

PHILIPPINE BIDDING DOCUMENTS

Republic of the Philippines

**PROVISION OF HIGHER EDUCATION
SERVICES (PROCUREMENT OF
ESSENTIAL LABORATORY AND
WORKSHOP EQUIPMENT FOR THE
FACULTY OF ENGINEERING AND PHYSICS
LABORATORY OF SOUTHERN LEYTE
STATE UNIVERSITY FOR CERTIFICATE OF
PROGRAM COMPLIANCE (COPC) WITH
THE COMMISSION ON HIGHER
EDUCATION)**

**First Edition
May 2025**

Preface

This Philippine Bidding Documents (PBD) for the Government of the Philippines (GoP) for the procurement of Goods through [*Competitive Bidding, Limited Source Bidding, Competitive Dialogue,¹ or Unsolicited Offer with Bid Matching²*] have been prepared by the GoP for use by all branches, agencies, departments, bureaus, offices, or instrumentalities of the government, including government-owned and/or -controlled corporations (GOCC), government financial institutions (GFI), state universities and colleges (SUC), and local government units (LGU) and autonomous regional government use in projects that are financed in whole or in part by the GOP or any foreign government/foreign or international financing institution³ in accordance with the provisions of the Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 12009.

The Bidding Documents shall clearly and adequately define, among others: (a) the objectives, scope, and expected outputs and/or results of the proposed contract; (b) the eligibility requirements of Bidders, such as track record to be determined by the Head of the Procuring Entity (HoPE); (c) the expected contract duration, the estimated quantity in the case of procurement of goods, delivery schedule and/or time frame; and (d) the obligations, duties, and/or functions of the winning Bidder.

In order to simplify the preparation of the Bidding Documents for each procurement, the PBD groups the provisions that are intended to be used unchanged in Section II. Instructions to Bidders (ITB) and in Section IV. General Conditions of Contract (GCC). Data and provisions specific to each procurement and contract should be included in Section III. Bid Data Sheet (BDS); Section V. Special Conditions of Contract (SCC); Section VI. Schedule of Requirements; and Section VII. Technical Specifications. The forms to be used are provided in Section VIII. Philippine Bidding Document Related Forms.

Prudence must be exercised to check the relevance of the provisions of the PBD against the requirements of the specific Goods to be procured. In addition, 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, except for the notes introducing Section VIII. Philippine Bidding Document Related Forms where the information is useful for the Bidder. 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 Project.
- b) Specific details, such as the “name of the Procuring Entity” and “address for bid submission,” should be furnished in the ITB, BDS, and SCC. 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, BDS, SCC, 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. The Bidding Documents should not contain footnotes except Section VIII. Philippine Bidding Document Related Forms since these provide important guidance to Bidders.

¹ For Second Stage of Competitive Dialogue under Section 29.4.2 of IRR of RA No. 12009.

² For Comparative or Competitive Bidding for Unsolicited Offer under Section 30.7 of IRR of RA No. 12009.

³ Unless the Treaty or International or Executive Agreement expressly provides use of foreign government/foreign or international financing institution procurement guidelines.

- d) The cover page should be modified as required to identify the Bidding Documents and date of issue.
- e) The Project title page should be modified as required to identify the Project title and number, name and address of the Procuring Entity.
- f) If modifications must be made to the bidding requirements, they can be presented in the BDS. Modifications for specific Project or Contract details should be provided in the SCC as amendments to the Conditions of Contract. For easy reference and completion, clauses from the PBD and SCC shall appear in bold type face on Section II. Instructions to Bidders and Section IV. General Conditions of Contract, respectively.



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PROVISION OF HIGHER EDUCATION SERVICES (PROCUREMENT OF ESSENTIAL LABORATORY AND WORKSHOP EQUIPMENT FOR THE FACULTY OF ENGINEERING AND PHYSICS LABORATORY OF SOUTHERN LEYTE STATE UNIVERSITY FOR CERTIFICATE OF PROGRAM COMPLIANCE (COPC) WITH THE COMMISSION ON HIGHER EDUCATION)

PB 2026-G&S-09



TABLE OF CONTENTS

Glossary of Acronyms, Terms, and Abbreviations.....	6
Definition of Terms	8
Section I. Invitation to Bid	10
Section II. Instructions to Bidders	15
Section III. Bid Data Sheet.....	44
Section IV. General Conditions of Contract	49
Section V. Special Conditions of Contract.....	63
Section VI. Schedule of Requirements	70
Section VII. Technical Specifications	74
Section VIII. Philippine Bidding Document Related Forms	139

Glossary of Acronyms, Terms, and Abbreviations

ABC – Approved Budget for the Contract.

BAC – Bids and Awards Committee.

BDS – Bid Data Sheet.

BIR – Bureau of Internal Revenue.

BSP – Bangko Sentral ng Pilipinas.

CDA - Cooperative Development Authority.

CIF – Cost Insurance and Freight.

CIP – Carriage and Insurance Paid.

COS – Contract of Service.

CPI – Consumer Price Index.

DDP – Delivered Duty Paid.

DOLE – Department of Labor and Employment.

DTI – Department of Trade and Industry.

EXW – Ex works.

FCA – “Free Carrier” shipping point.

FOB – “Free on Board” shipping point.

GCC - General Conditions of Contract.

GFI – Government Financial Institution.

GOCC – Government-Owned and/or –Controlled Corporation.

GoP – Government of the Philippines.

GPPB – Government Procurement Policy Board.

HoPE – Head of Procuring Entity.

INCOTERMS – International Commercial Terms.

IRR – Implementing Rules and Regulations.

ITB – Instructions to Bidders.

JO – Job Order.

LCB- Lowest Calculated Bid.

LCRB – Lowest Calculated Responsive Bid.

LGU – Local Government Unit

LoC – Letter of Credit.

MAB – Most Advantageous Bid.

MARB – Most Advantageous Responsive Bid.

MEARB – Most Economically Advantageous Responsive Bid.

MYCA – Multi-Year Contracting Authority.

NFCC – Net Financial Contracting Capacity.

NGA – National Government Agency.

PhilGEPS - Philippine Government Electronic Procurement System.

PSA – Philippine Statistics Authority.

RA No. – Republic Act Number.

SARB – Single Advantageous Responsive Bid.

SCC - Special Conditions of Contract.

SCRB – Single Calculated Responsive Bid.

SEARB – Single Economically Advantageous Responsive Bid.

SEC – Securities and Exchange Commission.

SLCC – Single Largest Completed Contract.

UN – United Nations.

Definition of Terms

Bid – a signed offer, proposal, or quotation submitted by a supplier, manufacturer, distributor, contractor, consultant, or service provider in response to the requirements of the Procuring Entity as stated in the Bidding Documents. (IRR, Section 5[c]).

Bidder – a supplier, manufacturer, distributor, contractor, consultant, and service provider, whether public or private, who submits a Bid in response to the requirements of the Procuring Entity as stated in the Bidding Documents. (IRR, Section 5[d]).

Bidding Documents – the documents issued by the Procuring Entity as the basis for Bids, furnishing all information necessary to prospective Bidder to prepare a Bid for the Goods, Infrastructure Projects, and Consulting Services required by the Procuring Entity. (IRR, Section 5[e]).

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.

Contract Price - the price payable to the Supplier under the Contract for the full and proper performance of its contractual obligations.

Effective Date of the Contract – the date indicated in the contract. However, the Supplier shall commence performance of its obligations only upon receipt of the Notice to Proceed.

Foreign-funded Procurement or Foreign-Assisted Project – refers to the acquisition of Goods, Consulting Services, and the contracting for Infrastructure Projects by the Government of the Philippines which are wholly or partly funded by foreign loans or grants pursuant to a Treaty or International or Executive Agreement.

Framework Agreement – is a procurement strategy which shall be in the nature of an option contract between the Procuring Entity and the Bidder that stipulates the terms and conditions to be applied in subsequent contracts for the procurement of Goods, Infrastructure Projects, and Consulting Services with a single or multiple contractor, manufacturer, supplier, distributor, consultant, and service provider to expand the pool of prospective Bidders, take advantage of economies of scale, minimize the administrative burden of conducting separate procurement activities, and generate time and money savings. (IRR, Section 16.2).

Goods – refer to (i) all items, supplies, and materials, whether in the nature of equipment, furniture, stationery, materials for construction, or personal property of any kind, needed in the transaction of public businesses or in the pursuit of any government undertaking, project or activity; or (ii) general support services which pertain to all types of services except Consulting Services and Infrastructure Projects, such as the repair and maintenance of equipment and furniture, as well as trucking, hauling, janitorial, security, and related or analogous services. Personnel Services or individual COS or JO engagements do not fall under this definition; (IRR, Section 5[n])

MARB – refers to the award criteria in the procurement of Goods where the considerations for the award of contract are the eligibility of the bidder, the responsiveness of its bid to the technical requirements, and the most advantageous bid in reference to the highest rated offer based on the quality component of the bid.

MEARB – refers to the award criteria in the procurement of Goods where the considerations for the award of contract are the eligibility of the bidder, and the responsiveness of its bid to the technical requirements, and the determination of the most economically advantageous bid in reference to the quality-price ratio allocated to the technical and financial components of the bid.

Online submission – pertains to the submission of the bid for Goods and the bid envelopes containing the technical and financial components of the bid through electronic means or through the electronic bidding facility of the PhilGEPS.

Project – refers to a specific or identified procurement covering Goods, Infrastructure Projects 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.

Services - means those services ancillary to the supply of the Goods, such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training, and other such obligations of the Supplier covered under the 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 its Bid. Supplier as used in these Bidding Documents may likewise refer to a manufacturer, distributor, contractor, or consultant, or service provider.

Verified Report - the report submitted by the Implementing Unit to the HoPE setting forth its findings as to the existence of grounds or causes for termination and explicitly stating its recommendation for the issuance of a Notice to Terminate.

Section I. Invitation to Bid

Notes on the Invitation to Bid

The Invitation to Bid provides information that enables potential Bidders to decide whether to participate in the procurement at hand. The Invitation to Bid shall be:

- a) In line with the principle of transparency and competitiveness and to ensure the widest possible dissemination thereof, all invitations to bid shall be published continuously by the Procuring Entity for seven (7) calendar days on the PhilGEPS website, in any conspicuous place reserved for this purpose in the premises of the Procuring Entity, and in the website or social media platforms of the Procuring Entity, if available, or such other channels as may be authorized by the Government Procurement Policy Board (GPPB), and the website prescribed by the foreign government/foreign or international financing institution, if applicable.
- b) For justifiable reasons, a Procuring Entity that cannot publish procurement opportunities on its website, social media platform, or such other channels authorized by the GPPB shall publish its Invitation to Bid, at least once, in a newspaper of general nationwide circulation;

Apart from the essential items listed in the Bidding Documents, the Invitation to Bid should also indicate the following:

- a) The availability of the Bidding Documents, which shall commence on the date the Invitation to Bid is first published and continue until the deadline for 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 from the last day of publication of the Invitation to Bid;
- d) The procurement strategy/ies (e.g. Life Cycle Assessment and Life Cycle Cost Analysis, Subcontracting, Pooled Procurement); and
- e) The bid award criterion/criteria (e.g., the application of a margin of preference in bid evaluation).

The Invitation to Bid should be incorporated in the Bidding Documents. The information contained in the Invitation to Bid must conform to the Bidding Documents, particularly to the relevant information in the BDS.



INVITATION TO BID FOR

PROVISION OF HIGHER EDUCATION SERVICES (PROCUREMENT OF ESSENTIAL LABORATORY AND WORKSHOP EQUIPMENT FOR THE FACULTY OF ENGINEERING AND PHYSICS LABORATORY OF SOUTHERN LEYTE STATE UNIVERSITY FOR CERTIFICATE OF PROGRAM COMPLIANCE (COPC) WITH THE COMMISSION ON HIGHER EDUCATION)

- 1) The **Southern Leyte State University – Main Campus**, through the Regular Agency Fund 2026 intends to apply the sum of

Lot No.	Approved Budget for Contract
Lot No. 1	11,378,487.00
Lot No. 2	10,343,807.00
Lot No. 3	3,354,930.58
Lot No. 4	12,856,728.60
Lot No. 5	484,226.00
Lot No. 6	1,106,500.00
Lot No. 7	14,354,000.00
Lot No. 8	1,145,000.00
Lot No. 9	1,704,650.00
Lot No. 10	2,090,000.00
Lot No. 11	13,380,568.00
Lot No. 12	1,580,000.00
Lot No. 13	996,296.33
Lot No. 14	211,238.10
Lot No. 15	1,456,283.02
Lot No. 16	1,762,123.77
Lot No. 17	969,850.06

TOTAL	79,174,688.06
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being the Approved Budget for the Contract (ABC) to payments under the contract for **Provision of Higher Education Services (Procurement of Essential Laboratory and Workshop Equipment for the Faculty of Engineering and Physics Laboratory of Southern Leyte State University for Certificate of Program Compliance (COPC) with the Commission on Higher Education)** under **PB 2026-G&S-09** for each lot. Bids received in excess of the ABC for each lot shall be automatically rejected at bid opening.

2) The **Provision of Higher Education Services (Procurement of Essential Laboratory and Workshop Equipment for the Faculty of Engineering and Physics Laboratory of Southern Leyte State University for Certificate of Program Compliance (COPC) with the Commission on Higher Education)**. Delivery of the Goods is required **120 calendar days**. Bidders should have completed, at least 5 years from the date of submission and receipt of bids, contracts 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 competitive bidding procedures using a non-discretionary “pass/fail” criterion as specified in the IRR of RA No. 12009.

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) Interested Bidders may obtain further information from **Southern Leyte State University – Main Campus** and inspect the Bidding Documents at the address given below from 8:00 A.M. to 5:00 P.M.

5) A complete set of Bidding Documents may be acquired by interested Bidders on May 12, 2026 from the address given below upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of

Lot No.	Approved Budget for Contract	Bidding Document Fee
Lot No. 1	11,378,487.00	25,000.00
Lot No. 2	10,343,807.00	25,000.00
Lot No. 3	3,354,930.58	5,000.00
Lot No. 4	12,856,728.60	25,000.00
Lot No. 5	484,226.00	500.00
Lot No. 6	1,106,500.00	5,000.00
Lot No. 7	14,354,000.00	25,000.00

Lot No. 8	1,145,000.00	5,000.00
Lot No. 9	1,704,650.00	5,000.00
Lot No. 10	2,090,000.00	5,000.00
Lot No. 11	13,380,568.00	25,000.00
Lot No. 12	1,580,000.00	5,000.00
Lot No. 13	996,296.33	1,000.00
Lot No. 14	211,238.10	500.00
Lot No. 15	1,456,283.02	5,000.00
Lot No. 16	1,762,123.77	5,000.00
Lot No. 17	969,850.06	1,000.00

It may also be downloaded free of charge from the website of the Philippine Government Electronic Procurement System (PhilGEPS) and the website of the Procuring Entity, provided that Bidders shall pay the applicable fee for the Bidding Documents **either in cash or through SLSU SOGOD CAMP LBP Current Account No. 3322-1003-95** not later than the submission of their bids.

- 6) The **Southern Leyte State University – Main Campus** will hold a Pre-Bid Conference on May 22, 2026 at 1:00 in the afternoon at the BAC Conference Room, 2nd Floor of Administration Building, SLSU Sogod Campus and/or through video conferencing via Microsoft Teams
<https://teams.microsoft.com/meet/48284885959923?p=STIB14YuqkT8m2Xb9s>,
which shall be open to prospective Bidders.
- 7) Bids must be duly received by the Bids and Awards Committee (BAC) Secretariat through manual submission at the office address indicated below on or before June 03, 2026 at 9:00 in the morning. 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 16.1.
- 9) Bid opening shall be on June 03, 2026 at 1:00 in the afternoon at the BAC Conference Room, 2nd Floor of Administration Building, SLSU Sogod Campus and/or via Microsoft Teams
<https://teams.microsoft.com/meet/48382932157825?p=eEFGjQXktG1m0bLnPy>.
Bids will be opened in the presence of the Bidders' representatives who choose to attend the activity.
- 10) The Southern Leyte State University – Main Campus 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 Section 70⁴ of R.A. No. 12009, without incurring any liability to the affected Bidder or Bidders.

11) For further information, please refer to:

Reymark M. Cativo
BAC Secretariat
Brgy. San Roque Sogod, Southern Leyte 6606
09568601139
bac_sg@southernleytestateu.edu.ph

12) You may visit the following websites:

For downloading of Bidding Documents: *www.southernleytestateu.edu.ph* or *www.philgeps.gov.ph*

May 12, 2026

Sgd.
MARIE KHUL C. LANGUB, Ed.D, Ph.D.
BAC Chairperson

⁴ Reservation Clause

Section II. Instructions to Bidders

Notes on the Instructions to Bidders

This Section of the Bidding Documents 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.

This Section contains provisions that shall not be changed or modified. Any amendment shall be reflected on Section III. Bid Data Sheet which consists of provisions that supplement, amend, or specify in detail, information or requirements included in this Section.

Matters governing performance of the Supplier, payments under the contract, or those affecting the risks, rights, and obligations of the parties under the contract are not normally included in this Section, but rather under Section IV. GCC and/or Section V. SCC. If duplication of a subject is inevitable in other sections of the document prepared by the Procuring Entity, prudence must be exercised to avoid contradictions between clauses dealing with the same matter.

TABLE OF CONTENTS

A. General	18
1) Scope of Bid	18
2) Source of Funds	18
3) Corrupt, Fraudulent, Collusive, and Coercive Practices	18
4) Conflict of Interest	19
5) Eligible Bidders	21
6) Bidder's Responsibilities	22
7) Origin of Goods	24
8) Subcontracts	25
B. Contents of Bidding Documents	25
9) Pre-Bid Conference	25
10) Clarification and Amendment of Bidding Documents	25
C. Preparation of Bids	26
11) Language of Bids	26
12) Documents Comprising the Bid: Technical and Financial Components	26
13) Bid Prices	28
14) Bid Currencies	29
15) Bid Validity	29
16) Bid Security	30
17) Format and Signing of Bids	32
18) Sealing and Marking of Bids	32
D. Submission and Opening of Bids	33
19) Deadline for Submission of Bids	33
20) Late Bids	33
21) Modification and Withdrawal of Bids	33
22) Opening and Preliminary Examination of Bids	34
E. Evaluation and Comparison of Bids	35
23) Process to be Confidential	35
24) Clarification of Bids	35
25) Domestic Preference	35
26) Detailed Evaluation and Comparison of Bids	36
27) Post-Qualification	38

28)	Reservation Clause	40
F.	Award of Contract	40
29)	Contract Award.....	40
30)	Signing of the Contract	41
31)	Performance Security	42
32)	Notice to Proceed	43
33)	Protest Mechanism	43

A. General

1) Scope of Bid

- 1.1 The Procuring Entity, named in the **BDS** invites bids for the Project with Identification Number which shall be specified in the **BDS**.
- 1.2 The Project is composed of number of lots or items as provided in the **BDS**, the details of which are described in Section VII. Technical Specifications.

2) Source of Funds

The Procuring Entity has a budget or has received funds from the Funding Source named in the **BDS**, and in the amount indicated in the **BDS**. It intends to apply part of the funds received for this Project to cover eligible payments under the contract.

3) Corrupt, Fraudulent, Collusive, and Coercive Practices

- 3.1 Unless otherwise specified in the **BDS**, 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. In pursuance of this policy, the Procuring Entity:
 - a) defines, for purposes of this provision, the following terms under existing laws, rules, and regulations:
 - i) “corrupt practice” means an act by which officials in the public or private sectors improperly and unlawfully enrich themselves, others, or induce others to do so, by misusing the position in which they are placed, and includes the offering, giving, receiving, or soliciting of anything of value to influence the action of any such official in the procurement process or in contract execution; entering, on behalf of the government, into any contract or transaction manifestly and grossly disadvantageous to the same, whether or not the public officer profited or will profit thereby, and similar acts as provided in RA No. 3019.
 - ii) “fraudulent practice” means a misrepresentation of facts for purposes of influencing a procurement process or the execution of a contract to the detriment of the Procuring Entity, which includes collusive practices among Bidders (prior to or after bid submission) designed to establish bid prices at artificial, non-competitive levels and to deprive the Procuring Entity of the benefits of free and open competition.
 - iii) “collusive practices” means a scheme or arrangement between two or more Bidders, with or without the knowledge of the Procuring Entity, designed to establish bid prices at artificial, non-competitive levels.
 - iv) “coercive practices” means harming or threatening to harm, directly or indirectly, persons, or their property to influence their

participation in a procurement process, or affect the execution of a contract;

v) “obstructive practice” is

a) deliberately destroying, falsifying, altering or concealing of evidence material to administrative proceedings or investigation or making false statements to investigators in order to materially impede administrative proceedings or investigation of the Procuring Entity or any foreign government/foreign or international financing institution relative to allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent the latter from disclosing its knowledge of matters relevant to the administrative proceedings or investigation or from pursuing such proceedings or investigation; or

b) acts intended to materially impede the exercise of the inspection and audit rights of the Procuring Entity or any foreign government/foreign or international financing institution herein.

b) Undertakes to reject a proposal for award upon *prima facie* determination that the Bidder recommended for award has engaged in any of the prohibited practices mentioned in this Clause for purposes of competing for the contract.

3.2 Further, the Procuring Entity will seek to impose the maximum civil, administrative, and/or criminal penalties available under applicable laws on individuals and organizations deemed to be involved in any of the practices mentioned in ITB Clause 3.1(a).

3.3 Furthermore, the Funding Source and the Procuring Entity reserve the right to inspect and audit records and accounts of a Bidder or Supplier in the bidding for and performance of a contract themselves or through independent auditors as reflected in the **GCC** Clause 3.

4) **Conflict of Interest**

4.1 All Bidders found to have conflicting interests shall be disqualified to participate in the procurement at hand, without prejudice to the imposition of appropriate administrative, civil, and criminal sanctions. A Bidder may be considered to have conflicting interests with another Bidder in any of the events described in paragraphs (a) through (c) below and a general conflict of interest in any of the circumstances set out in paragraphs (d) and (f) below:

a) A Bidder has controlling shareholders or beneficial owners in common with another Bidder;

b) A Bidder receives or has received any direct or indirect subsidy from any other Bidder;

c) A Bidder has the same legally authorized representative as that of another Bidder for purposes of this bid;

- d) A Bidder has a relationship, directly or through third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder or influence the decisions of the Procuring Entity regarding this bidding process; This may include a firm or an organization that lends, or temporarily seconds, its personnel to firms or organizations that are engaged in consulting services for the preparation related to procurement for or implementation of the project, if the personnel would be involved in any capacity on the same project;
 - e) A Bidder who participated as a consultant in the preparation of the design or technical specifications of the Goods and related services that are the subject of the bid.
 - f) A Bidder who lends, or temporarily seconds, its personnel to firms or organizations which are engaged in consulting services for the preparation related to procurement for or implementation of the project, if the personnel would be involved in any capacity on the same project.
- 4.2 All Bidding Documents shall be accompanied by an omnibus sworn statement of the Bidder that it is not related, by consanguinity or affinity up to the third level, to the HoPE, Procurement Agent (if engaged), the head of the Project Management Office (PMO), the End-User or Implementing Unit or any members of the Bids and Awards Committee (BAC), Technical Working Group (TWG), and BAC Secretariat.
- 4.3 The Bidder shall also disclose the ultimate beneficial ownership of an entity. Failure to comply shall be a ground for the automatic disqualification of the bid in consonance with Section 59 of the IRR. For this reason, relation to the aforementioned persons within the third civil degree of consanguinity or affinity shall automatically disqualify the Bidder from participating in the procurement of contracts of the Procuring Entity notwithstanding the act of such persons inhibiting themselves from the procurement process. This Clause shall apply to the following persons and affiliates:
- a) In the case of individuals or sole proprietorships, to the Bidders and their spouses;
 - b) In the case of partnerships, to the partnership itself and its partners;
 - c) In the case of cooperatives, to the cooperative itself and members of the board of directors, general manager or chief executive officer;
 - d) A partnership, joint venture or consortium which is blacklisted or which has blacklisted member/s or partner/s, as well as a person or entity who is a member of a blacklisted joint venture or consortium, are, likewise not allowed to participate in any government procurement during the period of suspension or blacklisting; and
 - e) In the case of corporations, a single stockholder, together with their relatives up to the third civil degree of consanguinity or affinity, and their assignees, holding at least twenty percent (20%) of the shares therein, its chairperson and president, shall be blacklisted after they have been determined to hold the same controlling interest in a previously blacklisted corporation or in two corporations that have been blacklisted; the corporations of which they are part of shall also be blacklisted.

5) Eligible Bidders

- 5.1 Only Bids found to be legally, technically, and financially eligible will be evaluated. For procurement of Goods, the following persons shall be eligible to participate in this bidding:
- a) Duly-licensed Filipino citizens or sole proprietorships;
 - b) Partnerships duly organized under the laws of the Philippines and of which at least sixty percent (60%) of the interest belongs to citizens of the Philippines;
 - c) Corporations duly organized under the laws of the Philippines, and of which at least sixty percent (60%) of the outstanding capital stock belongs to citizens of the Philippines;
 - d) Cooperatives duly organized under the laws of the Philippines; and
 - e) Persons or entities forming themselves into a Joint Venture (JV), i.e., a group of two (2) or more persons or entities that intend to be jointly and severally responsible or liable for a particular contract: Provided, however, that Filipino ownership or interest of the JV concerned shall be at least sixty percent (60%). For this purpose, Filipino ownership or interest shall be based on the contributions of each of the members of the joint venture as specified in their Joint Venture Agreement (JVA); Provided, further, that the primary purpose of each member of the JV must be similar to or related with the requirements of the project to be bid out.
- 5.2 Foreign Bidders may be eligible to participate when any of the following circumstances exist, as specified in the **BDS**:
- a) When provided for under any treaty or international or executive agreement as provided in Section 4 of the IRR;
 - b) When the foreign supplier is a citizen, corporation, or association of a country, the laws or regulations of which grant reciprocal rights or privileges to citizens, corporations, or associations of the Philippines;
 - c) When the Goods sought to be procured are not available from local suppliers; or
 - d) When there is a need to prevent situations that defeat competition or restrain trade.
- 5.3 GOCCs may be eligible to participate only if they can establish that they (a) are legally and financially autonomous, (b) operate under commercial law, and (c) are not attached agencies of the Procuring Entity.
- 5.4 The Bidder must have completed, within a period of ten (10) years from the submission of the bid, unless a shorter period is indicated in the Invitation to Bid and **BDS**, a Single Largest Completed Contract (SLCC) that is similar to the procurement project to be bid, and whose value must be equivalent to at least fifty percent (50%) of the ABC, adjusted to current prices using the Philippine Statistics Authority (PSA) consumer price indices.

- 5.5 If the Procuring Entity determines that it is necessary to adopt a different SLCC requirement to ensure broader Bidder participation while establishing their technical capacity, it may allow Bidders to present a combination of contracts completed within the same period, provided their total value is at least fifty percent (50%) of the ABC, thus:
- a) The Bidder should have completed at least one (1) similar contract amounting to at least 25% of the ABC; and
 - b) The Bidder should have completed other contracts, whether similar or not, with an aggregate amount of at least 25% of the ABC.

For this purpose, the Procuring Entity may clarify in the **BDS** the definition or description of what it considers to be a similar project, which must be germane to the kind, class, or genus of goods or services to be procured, guided by the principle of proportionality and fit-for-purpose approach.

- 5.6 The Bidder must submit a computation of its Net Financial Contracting Capacity (NFCC), which must be at least equal to the ABC to be bid, calculated as follows:

NFCC = [(Current assets minus current liabilities) (15)] minus the value of all outstanding or uncompleted portions of the projects under ongoing contracts, including awarded contracts yet to be started coinciding with the contract to be bid.

The values of the domestic Bidder's current assets and current liabilities shall be based on the latest Audited Financial Statements (AFS) submitted to the BIR not earlier than two (2) years prior to date of bid submission.

For purposes of computing the foreign Bidders' NFCC, the value of the current assets and current liabilities shall be based on their latest AFS prepared in accordance with International Financial Reporting Standards.

If the Bidder opts to submit a committed Line of Credit, it must be at least equal to ten percent (10%) of the ABC to be bid. Provided that, if issued by a foreign bank, it shall be confirmed or authenticated by a local bank.

6) Bidder's Responsibilities

- 6.1 The Bidder or its duly authorized representative shall submit an omnibus sworn statement, in the form prescribed in Section VIII. Philippine Bidding Document Related Forms, as required in ITB Clause 12.1(viii).
- 6.2 Before submitting their bids, the Bidder is deemed to be knowledgeable with all existing laws, decrees, ordinances, acts and regulations of the Philippines which may affect this Project in any way.
- 6.3 The Bidder undertook the following responsibilities:
 - a) Took steps to carefully examine and ensure full understanding and comprehension of the Bidding Documents, its requirements, clauses, and provisions;

- b) Acknowledged 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;
- d) Complied with the responsibility to inquire, or secure the Supplemental Bid Bulletin(s) as provided under ITB Clause 10.4;
- e) Ensured that it is not “blacklisted” or barred from bidding by the Government of the Philippines (GoP) or any of its agencies, offices, corporations, or LGUs, including foreign government, or foreign or international financing institutions whose blacklisting rules have been recognized by the GPPB; by itself or by reason of its relation, membership, association, affiliation, or controlling interest with another blacklisted person or entity;
- f) Ensured that each of the documents submitted in satisfaction with the bidding requirements is an authentic copy of the original, complete, and that all statements and information provided therein are true and correct;
- g) Authorized the HoPE or its duly authorized representative/s to verify all the documents submitted;
- h) Ensured that the signatory is the duly authorized representative of the Bidder, and granted full power and authority to do, execute, and perform any and all acts necessary to participate, submit the bid, to sign, and execute the ensuing contract, accompanied by the duly-notarized Special Power of Attorney, Board, or Partnership Resolution, or Secretary’s Certificate, whichever is applicable;
- i) Complied with the disclosure provision under Section 81 and 82 of RA No. 12009 and its IRR, in relation to other provisions of RA 3019;
- j) Complied with existing labor laws and standards, in the case of procurement of services. Moreover, the Bidder undertakes to:
 - i) Ensure the entitlement of workers to wages, hours of work, safety and health and other prevailing conditions of work as established by national laws, rules and regulations; or Collective Bargaining Agreement (CBA); or arbitration award, if and when applicable.

In case there is a finding by the Procuring Entity or the Department of Labor and Employment (DOLE) of underpayment or non-payment of workers’ wages and wage-related benefits, the Bidder agrees that the performance security or portion of the contract amount shall be withheld in favor of the complaining workers pursuant to appropriate provisions of RA No. 12009, without prejudice to the institution of appropriate actions under the Labor Code, as amended, and other social legislations.
 - ii) Comply with Occupational Safety and Health Standards (OSHS) and correct deficiencies, if any.

In case of imminent danger, injury, or death of the worker, the Bidder undertakes to suspend contract implementation pending clearance to resume from the DOLE Regional Office, in compliance with the Work Stoppage Order; and

- iii) Inform the workers of their conditions of work, labor clauses under the contract specifying wages, hours of work, and other benefits under prevailing national laws, rules and regulations; or CBA; or arbitration award, if and when applicable, through posting in two (2) conspicuous places in the establishment's premises.
- k) Ensured that it 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.
- l) Examined all instructions, forms, terms, and specifications in the Bidding Documents.
- m) Determined and complied with all matters pertaining to the contract to be bid, including but not limited to: (i) the location and the nature of this Project; (ii) climatic conditions; (iii) transportation facilities; and (iv) other factors that may affect the cost, duration, and execution or implementation of this Project.
- n) Ensured that all information in the Bidding Documents, including bid or supplemental bid bulletin/s issued, are correct and consistent. The Procuring Entity shall not assume any responsibility regarding erroneous interpretations or conclusions by the prospective or eligible Bidder out of the data furnished by the Procuring Entity.

