

Republic of the Philippines **Cebu Pormal University** Osmeña Boulevard, Cebu City

PHILIPPINE BIDDING DOCUMENTS

(As Harmonized with Development Partners)

Procurement of Equipment for the Upgrading of the CNU Science Laboratory

> Sixth Edition July 2020

Preface

These Philippine Bidding Documents (PBDs) for the procurement of Goods through Competitive Bidding have been prepared by the Government of the Philippines for use by any branch, constitutional commission or office, agency, department, bureau, office, or instrumentality of the Government of the Philippines, National Government Agencies, including Government-Owned and/or Controlled Corporations, Government Financing Institutions, State Universities and Colleges, and Local Government Unit. The procedures and practices presented in this document have been developed through broad experience, and are for mandatory use in projects that are financed in whole or in part by the Government of the Philippines or any foreign government/foreign or international financing institution in accordance with the provisions of the 2016 revised Implementing Rules and Regulations of Republic Act No. 9184.

The Bidding Documents shall clearly and adequately define, among others: (i) the objectives, scope, and expected outputs and/or results of the proposed contract or Framework Agreement, as the case may be; (ii) the eligibility requirements of Bidders; (iii) the expected contract or Framework Agreement duration, the estimated quantity in the case of procurement of goods, delivery schedule and/or time frame; and (iv) the obligations, duties, and/or functions of the winning bidder.

Care should be taken to check the relevance of the provisions of the PBDs against the requirements of the specific Goods to be procured. If duplication of a subject is inevitable in other sections of the document prepared by the Procuring Entity, care must be exercised to avoid contradictions between clauses dealing with the same matter.

Moreover, each section is prepared with notes intended only as information for the Procuring Entity or the person drafting the Bidding Documents. They shall not be included in the final documents. The following general directions should be observed when using the documents:

- a. All the documents listed in the Table of Contents are normally required for the procurement of Goods. However, they should be adapted as necessary to the circumstances of the particular Procurement Project.
- b. Specific details, such as the "*name of the Procuring Entity*" and "*address for bid submission*," should be furnished in the Instructions to Bidders, Bid Data Sheet, and Special Conditions of Contract. The final documents should contain neither blank spaces nor options.
- c. This Preface and the footnotes or notes in italics included in the Invitation to Bid, Bid Data Sheet, General Conditions of Contract, Special Conditions of Contract, Schedule of Requirements, and Specifications are not part of the text of the final document, although they contain instructions that the Procuring Entity should strictly follow.

- d. The cover should be modified as required to identify the Bidding Documents as to the Procurement Project, Project Identification Number, and Procuring Entity, in addition to the date of issue.
- e. Modifications for specific Procurement Project details should be provided in the Special Conditions of Contract as amendments to the Conditions of Contract. For easy completion, whenever reference has to be made to specific clauses in the Bid Data Sheet or Special Conditions of Contract, these terms shall be printed in bold typeface on Sections I (Instructions to Bidders) and III (General Conditions of Contract), respectively.
- f. For guidelines on the use of Bidding Forms and the procurement of Foreign-Assisted Projects, these will be covered by a separate issuance of the Government Procurement Policy Board.

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Glossary of Acronyms, Terms, and Abbreviations

ABC – Approved Budget for the Contract.

BAC – Bids and Awards Committee.

Bid – A signed offer or proposal to undertake a contract submitted by a bidder in response to and in consonance with the requirements of the bidding documents. Also referred to as *Proposal* and *Tender*. (2016 revised IRR, Section 5[c])

Bidder – Refers to a contractor, manufacturer, supplier, distributor and/or consultant who submits a bid in response to the requirements of the Bidding Documents. (2016 revised IRR, Section 5[d])

Bidding Documents – The documents issued by the Procuring Entity as the bases for bids, furnishing all information necessary for a prospective bidder to prepare a bid for the Goods, Infrastructure Projects, and/or Consulting Services required by the Procuring Entity. (2016 revised IRR, Section 5[e])

BIR – Bureau of Internal Revenue.

BSP – Bangko Sentral ng Pilipinas.

Consulting Services – Refer to services for Infrastructure Projects and other types of projects or activities of the GOP requiring adequate external technical and professional expertise that are beyond the capability and/or capacity of the GOP to undertake such as, but not limited to: (i) advisory and review services; (ii) pre-investment or feasibility studies; (iii) design; (iv) construction supervision; (v) management and related services; and (vi) other technical services or special studies. (2016 revised IRR, Section 5[i])

CDA - Cooperative Development Authority.

Contract – Refers to the agreement entered into between the Procuring Entity and the Supplier or Manufacturer or Distributor or Service Provider for procurement of Goods and Services; Contractor for Procurement of Infrastructure Projects; or Consultant or Consulting Firm for Procurement of Consulting Services; as the case may be, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.

CIF – Cost Insurance and Freight.

CIP – Carriage and Insurance Paid.

CPI – Consumer Price Index.

DDP – Refers to the quoted price of the Goods, which means "delivered duty paid."

DTI – Department of Trade and Industry.

EXW – Ex works.

FCA – "Free Carrier" shipping point.

FOB – "Free on Board" shipping point.

Foreign-funded Procurement or Foreign-Assisted Project– Refers to procurement whose funding source is from a foreign government, foreign or international financing institution as specified in the Treaty or International or Executive Agreement. (2016 revised IRR, Section 5[b]).

Framework Agreement – Refers to a written agreement between a procuring entity and a supplier or service provider that identifies the terms and conditions, under which specific purchases, otherwise known as "Call-Offs," are made for the duration of the agreement. It is in the nature of an option contract between the procuring entity and the bidder(s) granting the procuring entity the option to either place an order for any of the goods or services identified in the Framework Agreement List or not buy at all, within a minimum period of one (1) year to a maximum period of three (3) years. (GPPB Resolution No. 27-2019)

GFI – Government Financial Institution.

GOCC – Government-owned and/or –controlled corporation.

Goods – Refer to all items, supplies, materials and general support services, except Consulting Services and Infrastructure Projects, which may be needed in the transaction of public businesses or in the pursuit of any government undertaking, project or activity, whether in the nature of equipment, furniture, stationery, materials for construction, or personal property of any kind, including non-personal or contractual services such as the repair and maintenance of equipment and furniture, as well as trucking, hauling, janitorial, security, and related or analogous services, as well as procurement of materials and supplies provided by the Procuring Entity for such services. The term "related" or "analogous services" shall include, but is not limited to, lease or purchase of office space, media advertisements, health maintenance services, and other services essential to the operation of the Procuring Entity. (2016 revised IRR, Section 5[r])

GOP – Government of the Philippines.

GPPB – Government Procurement Policy Board.

INCOTERMS – International Commercial Terms.

Infrastructure Projects – Include the construction, improvement, rehabilitation, demolition, repair, restoration or maintenance of roads and bridges, railways, airports, seaports, communication facilities, civil works components of information technology projects, irrigation, flood control and drainage, water supply, sanitation, sewerage and solid waste management systems, shore protection, energy/power and electrification facilities, national

buildings, school buildings, hospital buildings, and other related construction projects of the government. Also referred to as *civil works or works*. (2016 revised IRR, Section 5[u])

LGUs – Local Government Units.

NFCC – Net Financial Contracting Capacity.

NGA – National Government Agency.

PhilGEPS - Philippine Government Electronic Procurement System.

Procurement Project – refers to a specific or identified procurement covering goods, infrastructure project or consulting services. A Procurement Project shall be described, detailed, and scheduled in the Project Procurement Management Plan prepared by the agency which shall be consolidated in the procuring entity's Annual Procurement Plan. (GPPB Circular No. 06-2019 dated 17 July 2019)

PSA – Philippine Statistics Authority.

SEC – Securities and Exchange Commission.

SLCC – Single Largest Completed Contract.

Supplier – refers to a citizen, or any corporate body or commercial company duly organized and registered under the laws where it is established, habitually established in business and engaged in the manufacture or sale of the merchandise or performance of the general services covered by his bid. (Item 3.8 of GPPB Resolution No. 13-2019, dated 23 May 2019). Supplier as used in these Bidding Documents may likewise refer to a distributor, manufacturer, contractor, or consultant.

UN – United Nations.

Notes on the Invitation to Bid

The Invitation to Bid (IB) provides information that enables potential Bidders to decide whether to participate in the procurement at hand. The IB shall be posted in accordance with Section 21.2 of the 2016 revised IRR of RA No. 9184.

Apart from the essential items listed in the Bidding Documents, the IB should also indicate the following:

- a. The date of availability of the Bidding Documents, which shall be from the time the IB is first advertised/posted until the deadline for the submission and receipt of bids;
- b. The place where the Bidding Documents may be acquired or the website where it may be downloaded;
- c. The deadline for the submission and receipt of bids; and
- d. Any important bid evaluation criteria (*e.g.*, the application of a margin of preference in bid evaluation).

The IB should be incorporated in the Bidding Documents. The information contained in the IB must conform to the Bidding Documents and in particular to the relevant information in the Bid Data Sheet.



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Office of the Bids and Awards Committee Telephone No.: (+63 32) 254 1452 local 141 or 125 Email: cnubacsec@gmail.com

INVITATION TO BID FOR Procurement of Equipment for the Upgrading of the CNU Science Laboratory

- 1. The *Cebu Normal University*, through the *General Appropriations Act of 2021* intends to apply the sum of Fifty-two Million Two Hundred Sixty Thousand Pesos (Php 52, 260,000.00) for the Procurement of Equipment for the Upgrading of the Science Laboratory; Lot 1 - *Physics Laboratory (Center for Computational and Experimental Physics) No. 20-11-439, Seventeen Million Four Hundred Twenty Thousand Pesos (Php 17,420,000.00); Lot 2 - Biology Laboratory (Advanced Laboratory in Biological Sciences) No. 20-11-440, Seventeen Million Four Hundred Twenty Thousand Pesos (Php 17,420,000.00); Lot 3 – Chemistry Laboratory (Center for Applied Chemistry No. 20-11-441, Seventeen Million Four Hundred Twenty Thousand Pesos (Php 17,420,000.00)* being the ABC to payments under the contract for each lot. Bids received in excess of the ABC for each lot shall be automatically rejected at bid opening.
- 2. The *Cebu Normal University* now invites bids for the above Procurement Project. Delivery of the Goods is required by *Sixty (60) Calendar Days*. Bidders should have completed, within *two (2) years* from the date of submission and receipt of bids, a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II (Instructions to Bidders).
- 3. Bidding will be conducted through open competitive bidding procedures using a nondiscretionary "*pass/fail*" criterion as specified in the 2016 revised Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 9184.

Bidding is restricted to Filipino citizens/sole proprietorships, partnerships, or organizations with at least sixty percent (60%) interest or outstanding capital stock belonging to citizens of the Philippines, and to citizens or organizations of a country the laws or regulations of which grant similar rights or privileges to Filipino citizens, pursuant to RA No. 5183.

4. Prospective Bidders may obtain further information from *Cebu Normal University* and inspect the Bidding Documents at the address given below during *office hours* from 8:00 A.M. to 5:00 P.M.

5. A complete set of Bidding Documents may be acquired by interested Bidders on *December 2 to 22, 2020* from the given address and website(s) *and upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of Fifteen Thousand Pesos (Php 15,000.00)].* The Procuring Entity shall allow the bidder to present its proof of payment for the fees *if it will be presented in person, by facsimile, or through electronic means.*

[NOTE: For lot procurement, the maximum fee for the Bidding Documents for each lot shall be based on its ABC, in accordance with the Guidelines issued by the GPPB; provided that the total fees for the Bidding Documents of all lots shall not exceed the maximum fee prescribed in the Guidelines for the sum of the ABC of all lots.]

- 6. The *Cebu Normal University* will hold a Pre-Bid Conference¹ on *December 9, 2020 at 9:00 A.M.* through video conferencing *via ZOOM Platform*, which shall be open to prospective bidders.
- 7. Bids must be duly received by the BAC Secretariat through manual submission at the office address indicated below, on or before *December 22, 2020 @ 8:30 A.M.* Late bids shall not be accepted.
- 8. All Bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in **ITB** Clause 14.
- 9. Bid opening shall be on *December 22, 2020, 9:00 A.M.* at the given address below. Bids will be opened in the presence of the bidders' representatives who choose to attend the activity.
- 10. The *Cebu Normal University* reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of the 2016 revised IRR of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.
- 11. For further information, please refer to:

Ann S. Ancajas BAC Secretariat's Office Cebu Normal University Osmeña Boulevard, Cebu City 6000 Philippines ajsancajas95@yahoo.com (+63 32) 254 1452 local 141 or 125

12. You may visit the following websites:

For downloading of Bidding Documents: <u>www.philgeps.gov.ph</u> www.cnu.edu.ph

¹ May be deleted in case the ABC is less than One Million Pesos (PhP1,000,000) where the Procuring Entity may not hold a Pre-Bid Conference.

November 28, 2020

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Dr. ANGELINE M. POGOY BAC Chairperson

Notes on the Instructions to Bidders

This Section on the Instruction to Bidders (ITB) provides the information necessary for bidders to prepare responsive bids, in accordance with the requirements of the Procuring Entity. It also provides information on bid submission, eligibility check, opening and evaluation of bids, post-qualification, and on the award of contract.

1. Scope of Bid

The Procuring Entity, *Cebu Normal University* wishes to receive Bids for the *Procurement of Equipment for the Upgrading of Science Laboratory: Lot 1 - Physics Laboratory (Center for Computational and Experimental Physics) with identification number 20-11-439; Lot 2 - Biology Laboratory (Advanced Laboratory in Biological Sciences) with identification number 20-11-440; Lot 3 – Chemistry Laboratory (Center for Applied Chemistry with identification number 20-11-441.*

[Note: The Project Identification Number is assigned by the Procuring Entity based on its own coding scheme and is not the same as the PhilGEPS reference number, which is generated after the posting of the bid opportunity on the PhilGEPS website.]

The Procurement Project (referred to herein as "Project") is composed of *three (3) lots*, the details of which are described in Section VII (Technical Specifications).

2. Funding Information

- 2.1. The GOP through the source of funding as indicated below for 2021 in the amount of *Fifty-two Million Two Hundred Sixty Thousand Pesos*.
- 2.2. The source of funding is:

[If an early procurement activity, select one and delete others:]

a. NGA, the National Expenditure Program.

