

# **PHILIPPINE BIDDING DOCUMENTS**

Republic of the Philippines

# **PROCUREMENT OF GOODS**

**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,<sup>1</sup> or Unsolicited Offer with Bid Matching<sup>2</sup>*] 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 institution<sup>3</sup> 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.

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<sup>1</sup> For Second Stage of Competitive Dialogue under Section 29.4.2 of IRR of RA No. 12009.

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

<sup>3</sup> 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.



Republic of the Philippines  
**Department of Education**  
CORDILLERA ADMINISTRATIVE REGION  
**SCHOOLS DIVISION OF BAGUIO CITY**  
**#82 MILITARY CUT-OFF, BAGUIO CITY**

# **PROCUREMENT OF GOODS**

**PROCUREMENT AND DELIVERY OF LEARNING  
TOOLS AND EQUIPMENT-SCIENCE AND  
MATHEMATICS EQUIPMENT (LTE-SME) FOR  
PUBLIC SCHOOLS (EARLY PROCUREMENT  
ACTIVITY)**

**2026-02-015**

## TABLE OF CONTENTS

<b>Glossary of Acronyms, Terms, and Abbreviations.....</b>	<b>6</b>
<b>Definition of Terms .....</b>	<b>8</b>
<b>Section I. Invitation to Bid .....</b>	<b>10</b>
<b>Section II. Instructions to Bidders .....</b>	<b>14</b>
<b>Section III. Bid Data Sheet.....</b>	<b>43</b>
<b>Section IV. General Conditions of Contract .....</b>	<b>49</b>
<b>Section V. Special Conditions of Contract.....</b>	<b>63</b>
<b>Section VI. Schedule of Requirements .....</b>	<b>70</b>
<b>Section VII. Technical Specifications .....</b>	<b>73</b>
<b>Section VIII. Philippine Bidding Document Related Forms .....</b>	<b>165</b>
<b>Section IX. Checklist of Documentary Requirements.....</b>	<b>180</b>

## ***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.



Republic of the Philippines  
**Department of Education**  
CORDILLERA ADMINISTRATIVE REGION  
**SCHOOLS DIVISION OF BAGUIO CITY**

**INVITATION TO BID FOR THE PROCUREMENT AND DELIVERY OF  
LEARNING TOOLS AND EQUIPMENT-SCIENCE AND MATHEMATICS  
EQUIPMENT (LTE-SME) FOR PUBLIC SCHOOLS -EARLY  
PROCUREMENT ACTIVITY**

**2026-02-015**

1. The Department of Education-Schools Division of Baguio City, through the 2026 General Appropriations Act intends to apply the following sum of:
    - a.) **Eight Hundred Fifty Thousand Two Hundred Pesos (Php 850,200.00)** for the contract corresponding to **Lot 1: Biology Laboratory Tools, Models of Human Anatomy and Chemistry Molecular Geometry Models**, being the Approved Budget for the Contract (ABC) to payments under the contract for Lot 1. Bids received in excess of the ABC for each lot shall be automatically rejected at bid opening.
    - b.) **Two hundred eighty thousand six hundred pesos only (Php 280,600.00)** for the contract corresponding to **Lot 2: Chemistry - Chemicals, Laboratory Glass wares, Tools and Accessories**, being the Approved Budget for the Contract (ABC) to payments under the contract for Lot 2. Bids received in excess of the ABC for each lot shall be automatically rejected at bid opening.
    - c. **One hundred twenty-four thousand two hundred pesos only (Php 124,200.00)** for the contract corresponding to **Lot 3: Mathematics - Manipulatives, Tools and Instruments**, being the Approved Budget for the Contract (ABC) to payments under the contract for Lot 3. Bids received in excess of the ABC for each lot shall be automatically rejected at bid opening.
  2. The Department of Education-Schools Division of Baguio City now invites bids for Procurement of Learning Tools and Equipment-Science and Mathematics Equipment (LTE-SME) using the *Lowest Calculated and Responsive Bid*. Delivery of the Goods is required *ninety (90) days after Notice to Proceed*. Bidders should have completed, **at least five (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.
2. Bidding will be conducted through competitive bidding procedures using a non-discretionary "pass/fail" criterion as specified in the IRR of RA No. 12009.
- i) 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.