Failure to observe any of the above responsibilities shall be at the risk of the Bidder concerned.

6.4 Further, the Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Procuring Entity shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

In case of failure of bidding, the Bidding Documents fee may be applied in the re-bidding for the same Project.

6.5 Furthermore, the Bidder should be aware that the Procuring Entity will accept bids only from those that have paid the applicable fee for the Bidding Documents at the office indicated in the Invitation to Bid.

7) **Origin of Goods**

Unless otherwise indicated in the **BDS**, there is no restriction on the origin of Goods other than those prohibited by a decision of the United Nations (UN) Security Council taken under Chapter VII of the Charter of the UN.

8) Subcontracts

- 8.1 Unless otherwise specified in the **BDS**, the Bidder may subcontract portions of the Goods to an extent as may be approved by the HoPE and as stated in the **BDS**. However, the subcontracted portion shall not exceed twenty percent (20%), or a different percentage of the ABC, on a per project basis, as approved by the GPPB.
- 8.2 Subcontracting of any portion of this Project shall not relieve the Bidder from any liability or obligation that may arise from the contract.
- 8.3 Subcontractors must meet the eligibility criteria and submit the same eligibility documents as the general contractor. Failure of a subcontractor to meet the eligibility criteria does not affect the eligibility of the general contractor for the Project. In such case, the portion intended to be subcontracted to the ineligible subcontractor shall be assumed by the general contractor.
- 8.4 Subcontracting arrangement, if allowed, including the time of submission of the eligibility documents of the subcontractor, shall be disclosed in the **BDS**.

B. Contents of Bidding Documents

9) Pre-Bid Conference

- 9.1 If so specified in the **BDS**, a pre-bid conference shall be held either at the Procuring Entity's physical address and/or online through videoconferencing, webcasting, or similar technology, or a combination thereof, on the date indicated therein, to clarify and address the Bidders' questions on the technical and financial components of this Project.
- 9.2 The pre-bid conference shall be held at least twelve (12) calendar days before the deadline for the submission and receipt of bids, but not earlier than seven (7) calendar days from the posting of the invitation to bid and other bidding documents in the PhilGEPS.
- 9.3 Bidders are highly encouraged to attend the pre-bid conference to fully understand the Procuring Entity's requirements. While non-attendance of the Bidder will in no way prejudice its bid. The Bidder is deemed to know any changes and/or amendments to the Bidding Documents, as may be provided in the Supplemental Bid Bulletin.

The proceedings of the pre-bid conference shall be recorded, and the corresponding minutes shall be prepared not later than five (5) calendar days after the pre-bid conference. The minutes shall be made available to prospective Bidders not later than five (5) days upon written request.
- 9.4 Decisions of the BAC amending any provision of the Bidding Documents shall be issued in writing through a Supplemental Bid Bulletin at least seven (7) calendar days before the deadline for the submission and receipt of bids.

10) Clarification and Amendment of Bidding Documents

- 10.1 Prospective Bidders may request for clarification on and/or interpretation of any part of the Bidding Documents. Such request must be in writing and submitted to the BAC of the Procuring Entity at the address or electronic mail indicated in

the **BDS** or through the electronic bidding facility of PhilGEPS, as may be applicable, at least ten (10) calendar days before the deadline set for the submission and receipt of Bids.

- 10.2 The BAC shall respond to the said request by issuing a Supplemental Bid Bulletin duly signed by the BAC Chairperson. It shall be made available to all those who have properly secured the Bidding Documents, at least seven (7) calendar days before the deadline for the submission and receipt of Bids.
- 10.3 Supplemental Bid Bulletins may also be issued upon the Procuring Entity's initiative for purposes of clarifying or modifying any provision of the Bidding Documents not later than seven (7) calendar days before the deadline for submission and receipt of Bids. Any modification to the Bidding Documents shall be identified as an amendment.
- 10.4 Any Supplemental Bid Bulletin issued by the BAC shall also be posted in the PhilGEPS, in any conspicuous place in the premises of the Procuring Entity, and on the website or social media platforms of the Procuring Entity, if available, or such other channels as may be authorized by the GPPB. It shall be the responsibility of all prospective Bidders, including those who have properly secured the Bidding Documents, to inquire and secure Supplemental Bid Bulletins that may be issued by the BAC. However, Bidders who have submitted bids before the issuance of the Supplemental Bid Bulletin must be accordingly informed by the BAC and be allowed to modify or withdraw their bids prior to the deadline for the submission and receipt of bids in accordance with ITB Clause 21.

C. Preparation of Bids

11) Language of Bids

The eligibility requirements or statements, the bids, and all other documents to be submitted to the BAC must be in English. If the eligibility requirements or statements, the bids, and all other documents submitted to the BAC are in foreign language other than English, it must be accompanied by a translation of the documents in English. The documents shall be translated by the relevant foreign government agency, the foreign government agency authorized to translate documents, or a registered translator in the foreign Bidder's country. The Bidder shall cause the authentication of the translated documents and shall be authenticated by the appropriate Philippine foreign service establishment or post or the equivalent office having jurisdiction over the foreign Bidder's affairs in the Philippines. The English translation shall govern, for purposes of interpretation of the bid.

However, for Contracting Parties to the Apostille Convention, the documents shall be authenticated through an apostille by the Competent Authority, as defined in Section 20.9.2 of [the] IRR, except for countries identified by the DFA that will still require legalization (red ribbon) by the relevant Embassy or Consulate.

12) Documents Comprising the Bid: Technical and Financial Components

- 12.1 The first bid envelope shall contain the following technical documents, including the eligibility documents:
 - i) PhilGEPS Certificate of Registration (Platinum Membership);

- ii) Statement of SLCC;
- iii) NFCC Computation or committed Line of Credit (LoC);
- iv) Statement 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;
- v) *[if applicable]* JVA) or in the absence of a JVA, duly notarized statements from all potential JV partners stating that they will enter into and abide by the provisions of the JVA in the event that the bid is successful;
- vi) Bid Security in the prescribed form and amount in accordance with ITB Clause 16, and validity period under ITB Clause 15;
- vii) Technical Specifications, which may include production or delivery schedule, manpower requirements, or after-sales service or parts, if applicable;
- viii) Omnibus Sworn Statement; and
- ix) For foreign Bidders claiming eligibility by reason of their country's extension of reciprocal rights to Filipinos, a certification from the relevant government office of their country stating that Filipinos are allowed to participate in their government procurement activities for the same item or product.

12.2 The second bid envelope shall contain the following financial documents:

- a) Bid Form which includes the Bid price;
- b) Price Schedules in accordance with ITB Clause 13.1; and
- c) *[if applicable]* Certificate of Domestic Preference, in accordance with ITB Clause 25.

12.3 Whenever necessary, modifications may be made to the foregoing components specifically for major and specialized procurement to suit the particular needs of the Procuring Entity, subject to the approval of the GPPB.

12.4 All bids that exceed the ABC shall not be accepted. Unless otherwise indicated in the **BDS**, for foreign-funded procurement, the ABC shall be applied as the ceiling to bid prices provided the following conditions are met:

- a) Bidding Documents are obtainable free of charge on a freely accessible website. If payment of Bidding Documents is required by the Procuring Entity, payment could be made upon the submission of bids.
- b) The Procuring Entity has procedures in place to ensure that the ABC is based on recent estimates made by the responsible unit of the Procuring Entity and that the estimates reflect the quality, supervision and risk, and inflationary factors, as well as prevailing market prices, associated with the types of works or goods to be procured.

- c) The Procuring Entity has trained cost estimators in estimating prices and analyzing bid variances.
- d) The Procuring Entity has established a system to monitor and report bid prices relative to ABC and engineer's/procuring entity's estimate.
- e) The Procuring Entity has established a monitoring and evaluation system for contract implementation to provide feedback on actual total costs of goods and works.

However, the GoP and the foreign government, or foreign or international financing institutions may agree to waive the foregoing conditions.

13) Bid Prices

13.1 The Bidder shall accomplish the Price Schedule Form as prescribed by the Procuring Entity, which may include the following details:

- a) For Goods offered from within the Philippines:
 - i) The price of the Goods quoted EXW (ex works, ex factory, ex warehouse, 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 the **BDS**.
- b) For Goods offered from abroad:
 - i) Unless otherwise stated in the **BDS**, the price of the Goods shall be quoted Delivery 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, listed in the **BDS**.
- c) For Services, based on the form which may be prescribed by the Procuring Entity, in accordance with existing laws, rules and regulations.

13.2 The Bidder shall accomplish the appropriate Price Schedule included herein, stating the unit prices, total price per item, the total amount and the expected countries of origin of the Goods to be supplied under this Project. The Bidder shall fill in rates and prices for all items of the Goods described in the Price Schedule, which shall be presented and computed using up to two (2) decimal places, unless otherwise indicated in the **BDS**.

13.3 If the Instructions to Bidders specifically allow partial bids, bids not addressing or providing all of the required items in the Bidding Documents including, where applicable, the Price Schedule, shall be considered non-responsive and shall

be automatically disqualified. However, when no price or a zero (0) or a dash (-) is indicated in a required item in the bid form, the same shall be construed that it is being offered for free to the Government, except those required by law or regulations to be provided for.

The terms Ex Works (EXW), Cost, Insurance and Freight (CIF), Cost and Insurance Paid to (CIP), (DDP), and other trade terms used to describe the obligations of the parties, shall be governed by the rules prescribed in the current edition of the International Commercial Terms (INCOTERMS) published by the International Chamber of Commerce, Paris.

- 13.4 Prices quoted by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to variation or price escalation on any account. A bid submitted with an adjustable price quotation shall be treated as non-responsive and shall be rejected.

14) Bid Currencies

- 14.1 Prices shall be quoted in the following currencies:

- a) For Goods that the Bidder will supply from within the Philippines, the prices shall be quoted in Philippine Peso.
- b) For Goods that the Bidder will supply from outside the Philippines, the prices may be quoted in the local or tradeable currency/ies accepted by the *Bangko Sentral ng Pilipinas* (BSP), as stated in the **BDS**. However, for purposes of bid evaluation, bids denominated in foreign currencies shall be converted to Philippine currency based on the exchange rate published in the BSP Daily Reference Exchange Rate Bulletin on the day of the bid opening.⁵

- 14.2 If so allowed in accordance with ITB Clause 14.1, the Procuring Entity, for purposes of bid evaluation and comparing the bid prices, will convert the amounts in various currencies in which the bid price is expressed to Philippine Peso at the foregoing exchange rates.

- 14.3 Unless otherwise specified in the **BDS**, payment of the contract price shall be made in Philippine Peso.

15) Bid Validity

- 15.1 Bids shall remain valid for the period specified in the **BDS** which shall not exceed one hundred twenty (120) calendar days from the date of the opening of bids.

- 15.2 Should it become necessary to extend the validity of the bids and the bid securities beyond one hundred twenty (120) calendar days, the Procuring Entity concerned shall request in writing all those who submitted bids for such extension before the expiration date therefor. Bidders, however, shall have the right to refuse to grant such extension without forfeiting their Bid Security.

⁵ RA No. 8183, Act to assure uniform value of Philippine coin and currency

16) Bid Security

16.1 The Bidder shall at its option, submit a Bid Security in the form and amount as stated in the **BDS**, which may include the following:

Form of Bid Security	Amount of Bid Security (Not less than the required percentage of the ABC)
a) Cash or cashier's or manager's check issued by a bank. <i>For biddings conducted by LGUs, the Cashier's or Manager's check may be issued by other banks certified by the BSP as authorized to issue such financial instrument.</i>	Two Percent (2%)
b) Bank draft/guarantee or irrevocable LoC issued by a bank: Provided, however, that it shall be confirmed or authenticated by a local bank, if issued by a foreign bank. <i>For biddings conducted by LGUs, Bank Draft/Guarantee, or Irrevocable Letter of Credit may be issued by other banks certified by the BSP as authorized to issue such financial instrument.</i>	Five Percent (5%)
c) Surety bond callable upon demand issued by a surety or insurance company duly certified by the Insurance Commission as authorized to issue such security.	Five Percent (5%)
d) Bid Securing Declaration	Not Applicable

The Bid Security shall be denominated in Philippine Peso and posted in favor of the Procuring Entity.

16.2 The Bid Security should be valid for the period specified in the **BDS**. Any bid not accompanied by an acceptable Bid Security shall be considered as non-responsive and rejected by the Procuring Entity.

16.3 In no case shall the Bid Security be returned later than the expiration of the bid validity period indicated in the **BDS**, unless it has been extended. In case the Bidder is required to extend its bid validity, the Bidder may, at its discretion, substitute a Bid Securing Declaration for the extended period as a replacement of its Bid Security; Provided, that the option to substitute is indicated in the **BDS**.

- 16.4 Upon signing and execution of the contract pursuant to ITB Clause 30, and the posting of the performance security pursuant to ITB Clause 31, the Bid Security of the successful Bidder will be discharged, but in no case later than its validity period as indicated in the ITB Clause 16.2.
- 16.5 The Bid Security may be forfeited based on any of the following grounds, as provided under Rule VIII, X, XI, and XXI of the IRR.
- a) if a Bidder:
- i) Withdraws its bid during the period of bid validity specified in ITB Clause 15;
 - ii) Does not accept the correction of errors pursuant to ITB Clause 26.5(b) (arithmetical error);
 - iii) Has a finding against the veracity of any of the documents submitted as stated in ITB Clause 27.2;
 - iv) Submits eligibility requirements containing false information or falsified documents;
 - v) Submits bids that contain false information or falsified documents, or the concealment of such information in the bids to influence the outcome of eligibility screening or any other stage of the public bidding;
 - vi) Allows the use of one's name, or uses the name of another for purposes of public bidding;
 - vii) Refuses to accept an award or enter into contract with the Government without justifiable cause, after the Bidder had been adjudged as having submitted the Lowest Calculated Responsive Bid (LCRB), Most Economically Advantageous Responsive Bid (MEARB), or Most Advantageous Responsive Bid (MARB);
 - viii) Refuses or fails to post the required performance security within the prescribed time;
 - ix) Refuses to clarify or validate in writing its bid during post-qualification within a period of seven (7) calendar days from receipt of the request for clarification;
 - x) Has any documented attempt by a Bidder to unduly influence the outcome of the bidding in its favor; or
 - xi) Commits other acts that tend to defeat the purpose of the competitive bidding, Competitive Dialogue, Unsolicited Offer with Bid Matching and Limited Source Bidding, such as but not limited to habitually withdrawing from bidding, submitting late Bids or patently insufficient bid, for at least three (3) times within a year, except for valid reasons.

- b) If a winning Bidder:
 - i) Fails to sign the contract in accordance with ITB Clause 30;
 - ii) Fails to furnish performance security in accordance with ITB Clause 31; or
 - iii) Fails to enter into joint venture after the bid is declared successful, in the case of potential JV partners.

17) Format and Signing of Bids

- 17.1 Bidders shall submit their bids through their duly authorized representative using the appropriate forms provided in Section VIII. Philippine Bidding Document Related Forms on or before the deadline specified in ITB Clause 19 in two (2) separate sealed bid envelopes which shall be submitted simultaneously, whether through manual or online submission. The first shall contain the technical component of the bid, including the eligibility requirements under ITB Clause 12, and the second shall contain the financial component of the bid. This shall also be observed for each lot in the case of lot procurement.
- 17.2 Forms as mentioned in ITB Clause 17.1 must be completed without any alterations to their format. No substitute form shall be accepted.
- 17.3 Each and every page of the Bid Form, including the Price Schedule, under Section VIII hereof, shall be signed by the duly authorized representative/s of the Bidder. Failure to do so shall be a ground for the rejection of the bid.
- 17.4 Any insertions, erasures, or overwriting shall be valid only if they are signed or initialed by the duly authorized representative/s of the Bidder.

18) Sealing and Marking of Bids

- 18.1 Bidders shall enclose their technical documents described in ITB Clause 12 in one sealed envelope marked "TECHNICAL COMPONENT", and the financial component in another sealed envelope marked "FINANCIAL COMPONENT", sealing them all in an outer envelope marked "BID". Each Bidder shall submit **three (3) sets (1 originally signed, 2 certified copies)** of the first and second components of its Bid using any size paper and with properly labeled tabbing.
- 18.2 The Bid as indicated in the Bidding Documents shall be typed or written in ink and shall be signed by the Bidder or its duly authorized representative/s.
- 18.3 All envelopes shall:
 - a) contain the name of the contract to be bid in capital letters;
 - b) bear the name and address of the Bidder in capital letters;
 - c) be addressed to the Procuring Entity's BAC in accordance with ITB Clause 1.1;
 - d) bear the specific identification of this bidding process indicated in the ITB Clause 1.1; and

- e) bear a warning “DO NOT OPEN BEFORE...” the date and time for the opening of bids, in accordance with ITB Clause 19.
- 18.4 For manually submitted bid envelopes that are not properly sealed and marked, as required in the Bidding Documents, the same shall be accepted; Provided, That the Bidder or its duly authorized representative shall acknowledge such condition of the bid as submitted. On the other hand, unsealed or unmarked bid envelopes, or bids that cannot be opened or corrupted in case of online submission, shall be rejected.

The BAC shall assume no responsibility for misplaced or lost contents of the improperly sealed or marked bid, or for its premature opening.

D. Submission and Opening of Bids

19) Deadline for Submission of Bids

Bids must be received by the Procuring Entity’s BAC at the address indicated in the Invitation to bid, or through the e-bidding facility of the PhilGEPS on or before the date and time indicated in the **BDS**.

20) Late Bids

Bids, including the eligibility requirements, submitted after the deadline shall be rejected by the BAC. The BAC shall record in the Minutes of the Meeting the submission and opening of bids, the Bidder’s name, its representative, and the time the late bid was submitted.

21) Modification and Withdrawal of Bids

21.1 Bidders may modify their bids before the deadline for the submission and receipt of bids.

- a) For manual submission and receipt of bids, the Bidders shall not be allowed to retrieve their original bid but shall only be allowed to submit the bid modification by sending another bid, equally sealed, properly identified, linked to their original bid, marked as a “modification,” thereof, and stamped “received” by the BAC. Bid modifications received after the applicable deadline shall not be considered and shall be returned to the Bidder unopened.
- b) For online submission of bids, the Bidders shall not be allowed to retrieve their original Bid, but shall only be allowed to submit the bid modification, send another Bid equally secured, properly identified labelled as a “modification” of the one previously submitted. The time indicated in the latest bid receipt page generated shall be the official time of submission. Bids modification submitted after the applicable deadline shall not be accepted.

21.2 Bidders may withdraw their bids in writing before the deadline for submission and receipt of bids. Withdrawal of bids after the applicable deadline shall be subject to appropriate sanctions as prescribed in the IRR.

Bidders may also express their intention not to participate in the bidding in writing, which should be received by the BAC before the deadline for submission and receipt of bids. Bidders that withdraw their bids shall no longer be allowed to submit another bid for the same contract, directly or indirectly.

- 21.3 No bid may be modified after the deadline for submission and receipt of bids. Further, no bid may be withdrawn in the interval between the deadline for submission and receipt of bids, and the expiration of bid validity specified by the Bidder in the Financial Bid Form. Withdrawal of bid during this interval shall result in the forfeiture of the Bidder's Bid Security pursuant to ITB Clause 16.5, and the imposition of administrative sanctions as prescribed by RA No. 12009, and without prejudice to the imposition of civil and criminal sanctions as provided under applicable laws.
- 21.4 Alternative Bids shall be rejected. For this purpose, Alternative Bid shall pertain to an offer made by a Bidder in addition or as a substitute to its original bid, which may be included as part of its original bid or submitted separately. A bid with options shall likewise be considered an Alternative Bid regardless of whether said bid proposal is contained in a single envelope or submitted in two (2) or more separate bid envelopes.
- 21.5 Each Bidder shall submit only one Bid, either individually or as a partner in a JV. Bidder who submits or participates in more than one bid (other than as a subcontractor if a subcontractor is permitted to participate in more than one bid) will cause all the proposals with the Bidder's participation to be disqualified. This shall be without prejudice to any applicable criminal, civil, and administrative penalties that may be imposed upon the persons and entities concerned.

22) Opening and Preliminary Examination of Bids

- 22.1 The BAC shall open the bids in public, immediately after the deadline for submission and receipt of bids, as specified in the **BDS**. In case the Bids cannot be opened as scheduled due to justifiable reasons, the BAC shall take custody of the submitted Bids and reschedule the opening of Bids on the next working day or at the soonest possible time, through the issuance of a notice of postponement to be posted on the PhilGEPS website and the website of the Procuring Entity concerned.
- 22.2 The manner of opening of the bids for Goods shall depend on the award criterion to be adopted as follows:
 - a) For LCRB and MEARB, the BAC shall open the technical and financial proposals on the same day; and
 - b) For MARB, only the technical proposals shall be opened on the same day while the financial proposals shall remain unopened and shall be kept securely by the BAC until the specified time of their opening as indicated in the **BDS**. Only the financial proposals of the Bidders who have met the highest technical score for Most Advantageous Bid (MAB) shall be opened.
- 22.3 The Procuring Entity shall prepare the minutes of the proceedings of the bid opening that shall include, as a minimum: (a) names of Bidders, their bid price

(per lot, if applicable, and/or including discount, if any), bid security, findings of preliminary examination, and whether there is a withdrawal or modification; and (b) attendance sheet. The BAC members shall sign the abstract of bids as read.

- 22.4 The Bidders or their duly authorized representatives may attend the opening of bids. The BAC shall ensure the integrity, security, and confidentiality of all submitted bids. The Abstract of Bids, as read, and the minutes of the bid opening shall be made available to the public, upon written request and payment of a specified fee to recover the cost of materials.
- 22.5 To ensure transparency and accurate representation of the bid submission, the BAC Secretariat, shall notify in writing all Bidders whose bids it has received through its PhilGEPS-registered physical address or official e-mail address. The said notice shall be issued within seven (7) calendar days from the date of the bid opening.

E. Evaluation and Comparison of Bids

23) Process to be Confidential

- 23.1 Members of the BAC, its staff and personnel, Secretariat, and TWG, as well as Observers, are prohibited from making or accepting any communication with any Bidder regarding the evaluation of their bids until the issuance of the Notice of Award, unless otherwise allowed in ITB Clause 24.
- 23.2 Any effort by a Bidder to influence the Procuring Entity in its decision in respect of bid evaluation, bid comparison or contract award will result in the rejection of the bid.

24) Clarification of Bids

To assist in the evaluation, comparison, and post-qualification of the bids, the Procuring Entity may ask in writing any Bidder for a clarification of its bid. All responses to requests for clarification shall be in writing. Any clarification submitted by a Bidder in respect to its bid that is not in response to the request of the Procuring Entity shall not be considered.

25) Domestic Preference

- 25.1 The Procuring Entity shall give priority and preference to Philippine products and services. The preference and priority for Philippine products shall be guaranteed at all levels of the procurement process, including raw materials, ingredients, supplies, or fixtures.
- 25.2 For a period of ten (10) years from the effectivity of RA No. 11981 or the "*Tatak Pinoy* (Proudly Filipino) Act," and for Philippine products and services in sectors and economic activities covered by the prevailing *Tatak Pinoy* Strategy, the Procuring Entity is mandated to award the contract to the domestic Bidder for Philippine products and services in sectors and economic activities covered by the prevailing *Tatak Pinoy* Strategy (TPS).

Domestic Bidder, for purposes of this provision, refers to any person or entity offering unmanufactured articles, materials, or supplies grown or produced in the Philippines, or manufactured articles, materials, or supplies manufactured or to be manufactured in the Philippines substantially from articles, materials,

or supplies that are or will be produced or manufactured in the Philippines, as the case may be.

- 25.3 After the said ten-year period, the domestic preference shall be subject to a margin of preference to be determined by the *Tatak Pinoy* Council which shall not be lower than fifteen percent (15%).
- 25.4 For products and services governed by the TPS, the domestic preference in procurement shall be in accordance with the IRR or guidelines issued for the *Tatak Pinoy Act*.
- 25.5 The Procuring Entity shall award the Project to the domestic Bidder if the bid is not more than twenty-five percent (25%) in excess of the lowest foreign bid. The margin of preference provided herein shall be subject to periodic review and adjustment by the GPPB, as may be necessary.
- 25.6 A Domestic Bidder can only claim preference if it secures from the appropriate agency a certification that the articles forming part of its bid are substantially composed of articles, materials, or supplies grown, produced, or manufactured in the Philippines.
- 25.7 The preference herein established may be waived should any of the following conditions be present as provided in the **BDS**:
 - a) Where domestic production is insufficient or unavailable in the required commercial quantities;
 - b) Where the specific or desired quality is not met;
 - c) Where domestic preference will result in inconsistencies with the Philippines' obligations under treaty or international or executive agreements; or
 - d) Other analogous circumstances.

26) Detailed Evaluation and Comparison of Bids

- 26.1 The Procuring Entity's evaluation of bids shall be based on the bid price quoted in the Bid Form, which includes the Price Schedule.
- 26.2 The Procuring Entity will undertake the detailed evaluation and comparison of the bids which have passed the opening and preliminary examination of bids, pursuant to ITB Clause 22, to determine the Lowest Calculated Bid (LCB), Most Economically Advantageous Bid (MEAB), and MAB.
- 26.3 The award criterion shall be determined as follows:
 - a) For LCB
 - i) The detailed evaluation of the financial component of the bids, to establish the correct calculated prices of the bids; and
 - ii) The ranking of the total bid prices as so calculated from the lowest to the highest, where the bid with the lowest price shall be identified as the LCB.

- b) For MEAB, the BAC shall evaluate the quality and price proposals to determine the Most Economically Advantageous Bid (MEAB) using the following steps:
 - i) The quality proposal together with the price proposal shall be considered in the evaluation of bids. The quality proposals shall be evaluated first using the criteria in the **BDS**. The price proposals of the bids that meet the minimum quality score shall then be opened.
 - ii) The price and quality proposals shall be given corresponding weights with the price proposal given a minimum weight of fifteen percent (15%) up to a maximum of forty percent (40%). The weight of the quality criteria shall be adjusted accordingly such that their total weight in percent together with the weight given to the price proposal shall be equal to one hundred percent (100%).
 - iii) To further promote green public procurement, the sustainability of products, or materials with green specifications shall be given greater weight in the evaluation of bids. As approved by the BAC, the exact weights shall be indicated in the **BDS**. The BAC shall rank the Bidders in descending order based on the combined numerical ratings of their quality and price proposals. The Bidder with the best overall score using the quality-price ratio shall be referred to as the MEAB.
 - iv) The HoPE shall approve or disapprove the recommendations of the BAC within two (2) calendar days after receipt of the results of the evaluation from the BAC.
- c) For MAB
 - i) BAC shall evaluate the quality proposals to determine the MAB using the quality components. The quality components shall be assessed on the basis of the criteria with corresponding numerical weights indicated in the **BDS** to determine the Bidder with the highest technical rating.
 - ii) The second bid envelope of the Bidder obtaining the highest technical rating shall be opened. If the financial proposal is equal to or lower than the ABC, the bid shall be accepted and determined as the MAB; otherwise, the same shall be rejected and the Bidder will be disqualified.

26.4 In order to eliminate bias in evaluating the quality proposals, it is recommended that the highest and lowest scores for each Bidder for each criterion shall not be considered in determining the average scores of the Bidders, except when the evaluation is conducted in a collegial manner.

26.5 The BAC shall immediately conduct a detailed evaluation of all bids using non-discretionary criteria in considering the following:

- a) Completeness of the bid. Unless the **BDS** allows partial bids, bids not addressing or providing all of the required items in the **BDS**, shall be considered non-responsive and, thus, automatically disqualified.

However, when no price or a zero (0) or a dash (-) is indicated in a required item in the bid form, the same shall be construed that it is being offered for free to the Government, except those required by law or regulations to be provided for; and

- b) Arithmetical corrections. The BAC shall apply arithmetical corrections on computational errors and omissions to enable proper comparison of all eligible bids. Bid corrections may also be considered if expressly allowed in the **BDS**. Any adjustment shall be calculated in monetary terms to determine the calculated prices.
- 26.6 Based on the detailed evaluation of bids, those that comply with the above-mentioned requirements shall be ranked in the ascending order of their total calculated bid prices, as evaluated and corrected for computational errors, discounts and other modifications, to identify the LCB, MEAB, or MAB. Total calculated bid prices, as evaluated and corrected for computational errors, discounts and other modifications, which exceed the ABC shall not be considered, unless otherwise indicated in the **BDS**.
- 26.7 The BAC shall evaluate all bids on an equal footing to ensure fair and competitive bid comparison. For this purpose, all Bidders shall be required to include in their bids the cost of all taxes, such as, but not limited to, value added tax (VAT), income tax, local taxes, and other fiscal levies and duties, whichever is applicable, as itemized in the bid form and reflected in the detailed estimates. Such bids, including said taxes, shall be the basis for bid evaluation and comparison.
- 26.8 If so indicated pursuant to ITB Clause 1.2, bids may be submitted for individual lots or for any combination thereof, provided that all bids and combinations of bids shall be received by the same deadline and opened and evaluated simultaneously so as to determine the Bid or combination of Bids offering the lowest calculated cost to the Procuring Entity. Bid prices quoted shall correspond to all items specified for each lot and to all quantities specified for each item of a lot. Bid Security as required by ITB Clause 16 shall be submitted for each contract (lot) separately. The basis for evaluation of lots is specified in **BDS** Clause 26.5.
- 26.9 In order to eliminate bias in evaluating the quality proposals, it is recommended that the highest and lowest scores for each Bidder for each criterion shall not be considered in determining the average scores of the Bidders, except when the evaluation is conducted in a collegial manner.

27) Post-Qualification

- 27.1 The BAC shall determine to its satisfaction whether the Bidder that is evaluated as having submitted the LCB, MEAB, or MAB as the case may be, complies with and is responsive to all the requirements and conditions specified in ITB Clauses 5, 12.1, and 12.2. The Bidder, within five (5) calendar days from receipt of notice from the BAC that it submitted the LCB, MEAB, or MAB shall submit all the eligibility documents supporting its PhilGEPS Certificate of Registration (Platinum Membership), its latest income and business tax returns filed for the preceding quarter which should not be earlier than two (2) quarters from the date of submission and receipt of bid, and other appropriate licenses and permits required by law and stated in the **BDS**.