3. Bidding Requirements

The Bidding for the Project shall be governed by all the provisions of RA No. 9184 and its 2016 revised IRR, including its Generic Procurement Manuals and associated policies, rules and regulations as the primary source thereof, while the herein clauses shall serve as the secondary source thereof.

Any amendments made to the IRR and other GPPB issuances shall be applicable only to the ongoing posting, advertisement, or **IB** by the BAC through the issuance of a supplemental or bid bulletin.

The Bidder, by the act of submitting its Bid, shall be deemed to have verified and accepted the general requirements of this Project, including other factors that may affect the cost, duration and execution or implementation of the contract, project, or work and examine all instructions, forms, terms, and project requirements in the Bidding Documents.

4. Corrupt, Fraudulent, Collusive, and Coercive Practices

The Procuring Entity, as well as the Bidders and Suppliers, shall observe the highest standard of ethics during the procurement and execution of the contract. They or through an agent shall not engage in corrupt, fraudulent, collusive, coercive, and obstructive practices defined under Annex "I" of the 2016 revised IRR of RA No. 9184 or other integrity violations in competing for the Project.

5. Eligible Bidders

5.1. Only Bids of Bidders found to be legally, technically, and financially capable will be evaluated.

5.2.

- a. Foreign ownership exceeding those allowed under the rules may participate pursuant to:
 - i. When a Treaty or International or Executive Agreement as provided in Section 4 of the RA No. 9184 and its 2016 revised IRR allow foreign bidders to participate;
 - ii. Citizens, corporations, or associations of a country, included in the list issued by the GPPB, the laws or regulations of which grant reciprocal rights or privileges to citizens, corporations, or associations of the Philippines;
 - iii. When the Goods sought to be procured are not available from local suppliers; or
 - iv. When there is a need to prevent situations that defeat competition or restrain trade.
- 5.3. Pursuant to Section 23.4.1.3 of the 2016 revised IRR of RA No.9184, the Bidder shall have an SLCC that is at least one (1) contract similar to the Project the value of which, adjusted to current prices using the PSA's CPI, must be at least equivalent to:
 - a. For the procurement of Non-expendable Supplies and Services: The Bidder must have completed a single contract that is similar to this Project, equivalent to at least fifty percent (50%) of the ABC.
- 5.4. The Bidders shall comply with the eligibility criteria under Section 23.4.1 of the 2016 IRR of RA No. 9184.

6. Origin of Goods

There is no restriction on the origin of goods other than those prohibited by a decision of the UN Security Council taken under Chapter VII of the Charter of the UN, subject to Domestic Preference requirements under **ITB** Clause 18.

7. Subcontracts

7.1. The Bidder may subcontract portions of the Project to the extent allowed by the Procuring Entity as stated herein, but in no case more than twenty percent (20%) of the Project.

The Procuring Entity has prescribed that:

- a. Subcontracting is not allowed.
- 7.2. *[If Procuring Entity has determined that subcontracting is allowed during the bidding, state:]* The Bidder must submit together with its Bid the documentary requirements of the subcontractor(s) complying with the eligibility criteria stated in **ITB** Clause 5 in accordance with Section 23.4 of the 2016 revised IRR of RA No. 9184 pursuant to Section 23.1 thereof.
- 7.3. *[If subcontracting is allowed during the contract implementation stage, state:]* The Supplier may identify its subcontractor during the contract implementation stage. Subcontractors identified during the bidding may be changed during the implementation of this Contract. Subcontractors must submit the documentary requirements under Section 23.1 of the 2016 revised IRR of RA No. 9184 and comply with the eligibility criteria specified in **ITB** Clause 5 to the implementing or end-user unit.
- 7.4. Subcontracting of any portion of the Project does not relieve the Supplier of any liability or obligation under the Contract. The Supplier will be responsible for the acts, defaults, and negligence of any subcontractor, its agents, servants, or workmen as fully as if these were the Supplier's own acts, defaults, or negligence, or those of its agents, servants, or workmen.

8. Pre-Bid Conference

The Procuring Entity will hold a pre-bid conference for this Project on the specified date and time through videoconferencing as indicated in paragraph 6 of the **IB**.

9. Clarification and Amendment of Bidding Documents

Prospective bidders may request for clarification on and/or interpretation of any part of the Bidding Documents. Such requests must be in writing and received by the Procuring Entity, either at its given address or through electronic mail indicated in the **IB**, at least ten (10) calendar days before the deadline set for the submission and receipt of Bids.

10. Documents comprising the Bid: Eligibility and Technical Components

- 10.1. The first envelope shall contain the eligibility and technical documents of the Bid as specified in Section VIII (Checklist of Technical and Financial Documents).
- 10.2. The Bidder's SLCC as indicated in **ITB** Clause 5.3 should have been completed within *Two (2) Years* prior to the deadline for the submission and receipt of bids.
- 10.3. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must

be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. Similar to the required authentication above, for Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.

11. Documents comprising the Bid: Financial Component

- 11.1. The second bid envelope shall contain the financial documents for the Bid as specified in Section VIII (Checklist of Technical and Financial Documents).
- 11.2. If the Bidder claims preference as a Domestic Bidder or Domestic Entity, a certification issued by DTI shall be provided by the Bidder in accordance with Section 43.1.3 of the 2016 revised IRR of RA No. 9184.
- 11.3. Any bid exceeding the ABC indicated in paragraph 1 of the **IB** shall not be accepted.
- 11.4. For Foreign-funded Procurement, a ceiling may be applied to bid prices provided the conditions are met under Section 31.2 of the 2016 revised IRR of RA No. 9184.
- 11.5. *[Include if Framework Agreement will be used:]* Financial proposals for single or multi-year Framework Agreement shall be submitted before the deadline of submission of bids as prescribed in the **IB**. For multi-year Framework Agreement, evaluation of the financial proposal during this stage is for purposes of determining eligibility and whether or not such financial proposal is within the ABC.

12. Bid Prices

- 12.1. Prices indicated on the Price Schedule shall be entered separately in the following manner:
 - a. For Goods offered from within the Procuring Entity's country:
 - i. The price of the Goods quoted EXW (ex-works, ex-factory, exwarehouse, ex-showroom, or off-the-shelf, as applicable);
 - ii. The cost of all customs duties and sales and other taxes already paid or payable;
 - iii. The cost of transportation, insurance, and other costs incidental to delivery of the Goods to their final destination; and
 - iv. The price of other (incidental) services, if any, listed in e.

- b. For Goods offered from abroad:
 - i. Unless otherwise stated in the **BDS**, the price of the Goods shall be quoted delivered duty paid (DDP) with the place of destination in the Philippines as specified in the **BDS**. In quoting the price, the Bidder shall be free to use transportation through carriers registered in any eligible country. Similarly, the Bidder may obtain insurance services from any eligible source country.
 - ii. The price of other (incidental) services, if any, as listed in Section VII (Technical Specifications).
- 12.2. *[Include if Framework Agreement will be used:]* For Framework Agreement, the following should also apply in addition to Clause 12.1:
 - a. For a single year Framework Agreement, the prices quoted by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to variation or escalation on any account. Price schedules required under Clause 12.1 shall be submitted with the bidding documents.
 - b. For a multi-year Framework Agreement, the prices quoted by the Bidder during submission of eligibility documents shall be the ceiling and the price quoted during mini-competition must not exceed the initial price offer. The price quoted during call for mini-competition shall be fixed during the Bidder's performance of that Call-off and not subject to variation or escalation on any account. Price schedules required under Clause 12.1 shall be submitted with the bidding documents.

13. Bid and Payment Currencies

- 13.1. For Goods that the Bidder will supply from outside the Philippines, the bid prices may be quoted in the local currency or tradeable currency accepted by the BSP at the discretion of the Bidder. However, for purposes of bid evaluation, Bids denominated in foreign currencies, shall be converted to Philippine currency based on the exchange rate as published in the BSP reference rate bulletin on the day of the bid opening.
- 13.2. Payment of the contract price shall be made in:
 - a. Philippine Pesos.

14. Bid Security

14.1. The Bidder shall submit a Bid Securing Declaration² or any form of Bid Security in the amount indicated in the **BDS**, which shall be not less than the percentage of the ABC in accordance with the schedule in the **BDS**.

 $^{^{2}}$ In the case of Framework Agreement, the undertaking shall refer to entering into contract with the Procuring Entity and furnishing of the performance security or the performance securing declaration within ten (10) calendar days from receipt of Notice to Execute Framework Agreement.

- 14.2. The Bid and bid security shall be valid until *April 20, 2021*. Any Bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.
- 14.3. *[Include if Framework Agreement will be used:]* In the case of Framework Agreement, other than the grounds for forfeiture under the 2016 revised IRR, the bid security may also be forfeited if the successful bidder fails to sign the Framework Agreement, or fails to furnish the performance security or performance securing declaration. Without prejudice on its forfeiture, bid securities shall be returned only after the posting of performance security or performance securing declaration, as the case may be, by the winning Bidder or compliant Bidders and the signing of the Framework Agreement.

15. Sealing and Marking of Bids

Each Bidder shall submit four (4) copies of the first and second components of its Bid.

The Procuring Entity may request additional hard copies and/or electronic copies of the Bid. However, failure of the Bidders to comply with the said request shall not be a ground for disqualification.

If the Procuring Entity allows the submission of bids through online submission or any other electronic means, the Bidder shall submit an electronic copy of its Bid, which must be digitally signed. An electronic copy that cannot be opened or is corrupted shall be considered non-responsive and, thus, automatically disqualified.

16. Deadline for Submission of Bids

- 16.1. The Bidders shall submit on the specified date and time and either at its physical address or through online submission as indicated in paragraph 7 of the **IB**.
- 16.2. [Include if Framework Agreement will be used:] For multi-year Framework Agreement, the submission of bids shall be for the initial evaluation of their technical and financial eligibility. Thereafter, those declared eligible during the said initial eligibility evaluation and entered into a Framework Agreement with the Procuring Entity shall submit anew their best financial offer at the address and on or before the date and time indicated in the Call for each mini-competition.

17. Opening and Preliminary Examination of Bids

17.1. The BAC shall open the Bids in public at the time, on the date, and at the place specified in paragraph 9 of the **IB**. The Bidders' representatives who are present shall sign a register evidencing their attendance. In case videoconferencing, webcasting or other similar technologies will be used, attendance of participants shall likewise be recorded by the BAC Secretariat.

In case the Bids cannot be opened as scheduled due to justifiable reasons, the rescheduling requirements under Section 29 of the 2016 revised IRR of RA No. 9184 shall prevail.

17.2. The preliminary examination of bids shall be governed by Section 30 of the 2016 revised IRR of RA No. 9184.

18. Domestic Preference

- 18.1. The Procuring Entity will grant a margin of preference for the purpose of comparison of Bids in accordance with Section 43.1.2 of the 2016 revised IRR of RA No. 9184.
- 18.2. *[Include if Framework Agreement will be used:] For* multi-year Framework Agreement, determination of margin of preference shall be conducted every call for Mini-Competition.

19. Detailed Evaluation and Comparison of Bids

19.1. The Procuring BAC shall immediately conduct a detailed evaluation of all Bids rated "*passed*," using non-discretionary pass/fail criteria. The BAC shall consider the conditions in the evaluation of Bids under Section 32.2 of the 2016 revised IRR of RA No. 9184.

[Include the following options if Framework Agreement will be used:]

- a. In the case of single-year Framework Agreement, the Lowest Calculated Bid shall be determined outright after the detailed evaluation;
- b. For multi-year Framework Agreement, the determination of the eligibility and the compliance of bidders with the technical and financial aspects of the projects shall be initially made by the BAC, in accordance with Item 7.4.2 of the Guidelines on the Use of Framework Agreement.
- 19.2. If the Project allows partial bids, bidders may submit a proposal on any of the lots or items, and evaluation will be undertaken on a per lot or item basis, as the case maybe. In this case, the Bid Security as required by **ITB** Clause 15 shall be submitted for each lot or item separately.
- 19.3. The descriptions of the lots or items shall be indicated in **Section VII** (**Technical Specifications**), although the ABCs of these lots or items are indicated in the **BDS** for purposes of the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184. The NFCC must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder.
- 19.4. The Project shall be awarded as follows:

Option 3 - One Project having several items, which shall be awarded as separate contracts per item.

19.5. Except for bidders submitting a committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation, all Bids must include the NFCC computation pursuant to Section 23.4.1.4 of the 2016 revised IRR of RA No. 9184, which must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder. For bidders submitting the committed Line of Credit, it must be at least equal to ten percent (10%) of the ABCs for all the lots or items participated in by the prospective Bidder.

20. Post-Qualification

- 20.1. [Include if Framework Agreement will be used:] For multi-year Framework Agreement, all bidders initially determined to be eligible and financially compliant shall be subject to initial post-qualification. The BAC shall then recommend the execution of a Framework Agreement among all eligible, technically and financially compliant bidders and the Procuring Entity and shall be issued by HoPE a Notice to Execute Framework Agreement. The determination of the Lowest Calculated Bid (LCB) shall not be performed by the BAC until a Mini-Competition is conducted among the bidders who executed a Framework Agreement. When a Call for Mini-Competition is made, the BAC shall allow the bidders to submit their best financial proposals on such pre-scheduled date, time and place to determine the bidder with the LCB.
- 20.2. Within a non-extendible period of five (5) calendar days from receipt by the Bidder of the notice from the BAC that it submitted the Lowest Calculated Bid, {[Include if Framework Agreement will be used:] or in the case of multi-year Framework Agreement, that it is one of the eligible bidders who have submitted bids that are found to be technically and financially compliant,}the Bidder shall submit its latest income and business tax returns filed and paid through the BIR Electronic Filing and Payment System (eFPS) and other appropriate licenses and permits required by law and stated in the **BDS**. {[Include if Framework Agreement will be used:] For every mini-competition in Framework Agreement, the LCB shall likewise submit the required documents for final Post Qualification.}

21. Signing of the Contract

21.1. The documents required in Section 37.2 of the 2016 revised IRR of RA No. 9184 shall form part of the Contract. Additional Contract documents are indicated in the **BDS**.

