</p>	<p>13.1 Alternative bids shall not be considered.</p>
<p>14. Bid Prices and Discounts</p>	<p>14.1 The Bidder shall indicate on the Price Schedule the unit prices and total bid prices of the goods it proposes to supply under the Contract.</p> <p>14.2 Any discount offered against any single item in the price schedule shall be included in the unit price of the item. However, a Bidder wishes to offer discount as a lot the bidder may do so by indicating such amounts appropriately.</p> <p>14.3 If so indicated in ITB Sub-Clause 1.1, bids are being invited for individual contracts (lots) or for any combination of contracts (packages). Unless otherwise indicated in the BDS, prices quoted shall correspond to 100 % of the items specified for each lot and to 100% of the quantities specified for each item of a lot. Bidders wishing to offer any price reduction (discount) for the award of more than one Contract shall specify the applicable price reduction separately.</p> <p>14.4 (i) Prices indicated on the Price Schedule shall include all duties and sales and other taxes already paid or payable by the Supplier:</p> <p>(a) on components and raw material used in the manufacture or assembly of goods quoted; or</p> <p>(b) on the previously imported goods of foreign origin.</p> <p>(ii) However, VAT shall not be included in the price but shall be indicated separately;</p> <p>(iii) the price for inland transportation, insurance and other related services to deliver the goods to their final destination;</p> <p>(iv) the price of other incidental services</p>

	<p>14.5 The Prices quoted by the Bidder shall be fixed during the Bidder's performance of the Contract and not subject to variation on any account. A bid submitted with an adjustable price quotation will be treated as non-responsive and rejected, pursuant to ITB Clause 31.</p> <p>14.6 All lots, if any, and items must be listed and priced separately in the Price Schedules. If a Price Schedule shows items listed but not priced, their prices shall be assumed to be included in the prices of other items.</p>
15. Currencies of Bid	15.1 Unless otherwise stated in Bidding Data Sheet, the Bidder shall quote in Sri Lankan Rupees and payment shall be payable only in Sri Lanka Rupees.
16. Documents Establishing the Eligibility of the Bidder	16.1 To establish their eligibility in accordance with ITB Clause 4, Bidders shall complete the Bid Submission Form, included in Section IV, Bidding Forms.
17. Documents Establishing the Conformity of the Goods and Related Services	<p>17.1 To establish the conformity of the Goods and Related Services to the Bidding Documents, the Bidder shall furnish as part of its Bid the documentary evidence that the Goods conform to the technical specifications and standards specified in Section V, Schedule of Requirements.</p> <p>17.2 The documentary evidence may be in the form of literature, drawings or data, and shall consist of a detailed item by item description (given in Section V, Technical Specifications) of the essential technical and performance characteristics of the Goods and Related Services, demonstrating substantial responsiveness of the Goods and Related Services to the technical specification, and if applicable, a statement of deviations and exceptions to the provisions of the Schedule of Requirements.</p> <p>17.3 The Bidder shall also furnish a list giving full , including quantities, available sources and current prices of spare parts, special tools, etc., necessary for the proper and continuing functioning of the Goods during the period if specified in the BDS following commencement of the use of the goods by the Purchaser.</p>
18. Documents Establishing the Qualifications of the Bidder	<p>18.1 The documentary evidence of the Bidder's qualifications to perform the contract if its bid is accepted shall establish to the Purchaser's satisfaction:</p> <p>(a) A Bidder that does not manufacture or produce the Goods it offers to supply shall submit the Manufacturer's Authorization using the form included in Section IV, Bidding Forms to demonstrate that it has been duly authorized by the manufacturer or producer of the Goods to supply these Goods;</p> <p>(b) that, if required in the BDS, in case of a Bidder not doing business within Sri Lanka, the Bidder is or will be (if awarded the contract) represented by an Agent in Sri Lanka equipped and able to carry out the Supplier's maintenance, repair and spare parts stocking obligations prescribed in the Conditions of Contract and/or Technical Specifications; and</p> <p>(c) that the Bidder meets each of the qualification criterion specified in</p>

	Section III, Evaluation and Qualification Criteria.
19. Period of Validity of Bids	<p>19.1 Bids shall remain valid until the date specified in the BDS. A bid valid for a shorter date shall be rejected by the Purchaser as non-responsive.</p> <p>19.2 In exceptional circumstances, prior to the expiration of the bid validity date, the Purchaser may request bidders to extend the period of validity of their bids. The request and the responses shall be made in writing. If a Bid Security is requested in accordance with ITB Clause 20, it shall also be extended for a corresponding period. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not be required or permitted to modify its bid.</p>
20. Bid Security	<p>20.1 The Bidder shall furnish as part of its bid, a Bid Security or a Bid-Securing Declaration, as specified in the BDS.</p> <p>20.2 The Bid Security shall be in the amount specified in the BDS and denominated in Sri Lanka Rupees, and shall:</p> <ul style="list-style-type: none"> (a) at the bidder's option, be in the form of either a bank draft, a letter of credit, or a bank guarantee from a banking institution; (b) be issued by an institution acceptable to Purchaser. The acceptable institutes are published in the NPA website, www.npa.gov.lk. (c) be substantially in accordance with the form included in Section IV, Bidding Forms; (d) be payable promptly upon written demand by the Purchaser in case the conditions listed in ITB Clause 20.5 are invoked; (e) be submitted in its original form; copies will not be accepted; (f) remain valid for the period specified in the BDS. <p>20.3 Any bid not accompanied by a substantially responsive Bid Security or Bid Securing Declaration in accordance with ITB Sub-Clause 20.1 and 20.2, may be rejected by the Purchaser as non-responsive.</p> <p>20.4 The Bid Security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's furnishing of the Performance Security pursuant to ITB Clause 43.</p> <p>20.5 The Bid Security may be forfeited or the Bid Securing Declaration executed:</p> <ul style="list-style-type: none"> (a) if a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Bid Submission Form, except as provided in ITB Sub-Clause 19.2; or (b) if a Bidder does not agree to correction of arithmetical errors in pursuant to ITB Sub-Clause 30.3 (c) if the successful Bidder fails to:

	<p>(i) sign the Contract in accordance with ITB Clause 42;</p> <p>(ii) Furnish a Performance Security in accordance with ITB Clause 43.</p>
21. Format and Signing of Bid	<p>21.1 The Bidder shall prepare one original of the documents comprising the bid as described in ITB Clause 11 and clearly mark it as "ORIGINAL." In addition, the Bidder shall submit a copy of the bid and clearly mark it as "COPY." In the event of any discrepancy between the original and the copy, the original shall prevail.</p> <p>21.2 The original and the Copy of the bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder.</p> <p>21.3 Any interlineations, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Bid.</p>
	D. Submission and Opening of Bids
22. Submission, Sealing and Marking of Bids	<p>22.1 Bidders may always submit their bids by mail or by hand.</p> <p>(a) Bidders submitting bids by mail or by hand, shall enclose the original and the copy of the Bid in separate sealed envelopes, duly marking the envelopes as "ORIGINAL" and "COPY." These envelopes containing the original and the copy shall then be enclosed in one single envelope.</p> <p>22.2 The inner and outer envelopes shall:</p> <p>(a) Bear the name and address of the Bidder;</p> <p>(b) be addressed to the Purchaser in accordance with ITB Sub-Clause 23.1;</p> <p>(c) bear the specific identification of this bidding process as indicated in the BDS; and</p> <p>(d) bear a warning not to open before the time and date for bid opening, in accordance with ITB Sub-Clause 261. If all envelopes are not sealed and marked as required, the Purchaser will assume no responsibility for the misplacement or premature opening of the bid.</p>
23. Deadline for Submission of Bids	<p>23.1 Bids must be received by the Purchaser at the address and no later than the date and time specified in the BDS.</p> <p>23.2 The Purchaser may, at its discretion, extend the deadline for the submission of bids by amending the Bidding Documents in accordance with ITB Clause 8, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.</p>
24. Late Bids	<p>24.1 The Purchaser shall not consider any bid that arrives after the deadline for submission of bids, in accordance with ITB Clause 23. Any bid received by the Purchaser after the deadline for submission of bids shall be declared late, rejected, and returned unopened to the Bidder.</p>
25. Withdrawal,	<p>25.1 A Bidder may withdraw, or modify its Bid after it has been submitted by</p>

<p>and Modification of Bids</p>	<p>sending a written notice in accordance with ITB Clause 22, duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITB Sub-Clause 21.2, (except that no copies of the withdrawal notice are required). The corresponding substitution or modification of the bid must accompany the respective written notice. All notices must be:</p> <p>(a) submitted in accordance with ITB Clauses 21 and 22 (except that withdrawal notices do not require copies), and in addition, the respective envelopes shall be clearly marked “WITHDRAWAL,” or “MODIFICATION;” and</p> <p>(b) received by the Purchaser prior to the deadline prescribed for submission of bids, in accordance with ITB Clause 23.</p> <p>25.2 Bids requested to be withdrawn in accordance with ITB Sub-Clause 25.1 shall be returned to the Bidders only upon notification of contract award to the successful bidder in accordance with sub clause 41.1.</p> <p>25.3 No bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Bid Submission Form or any extension thereof.</p>
<p>26. Bid Opening</p>	<p>26.1 The Purchaser shall conduct the bid opening in public at the address, date and time specified in the BDS.</p> <p>26.2 First, envelopes marked “WITHDRAWAL” shall be opened and read out and the envelope with the corresponding bid may be opened at the discretion of the Purchaser. No bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at bid opening. Envelopes marked “MODIFICATION” shall be opened and read out with the corresponding Bid. No Bid modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at Bid opening. Only envelopes that are opened and read out at Bid opening shall be considered further.</p> <p>26.3 All other envelopes shall be opened one at a time, reading out: the name of the Bidder and whether there is a modification; the Bid Prices, including any discounts and alternative offers; the presence of a Bid Security or Bid-Securing Declaration, if required; and any other details as the Purchaser may consider appropriate. Only discounts and alternative offers read out at Bid opening shall be considered for evaluation. No Bid shall be rejected at Bid opening except for late bids, in accordance with ITB Sub Section I Clause 24.1.</p> <p>26.4 The Purchaser shall prepare a record of the Bid opening that shall include, as a minimum: the name of the Bidder and whether there is a withdrawal, or modification; the Bid Price, per lot if applicable, including any discounts, and the presence or absence of a Bid Security or Bid-Securing Declaration. The bids that were opened shall be resealed in separate envelopes, promptly after the bid opening. The Bidders’ representatives who are present shall be requested to sign the attendance sheet. A copy of</p>

	the record shall be distributed to all Bidders who submitted bids in time.
	E. Evaluation and Comparison of Bids
27. Confidentiality	<p>27.1 Information relating to the examination, evaluation, comparison, and post-qualification (if applicable) of bids, and recommendation of contract award, shall not be disclosed to bidders or any other persons not officially concerned with such process until publication of the Contract Award.</p> <p>27.2 Any effort by a Bidder to influence the Purchaser in the examination, evaluation, comparison, and post-qualification of the bids or contract award decisions may result in the rejection of its Bid.</p> <p>27.3 Notwithstanding ITB Sub-Clause 27.2, if any Bidder wishes to contact the Purchaser on any matter related to the bidding process, from the time of bid opening to the time of Contract Award, it should do so in writing.</p>
28. Clarification of Bids	<p>28.1 To assist in the examination, evaluation, comparison and post-qualification of the bids, the Purchaser may, at its discretion, request any Bidder for a clarification of its Bid. Any clarification submitted by a Bidder in respect to its Bid and that is not in response to a request by the Purchaser shall not be considered for purpose of evaluation. The Purchaser's request for clarification and the response shall be in writing. No change in the prices or substance of the Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Purchaser in the Evaluation of the bids, in accordance with ITB Clause 30.</p>
29. Responsiveness of Bids	<p>29.1 The Purchaser's determination of a bid's responsiveness is to be based on the contents of the bid itself.</p> <p>29.2 A substantially responsive Bid is one that conforms to all the terms, conditions, and specifications of the Bidding Documents without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that:</p> <ul style="list-style-type: none"> (a) affects in any substantial way the scope, quality, or performance of the Goods and Related Services specified in the Contract; or (b) limits in any substantial way, inconsistent with the Bidding Documents, the Purchaser's rights or the Bidder's obligations under the Contract; or (c) if rectified would unfairly affect the competitive position of other bidders presenting substantially responsive bids. <p>29.3 If a bid is not substantially responsive to the Bidding Documents, it shall be rejected by the Purchaser and may not subsequently be made responsive by the Bidder by correction of the material deviation, reservation, or omission.</p>
30. Nonconformities, Errors, and Omissions	<p>30.1 Provided that a Bid is substantially responsive, the Purchaser may waive any non-conformities or omissions in the Bid that do not constitute a material deviation.</p> <p>30.2 Provided that a bid is substantially responsive, the Purchaser may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the bid related to documentation</p>

	<p>requirements. Such omission shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.</p> <p>30.3 Provided that the Bid is substantially responsive, the Purchaser shall correct arithmetical errors on the following basis:</p> <p>(a) if there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of the Purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the line item total as quoted shall govern and the unit price shall be corrected;</p> <p>(b) if there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; and</p> <p>(c) if there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.</p> <p>30.4 If the Bidder that submitted the lowest evaluated Bid does not accept the correction of errors, its Bid shall be disqualified and its Bid Security shall be forfeited or its Bid-Securing Declaration shall be executed.</p>
<p>31. Preliminary Examination of Bids</p>	<p>31.1 The Purchaser shall examine the bids to confirm that all documents and technical documentation requested in ITB Clause 11 have been provided, and to determine the completeness of each document submitted.</p> <p>31.2 The Purchaser shall confirm that the following documents and information have been provided in the Bid. If any of these documents or information is missing, the Bid shall be rejected.</p> <p>(a) Bid Submission Form, in accordance with ITB Sub-Clause 12.1;</p> <p>(b) Price Schedules, in accordance with ITB Sub-Clause 12;</p> <p>(c) Bid Security or Bid Securing Declaration, in accordance with ITB Clause 20.</p>
<p>32. Examination of Terms and Conditions; Technical Evaluation</p>	<p>32.1 The Purchaser shall examine the Bid to confirm that all terms and conditions specified in the CC and the Contract Data have been accepted by the Bidder without any material deviation or reservation.</p> <p>32.2 The Purchaser shall evaluate the technical aspects of the Bid submitted in accordance with ITB Clause 17, to confirm that all requirements specified in Section V, Schedule of Requirements of the Bidding Documents have been met without any material deviation or reservation.</p> <p>32.3 If, after the examination of the terms and conditions and the technical evaluation, the Purchaser determines that the Bid is not substantially responsive in accordance with ITB Clause 29, the Purchaser shall reject the Bid.</p>