- 27.2 Failure to submit any of the post-qualification requirements on time, or a finding against the veracity thereof, shall disqualify the Bidder for award; Provided, That in the event that a finding against the veracity of any of the documents submitted is made, it shall cause the forfeiture of the Bid Security.
- 27.3 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted pursuant to ITB Clauses 12.1 and 12.2, as well as other information as the Procuring Entity deems necessary and appropriate, using a non-discretionary "pass/fail" criterion, which shall be completed within a period of twelve (12) calendar days.
- 27.4 If the BAC determines that the Bidder with the LCB, MEAB, or MAB fails to meet the post-qualification criteria, it shall immediately notify the said Bidder in writing of its post-disqualification and the grounds for such determination.
- 27.5 Immediately after the BAC has notified the first Bidder of its post-disqualification, and notwithstanding any pending request for reconsideration thereof, the BAC shall initiate and complete the same post-qualification process on the Bidder with the second LCB, MEAB, or MAB. If the second Bidder passes the post-qualification and the request for reconsideration of the first Bidder has been denied, the second Bidder shall be post-qualified as the Bidder with the LCB, MEAB, or MAB.
- 27.6 If the second Bidder, however, fails the post-qualification, the procedure for post-qualification shall be repeated for the Bidder with the next LCB, MEAB, or MAB and so on, until the LCRB, MEARB, MARB, as the case may be, is determined for award, subject to the procedure of Notice and Execution of Award.
- 27.7 If the BAC determines that the Bidder with the LCB, MEAB, or MAB passes all the criteria for post-qualification, it shall declare the said bid as the LCRB, MEARB, MARB, Single Calculated Responsive Bid (SCRB), Single Economically Advantageous Responsive Bid (SEARB), or Single Advantageous Bid (SARB).
- 27.8 Within a period not exceeding ten (10) calendar days from the determination and declaration through a resolution by the BAC of the LCRB, MEARB, MARB, SCRB, SEARB, or SARB, as the case may be, and the recommendation of the award, the HoPE or its duly authorized representative shall approve or disapprove the said recommendation.
- 27.9 In case of approval, the HoPE or its duly authorized representative shall immediately issue the Notice of Award to the Bidder with the LCRB, MEARB, MARB, SCRB, SEARB, or SARB, as the case may be.

In the event that the approving authority shall disapprove the resolution on the award of the contract, such disapproval shall be based only on valid, reasonable, and justifiable grounds to be expressed in writing. A copy of the decision disapproving the resolution shall be furnished to the BAC and the Bidder.

28) Reservation Clause

28.1 Notwithstanding the eligibility or post-qualification of a Bidder and without incurring any liability, the HoPE or its duly authorized representative at any stage of the procurement, reserves the right to review its qualifications, reject any and all bids, declare a failure of bidding or not award the contract in the following situations:

- a) If it has reasonable grounds to believe that a misrepresentation has been made by the said Bidder, or that there has been a change in the Bidder's capability to undertake the project from the time it submitted its eligibility requirements.
- b) Should such review uncover any misrepresentation made in the eligibility and bidding requirements, statements or documents, or any changes in the situation of the Bidder which will adversely affect its capability to undertake the Project so that it no longer meets the prescribed eligibility or bid evaluation criteria, the Procuring Entity shall consider the said Bidder as ineligible and disqualify it from participating further in the bidding process or being awarded the contract.

28.2 Based on any of the following grounds, the Procuring Entity reserves the right to reject any and all bids, declare a Failure of Bidding at any time prior to the contract award, or not to award the contract, without thereby incurring any liability, and make no assurance that a contract shall be entered into as a result of the bidding:

- a) If there is *prima facie* evidence of collusion between appropriate public officers or employees of the Procuring Entity, or between the BAC and any of the Bidders, or if the collusion is between or among the Bidders themselves, or between a Bidder and a third party, including any act which restricts, suppresses or nullifies, or tends to restrict, suppress or nullify competition or influences or tends to influence the bidding process;
- b) If the BAC is found to have failed in complying with the applicable law or in following the prescribed bidding procedures; or
- c) If there are any justifiable and reasonable ground where the award of the contract will not redound to the benefit of the government, in instances where (i) the physical and economic conditions have significantly changed so as to render the Project no longer economically, financially, or technically feasible as determined by the HoPE; (ii) the Project is no longer necessary as determined by the HoPE; and (iii) the source of funds for the Project has been withheld or reduced through no fault of the Procuring Entity.

F. Award of Contract

29) Contract Award

29.1 Subject to ITB Clause 27, the HoPE or its duly authorized representative shall award the contract to the Bidder whose bid has been determined to be the LCRB, MEARB, MARB, SCRB, SEARB, or SARB, as the case may be.

- 29.2 Prior to the expiration of the period of bid validity, the Procuring Entity shall notify the successful Bidder in writing that its bid has been accepted, through a Notice of Award duly received by the Bidder or its representative personally or sent by registered mail or electronically, receipt of which must be confirmed in writing within two (2) days by the Bidder with the LCRB, MEARB, MARB, SCRB, SEARB, or SARB, as applicable and submitted personally or sent by registered mail or electronically to the Procuring Entity.
- 29.3 Within ten (10) calendar days from receipt by the winning Bidder of the Notice of Award, the following conditions should be complied with before the contract may be awarded:
- a) Submission of the following documents:
 - i) Valid JVA, if applicable; or
 - ii) The SEC Certificate of Registration of the foreign corporation, if applicable.
 - b) Posting of the performance security in accordance with ITB Clause 31; and
 - c) Signing of the contract as provided in ITB Clause 30.
- 29.4 At the time of contract award, the Procuring Entity shall not increase or decrease the quantity of goods originally specified in Section VI. Schedule of Requirements.

30) Signing of the Contract

- 30.1 Within ten (10) calendar days from receipt of the Notice of Award, the winning Bidder shall (i) post the required performance security, sign and date the contract, and return it to the Procuring Entity.
- 30.2 The Procuring Entity shall enter into a contract with the successful Bidder within the same ten (10) calendar day period, provided that all the documentary requirements are complied with.
- 30.3 The following documents shall form part of the contract:
- a) Contract Agreement;
 - b) Bidding Documents;
 - c) 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;
 - d) Performance Security;
 - e) Notice of Award of Contract; and
 - f) Other contract documents that may be required by existing laws and/or specified in the **BDS**.

31) Performance Security

- 31.1 To guarantee the faithful performance of its obligations under the contract, the winning Bidder shall post a performance security prior to the signing of the contract. Furthermore, the successful Bidder shall be required to update the performance security posted before the issuance of an amendment to order if any.
- 31.2 Sectors enumerated under Section 76.1⁶ of the IRR may be allowed to post a Performance Securing Declaration (PSD) as specified in the **BDS**.
- 31.3 The performance security shall be in any form selected by the Procuring Entity in the amount indicated in the **BDS**, which shall not be less than the percentage of the total contract price in accordance with the following price schedule:

Form of Performance Security	Amount of Performance Security (Not less than the Percentage of the Total Contract Price)
a. Cash or Cashier's or Manager's check issued by a bank. <i>For biddings conducted by LGUs, the Cashier's or Manager's check may be issued by other banks certified by the BSP as authorized to issue such financial instrument.</i>	Five percent (5%)
b. Bank draft or guarantee or irrevocable Letter of Credit issued by a local bank. If issued by a foreign bank, it shall be confirmed or authenticated by a local bank.	
ii. Surety bond callable upon demand issued by a surety or insurance company duly certified by the IC as authorized to issue such security.	Thirty Percent (30%)

⁶ Section 76.1 The GPPB, once data is available from relevant agencies, shall maintain a registry of entities belonging to the following sectors:

- a) Farmers, as certified by the Department of Agriculture (DA);
- b) Fisherfolk as certified by the Bureau of Fisheries and Aquatic Resources (BFAR);
- c) Persons with disabilities as certified by the National Council for Disability Affairs (NCDA) pursuant to RA No. 7277, otherwise known as the Magna Carta for Disabled Persons, as amended;
- d) Solo parents as certified by the Department of Social Welfare and Development (DSWD);
- e) Microenterprises and social enterprises as certified by the MSMED Council;
- f) Startups, Spin-offs, and other forms of entity involved in Science, Technology, and Innovation (DOST), as may be applicable;
- g) Cooperatives duly registered with the CDA pursuant to RA No. 6938, otherwise known as the Cooperative Code of the Philippines, as amended; and
- h) Other relevant sectors as may be determined by the GPPB to ensure inclusivity and diversity in the procurement process.

31.4 The performance security shall be denominated in Philippine Peso and posted in favor of the Procuring Entity, which shall be forfeited in the event it is established that the winning Bidder is in default in any of its obligations under the contract.

32) Notice to Proceed

The Procuring Entity shall issue the Notice to Proceed to the winning Bidder not later than three (3) calendar days from the date of approval of the contract by the appropriate signatories. All notices called for by the terms of the contract shall be effective only at the time of receipt thereof by the successful Bidder.

33) Protest Mechanism

Decisions of the BAC in all stages of procurement may be protested to the HoPE in accordance with Section 83 of the IRR.

Section III. Bid Data Sheet

Notes on the Bid Data Sheet

Section III is intended to assist the Procuring Entity in providing specific information relative to corresponding clauses in the ITB included in Section II, and has to be prepared for each specific procurement.

The Procuring Entity should specify in the BDS the information and requirements relevant to the circumstances of the Procuring Entity; including the procurement processing details; the applicable rules regarding bid price and currency; and the bid evaluation criteria that will apply to the bids. In preparing Section III, the following aspects should be checked:

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

Bid Data Sheet

ITB Clause	
1.1	<p>The Procuring Entity is Southern Leyte State University – Main Campus</p> <p>The Project title is Provision of Higher Education Services (Procurement of Essential Laboratory and Workshop Equipment for the Faculty of Engineering and Physics Laboratory of Southern Leyte State University for Certificate of Program Compliance (COPC) with the Commission on Higher Education).</p> <p>The identification number of the Contract is PB 2026-G&S-09.</p>
1.2	The number of lots: 17 lots
2	<p>The Funding Source is:</p> <p style="padding-left: 40px;">2.1 The GoP through the source of funding as indicated below for 2026 in the amount of P79,174,688.46.</p>
3.1	No further instructions.
5.2	Foreign Bidders, except those falling under ITB Clause 5.2(b), may not participate in this Project.
5.4	The Bidder's SLCC similar to the contract to be bid should have been completed within 5 years prior to the deadline for the submission and receipt of bids.
5.5	Procurement of Scientific and Laboratory Equipment
7	No further instructions.
8.1	Subcontracting is not allowed.
8.4	Not Applicable.
9.1	<p>The Procuring Entity will hold a pre-bid conference for this Project on May 22, 2026 at 1:00 in the afternoon at BAC Conference Room, 2nd Floor of Administration Building, SLSU Sogod Campus and through video-conferencing/webcasting via Microsoft Teams https://teams.microsoft.com/meet/48284885959923?p=STIB14YuqkT8m2Xb9s.</p>
10.1	<p>The Procuring Entity's address is:</p> <p>Brgy. San Roque Sogod, Southern Leyte</p> <p>Reymark M. Cativo, BAC Secretariat</p> <p>09568601139</p> <p>bac_sg@southernleytestateu.edu.ph</p> <p>www.southernleytestateu.edu.ph</p>

12.4	The ABC is ₱79,174,688.46. Any bid with a financial component exceeding the amount shall not be accepted.
13.1(a)(iv)	No incidental services are required.
13.1(b)(i)	The price of the Goods shall be quoted DDP <i>Sogod Southern Leyte, or the applicable INCOTERMS for this Project.</i>
13.1(b)(ii)	No incidental services are required.
13.2	No further instructions.
14.1(b)	The Bid prices for Goods supplied from outside of the Philippines shall be quoted in Philippine Peso.
14.3	Not applicable
15.1	Bids will be valid for 120 calendar days from bid opening.
16.1	<p>The Bid Security shall be in the form of a Bid Securing Declaration, or any of the following:</p> <ol style="list-style-type: none"> 1) The amount of not less than <u>2% of ABC per lot</u>, if bid security is in cash; 2) The amount of not less than <u>2% of ABC per lot</u>, if bid security is in cashier's check; 3) The amount of not less than <u>2% of ABC per lot</u>, if bid security is in manager's check; 4) The amount of not less than <u>5% of ABC per lot</u> if bid security is in bank draft; 5) The amount of not less than <u>5% of ABC per lot</u> if bid security is in guarantee; 6) The amount of not less than <u>5% of ABC per lot</u> if bid security is irrevocable LoC; or 7) The amount of not less than <u>5% of ABC per lot</u> if bid security is Surety Bond.
16.2	The Bid Security shall be valid until October 01, 2026.
16.3	<p>In case of extension of bid validity and bid security validity period, Substitution of the bid security form is allowed. Bid Securing Declaration or the following forms may be used:</p> <ol style="list-style-type: none"> a) Cash or Cashier's or Manager's Check issued by a Bank.

	<p>b) Bank draft/guarantee or irrevocable Letter of Credit issued by a Bank: Provided, however, that it shall be confirmed or authenticated by a local Bank, if issued by a foreign bank.</p> <p>c) Surety bond callable upon demand issued by a surety or insurance company duly certified by the Insurance Commission as authorized to issue such security.</p>
19	<p>The address for the submission of Bids is SLSU Sogod Campus, San Roque Sogod, Southern Leyte.</p> <p>The deadline for the submission of Bids is June 03, 2026 at 9:00 in the morning.</p>
22.1	<p>The place of the bid opening is BAC Conference Room, 2nd Floor Administration Building, SLSU Main Campus.</p> <p>The date and time of bid opening is on June 03, 2026 at 1:00 in the afternoon.</p>
22.2(b)	Not applicable.
25.7	No further instructions.
26.3(b)(i)	<p>The quality component shall be assessed on the basis of criteria with corresponding numerical weights, which may include qualitative, environmental, or social aspects linked to the subject matter of the contract. These may include any or a combination of the following:</p> <ul style="list-style-type: none"> a) Quality and technical merit, including technical competence and a credible track record; b) Aesthetic and functional design and characteristics; c) Approach and methodology; d) Accessibility; e) Tools and equipment; f) Social, environmental, economic, and innovative characteristics; g) Organization, qualification, and experience of employees or staff assigned to perform the contract; h) Ongoing contracts and work commitments; i) After-sales service and technical assistance; j) Delivery conditions, such as delivery period and delivery process; k) Disposal measures; or l) Other relevant criteria in relation to the subject Goods or Infrastructure Projects to be procured.
26.3(b)(iii)	Not applicable.
26.3(c)(i)	Not applicable.
26.5(a)	<p>Partial bids are allowed. All Goods are grouped in lots listed below. Bidders shall have the option of submitting a proposal on any or all lots and evaluation and contract award will be undertaken on a per lot basis. Lots shall not be divided further into sub-lots for the purpose of bidding, evaluation, and contract award.</p>

	<p>In all cases, the NFCC computation, if applicable, must be sufficient for all the lots or contracts to be awarded to the Bidder.</p> <p><i>[Insert grouping of lots]</i></p> <p>Grouping and Evaluation of Lots –</p> <p><i>Lots should be formed of similar items that are likely to attract the maximum competition. A lot is the quantity and number of items that will be included in a single contract.</i></p> <p>Similar items, to be grouped together to form several lots that shall be evaluated and awarded as separate contracts.</p>
26.5(b)	Arithmetical correction is not allowed.
26.6	No further instructions.
27.1	No additional requirements.
30.3(f)	No additional requirements.
31.2	Posting Performance Securing Declaration in lieu of performance security may be allowed in this Project.
31.3	<p>The Performance Security shall be in the form: <i>[choose one from any of the following:]</i></p> <ol style="list-style-type: none"> 1) The amount of not less than _____ <i>[Insert 5% of the total contract price]</i>, if performance security is in cash; 2) The amount of not less than _____ <i>[Insert 5% of the total contract price]</i>, if performance security is in cashier's check; 3) The amount of not less than _____ <i>[Insert 5% of the total contract price]</i>, if performance security is in manager's check; 4) The amount of not less than _____ <i>[Insert 5% of the total contract price]</i> if performance security is in bank draft; 5) The amount of not less than _____ <i>[Insert 5% of the total contract price]</i> if performance security is in guarantee; 6) The amount of not less than _____ <i>[insert 5% of the total contract price]</i> if performance security is irrevocable LoC. or 7) The amount of not less than _____ <i>[insert 30% of the total contract price]</i> if performance security is Surety Bond.

Section IV. General Conditions of Contract

Notes on the General Conditions of Contract

The GCC in Section IV, read in conjunction with the SCC in Section V and other documents listed therein, should be a complete document expressing all the rights and obligations of the parties.

The GCC herein shall not be altered. Any changes and complementary information which may be needed shall be introduced only through the SCC in Section V.

Table of Contents

Section IV. General Conditions of Contract	49
1) General Terms	51
2) Corrupt, Fraudulent, Collusive, and Coercive Practices	51
3) Inspection and Audit by the Funding Source	51
4) Governing Law and Language	51
5) Notices	51
6) Scope of Contract.....	52
7) Subcontracting	52
8) Procuring Entity’s Responsibilities	53
9) Prices.....	53
10) Advance Payment	53
11) Payment.....	54
12) Taxes and Duties.....	55
13) Performance Security	55
14) Use of Contract Documents and Information	55
15) Standards.....	56
16) Inspection and Tests	56
17) Warranty.....	56
18) Delays in the Supplier’s Performance	57
19) Liquidated Damages	57
20) Settlement of Disputes.....	58
21) Liability of the Supplier.....	59
22) Termination for Breach of Contract.....	59
23) Termination Due to Force Majeure	59
24) Termination for Convenience.....	60
25) Termination for Unlawful Acts.....	60
26) Procedures for Termination of Contracts.....	61
27) Assignment of Rights	62
28) Amendment to Order	62
29) Application	62
Section V. Special Conditions of Contract	63

1) General Terms

In this Contract, the following terms shall be interpreted as indicated:

- a) "The Procuring Entity" means the organization purchasing the Goods, as named in the **SCC**.
- b) "The Supplier" means the individual contractor, manufacturer distributor, or firm supplying/manufacturing the Goods and Services under this Contract and named in the **SCC**.
- c) The "Funding Source" means the organization named in the **SCC**.
- d) "The Project Site" where applicable, means the place or places named in the **SCC**.

2) Corrupt, Fraudulent, Collusive, and Coercive Practices

Unless otherwise provided in the **SCC**, the Procuring Entity as well as the Bidders, Contractors, or Suppliers shall observe the highest standard of ethics during the procurement and execution of this Contract. Further the Funding Source, as appropriate, will seek to impose the maximum civil, administrative, and/or criminal penalties available under the applicable law on individuals and organizations deemed to be involved with any of the practices mentioned in ITB Clause 3.1(a).

3) Inspection and Audit by the Funding Source

The Supplier shall allow the Funding Source to inspect its accounts and records related to the performance of its obligations. If the Funding Source requires a separate audit, it shall appoint its auditor and bear the cost thereof.

4) Governing Law and Language

- 4.1 This Contract shall be interpreted in accordance with the laws of the Republic of the Philippines.
- 4.2 This Contract has been executed in the English language, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract. All correspondence and other documents pertaining to this Contract exchanged by the parties shall be written in English.

5) Notices

- 5.1 Any notice, request, or consent required or permitted to be given or made pursuant to this Contract shall be in writing. Any such notice, request, or consent shall be deemed to have been given or made when received by the concerned party, either in person or through an authorized representative of the Party to whom the communication is addressed, or when sent by registered mail or electronic mail, to such Party at the address specified in the **SCC**, which shall be effective when delivered and duly received, as may be applicable.
- 5.2 A Party may change its address upon notice pursuant to the provisions listed in the **SCC**.

6) Scope of Contract

- 6.1 The Goods to be provided shall be as specified in Section VI. Schedule of Requirements.
- 6.2 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. Any additional requirements for the completion of this Contract shall be provided in the SCC.

7) Subcontracting

- 7.1 For subcontracting arrangements, the following rules shall apply for both locally-funded projects and projects financed through Official Development Assistance, except those covered by treaty, or international, or executive agreements.

- a) The subcontracted portion of the contract shall be subject to the approval of the HoPE and the following conditions:
- i) The subcontracted portion shall not exceed twenty percent (20%) for Goods, or a different percentage on a per project basis, as approved by the GPPB. The threshold percentages fixed herein shall be subject to the periodic review and adjustments as may be deemed appropriate by the GPPB; and
 - ii) The subcontracted portion shall be limited to components that are not deemed "significant or material" to the Project, as determined by the Procuring Entity.
- b) Subcontracting arrangement, if allowed, including the time of submission of the eligibility documents of the subcontractor, shall be disclosed in the Bidding Documents;
- c) Subcontractors must meet the eligibility criteria and submit the same eligibility documents as the general contractor.

Failure of a subcontractor to meet the eligibility criteria does not affect the eligibility of the general contractor for the procurement project. In such case, the portion intended to be subcontracted to the ineligible subcontractor shall be assumed by the general contractor;

- d) The general contractor shall remain liable for the subcontractor's actions, defaults, delays, and negligence;
- e) The general contractor and the subcontractor are obliged to comply with the provisions of the contract and shall share liability, jointly and severally, in cases of violation of safety standards or other labor standards insofar as the subcontracted portion is concerned; and

- f) For purposes of post-qualification in accordance with its objective and process under the IRR, the value of the entire completed and accepted Project, including the subcontracted portion, shall be credited as experience of the general contractor. In the case of the subcontractor, the following rules shall apply:
 - i) The subcontractor shall get credit for one hundred percent (100%) of the value of the subcontracted portion of the project performed; and
 - ii) Subcontractors shall be eligible to concessional windows of GFIs that treat receivables from the government as loan security; the receivables of subcontractors due from their general contractor shall similarly be accepted as loan security by GFIs.

8) Procuring Entity's Responsibilities

- 8.1 Whenever the performance of the obligations in this Contract requires that the Supplier obtain permits, approvals, import, and other licenses from local public authorities, the Procuring Entity may assist the Supplier in complying with such requirements in a timely and expeditious manner.
- 8.2 The Procuring Entity shall pay all costs involved in the performance of its responsibilities in accordance with the Scope of Contract.

9) Prices

- 9.1 For goods and services covered under this Contract, as awarded, all bid prices shall be deemed fixed and not subject to price escalation during contract implementation, except as otherwise provided in the succeeding provisions.
- 9.2 Prices charged by the Supplier for Goods delivered and/or services performed under this Contract shall not vary from the prices quoted by the Supplier in its bid, unless there is a change in price resulting from Amendment to Order issued in accordance with **GCC** Clause 28.

10) Advance Payment

- 10.1 For Goods sourced from within the Philippines, advance payments may be made as follows:
 - a) A single advance payment not to exceed fifty percent (50%) of the contract amount shall be allowed for contracts entered into by a Procuring Entity for the following services where the requirement of down payment is a standard industry practice: 1) hotel and restaurant services; 2) use of conference/seminar and exhibit areas; and 3) lease of office space;
 - b) Advance payment not to exceed fifteen percent (15%) of the contract amount, unless otherwise directed by the President, shall also be allowed for procurement of goods required to address contingencies arising from natural or man-made calamities in areas where a "State of Calamity" has been declared by appropriate authorities; and
 - c) Upon submission of an irrevocable Letter of Credit (LoC) or bank guarantee issued by local bank, advance payment not exceeding fifteen percent (15%) of the contract amount shall be allowed and paid to the Supplier within

sixty (60) calendar days from the signing of the contract. The irrevocable LoC or bank guarantee, which must be for an equivalent amount, shall remain valid until the goods are delivered, and accompanied by a claim for advance payment.

10.2 For Goods supplied from abroad, unless otherwise indicated in the **SCC**, the terms of payment shall be as follows:

- a) Upon Contract Signing: Fifteen Percent (15%) of the Contract Price shall be paid within sixty (60) days from signing of the Contract and upon submission of a claim and a bank guarantee for the equivalent amount valid until the Goods are delivered and in the form provided in Section VIII. PBD Related Forms.
- b) Upon Delivery: Sixty-five percent (65%) of the Contract Price shall be paid to the Supplier within sixty (60) days after the date of receipt of the Goods and upon submission of the documents (i) through (vi) specified in the SCC provision on Delivery and Documents.
- c) Upon Acceptance: The remaining twenty percent (20%) of the Contract Price shall be paid to the Supplier within sixty (60) days after the date of submission of the acceptance and inspection certificate for the respective delivery issued by the Procuring Entity's authorized representative. In the event that no inspection or acceptance certificate is issued by the Procuring Entity's authorized representative within forty-five (45) days of the date shown on the delivery receipt, the Supplier shall have the right to claim payment of the remaining twenty percent (20%) subject to the Procuring Entity's own verification of the reason(s) for the failure to issue documents (vii) and (viii) as described in the SCC provision on Delivery and Documents.

10.3 All progress payments for Goods shall first be charged against the advance payment until the latter has been fully exhausted.

11) Payment

11.1 Payments shall be made only upon a certification by the HoPE that the Goods have been delivered in accordance with the terms of this Contract and have been duly inspected and accepted. Except with the prior approval of the President, no payment shall be made for services not yet rendered or for supplies and materials not yet delivered under the Contract.

11.2 The Supplier's request(s) for payment shall be made to the Procuring Entity in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and/or Services rendered, and by documents submitted pursuant to the SCC provision for **GCC** Clause 6.2, and upon fulfillment of other obligations stipulated in this Contract;

11.3 Pursuant to **GCC** Clause 11.2, payments shall be made promptly by the Procuring Entity after submission of an invoice or claim by the Supplier. Payments shall be in accordance with the applicable accounting and auditing laws, rules and regulations.

11.4 Unless otherwise provided in the **SCC**, all payments to the Supplier under this Contract shall be in Philippine Peso;

11.5 Unless otherwise provided in the **SCC**, payments using LoC is allowed. For this purpose, the amount of provisional sum shall be indicated in the **SCC**. All charges for the opening of the LoC and/or incidental expenses thereto shall be for the account of the Supplier.

12) Taxes and Duties

The Supplier, whether local or foreign, shall be entirely responsible for all the necessary taxes, stamp duties, license and permit fees, and other such levies imposed for the completion of this Contract.

13) Performance Security

13.1 Within ten (10) calendar days from receipt of the Notice of Award from the Procuring Entity, but in no case later than the signing of the contract by both parties, the successful Bidder shall furnish the performance security in any the forms prescribed in the ITB Clauses 31.2 and 31.3.

13.2 The performance security posted in favor of the Procuring Entity shall be forfeited in the event it is established that the winning Bidder is in default in any of its obligations under the contract.

13.3 The performance security shall remain valid until issuance by the Procuring Entity of the Certificate of Final Acceptance.

13.4 The performance security may be released by the Procuring Entity and returned to the Supplier after the issuance of the Certificate of Final Acceptance, subject to the following conditions:

- a) There are no pending claims against the Supplier or the Surety Company filed by the Procuring Entity;
- b) The Supplier has no pending claims for labor and materials filed against it; and
- c) Other terms specified in the **SCC**.

13.5 The Procuring Entity shall allow a proportional reduction in the original performance security in case of a reduction in contract value, provided that any such reduction is more than ten percent (10%) and that the aggregate of such reductions is not more than fifty percent (50%) of the original performance security.

14) Use of Contract Documents and Information

14.1 The Supplier shall not, without the Procuring Entity's prior written consent, disclose this Contract or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the Procuring Entity, except for purposes of performing the obligations therein. Any such disclosure shall be made in confidence and shall extend only as far as may be necessary for purposes of such performance.

14.2 Other than this Contract, any document enumerated in **GCC** Clause 14.1 shall remain the property of the Procuring Entity. All copies shall be returned to the Procuring Entity upon completion of the Supplier's performance under this Contract, if so required by the Procuring Entity.

15) Standards

The Goods provided under this Contract shall conform to the standards mentioned in the Section VII. Technical Specifications. When no applicable standard is mentioned, the Goods shall comply with the latest authoritative standards appropriate to its country of origin.

16) Inspection and Tests

16.1 The Procuring Entity or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract specifications at no extra cost to the Procuring Entity, other than that specified under Item 16.3 below. The **SCC** and Section VII. 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.

16.2 If applicable, the inspections and tests may be conducted on the premises of the Supplier or its subcontractor(s), at point of delivery, and/or at the goods' final destination. If conducted on the premises of the Supplier or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no cost to the Procuring Entity. The Supplier shall provide the Procuring Entity with the results of such inspections and tests.

16.3 The Procuring Entity or its designated representative shall be allowed to attend the tests and/or inspections referred to in this Clause provided that the Procuring Entity shall bear all of its own costs and expenses incurred in connection with such attendance including, but not limited to, all traveling and board and lodging expenses.

16.4 The Procuring Entity shall reject the Goods or any part thereof that fail any test and/or inspection or do not conform to the specifications. The Supplier shall either rectify or replace such rejected Goods or parts thereof or make alterations necessary to meet the specifications at no cost to the Procuring Entity. Upon giving due notice to the Supplier pursuant to **GCC** Clause 5, the test and/or inspection may be repeated by the Procuring Entity, at no additional cost.

16.5 The Supplier agrees that neither the execution of a test and/or inspection of the Goods or any part thereof, nor the attendance by the Procuring Entity or its representative to the said test and/or inspection, shall release the Supplier from any warranties or other obligations under this Contract.

17) Warranty

17.1 The Supplier warrants that the Goods supplied under the Contract are new, unused, of the most recent or current models, and with all recent improvements in design and materials, except when the technical specifications required by the Procuring Entity provides otherwise.

17.2 The Supplier further warrants that all Goods supplied under this Contract shall have no defect, arising from design, materials, or workmanship or from any act or omission of the Supplier that may develop under normal use of the supplied Goods in the conditions prevailing in the country of final destination.

- 17.3 To ensure correction of manufacturing defects, the Supplier shall be required to provide a warranty for a minimum period specified in the **SCC**. At the option of the Procuring Entity, the obligation for the warranty shall be covered by:
- a) Retention money in an amount equivalent to at least one percent (1%) but not to exceed five (5%) of every progress payment; or
 - b) Special bank guarantee equivalent to at least one percent (1%) but not to exceed five (5%) of the total Contract Price; or
 - c) Other such amount, if so specified in the **SCC**.
- 17.4 The said amounts shall only be released by the Procuring Entity after the lapse of the warranty period as specified in the **SCC**, or in case of Expendable Supplies, after the consumption thereof; Provided, however, that the Supplies delivered are free from patent and latent defects and all the conditions imposed under this Contract have been fully met.
- 17.5 The Procuring Entity shall promptly notify the Supplier in writing of any claims arising under the warranty. Upon receipt of such notice, the Supplier shall, within the period specified in the **SCC**, repair or replace the defective Goods or parts thereof, at the soonest possible time, without cost to the Procuring Entity.
- 17.6 If the Supplier, after having been notified on the warranty claim, fails to remedy the defect(s) within the period specified in **GCC** Clause 17.5, the Procuring Entity may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense, and without prejudice to any other rights which the Procuring Entity may have against the Supplier under the Contract and other applicable laws.

18) Delays in the Supplier's Performance

- 18.1 Delivery of the Goods and/or performance of Services shall be made by the Supplier in accordance with the time schedule prescribed by the Procuring Entity in Section VI. Schedule of Requirements.
- 18.2 If at any time during the performance of this Contract, the Supplier encounters conditions that may impede the timely delivery of the Goods and/or performance of Services, the Supplier shall promptly notify the Procuring Entity in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, and upon causes provided for under **GCC** Clause 23, the Procuring Entity shall evaluate the situation and, if warranted, extend the Supplier's time for performance, in which case the extension shall be ratified by the parties by amendment of Contract.
- 18.3 Except as provided under **GCC** Clause 23, any delay by the Supplier in the performance of its obligations shall render it liable to the imposition of liquidated damages pursuant to **GCC** Clause 19, unless an extension of time is agreed upon pursuant to **GCC** Clause 28.

19) Liquidated Damages

- 19.1 When the Supplier fails to satisfactorily deliver the Goods under the contract within the specified delivery schedule, inclusive of duly granted time extensions, if any, the Supplier, manufacturer, or distributor shall be liable for liquidated damages in an amount equal to one-tenth (1/10) of one percent (1%) of the cost of the delayed

goods scheduled for delivery for every day of delay until such goods are finally delivered and accepted by the Procuring Entity.