[Include the following clauses if Framework Agreement will be used:]

- 21.2. At the same time as the Procuring Entity notifies the successful Bidder that its bid has been accepted, the Procuring Entity shall send the Framework Agreement Form to the Bidder, which contract has been provided in the Bidding Documents, incorporating therein all agreements between the parties.
- 21.3. Within ten (10) calendar days from receipt of the Notice to Execute Framework Agreement with the Procuring Entity, the successful Bidder or its duly authorized representative shall formally enter into a Framework

Agreement with the procuring entity for an amount of One Peso to be paid to the procuring entity as a consideration for the option granted by the procuring entity to procure the items in the Framework Agreement List when the need arises.

- 21.4. The Procuring Entity shall enter into a Framework Agreement with the successful Bidder within the same ten (10) calendar day period provided that all the documentary requirements are complied with.
- 21.5. The following documents shall form part of the Framework Agreement:
 - a. Framework Agreement Form;
 - b. Bidding Documents;
 - c. Call-offs;
 - d. Winning bidder's bid, including the Technical and Financial Proposals, and all other documents/statements submitted (*e.g.*, bidder's response to request for clarifications on the bid), including corrections to the bid, if any, resulting from the Procuring Entity's bid evaluation;
 - e. Performance Security or Performance Securing Declaration, as the case may be;
 - f. Notice to Execute Framework Agreement; and
 - g. Other contract documents that may be required by existing laws and/or specified in the **BDS**.

Section III. Bid Data Sheet

Notes on the Bid Data Sheet

The Bid Data Sheet (BDS) consists of provisions that supplement, amend, or specify in detail, information, or requirements included in the ITB found in Section II, which are specific to each procurement.

This Section is intended to assist the Procuring Entity in providing the specific information in relation to corresponding clauses in the ITB and has to be prepared for each specific procurement.

The Procuring Entity should specify in the BDS information and requirements specific to the circumstances of the Procuring Entity, the processing of the procurement, and the bid evaluation criteria that will apply to the Bids. In preparing the BDS, the following aspects should be checked:

- a. Information that specifies and complements provisions of the ITB must be incorporated.
- b. Amendments and/or supplements, if any, to provisions of the ITB as necessitated by the circumstances of the specific procurement, must also be incorporated.

Bid Data Sheet

ITB		
Clause		
5.3	For this purpose, contracts similar to the Project shall be:	
	a. Supply/Delivery and Installation of Science Laboratory Equipment with Training.	
	b. completed within Two (2) Years prior to the deadline for the submission and receipt of bids.	
7.1	[Specify the portions of Goods to be subcontracted, which shall not be a significant or material component of the Project as determined by the Procuring Entity.]	
12	The price of the Goods shall be quoted DDP [state place of destination] or the applicable International Commercial Terms (INCOTERMS) for this Project.	
14.1	The bid security shall be in the form of a Bid Securing Declaration, or any of the following forms and amounts:	
	a. The amount of not less than [Indicate the amount equivalent to two percent (2%) of ABC], if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit; or	
	b. The amount of not less than [Indicate the amount equivalent to five percent (5%) of ABC] if bid security is in Surety Bond.	
19.3	Lot 1 - Physics Laboratory (Center for Computational and Experimental Physics) No. 20-11-439, Seventeen Million Four Hundred Twenty Thousand Pesos (Php 17,420,000.00); Lot 2 - Biology Laboratory (Advanced Laboratory in Biological Sciences) No. 20-11-440, Seventeen Million Four Hundred Twenty Thousand Pesos (Php 17,420,000.00); Lot 3 – Chemistry Laboratory (Center for Applied Chemistry No. 20-11-441, Seventeen Million Four Hundred Twenty Thousand Pesos (Php 17,420,000.00)	
20.2	[List here any licenses and permits relevant to the Project and the corresponding law requiring it.]	
21.2	[List here any additional contract documents relevant to the Project that may be required by existing laws and/or the Procuring Entity.]	

Section IV. General Conditions of Contract

Notes on the General Conditions of Contract

The General Conditions of Contract (GCC) in this Section, read in conjunction with the Special Conditions of Contract in Section V and other documents listed therein, should be a complete document expressing all the rights and obligations of the parties.

Matters governing performance of the Supplier, payments under the contract, or matters affecting the risks, rights, and obligations of the parties under the contract are included in the GCC and Special Conditions of Contract.

Any complementary information, which may be needed, shall be introduced only through the Special Conditions of Contract.

1. Scope of Contract

This Contract shall include all such items, although not specifically mentioned, that can be reasonably inferred as being required for its completion as if such items were expressly mentioned herein. All the provisions of RA No. 9184 and its 2016 revised IRR, including the Generic Procurement Manual, and associated issuances, constitute the primary source for the terms and conditions of the Contract, and thus, applicable in contract implementation. Herein clauses shall serve as the secondary source for the terms and conditions of the Contract.

This is without prejudice to Sections 74.1 and 74.2 of the 2016 revised IRR of RA No. 9184 allowing the GPPB to amend the IRR, which shall be applied to all procurement activities, the advertisement, posting, or invitation of which were issued after the effectivity of the said amendment.

Additional requirements for the completion of this Contract shall be provided in the **Special Conditions of Contract (SCC).**

2. Advance Payment and Terms of Payment

- 2.1. Advance payment of the contract amount is provided under Annex "D" of the revised 2016 IRR of RA No. 9184.
- 2.2. The Procuring Entity is allowed to determine the terms of payment on the partial or staggered delivery of the Goods procured, provided such partial payment shall correspond to the value of the goods delivered and accepted in accordance with prevailing accounting and auditing rules and regulations. The terms of payment are indicated in the **SCC**.

[Include the following clauses if Framework Agreement will be used:]

- 2.3. For a single-year Framework Agreement, prices charged by the Supplier for Goods delivered and/or services performed under a Call-Off shall not vary from the prices quoted by the Supplier in its bid.
- 2.4. For multi-year Framework Agreement, prices charged by the Supplier for Goods delivered and/or services performed under a Call-Off shall not vary from the prices quoted by the Supplier during conduct of Mini-Competition.

3. Performance Security

Within ten (10) calendar days from receipt of the Notice of Award by the Bidder from the Procuring Entity but in no case later than prior to the signing of the Contract by both parties, the successful Bidder shall furnish the performance security in any of the forms prescribed in Section 39 of the 2016 revised IRR of RA No. 9184.*[[Include if Framework Agreement will be used:] In the case of* Framework Agreement, the Bidder may opt to furnish the performance security or a Performance Securing Declaration as defined under the Guidelines on the Use of Framework Agreement.*]*

4. Inspection and Tests

The Procuring Entity or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Project *{[Include if Framework Agreement will be used:]* or Framework Agreement/ specifications at no extra cost to the Procuring Entity in accordance with the Generic Procurement Manual. In addition to tests in the **SCC**, **Section IV** (**Technical Specifications**) shall specify what inspections and/or tests the Procuring Entity requires, and where they are to be conducted. The Procuring Entity shall notify the Supplier in writing, in a timely manner, of the identity of any representatives retained for these purposes.

All reasonable facilities and assistance for the inspection and testing of Goods, including access to drawings and production data, shall be provided by the Supplier to the authorized inspectors at no charge to the Procuring Entity.

5. Warranty

- 6.1. In order to assure that manufacturing defects shall be corrected by the Supplier, a warranty shall be required from the Supplier as provided under Section 62.1 of the 2016 revised IRR of RA No. 9184.
- 6.2. The Procuring Entity shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall, repair or replace the defective Goods or parts thereof without cost to the Procuring Entity, pursuant to the Generic Procurement Manual.

6. Liability of the Supplier

The Supplier's liability under this Contract shall be as provided by the laws of the Republic of the Philippines.

If the Supplier is a joint venture, all partners to the joint venture shall be jointly and severally liable to the Procuring Entity.

Section V. Special Conditions of Contract

Notes on the Special Conditions of Contract

Similar to the BDS, the clauses in this Section are intended to assist the Procuring Entity in providing contract-specific information in relation to corresponding clauses in the GCC found in Section IV.

The Special Conditions of Contract (SCC) complement the GCC, specifying contractual requirements linked to the special circumstances of the Procuring Entity, the Procuring Entity's country, the sector, and the Goods purchased. In preparing this Section, the following aspects should be checked:

- a. Information that complements provisions of the GCC must be incorporated.
- b. Amendments and/or supplements to provisions of the GCC as necessitated by the circumstances of the specific purchase, must also be incorporated.

However, no special condition which defeats or negates the general intent and purpose of the provisions of the GCC should be incorporated herein.

GCC Clause 1 [List here any additional requirements for the completion of this Contract. The following requirements and the corresponding provisions may be deleted, amended, or retained depending on its applicability to this Contract:] **Delivery and Documents –** For purposes of the Contract, "EXW," "FOB," "FCA," "CIF," "CIP," "DDP" and other trade terms used to describe the obligations of the parties shall have the meanings assigned to them by the current edition of INCOTERMS published by the International Chamber of Commerce, Paris. The Delivery terms of this Contract shall be as follows: [For Goods supplied from abroad, state:] "The delivery terms applicable to the Contract are DDP delivered [indicate place of destination]. In accordance with **INCOTERMS.**" [For Goods supplied from within the Philippines, state:] "The delivery terms applicable to this Contract are delivered [indicate place of destination]. Risk and title will pass from the Supplier to the Procuring Entity upon receipt and final acceptance of the Goods at their final destination." Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in Section VI (Schedule of Requirements). For purposes of this Clause the Procuring Entity's Representative at the Project Site is [indicate name(s)]. Incidental Services – The Supplier is required to provide all of the following services, including additional services, if any, specified in Section VI. Schedule of Requirements: Select appropriate requirements and delete the rest. a performance or supervision of on-site assembly and/or start-up of the supplied Goods; b.furnishing of tools required for assembly and/or maintenance of the supplied Goods; c.furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods; d.performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and

Special Conditions of Contract

 e. training of the Procuring Entity's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods. f. [Specify additional incidental service requirements, as needed.]
The Contract price for the Goods shall include the prices charged by the Supplier for incidental services and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.
Spare Parts –
The Supplier is required to provide all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:
Select appropriate requirements and delete the rest.
a. such spare parts as the Procuring Entity may elect to purchase from the Supplier, provided that this election shall not relieve the Supplier of any warranty obligations under this Contract; and
b. in the event of termination of production of the spare parts:
i.advance notification to the Procuring Entity of the pending termination, in sufficient time to permit the Procuring Entity to procure needed requirements; and
ii.following such termination, furnishing at no cost to the Procuring Entity, the blueprints, drawings, and specifications of the spare parts, if requested.
The spare parts and other components required are listed in Section VI (Schedule of Requirements) and the cost thereof are included in the contract price.
The Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spare parts or components for the Goods for a period of [<i>indicate</i> here the time period specified. If not used indicate a time period of three times the warranty period].
Spare parts or components shall be supplied as promptly as possible, but in any case, within [<i>insert appropriate time period</i>] months of placing the order.

Packaging –
The Supplier shall provide such packaging of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in this Contract. The packaging shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packaging case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.
The packaging, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified below, and in any subsequent instructions ordered by the Procuring Entity.
The outer packaging must be clearly marked on at least four (4) sides as follows:
Name of the Procuring Entity Name of the Supplier Contract Description Final Destination Gross weight
Any special lifting instructions Any special handling instructions Any relevant HAZCHEM classifications
A packaging list identifying the contents and quantities of the package is to be placed on an accessible point of the outer packaging if practical. If not practical the packaging list is to be placed inside the outer packaging but outside the secondary packaging.
Transportation –
Where the Supplier is required under Contract to deliver the Goods CIF, CIP, or DDP, transport of the Goods to the port of destination or such other named place of destination in the Philippines, as shall be specified in this Contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price.
Where the Supplier is required under this Contract to transport the Goods to a specified place of destination within the Philippines, defined as the Project Site, transport to such place of destination in the Philippines, including insurance and storage, as shall be specified in this Contract, shall be arranged by the Supplier, and related costs shall be included in the contract price.

	Where the Supplier is required under Contract to deliver the Goods CIF, CIP or DDP, Goods are to be transported on carriers of Philippine registry. In the event that no carrier of Philippine registry is available, Goods may be shipped by a carrier which is not of Philippine registry provided that the Supplier obtains and presents to the Procuring Entity certification to this effect from the nearest Philippine registry are available but their schedule delays the Supplier in its performance of this Contract the period from when the Goods were first ready for shipment and the actual date of shipment the period of delay will be considered force majeure.
	The Procuring Entity accepts no liability for the damage of Goods during transit other than those prescribed by INCOTERMS for DDP deliveries. In the case of Goods supplied from within the Philippines or supplied by domestic Suppliers risk and title will not be deemed to have passed to the Procuring Entity until their receipt and final acceptance at the final destination.
	Intellectual Property Rights –
	The Supplier shall indemnify the Procuring Entity against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof.
2.2	[If partial payment is allowed, state] "The terms of payment shall be as follows:
4	The inspections and tests that will be conducted are: [Indicate the applicable inspections and tests]

Section VI. Schedule of Requirements

The delivery schedule expressed as weeks/months stipulates hereafter a delivery date which is the date of delivery to the project site.

Item Number	Description	Quantity	Total	Delivered, Weeks/Months

Section VII. Technical Specifications

Notes for Preparing the Technical Specifications

A set of precise and clear specifications is a prerequisite for Bidders to respond realistically and competitively to the requirements of the Procuring Entity without qualifying their Bids. In the context of Competitive Bidding, the specifications (*e.g.* production/delivery schedule, manpower requirements, and after-sales service/parts, descriptions of the lots or items) must be prepared to permit the widest possible competition and, at the same time, present a clear statement of the required standards of workmanship, materials, and performance of the goods and services to be procured. Only if this is done will the objectives of transparency, equity, efficiency, fairness , and economy in procurement be realized, responsiveness of bids be ensured, and the subsequent task of bid evaluation and post-qualification facilitated. The specifications should require that all items, materials and accessories to be included or incorporated in the goods be new, unused, and of the most recent or current models, and that they include or incorporate all recent improvements in design and materials unless otherwise provided in the Contract.

Samples of specifications from previous similar procurements are useful in this respect. The use of metric units is encouraged. Depending on the complexity of the goods and the repetitiveness of the type of procurement, it may be advantageous to standardize the General Technical Specifications and incorporate them in a separate subsection. The General Technical Specifications should cover all classes of workmanship, materials, and equipment commonly involved in manufacturing similar goods. Deletions or addenda should then adapt the General Technical Specifications to the particular procurement.