33. Conversion to Single Currency	33.1 If the bidders are allowed to quote in foreign currencies in accordance with sub clause 15.1, for evaluation and comparison purposes, the Purchaser shall convert all bid prices expressed in foreign currencies in to Sri Lankan Rupees using the selling rates prevailed 28 days prior to closing of bids as published by the Central Bank of Sri Lanka. If this date falls on a public holiday the earliest working day prior to the date shall be applicable.
34. Domestic Preference	34.1 Domestic preference shall be a factor in bid evaluation only if stated in the BDS. If domestic preference shall be a bid evaluation factor, the methodology for calculating the margin of preference and the criteria for its application shall be as specified in Section III, Evaluation and Qualification Criteria.
35. Evaluation of Bids	<p>35.1 The Purchaser shall evaluate each bid that has been determined, up to this stage of the evaluation, to be substantially responsive.</p> <p>35.2 To evaluate a Bid, the Purchaser shall only use all the factors, methodologies and criteria defined in this ITB Clause 35.</p> <p>35.3 To evaluate a Bid, the Purchaser shall consider the following:</p> <p>(a) the Bid Price as quoted in accordance with clause 14;</p> <p>(b) price adjustment for correction of arithmetic errors in accordance with ITB Sub-Clause 30.3;</p> <p>(c) price adjustment due to discounts offered in accordance with ITB Sub-Clause 14.2; and 14.3</p> <p>(d) adjustments due to the application of the evaluation criteria specified in the BDS from amongst those set out in Section III, Evaluation and Qualification Criteria;</p> <p>(e) adjustments due to the application of a domestic preference, in accordance with ITB Clause 34 if applicable.</p> <p>35.4 The Purchaser's evaluation of a bid may require the consideration of other factors, in addition to the factors stated in ITB Sub-Clause 35.3, if specified in BDS. These factors may be related to the characteristics, performance, and terms and conditions of purchase of the Goods and Related Services. The effect of the factors selected, if any, shall be expressed in monetary terms to facilitate comparison of bids</p> <p>35.5 If so specified in the BDS, these Bidding Documents shall allow Bidders to quote for one or more lots, and shall allow the Purchaser to award one or multiple lots to more than one Bidder. The methodology of evaluation to determine the lowest-evaluated lot combinations is specified in Section III, Evaluation and Qualification Criteria.</p>
36. Comparison of Bids	36.1 The Purchaser shall compare all substantially responsive bids to determine the lowest evaluated bid, in accordance with ITB Clause 35.
37. Post Qualification of	37.1 The Purchaser shall determine to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated and substantially

the Bidder	<p>responsive bid is qualified to perform the Contract satisfactorily.</p> <p>37.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB Clause 18.</p> <p>37.3 An affirmative determination shall be a prerequisite for award of the Contract to the Bidder. A negative determination shall result in disqualification of the bid, in which event the Purchaser shall proceed to the next lowest evaluated bid to make a similar determination of that Bidder's capabilities to perform satisfactorily.</p>
38. Purchaser's Right to Accept Any Bid, and to Reject Any or All Bids	<p>38.1 The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to Bidders.</p>
	<p>F. Award of Contract</p>
39. Award Criteria	<p>39.1 The Purchaser shall award the Contract to the Bidder whose offer has been determined to be the lowest evaluated bid and is substantially responsive to the Bidding Documents, provided further that the Bidder is determined to be qualified to perform the Contract satisfactorily.</p>
40. Purchaser's Right to Vary Quantities at Time of Award	<p>40.1 At the time the Contract is awarded, the Purchaser reserves the right to increase or decrease the quantity of Goods and Related Services originally specified in Section V, Schedule of Requirements, provided this does not exceed twenty five percent (25%) or one unit whichever is higher and without any change in the unit prices or other terms and conditions of the bid and the Bidding Documents.</p>
41. Notification of Award	<p>41.1 Prior to the expiration of the period of bid validity, the Purchaser shall notify the successful Bidder, in writing, that its Bid has been accepted.</p> <p>41.2 Until a formal Contract is prepared and executed, the notification of award shall constitute a binding Contract.</p> <p>41.3 Upon the successful Bidder's furnishing of the signed Contract Form and performance security pursuant to ITB Clause 43, the Purchaser will promptly notify each unsuccessful Bidder and will discharge its bid security, pursuant to ITB Clause 20.4.</p>
42. Signing of Contract	<p>42.1 Within Seven (7) days after notification, the Purchaser shall complete the Agreement, and inform the successful Bidder to sign it.</p> <p>42.2 Within Seven (7) days of receipt of such information, the successful Bidder shall sign the Agreement.</p>
43. Performance Security	<p>43.1 Within fourteen (14) days of the receipt of notification of award from the Purchaser, the successful Bidder, if required, shall furnish the Performance Security in accordance with the CC, using for that purpose the Performance Security Form included in Section VIII Contract forms. The Employer shall promptly notify the name of the winning Bidder to each unsuccessful Bidder and discharge the Bid Securities of the unsuccessful bidders pursuant to ITB Sub-Clause 20.4.</p>

	<p>43.2 Failure of the successful Bidder to submit the abovementioned Performance Security or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security or execution of the Bid-Securing Declaration. In that event the Purchaser may award the Contract to the next lowest evaluated Bidder, whose offer is substantially responsive and is determined by the Purchaser to be qualified to perform the Contract satisfactorily.</p>
--	--

Section VI

Conditions of Contract

1. Definitions	<p>1.1 The following words and expressions shall have the meanings hereby assigned to them:</p> <p>(a) "Contract" means the Contract Agreement entered into between the Purchaser and the Supplier, together with the Contract Documents referred to therein, including all attachments, appendices, and all documents incorporated by reference therein.</p> <p>(b) "Contract Documents" means the documents listed in the Contract Agreement, including any amendments thereto.</p> <p>(c) "Contract Price" means the price payable to the Supplier as specified in the Contract Agreement, subject to such additions and adjustments thereto or deductions there from, as may be made pursuant to the Contract.</p> <p>(b) "Day" means calendar day.</p> <p>(e) "Completion" means the fulfillment of the supply of Goods to the destination specified and completion of the Related Services by the Supplier in accordance with the terms and conditions set forth in the Contract.</p> <p>(f) "CC" means the Conditions of Contract.</p> <p>(g) "Goods" means all of the commodities, raw material, machinery and equipment, and/or other materials that the Supplier is required to supply to the Purchaser under the Contract.</p> <p>(h) "Purchaser" means the entity purchasing the Goods and Related Services, as specified in the Contract Data.</p> <p>(i) "Related Services" means the services incidental to the supply of the goods, such as insurance, installation, training and initial maintenance and other such obligations of the Supplier under the Contract.</p> <p>(j) "Subcontractor" means any natural person, private or government entity, or a combination of the above, to whom any part of the Goods to be supplied or execution of any part of the Related Services is subcontracted by the Supplier.</p> <p>(k) "Supplier" means the natural person, private or government entity, or a combination of the above, whose bid to perform the Contract has been accepted by the Purchaser and is named as such in the Contract Agreement.</p> <p>(l) "The Project Site," where applicable, means the place named in the Contract Data.</p>
2. Contract	2.1 Subject to the order of precedence set forth in the Contract

Documents	Agreement, all documents forming the Contract (and all parts thereof) are intended to be correlative, complementary, and mutually explanatory. The Contract Agreement shall be read as a whole.
3. Fraud and Corruption	<p>3.1 The Government of Sri Lanka requires the Purchaser as well as bidders, suppliers, contractors, and consultants to observe the highest standard of ethics during the procurement and execution of such contracts. In pursuit of this policy:</p> <p>(i) “corrupt practice” means offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the action of a public official in the procurement process or in contract execution;</p> <p>(ii) “fraudulent practice” means a misrepresentation or omission of facts in order to influence a procurement process or the execution of a contract;</p> <p>(iii) “collusive practice” means a scheme or arrangement between two or more bidders, with or without the knowledge of the Purchaser to establish bid prices at artificial, noncompetitive levels; and</p> <p>(iv) “coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the procurement process or affect the execution of a contract.</p>
4. Interpretation	<p>4.1 If the context so requires it, singular means plural and vice versa.</p> <p>4.2 Entire Agreement</p> <p>The Contract constitutes the entire agreement between the Purchaser and the Supplier and supersedes all communications, negotiations and agreements (whether written or oral) of the parties with respect thereto made prior to the date of Contract.</p> <p>4.3 Amendment</p> <p>No amendment or other variation of the Contract shall be valid unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorized representative of each party thereto.</p> <p>4.4 Severability If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.</p>
5. Language	<p>5.1 The Contract as well as all correspondence and documents relating to the Contract exchanged by the Supplier and the Purchaser, shall be written in English language. Supporting documents and printed literature that are part of the Contract may be in another language provided they are accompanied by an accurate translation of the relevant passages in the language specified, in which case, for purposes of interpretation of the Contract, this translation shall govern.</p>

	5.2 The Supplier shall bear all costs of translation to the governing language and all risks of the accuracy of such translation, for documents provided by the Supplier.
6. Joint Venture, Consortium or Association	6.1 If the Supplier is a joint venture, consortium, or association, all of the parties shall be jointly and severally liable to the Purchaser for the fulfillment of the provisions of the Contract and shall designate one party to act as a leader with authority to bind the joint venture, consortium, or association. The composition or the constitution of the joint venture, consortium, or association shall not be altered without the prior consent of the Purchaser.
7. Eligibility	7.1 All goods supplied under this contract shall be complied with applicable standards stipulated by the Sri Lanka Standards Institute. In the absence of such standards, the Goods supplied shall be complied to other internationally accepted standards, such as British Standards.
8. Notices	8.1 Any notice given by one party to the other pursuant to the Contract shall be in writing to the address specified in the Contract Data. The term "in writing" means communicated in written form with proof of receipt. 8.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.
9. Governing Law	9.1 The Contract shall be governed by and interpreted in accordance with the laws of the Democratic Socialist Republic of Sri Lanka.
10. Settlement of Disputes	10.1 The Purchaser and the Supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract. 10.2 If, after twenty-eight (28) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the Purchaser or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given. Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under the Contract. Arbitration proceedings shall be conducted in accordance with the Arbitration Act No:11 of 1995. 10.3 Notwithstanding any reference to arbitration herein, (a) the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and (b) the Purchaser shall pay the Supplier any monies due the Supplier.
11. Scope of Supply	11.1 The Goods and Related Services to be supplied shall be as specified in the Schedule of Requirements.
12. Delivery and Documents	12.1 Subject to CC Sub-Clause 32.1, the Delivery of the Goods and Completion of the Related Services shall be in accordance with the Delivery and Completion Schedule specified in the Schedule of Requirements. Where applicable the details of shipping and other documents to be furnished by the Supplier are specified in the Contract Data.
13. Supplier's	13.1 The Supplier shall supply all the Goods and Related Services included

Responsibilities	in the Scope of Supply in accordance with CC Clause 11, and the Delivery and Completion Schedule, as per CC Clause 12.
14. Contract Price	14.1 Prices charged by the Supplier for the Goods supplied and the Related Services performed under the Contract shall not vary from the prices quoted by the Supplier in its bid.
15. Terms of Payment	<p>15.1 The Contract Price, shall be paid as specified in the Contract Data.</p> <p>15.2 The Supplier's request for payment shall be made to the Purchaser in writing, accompanied by invoices describing, as appropriate, the Goods delivered and Related Services performed, and by the documents submitted pursuant to CC Clause 12 and upon fulfillment of all other obligations stipulated in the Contract.</p> <p>15.3 Payments shall be made promptly by the Purchaser, but in no case later than twenty eight (28) days after submission of an invoice or request for payment by the Supplier, and after the Purchaser has accepted it.</p>
16. Taxes and Duties	16.1 The Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted Goods to the Purchaser.
17. Performance Security	<p>17.1 If required as specified in the Contract Data, the Supplier shall, within fourteen (14) days of the notification of contract award, provide a performance security of Ten percent (10%) of the Contract Price for the performance of the Contract.</p> <p>Period of performance security would be 12 months from the date of letter of award.</p> <p>17.2 The proceeds of the Performance Security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.</p> <p>17.3 As specified in the Contract Data, the Performance Security, if required, shall be in Sri Lanka Rupees and shall be in the format stipulated by the Purchaser in the Contract Data, or in another format acceptable to the Purchaser.</p> <p>17.4 The Performance Security shall be discharged by the Purchaser and returned to the Supplier not later than twenty-eight (28) days following the date of Completion of the Supplier's performance obligations under the Contract, including any warranty obligations.</p>
18. Copyright	18.1 The copyright in all drawings, documents, and other materials containing data and information furnished to the Purchaser by the Supplier herein shall remain vested in the Supplier, or, if they are furnished to the Purchaser directly or through the Supplier by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party.
19. Confidential Information	19.1 The Purchaser and the Supplier shall keep confidential and shall not, without the written consent of the other party hereto, divulge to any third party any documents, data, or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following completion or termination of the Contract. Notwithstanding the above,

	<p>the Supplier may furnish to its Subcontractor such documents, data, and other information it receives from the Purchaser to the extent required for the Subcontractor to perform its work under the Contract, in which event the Supplier shall obtain from such Subcontractor an undertaking of confidentiality similar to that imposed on the Supplier under CC Clause 19</p> <p>19.2 The Purchaser shall not use such documents, data, and other information received from the Supplier for any purposes unrelated to the contract. Similarly, the Supplier shall not use such documents, data, and other information received from the Purchaser for any purpose other than the performance of the Contract.</p> <p>19.3 The above provisions of CC Clause 19 shall not in any way modify any undertaking of confidentiality given by either of the parties hereto prior to the date of the Contract in respect of the Supply or any part thereof.</p> <p>19.4 The provisions of CC Clause 19 shall survive completion or termination, for whatever reason, of the Contract.</p>
20. Subcontracting	<p>20.1 The Supplier shall notify the Purchaser in writing of all subcontracts awarded under the Contract if not already specified in the bid. Such notification, in the original bid or later shall not relieve the Supplier from any of its obligations, duties, responsibilities, or liability under the Contract.</p> <p>20.2 Subcontracts shall comply with the provisions of CC Clauses 3 and 7.</p>
21. Specifications and Standards	<p>21.1 Technical Specifications and Drawings</p> <p>(a) The Goods and Related Services supplied under this Contract shall conform to the technical specifications and standards mentioned in Section V, Schedule of Requirements and, when no applicable standard is mentioned, the standard shall be equivalent or superior to the official standards whose application is appropriate to the Goods' country of origin.</p> <p>(b) The Supplier shall be entitled to disclaim responsibility for any design, data, drawing, specification or other document, or any modification thereof provided or designed by or on behalf of the Purchaser, by giving a notice of such disclaimer to the Purchaser.</p> <p>(c) Wherever references are made in the Contract to codes and standards in accordance with which it shall be executed, the edition or the revised version of such codes and standards shall be those specified in the Schedule of Requirements. During Contract execution, any changes in any such codes and standards shall be applied only after approval by the Purchaser and shall be treated in accordance with CC Clause 32.</p>
22. Packing and Documents	<p>22.1 The Supplier shall pack the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract.</p>
23. Insurance	<p>23.1 Unless otherwise specified in the Contract Data, the Goods supplied under the Contract shall be fully insured against loss or damage incidental to manufacture or acquisition, transportation, storage, and delivery.</p>
24.	<p>24.1 Unless otherwise specified in the Contract Data, responsibility for</p>