- 19.2 The Procuring Entity need not prove that it has incurred actual damages to be entitled to liquidated damages. Such amount shall be deducted from any money due, or which may become due the supplier, manufacturer, or distributor, or collected from any securities or warranties posted by the supplier, manufacturer, or distributor, whichever is convenient to the Procuring Entity. In case the total sum of liquidated damages reaches ten percent (10%) of the total contract price, the Procuring Entity may rescind the contract and impose appropriate sanctions over and above the liquidated damages to be paid.
- 19.3 If delays are likely to be incurred beyond its control, the supplier, manufacturer, or distributor shall promptly notify the Procuring Entity in writing, providing details of the causes and duration of the expected delay. The Procuring Entity may, at its discretion, grant a time extension based on meritorious grounds, with or without the imposition of liquidated damages.

20) Settlement of Disputes

- 20.1 Any dispute arising from the implementation of a contract covered by the Act and the IRR shall primarily be resolved and settled amicably by mutual consultation or agreement.
- 20.2 In case of failure to settle dispute amicably, the parties may mutually agree in writing to resort to other modes of alternative dispute resolution (ADR) to promote efficiency in the procurement process. Accordingly, they are encouraged to select the most expeditious mode of ADR available.

If arbitration is chosen as the ADR method, this shall be incorporated as a provision in the contract and referred to the Arbitrator specified in the **SCC**.

- 20.3 In case of disagreement or after exhausting the remedies provided in the preceding Section, the dispute may be submitted to arbitration or other forms of ADR which includes mediation, conciliation, early neutral evaluation, mini-trial, or any combination thereof in accordance with the provisions of RA No. 9285, otherwise known as the "Alternative Dispute Resolution Act of 2004."
- 20.4 Should the Parties fail to resolve their dispute or difference by such mutual consultation or agreement after thirty (30) days, either the Procuring Entity or the Supplier may signify its intention to commence arbitration by giving notice to the other Party, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given.
- 20.5 Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under this Contract.
- 20.6 Notwithstanding any reference to arbitration herein, the Parties shall continue to perform their respective obligations under the Contract unless otherwise agreed upon in writing.

21) Liability of the Supplier

- 21.1 The Supplier's liability under this Contract shall be as provided by the laws of the Republic of the Philippines, subject to additional provisions, if any, set forth in the **SCC**.
- 21.2 Except in cases of criminal negligence or willful misconduct, and in the case of infringement of patent rights, if applicable, the aggregate liability of the Supplier to the Procuring Entity shall not exceed the total Contract Price, provided that this limitation shall not apply to the cost of repair or replacement of the defective Goods.

22) Termination for Breach of Contract

The Procuring Entity may terminate for breach of contract when the Supplier fails to deliver or perform any or all of the Goods within the period(s) specified in the contract, or within any extension thereof granted by the Procuring Entity, pursuant to a request made by the Supplier prior to the delay, and such failure amounts to at least ten percent (10%) of the contract price, consistent with the provision of this IRR on liquidated damages. The Procuring Entity may likewise impose appropriate sanctions therein.

23) Termination Due to Force Majeure

- 23.1 For purposes of this Contract, the terms "*force majeure*" and "fortuitous event" may be used interchangeably. In this regard, a fortuitous event or *force majeure* shall be interpreted to mean as an event which the Supplier could not have been foreseen, or though foreseen, was inevitable. It shall not include ordinary unfavorable weather conditions, and any other causes the effect/s of which could have been avoided with the exercise of reasonable diligence by the Supplier. Such events may include, but not limited to, acts of the Procuring Entity in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.
- 23.2 The Procuring Entity may terminate this Contract and impose liquidated damages when, as a result of *force majeure*, the Supplier is unable to deliver or perform any or all of the Goods, amounting to at least ten percent (10%) of the Contract Price, for a period of not less than sixty (60) calendar days, or earlier, as deemed necessary by the Procuring Entity, after receipt of the written notice from the Procuring Entity stating that the circumstance of *force majeure* is deemed to have ceased.
- 23.3 The Supplier shall not be subject to forfeiture of its performance security, payment of liquidated damages, or contract termination due to *force majeure*, provided that the Supplier's delay in performance or other failure to perform its obligations under this Contract is the result of a *force majeure*.
- 23.4 If a *force majeure* situation arises, the Supplier shall promptly notify the Procuring Entity in writing of such condition and the cause thereof. Unless otherwise directed by the Procuring Entity, the Supplier shall continue to perform its obligations under the Contract as far as may be practicable, when not prevented by the *force majeure*, and shall seek all reasonable alternative means in the performance of its obligation.

24) Termination for Convenience

24.1 The Procuring Entity, through a written notice sent to the Supplier, may terminate this Contract, in whole or in part, at any time, if it has determined the existence of any of the following conditions that make contract implementation economically, financially, or technically impractical or unnecessary:

- a) When physical and economic conditions have significantly changed so as to render the project no longer economically, financially, or technically feasible, as determined by the HoPE;
- b) When the HoPE has determined the existence of conditions that make project implementation impractical or unnecessary, such as, but not limited to, fortuitous event/s, changes in laws, and government policies;
- c) When funding for the Project has been withheld or reduced by higher authorities through no fault of the Procuring Entity; or
- d) Any circumstance analogous to the foregoing.

24.2 The Goods that have been performed or are ready to be delivered or performed within thirty (30) calendar days after the Supplier's receipt of Notice to Terminate shall be accepted by the Procuring Entity at the contract terms and prices thereof. For Goods not yet delivered, performed and/or ready to be delivered or performed, the Procuring Entity may elect:

- a) To have any portion delivered and/or performed and paid at the contract terms and prices thereof; or
- b) To cancel the remainder and pay to the Supplier an agreed amount for partially completed and/or performed goods and for materials and parts previously procured by the Supplier.

25) Termination for Unlawful Acts

25.1 The Procuring Entity may terminate this Contract in case it is determined *prima facie* that the Supplier, including any joint venture partner therein, has engaged, before or during the implementation of this Contract, in unlawful deeds and behaviors relative to contract acquisition and implementation. Unlawful acts include, but are not limited to, the following:

- a) Corrupt, fraudulent, collusive, and coercive practices as defined in ITB Clause 3.1;
- b) Drawing up or using forged documents;
- c) Using adulterated materials, means or methods, or engaging in production contrary to rules of science or the trade; and
- d) Any other act analogous to the foregoing.

26) Procedures for Termination of Contracts

26.1 The following provisions shall govern the procedures for termination of this Contract:

- a) **Verification** - Upon receipt of a written report of acts or causes which may constitute grounds for termination as aforementioned, or upon its own initiative, the End-User or Implementing Unit shall, within a period of seven (7) calendar days, verify the existence of such grounds and cause the execution of a Verified Report, with all relevant evidence attached.
- b) **Notice to Terminate** - Upon recommendation by the End-User or Implementing Unit, the HoPE shall terminate contracts only by written notice to the supplier conveying the termination of the contract. The notice shall state:
 - i) That the contract is being terminated for any of the grounds aforementioned, and a statement of the acts that constitute the grounds constituting the same;
 - ii) The extent of termination, whether in whole or in part;
 - iii) An instruction to the Supplier, to show cause as to why the contract should not be terminated; and
 - iv) Special instructions of the Procuring Entity, if any.

The Notice to Terminate shall be accompanied by a copy of the Verified Report.

- c) **Show Cause** - Within a period of seven (7) calendar days from receipt of the Notice of Termination, the Supplier shall submit to the HoPE a verified position paper stating why the contract should not be terminated. If the Supplier, fails to show cause after the lapse of the seven (7) day period, either by inaction or by default, the HoPE shall issue an order terminating the contract.
- d) **Rescission of Notice of Termination** - The Procuring Entity may, at any time before receipt of the Supplier's verified position paper, withdraw the Notice to Terminate if it is determined that certain items or works subject of the notice had been completed, delivered, or performed before the Supplier's receipt of the notice.
- e) **Decision** - Within a non-extendible period of ten (10) calendar days from receipt of the verified position paper, the HoPE shall decide whether or not to terminate the contract. It shall serve a a written notice to the Supplier of its decision and, unless otherwise provided, the contract is deemed terminated from receipt of the Supplier of the notice of the decision. The termination shall only be based on the grounds stated in the Notice to Terminate.
- f) **Contract Termination Review Committee (CTRC)** - The HoPE may create a committee to assist in the discharge of its functions under the IRR. All decisions recommended by the CTRC shall be subject to the approval of the HoPE.

- g) **Take-over of Contracts** - If a Procuring Entity terminates the contract due to default, insolvency, or for a cause, it may enter into a Negotiated Procurement (Take-over of Contracts) pursuant to Section 35(c) of RA No. 12009.
- h) **Procuring Entity's Options in Termination for Convenience in Contracts for Goods** - The Goods that have been performed or are ready for delivery within thirty (30) calendar days after the supplier's receipt of Notice to Terminate shall be accepted by the Procuring Entity at the contract terms and prices. For Goods not yet performed or ready for delivery, the Procuring Entity may elect:
 - i) To have any portion delivered or performed and paid at the contract terms and prices; or
 - ii) To cancel the remainder and pay to the supplier an agreed amount for partially completed or performed goods and for materials and parts previously procured by the supplier.

27) Assignment of Rights

The Supplier shall not assign its rights or obligations under this Contract, in whole or in part, except upon prior written consent of the Procuring Entity.

28) Amendment to Order

No variation in or modification of the terms of this Contract shall be made except by written amendment signed by the parties in accordance with the provisions on Amendment to Order, subject to applicable laws, rules and regulations.

29) Application

These General Conditions shall apply to the extent that they are not suspended by the provisions from other parts of this Contract.

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.

The provisions of this Section 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 Section IV must be incorporated.
- b) Amendments and/or supplements to provisions of Section IV, 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 Section IV should be incorporated herein.

Special Conditions of Contract

GCC Clause	
1(a)	The Procuring Entity is Southern Leyte State University – Main Campus .
1(b)	The Supplier is <i>[to be inserted at the time of contract award]</i> .
1(c)	The Funding Source is: 2.1 The GoP through the source of funding as indicated below for 2026 in the amount of P79,174,688.46.
1(d)	The Project Site is SLSU Sogod Campus.
2	No further instructions.
5.1	The Procuring Entity's address for Notices is: <i>SLSU-Main Campus Brgy. San Roque Sogod, Southern Leyte Reymark M. Cativo, BAC Secretariat 09568601139</i> The Supplier's address for Notices is: <i>[Insert address including, name of contact, fax and telephone number]</i> .
5.2	No further instructions.
6.2	Delivery and Documents For purposes of this 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: <i>For Goods Supplied from Abroad, state "The delivery terms applicable to the Contract are DDP delivered [insert place of destination]. In accordance with INCOTERMS." (DAP)</i> <i>For Goods Supplied from Within the Philippines, state "The delivery terms applicable to this Contract are delivered SLSU Sogod Southern Leyte. Risk and title will pass from the Supplier to the Procuring Entity upon receipt and final acceptance of the Goods at their final destination."</i> Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in Section VI. Schedule of Requirements. The details of shipping and/or other documents to be furnished by the Supplier are as follows: <i>For Goods supplied from within the Philippines:</i>

Upon delivery of the Goods to the Project Site, the Supplier shall notify the Procuring Entity and present the following original documents to the Procuring Entity:

- i) Supplier's invoice showing the goods' description, quantity, unit price, and total amount;
- ii) Delivery receipt/note, railway receipt, or truck receipt;
- iii) Supplier's factory inspection report;
- iv) Manufacturer's and/or Supplier's warranty certificate;
- v) Certificate of origin (for imported Goods);
- vi) Delivery receipt detailing number and description of items received signed by the authorized receiving personnel;
- vii) Certificate of Acceptance/Inspection Report signed by the Procuring Entity's representative at the Project Site; and
- viii) Four copies of the Invoice Receipt for Property signed by the Procuring Entity's representative at the Project Site.

For goods supplied from abroad:

Upon shipment, the Supplier shall immediately communicate and notify the Procuring Entity and the insurance company the full details of the shipment, including Contract Number, description of the goods, quantity, vessel, bill of lading number and date, port of loading, date of shipment, port of discharge etc. Upon delivery to the Project Site, the Supplier shall notify the Procuring Entity and present the following original documents as applicable with the documentary requirements of any letter of credit issued taking precedence:

- i) Supplier's invoice showing the goods' description, quantity, unit price, and total amount;
- ii) Negotiable, clean shipped on board bill of lading marked "freight prepaid", as well as a copy of the non-negotiable bill of lading;
- iii) Supplier's factory inspection report;
- iv) Manufacturer's and/or Supplier's warranty certificate;
- v) Certificate of origin (for imported goods);
- vi) Delivery receipt detailing number and description of items received signed by the Procuring Entity's representative at the Project Site;
- vii) Certificate of Acceptance/Inspection Report signed by the Procuring Entity's representative at the Project Site; and
- viii) Invoice Receipt for Property signed by the Procuring Entity's representative at the Project Site.

For purposes of this Clause the Procuring Entity's Representative at the Project Site is **Miguel M. Bidon, Supply Officer**.

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:

- a) performance or supervision of onsite assembly and/or startup 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
- 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.

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:

- 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 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 spares for the goods for a period of 3 years.

Other spare parts and components shall be supplied as promptly as possible, but in any case within 12 months of placing the order.

Packaging

The Supplier shall meet packaging standards for goods in accordance with existing laws and regulations, and as indicated in this Contract to prevent damage or deterioration during transit to their final destination.

The packaging shall be durable enough to withstand rough handling, exposure to extreme temperatures, salt, precipitation, open storage, and other extreme conditions during transit. Packaging case sizes and weights shall consider the remoteness of the goods' final destination and the potential absence of heavy handling facilities at all transit points.

The packaging, labeling, and documentation within and outside the packages shall comply strictly with special requirements as shall be expressly provided for in this Contract, including additional requirements, 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 Hazardous Chemical 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. Otherwise, the packaging list is to be placed outside the secondary packaging.

Insurance

The Supplier shall fully insure the goods supplied under this Contract in a currency, local or tradeable and accepted by the *Bangko Sentral ng Pilipinas* against loss or damage incidental to manufacture,

	<p>acquisition, transportation, storage, and delivery. The risk and ownership of the goods remain with the Supplier until their final acceptance by the Procuring Entity, unless otherwise specified in this Contract.</p> <p>Transportation</p> <p>The Supplier shall arrange and pay for the delivery of the goods, with the cost included in the Contract Price. When required under this Contract to deliver the goods CIF, CIP, or DDP, the Supplier shall ensure the transport of the goods to the port of destination or any other specified place of destination in the Philippines, as indicated in this Contract.</p> <p>The Supplier shall arrange for transport, insurance, and storage to the specified destination with the related costs included in the Contract Price. When required under this Contract to transport the goods to a specified place of destination within the Philippines, defined as the Project Site.</p> <p>The goods must be transported using carriers registered in the Philippines when the Supplier is required under this Contract to deliver the goods CIF (Cost, Insurance, and Freight), CIP (Carriage and Insurance Paid To), or DDP (Delivered Duty Paid). If no Philippine-registered carrier is available, the goods may be shipped using a non-Philippine carrier, provided the Supplier obtains and presents certification from the nearest Philippine consulate at the port of dispatch. If Philippine-registered carriers are available but their schedules would impede timely delivery or cause delays in the Supplier's performance of this Contract, the period of delay from when the goods were first ready for shipment to the actual date of shipment will be considered <i>force majeure</i> in accordance with GCC Clause 23.</p> <p>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 ownership will not be deemed transferred to the Procuring Entity until their receipt and final acceptance at the final destination.</p> <p>Patent Rights</p> <p>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.</p>
10.3	Maintain the GCC Clause.
11.4	Not applicable
11.5	Payment using LoC is not allowed.
13.4(c)	No further instructions.

16.1	The inspections and tests that will be conducted is <i>Actual use or testing of the items.</i>
17.3	<p><i>If the goods pertain to Expendable Supplies:</i> Three (3) months after acceptance by the Procuring Entity of the delivered goods or after the goods are consumed, whichever is earlier.</p> <p><i>If the goods pertain to Non-expendable Supplies:</i> One (1) year after acceptance by the Procuring Entity of the delivered goods.</p> <p>The period for correction of defects in the warranty period is 1 year.</p>
17.3(c)	Not applicable.
17.4	No further instructions.
17.5	No further instructions.
20.2	Not applicable.
21.1	No further instructions.

Section VI. Schedule of Requirements

The delivery schedule, expressed in weeks or months, indicates the required delivery date which shall be understood as the date the Goods are to be delivered to the project site.

Item Number	Description	Quantity	Total	Delivery Schedule
LOT 1				120-calendar days upon receipt of Notice to Proceed
1	Determination of Settling Velocity (Particle Drag Coefficient) Apparatus	1 Set		
2	Basic Hydraulics Bench	2 Set		
3	Multi-purpose Teaching Flume Apparatus	1 Set		
4	Accessory: Sluice Gate	1 Piece		
5	Accessory: Broad Crested Weir	1 Piece		
6	Accessory: Ogee-crested Weir with 2 Weir Outlets	1 Piece		
7	Accessory: Crump Weir	1 Piece		
8	Accessory: Radial Gate	1 Piece		
9	Accessory: Pitot-Static Tube	1 Piece		
10	Accessory: Level Gauge	2 Piece		
11	Visualization of Seepage Flows Apparatus	1 Set		
12	Water Hammer in Pipes Apparatus	1 Set		
Total			11,378,487.00	
LOT 2				
13	Universal Testing Machine	1 Set		
14	Laboratory Oven	1 Set		
15	Digital Marshall Tester	1 Set		
16	Vicatronic/ Vicat Apparatus (Equipment for the Determination of Setting Time of Hydraulic Cement)	1 Set		
17	Gilmore Needle Apparatus	1 Set		
18	Centrifuge Extractor	1 Lot		
19	Sieve Cover	1 piece		
20	Sieve No. 10 or 2.00mm	1 piece		
21	Sieve No. 100 or 0.150mm	1 piece		
22	Sieve No. 140 or 0.106mm	1 piece		
23	Sieve No. 200 or 75mm	1 piece		
24	Sieve No. 4 or 4.75mm	1 piece		
25	Sieve No. 40 or 0.425mm	1 piece		
26	Sieve No. 60 or 0.250mm	1 piece		
27	Sieve No. 8 or 2.36mm	1 piece		

28	Sieve Pan	1 set		
29	Standard Digital Penetrometer	1 set		
Total			10,343,807.00	
LOT 3				
30	Digital Planimeter	1 Unit		
31	Digital Theodolite	3 Units		
32	Dumpy Level	3 Sets		
33	RTK (Real-Time Kinematic)	2 Sets		
34	Total Station	3 Sets		
35	Fiberglass Tape, 50 meters	10 Pieces		
Total			3,354,930.58	
LOT 4				
36	Interactive Whiteboard Display	6 Sets		
37	Laptop	30 Sets		
38	Complete Set of All in One Desktop PC with UPS-AVR each Set	50 units		
39	Laptop	2 unit		
Total			12,856,728.60	
LOT 5				
40	Supply, Delivery, and Installment of 3 HP Split Type ACU	4 Sets		
Total			484,226.00	
LOT 6				
41	Laboratory Storage Cabinets	11 Pieces		
42	Drawing Table with Chairs	21 Sets		
43	Working Tables and Chairs	15 Sets		
Total			1,106,500.00	
LOT 7				
44	Electromechanical Training System with Data Acquisition and Control	1 set		
45	Instrumentation and Process Control Trainer	1 set		
46	Manual Base Unit	5 unit		
47	Semiconductor Devices	5 unit		
48	Operational Amplifier Fundamentals Crcuit Board	5 unit		
49	Transistor Power Amplifiers Circuit Board	4 unit		
50	FET fundamentals Circuit Board	1 set		
Total			14,354,000.00	

LOT 8				
51	Digital MultiMeter Bench Top 6 1/2 Digit	1 unit		
52	Arbitrary Waveform Generator	5 unit		
53	Digital MultiMeters Bench Top 4 1/2 Digit	5 unit		
54	Digital Oscilloscope	5 unit		
Total			1,145,000.00	
LOT 9				
55	Conductive Paper	4 pack		
56	Equal Length Spring Set	5 set		
57	Field Mapper Kit	5 set		
58	Wireless Temperature Sensor	5 unit		
59	Hooke's Law Apparatus	5 set		
60	Large Slotted Mass set	5 set		
61	Mass and Hanger Set	5 set		
62	Resistivity Apparatus	5 set		
63	Short Mass Hanger	5 set		
64	Sonometer	5 set		
65	Calorimeter	1 set		
Total			1,704,650.00	
LOT 10				
66	Classroom Starter Kit	1 set		
67	Advanced Robotics Learning Classroom Kit	2 set		
68	Portable Competition Field Perimeter	1 set		
Total			2,090,000.00	
LOT 11				
69	Gasoline and Diesel Engine Performance test bed	1 set		
70	BHN Testing Machine	1 unit		
71	Mini Steam Turbine Power Plant	1 unit		
72	Rotation Fatigue Testing Machine	1 set		
73	CNC Lathe Machine	1 set		
74	Milling Machine	1 set		
Total			13,380,568.00	
LOT 12				
75	Dead Weight Tester	1 set		
76	Precision Digital Pressure Gauge	1 unit		
77	Hand Test Pump	1 set		
Total			1,580,000.00	
LOT 13				
78	Calibration Weights 10kilos	3 pcs		

79	Platform Scale (150kg)	1 unit		
80	Viscometer	1 set		
Total			996,296.33	
LOT 14				
81	Network Cable Tester	10 unit		
82	Robotic Arm	5 unit		
83	AIM Coding Robot	1 lot		
Total			211,238.10	
LOT 15				
84	Arduino Education Starter Kit PLC Starter Kit	5 units		
85	Pi 4 8gb Starter Kit	5 units		
86	Complete Set of Pi Kit 4	5 units		
87	Crimper	10 units		
88	Arduino Education Starter Kit	5 units		
89	FET III Type N-Channel MOSFET, 10 A, 650 V N, 3-Pin TO-220 FCPF360N65S3R0L-F154	5 units		
90	PCB Stencil Printer	1 unit		
91	Smart and Interactive Digital Whiteboard 65" Wall Installation and STAND Option	5 piece		
92	Circuit Board DEMOBOARD, Arduino Compatible Board	3 units		
93	Transistor Power Amplifiers 4-Channel Audio Power Amplifier, 15-Pin, 35W Multiwatt	5 units		
94	Nano Super Developer Kit Development Kit	5 unit		
Total			1,456,283.02	
LOT 16				
95	(8086/8088 Microcomputer Trainer) M888, one-stop microcomputer principle and interface experiment solution	5 lot		
Total			1,762,123.77	
LOT 16				
96	IoT Development Platform	2 set		
Total			969,850.06	

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) 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 this 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.

Prudence must be exercised 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 this 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 shall not be allowed except for reasons of technical compatibility, interoperability, servicing, maintenance, or preservation of supplier warranty in order to keep the performance, functionality, and useful life of the equipment, in which case, the Procuring Entity shall indicate the reasons or justifications for availing of the exception as

part of the Technical Specifications, Scope of Work, or Terms of Reference, as the case may be.

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
Lot 1		
1	<p>1 Set Determination of Settling Velocity (Particle Drag Coefficient) Apparatus</p> <p><i>Technical Specification:</i> Specification: [1] experimental unit to determine the settling velocity of different spheres [2] 2 transparent cylinders [3] marking of the measuring section [4] cover with guide tube to insert the sphere [5] sluice to remove the spheres from the cylinder [6] 10 spheres of various densities and diameters [7] 2 areometers to determine the density of the fluids [8] stopwatch to measure the sedimentation time</p> <p>Technical data: 2 cylinders - inner Ø: 92mm each - height: 1330mm each - sink height: 1000mm each</p> <p>Spheres: - aluminium (density: 2,7kg/dm³) -- 2x 5mm Ø -- 2x 10mm Ø - polyoxymethylene (POM), density: 1,41kg/dm³ -- 2x 5mm Ø -- 2x 10mm Ø - polyamide (PA), density: 1,13kg/dm³ -- 2x 10mm Ø</p> <p>Measuring ranges: - density: 1x 0,8...1,0kg/dm³, 1x 1,0...1,2kg/dm³</p>	<p><i>[Add 2 columns if the award criterion to be used is MEARB, or MARB (one for parameters and one for rating)]</i></p> <p>Bidders must state “Comply” or “Not Comply” for each specification and provide the corresponding performance parameters for offered equipment. Each response must be supported by a clear documentary support in the bid and properly cross-referenced. Acceptable evidence includes unaltered manufacturer sales brochures, official specification sheets, product samples, independent test results, and similar documents.</p> <p>Claims should be backed by documentary support. If the evidence contradicts the claim, the bid may be rejected. Any false statement—whether in the compliance form or supporting documents—found</p>
2	<p>2 Set Basic Hydraulics Bench</p> <p><i>Technical Specification:</i> Specification: [1] base module for supplying experimental units in fluid mechanics [2] closed water circuit with storage tank, submersible pump and measuring tank</p>	<p>the evidence contradicts the claim, the bid may be rejected. Any false statement—whether in the compliance form or supporting documents—found</p>

	<p>[3] measuring tank divided in two for volumetric flow rate measurements</p> <p>[4] measuring beaker with scale for very small volumetric flow rates</p> <p>[5] measurement of volumetric flow rates by using a stopwatch</p> <p>[6] work surface with integrated flume for experiments with weirs</p> <p>[7] work surface with inside edge for safe placement of the accessory and for collecting the dripping water</p> <p>[8] storage tank, measuring tank and work surface made of GRP</p> <p>Technical data:</p> <p>Pump</p> <ul style="list-style-type: none"> - power consumption: 250W - max. flow rate: 150L/min - max. head: 7,6m <p>Storage tank, capacity: 180L</p> <p>Measuring tank</p> <ul style="list-style-type: none"> - at large volumetric flow rates: 60L - at small volumetric flow rates: 10L <p>Flume</p> <ul style="list-style-type: none"> - LxWxH: 530x150x180mm <p>Measuring beaker with scale for very small volumetric flow rates</p> <ul style="list-style-type: none"> - capacity: 2L <p>Stopwatch</p> <ul style="list-style-type: none"> - measuring range: 0...9h 59min 59sec <p>230V, 60Hz, 1 phase</p>	<p>during evaluation, post-qualification, or contract implementation may be considered fraudulent in accordance with ITB Clause 3.1(a)(ii) and without prejudice to the imposition of appropriate administrative, civil, and criminal penalty in accordance with law.</p>
3	<p>1 Set Multi-purpose Teaching Flume Apparatus</p> <p><i>Technical Specification:</i></p> <p>Specification:</p> <p>[1] basic principles of open-channel flow</p> <p>[2] experimental flume with experimental section, inlet and outlet element and closed water circuit</p> <p>[3] length of the experimental section 2.5 meters with possibility to extend to 5 meters</p> <p>[4] smoothly adjustable inclination of the experimental section</p> <p>[5] experimental section with 10 evenly spaced threaded holes on the bottom for installing models or for water level measurement using pressure</p> <p>[6] side walls of the experimental section are made of tempered glass for excellent observation of the experiments</p> <p>[7] all surfaces in contact with water are made of corrosion-resistant materials</p> <p>[8] flow-optimised inlet element for low-turbulence entry into the experimental section</p> <p>[9] closed water circuit with water tank, pump, rotameter and</p>	

	<p>manual flow adjustment [10] models from all fields of hydraulic engineering available as accessories</p> <p>Technical data: Experimental section - length: 2.5m or 5m with possibility to extend to 5 meters - flow cross-section WxH: 86x300mm - inclination adjustment: -0,5...+3%</p> <p>Tank: 280L Pump - max. flow rate in the experimental section: 10m³/h - max. flow rate of the pump: 15m³/h - max. head of the pump: 21m</p> <p>Measuring ranges - flow rate: 0...10m³/h 230V, 60Hz, 1 phase</p>	
4	<p>1 Piece Accessory: Sluice Gate</p> <p><i>Technical Specification:</i> Specification: [1] sluice gate for the experimental flume [2] sluice gate with lateral sealing lips [3] manual height adjustment [4] scale to read the height of the gate opening</p> <p>Technical data: Gate - weir plate made of PVC - head adjustment: 0...120mm</p>	
5	<p>1 Piece Accessory: Broad Crested Weir</p> <p><i>Technical Specification:</i> Specification: [1] broad-crested weir for the experimental flume [2] weir with sharp edges [3] 2 additional elements for rounded edges [4] weir body with sealing lips</p> <p>Technical data Weir body - material: PVC</p>	
6	<p>1 Piece Accessory: Ogee-crested Weir with 2 Weir Outlets</p> <p><i>Technical Specification:</i> Specification: [1] ogee-crested weir for the experimental flume [2] weir crest with chute [3] 7 pressure measuring points included in the downstream side of the weir</p>	

	<p>[4] integrated manometer tubes [5] weir body with sealing lips</p> <p>Technical data: Manometer tubes - measuring range: 290mmWC</p>	
7	<p>1 Piece Accessory: Crump Weir</p> <p><i>Technical Specification:</i> Specification: [1] Crump weir for the experimental flume [2] weir body contour according to E. S. Crump [3] weir body with sealing lips</p> <p>Technical data Weir body - made of PVC - inclination (upstream): 1:2 - inclination (downstream): 1:5</p>	
8	<p>1 Piece Accessory: Radial Gate</p> <p><i>Technical Specification:</i> Specification: [1] radial gate for the experimental flume [2] radial gate with lateral sealing lips [3] height adjustment using lever</p> <p>Technical data: Gate - weir plate made of stainless steel, width: 80mm - radius of the segment: 298mm</p>	
9	<p>1 Piece Accessory: Pitot-Static Tube</p> <p><i>Technical Specification:</i> Specification: [1] determination of discharge velocity in the experimental flume [2] determination of velocity via differential pressure [3] holder with vertical scale to indicate the position of the pitotstatic tube [4] hoses connect the pitotstatic tube and the twin tube manometers</p> <p>Technical data: Scale (vertical position) - 0...240mm - graduation: 1mm Measuring ranges - pressure: 2x 0...350mm WS</p>	
10	<p>2 Piece Accessory: Level Gauge</p>	

	<p><i>Technical Specification:</i> Specification: [1] device for measuring discharge depths in the experimental flume [2] measurement either with probe tip or hook [3] vertically travelling probe tip or hook [4] scale to indicate the discharge depth [5] use of corrosion resistant materials</p> <p>Technical data: Scale - measuring range: 0...300mm - graduation: 1mm Max. travel: 300mm</p>	
11	<p>1 Set Visualization of Seepage Flows Apparatus</p> <p><i>Technical Specification:</i> Specification: [1] visualisation of two-dimensional seepage flows and investigation of water pressure at various models [2] closed water circuit [3] fluoresceine as a contrast medium [4] experimental section with tempered glass viewing window [5] fine-mesh screen to separate the experimental section from the feed and discharge chamber [6] height-adjustable overflows in the feed and discharge to adjust the water levels [7] 14 measuring connections with filters to detect the groundwater levels in the experimental section [8] "sheet pile" model for visualisation of streamlines [9] "retaining wall" and "foundation" models for demonstration of the water pressure [10] instruments: tube manometers, tubes on the "foundation" and "retaining wall" models [11] including appropriate amount of 1-2mm dia. sand, washed</p> <p>Technical data Experimental section - usable volume: 82L - LxWxH: 1480x104x630mm Pump - max. flow rate: 4m³/h - max. head: 4m Tank for contrast medium: 0,5L Storage tank, stainless steel: 96L Models - "sheet pile" - "retaining wall"</p>	