Care must be taken in drafting specifications to ensure that they are not restrictive. In the specification of standards for equipment, materials, and workmanship, recognized Philippine and international standards should be used as much as possible. Where other particular standards are used, whether national standards or other standards, the specifications should state that equipment, materials, and workmanship that meet other authoritative standards, and which ensure at least a substantially equal quality than the standards mentioned, will also be acceptable. The following clause may be inserted in the Special Conditions of Contract or the Technical Specifications.

Sample Clause: Equivalency of Standards and Codes

Wherever reference is made in the Technical Specifications to specific standards and codes to be met by the goods and materials to be furnished or tested, the provisions of the latest edition or revision of the relevant standards and codes shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national or relate to a particular country or region, other authoritative standards that ensure substantial equivalence to the standards and codes specified will be acceptable. Reference to brand name and catalogue number should be avoided as far as possible; where unavoidable they should always be followed by the words "*or at least equivalent*." References to brand names cannot be used when the funding source is the GOP.

Where appropriate, drawings, including site plans as required, may be furnished by the Procuring Entity with the Bidding Documents. Similarly, the Supplier may be requested to provide drawings or samples either with its Bid or for prior review by the Procuring Entity during contract execution.

Bidders are also required, as part of the technical specifications, to complete their statement of compliance demonstrating how the items comply with the specification.

Technical Specifications

Item	Specification	Statement of Compliance
		[Bidders must state here either "Comply" or "Not Comply"
		against each of the individual parameters
		of each Specification stating the
		corresponding performance
		parameter of the equipment offered.
		Statements of "Comply" or "Not Comply" must be
		Comply" must be supported by evidence in a Bidders
		Bid and cross- referenced to that
		evidence. Evidence shall be in the form of
		manufacturer's un- amended sales
		literature, unconditional
		statements of specification and compliance issued by
		the manufacturer, samples, independent
		test data etc., as appropriate. A
		statement that is not supported by
		evidence or is subsequently found to
		be contradicted by the evidence presented will render
		the Bid under evaluation liable for
		rejection. A statement either in
		the Bidder's statement

		of compliance or the supporting evidence that is found to be false either during Bid evaluation, post- qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the applicable laws and issuances.]
	Lot 1 - PHYSICS LABORATORY (Center for Computational and Experimental Physics) - No. 20-11-439	
1	1 unit FAST CAMERA	
	SPECS:	
	Frame rate: 60,000 fps	
	1280 x 1024 resolution CMOS sensor	
	500 frames per second at full resolution	
	720p imaging up to 720 fps	
	3200 ISO monochrome, 1600 ISO color	
	Battery operated	
	2 μs global shutter selectable independent of frame rate.	
	Built in solid state drives provide up to 1TB of internal memory	
	7 in built in LCD screen	
	Adjustable frame rate up to 20,000 fps	
	Installation, Training and Warranty	
2	2 unit SILICONE ELASTOMER SOLUTION	

	SPECS:
	Protective coating designed to stabilize semiconductor
	junctions and surfaces for use in device technology of diodes,
	rectifiers, transistors, and integrated circuits.
	Features:
	Flexibility: -60°C to 250°C
	Heat resistance: up to 300°C
	Specific gravity: 1.2
	Resistivity: 1x10 ¹⁵ ohm-cm
	Dielectric constant: 3.5 (1mc)
	Dielectric strength: 850 volts/mil
	Dissipation factor: 5x10 ³ (1 mc)
	Thermal conductivity: BTU-ft/ft ² -hr- ⁰ F
	Durometer shore A: 45
	Coefficient of thermal expansion: 14.1x10 ⁻⁵ in/in ⁰ F(0-350 ⁰ F)
3	
	4 unit POLY (DIMETHYLSILOXANE)
	SPECS:
	Viscosity (Base): 5100 cP
	Viscosity (Mixed): 3500 cP
	Thermal conductivity: 0.15 btu hr ^o F
	Specific gravity (Cured): 1.03
	Working time at 25°C: 1.5 hours
	Cure time at 25°C: 48 hours

	Heat cure time at 100°C: 35 minutes	
	Heat cure time at 125°C: 20 minutes	
	Heat cure time at 150°C: 10 minutes	
	Durometer Shore: 43	
	Dielectric Strength: 500 volts/mil	
4	1 unit VACUUM PUMP	
-		
	SPECS:	
	pressure range: -700 to 1,000 mbar	
	pressure type: negative and positive pressuer sensor resolution: 0.006% FS	
	pressuer sensor resolution. 0.000% 15	
	pressure stability: 0.006% FS	
	response time: 50 ms	
	setting time: down to 100 ms	
	supply pressure: integrated pressure & vacuum source	
	liquid compatibility: any aqueous or organic solvent biological	
	sample solution can be propelled	
	output connectors: stainless steel female luer lock	
5	1 lot INVERTED BRIGHT-FIELD MICROSCOPE	
5		
	SPECS:	
	Observation method: fluorescence (Blue/Green Excitation, Ultraviolet	
	Excitation), Differential Interference Contrast(DC), Phase Contra	

	Brightfield	
	Observation tubes: Widefield (FN 22) - Tilting Binocular, Trinocular	
	Stage: Mechanical - Plain Stage, IX3-SVR Mechanical Stage with right	
	handle	
	Condenser: Motorized - Universal Condenser; Manual - Universal	
	condenser, Ultra-Long Working Distance Condenser	
	Dimensions: 323 (W) x 475(D) x 656 (D) mm (1 Deck Standard Configuration)	
	Weight: 35 kg (1 Deck Standard Configuration)	
	Installation, Training and Warranty	
6	2 unit INVERTED BRIGHT-FIELD MICROSCOPE	
	100x oil immersion objective	
7	2 unit INVERTED BRIGHT-FIELD MICROSCOPE	
	60x oil immersion objective	
8	2 unit MICROFLUIDICS SYRINGE PUMP	
	SPECS:	
	holds 2, 4, 6, or 8 syringes of up to 140 mL each	
	Infusion rates from 0.452 $\mu L/hr$ (1 mL syringe) to 1451 mL/hr	
	(60 mL syringe)	
	Syringe size: 0.5 μL, 1 mL, 3 mL, 5 mL, 10 MI	

9	1 unit REFRIGERATOR
	SPECS:
	Certifications/Compliance cUL; Capacity (Metric) 827 L
	Frequency 60 Hz; Plug Type should be compatible in Philippines
	Dimensions (D x W x H) Interior; 28.5 x 30.0 x 58.0 in.
	(72.3 x 76.2 x 147.3 cm)
	Weight (Metric) 177 kg; Shipping Weight (Metric) 208 kg
	Refrigerant R290; Shelves 4; Chart Recorder Optional
	Depth (Metric) Interior 72.3 cm; Height (English) Interior 58.0 in.
	Height (Metric) Interior 147.3 cm; Width (Metric) Interior 76.2 cm
	Width (English) Exterior 34.0 in.; Depth (English) Exterior 37.8 in.
	Depth (Metric) Exterior 96.0 cm; Temperature Range 2°C to 8° C
	Capacity (English) 29.2 cu. ft.; Electrical Requirements
	208 - 230 V 60 Hz
	Amperage 15 A; Dimensions (L x W x H) Exterior
	37.8 x 34.0 x 78.5 in. (96.0 x 86.4 x 199.4 cm)
	Weight (English) 390 lb.; Shipping Weight (English) 459 lb.
	Display Microprocessor; Door Style Solid
	Smart View Compatibility Smart-Vue Compatible; Depth (English)
	Interior 28.5 in.
	Height (English) Exterior 78.5 in.; Height (Metric) Exterior 199.4 cm
	Width (English) Interior 30 in.; Defrost Automatic
	Width (Metric) Exterior 86.4 cm; Type High-Performance Refrigerator

10	1 unit OVEN	
	SPECS:	
	Temperature range: 50 - 300 Celcius	
	Accuracy: ±1 Celcius	
	Heater: 2 groups	
	Perspective window to look inside	
	Working voltage: AC 220 V, AC 380 V	
11		
11	1 unit ULTRA LOW-TEMPERATURE FREEZERS	
	SPECS:	
	Capacity 422 liters	
	Electrical 208 – 230 V, 60 Hz	
	Amps/Breaker Plug 5.6/15 (NEMA 6 – 15)	
	Maximum Shelf Weight 57 kg	
	Interior Dimensions (HXWXD) 130.1 X 45.2 X 71.9 cm	
	Exterior Dimensions (HXWXD) 198.1 X 58.4 X 95.5 cm	
	Shipping Weight 323 kg; Energy Consumption Standard	
	Mode 9.4 kW-hr/day; Peak Variation from -80°C Setpoint +8. 2.4°C	
	Door Opening Recovery 13 minutes; Warm Up Time	
	(-80°C to -50°C) 254 minutes	
	Noise Level 52 dBA;	
	FEATURES	
	Low Peak Variation: helps ensure sample protection	
	throughout entire cabinet	

Fast Door Opening Recovery: in as little as 13 minutes	
0.93°C Steady-State Temperature: variation over time	
Long Warm-Up Time: from -80°C to -50°C in hours	
Four Capacities: 300, 400, 500 and 600 2-inch (5 cm) box	
Easy-to-Use: set up wizard, event log, temperature mapping & data	
downloads; Capacitive Touch: even when using latex gloves	
Touch Screen Data logging and Temperature Mapping:	
eliminates the need for a separate chart recorder	
Built-in USB Port: for exporting data	
Advanced Security Features: alarm settings, password- protected	
controller, padlock-compatible doors and optional access card entry	
Ergonomic Design: comfortable door handle, eye-level touch- screen	
and shelf-level placement that do not require floor-level loading of racks;	
Four Inner Doors: minimize ambient temperature during sample	
retrieval	
1 unit RHEOMETERS	
SPECS:	
Torque Range Min. torque rotation CS (µNm): 0.01	
Min. torque rotation CR (µNm): 0.01	
Min. torque oscillation CS (µNm): 0.002	
Min. torque oscillation CD (µNm): 0.002	
Max. torque (mNm): 200	
Torque resolution (nNm): 0.1	
	0.93°C Steady-State Temperature: variation over time Long Warm-Up Time: from -80°C to -50°C in hours Four Capacities: 300, 400, 500 and 600 2-inch (5 cm) box Easy-to-Use: set up wizard, event log, temperature mapping & data downloads; Capacitive Touch: even when using latex gloves Touch Screen Data logging and Temperature Mapping: eliminates the need for a separate chart recorder Built-in USB Port: for exporting data Advanced Security Features: alarm settings, password-protected controller, padlock-compatible doors and optional access card entry Ergonomic Design: comfortable door handle, eye-level touch-screen and shelf-level placement that do not require floor-level loading of racks; Four Inner Doors: minimize ambient temperature during sample retrieval 1 unit RHEOMETERS SPECS: Torque Range Min. torque rotation CS (µNm): 0.01 Min. torque oscillation CS (µNm): 0.002 Min. torque oscillation CD (µNm): 0.002 Min. torque (mNm): 200

	Angular Resolution (nrad) 12
	Weight (Metric) 59kg
	Bearing Air bearing: 2x radial, 1x axial
	Width (Metric) 600mm
	Width (Metric) 600mm
	Motor Type: Drag cup
	Motor Inertia (kgm2) 10-5
	Frequency Range Min. oscillation frequency (Hz): 10-6
	Max. oscillation frequency (Hz): 100
	Normal Force Min. Normal force (N): 0.01
	Max. Normal force (N): 50
	Normal force resolution (N): 0.001
	Height (Metric) 890mm;
	Operating Temperature Range Min. temperature (°C): -150
	Max. temperature (°C): 600
	Depending on temperature module Speed Range
	Range; Max. lift travel (mm):240; Gap resolution (µm): 0.5 Min.
	lift speed (µm/s): 0.02 Max. lift speed (mm/s) 20
	Rotational Speed Range Min. rotational speed CS (rpm): 10-7
	Min. rotational speed CR (rpm): 10-8
	Max. rotational speed (rpm): 4500
	Step in velocity (ms): 10
	Installation, Training and Warranty
12	
13	1 Iot WEATHER STATION EQUIPMENT
	SPECS:

Component parts:	
Thermometer - for measuring air and sea surface temperature	
Barometer - for measuring barometric pressure/air pressure	
Hygrometer - for measuring humidity	
Anemometer - for measuring wind speed	
Wind vane - for measuring wind direction	
Rain gauge - for measuring precipitation	
Pyranometer - for measuring solar radiation	
CO2 sensor	
Turbidity sensor	
O2 gas sensor	
GPS device	
Light sensor	
Installation and Training	
4 unit COMPUTER SET	
SPECS:	
21.5 inch 2.9GHz	
Turbo Boost up to 3.6GHz	
8GB (two 4GB) memory	
1TB Hard drive	
NVIDIA GeForce GT 750M with 1GB Video Memory	
250 Gig SSD	
SPECS:	
Matlab R2020b	
	Thermometer - for measuring air and sea surface temperature Barometer - for measuring barometric pressure/air pressure Hygrometer - for measuring humidity Anemometer - for measuring wind speed Wind vane - for measuring wind direction Rain gauge - for measuring precipitation Pyranometer - for measuring solar radiation CO2 sensor Turbidity sensor O2 gas sensor GPS device Light sensor Installation and Training 4 unit COMPUTER SET SPECS: 21.5 inch 2.9GHz Turbo Boost up to 3.6GHz 8GB (two 4GB) memory 1TB Hard drive NVIDIA GeForce GT 750M with 1GB Video Memory 250 Gig SSD SPECS:

	High-level language for scientific and engineering computing	
	Desktop environment tuned for iterative exploration, design, and	
	problem-solving	
	Graphics for visualizing data and tools for creating custom plots	
	Apps for curve fitting, data classification, signal analysis, control	
	system tuning, and many other tasks	
	Add-on toolboxes for a wide range of engineering and scientific	
	applications	
	Tools for building applications with custom user interfaces	
	Interfaces to C/C++, Java®, .NET, Python, SQL, Hadoop,	
	and Microsoft® Excel®	
	Royalty-free deployment options for sharing MATLAB programs with	
	end users	
	Lot 3 - CHEMISTRY LABORATORY	
	(Center for Applied Chemistry) – No. 20-11-441	
1	1 LOT GAS CHROMATOGRAPH-MASS SPECTROMETER	
	(Inclusion: ON SITE INSTALLATION AND TRAINING, Calibration	
	and Preventive maintenance for 3 years, free gas refill)	
	GC SPECIFICATIONS:	
	Retention time repeatability : < 0.0008 min	
	Peak area repeatability: < 1 % RSD	
	Easy Maintenance: Fully integrated alerts and counters for	
	hardware and consumables, one touch injection maintenance	

button.	
Other System Functions: Highly precise oven control eliminates	
any temperature irregularity, Reliable error and warning system	
(Diagnostics Function) notifies you of any irregularity in the system.	
Safety Measure: Integrated leak check function, Oven door	
sensor automatically shuts off all heating elements when the	
door is opened or not properly closed.	
Flow control modes: constant pressure, constant column flow,	
constant linear velocity.	
Carrier gas: He, N2, H2	
Carrier gas flow range: He : 0 to 1300 mL/min ,N2 : 0 to 600 mL/min ,	
H2 : 0 to 500 mL/min	
Flow setpoint resolution: 0.1 mL/min	
Sleep/Wake Function:put GC to sleep when not in use to save	
valuable energy and wake the system to restore the previous analytical settings.	
Upgradability: Capable of up to three simultaneous injection unit	
installations, Capable of up to four simultaneous detector unit installations.	
Navigation:Color touch screen	
Injection Port:	
Two-position locking mechanism guarantees leak-free sealing	
Split/Splitless	
Max operating temperature: 450 °C	
Max operating pressure: 1035 kPa, Split ratio: Up to 9999.9:1	
 1	1

ates: fast, mid, slow or customize your own.
Oven light
13.7 L
00 m × 0.530 mm I.D. capillary columns
9999.99 min
ange : (ambient +2 °C) to 450 °C
etpoint Resolution : 0.1 °C
n time : 450 °C to 50 °C in 3.4 min
w Controller:
e : 0 to 1035 kPa (0 to 150 psi)
int resolution : 0.1 kPa (0.001 psi)
pr accuracy : < ± 2.0 % (full scale)
or repeatability : < ± 0.34 kPa
DNS (MS DETECTOR)
ce: Direct connection with capillary column
50 to 350 °C
or easy maintenance
e: Electron Ionization
Dual (Automatic Switching)
y: 10-200 Ev
nt: 5 to 250 µA

Mas	ss Analyzer:	
Mas	ss analyzer: Metal quadrupole with pre-rods	
Coll	lision Cell: UFsweeper 0 to 60 V, Argon collision gas	
Mas	ss Range: m/z 1.5 to 1090	
Pos	sible setting of FWHM: 0.4 to 2.0 u	
Mas	ss Axis Stability: + 0.1 u/48 hours (constant temperature)	
High	h-speed Scanning Control: Advanced Scanning Speed Protocol	
Sca	n Rate: 20,000u/sec	
Mini	imum Measurement Interval: 0.01 s (100 scan/sec maximum)	
Det	ector	
Elec	ctron multiplier with low noise	
ove	rdrive lens 8 × 106 dynamic range	
Vac	cuum System:	
Maii	n Pump: Turbomolecular pump differential exhaust	
syst	tem, 170 L/sec + 190 L/sec (He)	
Aux	illiary Pump: Oil rotary pump, 30 L/min (60 Hz)	
Colu	umn Flow: 15 mL/min (He)	
INC	LUSIONS:	
UHF	P Gas Regulator He	
Turk	bo Molecular Pump	
Tur	I I	

	He purification filter kit	
	Autoinjector	
	Quartz Wool	
	SUS pipe for He, 5 meters	
	Helium-specific Filter Kit - 1/8" SS	
	Capillary Column	
	Complete PC System (Desktop with LED color monitor),	
	O/S: Microsoft Windows 10 (lifetime LICENSE)	
	DESKTOP CPU Specs	
-	Core i7 64-bit x86; 2 TB hard drive; 16 GIG RAM; Wifi ready	
	With HDMI, USB and VGA ports; 250 Gig SSD	
	NIST Mass Spectrum Library	
	UPS	
-		
2	2 unit CHEMICAL FUME HOOD	
	(Inclusion: onsite installation, calibration, technical support,	
	preventive maintenance)	
	SPECS:	
	220-240 VAC; 50/60 Hz, 1ø EFA-4UDRVW-8 EFA-5UDRVW-8 EFA-	
	6UDRVW-8 EFA-8UDRVW-8; EFA-4UDRCW-8 EFA-5UDRCW-8 EFA-6UDRCW-8;	
	EFA-4UDUCW-8 EFA-5UDUCW-8 EFA-6UDUCW-8 EFA-8UDUVW-8	
	EFA-4UDUVW-8 EFA-5UDUVW-8 EFA-6UDUVW-8110-120 VAC,	
	50/60 Hz, 1ø EFA-4UDRVW-9 EFA-5UDRVW-9 EFA-6UDRVW-9 EFA-8UDRVW-9	

EFA-4UDRCW-9 EFA-5UDRCW-9 EFA-6UDRCW-9	
EFA-4UDUCW-9 EFA-5UDUCW-9 EFA-6UDUCW-9 EFA-8UDUVW-9	
EFA-4UDUVW-9 EFA-5UDUVW-9 EFA-6UDUVW-9	
Nominal Size 1.2 meter (4') 1.5 meter (5') 1.8 meter (6') 2.4 meter (8')External Dimensions	
 (W x D x H) Fume Hood unit only 1220 x 900 x 1400 mm	
(48.0" x 35.4" x 55.1") 1525 x 900 x 1400 mm	
(60.0" x 35.4" x 55.1") 1830 x 900 x 1400 mm	
(72.0" x 35.4" x 55.1") 2440 x 900 x 1400 mm	
(96.1" x 35.4" x 55.1")	
With Exhaust Collar 1220 x 900 x 1521 mm	
(48.0" x 35.4" x 59.9") 1525 x 900 x 1521 mm	
(60.0" x 35.4" x 59.9") 1830 x 900 x 1521 mm	
(72.0" x 35.4" x 59.9") 2440 x 900 x 1521 mm	
(96.1" x 35.4" x 59.9")	
With Fully-opened Sash 1220 x 900 x 1603 mm	
(48.0" x 35.4" x 64.7") 1525 x 900 x 1603 mm	
(60.0" x 35.4" x 64.7") 1830 x 900 x 1603 mm	
(72.0" x 35.4" x 64.7") 2440 x 900 x 1603 mm	
(96.1" x 35.4" x 64.7")	
 Internal Dimensions	
(W x D x H) 996 x 675 x 1230 mm	
 (39.2" x 26.6" x 48.4") 1301 x 675 x 1230 mm	
(51.2" x 26.6" x 48.4") 1606 x 675 x 1230 mm	
(63.2" x 26.6" x 48.4") 2210 x 675 x 1230 mm	
(96.1" x 35.4" x 64.7") Internal Dimensions (W x D x H) 996 x 675 x 1230 mm (39.2" x 26.6" x 48.4") 1301 x 675 x 1230 mm (51.2" x 26.6" x 48.4") 1606 x 675 x 1230 mm	

	(87.0" x 26.6" x 48.4")
3	3 unit ANALYTICAL BALANCE
	Capacity 220 g
	Repeatability (std) ± 0.0001 g ,Readability 0.0001 g
	Linearity ± 0.0002 g , Stabilization Time ≤2 seconds
	Calibration AutoCal™ on Δ1.5°C temperature change, 11 hours,
	Tare Range To capacity by subtraction
	Power Requirements AC Adapter Input: 100-240 VAC 0.6A 50-60 Hz
	Display Type Full-color VGA graphic display, 4-wire resistive touch screen
	Display Size 5.7 in / 145 mm (diagonal)
	Display Housing :Dimensions (W x H x D) 7.7 x 3.5 x 6.0 in / 195 x
	90 x 154 mm
	Base Housing Dimensions (W x H x D) 9.1 x 3.9 x 15.5 in / 230 x 98 x 393 mm
	Communication RS232, USB ,Operating Temperature
	Range 50°F (10°C) to 86°F (30°C)
	Operating Humidity Range, 15% to 80% at 87.8°F (31°C)
	decreasing linearly to 50% at 40°C, non-condensing
	Pan Size Ø3.5 in / 90 mm; Net Weight 6.9 kg
	INCLUSION: Calibration and preventive maintenance for 5 y
4	1 unit HIGH PERFORMANCE LIQUID CHROMATOGRAPHY WITH
	PHOTODIODE DETECTOR
	(Inclusion: ON SITE INSTALLATION AND TRAINING , Calibration
	and Preventive maintenance for 3 years)
L	

FEATURES:	
From setting vial to starting analysis, all the procedures	
are performed via the equipment	
 Interactive Communication Mode feature enables the operator	
to edit and start analysis methods and batch files from the HPLC	
Can perform routine operations, such as purging mobile phases,	
while away from the PC.	
A 14-second injection cycle maximizes the number of samples	
that can be processed. Moreover, a total of 1536 samples can be	
accommodated in right and left sample racks.	
Excellent Baseline Stability Unaffected by Circumstances	
Carryover specification is 0.0025%, thereby providing highly	
precise quantitative performance when analyzing complex sample	
 The Quick Batch window displays the sample rack mounted on	
the system. You can create batch files while checking the vial	
positions in the window.	
The Data Browser and Quantitation Browser accelerate the	
 comparison of multiple analytical data and processing of all	

quantitation results.
SPECIFICATIONS:
Pump
Degassing unit:5 Lines: Mobile phase 4 + Rinse soln solution 1
Pumping method:Parallel-type double plunger
Pulsation:≤ 0.1 MPa (1.0 mL/min,10 MPa, Water)
Flow rate setting range: 0.0001 to 10 mL/min
Flow rate accuracy:≤ ±1% or ≤ ±2 μL/min
Flow rate precision< 0.06 %RSD or < 0.02 minSD
Maximum pressure:44 Mpa
Auto Sampler
njection method:
njection volume setting range0.1 to 100 μL (Standard)
Samples for processing336 (1 mL), 216 (1.5 mL)
Column Oven
Heating and cooling method ,Forced air circulation method
Containable column size6 pieces at 10 cm max., 3 pieces at 10
cm to 30 cm
PDA Detector
Wavelength range190 to 800 nm
Spectral resolution1.4 nm
Slit bandwidth 1.2nm

	Number of Photodiode array elements	
	Light source Deuterium (D2) lamp, Tungsten lamp	
	DimensionsW410 × D500 × H605 mm	
	Complete PC System (Desktop), O/S: Microsoft Windows 10 Pro,	
-	Hard Disk Drive:1Tb, Monitor:21.5' LED Color monitor, Processor:	
	i54G RAM,Continuous ink printer	
	Additional inclusions	
	Getting Started Kit, C18 HPLC Column,1.5ml Screw-thread	
	Clear Vial with write on spot with PTFE/white Silicone Septa	
	100pcs Nonsterile Nylon Syringe Filters,0.45 um 100/pk	
	Solvent safety 4 Ports Bottle Caps Kit	
	o Solvent safety 2 Ports bottle caps Kit	
	Vacuum Filtration systemSolvent bottle (500 mL)HPLC grade	
	MethanolMembrane filter, Nylon, 47mm x 0.45um, 100pcs/pk	
5	2 unit ROTARY EVAPORATOR WITH VACUUM PUMP COMPLETE	
	WITH ACCESSORIES (TUBING ETC)	
	(Inclusion: ON SITE INSTALLATION AND TRAINING , Calibration	
	and Preventive maintenance for 3 years)	
	SPECS:	
	Height (Metric) G3 Glassware: 887 mm, G3 XL Glassware: 920 mm	
	Length (Metric) 739 mm; Width (Metric) 532 mm	
	Capacity (Metric) 4.50 L for bath; 5.00 L for evaporating flask	
	Speed 10 to 280 rpm; Temperature Range (Metric) 20°C to 210°C	
L		

	Product Type Rotary Evaporator; Wattage 1400 W
	Condenser Type Vertical Condenser
	Material Bath is Stainless Steel AISI 316L; Hertz 50/60 Hz; Voltage 115 V
	Capacity (English) 152.16 oz. for bath; 169.07 oz. for evaporating flask
	Model Hand Lift; Timer Yes
	Display 5in. LCD color graphic display
	Includes Glassware set, Rotary evaporator
	Electrical Requirements 115 V
	Glassware Assembly Type Coated G3 vertical glassware
	Temperature Accuracy ±1°C; Includes vacuum and chiller control
6	1 unit MULTI PARAMETER WATER AND WASTEWATER PHOTOMETER
	SPECS:
	measures COD, ammonia, TDS, turbidity, with built in mini thermal
	printer, with test kit accesory
	Inclusion: 1 set of reagents and standards
7	1 unit FLAME PHOTOMETER
	Technical Specification
	Size (w x d x h) 420 x 360 x 300mm
	Weight 8kg
	Range: 0 to 199.9ppm
	Limits of detection Na & K 0.2ppm
	Li 0.25ppm Ca 15ppm Ba30ppm

	Reproducibility <1% coefficient of variation for 20 consecutive	
	samples using 10ppm Na set to read 50	
	Stability < 2% over 5min when continuously aspirating 10ppm	
	sample set to read 50.0.	
	Electrical supply 90-125V or 190-250V @50/60Hz	
	Air supply Moisture and oil free, 6 litre/min @ 14psi	
	Fuel Propane, butane, natural gas or LPG	
	Includes:	
	1. Filters for Na, K, Li, Ca, Ba	
	2. Connecting hoses and clips	
	3. Compressor plug, drain trap, and fuses	
	4. Operation and instruction manual	
	5. Air compressor	
	6. Water separator	
	7. Calibration standards for Na, K, Li, Ca, Ba	
	8. Automatic Voltage Regulator	
	(Inclusion: ON SITE INSTALLATION AND TRAINING , Calibration	
	and Preventive maintenance for 3 years)	
8	3 unit CHEMICAL STORAGE CABINET	
	SPECS:	
	used for Flammables, Corrosives, Combustibles and other	
	chemicals	
	fireproof , with 4 to 5 height adjustable shelves	
9	1 unit FOURIER TRANSFORM INFRARED SPECTROPHOTOMETER	

	sion: ON SITE INSTALLATION AND TRAINING, Calibration	
and Pi	reventive maintenance for 3 years)	
SPECI	FICATIONS:	
Interfe	erometer : Michelson interferometer (30° incident angle)	
Equip	ped with Dynamic Alignment system	
Optica	Il System : Single Beam Optics	
Beam	Splitter: Germanium – coated KBr Plate	
Light	Source: High-energy ceramic light source	
Detect	or	
Mirro	r speed	
Sampl	e Compartment : Equipped with automatic accessory	
recog	nition mechanism	
Requi 35°C	red environment: Operating guaranteed temperature :10 to	
Perfor	mance guaranteed temperature :15 to 30°C	
Humid	ity: 20-70% (KBr window model)	
20-90%	% (KRS-5 window model)	
Additi	onal Inclusion: SoftwareComplete PC System (Desktop),	
0/S: N	licrosoft Windows 10 Pro, Hard Disk Drive:1Tb,	
Monito	r:21.5' LED Color monitor, Processor: i5, 4G RAM	
Contin	uous Printer	
1 set	LabSolutions IR	