3. Interested Bidders may obtain further information from *Department of Education-Schools Division of Baguio City* and inspect the Bidding Documents at the address given below from *8:00 AM to 5:00 PM*.
4. A complete set of Bidding Documents may be acquired by interested Bidders on *February 20, 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 following amount of:
  - a.) *One Thousand (Php 1,000.00) Pesos for Lot 1: Biology Tools, Models of Human Anatomy and Chemistry Molecular Geometry Models*
  - b.) *Five Hundred (Php 500.00) Pesos for Lot 2: Chemistry - Chemicals, Laboratory Glass wares, Tools and Accessories*
  - c.) *Five Hundred (Php 500.00) Pesos for Lot 3: Mathematics - Manipulatives, Tools and Instruments*

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 not later than the submission of their bids.

5. The Department of Education-Schools Division of Baguio City will hold a **Pre-Bid Conference** on **March 2, 2026, 10:00 AM at 82 Military Cut-off, Baguio City** and/or through video conferencing via zoom through this link **<https://tinyurl.com/BidOpening-EPA>**, which shall be open to prospective Bidders.
6. Bids must be duly received by the Bids and Awards Committee (BAC) Secretariat through **(i) manual submission at the office address indicated below on or before 9:30 AM of March 16, 2026**. Late bids shall not be accepted.
7. 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.
8. **Bid opening** shall be on **March 16, 2026, 10:00 AM at 82 Military Cut-off, Baguio City** and/or via zoom through this link: **<https://tinyurl.com/BidOpening-EPA>**. Bids will be opened in the presence of the Bidders' representatives who choose to attend the activity.
9. The *Department of Education-Schools Division of Baguio City* 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 70<sup>4</sup> of R.A. No. 12009, without incurring any liability to the affected Bidder or Bidders.
10. For further information, please refer to:

CARMEL F. MERIS  
BAC Chairperson  
Department of Education, Schools Division of Baguio City  
Address: # 82 Military Cut-Off, Baguio City

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<sup>4</sup> Reservation Clause

Email Add: [baguio.city@deped.gov.ph](mailto:baguio.city@deped.gov.ph)  
Telefax No.:(074) 442 – 7819  
Website: [www.depedpines.com](http://www.depedpines.com)

11. You may visit the following websites:

For downloading of Bidding Documents: [www.depedpines.com](http://www.depedpines.com)  
For electronic bid submission: [baguio.city@deped.gov.ph](mailto:baguio.city@deped.gov.ph)  
c: [depedbaguobac@gmail.com](mailto:depedbaguobac@gmail.com)

*February 20, 2026*

  
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**CARMEL F. MERIS**  
*BAC Chairperson*

## ***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

<b>A. General</b>	<b>17</b>
1) Scope of Bid	17
2) Source of Funds	17
3) Corrupt, Fraudulent, Collusive, and Coercive Practices	17
4) Conflict of Interest	18
5) Eligible Bidders	20
6) Bidder's Responsibilities	21
7) Origin of Goods	23
8) Subcontracts	24
<b>B. Contents of Bidding Documents</b>	<b>24</b>
9) Pre-Bid Conference	24
10) Clarification and Amendment of Bidding Documents	24
<b>C. Preparation of Bids</b>	<b>25</b>
11) Language of Bids	25
12) Documents Comprising the Bid: Technical and Financial Components	25
13) Bid Prices	27
14) Bid Currencies	28
15) Bid Validity	28
16) Bid Security	29
17) Format and Signing of Bids	31
18) Sealing and Marking of Bids	31
<b>D. Submission and Opening of Bids</b>	<b>32</b>
19) Deadline for Submission of Bids	32
20) Late Bids	32
21) Modification and Withdrawal of Bids	32
22) Opening and Preliminary Examination of Bids	33
<b>E. Evaluation and Comparison of Bids</b>	<b>34</b>
23) Process to be Confidential	34
24) Clarification of Bids	34
25) Domestic Preference	34
26) Detailed Evaluation and Comparison of Bids	35
27) Post-Qualification	37

28)	Reservation Clause .....	39
<b>F.</b>	<b>Award of Contract .....</b>	<b>39</b>
29)	Contract Award .....	39
30)	Signing of the Contract .....	40
31)	Performance Security .....	41
32)	Notice to Proceed .....	42
33)	Protest Mechanism .....	42

## **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.<sup>5</sup>

- 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.