	<p>- "foundation" Measuring ranges - pressure: 14x 20...650mmWC 230V, 60Hz, 1 phase</p>	
12	<p>1 Set Water Hammer in Pipes Apparatus</p> <p><i>Technical Specification:</i> Specification: [1] investigation of water hammer and pressure waves in pipes [2] pipe section as coiled tube to save space [3] generation of water hammer via solenoid valve with constant closing time [4] generation of water hammer via solenoid valve with adjustable closing time [5] pressure vessel with air cushion reflects the wave [6] safety valve protects against overpressure in the system [7] instruments: pressure sensor, rotameter, manometer [8] representation of the pressure curves and the flow rate with software [9] software for data acquisition via USB under Windows 11</p> <p>Technical data: Solenoid valve, constant closing time - closing time: 20...30ms - operating pressure: 0...10bar</p> <p>Solenoid valve, adjustable closing time - closing time: 1...4s - operating pressure: 0,2...12bar</p> <p>Safety valve: 16bar</p> <p>Pipe section, copper - length: 60m - inner diameter: 10mm</p> <p>Pressure vessel: 4L</p> <p>Measuring ranges - pressure: 0...16bar - flow rate: 30...320L/h 230V, 60Hz, 1 phase</p>	
Lot 2		
13	<p>1 Set Universal Testing Machine</p> <p><i>Technical Specification:</i> Specification: Functionality Used for tensile, bending, and compression tests of metallic and non-metallic materials</p>	

<p>Developed according to BS EN 10002-1, ISO 7500-1 & ASTM A370 “Metal Tensile Test Method”</p> <p>Electro-hydraulic servo control and electronic measurement</p> <p>Automatic processing of test results for statistical purposes</p> <p>Capability to print default or user-defined test reports</p> <p>System Features</p> <p>Micro-computer based system with:</p> <p>Automatic data collection and processing</p> <p>Real-time display of curves and data</p> <p>Unlimited storage of test results</p> <p>Batch test report processing</p> <p>Database management</p> <p>Network interface support</p> <p>Technical Parameters Automatically Computed:</p> <p>Elastic modulus E</p> <p>Upper yield strength ReH</p> <p>Lower yield strength ReL</p> <p>Stipulated non-proportional elongation intensity Rp</p> <p>Tensile strength Rm</p> <p>Stipulated total elongation intensity Rt</p> <p>Yield point percentage elongation</p> <p>Operation Display</p> <p>Computer screen display with:</p> <p>Test force display</p> <p>Break detection</p> <p>Full auto test range switching function</p> <p>Auto return function</p> <p>Peak/Break value display function</p> <p>Test conditions</p> <p>Safety Features</p> <p>Emergency stop switch</p> <p>Overload limit protection</p> <p>Ram-stroke limit</p> <p>Hydraulic pump motor over-current & overheating protection</p> <p>Leak/over-current protection</p> <p>Automatic stop control</p> <p>Safety guard enclosure</p> <p>Control & Data Processing Software</p> <p>User-friendly operation interface</p> <p>Automatic saving of test conditions & results</p> <p>User-defined test curves</p> <p>(Stress/Strain/Force/Elongation/Strength/Time)</p> <p>Simultaneous display of multiple test curves</p> <p>Excel compatibility for import/export</p> <p>USB & Ethernet communication ports</p>	
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	<p>Digital sample break detection, auto ranging, auto calibration, quick tare & auto return Exceeds ASTM, DIN, ISO, JIS, EN standards for accuracy</p> <p>Testing Capabilities: Tension, Compression, Shear, Cycling, Creep Tests Real-time display: Load, Stress, Elongation, Strain, Speed Grips & fixtures for tension, compression, flexural, shear products User-defined report formats (Excel, PDF, charts, bitmaps, JPG)</p> <p>Unique Features Oversized prestressed 4-column with twin screw High-toughness fragment safety guard with transparent sliding door Built-in shock absorption system on base mounting Console control unit</p> <p>Performance Specifications Load Capacity: 1200 kN Machine Class: Class 1 Load Accuracy: $\pm 1\%$ Displacement Resolution: 0.001 mm Max Compression Space: 900 mm Max Tensile Space: 1000 mm Piston Stroke: 200 mm Max Crosshead Speed: 240 mm/min Test Speed: 100 mm/min Wire Strand Size: $\text{Ø}8 - \text{Ø}18$ mm Round Specimen Size: $\text{Ø}14 - \text{Ø}45$ mm Flat Specimen Size: 40 mm Max Distance of Bending Test: 300 mm Compression Platen Size: $\text{Ø}225$ mm</p> <p>Measurement Range & Accuracy: Effective Measurement Range: 1% – 100% FS Deformation Measurement Range: 1% – 100% FS Relative Error of Deformation Indication: $\pm 1\%$ Relative Error of Displacement Indication: $\pm 1\%$ Relative Error of Displacement Rate Control: $\pm 1\%$ Strain Rate Control Adjustment Range: 0.00025/s – 0.0025/s Relative Error of Strain Rate Control: $\pm 2\%$ Force, Deformation & Displacement Retention Control: 0.3% – 100% FS Relative Error of Retention Control: $\leq 1\%$ Horizontal Clearance (max): 505 mm</p> <p>Machine Dimensions & Power Frame Dimensions (L×W×H): 1050 × 800 × 2800 mm</p>	
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	<p>Control Console Dimensions (L×W×H): 1100 × 750 × 900 mm Power: 380 V, 415 V, 2.2 kW / 0.4 kW, 50/60 Hz Frame Weight: 3500 kg Console Weight: 300 kg</p> <p>Standard Accessories Flat Specimen Jaw Set (0–20 mm thick) Round Specimen Jaw Set A (Ø13–Ø26 mm) Round Specimen Jaw Set B (Ø26–Ø40 mm) Compression Platen (Ø225 mm) Footing Stopper Bar with Wall Plug (2 Bar & 4 Plugs) Wire Strand Jaw Set (Ø8–18 mm) Computer Printer Step Ladder (2-step) Servopack Console Control Unit with Built-in Computer and Pre-installed TestMaster Software</p>	
14	<p>1 Set Laboratory Oven</p> <p><i>Technical Specification:</i> Specification: Type: High-end laboratory oven with forced ventilation Maximum temperature: up to 300 °C Models / Capacities:</p> <ul style="list-style-type: none"> • 120 litres (inside dim approx. 550 × 400 × 580 mm) • 220 litres (inside dim approx. 730 × 500 × 620 mm) • 420 litres (dual-door version) <p>Power / Wattage:</p> <ul style="list-style-type: none"> • 120 L model ~ 2.2 kW, 230 V single phase • 220 L model ~ 4.0 kW, 230 V single phase • 420 L model ~ 6.2 kW, 400 V three-phase <p>Outside dimensions (120 L model): approx. 750 × 780 × 880 mm Doors: Single door for smaller models; dual doors for larger (ex: 420 L) model Ventilation: Forced air circulation to ensure uniform temperature distribution Weight:</p> <ul style="list-style-type: none"> • ~ 70 kg for 120 L model • ~ 102 kg for 220 L model • ~ 155 kg for 420 L model <p>Applications: For drying, heating, thermal treatment of materials, aggregates, rocks etc, in geotechnical / concrete / aggregate labs</p>	
15	<p>1 Set Digital Marshall Tester</p> <p><i>Technical Specification:</i> Specification: STANDARD EN 12697-34, 12697-12 ASTM D6927, D5581, D1559,/ ASSTHO T245</p>	

	<p>BS 598:107 /NF P98-251-2</p> <p>Manufactured with rugged frame to bear strain and loads, easy to use, it is designed to operate with the minimum of maintenance. The load is measured by an electric cell 50kN capacity with high precision strain transducer; the flow is measured by a electronic displacement transducer 50mm stroke and +- 0.1 linearity</p> <p>The cyber-plus progress 8 channels digital display unit with microprocessor measures and displays at the same time the stability in kN and the flow in mm with pick hold features with the possibility to transfer them to a PC and a printer through a RS232 port.</p> <p>Supplied complete with Stability mould. Power supply: 230 V 1 ph 50 Hz 900 W Dimensions: 650x400x1100 mm. Weight: 120 kg</p>	
16	<p>1 Set Vicatronic/ Vicat Apparatus (Equipment for the Determination of Setting Time of Hydraulic Cement)</p> <p><i>Technical Specification:</i> Specification: Fully automatic Vicat apparatus for determining setting time of cements, mortars, gypsum, and other pastes Display: 7-inch touchscreen, graphic TFT/LCD, resolution ~ 800×480 pixels Internal position encoder with 0.1 mm resolution Supplied with incorporated printer Probes and Needles: mobile probe (300 g); two hardened needles (one Ø 1.00 mm, one Ø 1.13 mm) Moulds: two conical EN moulds (Ø 70/80 mm), ASTM moulds (Ø 60/70 mm), plus glass plate for conical mould Standards compliance: EN 13279-2, EN 480-2, EN 196-3; ASTM C187, ASTM C191; AASHTO T131 Power supply: 230 V, single phase 50/60 Hz, approx. 50 W Dimensions: approx. 240 × 360 × 440 mm Weight: approx. 13 kg Construction: Carbon-fiber body, anticorrosion components to tolerate humid environments and standard lab temperature conditions Programming: pre-set penetration cycles per standards; customizable test programs; option for free-fall or guided-fall penetration of needle Penetration timing: intervals selectable (e.g. between successive penetrations), can vary phases during test; capable of up to 5 different phases with different intervals or automatic changes based on penetration depth Data handling: stores test parameters & results; capacity for more than 50 complete tests; has USB port for data transfer</p>	

	Safety/Power interruption: in case of power loss during a test, the machine stops, retains set test data; last test results are printed automatically with full report and penetration-vs-time graph	
17	<p>1 Set Gilmore Needle Apparatus</p> <p><i>Technical Specification:</i> Specification: Standards: ASTM C91, C141, C266, C1398; AASHTO T154 Purpose: Used to determine the setting time (initial and final setting) of cement Vertical support shaft with device to maintain horizontal arms in alignment; support assembly is adjustable Two steel weighted needles calibrated per standard specifications; needle points made of stainless steel Initial setting needle diameter: 2.12 mm; weight: 113 g Final setting needle diameter: 1.06 mm; weight: 453.6 g Approximate weight of the apparatus: 3 kg</p>	
18	<p>1 Lot Centrifuge Extractor</p> <p><i>Technical Specification:</i> Specification: ASTM D2172 AASHTO T164A EN 12697-1 ROTAREX 1500g CAPACITY Used for the determination of bitumen percentage in bituminous mixtures. It consists of a removable, precision machined aluminium rotor bowl, placed into a cylindrical aluminium box. The separate control panel incorporates an electronic card fitted with AC drive which automatically drives the bowl speed rotation ramp from 0 to 3600 rpm as requested by Standards, with fast stop bowl rotation at the end of the test. Supplied complete with speed regulator and digital display monitoring the frequency. The centrifuge is supplied without aluminium bowl+cover Power supply: 230V 1ph 50-60Hz 600W Dimensions: 480x330x530 mm Weight: 50 kg approx.</p>	
19	<p>1 piece Sieve Cover</p> <p><i>Technical Specification:</i> 3in All Stainless, with Ring; The sieve cover has a 3-inch (76mm) stainless steel frame and weighs approximately 1.0lb (0.45kg)</p>	
20	<p>1 piece Sieve No. 10 or 2.00mm</p>	

	<p><i>Technical Specification:</i> The ASTM E11 No. 10 (2.0mm) sieve features a 3-inch (76mm) stainless steel frame with a full-height design, a stacked frame height of 1-1/8 inches, an overall frame height of 1.75 inches, and weighs approximately 1.0lb (0.45kg), with no backing cloth included.</p>	
21	<p>1 piece Sieve No. 100 or 0.150mm</p> <p><i>Technical Specification:</i> The ASTM E11 No. 100 (150µm) sieve features a 3-inch (76mm) stainless steel frame with a full-height design, a stacked frame height of 1-1/8 inches, an overall frame height of 1.75 inches, and weighs approximately 1.0lb (0.45kg), with no backing cloth included.</p>	
22	<p>1 piece Sieve No. 140 or 0.106mm</p> <p><i>Technical Specification:</i> The ASTM E11 No. 140 (106µm) sieve features a 3-inch (76mm) stainless steel frame with a full-height design, a stacked frame height of 1-1/8 inches, an overall frame height of 1.75 inches, and weighs approximately 1.0lb (0.45kg), with no backing cloth included.</p>	
23	<p>1 piece Sieve No. 200 or 75µm</p> <p><i>Technical Specification:</i> The ASTM E11 No. 200 (75µm) sieve features a 3-inch (76mm) stainless steel frame with a full-height design, a stacked frame height of 1-1/8 inches, an overall frame height of 1.75 inches, and weighs approximately 1.0lb (0.45kg), with no backing cloth included.</p>	
24	<p>1 piece Sieve No. 4 or 4.75mm</p> <p><i>Technical Specification:</i> The ASTM E11 No. 4 (4.75mm) sieve features a 3-inch (76mm) stainless steel frame with a full-height design, a stacked frame height of 1-1/8 inches, an overall frame height of 1.75 inches, and weighs approximately 1.0lb (0.45kg), with no backing cloth included.</p>	
25	<p>1 piece Sieve No. 40 or 0.425mm</p> <p><i>Technical Specification:</i> The ASTM E11 No. 40 (425µm) sieve features a 3-inch (76mm) stainless steel frame with a full-height design, a stacked frame height of 1-1/8 inches, an overall frame height of 1.75 inches, and weighs approximately 1.0lb (0.45kg), with no backing cloth included.</p>	
26	<p>1 piece Sieve No. 60 or 0.250mm</p> <p><i>Technical Specification:</i></p>	

	The ASTM E11 No. 60 (250µm) sieve features a 3-inch (76mm) stainless steel frame with a full-height design, a stacked frame height of 1-1/8 inches, an overall frame height of 1.75 inches, and weighs approximately 1.0lb (0.45kg), with no backing cloth included.	
27	<p>1 piece Sieve No. 8 or 2.36mm</p> <p><i>Technical Specification:</i> The ASTM E11 No. 8 (2.36mm) sieve features a 3-inch (76mm) stainless steel frame with a full-height design, a stacked frame height of 1-1/8 inches, an overall frame height of 1.75 inches, and weighs approximately 1.0lb (0.45kg), with no backing cloth included.</p>	
28	<p>1 set Sieve Pan</p> <p><i>Technical Specification:</i> 3in All Stainless, Full-Height; "The sieve pan features a 3-inch (76mm) stainless steel frame with a full-height design and weighs approximately 1.0lb (0.45kg).</p>	
29	<p>1 set Standard Digital Penetrometer</p> <p><i>Technical Specification:</i> Specification: Standards: EN 1426, ASTM D5, BS 1377-2, NF T66-004, AASHTO T49 Function: Determines the consistency (penetration) of a bituminous sample under fixed conditions of load, time, and temperature Penetration expressed in tenths of millimetres vertically penetrated by a standard needle Base: Rugged aluminium base table with levelling screws Vertical support: Plated vertical rod Adjustment: Micrometric vertical adjustment device Slider: Brass slider made for free fall of the needle Readout: Digital readout shows values in mm and inch, resolution 0.01 mm, LCD 5-digit display, zero settable at any position Power: 1.5 V battery Supplied with: stop and release push-button; automatic zero set; micrometer adjustment; set of weights (50 g and 100 g); penetration needles; brass sample cups Ø 55×35 mm and 70×45 mm Dimensions: 220 × 170 × 410 mm Weight: approx. 11 kg</p>	
Lot 3		
30	<p>1 Unit Digital Planimeter</p> <p><i>Technical Specification:</i> Type: Roller, with computing function Display: Liquid Crystal, 8-digit Figures, 13 Symbols</p>	

	<p>Symbol: Batt-E, SCALE, Memo, Hold, cm2, m2, km2, in2, ft2, acre etc.</p> <p>Converting Function: Unit and Scale value</p> <p>Accumulated Measuring Value: Maximum 10m2(Scale 1:1)</p> <p>Measuring Range: Maximum vertical width: 325mm, Horizontal roller rotating length: 30m</p> <p>Accuracy: Within +/-0.2%(Within +/-2/1000pluses)</p> <p>Power Supply: Built-in NiCd Battery(rechargeable through AC Adapter)</p> <p>AC Adapter 100-240V (Auto-power-off function is provided.)</p> <p>Operating Duration: Approx. 30 hours of continuous operation</p> <p>Battery Charging Time: Approx. 15 hours</p> <p>Main Unit Weight: 750g</p> <p>Accessories: Supplied AC Adapter and Plastic Case</p>	
31	<p>3 Units Digital Theodolite</p> <p><i>Technical Specification:</i></p> <p>MAGNIFICATION: 30x</p> <p>OBJECTIVE LENS: 45mm</p> <p>FIELD OF VIEW: 1°30'</p> <p>MIN. FOCUS DISTANCE: 1.5m</p> <p>STADIA RATIO: 100</p> <p>ANGLE DETECTION: H: Both sides / V: Single side</p> <p>ANGLE ACCURACY: 2"</p> <p>DISPLAY: LCD Double side</p> <p>TILT SENSOR: Automatic Vertical Compensation</p> <p>RANGE OF COMPENSATION: ±3'</p> <p>OPTICAL PLUMMET: 3x</p> <p>SENSITIVITY OF VIAL: Plate Level: 30"/2mm, Circular Level: 8'/2mm</p> <p>BATTERY: Rechargeable Ni-H Battery (36 hrs), Back-up AA × 4</p> <p>WEIGHT: 3.65kg</p>	
32	<p>3 Sets Dumpy Level</p> <p><i>Technical Specification:</i></p> <p>Telescope Length: 215mm (8.46in.)</p> <p>Telescope Objective Aperture: 42mm (1.65 in.)</p> <p>Telescope Magnification: 32X</p> <p>Telescope Image: Erect</p> <p>Telescope Field of View (at 100m/328ft.): 1°20' (2.3m / 7.5ft.)</p> <p>Telescope Resolving power: 3"</p> <p>Telescope Minimum Focus: 0.2m (7.9 in.) from end of telescope 0.3m (1ft.) from instrument center</p> <p>Telescope Stadia ratio: 100</p> <p>Telescope Stadia constant: 0</p> <p>Telescope Sighting Aid: Peep sight</p> <p>Accuracy (1km double run leveling) Without Micrometer: 0.7mm (0.03 in.)</p>	

	<p>Accuracy (1km double run leveling) With Micrometer: 0.5mm (0.02 in.)</p> <p>Compensator Type: Pendulum compensator with magnetic damping system</p> <p>Compensator Setting Accuracy: 0.3"</p> <p>Compensator Working Range: ±15'</p> <p>Circular Level Sensitivity: 10' / 2mm</p> <p>Water Resistance: IPX6 (IEC 60529:2001)</p> <p>Operating Temperature: -20 to +50°C (-4 to +122°F)</p>	
33	<p>2 Sets RTK (Real-Time Kinematic)</p> <p><i>Technical Specification:</i></p> <p>GNSS Accuracies:</p> <p>Real time kinematic (RTK): Horizontal-8mm +1 ppm RMS, Vertical: 15mm + 1 ppm RMS, Initialization time-<10s, Initialization reliability->99.9%</p> <p>Post-processing kinematic (PPK):</p> <p>Horizontal-3mm + 1 ppm RMS</p> <p>Vertical-5mm + 1 ppm RMS</p> <p>Post-processing static:</p> <p>Horizontal-2.5mm + 0.5 ppm RMS</p> <p>Vertical-5mm + 0.5 ppm RMS</p> <p>Code differential:</p> <p>Horizontal-0.4m RMS</p> <p>Vertical-0.8m RMS</p> <p>Autonomous</p> <p>Horizontal-1.5m RMS</p> <p>Vertical-2.5m RMS</p> <p>Visual stakeout</p> <p>H-8mm + 1 ppm RMS</p> <p>V-15mm + 1 ppm RMS</p> <p>Visual survey: Typical 2~4cm, Range 2~15m</p> <p>IMU update rate: 200 Hz</p> <p>Tilt angle: 0-60o</p> <p>Power consumption:</p> <p>UHF/4G RTK Rover w/o camera-Typical 2.4W</p> <p>UHF RTK Base w/o camera-Typical 4.3W</p> <p>Visual Stakeout/Visual Survey: Typical 4.2W</p> <p>Li-ion battery capacity: Built-in non-removable battery</p> <p>Operating time on internal battery:</p> <p>UHF/4G RTK Rover w/o camera- up to 16.5h</p> <p>Visual Stakeout/Visual Survey: up to 9.5h</p> <p>UHF RTK Base: up to 10h</p> <p>External power input: 5V/2A</p>	
34	<p>3 Sets Total Station</p> <p><i>Technical Specification:</i></p> <p>Telescope Magnification / Resolving power: 30x / 2.5"</p>	

	<p>Telescope Length : 171mm (6.7in.), Telescope Objective aperture : 45mm (1.8in.) (48mm (1.9in.) for EDM) Telescope Image: Erect Telescope Field of view: 1°30' (26m/1,000m Telescope Minimum focus: 1.3m (4.3ft.) Telescope Reticle illumination: 5 brightness levels Minimum Display: 1”/5” (0.0002 / 0.001gon, 0.005 / 0.02mil) Accuracy (ISO 17123-3:2001): 5" Dual-axis compensator: Dual-axis liquid tilt sensor, working range: ±6' Collimation compensation: On/Off (selectable) Minimum Display: Fine / Coarse : 0.0001m (0.001ft. / 1/8 in.) / 0.001m (0.005ft. / 1/8 in.) (selectable) Coarse : 0.001m (0.005ft. / 1/8 in.) / 0.01m (0.02ft. / 1 in.) (selectable) Tracking / Road : 0.01m (0.02ft. / 1 in.) Display / Keyboard: Graphic LCD, 192 x 80 dots, backlight : on/off (Selectable) / Alphanumeric keyboard / 28 keys with backlight</p> <p>Control panel location: On single face Laser-pointer: Coaxial red laser using EDM beam Instrument height: 192.5mm from tribrach mounting surface Weight: Approx. 5.1kg (11.3lb) Battery: Li-ion rechargeable battery BDC46C Operating time (20°C): Approx. 14hours*</p>	
35	<p>10 Pieces Fiberglass Tape, 50 meters</p> <p><i>Technical Specification:</i> Length: 50 meters Tape width: 13mm Weight: 862g Metric or Imperial: Metric Frame and Material: ABS Coating Transparent PVC coating</p>	
Lot 4		
36	<p>6 Sets Interactive Whiteboard Display</p> <p><i>Technical Specification:</i> 75-inch LED Backlight Resolution: 3840 × 2160@60 Hz Memory: 3GB Built-in Storage: 32GB Touch Point: 20-point multi-touch Video & Audio Input: HDMI IN × 2, MAX 4K@60 Hz, LINE IN × 1 Video & audio output: HDMI OUT × 1, MAX 4K @ 60 Hz, LINE OUT × 1 WITH MOBILE BRACKET</p>	
37	30 Sets Laptop	

Technical Specification:

Processor

- 64-bit high-performance mobile processor
- At least 16 cores and 32 threads
- Base clock speed of at least 3.0 GHz
- Maximum boost/turbo clock speed of at least 5.0 GHz
- At least 64 MB L3 cache
- Suitable for intensive engineering computing, structural analysis, BIM modeling, simulation, rendering, and multitasking applications

Graphics Processing Unit

- Dedicated high-performance graphics processing unit
- At least 12 GB GDDR6/GDDR7 dedicated video memory
- Must support hardware-accelerated 3D modeling, rendering, visualization, real-time ray tracing, and AI-assisted graphics acceleration or equivalent technology
- Suitable for CAD, BIM, 3D modeling, simulation visualization, and engineering design software

Memory

- Minimum of 16 GB DDR5 RAM, 5200 MHz or higher
- Dual-channel configuration
- Upgradeable to at least 32 GB

Storage

- 1 TB PCIe NVMe Solid State Drive, Gen 4.0 or higher
- With at least one additional M.2 slot for storage expansion

Display

- At least 16.0-inch IPS-level or equivalent anti-glare display
- WUXGA 1920 × 1200 resolution or higher
- 16:10 aspect ratio
- At least 100% sRGB color coverage
- Refresh rate of at least 120 Hz or higher

Operating System

- Licensed 64-bit Windows-compatible operating system, pre-installed
- Must be compatible with engineering CAD, BIM, modeling, simulation, and analysis software

Additional Functional Requirement

- The laptop shall be capable of running civil engineering academic software for structural analysis and design, construction simulation, geotechnical modeling, water resources modeling, transportation design, surveying, CAD drafting, BIM modeling, and 3D visualization.

Inclusion No. 1: Software Academic License

3-Year Academic Subscription for 30 Seats

- **Structural Engineering Software Package**
 - **Structural Analysis and Design Software**
Software capable of creating and analyzing 2D and 3D structural models, assigning loads, supports, materials, member properties, and load combinations, and generating structural analysis and design reports for academic instruction and laboratory activities.
 - **Reinforced Concrete Design and Detailing Software**
Software used for the design, checking, and documentation of reinforced concrete members such as beams, columns, slabs, walls, footings, and other structural components, including reinforcement detailing and design reports.
 - **Foundation Analysis and Design Software**
Software used for the analysis and design of foundation systems such as isolated footings, combined footings, mat or raft foundations, pile foundations, and other foundation types based on structural loads and soil parameters.
 - **Steel Connection Design Software**
Software used for the analysis, checking, and design of steel structural connections, including bolted and welded connections, connection components, code-based verification, and design documentation.
- **Construction Engineering Management Software Package**
 - **4D Construction Planning and Simulation Software**
Software capable of linking construction schedules with 3D models to visualize project sequencing, construction phasing, progress simulation, resource coordination, and construction planning activities.
- **Geotechnical Engineering Software Package**
 - **2D and 3D Geotechnical Finite Element Analysis Software**
Software used for modeling and analyzing geotechnical problems such as soil–structure interaction, excavations, embankments, retaining structures, foundations, slope stability, consolidation, groundwater flow, and staged construction.
- **Water Resources Engineering Software Package**

	<ul style="list-style-type: none"> ○ Integrated Water Infrastructure Modeling Software Software platform used for hydraulic and hydrologic modeling of water-related infrastructure systems, including water distribution, stormwater, wastewater, drainage, and other water resources engineering applications. ○ Water Distribution Network Modeling Software Software used for the hydraulic analysis, design, and simulation of pressurized water distribution systems, including pipes, pumps, valves, tanks, reservoirs, pressure zones, demand patterns, and scenario analysis. ○ Sewer and Stormwater Network Modeling Software Software used for the analysis and design of sanitary sewer, storm sewer, and drainage collection systems, including gravity and pressure networks, inflow and infiltration, hydraulic capacity, surcharge conditions, and flooding assessment. • Transportation Engineering Software Package <ul style="list-style-type: none"> ○ Roadway and Civil Infrastructure Design Software Software used for the planning, design, and documentation of roads and civil infrastructure, including horizontal and vertical alignments, terrain modeling, corridors, cross-sections, earthworks, drainage elements, and plan production. • Surveying / Environmental Engineering Software Package <ul style="list-style-type: none"> ○ Reality Modeling and Photogrammetry Software Software used for processing geotagged images, aerial or terrestrial photographs, and point-cloud data to generate 3D models, terrain surfaces, meshes, and georeferenced outputs for surveying, mapping, and environmental assessment. <p>1-Year Academic Subscription for 1 Seat</p> <ul style="list-style-type: none"> • Advanced Structural Connection and Detail Analysis Software <ul style="list-style-type: none"> ○ Software used for advanced analysis, checking, and design of steel connections, structural details, and discontinuity regions using component-based or finite-element-based 	
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analysis, including code-based verification and design documentation.

1-Year Academic Subscription

- **Computer-Aided Drafting Software**
 - Software used for 2D drafting, technical drawing, annotation, layout preparation, plotting, and preparation of engineering drawings and documentation for civil engineering instruction and laboratory activities.
- **Building Information Modeling Software**
 - Software used for creating, managing, and documenting intelligent 3D building models for architectural, structural, and building systems coordination, including model-based drawings, schedules, and construction documentation.
- **Civil Infrastructure Design and Documentation Software**
 - Software used for civil site and infrastructure design, including terrain modeling, grading, roadway and corridor design, pipe networks, drainage layouts, profiles, sections, quantity computations, and construction documentation.