	1 set Diamond ATR	
	1 set Library for spectra	
	1 set Basic Starter kit	
	Lot 2 - BIOLOGY LABORATORY	
	(Advanced Laboratory in Biological Sciences) –	
	No. 20-11-440	
1	2 Iots AGAROSE GEL ELECTROPHORESIS SYSTEM	
	SPECS:	
	Electrophoresis Tank	
	Overall Dimensions 183 mm (B) x 59 mm (H) x 162 mm (L)	
	Material PPHOX (Polyphenylenoxid); Buffer Solution Volume Approx. 270 – 320 ml	
	Multi-sample Multichannel pipette compatible	
	Safety Lid	
	Overall Dimensions 197 mm (B) x 38 mm (H) x 170 mm (L)	
	Safety Interlock System Without the lid, main power cannot be operated	
	Power Supply	
	Overall Dimensions 75 mm (B) x 62 mm (H) x 170 mm (L)	
	Weight 410 g	
	Input Voltage AC 220V, 60 Hz (compatible with Philippines)	
	Output Voltage 18 V, 25 V, 35 V, 50 V, 70 V, 100 V and 135 V.	
	Timer Can be set between 0 and 99 min. and cont. mode.	
	Temporary shutdown supported	
L		

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	Pennyweight, Grain, Newton, Momme, Mesghal,
	Hong Kong Tael, Singapore Tael, Taiwan Tael, Tical, Tola, Baht, 3
	Custom Units
	Calibration AutoCal [™] on Δ1.5°C temperature change, 11 hours,
	and external calibration
	Tare Range To capacity by subtraction
	Power Requirements (compatible with Philippines) AC Adapter Input: 220V VAC 0.6A, 60 Hz
	Display Type Full-color VGA graphic display, 4-wire resistive touch screen
	Display Size 5.7 in / 145 mm (diagonal)
	Display Housing
	Dimensions (W x H x D) 7.7 x 3.5 x 6.0 in / 195 x 90 x 154 mm
	Base Housing Dimensions (W x H x D) 9.1 x 3.9 x 15.5 in / 230 x
	98 x 393 mm
	Communication RS232, USB
	Operating Temperature Range 50°F (10°C) to 86°F (30°C)
	Operating Humidity Range
	15% to 80% at 87.8°F (31°C) decreasing linearly to 50% at 40°C,
	non-condensing
	Pan Size Ø3.5 in / 90 mm; Net Weight 6.9 kg
	Free Installation and demonstration
	With at least one (1) year warranty after installation
3	1 lot AUTOCLAVE
	SPECS:
	Chamber Capacity (usable inner size) 54 liters, Ø320 X 676 mm
L	

	Usable Maximum Temperature; Usable Maximum Pressure 140°C	
	0.27 Mpa; Usable Temperature Sterilization: 101°C to 140°C	
	Dissolving: 40°C to 100°C; Warming: 40°C to 60°C	
	Usable Time Sterilization, Dissolving: 0 min to 48 hrs and continuous	
	Warming: 0 min to 48 hrs. 00min; Controller Microprocessor controller,	
	Graphic display; Temperature3 digits, PID control	
	Timer2digits hours: 2digits minutes, down count (Temp/Time integration system)	
	Exhaust Cooling System Water storage tank with cooling coil &	
	Exhaust drain receive bottle; Drain Valve Manual valve at inner side of exhaust bottle	
	Safety Valve Operation 0.29 Mpa; Water Test Pressure 0.58 Mpa	
	Chamber & Lid Stainless steel SUS304, shiny polished.	
	Molded silicon rubber lid gasket (self-seal system)	
	Outer Panel Steel with baked melamine finish.; Top panel: Heat- resisting molded resin	
	Power Demand (compatible with Philippines) AC 220 V, 1 phase, 60 Hz, 2.6 kW, 12A;	
	Includes 5kVA AVR; Outer Dimensions (WXDXH) 550 X 550 X 990 mm; Weight 60 kg	
	Standard Accessories Stainless wire baskets: 2 pieces of Ø 300 X 300 mm	
	Exhaust bottle Chamber Drain Tray	
	Includes installation, all installation materials, and labor	
	Includes calibration (and materials and labor) and trainings with certificates	
	With at least one (1) year warranty after installation	
4	1 Iot BIOSAFETY CABINET	
	SPECS:	

Exterior Dimensions (WXHXD) 51.2 X 61.0 X 31.4 inches
Interior Dimensions (WXHXD) 47.2 X 30.7 X 18.3 inches
Work Surface Height (adjustable) 30 to 37 inches; Working Height of Front Window 8 inches;
Maximum Opening Height of Front Window 21 inches; Net Weight ~170 kg;
Maximum Weight Load of One-piece Work Tray 50 kg
Maximum Weight Load of Divided Work Tray 25 kg
Exhaust /Inflow Air Volume 389 m3/h; Exhaust Volume, Thimble 505 m3/h
Normal Heat Output in Operation Mode (non-vented) 200W
Reduced Flow Heat Output (lights off, non-vented) 40W
Supply/Exhaust Air Filter H14 HEPA EN 1822, 99.995% at the
most penetrating particle size (mini-pleated)
Certification EN 12469: by TUV-Nord, LNA, HPA
Sound Pressure Level 55 dB (A); Lighting Power >1200 lux
Electrical Requirements (compatible with Philippines) 220V, 60 Hz; Includes 5kVA AVR
Energy Consumption, Operating setpoint 200W; Energy Consumption,
 Reduced Flow Mode 40W; Protection Class IP 20; Protective Measure Conductor connection
Individual Precautions on Customer Side Lead fuse (slow blow) T
16 A or circuit breaker B 16. The local electrical regulations in the
 country of use as well as the relevant connection conditions must be observed.
The national regulations for electrical engineering as well as
 the relevant technical connection conditions must be taken into account.
Supply Requirement 230 V, 50/60 Hz standard supply.
Total requirement including interior sockets 13-16 Amps.
Receptacles The receptacles have a load capacity of up to

	5 A and are protected with T 5 A fuses.	
	When all receptacles are in use simultaneously, they must not	
	exceed the maximum total load capacity of 5 A.	
	Radio Interference Circuit is interference free in accordance with	
	EN 55 014 Receptacles One double, right side; ccess Ports (23 mm Ø) 4 (2 on each side);	
	AService Valves Up to 4 (installed through access ports)	
	Includes installation, all installation materials, and labor	
	Includes calibration (and materials and labor) and trainings with certificates	
	With at least one (1) year warranty after installation	
5	1 lot CHEMICAL FUME HOOD	
	SPECS:	
	220 VAC; 60 Hz (compatible Philippines); includes 5kVA AVR	
	1ø EFA-4UDRVW-8 EFA-5UDRVW-8 EFA-	
	6UDRVW-8 EFA-8UDRVW-8; EFA-4UDRCW-8 EFA-5UDRCW-8	
	EFA-6UDRCW-8; EFA-4UDUCW-8 EFA-5UDUCW-8	
	EFA-6UDUCW-8 EFA-8UDUVW-8; EFA-4UDUVW-8 EFA-5UDUVW- 8 EFA-6UDUVW-8	
	Nominal Size 1.2 meter (4') 1.5 meter (5') 1.8 meter (6') 2.4 meter (8')	
	External Dimensions	
	(W x D x H) Fume Hood unit only 1220 x 900 x 1400 mm	
	(48.0" x 35.4" x 55.1") 1525 x 900 x 1400 mm; (60.0" x 35.4" x 55.1") 1830 x 900 x 1400 mm	
	(72.0" x 35.4" x 55.1") 2440 x 900 x 1400 mm; (96.1" x 35.4" x 55.1")	

	(48.0" x 35.4" x 59.9") 1525 x 900 x 1521 mm; (60.0" x 35.4" x 59.9") 1830 x 900 x 1521 mm	
	(72.0" x 35.4" x 59.9") 2440 x 900 x 1521 mm; (96.1" x 35.4" x 59.9")	
	With Fully-opened Sash 1220 x 900 x 1603 mm	
	(48.0" x 35.4" x 64.7") 1525 x 900 x 1603 mm; (60.0" x 35.4" x 64.7") 1830 x 900 x 1603 mm	
	(72.0" x 35.4" x 64.7") 2440 x 900 x 1603 mm; (96.1" x 35.4" x 64.7")	
	Internal Dimensions; (W x D x H) 996 x 675 x 1230 mm	
	(39.2" x 26.6" x 48.4") 1301 x 675 x 1230 mm; (51.2" x 26.6" x 48.4") 1606 x 675 x 1230 mm	
	(63.2" x 26.6" x 48.4") 2210 x 675 x 1230 mm; (87.0" x 26.6" x 48.4")	
	Construction Main Body Electrogalvanized steel with Epoxy-	
	polyester hybrid Isocide™ powder coating; Internal Liner (default) Esco Resinate™	
	Worktop (default) Phenolic Resin;Sash Material Tempered Laminated and	
	Framed Sash Glass; Sash Configuration Vertical or Combination Vertical	
	Sloping 5° Sloped; Maximum Sash Opening 740 mm (29.1")	
	Includes installation, all installation materials, and labor	
	Includes calibration (and materials and labor) and trainings with certificates	
	With at least one (1) year warranty after installation	
6	1 unit CAMERA MACRO LENS	
	SPECS:	
	180mm; f2.8; should be compatible with the Camera purchased	

	Includes compatible lens bag	
	With at least one (1) year warranty after installation	
7	1 unit CAMERA TELEPHOTO LENS	
	SPECS:	
	150-600mm; f2.8; should be compatible with the Camera purchased	
	Includes compatible lens bag	
	With at least one (1) year warranty after installation	
8	1 Iot CAMERA, DIGITAL SINGLE LENS REFLEX CAMERA	
	SPECS:	
	at least 24 mega pixels, 4K video; with 60fps HD video recording	
	Includes compatible Camera bag	
	With at least one (1) year warranty after installation	
9	5 lot DESKTOP CPU AND MONITOR	
	SPECS:	
	With 24 inches full HD monitor; Core i7 64-bit x86; 2 TB hard drive;	
	16 GIG RAM; Wifi ready; Geforce 2060 ti graphics;	
	With at least 2 HDMI ports; With USB and VGA ports;	
	250 Gig SSD; With wired keyboard and wired mouse	
	With licensed Operating System and Microsoft Office;	
	With at least one (1) year warranty after installation	
10		
10	1 lot FREEZER, ULTRA-LOW TEMPERATURE	
	SPECS:	

	Capacity 422 liters
	Electrical (should be compatible with Philippines) 220 V, 60 Hz; includes 5kVA AVR
	Amps/Breaker Plug 5.6/15 (NEMA 6 – 15); Maximum Shelf Weight 57 kg
	Interior Dimensions (HXWXD) 130.1 X 45.2 X 71.9 cm
	Exterior Dimensions (HXWXD) 198.1 X 58.4 X 95.5 cm
	Shipping Weight 323 kg; Energy Consumption Standard Mode 9.4 kW-hr/day
	Peak Variation from -80°C Setpoint +8.5°C / -2.4°C
	Door Opening Recovery 13 minutes; Warm Up Time (-80°C to -50°C) 254 minutes
	Noise Level 52 dBA;
	FEATURES:
	Low Peak Variation: helps ensure sample protection throughout entire cabinet
	Fast Door Opening Recovery: in as little as 13 minutes
	0.93°C Steady-State Temperature: variation over time
	Long Warm-Up Time: from -80°C to -50°C in hours
	Four Capacities: 300, 400, 500 and 600 2-inch (5 cm) box
	Easy-to-Use: set up wizard, event log, temperature mapping & data downloads
	Capacitive Touch: even when using latex gloves
	Touch Screen Data logging and Temperature Mapping:
	eliminates the need for a separate chart recorder
	Built-in USB Port: for exporting data; Advanced Security Features: alarm settings,
	password-protected controller, padlock-compatible doors and
	optional access card entry; Ergonomic Design: comfortable
	door handle, eye-level touch-screen and shelf-level placement
	that do not require floor-level loading of racks; Four Inner Doors:
l	

	minimize ambient temperature during sample retrieval	
	Includes installation, all installation materials, and labor	
	Includes calibration (and calibration materials and labor) with certificate	
	With at least one (1) year warranty after installation	
11	1 lot ORBITAL/ RECIPROCATING SHAKER	
	SPECS:	
	Origin: NOT MADE IN CHINA OR MEXICO	
	Shaking Range 28 mm; Speed Range 45 – 400 rpm	
	Motor BLDC motor; Timer (speed) 99 hr 59 min	
	Temperature Resistance Lower than 55°C	
	Loadable Weight 6 kg; Weight 17 kg; Inclusions: Flask table for 50 ml capacity: 25 ea	
	Dimensions (WXDXH) 430 X 520 X 140 mm	
	Platform (WXD) 400 X 400 mm; Wattage 30 W	
	Power AC 220V, 60Hz (compatible with Philippines); includes 3 kVA AVR	
	Flask table for 100 ml capacity: 25 ea; Flask table for 250 ml capacity: 14 ea	
	Flexible silicon wire rack (W400XD400 mm);	
	With at least one (1) year warranty after installation	
12	5 lot MICROPIPETTE, 10 μL	
	SPECS:	
	single-channel, variable, includes epT.I.P.S.® Box, 0.5 – 10 μI	
	With at least one (1) year warranty	
13	5 lot MICROPIPETTE, 20 μL	