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<sup>5</sup> 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".
- 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 76.1<sup>6</sup> 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%)

<sup>6</sup> 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 Department of Education-Schools Division of Baguio City.</p> <p>The Project title is Procurement and Delivery of Learning Tools and Equipment for Science and Mathematics-Early Procurement Activity.</p> <p>The identification number of the procurement project is <i>2026-02-015</i>.</p> <p>This is an Early Procurement Activity.</p>
1.2	The number of lot(s): <i>Three (3) lots</i>
2	<p>The Funding Source is:</p> <p style="padding-left: 40px;">2.1 The Government of the Philippines for 2026 in the amount of One Million Two Hundred Fifty Five Thousand Pesos Only (Php 1,255,000.00)</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 <i>five (5) years</i> prior to the deadline for the submission and receipt of bids.
5.5	Not Applicable
7	No further instructions.
8.1	Subcontracting is not allowed.
8.4	Not Applicable.
9.1	The Department of Education-Schools Division of Baguio City will hold a <b>Pre-Bid Conference on March 2, 2026, 10:00 AM at 82 Military Cut-off, Baguio City</b> and/or through video conferencing via zoom through this link <a href="https://tinyurl.com/BidOpening-EPA">https://tinyurl.com/BidOpening-EPA</a> , which shall be open to prospective Bidders.
10.1	<p>The Procuring Entity's address is:</p> <p style="padding-left: 40px;">Department of Education, Schools Division of Baguio City Address: # 82 Military Cut-Off, Baguio City CARMEL F. MERIS BAC Chairperson Telefax No.:(074) 442 – 7819 Email Add: <a href="mailto:baguio.city@deped.gov.ph">baguio.city@deped.gov.ph</a> Website: <a href="http://www.depedpines.com">www.depedpines.com</a></p>

12.4	<p>The ABC per lot are:</p> <p>a.) <b>Eight Hundred Fifty Thousand Two Hundred Pesos (Php 850,200.00)</b> for <b>Lot 1: Biology Laboratory Tools, Models of Human Anatomy and Chemistry Molecular Geometry Models.</b></p> <p>b.) <b>Two hundred eighty thousand six hundred pesos only (Php 280,600.00)</b> for <b>Lot 2: Chemistry - Chemicals, Laboratory Glass wares, Tools and Accessories.</b></p> <p>c.) <b>One hundred twenty-four thousand two hundred pesos only (Php 124,200.00)</b> for <b>Lot 3: Mathematics - Manipulatives, Tools and Instruments.</b></p> <p>Any bid with a financial component exceeding the amount shall not be accepted.</p>
13.1(a)(iv)	"No incidental services are required."
13.1(b)(i)	"Not applicable"
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 <i>One hundred twenty (120) days</i> from bid opening.
16.1	<p>The Bid Security shall be in the form of a Bid Securing Declaration, and any of the following <i>[choose at least two (2)]</i>:</p> <ol style="list-style-type: none"> <li>1) The amount of not less than _____ <i>[Insert 2% of ABC]</i>, if bid security is in cash;</li> <li>2) The amount of not less than _____ <i>[Insert 2% of ABC]</i>, if bid security is in cashier's check;</li> <li>3) The amount of not less than _____ <i>[Insert 2% of ABC]</i>, if bid security is in manager's check;</li> <li>4) The amount of not less than _____ <i>[Insert 5% of ABC]</i> if bid security is in bank draft;</li> <li>5) The amount of not less than _____ <i>[Insert 5% of ABC]</i> if bid security is in guarantee;</li> <li>6) The amount of not less than _____ <i>[insert 5% of ABC]</i> if bid security is irrevocable LoC; or</li> <li>7) The amount of not less than _____ <i>[insert 5% of ABC]</i> if bid security is Surety Bond.</li> </ol>