Training for Faculty

- Training
- With Downloadable Course Materials
- Manuals
- Certificate of Completion
- Certificate of Accomplishment

Technical Support:

software upgrade to new version releases and maintenance releases, problem resolutions, bug fixes, and local technical support

Inclusion No. 2:

- Mouse
- Laptop Bag
- Swivel chair:
 - Fabric-upholstered office swivel chair with padded seat and backrest, loop-type polypropylene armrests, tilting mechanism, pneumatic height adjustment, 360-degree swivel function, chrome-plated five-star base, and caster wheels; durable, corrosion-

	<p>resistant, suitable for office or academic use, with minimum load capacity of 100 kg, brand new, and with warranty against factory defects.</p> <ul style="list-style-type: none"> ▪ Color: Blue 	
38	<p>50 units Complete Set of All in One Desktop PC with UPS-AVR each Set</p> <p><i>Technical Specification:</i> All in One Desktop PC with UPS-AVR each SET Operating System: Windows 11 or higher Processor: Intel® Core™ i7 Graphics: Intel® UHD Graphics Memory: 8GB DDR5 Storage: 1TB SSD M.2 Monitor: 23.8" IPS Display - WIDE SCREEN Ports: LAN, WiFi, Bluetooth, Built-In Camera. Keyboard & Mouse: Wireless Keyboard and Mouse Microsoft Office: Office Home and Student 2021, INCLUDING _ UPS AVR - min 5mins Back-UP" *with MATLAB (Academic) subscription inclusion specs: view specifications Provides the right to use the software indefinitely, and the first year of MathWorks Software Maintenance Service is included in the initial purchase price. quantity: 100 for 12 months</p>	
39	<p>2 unit Laptop</p> <p><i>Technical Specification:</i> Model: 15.6" Intel Core i7 (11th Gen) Processor: Intel Core i7-1165G7, 4 cores and 8 threads, up to approximately 4.7 GHz Turbo Memory (RAM): 12 GB DDR4 Storage: 512 GB SSD PCIe NVMe Graphics: Integrated Intel Iris Xe Graphics Display: 15.6" Full HD (1920 × 1080) IPS panel Connectivity: Wi-Fi 6 (802.11ax) and Bluetooth 5.0 Ports: HDMI output, USB Type-A (USB 3.x), USB Type-C, 3.5 mm headphone/microphone combo jack Operating System: Windows 11 Home 64-bit Dimensions: Approximately 362.2 × 253.4 × 19.9 mm Weight: Approximately 1.7 kg</p>	
Lot 5		
40	<p>4 Sets Supply, Delivery, and Installment of 3 HP Split Type ACU</p> <p><i>Technical Specification:</i> Aircon Type: Split</p>	

	<p>Split Type: Yes</p> <p>Highlights</p> <p>Cooling Capacity (HP): 3HP</p> <p>Width (cm): Indoor: 99 Outdoor: 84.5</p> <p>Height (cm): Indoor: 29.7 Outdoor: 61.5</p> <p>Gross Weight (kg): Indoor: 15.5 Outdoor: 40</p> <p>Length (cm): Indoor: 27.3 Outdoor: 30</p> <p>Net Weight (kg): Indoor: 13 Outdoor: 37</p> <p>Warranty: 1 year on parts and labor; 3 years warranty on PCB and 5 years on compressor</p> <p>Power Consumption: 1965W</p> <p>Dimensions (h x w x d): 615mm x 845mm x 300mm</p> <p>Refrigerant: R32</p> <p>EER: 5.75</p>	
Lot 6		
41	<p>11 Pieces Laboratory Storage Cabinets</p> <p><i>Technical Specification:</i></p> <p>Material: Steel Metal</p> <p>Finish: Powder Coated</p> <p>5 Layers Adjustable</p> <p>Assembled Dimensions:</p> <p>Length: 900mm</p> <p>Width: 400mm</p> <p>Height: 1850mm</p>	
42	<p>21 Sets Drawing Table with Chairs</p> <p><i>Technical Specification:</i></p> <p>DRAFTING TABLE:</p> <ul style="list-style-type: none"> • TOP: MELAMINE LAMINATED PB IN WOODGRAIN FINISH W/ FLAT PVC EDGING • TABLE FRAME: IN METAL POWDERCOATED BLACK FINISH • DRAFTING TABLE WOOD TOP, • METAL FRAME W/ MESH TRAY • 650L X 906L X <p>CHAIR:</p> <ul style="list-style-type: none"> • SEAT & BACKREST: PU • MATERIAL, GASLIFT: QG-D200 • (500-680MM)+PROTECTIVE • COVER, MECHANISM: DUAL • FUNCTION: ADJUSTABLE • BACKREST TILT AND SEAT • HEIGHT ADJUSTMENT, NYLON 5 • STAR BASE 560MM, FOOT • CASTERS: 50MM - BLACK 	
43	<p>15 Sets Working Tables and Chairs</p>	

	<p><i>Technical Specification:</i> Six-sided experimental table 1212*700*780mm DESK TOP: 12.7MM SOLID PHYSICAL AND CHEMICAL BOARD MAIN BODY: ALUMINUM ALLOY PROFILES AND ALUMINUM DIE CASTING PARTS TO CONNECT THE COMPOSITE FRAME; THE SURFACE IS TREATD BY ANTI-CORROSION OXIDATION ANF HIGH TEMPERATURE CURING OF PURE EPOXY RESIN PLASTIC POWDER.</p>	
Lot 7		
44	<p>1 set Electromechanical Training System with Data Acquisition and Control</p> <p><i>Technical Specification:</i> FEATURES:</p> <p>Requires 3-phase power. / 120 -208 VAC</p> <p>Equipment set consisting of the ff :</p> <ul style="list-style-type: none"> Three-Phase Synchronous Motor/Generator Three-Phase Transformer Bank Lead-Acid Battery Pack Timing Belt Connection Lead Set Four-Quadrant Dynamometer / Power Supply with Manual and Computer-Based Control <p>Specifications :</p> <ul style="list-style-type: none"> Dynamometer Mode Magnetic Torque - 0 to 3 N·m (0 to 27 lbf·in) Direction of Rotation - CW / CCW Speed - 0 to 2500 r/min Nominal Power - 350 W Power Supply Mode DC Voltage - 0 to ± 150 V AC Voltage (RMS) - 0 to 105 V (no-load) DC Current - 0 to ± 5 A AC Current (RMS) - 0 to 3.5A Maximum Output Power - 500W Communication Port - USB Power Requirements - 120 V - 6 A - 60 Hz, must include live, neutral, and ground wires Data Acquisition and Control Interface Four-Pole Squirrel Cage Motor Resistive Load Inductive Load Capacitive Load Transformer Permanent Magnet DC Motor 	

	<p>Synchronising Module/ Three-Phase Contactor, 120 V, EN</p> <p>Manuals:</p> <p>Power Factor Correction (Workbook)</p> <p>Power Factor Correction (Workbook (Instructor))</p> <p>DC Power Circuits (Workbook)</p> <p>DC Power Circuits (Workbook (Instructor))</p> <p>Single-Phase AC Power Circuits (Workbook)</p> <p>Single-Phase AC Power Circuits (Workbook (Instructor))</p> <p>Three-Phase AC Power Circuits (Workbook)</p> <p>Three-Phase AC Power Circuits (Workbook (Instructor))</p> <p>Three-Phase Rotating Machines (Workbook)</p> <p>Three-Phase Rotating Machines (Workbook (Instructor))</p> <p>Single-Phase Power Transformers (Workbook)</p> <p>Single-Phase Power Transformers (Workbook (Instructor))</p> <p>Three-Phase Transformer Banks (Workbook)</p> <p>Three-Phase Transformer Banks (Workbook (Instructor))</p> <p>Permanent Magnet DC Machine (Workbook (Instructor))</p> <p>Permanent Magnet DC Machine (Workbook)</p> <p>Level 2 of EMS</p> <p>DC Motor/Generator</p> <p>Specifications :</p> <p>Motor Output Power - 175 W</p> <p>Generator Output Power - 120 W</p> <p>Armature Voltage - 120V DC</p> <p>Shunt Field Voltage - 120V DC</p> <p>Full-Load Speed - 1800 r/min</p> <p>Full-Load Motor Current - 2.8 A</p> <p>Full-Load Generator Current - 1 A</p> <p>Capacitor-Start Motor</p> <p>Specifications :</p> <p>Line Voltage - 120V</p> <p>Mechanical Power - 175W</p> <p>Full-Load Speed - 1715 r/min</p> <p>Full-Load Current - 4.6A</p> <p>Universal Motor</p> <p>Conventional DC Machines and Universal Motor (Workbook)</p> <p>Conventional DC Machines and Universal Motor (Instructor)</p> <p>Single-Phase Induction Motors (Workbook)</p> <p>Single-Phase Induction Motors (Instructor)</p> <p>Other equipment/accessories</p> <p>Variable Three-Phase Power Supply</p> <p>Fuse SB 5.0 A</p> <p>Mobile Workstation</p> <p>Three-Phase Power Receptacle - NEMA L21-20R</p> <p>Simulation Software for EMS (1 USER)</p> <p>FREE Inclusion on the package</p> <p>Electromechanical Systems Simulation Software</p>	
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	<p>System Requirements Maximum Current : 10 A Typical Current : 1.5 A per student group AC Power Network Installation : 3 phases (120/208 V – 60 Hz), star (wye) configuration including neutral and ground wires, protected by a 20 A circuit breaker AC Power Network Connector : NEMA L21-20</p>	
45	<p>1 set Instrumentation and Process Control Trainer</p> <p><i>Technical Specification:</i> Equipment set consisting of the ff:</p> <p>Multimeter Hand-Operated Two-Way Valve Heating Unit Radiator Rotameter Work Surface (Stainless Steel) DC Power Supply Column Pressure Transmitter RTD Temperature Transmitter Venturi Tube Hose Set and Accessory Kit Pumping Unit Expanding Work Surface (Large) I/O Interface</p> <p>Manuals Temperature Process and Heat Exchanger (Workbook) Temperature Process and Heat Exchanger (Workbook (Instructor)) Pressure, Flow, and Level Processes (Workbook) Pressure, Flow, and Level Processes (Workbook (Instructor)) Workstation Bench (Assembled, with Dressing Panels and Lockable Front Door) Storage/Work Surface Consumables Antibacterial Solution</p>	
46	<p>5 unit Manual Base Unit</p> <p><i>Technical Specification:</i> with Power Cable Nema -15</p> <p>Specifications: Power Requirements</p>	

	<p>Service Installation - Standard single-phase ac outlet Voltage - 100-250VAC Current - 0.4-0.65 A Frequency - 60Hz Dimensions (H x W x D) - 152 x 305 x 356 mm (6 x 12 x 14 in) Net Weight - 3.1 Kg (6.9 lb) Includes : IEC power cable 90° Cord - NEMA 5-15 (Type B)</p>	
47	<p>5 unit Semiconductor Devices</p> <p><i>Technical Specification:</i> Semiconductor Fundamentals (Workbook) Semiconductor Fundamentals (Workbook (Instructor))</p> <p>Students in this program will be responsible for analyzing and troubleshooting the following circuits:</p> <ul style="list-style-type: none"> - Diodes and Half-wave Rectification - Full-wave Rectification with POWER Supply Filters - Zener Diode Regulator - Diode Waveshaping - Voltage Doubler - Transistor Junction - PNP DC Bias - Transistor Load Lines and Gain 	
48	<p>5 unit Operational Amplifier Fundamentals Circuit Board</p> <p><i>Technical Specification:</i> Operational Amplifier Fundamentals (Workbook) Operational Amplifier Fundamentals (Instructor)</p> <p>The objective is to familiarize students with the following circuits:</p> <ul style="list-style-type: none"> - Inverting Amplifier - Non-Inverting Amplifier - Voltage Follower - Inverting Summing Amplifier - Non-Inverting Summing Amplifier - Difference Amplifier - Open Loop Comparator - Sine/Square Comparator 	
49	<p>4 unit Transistor Power Amplifiers Circuit Board</p> <p><i>Technical Specification:</i> Transistor Power Amplifiers (Workbook) Transistor Power Amplifiers (Instructor)</p> <p>The Transistor Power Amplifiers module is designed to teach troubleshooting of transistor power amplifier circuitry.</p> <p>Training on this board includes identifying and isolating the following circuits:</p>	

	<ul style="list-style-type: none"> - SINGLE-Ended POWER Amplifier - Phase Splitter - Push-Pull POWER Amplifier - Attenuator - Complementary Power Amplifier - Darlington Pair 	
50	<p>1 set FET fundamentals Circuit Board</p> <p><i>Technical Specification:</i> FET Fundamentals (Workbook) FET Fundamentals (Workbook (Instructor))</p> <p>The FET Fundamentals module contains nine circuit blocks which enable students to perform practical exercises that demonstrate principles of JFET, MOSFET, and UJT:</p> <ul style="list-style-type: none"> - JFET - JFET Amplifier - JFET Current Source - Dual Gate MOSFET - Unijunction Transistor - Thermistor - Colpitts/Hartley Oscillator - Photo Resistor - Fiber Optic Link 	
Lot 8		
51	<p>1 unit Digital MultiMeter Bench Top 6 1/2 Digit</p> <p><i>Technical Specification:</i> Key specifications: Digits of resolution: 6½ Basic DCV accuracy: 40 ppm Max reading rate: 50,000 readings/s Memory: 2 million readings NISPOM and file security: Yes Data logging: Yes Display: 7" Color, graphical Statistical graphics: Bar meter, histogram, trend chart</p> <p>Measurements DCV: 100 mV to 1,000 V ACV: (RMS) 100 mV to 750 V DCI: 100 µA to 3 A ACI: 100 µA to 3 A 2- and 4-wire resistance: 100 Ω to 100 MΩ Continuity, diode: Y, 5 V Frequency, period: 3 Hz to 300 kHz Temperature: RTD/PT100, thermistor Capacitance: 1 nF to 100 µF IO interface USB: Yes</p>	

	<p>LAN/LXI Core: Yes</p> <p>Specifications:</p> <p>Accuracy specifications: \pm (% of reading + % of range) 1</p> <p>Range 2 /Frequency</p> <p>90 Days</p> <p>TCAL \pm 5 °C</p> <p>1 Year</p> <p>TCAL \pm 5 °C</p> <p>2 Years</p> <p>TCAL \pm 5 °C</p> <p>Temperature</p> <p>Coefficient/°C 3</p> <p>DC Voltage</p> <p>100 mV 0.0040 + 0.00607 0.0050 + 0.0070 0.0065 + 0.0070 0.0005 + 0.0008</p> <p>1 V 0.0030 + 0.0009 0.0040 + 0.0009 0.0055 + 0.0009 0.0005 + 0.0001</p> <p>10 V 0.0040 + 0.0005 0.0040 + 0.0005 0.0050 + 0.0005 0.0005 + 0.0001</p> <p>100 V 0.0100 + 0.0006 0.0125 + 0.0006 0.0160 + 0.0006 0.0010 + 0.0005</p> <p>1000 V 0.0120 + 0.0010 0.0130 + 0.0010 0.0165 + 0.0010 0.0010 + 0.0005</p> <p>True RMS AC Voltage 4, 5</p> <p>100 mV, 1 V, 10 V, 100 V, and 750 V Ranges</p> <p>10 Hz to 20 kHz 0.05 + 0.03 0.06 + 0.03 0.13 + 0.03 0.005 + 0.003</p> <p>20 kHz to 50 kHz 0.29 + 0.05 0.31 + 0.05 0.32 + 0.05 0.011 + 0.005</p> <p>50 kHz to 100 kHz 0.60 + 0.08 0.60 + 0.08 0.70 + 0.08 0.060 + 0.008</p> <p>100 kHz to 300 kHz 4.00 + 0.50 4.00 + 0.50 4.00 + 0.50 0.200 + 0.020</p> <p>Resistance⁶ Test Current</p> <p>100 Ω 1 mA 0.0080 + 0.0070 0.0100 + 0.0080 0.0120 + 0.0090 0.0006 + 0.0010</p> <p>1 kΩ 1 mA 0.0100 + 0.0010 0.0130 + 0.0010 0.0170 + 0.0012 0.0006 + 0.0001</p> <p>10 kΩ 100 μA 0.0100 + 0.0010 0.0130 + 0.0010 0.0170 + 0.0010 0.0006 + 0.0001</p> <p>100 kΩ 10 μA 0.0100 + 0.0010 0.0130 + 0.0010 0.0190 + 0.0010 0.0006 + 0.0001</p> <p>1 MΩ 5 μA 0.0180 + 0.0010 0.0220 + 0.0010 0.0280 + 0.0010 0.0010 + 0.0002</p> <p>10 MΩ 500 nA 0.0270 + 0.0010 0.0400 + 0.0010 0.0600 + 0.0010 0.0030 + 0.0004</p> <p>100 MΩ 500 nA 10 MΩ 0.8000 + 0.0100 0.8000 + 0.0100 0.8000 + 0.0100 0.1500 + 0.0002</p>	
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	<p>DC Current Burden Voltage</p> <p>100 μA < 0.011 V 0.0400 + 0.0250 0.0500 + 0.0250 0.0600 + 0.0250 0.0020 + 0.0030</p> <p>1 mA < 0.11 V 0.0300 + 0.0060 0.0500 + 0.0060 0.0600 + 0.0060 0.0020 + 0.0005</p> <p>10 mA < 0.05 V 0.0300 + 0.0200 0.0500 + 0.0200 0.0600 + 0.0200 0.0020 + 0.0020</p> <p>100 mA < 0.5 V 0.0300 + 0.0050 0.0500 + 0.0050 0.0600 + 0.0050 0.0020 + 0.0005</p> <p>1 A < 0.7 V 0.0800 + 0.0100 0.1000 + 0.0100 0.1200 + 0.0100 0.0050 + 0.0010</p> <p>3 A < 2.0 V 0.2000 + 0.0200 0.2000 + 0.0200 0.2300 + 0.0200 0.0050 + 0.0020</p> <p>Capacitance</p> <p>1 nF (typ) 0.50 + 0.50 0.50 + 0.50 0.50 + 0.50 0.05 + 0.05</p> <p>10 nF (typ) 0.40 + 0.10 0.40 + 0.10 0.40 + 0.10 0.05 + 0.01</p> <p>100 nF 0.40 + 0.10 0.40 + 0.10 0.40 + 0.10 0.05 + 0.01</p> <p>1 μF 0.40 + 0.10 0.40 + 0.10 0.40 + 0.10 0.05 + 0.01</p>	
52	<p>5 unit Arbitrary Waveform Generator</p> <p><i>Technical Specification:</i></p> <ul style="list-style-type: none"> • 200MHz bandwidth • Dual Channel • Supports instrument control through a web browser, allowing testing tasks to be completed remotely. • 1GSa/s and 16-bit sampling system • Pulse width can be fine-tuned to the minimum of 19.4ns with the adjustment step as small as 100ps • Arbitrary waveform length: 8 Mpts/Ch. • Provides sequence playback function to easily meet various testing needs. • Can generate arbitrary waveforms point by point, never skips any point so that it can reconstruct all the details of the waveform as defined. • 3 operating modes: <ul style="list-style-type: none"> - continuous - burst - SINGLE • 3 trigger sources: <ul style="list-style-type: none"> - Internal - External - Manual • Maximum Amplitude: ± 10 V • Harmonic function • Waveform Combining function • High precision Frequency Counter • 196 built-in arbitrary waveforms • With Sequence playback function. • Built-in dual pulse output function 	

	<ul style="list-style-type: none"> • Display: 4.3” display, 480 x 272 x RGB • Standard Interface: USB Host, USB Device, LAN • Inclusions: <ul style="list-style-type: none"> - Quick Start Guide: 1 - Power Cord: 1 - USB Cable: 1 - Factory Calibration: 1 	
53	<p>5 unit Digital MultiMeters Bench Top 41/2 Digit</p> <p><i>Technical Specification:</i> FEATURES: 4 ½ Digit Digital Multimeter DC Voltage Range: 600 mV – 1000 V Resolution @ 6 V: 0.0001 V DC Current Range: 600 µA - 10 A Resolution @ 6 mA: 0.0001 mA Resistance Range: 600 Ω - 100 MΩ Resolution @ 60 KΩ: 0.001 KΩ Diode Test: 0-2 V ; 2-4 V Continuity Test: 2000 Ω Accuracy at 600 V: 0.06 + 8 Accuracy at 6 A: 0.25 + 4 Accuracy at 20 KHz – 200 KHz: 0.01 + 2 Capacitance Range: 2 nF - 10000 µF Accuracy @ 200 nF: 1 + 9 With support for TC and RTD sensors Max, Min, Average, Standard Deviation, dBm/dB, Relative Measurement, Pass/ Fail Histogram, Trend Char AC Voltage: True-RMS, 600 mV - 750 V AC Current: True-RMS, 60 mA - 10 A Frequency Measurement: 20 Hz - 500 KHz Period Measurement: 2 µs - 0.05 s With easy, convenient and flexible PC software Standard interface: USB Device, USB Host, LAN Remote Interface: 10/100 Mbit LAN, USB2.0 Full Speed Device and Host</p> <p>Inclusions: - Power Cord: 1 - USB Cable: 1 - Quick Start Guide: 1 - Factory Certificate: 1 - Test Leads and Alligator Clips: 2</p>	
54	<p>5 unit Digital Oscilloscope</p> <p><i>Technical Specification:</i> 200 MHz bandwidth models 12-bit high resolution</p>	

	<p>Real-time sampling rate up to 2 GSa/s</p> <p>Memory depth up to 100 Mpts</p> <p>Waveform capture rate up to 500,000 wfms/s (Sequence mode)</p> <p>7-inch touch screen, support for external mouse and keyboard</p>	
Lot 9		
55	<p>4 pack Conductive Paper</p> <p><i>Technical Specification:</i> 50 sheets; 23 x 30 cm (with cm grid)</p>	
56	<p>5 set Equal Length Spring Set</p> <p><i>Technical Specification:</i> Spring constants: 25 N/m, 30 N/m, 35 N/m, 40 N/m, 50 N/m ($\pm 5\%$)</p> <p>What's Included?: 1x White storage box 5x Five (color-coded) springs 30 cm long</p>	
57	<p>5 set Field Mapper Kit</p> <p><i>Technical Specification:</i> Complete kit Complete manual Measure electric fields directly Measure potentials directly No mess Inexpensive Easy storage Conductive Paper with grid 23 x 30 cm (50 sheets) Plastic Tray 32 x 48 cm</p> <p>What's Included?: 50x Conductive paper with cm grid: 23 x 30 cm (50 sheets) 10x pushpins 3x wires 1x Conductive ink pen and circular template 1x Plastic tray with corkboard top: 32 x 48 cm 1x Instruction manual with 10 experiments</p>	
58	<p>5 unit Wireless Temperature Sensor</p> <p><i>Technical Specification:</i> Product Specifications: Approximate Mass: 31 g Range: -40 to 125°C Resolution: 0.01°C Accuracy: $\pm 0.5^\circ\text{C}$ Maximum Sample Rate: 10 Hz Waterproof: IPX7 rated (1m for 30 min)</p>	

	<p>Probe material: Corrosion Resistant 316 Stainless Steel</p> <p>Diameter: 0.19 in (5.0 mm)</p> <p>Length: 4.5 in (115 mm)</p> <p>Response Time: 5 seconds to reach 63% of value in response to step change in temperature.</p> <p>Connectivity: Bluetooth 5.2</p> <p>Logging: Yes</p> <p>Battery Type: Coin Cell</p> <p>Battery & Logging</p> <p>Stored Data Points Memory (Logging) 1: >55,000</p> <p>Battery - Connected (Data Collection Mode) 2: >275 hr (2-3yrs of normal classroom use)*</p> <p>Battery - Logging (Data Logging Mode) 3: 35 days</p> <p>Battery Type: Coin Cell</p>	
59	<p>5 set Hooke's Law Apparatus</p> <p><i>Technical Specification:</i> What's Included?:</p> <p>4x Mass hanger (5.0 g) 3x 100 g mass (brass) 3x 50 g mass (brass) 6x 20 g mass (brass) 3x 10 g mass (aluminum) 3x 5.0 g mass (aluminum) 3x 2.0 g mass (plastic) 3x 1.0 g mass (plastic) 3x 0.5 g mass (plastic) 1x Storage Case</p>	
60	<p>5 set Large Slotted Mass set</p> <p><i>Technical Specification:</i> What's Included?:</p> <p>1x 0.5 kg mass hanger 9x 0.5 kg slotted masses 1x Diameter of masses 8 cm 1x Height of hanger 36 cm</p>	
61	<p>5 set Mass and Hanger Set</p> <p><i>Technical Specification:</i> INCLUSION:</p> <p>- 4 x Mass hanger (5.0 g) - 3 x 100 g mass (brass) - 3 x 50 g mass (brass) - 6 x 20 g mass (brass) - 3 x 10 g mass (aluminum) - 3 x 5.0 g mass (aluminum)</p>	

	<ul style="list-style-type: none"> - 3 x 2.0 g mass (plastic) - 3 x 1.0 g mass (plastic) - 3 x 0.5 g mass (plastic) - 1 x Storage Case 	
62	<p>5 set Resistivity Apparatus</p> <p><i>Technical Specification:</i> Vary wire length: Slide-wire potentiometer pick-up makes it easy. Use the built-in scale to measure the length of the wire. Vary wire diameter: Four different diameters of brass wire are included. Investigate the difference between resistance and resistivity. Interchange wires quickly and easily. Vary wire material: Five different material wires are included. Investigate how resistivity depends on the wire material. Storage: Built-in storage tray to hold wires. Sample Wire: Wires are held securely and straight by the wire guides and lugs. Slide Wire Probe: Spring-loaded wire probe slides easily along the wire, making contact at a single point. Built-in cm Scale and slide wire probe make it easy to measure the voltage drop across various wire lengths.</p> <p>What's Included?: 2x 30 cm long wires: Copper (1.0 mm diameter) 2x 30 cm long wires: Aluminum (1.0 mm diameter) 2x 30 cm long wires: Stainless Steel (1.0 mm diameter) 2x 30 cm long wires: Nichrome (1.0 mm diameter) 2x 30 cm long wires: Brass (0.5 mm, 0.8 mm, 1.0 mm, 1.3 mm diameter)</p>	
63	<p>5 set Short Mass Hanger</p> <p><i>Technical Specification:</i> 1/2 kg mass hanger</p>	
64	<p>5 set Sonometer</p> <p><i>Technical Specification:</i> Working length of sounding board: 50 cm Strings: Steel guitar strings with diameters 0.014-inch and 0.018-inch (4 of each type) Tuning Gears: For fine adjustments of the string tension Built-in Scales: Scales on both sides measuring the string length at the indicator on the bridge Tensioning Lever: 5-to-1 lever to provide tension in the string with built-in bubble level Maximum hanging mass per string : 3 kg Guitar Pick: Yellow Nylon 0.73 mm thick</p> <p>What's included?: 1x Sonometer</p>	

	2x Bridges 2x Guitar Pick 4x 0.014-inch steel string 4x 0.018-inch steel string	
65	1 set Calorimeter <i>Technical Specification:</i> What's Included?: 1x Outer Aluminum Cup (8.9 cm tall, 4.7 cm dia) 1x Inner Aluminum Cup (7.5 cm tall, 3.8 cm dia) 1x Plastic Lid 1x Two-Hole Rubber Stopper 1x Heating Resistor with Input Cables	
Lot 10		
66	1 set Classroom Starter Kit <i>Technical Specification:</i> Electronics (1) Robot Brain (1) Controller (1) Robot Radio (1) Robot Battery Li-Ion 11 00mAh (1) Robot Battery Cable (1) Robot Battery Charger (8) Smart Motor (2) 36:1 Smart Motor Cartridge (1) AI Vision Sensor (4) Bumper Switch v2 (3) 300mm Smart Cables (3) 600mm Smart Cable (2) 900mm Smart Cable (1) 1200mm Smart Cable (2) 1500mm Smart Cable (1) USB A to Micro Cable Motion (4) 4" Omni-Directional Wheel (4) 4" Wheels (8) 12T Metal Pinion (8) 36T High Strength Gears (8) 60T High Strength Gears (8) 84T High Strength Gears (32) High Strength Square Gear Inserts (32) Free Spinning Gear Inserts (4) 6T High Strength Sprockets (6) 12T High Strength Sprockets (6) 18T High Strength Sprockets (2) 24T High Strength Sprockets (2) 30T High Strength Sprockets (700) High Strength Chain Links	

<p> (100) Chain Attachment Links (50) Tank Tread Traction Links (60) Conveyor-belt Base Links (20) Short Conveyor-belt Inserts (20) Medium Conveyor-belt Inserts (20) Tall Conveyor-belt Inserts (2) 2" Shafts (4) 3" Shafts (2) 4" Shafts (16) 12" Shafts (4) 12" High Strength Shafts (20) High Strength Shaft Bearings (20) High Strength Clamping Shaft Collars (96) Shaft Collars (32) #8-32 Setscrews (30) Rubber Shaft Collars (8) Intake Rollers (60) 1/16" High Strength Shaft Spacers (40) 1/8" High Strength Shaft Spacers (20) 1/4" High Strength Shaft Spacers (20) 1/2" High Strength Shaft Spacers (80) 1/8" Nylon Spacers (80) 1/4" Nylon Spacers (70) 3/8" Nylon Spacers (70) 1/2" Nylon Spacers Structure (2) 1x2x1x25 Aluminum C-Channels (24) 1x2x1x35 Aluminum C-Channels (12) 1x3x1x35 Aluminum C-Channels (6) 5x25 Aluminum Plates (4) 2x2x25 Aluminum Angles (4) 1x1x35 Aluminum Angles (4) 90-Degree Gussets (175) #8-32 x 1/4" Locking Star Drive Screws (125) #8-32 x 1/2" Locking Star Drive Screws (250) #8-32 x 3/8" Star Drive Screws (225) #8-32 x 1/2" Star Drive Screws (100) #8-32 x 7/8" Star Drive Screws (75) #8-32 x 1.000" Star Drive Screws (50) #8-32 x 1.250" Star Drive Screws (50) #8-32 x 1.500" Star Drive Screws (25) #8-32 x 1.750" Star Drive Screws (10) #8-32 x 2.000" Star Drive Screws (20) 1-Post Hex Nut Retainers w/ Bearing Flat (20) 1-Post Hex Nut Retainers (20) 4-Post Hex Nut Retainers (700) #8-32 Nylock Nuts (100) #8-32 Hex Nuts (1) Pillow Block Bearing </p>	
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	<p>(40) Bearing Flats (8) Drive Shaft Bar Locks (20) 1/2" Standoffs (30) 3/4" Standoffs (20) 1" Standoffs (40) 2" Standoffs (4) 3" Standoffs</p> <p>Tools & Accessories (20) #64 Rubber Bands (600) 4" Zip Ties (50) 11" Zip Ties (1) 12" X 15" Anti Slip Mat (Thick) (4) T15 Star Screwdrivers (2) T15 Star Keys (2) T8 Star Keys (6) Open End Wrenches</p>	
67	<p>2 set Advanced Robotics Learning Classroom Kit</p> <p><i>Technical Specification:</i></p> <p>Electronics (1) Robot Brain (1) Controller (1) Robot Radio (1) Robot Battery Li-Ion 1100mAh (1) Robot Battery Cable (1) Robot Battery Charger (6) Smart Motors (4) Bumper Switch (1) Vision Sensor (2) 200mm Smart Cables (4) 300mm Smart Cables (2) 600mm Smart Cables (1) 900mm Smart Cables (2) 6" 3-Wire Cables (2) 12" 3-Wire Cables (1) 24" 3-Wire Cable (1) 36" 3-Wire Cable (2) 6" Y-Cables (1) Ultrasonic Range Finder (2) Potentiometers (1) USB A to Micro Cable</p> <p>Motion (4) 2" Shafts (6) 3" Shafts (1) 3.5" Shaft (5) 4" Shafts (4) 12" Drive Shafts</p>	

<ul style="list-style-type: none"> (5) 12T Metal Pinion (5) 12T Metal Pinion Inserts (4) 36T High Strength Gears (4) 60T High Strength Gears (5) 84T High Strength Spur Gears (10) High Strength Gear Shaft Inserts (5) 12T High Strength Gear Inserts (16) High Strength Square Gear Insert (16) Free Spinning Gear Insert (4) 6T High Strength Sprockets (2) 12T High Strength Sprockets (2) 18T High Strength Sprockets (2) 24T High Strength Sprockets (2) 30T High Strength Sprockets (280) High Strength Chain Links (40) Chain Attachment Links (4) 2.75" Wheels (4) 3.25" Traction Wheels (4) 3.25" Omni-Directional Wheels (4) 4" Omni-Directional Wheels (4) 4" Wheels (4) 4" Mecanum Wheels (4) 12" Long Linear Slide Tracks 2) Rack Gearbox Brackets (4) Inner Acetal Slide Trucks (4) Outer Acetal Slide Trucks (1) Claw Assembly (16) Rack Gear v2 (25) Tank Tread Traction Links (30) Conveyor-belt Base Links (12) Short Conveyor-belt Inserts (10) Medium Conveyor-belt Inserts (10) Tall Conveyor-belt Inserts (1) Winch Bracket (1) Winch Drum (1) Ratchet Gear (1) Winch Pawl (8) VEX Pulleys (1) 4' Rope Section (8) Intake Rollers (2) Hand Crank (1) Lead Screw Nut (4) Lead Screw Segments (2) Lead Screw Mounting Brackets (2) 16T Bevel Gears (2) 32T Bevel Gears (4) Worm Wheels (4) Worm Gears (2) Drop Off Cams (2) Cam Followers 	
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	<p>(2) Cam Follower Mounting Brackets (2) Universal Joints (1) 2.6" Diameter Turntable Bearings (1) 4.25" Diameter Turntable Bearings</p> <p>Structure</p> <p>(4) 2x2x2x20 Steel U-Channel (4) 1x2x1x15 Steel C-Channels (4) 1x2x1x25 Steel C-Channels (2) 1x1x25 Steel Angles (2) 2x2x14x20 Steel Angles (2) 2x2x20 Steel Angles (2) 2x2x25 Steel Angles (1) 5x15 Plate (2) 5x25 Plates (8) 1x25 Bars (4) Angle Gussets (4) Plus Gussets (4) Pivot Gussets (2) 15x30 Base Plates (35) 1-Post Hex Nut Retainer w/ Flat Bearing (25) 1-Post Hex Nut Retainers (27) 4-Post Hex Nut Retainers (100) #8-32 Keps Nuts (130) #8-32 Hex Nuts (6) 0x2 Connector Pin (25) #8-32 x 1/4" Locking Star Drive Screws (29) #8-32 x 1/2" Locking Star Drive Screws (4) #8-32 x 1.500" Locking Star Drive Screws (50) #8-32 x 1/4" Star Drive Screws (80) #8-32 x 3/8" Star Drive Screws (25) #8-32 x 1/2" Star Drive Screws (25) #8-32 x 3/4" Star Drive Screws (2) #8-32 x 1.000" Star Drive Screws (4) 3" Standoffs (4) 2" Standoffs (8) 1" Standoffs (10) 1/2" Standoffs (12) Bearing Blocks (8) Lock Bars (25) Flat Bearings (28) 1/8" Spacers (20) 1/4" Spacers (14) 3/8" Spacers (13) 1/2" Spacers (2) 7/8" Spacers (83) Rubber Shaft Collars</p> <p>Tools & Accessories</p> <p>(2) Battery Clips</p>	
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	(1) Latex Tubing (10') (10) #32 Rubber Bands (2) Open End Wrench (2) T8 Star Drive Key (4) T15 Star Drive Keys (50) 4" Zip Ties (1) Instruction Guide	
68	1 set Portable Competition Field Perimeter <i>Technical Specification:</i> Portable Competition Field Perimeter (16) T Connectors (8) Corner Connectors (4) Side Extrusions (4) Center Extrusions (4) Left Extrusions (8) Vertical Center Extrusions (4) Vertical Corner Extrusions (12) GPS Code Extrusions (8) Side Panels (4) Center Panels (2) Straps (2) Field Cases (2) Field Tile Cases Inclusions: (4) 11.5 Tablet Size: 11.5 inches Type: LCD, up to 144 Hz refresh rate LCD, up to 144 Hz refresh rate 30 ~ 144 Hz adaptive refresh rate Resolution: 2800 × 1840 RAM: 8 GB ROM: 256 GB Typical Capacity: 8800 mAh Wi-Fi: 802.11a/b/g/n/ac/ax, 2 × 2 MIMO Virtual Simulation Software for tablets, PC,s and Mac's (1) Vacuum Cleaner Essential for Maintaining Robotics room Rated Power: 2400W Rated Voltage: 220-240V Rated Frequency: 50/60Hz Dust Capacity: 75L Vacuum Pressure: 16-17Kpa Air Flow: 3.0m ³ /min Noise: 19-83dB(A) Cable Length: 5m Tank Material: Stainless Steel	