Transportation	arranging transportation of the Goods shall be a responsibility of the supplier.
25. Inspections and Tests	<p>25.1 The Supplier shall at its own expense and at no cost to the Purchaser carry out all such tests and/or inspections of the Goods and Related Services as are specified in the Contract Data.</p> <p>25.2 The inspections and tests may be conducted on the premises of the Supplier or its Subcontractor, at point of delivery, and/or at the Goods' final destination, or in another place as specified in the Contract Data. Subject to CC Sub-Clause 25.3, if conducted on the premises of the Supplier or its Subcontractor, all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Purchaser.</p> <p>25.3 The Purchaser or its designated representative shall be entitled to attend the tests and/or inspections referred to in CC Sub-Clause 25.2, provided that the Purchaser bear all of its own costs and expenses incurred in connection with such attendance including, but not limited to, all traveling and board and lodging expenses.</p> <p>25.4 Whenever the Supplier is ready to carry out any such test and inspection, it shall give a reasonable advance notice, including the place and time, to the Purchaser. The Supplier shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable the Purchaser or its designated representative to attend the test and/or inspection.</p> <p>25.5 The Purchaser may require the Supplier to carry out any test and/or inspection not required by the Contract but deemed necessary to verify that the characteristics and performance of the Goods comply with the technical specifications codes and standards under the Contract, provided that the Supplier's reasonable costs and expenses incurred in the carrying out of such test and/or inspection shall be added to the Contract Price. Further, if such test and/or inspection impedes the progress of manufacturing and/or the Supplier's performance of its other obligations under the Contract, due allowance will be made in respect of the Delivery Dates and Completion Dates and the other obligations so affected.</p> <p>25.6 The Supplier shall provide the Purchaser with a report of the results of any such test and/or inspection.</p> <p>25.7 The Purchaser may reject any Goods or any part thereof that fail to pass any test and/or inspection or do not conform to the specifications. The Supplier shall either rectify or replace such rejected Goods or parts thereof or make alterations necessary to meet the specifications at no cost to the Purchaser, and shall repeat the test and/or inspection, at no cost to the Purchaser, upon giving a notice pursuant to CC Sub-Clause 25.4.</p> <p>25.8 The Supplier agrees that neither the execution of a test and/or</p>

	inspection of the Goods or any part thereof, nor the attendance by the Purchaser or its representative, nor the issue of any report pursuant to CC Sub-Clause 25.6, shall release the Supplier from any warranties or other obligations under the Contract.
26. Liquidated Damages	26.1 Except as provided under CC Clause 31, if the Supplier fails to deliver any or all of the Goods by the Date(s) of delivery or perform the Related Services within the period specified in the Contract, the Purchaser may without prejudice to all its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in the Contract Data of the delivered price of the delayed Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the percentage specified in those Contract Data. Once the maximum is reached, the Purchaser may terminate the Contract pursuant to CC Clause 34.
27. Warranty	<p>27.1 The Supplier warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.</p> <p>27.2 Subject to CC Sub-Clause 21.1(b), the Supplier further warrants that the Goods shall be free from defects arising from any act or omission of the Supplier or arising from design, materials, and workmanship, under normal use in the conditions prevailing in the country of final destination.</p> <p>27.3 Unless otherwise specified in the Contract Data, the warranty shall remain valid for twelve (12) months after the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the Contract Data.</p> <p>27.4 The Purchaser shall give notice to the Supplier stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof. The Purchaser shall afford all reasonable opportunity for the Supplier to inspect such defects.</p> <p>27.5 Upon receipt of such notice, the Supplier shall, within the period specified in the Contract Data, expeditiously repair or replace the defective Goods or parts thereof, at no cost to the Purchaser.</p> <p>27.6 If having been notified, the Supplier fails to remedy the defect within the period specified in the Contract Data, the Purchaser may proceed to take within a reasonable period such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.</p>
28. Patent Indemnity	28.1 The Supplier shall, subject to the Purchaser's compliance with CC Sub-Clause 28.2, indemnify and hold harmless the Purchaser and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Purchaser may suffer as a result of any infringement or alleged

	<p>infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract by reason of:</p> <p>(a) the installation of the Goods by the Supplier or the use of the Goods in the country where the Site is located; and</p> <p>(b) the sale in any country of the products produced by the Goods. Such indemnity shall not cover any use of the Goods or any part thereof other than for the purpose indicated by or to be reasonably inferred from the Contract, neither any infringement resulting from the use of the Goods or any part thereof, or any products produced thereby in association or combination with any other equipment, plant, or materials not supplied by the Supplier, pursuant to the Contract.</p> <p>28.2 If any proceedings are brought or any claim is made against the Purchaser arising out of the matters referred to in CC Sub-Clause 28.1, the Purchaser shall promptly give the Supplier a notice thereof, and the Supplier may at its own expense and in the Purchaser's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.</p> <p>28.3 If the Supplier fails to notify the Purchaser within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Purchaser shall be free to conduct the same on its own behalf.</p> <p>28.4 The Purchaser shall, at the Supplier's request, afford all available assistance to the Supplier in conducting such proceedings or claim, and shall be reimbursed by the Supplier for all reasonable expenses incurred in so doing.</p> <p>28.5 The Purchaser shall indemnify and hold harmless the Supplier and its employees, officers, and Subcontractors from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Supplier may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract arising out of or in connection with any design, data, drawing, specification, or other documents or materials provided or designed by or on behalf of the Purchaser.</p>
<p>29. Limitation of Liability</p>	<p>29.1 Except in cases of criminal negligence or willful misconduct,</p> <p>(a) the Supplier shall not be liable to the Purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Supplier to pay liquidated damages to the Purchaser and</p>

	<p>(b) the aggregate liability of the Supplier to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the supplier to indemnify the purchaser with respect to patent infringement</p>
<p>30. Change in Laws and Regulations</p>	<p>30.1 Unless otherwise specified in the Contract, if after the date of 28 days prior to date of Bid submission, any law, regulation, ordinance, order or bylaw having the force of law is enacted, promulgated, abrogated, or changed in Sri Lanka that subsequently affects the Delivery Date and/or the Contract Price, then such Delivery Date and/or Contract Price shall be correspondingly increased or decreased, to the extent that the Supplier has thereby been affected in the performance of any of its obligations under the Contract. Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited if the same has already been accounted for in the price adjustment provisions where applicable, in accordance with CC Clause 14.</p>
<p>31. Force Majeure</p>	<p>31.1 The Supplier shall not be liable for forfeiture of its Performance Security, liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.</p> <p>31.2 For purposes of this Clause, “Force Majeure” means an event or situation beyond the control of the Supplier that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Supplier. Such events may include, but not be limited to, acts of the Purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.</p> <p>31.3 If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.</p>
<p>32. Change Orders and Contract Amendments</p>	<p>32.1 The Purchaser may at any time order the Supplier through notice in accordance CC Clause 8, to make changes within the general scope of the Contract in any one or more of the following:</p> <ul style="list-style-type: none"> (a) drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser; (b) the method of shipment or packing; (c) the place of delivery; and (d) the Related Services to be provided by the Supplier. <p>32.2 If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier’s performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or in the Delivery/Completion Schedule, or both, and the Contract shall</p>

	<p>accordingly be amended. Any claims by the Supplier for adjustment under this Clause must be asserted within twenty-eight (28) days from the date of the Supplier's receipt of the Purchaser's change order.</p> <p>32.3 Prices to be charged by the Supplier for any Related Services that might be needed but which were not included in the Contract shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.</p> <p>32.4 Subject to the above, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.</p>
<p>33. Extensions of Time</p>	<p>33.1 If at any time during performance of the Contract, the Supplier or its subcontractors should encounter conditions impeding timely delivery of the Goods or completion of Related Services pursuant to CC Clause 12, the Supplier shall promptly notify the Purchaser in writing of the delay, its likely duration, and its cause. As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may at its discretion extend the Supplier's time for performance, in which case the extension shall be ratified by the parties by amendment of the Contract.</p> <p>33.2 Except in case of Force Majeure, as provided under CC Clause 31, a delay by the Supplier in the performance of its Delivery and Completion obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to CC Clause 26, unless an extension of time is agreed upon, pursuant to CC Sub-Clause 33.1.</p>
<p>34. Termination</p>	<p>34.1 Termination for Default</p> <p>(a) The Purchaser, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Supplier, may terminate the Contract in whole or in part:</p> <p>(i) if the Supplier fails to deliver any or all of the Goods within the period specified in the Contract, or within any extension thereof granted by the Purchaser pursuant to CC Clause 33;</p> <p>(ii) if the Supplier fails to perform any other obligation under the Contract; or</p> <p>(iii) if the Supplier, in the judgment of the Purchaser has engaged in fraud and corruption, as defined in CC Clause 3, in competing for or in executing the Contract.</p> <p>(b) In the event the Purchaser terminates the Contract in whole or in part, pursuant to CC Clause 34.1(a), the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or Related Services similar to those undelivered or not performed, and the Supplier shall be liable to the Purchaser for any additional costs for such similar Goods or Related Services. However, the Supplier shall continue performance of the Contract to the extent not terminated.</p> <p>34.2 Termination for Insolvency.</p> <p>(a) The Purchaser may at any time terminate the Contract by giving notice</p>

	<p>to the Supplier if the Supplier becomes bankrupt or otherwise insolvent. In such event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to the Purchaser 34.3 Termination for Convenience.</p> <p>(a) The Purchaser, by notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.</p> <p>(b) The Goods that are complete and ready for shipment within twenty-eight (28) days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices. For the remaining Goods, the Purchaser may elect:</p> <p>(i) to have any portion completed and delivered at the Contract terms and prices; and/or</p> <p>(ii) to cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and Related Services and for materials and parts previously procured by the Supplier.</p>
35. Assignment	35.1 Neither the Purchaser nor the Supplier shall assign, in whole or in part, their obligations under this Contract, except with prior written consent of the other party.

Section VIII

Contract Forms

1. Contract Agreement

THIS CONTRACT AGREEMENT is made

The day of ,

BETWEEN

(1) Accelerating Higher Education Expansion and Development (AHEAD) project University of Colombo, an agency of the Ministry of Higher Education and Cultural Affairs and having its principal place of business at 94, CumaratungaMunidasa Mw, Colombo 03 (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]

2. 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: -----[Name and Address of Employer] -----

Date: -----

PERFORMANCE 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]

3. 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: [insert legal name and address of Purchaser]

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

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

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

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

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

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

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

VOLUME 02

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 need, in the notes in italics mentioned for the relevant ITB Clauses.]

ITB Clause Reference	A. General
ITB 1.1	The Purchaser is : Vice Chancellor ,University of Colombo
ITB 1.1	<p>The name and identification number of the Contract are:</p> <p>Package 01 - AHEAD/NCB/RA1/FOT/2019/01 - Supply, Delivery, Installation and Commissioning of Lab & Teaching Equipment - Faculty of Technology</p> <p>Package 02 - AHEAD/NCB/DOR2/FOM/2019/01 - Supply, Delivery, Installation and Commissioning of Multiparametric Flowcytometer - Faculty of Medicine</p> <p>Package 03 - AHEAD/NCB/ELTA-ELSE/F/SCI/2019/01 - Supply, Delivery, Installation and Commissioning of ICT Equipment for Faculty of Science, University of Colombo</p> <p>Package 04 - AHEAD/NCB/ELTS-ELSE/F/SCI/2019/02 - Supply, Delivery and Installation of Audio Visual and Video Equipment – Faculty of Science</p>
ITB 2.1	The source of funding is : World bank Credit/Grant #:6026-LK/8743-LK
ITB 3.1	<p>Preventing and Combating Fraud and Corruption:</p> <p>It is the World Bank’s policy to require that Borrowers (including beneficiaries of Bank loans), as well as bidders, suppliers, and contractors and their subcontractors under Bank-financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts. In this context, any action taken by a bidder, supplier, contractor, or a sub-contractor to influence the procurement process or contract execution for undue advantage is improper. In pursuance of this policy, the Bank:</p> <p>(a) defines, for the purposes of this provision, the terms set forth below as follows:</p> <p>(i) “corrupt practice” “another party” refers to a public official acting in relation to the procurement process or contract execution]. In this context, “public official” includes World Bank staff and employees of other organizations taking or reviewing procurement decisions. is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;</p> <p>(ii) “fraudulent practice” a “party” refers to a public official; the terms “benefit” and “obligation” relate to the procurement process or contract execution; and the “act or omission” is intended to influence the procurement process or contract execution. is any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;</p> <p>(iii) “Collusive practice” “parties” refers to participants in the procurement process (including public officials) attempting to establish bid prices at artificial, non-competitive levels. is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another</p>

	<p>party;</p> <p>(iv) “Coercive practice” a “party” refers to a participant in the procurement process or contract execution. is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;</p> <p>(v) “obstructive practice” is</p> <p>(a) deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede a Bank investigation into allegations of a corrupt, fraudulent, coercive or collusive practice; and/or threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation;</p> <p>or</p> <p>(b) acts intended to materially impede the exercise of the Bank’s inspection and audit rights provided for under sub-clause 3.1 (e) below.</p> <p>(b) will reject a proposal for award if it determines that the bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for the contract in question;</p> <p>(c) will cancel the portion of the loan allocated to a contract if it determines at any time that representatives of the Borrower or of a beneficiary of the loan engaged in corrupt, fraudulent, collusive, or coercive practices during the procurement or the execution of that contract, without the Borrower having taken timely and appropriate action satisfactory to the Bank to address such practices when they occur;</p> <p>(d) will sanction a firm or individual, including declaring ineligible, either indefinitely or for a stated period of time, to be awarded a Bank-financed contract if it at any time determines that the firm has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive or obstructive practices in competing for, or in executing, a Bank-financed contract; and</p> <p>(e) will have the right to require that a provision be included in bidding documents and in contracts financed by a Bank loan, requiring bidders, suppliers, and contractors and their sub-contractors to permit the Bank to inspect their accounts and records and other documents relating to the bid submission and contract performance and to have them audited by auditors appointed by the Bank.</p>
ITB 4.4	Foreign bidders are allowed to participate in bidding: Not Allowed
	B. Contents of Bidding Documents
ITB 7.1	<p>For clarification of bid purposes only, the Purchaser’s address is: Attention: Deputy Director - Procurement/OTS</p> <p>Address: University of Colombo, No. 94, CumaratungaMunidasa Mawatha, Colombo 3.</p> <p>Telephone:011 2595953 Facsimile Number: 011 2595953</p>

C. Preparation of Bids

ITB 11.1 (e)

- Bidder should have at least 5 years' experience in the relevant field
- Manufacturer should have at least 10 years' experience in manufacturing the proposed brand of the item. (for package 2 – 5 years' experience)
- All requirements should be compatible with the specification approved by the relevant national & international bodies.
- Bidder must submit the additional documents required in post qualification requirement, evaluation and qualification criteria, section iii

ITB14.3

The Bidders may quote following minimum quantities:

1. Supply of

No	Item	Qty
Package 01		
1.	SEM with EDS Detector	01
2.	FT-IR System	01
3.	Atomic Absorption Spectrometer	01
4.	PCR Machine	01
5.	Polyacrylamide Gel Electrophoresis Unit	01
6.	Agarose Gel Electrophoresis System	02
7.	UV Trans illuminator	01
8.	-80 °C Freezer	01
9.	Shaking water Bath	01
10.	Potentiostat / Galvanostat	01
11.	Compact spectrometer (UV-Vis-NIR)	01
Package 02		
1.	Multiparametric Flowcytometer	01
Package 03		
1.	Server – Type 01	01
2.	Server – Type 02	01
3.	Laptop Computers i5	15
4.	Laptop Computers i7	01
5.	Laptop Computers i7 – Type 2	06
6.	Desktop Computers i7	12
7.	Desktop Computers i3	20
8.	Desktop Computer i5	07
9.	Nonlinear Video-Editing Computer + Recorder + Production	01

		Switch	
	10.	UPS – Type 01	10
	11.	Online UPS – Type 02	01
	12.	Portable Hard Drive	04
	Package 04		
	1.	Cables and Omnidirectional Microphone	01
	2.	Interactive Pen Displays	03
	3.	Multimedia Projectors Portable	02
	4.	Multimedia Projector	01
	5.	Multimedia Projector Screen Type 1	01
	6.	Multimedia Projector Screen Type 2	01
	7.	Audience Response System Type 1 (200 Clickers)+ Software + Keypads	01
	8.	Audience Response System Type 2 (100 Clickers)+ Software + Keypads	01
	9.	Large Lecture Recording Camera With Camera Tripod	01
	10.	Web Camera	01
	11.	Document Camera	01
	12.	Video Recorder With a Mini Projector +Tripod	01
ITB15.1	The bidder shall quote the local expenditure in Sri Lankan Rupees.		
ITB17.3	Period of time the Goods are expected to be functioning (for the purpose of spare parts): not applicable		
ITB 18.1 (a)	Manufacture Authorization is : Required		
ITB 18.1 (b)	After sales service is : Required		
ITB 19.1	The bid shall be valid until: 29/11/2019		
ITB 20.1	(a) Bid shall include a Unconditional on demand Bid Security (issued by any commercial bank) included in Section IV Bidding Forms		
ITB 20.2	<p>The amount of the bid security shall be :</p> <p>Package 01: Rs. 675,000.00 (Rupees Six Hundred Seventy-Five Thousand) Package 02: Rs. 163,000.00 (Rupees One Hundred and Sixty-Three Thousand) Package 03: Rs. 100,000.00 (Rupees One Hundred Thousand) Package 04: Rs. 50,000.00 (Rupees Fifty Thousand)</p> <p>The validity period of the bid security shall be until: 27.12.2019</p> <p>The beneficiary of the bid security shall be : The Vice-Chancellor, University of Colombo</p>		

	D. Submission and Opening of Bids
ITB 22.2 (c)	<p>The inner and outer envelopes shall bear the following identification marks:</p> <p>Package 01: Supply, Delivery, Installation and Commissioning of Lab & Teaching Equipment - Faculty of Technology - AHEAD/NCB/RA1/FOT/2019/01</p> <p>Package 02: Supply, Delivery, Installation and Commissioning of Multiparametric Flowcytometer - Faculty of Medicine - AHEAD/NCB/DOR2/FOM/2019/01</p> <p>Package 03: Supply, Delivery, Installation and Commissioning of ICT Equipment for Faculty of Science, University of Colombo - AHEAD/NCB/ELTA-ELSE/F/SCI/2019/01</p> <p>Package 04: Supply, Delivery and Installation of Audio Visual and Video Equipment – Faculty of Science, University of Colombo - AHEAD/NCB/ELTS-ELSE/F/SCI/2019/02</p>
ITB 23.1	<p>For bid submission purposes, the purchaser’s address is:</p> <p>Attention: Deputy Director Procurement, AHEAD Project Address: University of Colombo,94, CumaratungaMunidasa Mawatha, Colombo 3. The deadline for the submission of bids is: Date: 29/08/2019 Time: 2.30 p.m.</p>
ITB 26.1	<p>The Bid Opening shall take place at: Address: Board Room University of Colombo, No 94, CumaratungaMunidasa Mawatha, Colombo 3. Date: 29/08/2019 Time: 2.30 p.m. (immediate after closing the bids)</p>
	E. Evaluation and Comparison of Bids
ITB 34.1	Domestic preference shall not be a bid evaluation factor.
ITB 35.3 (d)	<p>The adjustments shall be determined using the following criteria, from amongst those set out in Section III, Evaluation and Qualification Criteria:</p> <p>(a) Deviation in Delivery schedule: Not applicable (b) Deviation in payment schedule: Not applicable (c) The cost of major replacement components, mandatory spare parts and service: Not applicable</p>
ITB 35.4	The factors and methodology used for evaluation: Item Wise
ITB 35.5	Bidders shall be allowed to quote for one or more package/Items. (refer to Section III Evaluation and Qualification Criteria, for the evaluation methodology, if appropriate)-NA
ITB 37.2	Post-Qualification Requirements : Required (Submit the relevant documents)

Section III

Evaluation and Qualification Criteria

1. Evaluation Criteria (ITB 35.3 (d))

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

(a) Delivery schedule

Option 1

The Goods specified in the List of Goods are required to be delivered within the acceptable time range (after the earliest and before the final date, both dates inclusive) specified in Section VI, Delivery Schedule. No credit will be given to deliveries before the earliest date, and bids offering delivery after the final date shall be treated as non-responsive. Within this acceptable period, an adjustment, as specified in BDS Sub-Clause 35.3(d), will be added, for evaluation purposes only, to the bid price of bids offering deliveries later than the "Earliest Delivery Date" specified in Section VI, 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 to the bid price of bids offering deliveries later than the earliest delivery period specified in the Schedule of Requirements.

Option 3

The goods covered under this invitation are required to be delivered in partial shipments, as specified in the Schedule of Requirements. Bids offering deliveries earlier or later than the specified deliveries will be adjusted in the evaluation by adding to the bid price a factor equal to a percentage, specified in the Bid Data Sheet, of price per week of variation from the specified delivery schedule.

a) Deviation in payment schedule.

b) Bidders shall state their bid price for the payment schedule outlined in the Contract Data. Bids shall be evaluated on the basis of this base price. Bidders are, however, permitted to state an alternative payment schedule and indicate the reduction in bid price they wish to offer for such alternative payment schedule. The Purchaser may

consider the alternative payment schedule and the reduced bid price offered by the Bidder selected on the basis of the base price for the payment schedule outlined in the Contract Data.

Or

- (ii) The Contract Data stipulate the payment schedule specified by the Purchaser. If a bid deviates from the schedule and if such deviation is considered acceptable to the Purchaser, the bid will be evaluated by calculating interest earned for any earlier payments involved in the terms outlined in the bid as compared with those stipulated in the Contract Data, at the rate per annum specified in BDS Sub-Clause 35.3 (d).
- (c) Cost of major replacement components, mandatory spare parts, and service.
- (i) The list of items and quantities of major assemblies, components, and selected spare parts, likely to be required during the initial period of operation specified in the BDS Sub-Clause 17.3, is in the List of Goods. An adjustment equal to the total cost of these items, at the unit prices quoted in each bid, shall be added to the bid price, for evaluation purposes only. Add quantities

Or

- (a) The Purchaser will draw up a list of high-usage and high-value items of components and spare parts, along with estimated quantities of usage in the initial period of operation specified in the BDS Sub-Clause 17.3. The total cost of these items and quantities will be computed from spare parts unit prices submitted by the Bidder and added to the bid price, for evaluation purposes only.
- (d) Specific additional criteria

Other specific additional criteria to be considered in the evaluation and the evaluation method shall be detailed in BDS Sub-Clause 35.3(d)

1. Evaluation Criteria (ITB 35.4) – item wise

3. Multiple Contracts (ITB 35.5)

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

The Purchaser shall:

- (a) evaluate only lots or contracts that include at least the percentages of items per lot and quantity per item as specified in ITB Sub Clause 14.6
- (b) take into account:
 - (i) the lowest-evaluated bid for each lot and

(ii) the price reduction per lot and the methodology for its application as offered by the Bidder in its bid”

3. 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.

Qualification Criteria:

- (a) Bids may be submitted by any reputed supplier who has a 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 five years in the supply & Delivery of Equipment also technical and financial capability necessary to perform the contract.
- (c) Bids will be rejected as non-responsive if documentary evidence in proof of above has not been provided.
- (d) If an Agent submits bids on behalf of more than one Manufacturer, 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, all such bids will be rejected as non-responsive.
- (e) Bidders should possess the Certificate of Business Registration issued by a Governmental Authority/Registrar of Companies/Provincial Registrar of Business in the relevant category.
- (f) Bidders offering goods under their own brand names should provide along with their bids a current certification/s of quality, in conformity with ISO. Bids not complying with this requirement may be treated as no-responsive.

4. Domestic Preference (ITB 34.1)

If the Bidding Data Sheet so specifies, the Purchaser will grant a margin of preference to goods manufactured in Sri Lanka for the purpose of bid comparison, in accordance with the procedures outlined in subsequent paragraphs.

Bids will be classified in one of three groups, as follows:

- (a) Group A: Bids offering goods manufactured in Sri Lanka, for which (i) labor, raw materials, and components from within Sri Lanka account for more than thirty (30) percent of the price quoted; and (ii) the production facility in which they will be

manufactured or assembled has been engaged in manufacturing or assembling such goods at least since the date of bid submission.

(b) Group B: All other bids

All evaluated bids in each group will then be compared to determine the lowest evaluated bid of each group. Such lowest evaluated bids shall be compared with each other and if as a result of this comparison a bid from Group A, it shall be selected for the award.

If, as a result of the preceding comparison, the lowest evaluated bid is from Group B, all Group B bids will then be further compared with the lowest evaluated bid from Group A, after adding to the evaluated bid price of goods offered in the bid for Group B, for the purpose of further comparison only an amount equal to % of the bid price.

Section IV

Bidding 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:

No.:

To: **Vice Chancellor, University of Colombo**

We, the undersigned, declare that:

- a) We have examined and have no reservations to the Bidding Documents, including Addenda No.:
- 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

.....

- c) The total price of our Bid without VAT, including any discounts offered is:
.....(In words)
.....(In figures)
- d) The total price of our Bid including VAT, and any discounts offered is:
.....
- e) Our bid shall be valid for the period of time specified in ITB Sub-Clause 19.1, 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;

(k) 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.

(l) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.

Signed:

In the capacity of

Name:

Duly authorized to sign the bid for and on behalf of:

Dated on _____ day of _____, _____

Price Schedule

Serial No.	Item	Qty (Nos.)	All inclusive Unit Price (Excluding VAT) Rs.	Discount if any	All-inclusive Total Price (Excluding VAT) Rs.	VAT Rs.	All-inclusive Total Price (including VAT) Rs.
Package 01							
1.	SEM with EDS Detector	01					
2.	FT-IR System	01					
3.	Atomic Absorption Spectrometer	01					
4.	PCR Machine	01					
5.	Polyacrylamide Gel Electrophoresis Unit	01					
6.	Agarose Gel Electrophoresis System	02					
7.	UV Trans illuminator	01					
8.	-80 °C Freezer	01					
9.	Shaking water Bath	01					
10.	Potentiostat / Galvanostat	01					
11.	Compact spectrometer (UV-Vis-NIR)	01					
Package 02							
1.	Multiparametric Flowcytometer	01					
Package 03							
1.	Server – Type 01	01					
2.	Server – Type 02	01					
3.	Laptop Computers i5	15					

4.	Laptop Computers i7	01					
5.	Laptop Computers i7 – Type 2	06					
6.	Desktop Computers i7	12					
7.	Desktop Computers i3	20					
8.	Desktop Computer i5	07					
9.	Nonlinear Video-Editing Computer + Recorder + Production Switch	01					
10.	UPS – Type 01	10					
11.	Online UPS – Type 02	01					
12.	Portable Hard Drive	04					

Package 04

1.	Cables and Omnidirectional Microphone	01					
2.	Interactive Pen Displays	03					
3.	Multimedia Projectors Portable	02					
4.	Multimedia Projector	01					
5.	Multimedia Projector Screen Type 1	01					
6.	Multimedia Projector Screen Type 2	01					
7.	Audience Response System Type 1 (200 Clickers)+ Software + Keypads	01					
8.	Audience Response System Type 2 (100 Clickers)+ Software + Keypads	01					
9.	Large Lecture Recording Camera With Camera Tripod	01					

10.	Web Camera	01					
11.	Document Camera	01					
12.	Video Recorder With a Mini Projector +Tripod	01					

Total price without Taxes (in SLR)

Total price without Taxes (in words)

Vat Registration No:

Total Price with VAT:

Total Price with VAT (in words) :

Maintenance Charges as a percentage of cost after the warranty period :.....

Name of the Authorized person :

Signature of the Authorized person :

Date :

Bid 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: [name and address of Purchaser] Date: [Insert (by issuing agency) date] BID GUARANTEE No.: [Insert (by issuing agency) number] We have been informed that [Insert (by issuing agency) name of the Bidder; if a joint venture, list complete legal names of partners] (Hereinafter called "the Bidder") has submitted to you its bid dated [Insert (by issuing agency) date](Hereinafter called "the Bid") for the supply of [insert name of Supplier] under Invitation for Bids No. [Insert IFB number] ("The IFB").

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] hereby 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 Purchaser 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) our receipt of a copy of your notification to the Bidder that the Bidder was unsuccessful, 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(s) of authorized representative(s)]

Manufacturer's Authorization

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

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

No.: [insert number of bidding process]

To: [insert complete name of Purchaser]

WHEREAS

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

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

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

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

Title: [insert title]

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

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

Section V

Schedule of Requirements

Package 01

1.	SEM with EDS Detector – 01 Number				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make (please specify)				
	Model (please specify)				
	Country of Origin (please specify)				
	Country of Manufacturing (please specify)				
	Year of manufacture (please specify)				
	Operation Modes	Capable of working in high vacuum and low vacuum modes is required. The supply should include all necessary items like Sputter coater ,UPS ,etc.			
	Resolution (Secondary Electron)	3.0 nm in High Vacuum mode at 30k .			
		4.0 nm in low vacuum mode for observation of non-conducting samples without coating.			
	Accelerating Voltage	up to 30kV,continuously variable or in steps (Step size: 10V or smaller)			
	Probe Current	5 uA or more for better imaging in low vacuum mode			
	Magnification	10x to 300,000x or better (Real time magnification) and up to 1,000,000 x display magnification.			
	Electron Source	Tungsten			
	Vacuum System	Should give ultra clean dry fast vacuum using			
		Air cooled Turbo Molecular Pump backed by Rotary pump without a need for additional water circulation unit.			
		Built in safety system is required to protect SEM in an event of any power or Vacuum			

		failure.			
	Pressure range	High vacuum mode Vacuum level less than 5×10^{-4} Pa			
		Variable pressure range for chamber must be at least 400 Pa or more			
	Stage Specification	5 axis motorized stage			
	Stage movement	X = 120 mm or higher			
		Y = 120 mm or higher,			
		Z = 5 – 50 mm or higher,			
		Tilt = 0 to 70° or better			
		Rotation = 360° (continuous) .			
		Facility of stage co-ordinate storing and recall must be provided. Stage navigation software must be provided			
	Detectors	Should provide following detectors			
	Secondary Electron Detector	Secondary Electron Detector for use in high vacuum mode.			
	EDS (Energy Dispersive Spectrometer)				
	Detection	Capability to detect elements from B to U			
	X-ray Analytical working distance	8.0-10.0 mm or less to get High resolution imaging & Micro analysis at same working distance			
	Anti-vibration air table	Pneumatic vibration isolation system for better vibration isolation .			
	Apertures	Movable apertures			
	Digital Image resolution	32000X24000 Pixels			
	Integration and Averaging	Should provide a range of integration and averaging modes to reduce the noise.			
	Image format	Should enable saving of images to files of the following types: TIFF (8 or 16-bit, selectable by user) and/or BMP			
	Image Area selection	full frame, reduced raster, line X, line Y and spot modes, with independent setting of operational parameters such as line scan times, number of lines/frame etc.			