16.2	The Bid Security shall be valid until <i>One Hundred Twenty (120) Days from bid opening.</i>
16.3	In case of extension of bid validity and bid security validity period, Substitution of the bid security form is allowed. Bid Securing Declaration and the following forms may be used: <i>[choose at least two (2)]</i>  a) Cash or Cashier's or Manager's Check issued by a Bank.  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.  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.
19	The address for the submission of Bids is at the <i>BAC Secretariat Office, PFVR Gymnasium, Military Cut-off, Baguio City.</i>  The deadline for the submission of Bids is <b>March 16, 2026 at 9:30 AM.</b>
22.1	<b>The place of the bid opening shall be at 82 Military Cut-off, Baguio City and/or via zoom through this link: <a href="https://tinyurl.com/BidOpening-EPA">https://tinyurl.com/BidOpening-EPA</a>.</b>  The date and time of bid opening is <b>March 16, 2026, 10:00 AM.</b>
22.2(b)	Not applicable.
25.7	No further instructions.
26.3(b)(i)	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:  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.</p> <p>Lot 1: Biology Tools, Models of Human Anatomy and Chemistry Molecular Geometry Models</p> <p>Lot 2: Chemistry - Chemicals, Laboratory Glasswares, Tools and Accessories</p> <p>Lot 3: Mathematics - Manipulatives, Tools and Instruments or contracts to be awarded to the Bidder.</p> <p><b>Grouping and Evaluation of Lots –</b></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. For example:</i></p> <p><i>Option 1 – Each item to be evaluated and compared with other Bids separately and recommended for contract award separately.</i></p> <p><i>Option 2 - All items to be grouped together to form one complete Lot that will be awarded to one Bidder to form one complete contract.</i></p> <p><i>Option 3 - Similar items, to be grouped together to form several lots that shall be evaluated and awarded as separate contracts.</i></p>
26.5(b)	Arithmetical correction is allowed.
26.6	No further instructions.
27.1	No additional requirements.
30.3(f)	No additional requirements.
31.2	Not applicable
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"> <li>1) The amount of not less than _____ <i>[Insert 5% of the total contract price]</i>, if performance security is in cash;</li> <li>2) The amount of not less than _____ <i>[Insert 5% of the total contract price]</i>, if performance security is in cashier's check;</li> </ol>

	<p>3) The amount of not less than _____ [<i>Insert 5% of the total contract price</i>], if performance security is in manager's check;</p> <p>4) The amount of not less than _____ [<i>Insert 5% of the total contract price</i>] if performance security is in bank draft;</p> <p>5) The amount of not less than _____ [<i>Insert 5% of the total contract price</i>] if performance security is in guarantee;</p> <p>6) The amount of not less than _____ [<i>insert 5% of the total contract price</i>] if performance security is irrevocable LoC. or</p> <p>7) The amount of not less than _____ [<i>insert 30% of the total contract price</i>] if performance security is Surety Bond.</p>
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## ***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

<b>Section IV. General Conditions of Contract</b> .....	<b>49</b>
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
<b>Section V. Special Conditions of Contract</b> .....	<b>63</b>

## 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 <i>Department of Education-Schools Division of Baguio City</i>
1(b)	The Supplier is <i>[to be inserted at the time of contract award]</i> .
1(c)	<p>The Funding Source is:</p> <p>2.1 The GoP through the source of funding as indicated below for 2026 in the amount of One Million Two Hundred Fifty Five Thousand Pesos Only (Php 1,255,000.00).</p> <p>2.2 The source of funding is the National Expenditure Program.</p>
1(d)	The Project Site is <i>Department of Education-Schools Division of Baguio City, #82 Military Cut-off, Baguio City.</i>
2	No further instructions.
5.1	<p>The Procuring Entity's address for Notices is: <i>Department of Education-Schools Division of Baguio City, #82 Military Cut-off, Baguio City]</i></p> <p>The Supplier's address for Notices is: <i>[Insert address including, name of contact, fax and telephone number]</i>.</p>
5.2	No further instructions.
6.2	<p><i>[List here any additional requirements for the completion of this Contract. The following requirements and the corresponding provisions may be deleted, amended, or retained depending on its applicability to this Contract:]</i></p> <p><b>Delivery and Documents</b></p> <p>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:</p> <p><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></p> <p><i>For Goods Supplied from Within the Philippines, state "The delivery terms applicable to this Contract are delivered [insert place of destination]. Risk and title will pass from the Supplier to the Procuring Entity upon receipt and final acceptance of the Goods at their final destination."</i></p>

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:

*For Goods supplied from within the Philippines:*

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 *[insert name(s)]*.

**Incidental Services**

The Supplier is required to provide all of the following services, including additional services, if any, specified in Section VI. Schedule of Requirements:

*[Select appropriate requirements and delete the rest.]*

- a) performance or supervision of 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:

*[Select appropriate requirements and delete the rest]*

- a) such spare parts as the Procuring Entity may elect to purchase from the Supplier, provided that this election shall not relieve the Supplier of any warranty obligations under this Contract; and
- b) in the event of termination of production of the spare parts:

- i) advance notification to the Procuring Entity of the pending termination, in sufficient time to permit the Procuring Entity to procure needed requirements; and
- ii) following such termination, furnishing at no cost to the Procuring Entity, the blueprints, drawings, and specifications of the spare parts, if requested.

The spare parts 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 *[insert here the time period specified. If not used insert time period of three times the warranty period]*.

Other spare parts and components shall be supplied as promptly as possible, but in any case within *[insert appropriate time period]* 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, 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.