	SPECS:	
	single-channel, variable, includes epT.I.P.S.® Box, 2 – 20 μL	
	With at least one (1) year warranty	
14	5 lot MICROPIPETTE, 100 µL	
	SPECS:	
	single-channel, variable, includes epT.I.P.S.® Box, 10 – 100 μL	
	With at least one (1) year warranty	
15	5 lot MICROPIPETTE, 300 µL	
	SPECS:	
	single-channel, variable, includes epT.I.P.S.® Box, 30 – 300 μL	
	With at least one (1) year warranty	
16	5 lot MICROPIPETTE, 1000 µL	
	SPECS:	
	single-channel, variable, includes epT.I.P.S.® Box, 100 – 1,000 µL	
	With at least one (1) year warranty	
17	5 Iot MICROPIPETTE HOLDER OR STAND	
	SPECS:	
	Important Requirement: Should be compatible with the Micropippete units	
	Carries up to six manual single pipettes; Includes rotatable	
	stand with completely new design	
	Pipette holders are interchangeable, no tools required	
	•	

	Robust design that securely holds and protects pipettes	
	Handle for easy transport from bench to bench	
	With at least one (1) year warranty	
18	14 Iot MICROSCOPE, BINOCULAR COMPOUND	
	SPECS:	
	Head: Binocular 30º inclined and rotatable 360º	
	Eyepieces: 10x 20mm FOV; Nosepiece: Reversed, quadruple	
	Objectives: Plan Achromat 4x, 10x, 40x, 100x Oil	
	Condenser: 1.25 N.A.; Stage: Rackless mechanical stage	
	Focusing: Coaxial coarse/fine focus system with limit stopper	
	and torque adjustment	
	Focusing: Coaxial focusing system with an adjustable tension	
	control and upper limit stop to prevent accidental damage to	
	slides; all metal gears, brass fine focus gear	
	Illumination: LED Illumination variable with cord holder	
	Warranty: 5 Year Mechanical & 1 Year Electrical	
	• Binocular tube with 30° inclination; Interpupillary adjustment 48-75 mm	
	Two 10x wide field eyepieces – FN20 are fixed by screws	
	Diopter adjustment on the left sleeve;	
	• Plan Achromat 4X, 10X, 40X, 100X oil objectives	
	Abbe condenser 1.25NA; Coaxial course & fine focus	
	Quadruple reverse nose piece; 174 x 89mm	
	Mechanical stage 76 x 30mm travel	
	1 slide specimen holder; Anti fungus Treated	

	Built in LED illumination; PSU + Dust cover + Oil included	
	Voltage is compatible/same in Philippine voltage setting standard	
	Includes installation (or assembly), all installation materials, and labor	
	Includes one (1) year preventive maintenance, checks, and services	
	With at least one (1) year warranty after installation	
19	1 lot FLUORESCENCE MICROSCOPE	
	SPECS:	
	Head: Binocular 30º inclined and rotatable 360º or Trinocular	
	Eyepieces: 10x 20mm FOV	
	Nosepiece: Reversed, quadruple	
	Objectives: Plan Achromat 4x, 10x, 40x, 100x Oil	
	Condenser: 1.25 N.A.	
	Stage: Rackless mechanical stage	
	Focusing: Coaxial coarse/fine focus system with limit stopper and torque adjustment	
	Focusing: Coaxial focusing system with an adjustable tension	
	control and upper limit stop to prevent accidental damage to slides;	
	all metal gears, brass fine focus gear	
	Illumination: LED Illumination variable with cord holder	
	Warranty: 5 Year Mechanical & 1 Year Electrical	
	Single Wavelength Options:	
	Mode LED lighting central wavelength Excitation filter wavelength	
	Dichroic mirror wavelength Emission filter wavelength	

n 460-490nm >500nm >510nm n 420-480nm >500nm >510nm / Rhodamine 530nm 510-550nm >570nm >590nm
Bodamine 530nm 510-550nm >570nm >590nm
380nm >400nm >420nm
-415nm >420nm >440nm
Option 1:
g central wavelength Excitation filter wavelength
avelength Emission filter wavelength
n 460-490nm >500nm >510nm
/ Rhodamine 530nm 510-550nm >570nm >590nm
Option 2:
g central wavelength Excitation filter
bic mirror wavelength Emission filter
1 420-480nm >500nm >510nm
/ Rhodamine 530nm 510-550
and memory card) compatible with the microscope
compatible to the microscope with connector to the
pecifications:
T9P006(color)
os
4.28mm (1/2.5" class)
crometers

Frame Rate: 101.2fps @ 640x480, 38.3fps @ 1280x960, 14.2fps @ 2560x1922	
Sensitivity: 1.76V/Lux-sec	
Connectivity: USB 3.0	
Compatibility: Windows (32/64 bit) XP/7/8/10, Mac OSX, Linux	
Mounting Sizes: 23mm, 30mm, 30.5mm, and C-mount	
Fluorescence Camera Software Specifications:	
OS Requirements: Windows (32/64 bit) XP/Vista/7/8/10, Mac OS	
10.8+, Linux kernel 3.13+	
Hardware Requirements: Intel Core2 2.8GHz or comparable	
processor, 2GB RAM, USB3.0 port for maximum speed	
Advanced software for Windows:	
offers Stitching, EDF, video recording and measurement functions	
conducts measurements for lengths, angles, arcs, areas and etc.	
saves still images in BMP, TIFF, JPG, PICT, PTL or other formats	
live video and still image capture can be set in different	
resolutions simultaneously	
More features: add layers, watermarks, mosaics, tiles; adjust	
color balance, exposure, saturation, contrast, orientation;	
change resolution, histogram, granulation, diffusion; transform	
images via edge detection, digital image warping; conducts	
measurements for single, parallel or perpendicular lines and	
rectangular, elliptical and irregular areas; adds notes,	
measurements, text, arrows, labels, and etc. using customizable	

	text with different sizes and colors; conducts measurements in	
	microns, millimeters, centimeters, inches, feet, and etc. under	
	any magnification powers with desired tolerances	
	Contents:	
	One 5MP USB3.0 Digital Camera	
	One Reduction Lens	
	One 6' (1.8m) USB Cable	
	Two Adapters: 30mm and 30.5mm	
	One CD with Software and User's Instructions	
	Fluorescence power supply:100W fluorescence power supply	
	(universal voltage range and constant power and calculagraph)	
	Voltage is compatible/same in Philippine voltage setting standard	
	Includes installation (or assembly), all installation materials, and labor	
	Includes one (1) year preventive maintenance, checks, and services	
	With at least one (1) year warranty after installation	
20	1 Iot PCR THERMAL CYCLER, CONVENTIONAL	
	SPECS:	
	220 V; Hertz: 60Hz; (should be compatible in Philippines)	
	Ramp Rate: 3°C/sec. heating; 2°C/sec. cooling	
	Temperature Uniformity: ≤±0.4°C at 95°C	
	Material: Aluminum; Temperature Accuracy: ±0.2°C	

Intuitive graphic programming; Small footprint	
Universal block for ultimate flexibility;	
Available with gradient; E-mail notification	
flexlid® concept allows use of all types of consumables with	
automatic height adjustment of the lid	
Dimensions (W × D × H):	
25 × 41.2 × 32.1 cm	
Includes compatible uninterruptible power supply (UPS), 3kVA	
Includes compatible AVR, 3kVA	
Includes installation, all installation materials, and labor	
Includes calibration (and materials and labor) and trainings with certificates	
With at least one (1) year warranty after installation	
1 Iot PCR THERMAL CYCLER, REAL-TIME	
SPECS:	
Maximum ramp rate, °C/sec 2.5	
Average ramp rate, °C/sec 2; Heating and cooling method Peltier	
Lid, °C Heats up to 105; Temperature Range, °C 0–100	
Accuracy, °C ±0.2 of programmed target at 90°C	
Uniformity, °C ±0.4 well-to-well within 10 sec of arrival at 90°C	
Gradient; Operational range, °C 30–100; Programmable span, °C 1– 24	
Optical Detection; Excitation 6 filtered LEDs	
Detection 6 filtered photodiodes	
	Universal block for ultimate flexibility; Available with gradient; E-mail notification flexild® concept allows use of all types of consumables with automatic height adjustment of the lid Dimensions (W × D × H): 25 × 41.2 × 32.1 cm Includes compatible uninterruptible power supply (UPS), 3kVA Includes compatible uninterruptible power supply (UPS), 3kVA Includes compatible AVR, 3kVA <i>Includes installation, all installation materials, and labor Includes calibration (and materials and labor) and trainings with certificates</i> With at least one (1) year warranty after installation SPECS: Maximum ramp rate, °C/sec 2.5 Average ramp rate, °C/sec 2.5 Average ramp rate, °C/sec 2.5 Average, °C 0–100 Accuracy, °C ±0.2 of programmed target at 90°C Uniformity, °C ±0.4 well-to-well within 10 sec of arrival at 90°C Gradient; Operational range, °C 30–100; Programmable span, °C 1– 24

	Range of excitation/emission wavelengths, nm 450–730	
	Sensitivity Detects 1 copy of target sequence in human genomic	
	DNA; Dynamic range 10 orders of magnitude; Scan Time:	
	All channels, sec 12; FAM/SYBR® Green only, sec 3; Software:	
	Operating systems Windows XP, Windows 7, Windows 10	
	Multiplex analysis Up to 5 targets per well System;	
	Licensed for real-time PCR Yes; Sample capacity, wells 96	
	Sample size, µI 10–125; Communication interface USB 2.0	
	Electrical approvals IEC, CE	
	Dimensions (W x D x H), cm/in 33 x 46 x 36/13 x 18 x 14	
	Weight, kg/lb 21/47	
	Real-time PCR license	
	Real-time PCR run in stand alone mode	
	Includes compatible laptop with licensed Operating System and Microsoft Office	
	Includes compatible printer and compatible AVR 3kVA	
	Includes compatible uninterrupted power supply (UPS), 3kVA	
	Includes installation, all installation materials, and labor	
	Includes calibration (and all materials and labor) and trainings with certificates	
	With at least one (1) year warranty after installation	
22	2 lot PCR WORKSTATION	
	SPECS:	
	220V, 60Hz (should be compatible in Philippines)	

	Dimensions: Exterior (WxDxH): 750×620×780 mm	
	Work surface (W×D): 720×540 mm	
	Large working area to accommodate bench top equipment,	
	Construction: Stainless steel housing, front and side panels	
	made of 8 mm Makrolon® protects from UV irradiation.	
	Lower front door opens up for easy movement	
	Includes installation (or assembly), all installation materials, and labor	
	Includes one (1) year preventive maintenance, checks, and services	
	With at least one (1) year warranty after installation	
23	1 Iot PHYSIOLOGY/ ANATOMY MODELS OF TORSO AND MUSCULAR	
	SYSTEM	
	SPECS:	
	"Free training/demonstration, preventive maintenance and checks"	
	Human Torso Model	
	Life-size, anatomically correct human torso model	
	Hand-painted true to detail and made of high-quality plastic	
	Weight : 11.024 kg	
	Dimensions : 87 x 38 x 25 cm	
	Includes at least the following removable parts and organs:	
	√ 6-part head	
	✓ Chest and abdominal wall with muscles	
	√ 7th thoracic vertebra	

√ Female mammary gland
✓ Gluteus maximus and deltoid muscle
√ 2 lungs
√ 2-part heart
√ 2-part stomach
√ Liver with gall bladder
√ 4-part intestinal tract
✓ Front half of kidney
√ 3-part female genital insert with fetus
✓ 4-part male genital insert
Includes Torso Guide
With at least one (1) year warranty after installation (assembly)
Muscular System Model (Whole Body)
At least 3/4 life-size, anatomically correct human muscular system model
Made of high-quality plastic
Without internal organs, brain, and male genitalia providing for e
unobstructed study of the human musculatur
Weight: 24.69 lbs.
Dimensions: 54.3 x 17.7 x 12.6 in.
Includes at least the following features:
* 5 arm/shoulder muscles
* 8 leg/hip muscles
* Detachable arms, leg, head and abdominal wall for detailed study
Includes Muscular System Guide

24	1 Iot REFRIGERATED MICROCENTRIFUGE	
	SPECS:	
	Power supply: 220 V / 60 Hz (should be compatible in Philippines)	
	Power requirement: Centrifuge 400 W; Compressor 300 W	
	Includes compatible AVR	
	Max. rotational speed: 16,400 rpm	
	Max. centrifugal force: 25,000 rcf	
	Max. load: 30 x 2.0 ml Safe-Lock Microcentrifuge Tubes	
	Max. density of material to be centrifuged: 1.2 g/ml	
	Range of control for refrigeration: – 9 °C to + 40 °C	
	Refrigeration time for "Fast Cool" from 20 °C to 4 °C: approx. 20 min.	
	Permitted ambient temperature during operation: 10 °C-35 °C	
	Permitted maximum relative air humidity: 75 %	
	Max. kinetic energy: 6,100 Nm	
	Dimensions (H x W x D): 250 x 310 x 597 mm; Weight: 34.8 kg	
	Degree of pollution 2; Overvoltage category II	
	Includes installation, all installation materials, and labor	
	Includes calibration (and calibration materials and labor) with certificate	
	With at least one (1) year warranty after installation	
25	3 lot MINI CENTRIFUGE	
	SPECS:	
	220V, 60 Hz (should be compatible in Philippines)	

	Max. Speed 8,500 rpm
	Max. RCF 3,884 g
	Dimension (LxWxH): 6 x 6 x 5 inches
	Rotor 1: 6 x 1.5/2mL tubes (adapters for 0.5mL and 0.2ml tubes)
	With at least one (1) year warranty after installation
26	1 lot REFRIGERATOR, LABORATORY
	SPECS:
	Certifications/Compliance cUL,
	Capacity : (Metric) 827 L
	220V Frequency 60 Hz; Plug Type should be compatible in Philippines
	Dimensions (D x W x H)
	Interior; 28.5 x 30.0 x 58.0 in. (72.3 x 76.2 x 147.3 cm)
	Weight (Metric) 177 kg; Shipping Weight (Metric) 208 kg
	Refrigerant R290; Shelves 4; Chart Recorder Optional
	Depth (Metric) Interior 72.3 cm; Height (English) Interior 58.0 in.
	Height (Metric) Interior 147.3 cm; Width (Metric) Interior 76.2 cm
	Width (English) Exterior 34.0 in.; Depth (English) Exterior 37.8 in.
	Depth (Metric) Exterior 96.0 cm; Temperature Range 2°C to 8° C
	Capacity (English) 29.2 cu. ft.; Electrical Requirements 208 - 230 V 60 Hz
	Amperage 15 A; Dimensions (L x W x H) Exterior
	37.8 x 34.0 x 78.5 in. (96.0 x 86.4 x 199.4 cm)
	Weight (English) 390 lb.; Shipping Weight (English) 459 lb.
	Display Microprocessor; Door Style Solid
<u> </u>	Smart View Compatibility Smart-Vue Compatible;
	- 1