	Display	24-inch LCD			
	Simultaneous viewing of different detectors	.Image from different detectors could be viewed simultaneously in a split-up view area of the monitor.			
	Sample Chamber				
	Sample Size	Should accommodate up to 250mm diameter and 145mm height of sample size with a min sample load of 5 Kg			
	Chamber viewing system	IRCCD camera for observing stage and specimens Within the chamber without interfering with EM detectors.			
	Sample Chamber Ports	Should have minimum of 10 chamber & door ports for accommodating various detectors & accessories.			
	Sample Exchange	Should facilitate rapid specimen exchange			
	Computer	Latest Branded computer should be supplied			
	SEM Controller	Control panel integrated to keyboard for easy adjustment of important microscope parameters like Focus, magnification ,Scan rate, Brightness & contrast, astigmatism etc.			
	Gun Control	Software should support Auto gun control and gun alignment, auto bias and auto saturation of gun condition.			
		Automatic control of other features like focus, brightness and contrast etc.			
	Accessories required for SEM	1. Specimen preparation kit,			
		2.Sputter coater capable of doing Gold & carbon coating for Bio samples.			
		3.Should have necessary EDS interface system to enable elemental mapping & integration to SEM (EXTIF)			
		UPS 10KVA			
		Laser Printer			
		SEM consumables for 1 year operation			
	EDS Detector	Liquid Nitrogen free Silicon Drift Detector			

		(SDD)			
		Resolution should be Mn-K α should be equal to 130eV or better (lower in magnitude) and < 60 eV for C K α (conforming to ISO 15632:2002 specifications)			
		EDS Software Should have following Features			
		Quantitative and qualitative analysis			
		Dot mapping			
		Elemental line scans			
		Automatic spectrum acquisition at multiple pre-defined locations			
		Elemental mapping and save mapped images in different colour			
		Capability to add, subtract and otherwise manipulate elemental images			
		Please quote separately for 'standard' samples for quantitative analysis.			
		Detector area should be 10mm ²			
	Complete workable system	Instrument should be a fully workable system			
		Manufacturer should have at least 50 Nos of same series installations in SAARC countries. List of users with contact details should be attached with tender			
	Warranty	1 year warranty			
	Training	Complete training for operation, maintenance and calibration of instrument should be provided by the Manufacturer at installation site. Trainer should have sufficient knowledge on Technology as well as sample preparation.			
	Supply of Spare Parts	The supplier must agree to provide necessary spare parts at least for 10 years after installing the instrument.			

2.	FT-IR System – 1 Number				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make (please specify)				
	Model (please specify)				
	Country of Origin (please specify)				
	Country of Manufacturing (please specify)				
	Year of manufacture (please specify)				
	Sample Capability	Should be able to analysis solids and Liquids			
	Analysis Methods	Should be having ATR, Diffuse Reflectance and Transmission modes			
	Interferometer	Maintenance free interferometer with software controlling facility			
	Enclosure	System Should be sealed and desiccated			
	Spectral range	Should be able to cover 7800 - 350 cm ⁻¹			
	Spectral resolution	Should be less than 0.5 cm ⁻¹			
	Wavelength Accuracy	0.01 cm ⁻¹ or better			
	Signal to noise ratio	35000:1 peak to peak in one minute or better			
	IR Source	User replaceable Mid IR source			
	Detector	DTGS detector or better technology			
	Diagnostics	Environmental humidity and heat Diagnostic should be available			
		NIST traceable polystyrene should be available			
	System Purging	Facility should be available			
	Performance Verification	NIST traceable Polystyrene film should be available			
		System suitability tests for complete system performance assurance			
	Spectrometer interface	USB connection			
	Software	live spectral displays during data collection should be available			

		Should be able to do the spectral search and comparison with library			
		Information of detector, beam splitter, and source should be available for diagnostics and performance check			
		Data saving facility in spreadsheet formats should be available			
		Spectral comparison should be available to one or many spectra which is available in libraries or available previous done spectra			
	Libraries	System should have comprehensive standard library (minimum 1000 spectra) with the system			
		System software should provide the facility to generate own library			
	Warranty	Minimum 1 year for complete instrument			
		Minimum 2 years for source			
		Minimum 10 years for laser			
		Minimum 2 years for modulator			
	Accessories	ZnSe attenuated total reflection (ATR) should be supplied with the instrument			
		Latest branded computer with original windows operating software, intel core i5 processor, 500 GB Hard Disk, 2 GB RAM, 18" inch LED monitor			
		Laser printer			
		2 KVA UPS with minimum 15 minutes battery backup			
	Training	Comprehensive training (Minimum 3 days) should be provide by the supplier to operate the equipment efficiently, collect the data and interpret, safe handling of the equipment and minimum maintenance			
	Manuals and Documents	Manuals (User/ Operational and maintenance) of the system should be included			

		Letter of authority required from the manufacture.			
		Documentary evidence of requested specifications should be provided clearly by making on manufactures literature where necessary.			
		Suggesting item should be a world reputed brand with at least ten years satisfactory sales record including in Sri Lanka			
	Supplier capability	Bidder should have a very good after sales service facility with necessary repair and calibration tools. Details of the location of the after sales service division, name of the key contact person with contact nos should be specified			
		Minimum 3 installations of quoted FT-IR models should be available in Sri Lanka. User list with contact details and institute must be available with the tender document			
		Bidder should have Manufacturer trained after sales technical team to provide uninterrupted aftersales support			
		Training received by each technician/Engineer from Manufacturer should attach training certificates			
		Bidder should have acted as local representative for the quoted instrument at least for 2 years			
		The supplier needs to provide site recommendations for successful installation and handing over			

3.	Atomic Absorption Spectrophotometer – 1 number				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make (please specify)				
	Model (please specify)				
	Country of Origin (please specify)				
	Country of Manufacturing (please specify)				
	Year of manufacture (please specify)				
	Optics	Double beam, sealed optics			
		Reflective system with silica over coating mirrors			
	Monochromator	Wave length range – 180-900 nm or better			
		Automated self-calibration and wavelength selection			
		linear dispersion should be 0.5 nm/mm at 200 nm or better			
		Slit settings 0.1, 0.2, 0.5 and 1.0 nm band width			
		Ebert type monochromator should be available			
		Automated slit selection			
	Lamp support	At least six lamps with automated lamp selection with auto aligning facility			
		Facility to analyze minimum of 6 elements in sequence before moving to next sample			
		Automated pre warming of next lamp in the sequence			
		6 separate power lines for each and every lamp			
		Should be compatible with standard hollow cathode lamps available in the market			
	Back ground corrector	High energy quad line deuterium background correction			
	Internal Air Purge	A fitting should be available to supply of clean dry air to enable internal purging of the instrument.			
	Flame atomization system	Universal burner for Air/Acetylene and Nitrous oxide/Acetylene flames should provide			
		UV absorbing window for safety			

		Removable inert spray chamber made of solid, non-corrosive material			
		Adjustable nebulizer with inert capillary and corrosion resistant venturi			
		Automatic flame shutdown and flame sensor for safety			
	Flame control	Safety interlocks for monitor burner type, pressure relief bung, UV and heat absorbing window, flame operation, oxidant flow and mains power.			
		Ignition is prevented or flame is shut down if a fault is detected.			
	Software	Windows based software having analytical method information of each element and easy recalling of parameters			
		Automatic setting of flame type and gas flows from stored conditions			
		Analytical results should be presented in spreadsheet format for concentration, mean absorbance, mean background absorbance and relative standard deviation, etc.			
		Should be capable of storage of raw data, signal graphics, Method and sequence parameters for all samples in one worksheet file			
	Power supply	220 – 240 V AC, 50/60 Hz			
		All electrical equipment to be supplied should be suitable for use with 220 – 240 VAC, 50/60 Hz			
	Following accessories have to be supplied with the spectrometer	Burner for both Nitrous Oxide/Acetylene and air/acetylene			
		Air/Acetylene 100 mm burner			
		Nitrous Oxide gas cylinder, regulator with heater, including fitting, proper tubes & connectors			
		Acetylene gas cylinder, regulator including fittings, proper tubes & connectors			
		Silent air compressor			
		Gas Purification System for Acetylene and Air			

		Complete fume extraction system including hood, blower and ducting			
		Hydride vapor generator system with closed cell for Hg, open cell for As & Se , cell holder, two sets of all different sizes of clear connecting tubes			
		Argon gas cylinder, regulator including fittings, proper tubes & connectors for Vapor generation assembly			
		Branded core i5 computer and laser printer with necessary original software			
		3 KVA online UPS			
		Hollow cathode lamps for Ca, Mg, Cu, Mn, Zn, Al, As, Cd, Pb, Hg, Se, Cr, Ni, K, Fe			
		High precision Standard solutions for all the elements mentioned above			
	Other Mandatory Requirements	The quoted system should be upgradeable for Graphite Furnace Attachment on future requirements.			
		Minimum 5 installations of AAS systems should be available in working condition in Sri Lanka with proven analysis capabilities. Installations with user contact details should be provide with the tender document			
		Printed original literature from instrument manufacturer should be attached with the offer. All requested specifications should highlight and tag for easy reference			
		Letter of Authority from instrument manufacturer should be accompanied with the tender document by the certifying local agent in Sri Lanka. Offers not carrying authentic letter of authority will be rejected.			
		At least one year guarantee from the date of acceptance after satisfactory installation and commissioning of the instrument.			
		Complete set of operation and maintenance manuals.			
		Installation and commissioning of the			

		instrument should be done by the local agent			
		Complete training for operation, maintenance and calibration of instrument should be provided by the local agent at the installation site.			
		After sales services, calibration and maintenance work should be provided by the local agent.			
		Local representative should have proper after sales service and details of after sales service members should be submitted with the quotation. Copy of training certificates of after sales service members should be attached. Engineers who provide after sales service should be having minimum 5 years' experience for Ion Chromatography technology			
		Should provide past five years installations at government regularity authorities and other government institutes.			
4.	PCR Machine – 1 number				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make (please specify)				
	Model (please specify)				
	Country of Origin (please specify)				
	Country of Manufacturing (please specify)				
	Year of manufacture (please specify)				
	Capacity	The system should be a 96 well Thermal Cycler with 6 separate pettier blocks to provide independent temperature zones to run – six different assays with varying annealing temperatures at the same time.			
	Type	Bench top standard type for routine laboratory work			

	Temperature	Programmable heat lid cover from 40 degree to 105 degree centigrade for efficient PCR optimization			
	Time setting	Run up to 6 separate temperatures in the same plate with user defined time to determine the optimal annealing temperatures.			
	Calculation	On board Tm calculator facility to approximate the optimal annealing temperature.			
	Volume of tubes	The system should provide for Standard and fast run modes in a single instrument with the ability to use 0.2ml / 0.1ml PCR tubes or micro-well plates. The system should support PCR volumes ranging from 10 to 80 microliters.			
	Display	Mouse or stylus free navigation capability with VGA colour touch screen allowing for easy intuitive graphical user interface programming.			
	Memory of instrument	Choice of saving the methods up to 800 to the instrument or unlimited to a USB memory stick.			
	Scalability	Capability to interlink up to 11 PCR systems via single Ethernet hub.			
	Security	The system should have the ability to store most important methods on a memory stick.			
	Portability	The system should have a USB port to transfer methods from one machine to another. The system should allow easy product updates via USB port.			

	Certification	The machine should be duly certified / authorized for PCR process and the vendor should produce the certificate for the same.			
	Regents	All necessary optimized reagents and plastic ware for standard and fast thermal cycling should be made available by the vendor			
	Software	PCR machine should be supplied with required software for PCR			
	Installation	The instrument should install at the user site by a Certified Service Engineer without additional cost to the customer. The service engineer should perform all the instrument calibrations and verifies that the instrument is performing according to specifications by running a specified verification assay.			
	Full options	PCR Machine should have ability to programme for gradient PCR, Tough down PCR, multiplex PCR like modern PCR application with available chemical regents and primers.			
	Resistance to adverse condition	PCR machine should be made out of chemical and heat resistance materials			
	Inhibitors	Free from RNase, DNase and PCR inhibitors			
	Language settings and user manual	English			
	Power supply	220-230 V, 50 Hz			

	Power Guard	3kVA online UPS			
	Warranty	Min. 2 years manufactures warranty			
5	Polyacrylamide Gel Electrophoresis Unit – 1 number				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make (please specify)				
	Model (please specify)				
	Country of Origin (please specify)				
	Country of Manufacturing (please specify)				
	Year of manufacture (please specify)				
	Construction	Inner Gel Support - Molded ABS (Acrylonitrile Butadiene Styrene) Clamp assemblies - Molded polycarbonate Buffer chamber - 3/8" cast acrylic Gaskets - Extruded silicone			
	Shipping weight	7 lbs (3175 g)			
	Overall Size	170 mm (L) x 170 mm (W) x 180 mm (H)			
	Gel size	80 mm (L) x 100 mm (W) in pre-cast 100 mm (L) x 100 mm (W) in hand cast			
	Buffer tank minimum capacity	350ml			
	Maximum Sample Capacity	300 samples (6 combs, 50 samples each)			
	Buffer tank maximum capacity	850ml			
	Language settings and user manual	English			
	Power supply unit	220-230 V, 50 Hz			
	Power guard	USB power guard for electrical stability during functional mode.			
	Warranty	Min. 2 years manufactures warranty			

6. Agarose Gel Electrophoresis System – 2 numbers					
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make (please specify)				
	Model (please specify)				
	Country of Origin (please specify)				
	Country of Manufacturing (please specify)				
	Year of manufacture (please specify)				
	Construction	Multi-Function, Power Supply Unit, Multichannel Pipette, Compatible UV Transparent Electrophoresis Tank with protective lid			
	Type	Bench top, Mupidexu - New Generation Submarine Electrophoresis System			
	Over role size	183 mm(W) x 56 mm(H) x 164 mm(L)			
	Material Characteristics	UV transmitting (254 nmfi50 %, 312 nmfi80 %) plastic			
	Timer	Timer Operation 0 ~ 99 min. and continuous (Temporary shutdown)			
	Input Voltage	100 ~ 240 V (Internationally compatible), 50 / 60 Hz			
	Output Voltage	135 V – 100 V – 50 V – 25 V - 70 V - 35 V - 18 V Constant peak voltage for all (140 V) duty controlled			