### **Transportation**

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.

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.

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 *force majeure* in accordance with **GCC** Clause 23.

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.

### **Patent Rights**

	The Supplier shall indemnify the Procuring Entity against all third- party claims of infringement of patent, trademark, or industrial design rights arising from use of the goods or any part thereof.
10.3	<i>State</i> "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 are: <b>[Insert the applicable inspections and tests, if none, state "None"]</b> .
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 <b>[insert number of days]</b>.</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.

<b>Lot 1: Biology Laboratory Tools and Models of Human Anatomy, and Chemistry Molecular Geometry Models</b>				
<b>Item Number</b>	<b>Description</b>	<b>Quantity</b>	<b>Total</b>	<b>Delivery Schedule</b>
<b>Biology - Laboratory Tools</b>				
1	Protein Synthesis Demonstration Set	3	3	90 days after NTP
<b>Biology - Models of Human Anatomy</b>				
1	Model, Human Circulatory System	3	3	90 days after NTP
2	Model, Human Endocrine System	3	3	90 days after NTP
3	Model, Human Nervous System	3	3	90 days after NTP
4	Model, Human Torso	3	3	90 days after NTP
<b>Chemistry - Molecular Geometry Models</b>				
1	Model, Atomic Orbital, 82-pc	12	12	90 days after NTP
2	Model, Biochemistry Molecular, (262 atom parts)	12	12	90 days after NTP
3	Model, Crystal Structures Set (Graphite, diamond, sodium chloride, carbon dioxide)	12	12	90 days after NTP
4	Model, Molecular, Inorganic/Organic (307-pc)	12	12	90 days after NTP
5	Model, Sublevel Orbitals of the Atom (Quantum)	12	12	90 days after NTP
6	Model, VSEPR, 14 shapes (50-pc)	12	12	90 days after NTP

<b>Lot 2-Chemistry - Chemicals and Laboratory Glasswares, Tools and Accessories</b>				
<b>Chemistry - Chemicals</b>				
1	Benedict's Solution, 100 mL/bottle	3	3	90 days after NTP
2	Boric Acid, 100 grams/bottle	3	3	90 days after NTP
3	Calcium Chloride, 100 grams / bottle	3	3	90 days after NTP
4	Copper Sulfate, CuSO <sub>4</sub> , 100 grams/bottle	3	3	90 days after NTP
5	Magnesium Ribbon, 25 grams, 1 roll	3	3	90 days after NTP
6	Manganese Dioxide, 50 grams / bottle	3	3	90 days after NTP
7	Phenolphthalein, 100 grams/bottle	3	3	90 days after NTP
8	Potassium Chloride, 100 grams / bottle	3	3	90 days after NTP
9	Potassium Iodide, 100 grams / bottle	3	3	90 days after NTP
10	Sodium Hydroxide (Lye), 250 grams/bottle	3	3	90 days after NTP
11	Zinc Chloride, 100 grams / bottle	3	3	90 days after NTP
12	Zinc metal, pellets/mossy, 100 grams / bottle	3	3	90 days after NTP