	<p>FEATURES: Wet and Dry cleaning. Floor brush - for carpet and wooden floor, etc. Bristle brush - for sofa, bookshelf, curtain and furniture, etc. Cervice Nozzle - for corners, cracks, etc.</p> <p>INCLUSION: 1pc 2400W 75L Wet & Dry Vacuum Cleaner 1pc Flexible Hose 1pc Floor Brush 1pc 2 Part Metal Tube 1pc Cloth Filter 1pc Metal Handle 1pc Operating Manual</p>	
Lot 11		
69	<p>1 set Gasoline and Diesel Engine Performance test bed</p> <p><i>Technical Specification:</i></p> <p>1.General Description of the System The equipment shall be an Internal Combustion Engine Test Stand, intended for laboratory investigation of gasoline and diesel internal combustion engines. The system shall be a robust floor mounted regenerative engine test bed with modular instrumentation and control. 2.Complete System Features and Capabilities The complete system shall have the following features: a.Regenerative engine test bed supplied with: -One four-stroke diesel engine -One four-stroke gasoline engine b.Designed to operate on 3-phase, 220 VAC electrical supply c.Capable of investigation of: -Torque–speed characteristics - Power–speed characteristics -Specific fuel consumption - Mechanical efficiency -Thermal efficiency over a wide range of operating conditions d.Regenerative dynamometer including both torque and speed control together with direct reading digital display. e.Engine speed and all relevant temperatures displayed on digital panel meters located on a remote instrumentation console. f.Intake air supplied through an intake orifice and pulsation damper. g.Airflow measurement via flow measurement orifice connected to a panel mounted manometer for differential pressure measurement. h.Fuel flow measurement using a calibrated volumetric fuel gauge. i.Engines preinstalled on standard mounting plates allowing quick and easy installation on the test bed. j.Fuel supply systems provided with quick release, self sealing fuel couplings. k.Test stand mounted on braked wheels for ease of movement. l.Exhaust extension is supplied. m.Decompression lever provided for ease of starting. n.Operator safety ensured by interlocks and safety cut out devices. o.Carbon monoxide sensor included. p.System suitable for research investigation of bio fuels. 3.Major Components – Specifications A.Regenerative Dynamometer</p>	

	<p>Maximum shaft power capacity: Up to 4 kW. Control modes: -Torque control -Speed control Display: -Direct-reading digital display of dynamometer outputs. Integrated with remote instrumentation console. B.Diesel Engine Type: Vertical cylinder, air-cooled, four-stroke diesel engine. Configuration: Single cylinder Maximum output: 4.6 HP (3.5 kW) Rated speed: 3600 rpm. Displacement: 211 cc. Bore × stroke: 70 × 55 mm. Fuel type: Diesel Decompression lever provided for ease of starting. C.Gasoline Engine Type: Air-cooled, four-stroke gasoline engine Configuration: Single cylinder. Maximum output: 3.5 HP (2.6 kW). Rated speed: 3600 rpm. Displacement: 118 cc. Bore × stroke: 60 × 42 mm. Fuel type: Unleaded gasoline 4.LEARNING CAPABILITIES: 4.1.Measurement of the Torque - Speed and Power - Speed for an Internal Combustion Petrol Engine at a Range of Throttle Settings. 4.2.Measurement of the Specific Fuel Consumption at Constant Speed and Varying Power Output. 4.3.Measurement of Air-Fuel Ratio and Engine Thermal Efficiency at Constant Speed and Range of Throttle Settings. 4.4.Measurement Of Engine Internal Friction At A Range Of Engine Speeds. 4.5.Measurement of the Specific Fuel Consumption at Constant Speed and Varying Power Output on a Diesel Engine 4.6.Measurement of Air-Fuel Ratio and Engine Thermal Efficiency at Constant Speed and Range of Injector Settings on a Diesel Engine 4.7.Measurement of the Torque - Speed and Power - Speed for an Internal Combustion Diesel Engine at a Range of Injector Settings. 5.Standard Accessories: 1 x Diesel Engine (fitted) 1 x Gasoline Engine (not fitted) 1 x Engine Mount 1 x Dynamometer console Transformer Fuel pumps Air Supply chamber 1 x Engine Exhaust 1 x Carbon Monoxide Sensor 1 x Stop watch 1 x Manometer Fluid Instruction manual Packing list Test sheet Spares 6.Essential Services: 210-220 Volts, 3 Phase 50/60Hz (With earth/ground). Line current up to 32A *includes, installation, commissioning, and on-site training.</p>	
70	<p>1 unit BHN Testing Machine</p> <p><i>Technical Specification:</i> Main functions and features: 1、 Touch screen control, with a simple and easy to understand operating interface, has good reliability, operability, and intuitiveness. 2、 The body part is formed in one go by casting process and has undergone long-term aging treatment. Compared to the splicing process, long-term use has minimal deformation and can effectively adapt to various harsh environments. 3、 Automotive paint, with high quality and strong scratch resistance, remains shiny and new after years of use. 4、 Removed loading weights and adopted an electronic automatic loading system; It has a ten level experimental force, a wider testing range, and higher</p>	

	<p>accuracy. 5、 There are 14 hardness conversion scales available, which can directly convert various commonly used hardness values. Technical parameters: Parameter Parameter Data Measuring range 8-650HBW Test force 62.5kgf、 100kgf、 125kgf、 187.5kgf、 250kgf、 500kgf、 750kgf、 1000kgf、 1500kgf、 3000kgf 612.9N、 980.7N、 1226N、 1839N、 2452N、 4903N、 7355N、 8907N、 14710N、 29420N Exchange scales HRA、 HRB、 HRC、 HRD、 HRF 、 HV、 HK、 HBW、 HR15N、 HR30N、 HR45N、 HR15T 、 HR30T、 HR45T Indenter diameter Φ2.5mm、 Φ5mm、 Φ10mm Maximum allowable height of the specimen 280mm Distance from the center of the indenter to the machine wall 150mm Hardness value reading Digital touch screen LCD reading hardness value Data output Built-in printer Power supply AC220V, 50Hz Executive standards GB/T231.2、 ISO6506-2、 ASTM E10 Overall dimensions 230*600*920mm Net weight 130kg Standard configuration: Name Quantity Hardness tester host 1Set Big workbench 1 Pc Small workbench 1 Pc V-shaped workbench 1 Pc Φ2.5 Hard ball indenter 1 Pc Φ5 Hard ball indenter 1 Pc Φ10 Hard ball indenter 1 Pc Brinell hardness standard block 200\pm50HBW 10/3000 1 Pc Brinell hardness standard block 100\pm25HBW 10/1000 1 Pc Accessory box 1 Pc Dust cover 1 Pc Power line 1 Pc Digital micrometer 1Set User Manual 1 Pc Certificate of conformity 1 Pc *includes, installation, commissioning, and on-site training.</p>	
71	<p>1 unit Mini Steam Turbine Power Plant</p> <p><i>Technical Specification:</i></p> <p>1. FEATURES <input type="checkbox"/> Complete steam turbine power plant designed for engineering steam power education <input type="checkbox"/> Demonstrates operation of a true Rankine thermodynamic cycle <input type="checkbox"/> Integrated system consisting of: Fossil fueled boiler Axial flow steam turbine AC/DC electrical generator Condenser tower Instrumentation and computerized data acquisition <input type="checkbox"/> Mounted on a rigid, mobile steel frame for laboratory mobility and storage <input type="checkbox"/> Boiler with tube type, flame through design and access doors for viewing internal components <input type="checkbox"/> Adjustable steam admission valve for control of turbine speed and power output <input type="checkbox"/> Generator capable of supplying both AC output and rectified DC output <input type="checkbox"/> Fully instrumented with calibrated sensors for thermodynamic and electrical analysis <input type="checkbox"/> Supplied with National Instruments™ USB based data acquisition system and LabVIEW™ software <input type="checkbox"/> Includes Windows® laptop with pre installed and pre calibrated data acquisition software <input type="checkbox"/> All exposed metal surfaces constructed of stainless steel, anodized aluminum, or powder coated steel for durability <input type="checkbox"/> Delivered fully assembled, factory calibrated, and ready for operation 2.</p>	

TECHNICAL SPECIFICATIONS 2.1 Boiler System □ Type: Fossil fueled, tube type, flame through steam boiler □ ASME-certified pressure vessel boiler. □ Maximum operating pressure: 120 psi (827 kPa) □ Maximum operating temperature: 482 °F (250 °C) □ Safety features: Over pressure relief valve Automatic low water level shutdown Manual blowdown valve □ Water level indication: Sealed boiler sight glass 2.2 Steam Turbine □ Type: Axial flow steam turbine □ Steam flow control: Adjustable steam admission valve □ Measured parameters: Turbine inlet temperature and pressure Turbine exit temperature and pressure Turbine rotational speed (RPM) 2.3 Generator and Electrical Output □ Generator type: Steam turbine driven electric generator □ Rated electrical output: Voltage: 15.0 V Current: 1.0 A Maximum load: 15.0 W □ Generator configuration: 4 pole □ Electrical output: Alternating Current (AC) Rectified Direct Current (DC) □ Load: Infinitely adjustable electrical load □ Analog instrumentation: Boiler pressure gauge Generator voltage meter Generator current meter 2.4 Condenser System □ Type: Integrated condenser tower □ Function: Condenses exhaust steam to liquid state □ Condensate measurement: Graduated beaker □ Integrated boiler fill and drain system 2.5 Instrumentation and Data Acquisition □ Data acquisition platform: National Instruments™ hardware □ Interface: Single cable USB connection to PC □ I/O capability: 20 Analog Input channels 16 Digital Input/Output channels 4 Frequency/Pulse Input channels □ Software: Custom LabVIEW™ virtual instrument □ Computer: Supplied Windows® laptop □ Functions: Real time data display Configurable data output Data recording and export Factory pre calibrated sensors 2.6 Measured Parameters Calibrated transducers and thermocouples measure: □ Boiler temperature and pressure □ Turbine inlet temperature and pressure □ Turbine exit temperature and pressure □ Turbine RPM □ Fuel flow rate □ Generator voltage □ Generator current □ Generator electrical load 2.7 Operating Requirements □ Electrical supply: 220 VAC, 60 Hz □ Fuel: Liquid Propane (LPG) □ Cooling water: Not required (self contained condenser) 3. EXPERIMENTAL CAPABILITIES Supports the following experiments and analyses: □ Energy relationships and the First Law of Thermodynamics □ Cycle analysis and the Second Law of Thermodynamics □ Control volume analysis □ Entropy analysis □ Isentropic analysis, including turbine and nozzle efficiency □ Heat transfer analysis and boiler efficiency □ Combustion process analysis □ Vapor power system fundamentals □ Electric power generation principles □ Experimental methods and data acquisition techniques 4. PHYSICAL DIMENSIONS AND WEIGHT Installed Unit □ Dimensions: 58 in (L) × 30 in (W) × 48 in (H) (148 cm × 77 cm × 122 cm) □ Weight: 260 lb (118

	kg) Shipping: □Dimensions: 67 in (L) × 33 in (W) × 52 in (H) (170 cm × 84 cm × 132 cm) □Shipping weight: 350 lb (158 kg) *includes, installation, commissioning, and on-site training.	
72	<p>1 set Rotation Fatigue Testing Machine</p> <p><i>Technical Specification:</i></p> <ul style="list-style-type: none"> ◆ Features <p>Fatigue testing (Wohler method) Fully guarded system Variable speed Auto motor cut-off upon specimen fracture Digital interface Keyless chuck Optional specimen sets</p> <ul style="list-style-type: none"> ◆ Technical Specifications <p>Motor speed: ~5600 / 1400 rpm Motor speed (nominal): 2800 rpm Or-bond arrester belt Timing pulley: 20T and 40T Standard specimen: Ø4 mm × 65 mm (steel) Cantilever loading with self-weight compensation Safety guard Safety motor interlock</p> <ul style="list-style-type: none"> ◆ What's Included <p>Rotation fatigue testing machine Transformer (115V) Interface Spanners Specimens Load hanger Hex wrench set Spare belt Spare fuse Instruction manual Packing list Test sheet</p> <ul style="list-style-type: none"> ◆ Dimensions & Electrical <p>Weight: 26 kg Length: 715 mm Width: 260 mm Height: 280 mm Power: 220–240V, Single Phase, 50Hz Current: up to 0.6A @ 230V</p> <ul style="list-style-type: none"> ◆ Inclusions <p>Installation Commissioning On-site training</p>	
73	1 set CNC Lathe Machine	

	<p><i>Technical Specification:</i></p> <ul style="list-style-type: none"> ◆ Features High-grade casting body Ultrasonic frequency quenched bed Induction-hardened bed 6-station tool holder Precision machining capability Optional gang tool turret Fully enclosed protective cover ◆ Inclusions Manual 3-jaw chuck and tailstock 6-way automatic tool turret Siemens 808D Controller Automatic lubrication system Automatic coolant system Work light Leveling block set Toolbox with basic tools Turning cutter set (9 pcs, TiN coated) ◆ Specifications Max swing over bed: 320 mm Max swing over carriage: 150 mm Max workpiece length: 750 mm Bed width: 215 mm Spindle nose: A2-5 Spindle bore taper: MT5 3-jaw chuck: 6" Spindle motor power: 2.2 kW Spindle speed: 150–2500 rpm Spindle bore: 40 mm Rapid traverse (X/Z): 6 / 8 m/min X-axis travel: 180 mm Z-axis travel: 750 / 1000 mm Tool stations: 6-way automatic Sleeve diameter/travel: 100 mm / 130 mm Quill taper: MT3 Coolant motor: 120 W Power supply: 220V AC / 60Hz / 3-phase Net weight: 1500 kg Dimensions: 2000 × 1100 × 1750 mm ◆ Inclusions Installation Commissioning On-site training 	
74	<p>1 set Milling Machine</p> <p><i>Technical Specification:</i></p> <ul style="list-style-type: none"> ◆ Standard Accessories 	

	<p>3-Axis Digital Readout X-Axis Auto Feed Y-Axis Auto Feed Clamping Kit (58 pcs set)</p> <ul style="list-style-type: none"> ◆ Specifications <p>Table size: 254 × 1370 mm Longitudinal travel: 850 mm Cross travel: 400 mm Vertical travel: 420 mm Ram travel: 470 mm T-slot number and size: 3 × 16 mm Distance (spindle nose to table surface): 0–420 mm Spindle hole taper: R8 / ISO 30 / ISO 40 Spindle travel: 127 mm Spindle speed: 16 steps, 50Hz: 65–4540 rpm Main motor: 3.75 kW Distance (spindle to table): 90–370 mm Distance (horizontal spindle to table): 0–280 mm Distance (spindle to column): 200–700 mm Quill feeding: 0.04 / 0.08 / 0.15 mm/rev Swivel: 90° Head tilting: 45° Net/Gross weight: 1380 / 1430 kg Packing size: 1516 × 1550 × 2080 mm</p> <ul style="list-style-type: none"> ◆ Inclusions <p>Installation Commissioning On-site training</p>	
Lot 12		
75	<p>1 set Dead Weight Tester</p> <p><i>Technical Specification:</i></p> <ul style="list-style-type: none"> ◆ Features <p>Accuracy: ±0.015% to ±0.006% of reading Multiple pressure ranges supported Stainless steel piston-cylinder system Aluminum base with ABS protective cover Interchangeable piston sets Traceable calibration (UKAS optional)</p> <ul style="list-style-type: none"> ◆ Scope of Delivery <p>Instrument base with ABS cover Piston-cylinder system Masses (non-adjusted to standard gravity 9.80665 m/s²) Q/A mineral oil (for selected ranges) Standard tool set: Allen keys Open-ended spanner SW30 Level Leveling feet (4 pcs)</p>	

	<p>Seal kit Connection set Pointer punch & remover Inlet adapter</p> <ul style="list-style-type: none"> ◆ Additional Inclusions <p>Operating instructions Calibration certificate</p>	
76	<p>1 unit Precision Digital Pressure Gauge</p> <p><i>Technical Specification:</i> Measuring ranges: 0 ... 10,000 bar (0 ... 150,000 psi) Vacuum and absolute pressure available Accuracy: up to 0.1% (incl. calibration certificate) Intrinsically safe version</p> <p>Performance:</p> <p>Logger: up to 50 measured values/sec Gauge pressure: 0 ... 10,000 bar Absolute pressure: 0 ... 25 bar Vacuum range: -1 ... 40 bar</p> <p>Accuracy Classes:</p> <p>0.025% FS 0.05% FS 0.1% FS 0.25% FS</p> <p>Configuration:</p> <p>Vertical mounting, lower mount connection Adjustable offset and span factor</p> <p>Functions:</p> <p>Menu: Min/Max, alarm (visual) Power-off function Measuring rate Mean value filter Pressure rate Mean value (interval selectable) Level indication Torque offset Indication damping</p> <p>Memory:</p> <p>Min/Max memory</p>	

	<p>Integrated data logger</p> <p>Logging:</p> <p>Mean interval: 1–3600 seconds Measuring rate max: 50/s Storage: up to 1,000,000 values Cyclic logging Selectable recording rates Battery status indicator (4 bars, 25% steps)</p> <p>Mechanical:</p> <p>Rotatable case: 330° Protection: IP65</p>	
77	<p>1 set Hand Test Pump</p> <p><i>Technical Specification:</i></p> <p>Hydraulic pressure generation up to: 700 bar (10,000 psi) 1,000 bar (14,500 psi) Ergonomic handling Fine adjustment valve for precise pressure Compact and lightweight</p> <p>Performance:</p> <p>Pressure range: 0 – 700 bar (0 – 10,000 psi) Test pressure setting via fine adjustment valve Pressure relief valve included Pump handles included</p> <p>Medium & Fluid:</p> <p>Medium: simple distilled water Mineral oil-based fluids not suitable Oil must be clean and non-thermally aging Optional pressure media available</p> <p>Components:</p> <p>Fluid reservoir: 200 ml (refillable) Pump volume per stroke Inlet pressure: 81.6 mm² High pressure: 23 mm²</p> <p>Materials (non-wetted):</p> <p>Anodized aluminum Brass</p>	

	<p>Stainless steel ABS</p> <p>Other Details:</p> <p>Weight: 1.3 kg (2.9 lb) Test connection: Female thread G ¼, freely rotating Removable via Allen key Hose connection: G ¼ female thread</p> <p>Hose:</p> <p>Length: 1 m (3.28 ft) Connection adapters: G ¼ male thread Material: Stainless steel Seal: FKM NBR</p>	
Lot 13		
78	<p>3 pcs Calibration Weights 10kilos</p> <p><i>Technical Specification:</i> With Certificate</p>	
79	<p>1 unit Platform Scale (150kg)</p> <p><i>Technical Specification:</i> Product Type: Bench Scale Weighing Capacity: 150 kg Scale Type: Bench Resolution: 1:600000 Parts Counting: Yes</p> <p>Interface:</p> <p>WiFi, Bluetooth, RS232, Ethernet</p> <p>Display:</p> <p>AC, Universal LCD Backlight</p> <p>Operating Temperature:</p> <p>Minimum: -10°C Maximum: 40°C</p> <p>Weighing Modes:</p> <p>Percentage weighing Check weighing</p>	

	<p>Piece counting</p> <p>Standards/Approvals:</p> <p>UL61010, IEC/EN 61010</p>	
80	<p>1 set Viscometer</p> <p><i>Technical Specification:</i></p> <p>Technical Data:</p> <p>Viscosity Measuring Range: 8000000 mPas Viscosity Accuracy (FSR): 1% Viscosity Repeatability (FSR): 0.2% Spring torque: 14.374 mNm Guard rail: me-vi Measuring spindle series: SP set-2 Motor rating output: 4.8 W Overload protection: yes Direction of rotation: right Display: TFT</p> <p>Speed:</p> <p>Speed display: TFT Speed range: 0.01 - 200 rpm Setting accuracy speed: 0.01 rpm Speed adjustment: TFT</p> <p>Torque & Timing:</p> <p>Torque display: yes Torque measurement: yes Timer: yes Timer display: TFT Time setting range: 0.01 - 6000 min</p> <p>Temperature:</p> <p>Temperature measurement resolution: 0.1 K Working temperature display: TFT Connection for external temperature sensor: PT 100</p> <p>Functions:</p> <p>Graph function: yes Operating mode: timer and continuous operation Calibration option: yes Touch function: yes</p> <p>Capacity & Structure:</p>	

	<p>Permitted density: 9999 kg/dm³ Working temperature: -100 to 300°C Fastening on stand: extension arm Support rod diameter: 16 mm Telescope stand stroke: 200 mm Plug-in coupling: Ø12 mm Basic container volume: 600 ml Stroke max: 61 mm Diameter: 16 mm Dynamic load: 5 kg</p> <p>Dimensions & Weight:</p> <p>Dimensions (W x H x D): 351 x 629 x 372 mm Weight: 7.1 kg</p> <p>Environment:</p> <p>Permissible ambient temperature: 5 - 40°C Permissible relative humidity: 80%</p> <p>Protection & Interface:</p> <p>Protection class: IP 40 (DIN EN 60529) RS 232 interface: yes USB interface: Micro-USB</p> <p>Electrical:</p> <p>Voltage: 100 - 240 V Frequency: 50/60 Hz Power input: 24 W Power input standby: 0.06 W DC Voltage: 24 V Current consumption: 1000 mA</p>	
Lot 14		
81	<p>10 unit Network Cable Tester</p> <p><i>Technical Specification:</i> Accessory Type Cable Identifier For Use With TES-48 Cable Tester</p>	
82	<p>5 unit Robotic Arm</p> <p><i>Technical Specification:</i> Maximum operating distance 80 cm Maximum Height 52 cm Base Width 14 cm Gripper Width 9 cm Cable Length 40 cm</p>	

	<p>Load Capacity Maximum weight at 32 cm operating distance: 150 g Maximum weight at the minimal Braccio configuration: 400g Weight 0.792 Kg Product Code T050000 Plastic Parts 21 Screws 63 Flat Washer 16 Hexagon Nut 7 Springs 2 Servo Motors 2 x SR 311, 4 x SR 431 Arduino compatible Shield 1 Power Supply 5V, 5A 1 Phillips Screwdriver 1 Double Hexagon Box Wrench 1 Spiral Cable Protection Wrap 1 Operating Voltage 5 V Power Consumption 20 mW Max current 1.1A from M1 to M4 connectors 750mA from M5 and M6 connectors</p>	
83	<p>1 lot AIM Coding Robot</p> <p><i>Technical Specification:</i> the learning environment. Specification: • Omnidirectional Drive: Omni wheels allow movement in any direction • Multilingual Color Touch Screen: Displays menus, sensor data, user text and images • Emojis: 36 unique emojis bring AIM to life and takes coding off the computer screen • User-Controlled Speaker: Enhances interaction with selectable sounds • Precision Navigation: Includes gyro, accelerometer, and wheel encoders for accurate driving • Programmable LED Lights: Customizable for an engaging visual experience • AI Vision Sensor: detects the Sports Ball, Barrels and April Tags (included) as well as colors • Kicker: Allows AIM to pick up / place barrels, and catch / kick the sports ball • Controller: Included handheld controller allows users to drive AIM in any direction as well as control the kicker • Robot-to-Robot Communication: Enabled via Bluetooth for interactive learning. (Coming in future software update) • Versatile Coding Options: Supports VEXcode Blocks, Switch, Python; and Visual Studio Code with the VEX extension • Button Coding: Button coding allows any user to experience AIM coding • Console: Send text bidirectionally between AIM and VEXcode, allowing user interaction and extending debugging options</p>	

	<ul style="list-style-type: none"> • Convenient Program Downloading: Transfer programs easily via Bluetooth or USB • USB-Rechargeable Internal Battery: Ensures long-lasting, convenient power • Optional Field: The AIM Field provides maximum engagement and controlled play spaces, on a table or on the floor 	
Lot 15		
84	<p>5 units Arduino Education Starter Kit PLC Starter Kit</p> <p><i>Technical Specification:</i> Note: This board needs the Arduino Opta® for full functionality. Temperature sensor 1x TMP236, from -10 °C to 125 °C with an accuracy of +/- 2.5 °C Heater circuits 2x independent heater circuits Screw connectors 2x screw connectors exposing +24 VDC 2x screw connectors exposing GND 2x screw connectors for the two independent heater circuits (24 VDC) 1x screw connector for the output voltage of the temperature sensor DIN mounting RT-072 DIN Rail Modular PCB Board Holders - 72 mm</p>	
85	<p>5 units Pi 4 8gb Starter Kit</p> <p><i>Technical Specification:</i> Processor: Broadcom BCM2711, quad-core Cortex-A72 (ARM v8) 64-bit SoC @ 1.5GHz</p> <p>Memory: 1GB, 2GB or 4GB LPDDR4 (depending on model)</p> <p>Connectivity: 2.4 GHz and 5.0 GHz IEEE 802.11b/g/n/ac wireless LAN, Bluetooth 5.0, BLE Gigabit Ethernet 2 × USB 3.0 ports 2 × USB 2.0 ports</p> <p>GPIO: Standard 40-pin GPIO header (fully backwards-compatible with previous boards)</p> <p>Video & sound: 2 × micro HDMI ports (up to 4kp60 supported) 2-lane MIPI DSI display port</p>	

	<p>2-lane MIPI CSI camera port 4-pole stereo audio and composite video port</p> <p>Multimedia: H.265 (4Kp60 decode); H.264 (1080p60 decode, 1080p30 encode); OpenGL ES, 3.0 graphics</p> <p>SD card support: Micro SD card slot for loading operating system and data storage</p> <p>Input power: 5V DC via USB-C connector (minimum 3A) 5V DC via GPIO header (minimum 3A) Power over Ethernet (PoE)-enabled (requires separate PoE HAT)</p> <p>Environment: Operating temperature 0–50°C</p> <p>Compliance: For a full list of local and regional product approvals, please visit: https://www.raspberrypi.org/documentation/hardware/raspberrypi/conformity.md</p> <p>Production lifetime: The Raspberry Pi 4 Model B will remain in production until at least January 2026.</p>	
86	<p>5 units Complete Set of Pi Kit 4</p> <p><i>Technical Specification:</i> with 3 inclusions: 1. Raspberry Pi LCD Touch Screen with 7 in Capacitive Touch Screen 2. 4D Systems Diablo16 Starter Kit with 4.3 in Resistive Touch Screen 3. Raspberry Pi 4 B Starter Kit</p> <p>Raspberry Pi LCD Touch Screen with 7 in Capacitive Touch Screen Technical Specification</p> <ul style="list-style-type: none"> • 7” Touch screen Display. • Screen Dimensions: 194mm x 110mm x 20mm (including standoffs) • Weight incl Packaging: 336 gram • Viewable screen size: 155mm x 86mm • Screen Resolution 800 x 480 pixels • 10 finger capacitive touch. • Connects to the Raspberry Pi board using a ribbon cable connected to the DSI port. 	