	Combs	Different size of combs for PCR product Multiple number of sample loadable 13 wells: 9 mm pitch 26 wells: 4.5 mm pitch 4 cobs			
	Gel casting trays	130 mm (W) x 13 mm (H) x 59.5 mm (L) (Normal) 2 pieces 130 mm (W) x 13 mm (H) x 122 mm (L) (Large) 1 pieces Allows formation of different numbers of wells in a gel			
	Gel casting stand	Overall size 149 mm (W) x 20 mm (H) x 125 mm (L)			
	Accessories	Large tray 2 Small Tray 4 Gel maker set – 2 small trays, 1 large tray, 4 multi-channel combs and one gel maker stand Standard comb 2			
	Visualization of Bands	Permits users to directly observe bands by mounting the tank on the trans illuminator			
	Function	Ability to analyze DNA, RNA			
	Properties	Chemical proof, durable, user friendly			
	Type of output	Constant voltage or current with automatic crossover ,			
	Safety features:	No load detection, ground leak detection, sudden load change detection, overload/short circuit detection, auto power up after power failure.			
	Safety switch	Mini-switches in the Power Supply Without Safety lid, no output of power			
	Memory Function	Automaticity memory of Select Voltage , Timer Setting			

	Language settings and user manual	English			
	Power supply unit	220-230 V, 50 Hz			
	Power guard	UPS power guard for electrical stability during functional mode.			
	Warranty	Min. 2 years manufactures warranty			
7. UV Transilluminator – 1 number					
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make (please specify)				
	Model (please specify)				
	Country of Origin (please specify)				
	Country of Manufacturing (please specify)				
	Year of manufacture (please specify)				
	Type	Standard type			
	UV protection	Unique UV protective glass can be adjusted to the operator's visual angle and fixed providing better UV protection			
	Wavelength	Single/dual wavelength, single/variable intensity, UV/dual-light, The UV wavelength 254nm, 302 nm or 365nm			
	Functional mode	Different wavelength-selectable fit for different DNA dyes, such as SYBR-Green, SYPRO Orange. Also different wavelength for different experimental purpose: 302nm for detection and analysis of EB stained DNA/RNA, 365nm for gel incision or DNA preparation.			
	Work surface	Dual-light Trans illuminator providing two 20cm×20cm work surfaces.			
	Light filter	White light filter surface for coomassie blue			

		stained protein gels, methylene blue stained DNA gels, silver stained protein gels, auto radiographies, and microtiter plates.			
	Efficiency	Excellent transmission efficiency for certain wavelength ensures highly detective sensitivity and increase the capture ability for weak signals.			
	Construction	Rational structural design and high-quality UV lamp for unsurpassed UV intensity and outstanding irradiance uniformity. Small figure and airproof frame for the equipment life longer and maintenance easier.			
	Language settings and user manual	English			
	Power supply	220-230 V, 50 Hz			
	Power guard	UPS power guard for electrical stability during functional mode.			
	Warranty	Min. 2 years manufactures warranty			
8. -80 °C Freezer – 1 number					
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make (please specify)				
	Model (please specify)				
	Country of Origin (please specify)				
	Country of Manufacturing (please specify)				
	Year of manufacture (please specify)				
	CFC	It should be a model with CFC free refrigerants			
	Capacity	Capacity should be minimum 650L			

	Temperature range	Temperature Range shall be controllable from -50°C to -86°C			
	Ergonomic handling	There shall be latch and handle for ergonomic handling and one hand operation			
	Extra capacity	There should be down-feed evaporator and surge tank for extra capacity.			
	Doors	There will be two outer doors with four Inner access doors for product protection. Triple -sealing silicone door gasket will assure tight closing and no air leakage It should have non-CFC foamed-in-place polyurethane insulation door			
	Interior	It should have a painted interior			
	Caster Wheel	Heavy-duty dual wheel swivel locking casters should be available for easy handling			
	Voltage compensator	There should be an automatic voltage compensator to responds to high and low voltages			
	Outer surface	The outer surface should be powder coated for higher durability			
	Airflow	Front to back airflow with Removable, cleanable air filter will be available			
	Vacuum relief port	A vacuum relief port will allow easy re-entry after door openings			
	Cooling	Two fans should be available to provide maximum cooling for the compressor housing			
	Display	A microprocessor controller system will be available with one degree increments, with digital display. Eye Level Information center with digital display will assure at-a-Glance Monitoring			
	Alarm system	Both visual and audible alarms must give alerts for over and under temperature,			

		power fail, door ajar, and low battery conditions			
	Certification	The freezer should comply with UL Listed, ISO9001, CE standards			
	CO₂ cylinder	Price of the CO2 backup system with CO2 cylinder should be shown separately			
	Manufacture	Manufacture product catalogs with requested information should be supplied Manufacture authorization for the bidder to represent the given brand User reference list should be attached			
	After sale service	Bidder should have good after sales facility with trained technicians and parts available locally to carry out any service/ repair immediately			
	Language settings and user manual	English			
	Power supply	220-230 V, 50 Hz			
	Battery back-up	Battery back-up for the alarm monitoring system will be available, that will ensure sample protection UPS power guard for electrical stability during functional mode.			
	Warranty	Min. 5-10 years manufactures warranty			

9.	Shaking water bath – 1 number				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make (please specify)				
	Model (please specify)				
	Country of Origin (please specify)				

	Country of Manufacturing (please specify)			
	Year of manufacture (please specify)			
	Temperature range	Approximately 5 °C above ambient to + 100 °C, 0.1 °C increments		
	Temperature	Temperature stability of ± 0.1 °C, uniform heat distribution, fast heating up to the set temperature		
	Shaking motion	Adjustable, reciprocating		
	Shaking speed range	10 - 250 rpm, constant shaking frequency independent of the load		
	Shaking amplitude	15 - 25 mm		
	Shaking racks	Non corrosive, easily removable, one rack each for handling Erlenmeyer flasks, test tubes, falcon tubes and micro plates		
	Control panel	Microprocessor controlled		
	Display	Digital display, display of temperature and speed (rpm), display resolution of ± 0.1 °C		
	Time setting	min/hrs		
	Capacity	Min. 15 L		
	Safety features	Over temperature cut off		
	Exterior	Stainless steel, non-corrosive, preferably epoxy coated		
	Interior	Stainless steel, non-corrosive, easy to clean		
	Drain valve	Required		
	Power supply	220-230 V, 50 Hz		
	Battery back-up	Battery back-up for the alarm monitoring system will be available, that will ensure sample protection UPS power guard for electrical stability during functional mode.		
	Warranty	Min. 2 years' manufactures warranty (warranty extension should be quoted separately)		
	Language settings and user manual	English		

10.	Potentiostat/ Galvanostat – 1 number				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make (please specify)				
	Model (please specify)				
	Country of Origin (please specify)				
	Country of Manufacturing (please specify)				
	Year of manufacture (please specify)				
	Electrode connections	2, 3, and 4 electrode configurations should be available			
	Potential Range	± 10 V or better			
	Compliance voltage	± 20 V or better			
	Maximum current	±800 mA or higher			
	Current ranges	lower value 10 nA or lower			
		upper value 1 A or higher			
	Potential Accuracy	±0.2% or higher accuracy			
	Potential Resolution	0.3 µV or better			
	Current Accuracy	±0.2% or higher accuracy			
	Current Resolution	0.015% of current range of higher resolution			
	Input impedance	> 1 TOhm or higher			
	Potential bandwidth	500 kHz or higher			
	Impedance spectroscopy	Instrument should be able to do Electrochemical Impedance Spectroscopy			
		Frequency range should be 10 µHz - 30 MHz or better			
		Frequency resolution should 0.01% or better			
		Input voltage range should be +/- 10 V or better			
		Should be able to perform Mott-Schottky, Admittance, Dielectric, Nyquist and Bode data presentations			
		Should provide comprehensive software for perform Electrochemical Impedance Spectroscopy			
	Measurement and Analyses	The instrument and control software should capable of doing following analysis and take required measurement			

		Potentiostatic and galvanostatic Volumetric analyses			
		Potentiostatic and galvanostatic Chrono methods			
		Potentiostatic and galvanostatic Sampled dc voltammetry			
		Measure various charge/discharge properties of Batteries and Capacitors/Super-Capacitors			
		Impedance Measurement (from μHz to MHz range with a linear, logarithmic and square not distribution			
		Software upgradation should be free of cost for the life time of instrument			
		Software should be freely installable to any number of computers including laptops			
	Optical bench/light source simulator	Should be able to perform measurements on photovoltaic devices. Should allow for positioning of light source and detector.			
	Reference electrode	One Aqueous Ag/AgCl reference electrode with Double Junction and one saturated calomel reference electrode should supply with the instrument			
	Counter Electrodes	One Pt wire or/and Pt sheet counter electrode should supply with the instrument			
	Working Electrodes	2 nos of 3.0 mm Glassy carbon electrodes should supply with the instrument			
	Basic Electrochemical cell setup <i>(All should include)</i>	Base plate with stand rod Cell Vessel Minimum volume of 20 ml Gas inlet and overflow tubes Electrolyte solution			
	Computer	Branded computer with core i7 processor, 4 GB RAM, 1 TB Hard Disk, genuinely licensed Microsoft Windows 8 or later should supply with the instrument			
	Printer	Laser printer should supply with the instrument			
	UPS	2 KVA UPS should supply for the protection of the instrument			
	Computer interface	USB 2.0 or USB 3.0 support			
	Control software	The instrument should bundled with a control			

		software which capable of taking all the measurements required for the analysis with the same software			
	Warranty	Minimum of 2 years of warranty and on-site service is required			
	Documentations and Supply qualifications	Original or Printed literatures should be attached with tender document with highlighted specifications and tagged to reference			
		Letter of Authority from manufacture should be submit with the tender document			
		Minimum 5 installations of installations of quoted model should be available in working condition in Sri Lanka with proven analysis capabilities. Installations with user contact details should be provide with the tender document			
		Bidders should have established after sales service and minimum of 10-year experience for supply and maintaining similar type of Electrochemical Work stations. Supplied instrument list should be attached with tender document. Type of instrument supplied, institute name and end user with contact details should be clearly mention in the instrument list.			
		Manufactures independently provide a written confirmation that they will provide their services and support even they change the local agent in Sri Lanka with the sign of most senior manager which is responsible for Sri Lanka market			
		Operational manual and Software manual should submit in the installation of the instrument			
		Complete and satisfactory training should be offered to instrument users for operation, maintenance and calibration of instrument by Local Agent/Manufacturer.			
		Manufacture should agree to provide spare parts at least 10 years after installing the instrument			

		Bidders should submit documentary evidence for company registration, year of company registration, No of staff (In the payroll and EPF paid), and experience of after sales staff.			
		Bidders should submit documentary evidence for working capital of past 3 years and should have positive working capital for last 3 years.			

11.	Compact spectrometer (UV-Vis-NIR) – 1 number				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make (please specify)				
	Model (please specify)				
	Country of Origin (please specify)				
	Country of Manufacturing (please specify)				
	Year of manufacture (please specify)				
	DETECTOR				
	Pixels	3648 or above			
	2nd order 3rd order rejection filters	YES			
	Detector collection lens (Cylindrical)	Yes			
	SPECTROSCOPIC				
	Wavelength range:	At least 200-1100 nm (wider if possible)			
	Integration time:	4 ms to 20 s or better (continuous), 10 μs to 4 ms or better (shutter)			
	Dynamic range:	2000:1 or better for a single acquisition			
	Signal-to-noise ratio:	300:1 or better			

	Grating:	At least 300 lines per mm (or better, specify)			
	Slit:	5 µm wide (interchangeable if possible)			
	Optical resolution:	<1.0 nm FWHM (average)			
	Stray light:	specify			
	Fiber optic connector:	SMA 905			
	ELECTRONICS				
	Strobe functions:	programmable strobe signals (single/continuous)			
	Interfaces:	USB 2.0, RS-232; I ² C			
	Temperature:	-10° to 50° C Operation			
	Humidity:	0% – 90% non-condensing			
	Software	YES with drivers			
	ACCESSORIES				
	Fiber-optic probe	Compatible fiber optic probe with optimized transmission in 200-1100 nm wavelength range			
		Core diameter of fiber 1000 µm			
		With compatible collimating lens accessory for the fiber probe			
		With compatible cosine corrector accessory for the fiber probe			
		With compatible integrating sphere			
	Adjustable optical band pass filter using high-pass and low-pass Linear variable filters should be included	Range 300 nm to 750 nm			

		Filter holding accessory should be included (should be compatible with spectrometer probe)			
		1 m long 1 mm core diameter fiber optic connector with SMA 905 connectors (X2) for both ends should be included			
		50 m long 1 mm core diameter fiber optic connector with SMA 905 connectors (X2) for both ends should be included			
	Cuvette holder with four collimating lenses (SMF 905 connectors) should be included	Path length 1 cm			
		Collimating lens wavelength range 200-2000 nm or higher			
	Warranty	Minimum of 2 years warranty			

Delivery Schedule

Serial No.	Description of Goods	Earliest Delivery	Bidder's response
01.	Supply Delivery Installation and commissioning of Lab & Teaching Equipment for Faculty of Technology, University of Colombo. AHEAD/NCB/RA1/FOT/2019/01 Delivery Destination: Faculty of Technology, University of Colombo, Kaduwela Road, Malabe.	8 to 10 weeks ***	
02	All requirements should be compatible with the specification approved by the relevant national & International bodies.		
03	University has the right to increase or decrease the quantity of the item.		