	Depth (English) Interior 28.5 in.	
	Height (English) Exterior 78.5 in.; Height (Metric) Exterior 199.4 cm	
	Width (English) Interior 30 in.; Defrost Automatic	
	Width (Metric) Exterior 86.4 cm; Type High-Performance Refrigerator	
	Includes compatible AVR	
	Includes installation, all installation materials, and labor	
	Includes calibration (and calibration materials and labor) with certificate	
	With at least one (1) year warranty after installation	
27	1 lot ROTARY EVAPORATOR	
	SPECS:	
	Height (Metric) G3 Glassware: 887 mm, G3 XL Glassware: 920 mm	
	Length (Metric) 739 mm; Width (Metric) 532 mm	
	Capacity (Metric) 4.50 L for bath; 5.00 L for evaporating flask	
	Speed 10 to 280 rpm; Temperature Range (Metric) 20°C to 210°C	
	Product Type Rotary Evaporator; Wattage 1400 W	
	Condenser Type Vertical Condenser	
	Material Bath is Stainless Steel AISI 316L	
	Hertz 60 Hz; Voltage 220 V	
	Capacity (English) 152.16 oz. for bath; 169.07 oz. for evaporating flask	
	Model Hand Lift; Timer Yes	
	Display 5 in. LCD color graphic display	
	Includes Glassware set, Rotary evaporator	

	Electrical Requirements 220 V, 60Hz	
	Glassware Assembly Type Coated G3 vertical glassware	
	Temperature Accuracy ±1°C; Includes vacuum and chiller control	
	Includes installation (or assembly), all installation materials, and labor	
	Includes one (1) year preventive maintenance, checks, and services	
	With at least one (1) year warranty after installation	
28	2 Iot ROTARY EVAPORATOR VACCUM PUMP	
	SPECS:	
	IMPORTANT: Should be compatible with the rotary evaporator	
	Operating Temperature Range (deg C) : 7~40; Power: AC	
	Available Atmosphere Temperature (degree c): 7 to 40	
	Full Load Current (A): 0.6, 0.6; Oil Volume (mL): 20, 20	
	Suction diameter: O.D.Φ12mm × I.D.Φ6mm	
	Weight (kg) : 2.5; Power (V): 220 (should be compatible in Philippines)	
	Exhaust Velocity 60 Hz) (L/min): 43591, 5/6	
	Voltage (V): 100; Use Oil: SMR-100, SMR-100	
	Pump type: Oil Rotation	
	Maximum Dimensions (Width x Length x Height)	
	(mm): 80 x 199 x 156, 80x199x156	
	TRUSCO Part Number: 398-1592, 398-1592	
	Dimension (mm): 80.0x199.0x156.0	
	2014 TRUSCO Published Page: 2-2230	
	Ultimate Pressure (Pa): 4000, 4x103	

	Intake Pipe Diameter (phi mm): O.D.12xI.D.6	
	Purpose; Vacuum evaporator, freeze dryer	
	Includes installation (or assembly), all installation materials, and labor	
	Includes one (1) year preventive maintenance, checks, and services	
	With at least one (1) year warranty after installation	
29	1 Iot SPECTROPHOTOMETER, MICROVOLUME	
	SPECS:	
	Wavelength Range (nm) 190 nm - 1,100 nm	
	Photometric accuracy (K2Cr2O7) ±0.01A; Wavelength accuracy ±1.0nm	
	Path length 0.1mm; 1.0mm; Cuvette holder: 1cm	
	Options: Printer; Cuvettes; Barcode reader; Fingerprint reader;	
	FillPal Mini pump; LabX PC software	
	Resolution (Toluene in hexane) >1.7	
	Stray light (KCl, 198nm) >2; Shortcuts per user 24	
	Max. Number of Methods 50; User Identification yes	
	Language: English	
	Minimal Scan time 1 s; Display 7 inch QVGA Color TFT touch	
	sensitive screen; Displayed Resolution 800x400	
	Dimensions (DxHxW) 10.04 in x 8.54 in x 8.19 in	
	(255 mm x 217 mm x 208 mm)	
	Weight (incl. Terminal) 7.2 kg; Terminal resolution 800x400	
	FastTrack UV/VIS Spectroscopy	
	With LockPath Technology to guarantee measurement accuracy	

	Includes Cuvette, quartz glass, 10 mm 2 each	
	Depth: 12.5 mm; Width: 12.5 mm; Volume: 3,500 µL	
	Height (2): 45 mm; Inner Dimensions: 9.5 mm	
	Optical path length: 10 mm	
	220 V; 60Hz (sould be compatible in Philippines)	
	Includes installation, all installation materials, and labor	
	Includes calibration (and materials and labor) and trainings with certificates	
	With at least one (1) year warranty after installation	
30	1 lot WATER DISTILLER SYSTEM	
	SPECS:	
	Water Distiller: Height: 13 inches; Width: 20 inches;	
	Depth: 13 inches; Shipping Weight: 38 lbs; Storage Tank: Height:	
	6.5 inches; Width: 23 inches; Depth: 16.5 inches; Shipping Weight: 14 lbs	
	Overall Height: (Water Distiller plus Storage Tank) 19.5 inches	
	- Allow 3" additional for ventilation, 22.5" min. total.	
	Product Description:	
	Produces 46 liters (approximately 12 gallons) every 24 hours.	
	Features & Convenience: Automatic High Level Control	
	Convenient Faucet with Water Site Gauge	
	15 Liter (approximately 4 Gallons) Stainless Steel Storage Tank	
	316 Alloy stainless steel evaporator for increased corrosion resistance	
	Incoloy (stainless steel super alloy) heating element - 1500 watt	
	Volatile gas vent system eliminates VOCs prior to condensation	

	Self-Sterilization Feature. With empty reserve tank, simply flip fan	
	switch off for a couple minutes when steaming	
	Easily converts from Auto-fill to Manual-fill by flipping a switch,	
	(if a tap water line is not available.)	
	220 V; 60Hz (sould be compatible in Philippines)	
	Everything is included for a normal installation. (Installation kit,	
	Pre-Filter, Post-filter and fittings.)	
	Includes installation, all installation materials, and labor	
	Includes calibration (and materials and labor) and trainings with certificates	
	With at least one (1) year warranty after installation	
31	2 Iot VORTEX MIXER	
	SPECS:	
	analog, 230V, 60 Hz	
	compatible for use with flasks, beakers, tubes and microwell plates	
	Touch mode mixer with three-way power switch	
	Orbit: 4.9mm	
	Speed knob: Variable 1 to 10 dial marks	
	Variable speed: 300 to 3200rpm	
	Electrical requirements: 120V 50/60Hz 150w	
	L x W x H: 20.3 x 14 x 12.2cm (8 x 5.5 x 4.8 in.)	
	With at least one (1) year warranty	
32	1 lot LIQUID NITROGEN TANK	

SPECS:	
cryogenic dewar with pouring spouts or pressurized dispensing	
device or dippers for safe transfer of liquid nitrogen; 20-liter liqui	d
nitrogen capacity; Static Evaporation Rate: 0.18 L/day; Neck	
Opening 2.18: inches; Inner Diameter: 11.4 in.; Outer Diameter:	
14.5 inches: Usable Height: 13.7 inches; Overall Height: 24.5 inc	ches;
Weight Empty:19 lb: Weight Full:55 lb.	
Includes 1 piece portable	
liquid nitrogen container (capacity 1.5 to 2 liters) with hand benchtop use	lle for
Includes installation (or assembly), all install materials, and labor	lation
Includes one (1) year preventive maintenance, checks services	s, and
With at least one (1) year warranty after installation	

REPUBLIC OF THE PHILIPPINES) CITY/MUNICIPALITY OF _____) S.S.

AFFIDAVIT

I, [Name of Affiant], of legal age, [Civil Status], [Nationality], and residing at [Address of Affiant], after having been duly sworn in accordance with law, do hereby depose and state that:

1. Select one, delete the other:

If a sole proprietorship: I am the sole proprietor or authorized representative of *[Name of Bidder]* with office address at *[address of Bidder]*;

If a partnership, corporation, cooperative, or joint venture: I am the duly authorized and designated representative of [Name of Bidder] with office address at [address of Bidder];

2. Select one, delete the other:

If a sole proprietorship: As the owner and sole proprietor, or authorized representative of [Name of Bidder], I have full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for [Name of the Project] of the [Name of the Procuring Entity], as shown in the attached duly notarized Special Power of Attorney;

If a partnership, corporation, cooperative, or joint venture: I am granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for [Name of the Project] of the [Name of the Procuring Entity], as shown in the attached [state title of attached document showing proof of authorization (e.g., duly notarized Secretary's Certificate, Board/Partnership Resolution, or Special Power of Attorney, whichever is applicable;)];

- 3. *[Name of Bidder]* is not "blacklisted" or barred from bidding by the Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units, foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the Government Procurement Policy Board;
- 4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;
- 5. *[Name of Bidder]* is authorizing the Head of the Procuring Entity or its duly authorized representative(s) to verify all the documents submitted;

6. Select one, delete the rest:

If a sole proprietorship: The owner or sole proprietor is not related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

If a partnership or cooperative: None of the officers and members of *[Name of Bidder]* is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

If a corporation or joint venture: None of the officers, directors, and controlling stockholders of *[Name of Bidder]* is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

- 7. [Name of Bidder] complies with existing labor laws and other social legislations; and
- 8. *[Name of Bidder]* is aware of and has undertaken the following responsibilities as a Bidder:
 - a) Carefully examine all of the Bidding Documents;
 - b) Acknowledge all conditions, local or otherwise, affecting the implementation of the Contract;
 - c) Made an estimate of the facilities available and needed for the contract to be bid, if any; and
 - d) Inquire or secure Supplemental/Bid Bulletin(s) issued for the [Name of the Project].
- 9. *[Name of Bidder]* did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.

IN WITNESS WHEREOF, I have hereunto set my hand this ____ day of ____, 20___ at ____, Philippines.

Bidder's Representative/Authorized Signatory

SUBSCRIBED AND SWORN to before me this ____ day of [month] [year] at [place of execution], Philippines. Affiant/s is/are personally known to me and was/were identified by me through competent evidence of identity as defined in the 2004 Rules on Notarial Practice (A.M. No. 02-8-13-SC). Affiant/s exhibited to me his/her [insert type of government identification card used], with his/her photograph and signature appearing thereon, with no. _____ and his/her Community Tax Certificate No. _____ issued on _____ at ____.

Witness my hand and seal this ____ day of [month] [year].

NAME OF NOTARY PUBLIC

_until
ued], [place issued]
ued], [place issued]

Doc. No. _____ Page No. _____ Book No. _____ Series of _____

Section VIII. Checklist of Technical and Financial Documents

Notes on the Checklist of Technical and Financial Documents

The prescribed documents in the checklist are mandatory to be submitted in the Bid, but shall be subject to the following:

- a. GPPB Resolution No. 09-2020 on the efficient procurement measures during a State of Calamity or other similar issuances that shall allow the use of alternate documents in lieu of the mandated requirements; or
- b. Any subsequent GPPB issuances adjusting the documentary requirements after the effectivity of the adoption of the PBDs.

The BAC shall be checking the submitted documents of each Bidder against this checklist to ascertain if they are all present, using a non-discretionary "pass/fail" criterion pursuant to Section 30 of the 2016 revised IRR of RA No. 9184.

Checklist of Technical and Financial Documents

I. TECHNICAL COMPONENT ENVELOPE

Class "A" Documents

Legal Documents

- □ (a) Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages); or
- (b) Registration certificate from Securities and Exchange Commission (SEC), Department of Trade and Industry (DTI) for sole proprietorship, or Cooperative Development Authority (CDA) for cooperatives or its equivalent document,

<u>and</u>

- □ (c) Mayor's or Business permit issued by the city or municipality where the principal place of business of the prospective bidder is located, or the equivalent document for Exclusive Economic Zones or Areas;
 and
- □ (d) Tax clearance per E.O. No. 398, s. 2005, as finally reviewed and approved by the Bureau of Internal Revenue (BIR).

Technical Documents

- □ (f) Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid; <u>and</u>
- □ (g) Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid, except under conditions provided for in Sections 23.4.1.3 and 23.4.2.4 of the 2016 revised IRR of RA No. 9184, within the relevant period as provided in the Bidding Documents; and
- (h) Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission;

<u>or</u>

Original copy of Notarized Bid Securing Declaration; and

- ☐ (i) Conformity with the Technical Specifications, which may include production/delivery schedule, manpower requirements, and/or after-sales/parts, if applicable; **and**
- (j) Original duly signed Omnibus Sworn Statement (OSS);
 and if applicable, Original Notarized Secretary's Certificate in case of a corporation, partnership, or cooperative; or Original Special Power of Attorney of all members of the joint venture giving full power and authority to its officer to sign the OSS and do acts to represent the Bidder.

Financial Documents

- □ (k) The Supplier's audited financial statements, showing, among others, the Supplier's total and current assets and liabilities, stamped "received" by the BIR or its duly accredited and authorized institutions, for the preceding calendar year which should not be earlier than two (2) years from the date of bid submission; and
- \square (1) The prospective bidder's computation of Net Financial Contracting

Capacity (NFCC);

<u>or</u>

A committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation.

Class "B" Documents

☐ (m) If applicable, a duly signed joint venture agreement (JVA) in case the joint venture is already in existence;

<u>or</u>

duly notarized statements from all the potential joint venture partners stating that they will enter into and abide by the provisions of the JVA in the instance that the bid is successful.

Other documentary requirements under RA No. 9184 (as applicable)

- □ (n) [For foreign bidders claiming by reason of their country's extension of reciprocal rights to Filipinos] Certification from the relevant government office of their country stating that Filipinos are allowed to participate in government procurement activities for the same item or product.
- □ (o) Certification from the DTI if the Bidder claims preference as a Domestic Bidder or Domestic Entity.

25 FINANCIAL COMPONENT ENVELOPE

- \Box (a) Original of duly signed and accomplished Financial Bid Form; <u>and</u>
- \Box (b) Original of duly signed and accomplished Price Schedule(s).