	<ul style="list-style-type: none"> • Adapter board is used to power the display and convert the parallel signals from the display to the serial (DSI) port on the Raspberry Pi. • Will require the latest version of Raspbian OS to operate correctly. <p>Kit Contents</p> <ul style="list-style-type: none"> • 7” Touch screen Display • Adapter Board • DSI Ribbon cable • 4 x stand-offs and screws (used to mount the adapter board and Raspberry Pi board to the back of the display) • 4 x jumper wires (used to connect the power from the Adapter Board and the GPIO pins on the Pi so the 2Amp power is shared across both units) <p>4D Systems Starter Kit with 4.3 in Resistive Touch Screen Powerful 4.3” Intelligent LCD-TFT display module powered by DIABLO16.</p> <ul style="list-style-type: none"> • 480 x 272 Resolution, RGB 65K true to life colours, TFT Screen with integrated 4-wire Resistive Touch Panel. • Easy 5 pin interface to any TTL Serial Host: VCC, TX, RX, GND, RESET • 6 banks of 32750 bytes of Flash memory for User Application Code and Data • 32Kb of SRAM purely for the User. • 16 General Purpose I/O pins for user interfacing, which include 4 configurable Analog Inputs. • The GPIO is variously configurable for alternative functions such as: <ul style="list-style-type: none"> ◦ 3x I2C channels available ◦ 1x SPI dedicated for SD Card and 3x configurable SPI channels available ◦ 1x dedicated and 3x configurable TTL Serial comm ports available ◦ Up to 6 GPIO can be used as Pin Counters ◦ Up to 6 GPIO for PWM (simple and Servo) ◦ Up to 10 GPIO for Pulse Output ◦ Up to 14 GPIO can be configured for Quadrature Encoder Inputs (2 channels) • On-board micro-SD memory card connector for multimedia storage and data logging purposes. • Full sided SD memory card connector is available for volume purchases. • DOS compatible file access (FAT16 format) as well as low level access to card memory. • Dedicated raw PWM Audio pin driven by WAV files from micro-SD card. • On-board audio amplifier with a tiny 8Ω speaker 	
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- for sound generation and WAV file playback.
 - Display full colour images, animations, icons and video clips on chosen 4D Systems display.
 - Supports all available Windows fonts.
 - 4.0V to 5.5V range operation (single supply).
 - Module dimensions: 119.5 x 67.0 x 15.2mm (including tabs) – See drawing, Weighing ~80 g.
 - Display Viewing Area: 95.04 x 53.85mm
 - 4x mounting tabs with 3.0mm holes for mechanical mounting.
 - RoHS and CE Compliant.
- Raspberry Pi 4 B Starter Kit

SPECIFICATIONS

Processor:
Memory:
Connectivity:
GPIO:
Video & sound:
Multimedia:
SD card support:
Input power:
Environment:
Compliance:
Production lifetime:
Broadcom BCM2711, quad-core Cortex-A72 (ARM v8)
64-bit SoC @ 1.5GHz
1GB, 2GB or 4GB LPDDR4 (depending on model)
2.4 GHz and 5.0 GHz IEEE 802.11b/g/n/ac wireless
LAN, Bluetooth 5.0, BLE
Gigabit Ethernet
2 × USB 3.0 ports
2 × USB 2.0 ports
Standard 40-pin GPIO header
(fully backwards-compatible with previous boards)
2 × micro HDMI ports (up to 4Kp60 supported)
2-lane MIPI DSI display port
2-lane MIPI CSI camera port
4-pole stereo audio and composite video port
H.265 (4Kp60 decode);
H.264 (1080p60 decode, 1080p30 encode);
OpenGL ES, 3.0 graphics
Micro SD card slot for loading operating system and data storage
5V DC via USB-C connector (minimum 3A*
)
5V DC via GPIO header (minimum 3A*
)
Power over Ethernet (PoE)–enabled (requires separate PoE HAT)
Operating temperature 0–50o

	<p>C</p> <p>For a full list of local and regional product approvals, please visit https://www.raspberrypi.org/documentation/hardware/raspberrypi/conformity.md</p> <p>The Raspberry Pi 4 Model B will remain in production until at least January 2026.</p>	
87	<p>10 units Crimper</p> <p><i>Technical Specification:</i> Crimp Tool Type Plier Crimp Connector Type RJ11, RJ12, RJ45 No. of Crimping Positions Suitable for RJ-11 (6 Position) and RJ-45 (8 Position modular plugs) Applications Maintenance & repair, Electrical Installations, Cable assemblies</p>	
88	<p>5 units Arduino Education Starter Kit</p> <p><i>Technical Specification:</i> The Arduino Explore IoT Kit Rev2 has been created to provide a comprehensive understanding of the Internet of Things, as well as to encourage students to think about solving global sustainability challenges, according to the UN's Sustainable Development Goals.</p> <p>Micro USB cable</p> <p>Moisture sensor</p> <p>PIR sensor</p> <p>Pressure sensor</p> <p>Gas sensor (VOC)</p> <p>Ambient light sensor</p> <p>RGB color sensor</p>	
89	<p>5 units SUPERFET III Type N-Channel MOSFET, 10 A, 650 V N, 3-Pin TO-220 FCPF360N65S3R0L-F154</p> <p><i>Technical Specification:</i> Description SUPERFET III MOSFET is ON Semiconductor's brand-new high voltage super-junction (SJ) MOSFET family that is utilizing charge</p>	

	<p>balance technology for outstanding low on-resistance and lower gate charge performance. This advanced technology is tailored to minimize conduction loss, provides superior switching performance, and withstand extreme dv/dt rate. Consequently, SUPERFET III MOSFET Easy drive series helps manage EMI issues and allows for easier design implementation.</p> <p>Features</p> <ul style="list-style-type: none"> • 700 V @ TJ = 150°C • Typ. RDS(on) = 310 m • Ultra Low Gate Charge (Typ. Qg = 18 nC) • Low Effective Output Capacitance (Typ. Coss(eff.) = 173 pF) • 100% Avalanche Tested • These Devices are Pb-Free and are RoHS Compliant 	
90	<p>1 unit PCB Stencil Printer</p> <p><i>Technical Specification:</i> Product specifications Dimensions 240 x 370 x 110 mm Max. PCB size 180 x 240 mm Max. Stencil size 190 x 270 mm Weight max. 7 kg</p>	
91	<p>5 piece Smart and Interactive Digital Whiteboard 65" Wall Installation and STAND Option</p> <p><i>Technical Specification:</i> A Smartboard 65" interactive whiteboard typically features a 65-inch, 4K UHD (3840 x 2160) LED or LCD display with a 16:9 aspect ratio and a 60Hz refresh rate. Connectivity options include HDMI, USB (Type-A, Type-B, and Type-C), and sometimes RS232C and RJ45 (LAN) ports. The interactive features include a multi-touchscreen with up to 40 touch points and support for various operating systems.</p> <p>Interactive features</p> <p>Touch: Multi-touch support, often up to 40 touch points, supporting pen, touch, and gesture input Supported OS: Windows, macOS, Linux, and Android Embedded Computing: Integrated iQ system (on many models) With Wall Installation and option of STAND 65-inch diagonal screen size. 4K Ultra HD resolution 10 simultaneous touch points SMART Learning Suite - lesson delivery, assessment, student collaboration and game-based activities are gathered together into one ultimate education suite.</p>	

	<p>Share everything from any Android® (Google Cast), iOS® (AirPlay) and Windows® (Miracast) device wirelessly</p> <p>Built-in Chromium web browser Digital whiteboard</p> <p>Numerous HDMI, VGA, USB and multimedia ports 50,000 hours of reliable use</p> <p>Simultaneous tool differentiation</p> <p>Object awareness™</p>	
92	<p>3 units Circuit Board DEMOBOARD, Arduino Compatible Board</p> <p><i>Technical Specification:</i></p> <ul style="list-style-type: none"> o Demoboard is able to provide continuous current load (36V-20A) between V_OUT and GND. o A green LED will turn ON when logic supply voltage is connected and ON. o Output voltage, Input logic, Status and SRP can be measured externally with test points. o Output voltage, Input logic, Status can be monitored with the Arduino Interface. 	
93	<p>5 units Transistor Power Amplifiers 4-Channel Audio Power Amplifier, 15-Pin, 35W Multiwatt</p> <p><i>Technical Specification:</i></p> <ul style="list-style-type: none"> ■ HIGH OUTPUT POWER CAPABILITY: <ul style="list-style-type: none"> – 2 x 40W max./4□ – 2 x 35W/4□ EIAJ – 2 x 35W/4□ EIAJ – 2 x 25W/4□ @14.4V, 1KHz, 10% – 4 x 7W/4□ @14.4V, 1KHz, 10% – 4 x 12W/2□ @14.4V, 1KHz, 10% ■ MINIMUM EXTERNAL COMPONENTS COUNT: <ul style="list-style-type: none"> – NO BOOTSTRAP CAPACITORS – NO BOUCHEROT CELLS – INTERNALLY FIXED GAIN (26dB BTL) ■ ST-BY FUNCTION (CMOS COMPATIBLE) ■ NO AUDIBLE POP DURING ST-BY OPERATIONS ■ DIAGNOSTICS FACILITY FOR: <ul style="list-style-type: none"> – CLIPPING – OUT TO GND SHORT – OUT TO VS SHORT – SOFT SHORT AT TURN-ON – THERMAL SHUTDOWN PROXIMITY 2 PROTECTIONS: <ul style="list-style-type: none"> ■ OUPUT AC/DC SHORT CIRCUIT <ul style="list-style-type: none"> – TO GND – TO VS – ACROSS THE LOAD ■ SOFT SHORT AT TURN-ON 	

	<ul style="list-style-type: none"> ■ OVERRATING CHIP TEMPERATURE WITH ■ SOFT THERMAL LIMITER ■ LOAD DUMP VOLTAGESURGE ■ VERY INDUCTIVE LOADS ■ FORTUITOUS OPEN GND ■ REVERSED BATTERY ■ ESD 	
94	<p>5 unit Nano Super Developer Kit Development Kit</p> <p><i>Technical Specification:</i> AI Performance 67 TOPS GPU NVIDIA Ampere architecture with 1024 CUDA cores and 32 tensor cores CPU 6-core Arm® Cortex®-A78AE v8.2 64-bit CPU 1.5MB L2 + 4MB L3 Memory 8GB 128-bit LPDDR5 102GB/s Storage Supports SD card slot and external NVMe Video Encode 1080p30 supported by 1-2 CPU cores Video Decode 1x 4K60 (H.265) 2x 4K30 (H.265) 5x 1080p60 (H.265) 11x 1080p30 (H.265) Power 7W–25W</p>	
Lot 16		
95	<p>5 lot (8086/8088 Microcomputer Trainer) M888, one-stop microcomputer principle and interface experiment solution</p> <p><i>Technical Specification:</i> Specification: The system resources are completely open, with rich onboard resources and strong scalability. The experimental platform utilizes the INTEL8088 (compatible with the 8086) system. All system resources, including 8-bit data lines, 16-bit address lines, and read/write control signals, are exposed and accessible to the user. The experimental box includes a rich onboard module resource library (see the Module Resource List for details). Furthermore, it provides an "experimental module expansion" interface and a rich sensor module package. This eliminates the limitations of separate teaching for the single sensor and microcomputer interface experimental platforms, achieving a perfect integration of current sensor and microcomputer interface technologies. This makes the designed microcomputer interface system more relevant and intelligent for practical applications.</p>	

	<p>Standard high-speed and easy-to-use USB communication interface, which can be used for online simulation and debugging.</p> <p>The standard USB communication interface is plug-and-play, suitable for desktop computers and laptops without serial ports, and supports operating systems such as Windows XP, Windows 7, Windows 10, and Windows 11. It can also be easily switched to an RS232 serial communication interface. Connecting to the host software allows for online simulation, debugging, and program development.</p> <p>No computer required, convenient and fast demonstration mode</p> <p>The system is equipped with management monitoring. When not connected to a PC, the system automatically switches to offline management mode. Users can easily call up experimental programs stored in the EPROM through the 4*6 keyboard in the lower right corner of the experimental box to complete experiments. Experiments can be run offline, making it convenient for teachers to verify and demonstrate experiments in the early stages of teaching, while also enhancing students' interest and desire to learn.</p> <p>Step-by-step difficulty design and detailed experimental guidance</p> <p>The experimental cases are designed with a graduated level of difficulty, from simple to complex. This allows beginners to seamlessly transition from basic to fully master the design of various complex systems and programs. This allows students to seamlessly transition into the workforce and become employable, useful, and employable professionals.</p> <p>Vivid CNC innovative experimental platform (patented product, optional modules, 1 set for laboratory configuration)</p> <p>The digitally controlled innovative experimental platform uses current 2D animation technology to create complex experiments such as a four-story elevator control system and tool magazine shortcut selection. Leveraging PC resources, it simulates the control system of a physical object. A USB interface enables CPU control of the virtual controlled object and two way communication. This platform offers vivid visuals, strong operability, and the ability to</p>	
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	<p>implement complex closed-loop control, significantly enhancing student learning interest and innovative thinking. Compared to traditional physical models, it offers a highly cost-effective solution, requires no ongoing maintenance or repair, and is safe and convenient to use.</p> <p>Currently, this innovative experimental platform features 15 typical system experiments. Built-in all-in-one computer</p> <ul style="list-style-type: none"> • The CPU main frequency is 2.16GHz. The memory is DDR3L SODIMMX14G, solid state drive, and supports power-on auto-start. • It provides a 14-inch IPS screen with an HDMI interface, a high-resolution image quality of up to 1920*1080, and a 60Hz screen refresh rate without any lag. • It provides rich interface resources such as 1xUSB3.0, 3xUSB2.0, 1 headphone jack & microphone, 1 COM serial port, 1xHDML, 1xVGA, 2 antenna interfaces, 2xGigabit network ports, etc. • The module is installed with a self-recovery system, which can effectively prevent virus infection and is safe and stable. • The platform comes standard with a Bluetooth wireless mouse and keyboard to facilitate user operation, control and programming. • The platform can complete all experimental projects without an external computer. 	
Lot 17		
96	<p>2 lots Development Platform</p> <p><i>Technical Specification:</i> Specification: IoT development platform uses Arduino, popular electronic modules, and industrial sensors to collect environmental data and send it to remote locations via the different communication channels, such as Wi-Fi, Bluetooth, IrDA, LoRa, and RFTransceiver, for further processing. The platform contains more than 35 electronic blocks under 8 categories: Digital Input, Analog Input, Display, Sound,Sensor, Motor, Communication, and Tool. Students will learn and be familiar with each module individually and combinethese modules to create advanced IoT projects. Integration experiments contain various popular cloud-based IoT projects, such as Line Notify, ThingSpeak, IFTTT, and local-based wireless applications, such as IrDA remote control, Bluetooth lamp, LoRa Messenger, etc. Students can efficiently learn and create various IoT projects through simple connections and sample Arduino codes in the</p>	

	<p>tutorials provided.</p> <ol style="list-style-type: none">1. The main unit includes fixed I/O peripherals suitable for common I/O controlled projects.2. Modular electronic blocks allow users to build their projects with high flexibility.3. An independent power supply is provided to maximize the number of peripheral modules.4. Four sets of I/O ports are extended around the working area for easy signal connection.5. Two sets of USB power to supply power directly to Arduino	
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Section VIII. Philippine Bidding Document Related Forms

Notes to the Philippine Bidding Document Related Forms

The Bidder shall complete and submit with its Bid the **Bid Form** and **Price Schedules** in accordance with ITB Clause 13 with the requirements of the Bidding Documents and the format set out in this Section.

When requested in the BDS, the Bidder should provide the **Bid Security**, either in the form included hereafter or in another form acceptable to the Procuring Entity, pursuant to ITB Clause 16.

The **Contract Form** should incorporate any correction or modification to the accepted Bid resulting from price corrections when it is finalized at the time of contract award. The Price Schedule and Schedule of Requirements which form part of the contract should be modified accordingly.

The **Omnibus Sworn Statement** must be completed by all Bidders in accordance with ITB Clause 4.2. Failure to submit it with the Bid shall result in the rejection of the Bid and the Bidder's disqualification.

The **Performance Securing Declaration, if allowed and Bank Guarantee Form for Advance Payment** shall be completed only by the successful Bidder in accordance with one of the forms indicated herein by the Procuring Entity, and pursuant to **GCC** Clause 13 and its corresponding SCC provision.

TABLE OF CONTENTS

Bid Form for Procurement of Goods	141
Price Schedule for Goods Offered from Within the Philippines	143
Price Schedule for Goods Offered from Abroad	144
Contract Form	145
Omnibus Sworn Statement Form	148
Bid Securing Declaration Form.....	152

Bid Form for Procurement of Goods

[Note: The duly accomplished form shall be submitted with the Bid]

BID FORM

Project Identification No.: *[Insert number]*

To: *[Name of Procuring Entity]*

Having examined the Philippine Bidding Documents (PBD) including the Supplemental Bid Bulletin Numbers *[insert numbers]*, the receipt of which is hereby duly acknowledged, we, the undersigned, declare that:

- a) I/We have no reservation to the PBD, including the Supplemental Bid Bulletins, for the Procurement Project *[Project Title]*;
- b) Select one, delete the other
 - I/We undertake to deliver the Goods in accordance with the delivery schedule in the Schedule of Requirements;
 - I/We offer to execute the Works for this Contract in accordance with the PBD;
- c) The total price of our Bid in words and figures, excluding any discount offered below, is *[insert information]*
- d) The discounts offered and the methodology for their application, if any, are: *[insert information]*; or indicate N/A if no discount offered
- e) The total bid price in words and figures, after applying the applicable discount, includes the cost of all taxes, such as, but not limited to *[specify the applicable taxes, e.g. (i) value added tax (VAT), (ii) income tax, (iii) local taxes, and (iv) other fiscal levies and duties]*, which are itemized in the *[Select one, delete the other: the Price Schedules/ Detailed Estimates]*.
- f) This Bid shall remain valid within a period stated in the PBD, and it shall be binding upon me/us at any time before the expiration of that period;
- g) If our bid is accepted, I/we commit to enter to a contract and provide a performance security in the form, amounts, and within the times prescribed in the PBD, and hereby acknowledge the consequences under the IRR of RA No. 12009 on forfeiture of Bid Security or enforcement of Bid Securing Declaration and on Blacklisting.

Until a formal Contract is prepared and executed, this Bid, together with your written acceptance thereof and your Notice of Award, shall be binding upon the Bidder.

I/We understand that you are not bound to accept the Lowest Calculated Bid or any Bid you may receive.

I/We certify/confirm that we comply with the eligibility requirements pursuant to the PBD.

The undersigned is authorized to submit the bid on behalf of [Name of the Bidder] as evidenced by the attached [State the Written Authority].

I/We acknowledge that failure to sign each and every page of this Bid Form, including the attached Schedule of Prices, shall be a ground for the rejection of our bid.

Duly authorized to sign the Bid for and behalf of:

[Insert Bidder's Name]

[Signature over Printed Name]

[Position/Designation]

[Date]

Price Schedule for Goods

Name of Bidder _____ . Project ID No. _____ . Page _ of _____

Pricing Details for Goods Offered from Within the Philippines

1	2	3	4	5	6	7	8	9	10
Item	Description	Source of Domestic Product, as certified by the Relevant Agency	Quantity	Unit price exw per item	Transportation and all other costs incidental to delivery, per item	Sales and other taxes payable if Contract is awarded, per item	Cost of Incidental Services, if applicable, per item	Total Price, per unit (col 5+6+7+8)	Total Price delivered Final Destination (col 9) x (col 4)

Summary of Bid Prices

The Procuring Entity may modify the table below as necessary to comply with the requirements of the Procurement Project.

1	2	3	4
Item No.	Item	Particulars / Description	Total Amount

Name: _____

Signature: _____

Duly authorized to sign the Bid for and behalf of: _____

Price Schedule for Goods

Name of Bidder _____ . Project ID No. _____ . Page _ of _____

Pricing Details for Goods Offered from Abroad

1	2	3	4	5	6	7	8	9
Item	Description	Country of origin	Quantity	Unit price CIF port of entry (specify port) or CIP named place (specify border point or place of destination)	Total CIF or CIP price per item (col. 4 x 5)	Unit Price Delivered Duty Unpaid (DDU)	Unit price Delivered Duty Paid (DDP)	Total Price delivered DDP (col 4 x 8)

Summary of Bid Prices

The Procuring Entity may modify the table below as necessary to comply with the requirements of a specific Project.

1	2	3	4
Item No.	Item	Particulars / Description	Total Amount

Name: _____

Signature: _____

Duly authorized to sign the Bid for and behalf of: _____

Contract Form

[Note: The duly accomplished form is not required to be submitted with the Bid but shall be submitted within ten (10) days after receiving the Notice of Award]

CONTRACT FOR [Insert Project Title]

This CONTRACT executed on the _____ day of _____ 20____ by and between:

[Name of Procuring Entity], a government agency of the Republic of the Philippines, hereinafter called "the Entity";

-and-

[Name of Supplier /Contractor/ Consultant] a company duly organized and existing under the laws of [city and country], with principal office at [insert address], hereinafter called "the Supplier".

WHEREAS, the Entity invited Bids for certain goods and services/works/consulting services, particularly *[Brief description of Project]*;

WHEREAS, the Supplier/Contractor/Consultant submitted a responsive bid and was awarded the contract for the procurement in the total amount of *[Contract price in words and figures, including currency]*, hereinafter referred to as the "Contract Price."

NOW, THEREFORE, for and in consideration of the foregoing premises, the parties hereby agree as follows:

1. Unless otherwise stated, terms and expressions used in this Contract shall have the same meanings as those assigned to them in the Conditions of Contract, which form an integral part of this Contract.
2. The following documents as required by the Implementing Rules and Regulations of Republic Act No. 12009 shall form part and be read and construed as integral parts of this Contract, viz.:
 - a. Philippine Bidding Document (PBD); *[Select one, delete the others]*
 - *For Procurement of Goods*
 - i. Invitation to Bid;
 - ii. Instruction to Bidders;
 - iii. Bid Form, including all the documents/statements contained in the Bidder's bidding envelopes, as annexes, and all other documents 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;
 - iv. Bid Data Sheet;
 - v. Schedule of Requirements;
 - vi. Technical Specifications;
 - vii. General and Special Conditions of Contract;
 - viii. Supplemental Bid Bulletins, if any; and

- ix. Other contract documents that may be required by existing laws and/or the Entity.
- *For Procurement of Infrastructure Projects*
 - i. Drawings/Plans;
 - ii. Specifications;/Scope of Work;
 - iii. Bill of Quantities;
 - iv. General and Special Conditions of Contract; and
 - v. Supplemental Bid Bulletins, if any;
 - *For Procurement of Consulting Services*
 - i. General and Special Conditions of Contract;
 - ii. Terms of Reference;
 - iii. Request for Expression of Interest;
 - iv. Instructions to Bidders;
 - v. Bid Data Sheet;
 - vi. Addenda and/or Supplemental/Bid Bulletins, if any;
 - vii. Bid forms, including all the documents/statements contained in the Bidder's bidding envelopes, as annexes, 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;
 - viii. Eligibility requirements, documents and/or statements;
 - ix. Performance Security;
 - x. Notice of Award of Contract and the Bidder's *conforme* thereto; and
 - xi. Other contract documents that may be required by existing laws and/or the Entity.
- b. Winning bidder's bid, including the Eligibility Requirements, Technical and Financial Proposals, and all other documents or statements submitted;
 - c. Performance Security;
 - d. Notice of Award of Contract; and the Bidder's *Conforme* thereto; and
 - e. Other contract documents that may be required by existing laws and/or the Procuring Entity concerned in the PBD, such as but not limited to the Notice to Proceed and Warranty Security.
3. In consideration of the Contract Price of [*Contract Price in words and figures*], or such other sums as may be determined in accordance with the terms of the Contract, the Supplier/Contractor/Consultant agrees to deliver and perform the items and related services for the [*Project Title*] described herein in accordance with the terms and conditions specified in the Contract and its annexed documents.
 4. The [*Name of the Procuring Entity*] agrees to pay the above-mentioned sum to the Supplier/Contractor/Consultant in accordance with the schedule and manner provided in the Bidding Documents and its annexes.
 5. Any dispute, difference, or claim arising out of or relating to this Contract, including its existence, validity, interpretation, breach, or termination thereof, may be submitted to arbitration or other form of alternative dispute resolution in accordance with the

applicable law, such as Republic Act No. 9285 (Alternative Dispute Resolution Act of 2004) or Executive Order No 1008, series 1985 (Construction Industry Arbitration Law).

IN WITNESS WHEREOF, the parties hereto have caused this Contract to be executed in accordance with the laws of the Republic of the Philippines on the day and year first above written.

For the Procuring Entity
Head of the Procuring Entity or Duly
Authorized Representative

For the Bidder
Duly authorized to sign the Contract for and
behalf of *[Bidders Name]*:

[Signature over Printed Name]
[Position/Designation]
[Date]

[Signature over Printed Name]
[Position/Designation]
[Date]

Signed in the presence of:

[Name and Signature]
Witness – Procuring Entity

[Name and Signature]
Witness- Supplier

ACKNOWLEDGMENT

BEFORE ME, A Notary Public for and in the _____, City/Province of _____, this _____ day of _____, 20_____, personally appeared the above-named persons who have satisfactorily proven to me their identity, through their identifying documents written below their names and signatures, that they are the same persons who executed and voluntarily signed the foregoing instrument consisting of _____ pages, including this page where this Acknowledgement is written, which they acknowledged before me as their free and voluntary act and deed.

WITNESS MY HAND AND SEAL this ____ day of *[month]* *[year]*.

NAME OF NOTARY PUBLIC

Notarial Commission No. _____
Notary Public for _____ until _____
Roll of Attorneys No. _____
PTR No. __, *[date issued]*, *[place issued]*
IBP No. __, *[date issued]*, *[place issued]*

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

Omnibus Sworn Statement Form

[Note: The duly accomplished form shall be submitted with the Bid]

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

OMNIBUS SWORN STATEMENT

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

1. **Select one, delete the others:**

- *If sole proprietorship:* I am the sole proprietor or authorized representative of *[Name of Bidder]* with office address at *[Address of Bidder]*;
- *If 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]*;
- *If individual consultant not registered under a sole proprietorship, in case of Consulting Services:* I am the individual consultant or authorized representative of *[Name of Bidder]* with office address at *[Address of Bidder]*;

2. **Select one, delete the others:**

- *If 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 *[Project Title]* of the *[Name of the Procuring Entity]* *[insert "as supported by the attached duly notarized Special Power of Attorney" for authorized representative]*;
- *If 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 *[Project Title]* of the *[Name of the Procuring Entity]*, as supported by the attached duly notarized Special Power of Attorney, Board/Partnership Resolution, or Secretary's Certificate, whichever is applicable;
- *If individual consultant not registered under a sole proprietorship, in case of Consulting Services:* As the individual consultant 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 *[Project Title]* of the *[Name of the Procuring Entity]*, as supported by the attached duly notarized Special Power of Attorney *for authorized representative*;

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; by itself or by relation, membership, association, affiliation, or controlling interest with another blacklisted person or entity;
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 others:*
 - *If sole proprietorship* : The *[Name of Bidder]* and its spouse are not related by consanguinity or affinity up to the third civil degree to the Head of the Procuring Entity, Procurement Agent (if engaged), End-User or Implementing Unit, project consultants, head of the Project Management Office, or the members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat;
 - *If partnership* : The partnership itself and the partners of *[Name of Bidder]* are not related by consanguinity or affinity up to the third civil degree to the Head of the Procuring Entity, Procurement Agent (if engaged), End-User or Implementing Unit, project consultants, head of the Project Management Office, or the members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat;
 - *If cooperative*: The cooperative itself and members of the board of directors, general manager, or chief executive officer of *[Name of Bidder]* are not related by consanguinity or affinity up to the third civil degree to the Head of the Procuring Entity, Procurement Agent (if engaged), End-User or Implementing Unit, project consultants, head of the Project Management Office, or the members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat;
 - *If corporation, or joint venture*: The corporation or joint venture itself, and officers, directors, and controlling stockholders of *[Name of Bidder]* are not related by consanguinity or affinity up to the third civil degree to the Head of the Procuring Entity, Procurement Agent (if engaged), End-User or Implementing Unit, project consultants, head of the Project Management Office, or the members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat;
 - *If individual consultant not registered under a sole proprietorship, in case of Consulting Services*: The individual consultant and its spouse are not related by consanguinity or affinity up to the third civil degree to the Head of the Procuring Entity, Procurement Agent (if engaged), End-User or Implementing Unit, project consultants, head of the Project Management Office, or the members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat;

7. It is understood that failure to faithfully disclose its relationship with the Head of the Procuring Entity, members of the BAC, the TWG, and the BAC Secretariat, the head of the PMO or the end-user unit or implementing unit, and the project consultants of the Procuring Entity, or of the procurement agent by consanguinity or affinity up to the third civil degree, as well as its submission of beneficial ownership information containing false entries shall be subject to blacklisting under Section 100 of the Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 12009, without prejudice to criminal and civil liabilities under applicable laws, including their accessory penalties, if any.

Select one, delete the rest:

- *In case of corporations: [Name of Bidder] declares its beneficial ownership information consistent with its updated General Information Sheet or Beneficial Ownership Declaration Form or any other document duly submitted to the SEC and has maintained a valid and updated file therein in compliance with Sections 20.2.9.1, 81, and 82 of the IRR of RA No. 12009.*
 - *In case of Foreign Bidders: [Name of Bidder] submitted an appropriate equivalent document in English issued by the country of the bidder concerned in accordance with Section 20.2.9.2 of the IRR of RA No. 12009.*
8. *[Name of Bidder] complies with existing labor laws and standards; and*
 9. *[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 *[Project Title]*.
 10. *[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.*
 11. *In case advance payment was made or given to [Name of Bidder], failure to perform or deliver any of the obligations and undertakings in the contract shall be sufficient grounds to constitute criminal liability under existing laws.*

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

Duly authorized to sign the Bid for and behalf of:

[Insert Bidder's Name]

[Affiant's Signature over Printed Name]

[Position/Designation]

[Date]

JURAT

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. _____.

WITNESS MY HAND AND SEAL this ___ day of *[month]* *[year]*.

NAME OF NOTARY PUBLIC

Notarial Commission No. _____

Notary Public for _____ until _____

Roll of Attorneys No. _____

PTR No. __, *[date issued]*, *[place issued]*

IBP No. __, *[date issued]*, *[place issued]*

Doc. No. _____

Page No. _____

Book No. _____

Series of _____.

Bid Securing Declaration Form

[The duly accomplished form shall be submitted with the Bid if bidder opts to provide this type of bid security]

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

BID SECURING DECLARATION

Project Identification No.: *[Number]*

To: *[Insert name of the Procuring Entity]*

I/We, the undersigned, declare that:

- 1) I/We understand that, according to your conditions, bids must be supported by a Bid Security, which may be in the form of a Bid Securing Declaration;

[Insert paragraph for Unsolicited Offer with Bid Matching]

I/We understand that upon conferment of the original offeror status under Section 30.6 of the Implementing Rules and Regulations (IRR) of Republic Act (RA) No. 12009, the offeror shall submit a Bid Securing Declaration within ten (10) days from the receipt of the certificate of conferment;

- 2) Select one, delete the other:

- I/We accept that: (a) I/we will be automatically disqualified from bidding for any procurement contract with any Procuring Entity upon receipt of your Blacklisting Order; and, (b) I/we will pay the applicable fine provided under the Guidelines on the Use of Bid Securing Declaration, within fifteen (15) days from receipt of the written demand by the Procuring Entity for the commission of acts resulting to the enforcement of the Bid Securing Declaration under Sections 52.2 (a), 63.2, 69.1 and 100, except 100.3 (c), of the IRR of Republic Act No. 12009; without prejudice to other legal action the government may undertake; and

(For Unsolicited Offer with Bid Matching)

- I/We accept that: I/we will be automatically disqualified from any procurement opportunity of the Procuring Entity for a period of one (1) year on the first offense, two (2) years on the second offense, and perpetually on the third offense without prejudice to other legal action the government may undertake.

- 3) I/We understand that this Bid Securing Declaration shall cease to be valid on the following circumstances:

- a) Upon expiration of the bid validity period, or any extension thereof pursuant to your request;
- b) I am/we are declared ineligible or post-disqualified upon receipt of your notice to such effect, and (i) I/we failed to timely file a request for reconsideration or (ii) I/we filed a waiver to avail of said right;

[Insert this paragraph for Unsolicited Offer with Bid Matching]

- b) Upon contract award and the LCCRB is not the original offeror; or
- c) I am/we are declared the bidder with the *[Insert Award Criterion¹]* and I/we have furnished the performance security and signed the Contract.

IN WITNESS WHEREOF, I/We have hereunto set my/our hand/s this ____ day of *[month]* *[year]* at *[place of execution]*.

Duly authorized to sign the Bid for and behalf of:

[Insert Bidder's Name]

[Signature over Printed Name]

[Position/Designation]

[Date]

JURAT

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. _____.

WITNESS MY HAND AND SEAL this ____ day of *[month]* *[year]*.

NAME OF NOTARY PUBLIC

Notarial Commission No. _____

Notary Public for _____ until _____

Roll of Attorneys No. _____

PTR No. __, *[date issued]*, *[place issued]*

IBP No. __, *[date issued]*, *[place issued]*

Doc. No. _____

Page No. _____

Book No. _____

Series of _____.

Checklist of Technical and Financial Documents

I. TECHNICAL COMPONENT ENVELOPE

- (a) PhilGEPS Certificate of Registration (Platinum Membership); **and**
- (b) Statement of SLCC; **and**
- (c) NFCC Computation or committed Line of Credit (LoC); **and**
- (d) Statement 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; **and**
- (e) [if applicable] JVA) or in the absence of a JVA, duly notarized statements from all potential JV partners stating that they will enter into and abide by the provisions of the JVA in the event that the bid is successful; **and**
- (f) Bid Security in the prescribed form and amount in accordance with ITB Clause 16, and validity period under ITB Clause 15; **and**
- (g) Technical Specifications, which may include production or delivery schedule, manpower requirements, or after-sales service or parts, if applicable; **and**
- (h) Omnibus Sworn Statement; **and**
- (i) For foreign Bidders claiming eligibility by reason of their country's extension of reciprocal rights to Filipinos, a certification from the relevant government office of their country stating that Filipinos are allowed to participate in their government procurement activities for the same item or product; **and**

I. FINANCIAL COMPONENT ENVELOPE

- (j) Bid Form which includes the Bid price; **and**
- (k) Price Schedules in accordance with ITB Clause 13.1; **and**
- (l) [if applicable] Certificate of Domestic Preference, in accordance with ITB Clause 25.