*** From the Date of Letter of award

Package 02

	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make	Please Specify			
	Model	Please Specify			
	Country of Origin	Please Specify			
	Country of Manufacturing	Please Specify			
	Year of manufacture	Please Specify			
	Features	equipped with lasers of following wavelengths and power outputs: a) 488nm Solid State or Air cooled blue laser b) 633-642nm Solid State or Air cooled red laser c) 405nm Violet Laser			
		Minimum capability of at least 8 fluorescent colors and 10 parameters (4 from Blue+2 from Red + 2from Violet along with FSC & SSC). For each parameter the flow cytometer should be capable of measuring area, height and width.			
		The excitation and collection optics of both lasers should be fixed requiring no alignment to be done by operator			
		High quality quartz flow cell.			
		Automated to start daily routine procedures, such as startup, shutdown, and routine cleaning cycles with the help of clinical software.			
		Able to acquire at least 10,000 events per second. The sample carryover must be			

		≤0.1%.			
		compensation capability between all fluorescence channels with online as well as post-acquisition manual and auto-compensation features.			
		digital signal processing with dynamic range of at least 18 bit acquisition or more.			
		operable at 220-230V and 50Hz, single phase. All recommended safety measures against power fluctuations, surges and dips etc. shall be provided			
		bio-hazard containment system and proper waste collection and management system.			
		The details of the data management system and software used should be clearly indicated.			
		The company should provide appropriate starter kits for analyzing 100 samples.			
		IVD approved for 6 color assays			
		The unit shall be provided with a compatible uninterrupted power supply (UPS) and state of the art, compatible computer system with latest configuration along with DVD-RW devices, USB and network ports.			
		able to set threshold (discriminators) on any parameter and should have ability to set multiple thresholds.			
		able to analyze samples with a minimum volume of 50 ul.			
		The system should be validated for adult and pediatric use.			
	Standard Information Should be submitted by the Bidder	<ol style="list-style-type: none"> 1. Year of introduction of the model offered 2. Original Equipment Manufacturer (OEM) certificate 			

		<p>3. Detailed illustrated technical literature</p> <p>4. Number of equipment sold and reference installation sites</p> <p>5. Technical support at site for life of the equipment</p> <p>Standards certification. Quality and adaptability of equipment offered.</p>			
	Training	<p>should provide training to the end users/technical staff on operation and maintenance of the machine and ensure competence of the said staff in handling the unit. The facilities available, competence of the trainers and the plan for such training shall be clearly stated and submitted with the tender documents.</p>			
		<p>The Company should have a full-fledged flow cytometry training center, with access to the end users, providing regular training courses on research & clinical applications with document proof of providing such trainings in the past.</p>			
	User Manual	<p>Complete and detailed set of operation, service and repair manuals in English shall be supplied with the unit</p>			
	Warranty	<p>full parts and labor basis against manufacturing defect for a period of not less than 12 months from the date of successful commissioning. Full details of the warranty shall be submitted with the bid, including details of what facilities the bidder has locally to maintain the equipment during and after the validity of the warranty</p>			
	After Sales Services	<p>The bidder shall also quote separately for a comprehensive service and maintenance agreement including both preventive</p>			

		<p>maintenance as well as corrective maintenance including full parts and labor for a period of five years after the one year warranty period.</p>			
		<p>The supplier shall hold the responsibility to monitor the environment and accommodation requirements of the equipment as per the manufacturers recommendations and shall provide necessary instructions to the customer.</p>			
		<p>The supplier shall be responsible for maintaining an uninterrupted service during a major breakdown of the machine.</p>			
	Spare Parts	<p>Consumables including reagents, quality controls, vacutainers etc., and spare parts required for 5 years should be quoted separately and price fixed for the same period (subject to exchange rate variations)</p>			

Delivery Schedule

Serial No.	Description of Goods	Earliest Delivery	Bidder's response
01.	Supply, Delivery, Installation and Commissioning of Multiparametric Flowcytometer for Faculty of Medicine, University of Colombo AHEAD/NCB/DOR2/FOM/2019/01 Delivery Destination: Faculty of Medicine, University of Colombo, Kinsey Road, Colombo 08.	8 to 10 weeks ***	
02	All requirements should be compatible with the specification approved by the relevant national & International bodies.		
03	University has the right to increase or decrease the quantity of the item.		

*** From the Date of Letter of award

Package 03

1.	Server Type 01– 01 Number				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make	please specify			
	Model	please specify			
	Country of Origin	please specify			
	Country of Manufacturing	please specify			
	Year of manufacture	please specify			
	Type	Rack Mountable			
	Form Factor	2U			
	Processors	Support up to 2 no of Processors			
	Processor Model	Intel Xeon-Silver 4114 (2.2GHz/10-core/85W), 13.75MB L3 Cache			
	No of Processors	1			
	Chipset	Intel C621 Chipset			
	Memory	64GB or above Should support to expand memory capacity up to 768GB (24 DIMM Slots) or higher with DDR4-2666MT/s RDIMM Memory.			
	Drive bay	Chassis with at least 8 Hot plug SFF SAS/SATA HDD bays Supports Optional NVMe Drive Bay options			
	Hard Disk Upgrade	Specify			
	Maximum Internal Storage	Server should support maximum storage capacity of 72.0TB with hot plug SFF SAS HDDs or 60TB with Hot plug SFF SATA HDDs with optional rear SFF drive cage. Support Storage Capacity 153.6TB with Hot Plug SFF NVMe PCIe SSD			
	RAID Controller	12G SAS Modular controller with 2GB Non-Volatile Cache (Battery backed or any other			

	Technology)			
RAID Configuration	RAID 0, 1, 5, 6, 10, 50, 60, 1 ADM, 10 ADM (Advanced Data Mirroring) Mixed Mode (RAID logic drives and HBA physical drives simultaneously)			
Storage Requirement	Hot-swappable 3x 1TB SAS 7.2K RPM drives			
CD ROM Drive	SATA DVD-RW Optical Drive			
Expansion Slots	Specify			
Interfaces	1 front (USB 3.0), 2 rear (USB 3.0), 2 internal(secure) 1 Micro SD, , 2 USB 2.0 front via media Bay, 1xVGA Port, 1xDisplay Port			
Network Interface	Should include 4 x 1 Gb Ports			
Power Supply	Dual, Hot-Plug, Redundant Power Supply(1+1), 800W			
Remote Management	Should have 1GB Dedicated Port			
Accessories	Should provide Rack Mounting KIT			
Operating System	Support Windows Server 2019, 2016, VMWare vSphere 6.0 U3, RHEL 7.6w/Kbase, SLES 12 SP4 and 15 SP1			
Predictive Analytics tool	Cloud-based analytics tool that predicts and prevents the infrastructure issues that lead to application disruptions, wasted IT staff time and missed business opportunities.			
Industry Standard Compliance	ACPI 6.1 Compliant, PCIe 3.0 Compliant, WOL Support,IPMI 2.0			
Security	UEFI Secure Boot and Secure Start support, TPM (Trusted Platform Module) 2.0 option Support , Secure Recovery - Recover critical firmware to known good state on detection of compromised firmware			
Warranty	3 Years onsite comprehensive warranty			
Manufacturer Authorization	Original Manufacturer Authorization is Compulsory			

2.	Server Type 02 – 1 Number				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make	please specify			
	Model	please specify			
	Country of Origin	please specify			
	Country of Manufacturing	please specify			
	Year of manufacture	please specify			
	Form factor	Mini tower server			
	Processor	Intel Xeon E-2126G 3.3GHz, 12M cache, 6C/6T, turbo (80W)			
	Memory	16GB 2666MT/s DDR4 ECC UDIMM			
	Storage controllers	RAID Controller			
	Drive bays	Up to 4 x 3.5" cabled bays			
	HDD	2 x 1TB 7.2K RPM SATA 6Gbps 3.5in Cabled Hard Drive			
	I/O & ports	Networking options: 2 X 1GbE, Front Ports: 1x USB 3.0, 1x micro USB 2.0 management port Rear Ports: 2x USB 3.0, 4x USB 2.0, VGA, serial connector Internal USB: 1x internal USB 3.0			
	PCIe Slots:	1x8 Gen3 (x16 connector) FH/HL 1x8 Gen3 (x8 connector) FH/HL 1x4 Gen3 (x8 connector) FH/HL 1x1 Gen3 (x1 connector) FH/HL			
	Power supplies	Single cabled 365W PSU			
	Dimensions	Please Specify			
	Integrations and connections	Integrations: Microsoft System Center VMware vCenter BMC Truesight (available from BMC) Red Hat Ansible Connections: Nagios Core & Nagios XI Micro Focus Operations Manager i (OMi) IBM Tivoli Netcool/OMNibus			
	Security	TPM 1.2/2.0 optional Cryptographically signed firmware Silicon Root of Trust, Secure Boot, Secure Erase			
	Supported operating systems	Certify XenServer , Citrix XenServer , Microsoft			

		Windows Server with Hyper-V , Red Hat Enterprise Linux , Ubuntu Server , SUSE Linux Enterprise Server , VMware ESXi ,			
	Manufacturer authorization	Manufacturer authorization letter should be provided.			
	Warranty	3 Years Hardware warranty			
	Support	3 Years On-site Support			
	Spare Parts Availability	Original Equipment Manufacturer Should maintain all required Spares in an independent Part Depot Located within Colombo City			
3.	Laptop Computers i5 – 15 Numbers				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make	please specify			
	Model	please specify			
	Country of Origin	please specify			
	Country of Manufacturing	please specify			
	Year of manufacture	please specify			
	Processor	Intel Core i5-8 th Gen 2.2GHz(Turbo up to 2.7GHz).			
	Hard Drive	1TB 5400RPM			
	RAM	8 GB, DDR 4			
	Monitor	15.6 inches LED backlit display, 1366 by 768 resolution			
	Wi-Fi	Gigabit Dual-Band 802.11AC ultra-fast Wi-Fi			
	Ports	2 x USB 3.0, 1 x USB 2.0, 1 x HDMI to VGA Converter is required. RJ 45			
	Warranty	3 year (Comprehensive) Warranty			

4.	Laptop Computers i7, Type i– 1 Number				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make	please specify			
	Model	please specify			
	Country of Origin	please specify			
	Country of Manufacturing	please specify			
	Year of manufacture	please specify			
	Processor	Intel core i7 8 th Gen			
	RAM	16GB			
	RAM Speed	DDR 4			
	Hard Drive	256 SSD + 1 GB (or better)			
	Graphics Card	On - Board			
	Ports	HDMI + HDMI to VGA converter 1 Type C; 3 USB 3.0 , RJ 45			
	Display	Touch Display 14"			
	Operating System	Windows 10 Pro, 64 bit			
	Warranty	3 yrs onsite comprehensive			
5.	Laptop Computers i7 ,Type ii – 6 Numbers				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make	please specify			
	Model	please specify			
	Country of Origin	please specify			
	Country of Manufacturing	please specify			
	Year of manufacture	please specify			
	Display	15.6"			
	Operating Systems	Windows 10 professional			
	Processor	Core i7 8 th Gen			
	Memory	16GB DDR4			
	VGA	Separate 2GB or better			
	Hard Drive	1 TB 5400RPM			

	Ports	USB 3.1, HDMI, RJ45, headphone/microphone			
	Other	HD Web Cam, Inbuilt microphone and speakers, DVD drive			
	Warranty	Minimum 3 years comprehensive Manufacturer's warranty			
6.	Desktop Computers i7- 12 Numbers				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make	please specify			
	Model	please specify			
	Country of Origin	please specify			
	Country of Manufacturing	please specify			
	Year of manufacture	please specify			
	Processor	Intel Core i7-8700 '3.2GHz / 4.6GHz'			
	RAM	8 GB DDR4-2666			
	HDD	1 TB, 7.2 K rpm, SATA 6.0 Gb/s			
	Optical disk drives	DVD-RW			
	USB ports	4 USB 2.0: 4 USB 3.1 Gen 1			
	Monitor	18-20" or large TFT LCD Screen			
	Network/communication ports				
	Power	HDMI 2.0 or VGA			
	Audio/multimedia Type	Please Specify			
	Networking/communications	Ethernet 'RJ-45' : Integrated 1 Gigabit Ethernet			
	Physical specifications				
	Dimensions 'W x H x D' : Chassis	Please Specify			
	Warranty	3 Years Comprehensive, Onsite			

7.	Desktop Computers i3– 20 Numbers				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make	please specify			
	Model	please specify			
	Country of Origin	please specify			
	Country of Manufacturing	please specify			
	Year of manufacture	please specify			
	Processor	Intel Core i3 8th Generation			
	Memory (RAM)	8GB			
	RAM Type	DDR 4 SDRAM			
	Hard disk size	500GB SATA, 7200 RPM			
	Graphics	Inter HD 4600			
	Optical Devices	DVD +/- RW (internal)			
	Mouse	2 Buttons optical Scroll mouse			
	Keyboard	USB Keyboard			
	Expansion options				
	<u>Ports</u>	VGA Headphone / Speakers RJ-45 (10/100/1000) 6 USB ports (at least 3 USB 3.0 should be in front)			
	<u>Display</u>	Monitor Type - 18.5" TFT LCD Aspect ratio 16:9			
	<u>Chassis</u>	Please Specify			
	Warranty	3 Years comprehensive manufacturer's warranty			

8.	Desktop Computers i5– 07 Numbers				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make	please specify			
	Model	please specify			
	Country of Origin	please specify			
	Country of Manufacturing	please specify			
	Year of manufacture	please specify			
	Processor	Intel® Core i5™,			
	Display	15 inch			
	RAM	4GB or higher DDR4 RAM			
	HDD	1 TB or higher Hard Drive			
	Operating System	Windows 10 Professional 64bit			
	Warranty	3 Years comprehensive manufacturer's warranty			
9.	Nonlinear Video-Editing Computer + Recorder + Production Switch – 01 Number				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make	please specify			
	Model	please specify			
	Country of Origin	please specify			
	Country of Manufacturing	please specify			
	Year of manufacture	please specify			
	Processor	Intel Core i7 8700k			
	Storage	2 x 2 TB HDD 250 GB SSD			
	Memory	64 GB			
	Monitors	2 x 22" full HD displays			
	Accessories	Keyboard mouse 1 TB portable HDD			
	UPS	1200 KVA UPS with 15 min backup time at full load			

	Warranty	3 years (comprehensive)*			
	Recorder				
	Video Inputs	1 x SDI			
	Video Outputs	2 x SDI, HDMI			
	Power	1 x Ethernet with Power over Ethernet			
	Computer Interface	1 x USB 2.0 type C			
	Audio Inputs	SDI(16 channels)			
	Audio Outputs	SDI(16 channels), HDMI(8 channels)			
	Warranty	1 year (comprehensive)			
	Production Switcher				
	Video Inputs	4 x HDMI(2 channel audio) & 4 x SDI(3G, 2 channel audio)			
	Audio Inputs	2 x XLR			
	SDI Program Output	5 (10-bit)			
	SDI Multi View Output	1			
	HDMI Multi View Output	1			
	Warranty	1 year (comprehensive)			
10.	UPS Type I – 10 Numbers				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make	please specify			
	Model	please specify			
	Country of Origin	please specify			
	Country of Manufacturing	please specify			
	Year of manufacture	please specify			
	Capacity (Linear Load)	1KVA/900W			
	UPS Topology	Online			
	Input				
	Voltage Range	Half Load: 115-295 Full Load: 145-295			
	Power Factor	>= 0.98			
	Frequency	50 Hz+/-10%			
	Output				
	Voltage	208/220/230/240VAC			
	Voltage Regulation	+/- 1%			

	Harmonic Distortion	<= 3% (Linear Load); <= 5% (Non-Linear Load)			
	Battery				
	Recharge Time	90% capacity after 8 hours charging			
	Backup	7 - 10 min at 70% load			
	Others				
	Noise Level	<50dB (1m)			
	Warranty	1 year Comprehensive warranty			
	After Warranty Services				
	Charge Per Year	Please Specify			
	No. of Services	Please Specify			
11.	UPS Type II(Online UPS) – 10 Numbers				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make	please specify			
	Model	please specify			
	Country of Origin	please specify			
	Country of Manufacturing	please specify			
	Year of manufacture	please specify			
	Capacity (Linear Load)	1KVA/900W			
	UPS Topology	Online			
	Input				
	Voltage Range	Half Load: 115-295 Full Load: 145-295			
	Power Factor	>= 0.98			
	Frequency	50 Hz+/-10%			
	Output				
	Voltage	208/220/230/240VAC			
	Voltage Regulation	+ - 1%			
	Waveform	Pure sine wave			
	Harmonic Distortion	<= 3% (Linear Load); <= 5% (Non-Linear Load)			
	Battery				
	Recharge Time	90% capacity after 8 hours charging			
	Backup	7 - 10 min at 70% load			
	Others				
	Noise Level	<50dB (1m)			

	WARRANTY	1 year Comprehensive warranty			
	After Warranty Services				
	Charge Per Year	Please Specify			
	No. of Services				
	Any other relevant matter	Please specify			
12.	Portable Hard Drive – 04 Numbers				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make	please specify			
	Model	please specify			
	Country of Origin	please specify			
	Country of Manufacturing	please specify			
	Year of manufacture	please specify			
	Storage Capacity	1 TB			
	Connection Interface	1 x USB 3.1 Gen 1 (USB Micro-B)			

Delivery Schedule

Serial No.	Description of Goods	Earliest Delivery	Bidder's response
01.	<p>Supply, Delivery, Installation and Commissioning of ICT Equipment for Faculty of Science, University of Colombo AHEAD/NCB/ELTA-ELSE/F/SCI/2019/01 Delivery Destination: Faculty of Science, University of Colombo.</p> <p>Supply of Laptop Computers i7 – Type 2 Delivery Destination: Department of English, ELTU, University of Colombo.</p>	<p>8 to 10 weeks</p> <p>***</p>	
02	<p>All requirements should be compatible with the specification approved by the relevant national & International bodies.</p>		
03	<p>University has the right to increase or decrease the quantity of the item.</p>		

*** From the Date of Letter of award

Package 04

1.	Cables and Omnidirectional Microphone – 01 Number				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make	Please Specify			
	Model	Please Specify			
	Country of Origin	Please Specify			
	Country of Manufacturing	Please Specify			
	Year of manufacture	Please Specify			
	Connector	tiny XLR-3			
	Frequency response	40 Hz – 20 kHz			
	Max. sound pressure level	140 dB			
	Dynamic range	111 dB (A)			
	Sensitivity	10 mV/Pa			
	Warranty	1 year (comprehensive)*			
	Cables				
	4 x 100 m SDI (3G) cable 2 x 10 m HDMI cable (High Speed 4K) 2 x 20 m HDMI cable (High Speed 4K)				
2.	Interactive Pen Displays– 3 Numbers				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make	Please Specify			
	Model	Please Specify			
	Country of Origin	Please Specify			
	Country of Manufacturing	Please Specify			
	Year of manufacture	Please Specify			
	Screen Size	15.6 inch			

	Display Resolution	Up to 3840 x 2160			
	Pressure Level	8192			
	Compatibility	Windows, Mac			
	Viewing Angle	176° (88°/88°) H, (88°/88°) V			
	Pen				
	Pen pressure levels	8100, both pen tip and eraser			
	Tilt Range	60 degrees (±60 levels)			
	Type	Pressure-sensitive, cordless, battery-free			
	Switches	Tip switch, 2 side switches, eraser			
	Nibs	10 (6 standard, 4 felt)			
	Pen Box/Holder	Required			
	Pen Stand	Required			
	Resolution	5000 lpi			
	Warranty	1 years (comprehensive)*			
3.	Multimedia projectors - Portable – 2 Numbers				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make	Please Specify			
	Model	Please Specify			
	Country of Origin	Please Specify			
	Country of Manufacturing	Please Specify			
	Year of Manufacture	Please Specify			
	Native Resolution	1920 x 1080(16:9 aspect ratio)			
	Brightness	3000 lumens			
	Contrast	20,000:1			
	Input Connectors	2 x HDMI, VGA			
	Features	Works with the latest laptops and media players — the standard in connectivity, for digital video and audio in one cable			
	Projection Distance	Coverage: ~1.5m - 6.6m			
	Screen Size	60" - 180" (129 x 81cm - 388 x 242cm)			
	Digital Zoom Magnification	2x			
	Warranty	1 years (comprehensive)*			

4.	Multimedia Projector – 1 Number				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make	Please Specify			
	Model	Please Specify			
	Country of Origin	Please Specify			
	Country of Manufacturing	Please Specify			
	Year of manufacture	Please Specify			
	Features	Minimum Specification			
	Imaging System	DLP or LCD			
	Image	Zoom -1 - 1.2 x (Optical) Colour Light Output -3,500 Lumens White Light Output - 3,500 Lumens Resolution – 1020 x 768 XGA Native Aspect Ratio - 4:3 Contrast Ratio - 20,000:1 Lamp Hours - 5,000 hours (Normal) 10,000 hours (ECO)			
	Connectivity	HDMI and VGA			
	Warranty	One Year Comprehensive			
5.	Multimedia projector screen Type 1– 1 Number				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make	Please Specify			
	Model	Please Specify			
	Country of Origin	Please Specify			
	Country of Manufacturing	Please Specify			
	Year of manufacture	Please Specify			
	Type	Electric Motorized Screen			
	Fabrics	Matte White			

	Size	70X70 inc			
	Feature	Remote controller			
6.	Multimedia projector screen Type 2 – 01 Number				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make	Please Specify			
	Model	Please Specify			
	Country of Origin	Please Specify			
	Country of Manufacturing	Please Specify			
	Year of manufacture	Please Specify			
	Size	84" x 48" Aspect Ratio 16:9			
	Type	Manual pull down Retractable Projector Projection Screen			
7.	Audience Response System Type 1 (200 Clickers)+ Software + Keypads – 01 Number				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make	Please Specify			
	Model	Please Specify			
	Country of Origin	Please Specify			
	Country of Manufacturing	Please Specify			
	Year of manufacture	Please Specify			
	Type	software works with Microsoft PowerPoint 2007, 2010, 2013 & 2016			
	Features	<ul style="list-style-type: none"> • Multiple Choice Questions & Graphs • Up to 30 Multiple Choice Options per Question • Real-time Updating Graph Objects • Animated Countdown Timers 			

		<ul style="list-style-type: none"> • Automatically Sync Music to Countdown Timers • Track Results by Individual • Data Exports & Reports in Word and Excel • Individual & Team Competitions • Ranking & Prioritization • Demographics & Participant Grouping • On-The-Fly & Pre-programmed Data Slicing • Participant Weighting for Shareholder & Delegate Voting • On-The-Fly Questions • Multi-axis Bubble, Scatter and Radar Charts • Multi-Response Questions • Create and Merge "Snapshots" of Meeting Data 			
	Hardware (200 Keypads)				
	Type	12 button audience response keypads			
	Features	<ul style="list-style-type: none"> • Multi-digit response entry • Multiple selections for prioritization questions • Responses are internally timestamped for speed-scoring • Up to 500 keypads can be used with each interface • 75 channels for large groups or multiple classrooms • Supports remote locations over TCP/IP • Powered by industry leading wireless keypad technology • Multiple RF Channels with 			

		<ul style="list-style-type: none"> integrated WiFi avoidance 2.4 GHz radio frequency allows keypads to be used worldwide Frequency hopping spread spectrum technology for improved reliability 			
8.	Audience Response System Type 2 (100 Clickers)+ Software + Keypads – 01 Number				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response	Comments	
			Yes	No	
	Make	Please Specify			
	Model	Please Specify			
	Country of Origin	Please Specify			
	Country of Manufacturing	Please Specify			
	Year of manufacture	Please Specify			
	Type	software works with Microsoft PowerPoint 2007, 2010, 2013 & 2016			
	Features	<ul style="list-style-type: none"> Multiple Choice Questions & Graphs Up to 30 Multiple Choice Options per Question Real-time Updating Graph Objects Animated Countdown Timers Automatically Sync Music to Countdown Timers Track Results by Individual Data Exports & Reports in Word and Excel Individual & Team Competitions Ranking & Prioritization Demographics & Participant Grouping On-The-Fly & Pre-programmed Data Slicing 			

		<ul style="list-style-type: none"> • Participant Weighting for Shareholder & Delegate Voting • On-The-Fly Questions • Multi-axis Bubble, Scatter and Radar Charts • Multi-Response Questions • Create and Merge "Snapshots" of Meeting Data 			
	Hardware (100 Keypads)				
	Type	12 button audience response keypads			
	Features	<ul style="list-style-type: none"> • Multi-digit response entry • Multiple selections for prioritization questions • Responses are internally timestamped for speed-scoring • Up to 500 keypads can be used with each interface • 75 channels for large groups or multiple classrooms • Supports remote locations over TCP/IP • Powered by industry leading wireless keypad technology • Multiple RF Channels with integrated WiFi avoidance • 2.4 GHz radio frequency allows keypads to be used worldwide • Frequency hopping spread spectrum technology for improved reliability 			

9.	Large Lecture Recording Camera With Camera Tripod – 01 Number				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make	Please Specify			
	Model	Please Specify			
	Country of Origin	Please Specify			
	Country of Manufacturing	Please Specify			
	Year of manufacture	Please Specify			
	Image sensor	1" CMOS sensor			
	Effective sensor resolution	8 MP			
	Smallest illumination required	1.7 lux at 1/30 Shutter Speed 0.1 lux at 1/2 Shutter Speed			
	White balance range	2000 K to 15,000 K			
	Lens: Focal length	25.5 mm to 380 mm			
	Lens: Optical zoom	15 x			
	Lens: Maximum aperture	f/2.8 to f/4.5			
	Lens: Filter size	58 mm			
	Lens: Control ring	Focus/ Zoom			
	Lens: Image Stabilization	Optical			
	Lens: Focus	Automatic and Manual			
	Shutter speed	1/24 s to 1/2000 s			
	Built-in neutral density filter optical density	Please specify			
	Built-in microphone	Stereo			
	Recording media	2 x card slots (SD preferred)			
	Broadcast System Compatibility	NTSC			
	Recording Modes	XF-AVC 4:2:0 8-Bit: 3840 x 2160p at 23.98/29.97/59.94 fps (160 Mb/s) 1920 x 1080p at 23.98/29.97/59.94 fps (17 to 45 Mb/s) 1920 x 1080i at 59.94 fps (45 Mb/s) With H.264 4:2:2: compression 3840 x 2160p at 24/30/60 fps (150 Mb/s)			

		1920 x 1080p at 24/30/60 fps (17 to 35 Mb/s) 1280 x 720p at 60 fps (8 Mb/s) 1280 x 720p at 30 fps (4 Mb/s)			
Frame Rates		UHD: 30 fps to 120 fps 1080p: 30 fps to 120 fps 720p: 30 fps to 120 fps			
Audio Recording		2-Channel 16-Bit 48 kHz AAC Audio 4-Channel 16-Bit 48 kHz LPCM Audio			
IP access		FTP, MP4, H.264: 1920 x 1080 at 50i, (4.0 to 9.0 Mb/s)			
Video connectors		1 x Mini-HDMI Output 1 x BNC (3G-SDI) Output			
Audio connectors		2 x 3-Pin XLR Input 1 x 3.5 mm Stereo Mic Level Input 1 x 3.5 mm Stereo Headphone Output			
Other I/O		1 x USB (or mini USB) 1 x RJ45 LAN 1 x 2.5 mm LANC Control Wireless: Wi-Fi control			
Built-in display		3.5 " LCD touch screen			
EVP display		0.24" with 1,500,000 dots			
Power supply		Please specify			
Battery type		Please specify			
Battery backup time		Please specify			
Operating temperature		Please specify			
Weight and dimension		Please specify			
Accessories		Carrying case 64 GB memory card			
Warranty		1 years comprehensive			
Video Tripod					
Type		Heavy Duty Video			
Head Type		Fluid Drag Pan Head			
Height		72 "			
Max load		up to 4 kg			

	Head Included	Yes			
	Tube diameter	1"			
	Material	Aluminum alloy			
	Working height	25 " - 72			
	Tripod travel case	Required			
10.	Web Camera – 01 Number				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make	Please Specify			
	Model	Please Specify			
	Country of Origin	Please Specify			
	Country of Manufacturing	Please Specify			
	Year of manufacture	Please Specify			
	Features	Webcam with a wide field of view and HD digital zoom			
11.	Document Camera – 01 Numbers				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make	Please Specify			
	Model	Please Specify			
	Country of Origin	Please Specify			
	Country of Manufacturing	Please Specify			
	Year of manufacture	Please Specify			
	Camera	8 Megapixel			
	Max Resolution	1920 x 1080			
	Lens	Autofocus			
	Shooting Area	12" x 10"			
	Live video streaming	30fps HD			
	Generic Interfaces	SD Card / USB ports / HDMI OUT/ VGA			

		IN&OUT			
	Adjustable Free-Angle Camera Head & Arm	Yes			
	Zoom	20 X			
	Warranty	1 years (comprehensive)			
12.	Document Camera – 01 Numbers				
	Minimum Technical Specification	Mandatory Specification	Bidder's Response		Comments
			Yes	No	
	Make	Please Specify			
	Model	Please Specify			
	Country of Origin	Please Specify			
	Country of Manufacturing	Please Specify			
	Year of manufacture	Please Specify			
	Capture	Capture 4k/24p/30p video			
	Resolution	24MP			
	Image stabilization	Yes			
	Mic w/ manual audio controls	Yes			
	External Mic	Yes			
	Connectivity/Broadcast	WiFi/NFC2			
	Zoom	52X			
	Extra battery	1			
	Carrying case	1			
	External memory	128GB high performance memory card			
	Touch screen	Yes			
	Tripod mount	Yes			
	Warranty	1 years (comprehensive)			
	Tripod				
	Make (please specify)				
	Model (please specify)				
	Country of Origin (please specify)				
	Country of Manufacturing (please specify)				
	Year of manufacture (please specify)				

Material	Aluminum			
Extended height	160 cm			
Folded height	34 cm (max)			
Max load	10 Kg			
Adjustable leg locks	Yes			
Pan and tilt lock	Yes			
Fluid head	Yes			
Carrying case	Yes			
Warranty	1 years (comprehensive)			

Delivery Schedule

Serial No.	Description of Goods	Earliest Delivery	Bidder's response
01.	<p>Supply, Delivery, Installation and Commissioning of Audio Visual and Video Equipment for Faculty of Science, University of Colombo AHEAD/NCB/ELTA-ELSE/F/SCI/2019/02</p> <p>Delivery Destination: Faculty of Science, University of Colombo.</p>	<p>8 to 10 weeks</p> <p>***</p>	
02	<p>All requirements should be compatible with the specification approved by the relevant national & International bodies.</p>		
03	<p>University has the right to increase or decrease the quantity of the item.</p>		

*** From the Date of Letter of award

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: Vice Chancellor, University of Colombo
CC 1.1 (m)	The Project Site(s)/Final Destination(s) is/are: Faculty of Technology, University of Colombo
CC 8.1	For notices, the Purchaser's address shall be: Attention: Deputy Director Procurement Address: University of Colombo, 94, CumaratungaMunidasaMawatha., Colombo 3. Telephone: 011-2595953
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: Payment shall be made in Sri Lanka 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.
CC 17.1	A Performance Security - 10% of the contract price within fourteen (14) days of the notification of contract award issued by a commercial Bank operating in Sri Lanka and approved by the central Bank of Sri Lanka. This Performance Security should be valid 28 days beyond the warranty period.
CC 17.4	The Performance Security shall be discharged by the Purchaser and returned to the Supplier not later than twenty-eight (28) days following the date of Completion of the Supplier's performance obligations under the Contract, including any warranty obligations.
CC 26.1	The liquidated damage shall be: 1% of the contract value per week
CC 26.1	The maximum amount of liquidated damages shall be: 10 % of the Contract Value