Chemistry - Laboratory Glass wares, Tools and Accessories				
1	Beaker, borosilicate, 100 mL	15	15	90 days after NTP
2	Beaker, borosilicate, 1000 mL	15	15	90 days after NTP
3	Beaker, borosilicate, 250 mL	30	30	90 days after NTP
4	Beaker, borosilicate, 50 mL	15	15	90 days after NTP
5	Beaker, borosilicate, 500 mL	15	15	90 days after NTP
6	Burette, 10 mL capacity (acid)	15	15	90 days after NTP
7	Burette, 10 mL capacity (base)	15	15	90 days after NTP
8	Burner, Alcohol, glass, 150 mL Capacity	15	15	90 days after NTP
9	Burner, Bunsen	15	15	90 days after NTP
10	Cork Borer	6	6	90 days after NTP
11	Cork Stopper # 5 (for Ø 16mm test tube)	15	15	90 days after NTP
12	Crucible with lid/cover	15	15	90 days after NTP
13	Dish, Evaporating, 75 mL	15	15	90 days after NTP
14	Double burette clamp/holder	3	3	90 days after NTP
15	Filter Paper, crepe, 580mm x 580 mm sheet, Grade 0905	15	15	90 days after NTP
16	Flask, Erlenmeyer, borosilicate, narrow-mouth, 250 mL	30	30	90 days after NTP
17	Funnel, borosilicate, fluted	15	15	90 days after NTP
18	Glass Tubing	15	15	90 days after NTP
19	Gloves, Hand, super nitrile	15	15	90 days after NTP
20	Graduated Cylinder, borosilicate, 10 mL	15	15	90 days after NTP
21	Graduated Cylinder, borosilicate, 100 mL	15	15	90 days after NTP
22	Graduated pipette with rubber pipettor, borosilicate, 10 mL	15	15	90 days after NTP
23	Hydrometer for heavy liquids	15	15	90 days after NTP
24	Hydrometer for light liquids	15	15	90 days after NTP
25	Manometer, Open U-tube	15	15	90 days after NTP
26	Mortar and Pestle, porcelain, 150 mL.	15	15	90 days after NTP
27	Nichrome wire. 0.4, 100 ft	3	3	90 days after NTP
28	Reagent Bottle, narrow-mouth, amber, borosilicate, 250 mL	15	15	90 days after NTP
29	Reagent Bottle, wide-mouth, transparent, borosilicate, 250 mL	15	15	90 days after NTP
30	Rubber Stopper # 0 (for Ø 16mm test tube)	15	15	90 days after NTP
31	Rubber Stopper # 6 for Erlenmeyer Flask (narrow-mouth) 250 mL, 1 hole	15	15	90 days after NTP
32	Rubber Stopper # 6 for Erlenmeyer Flask (narrow-mouth) 250 mL, 2 holes	15	15	90 days after NTP
33	Safety Goggles, polycarbonate	15	15	90 days after NTP
34	Spatula, spoon, porcelain and glazed	15	15	90 days after NTP
35	Stirring Rod, Ø 6 mm x 250 mm long	15	15	90 days after NTP
36	Test tube brush	15	15	90 days after NTP
37	Test Tube, borosilicate, Ø 16 mm x 150 mm long	75	75	90 days after NTP
38	Thermometer, Laboratory type, alcohol, -20 degrees Celsius to 110 degrees Celsius	15	15	90 days after NTP

39	Tong, Beaker	15	15	90 days after NTP
40	Tong, Crucible	15	15	90 days after NTP
41	Universal pH indicator, 100 strips per pack	15	15	90 days after NTP
42	Vial, screw-neck, 25 ml. (with screw-type plastic cap)	50	50	90 days after NTP
43	Vial, screw-neck, 50 mL. (with screw-type plastic cap)	44	44	90 days after NTP
44	Volumetric Flask, borosilicate 250 mL	15	15	90 days after NTP
45	Wash bottle, plastic, 250 mL	15	15	90 days after NTP
46	Watch Glass, Ø 90 mm	15	15	90 days after NTP

<b>Lot 3-Mathematics - Manipulatives and Tools and Instruments</b>				
<b>Mathematics - Manipulatives</b>		0	0	
1	Ghost Grid Whiteboard, Mobile Magnetic, 72-inch x 40-inch	3	3	90 days after NTP
<b>Mathematics - Tools and Instruments</b>				
1	Calculator, Scientific	57	57	90 days after NTP

## **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

<b>Lot 1-Biology - Laboratory Tools and Models of Human Anatomy and Chemistry Molecular Geometry Models</b>		
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<b>Item</b>	<b>Specification</b>	<p><b>Statement of Compliance</b>                      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>
<b>Biology - Laboratory Tools</b>		

1	<p><b>Protein Synthesis Demonstration Set</b></p> <p>Functional Specifications: Used to demonstrate the synthesis of protein.</p> <p>Performance Specifications: Must be able to illustrate the synthesis of protein using information from DNA.</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Contains 33 pieces of reusable, non-toxic plastic (certificate of non-toxicity is required), magnetic, and colorful teacher manipulatives (large DNA, mRNA, ribosome, tRNA, and amino acid models)</li> <li>2. A 3' -5' DNA sense strand and a linear 5'-3' DNA anti-sense strand</li> <li>3. With 180 student manipulatives (smaller size models) where students can manipulate on their tables</li> <li>4. With teachers key for easy verification</li> <li>5. With instructional video on the use in USB</li> <li>6. Safely packed in a box</li> <li>7. With English User's manual that shall provide assessment questions in the identification of a resulting amino acid sequence from a unique DNA sequence.</li> <li>8. Manual details: <ol style="list-style-type: none"> <li>a. Material: Inside pages: Book Paper, 80 gsm (minimum 0.08mm)</li> <li>Cover: Paper board, 280 gsm (minimum 0.30 mm)</li> <li>b. Size (minimum): 165 mm x 215 mm Fold (minimum): 330 mm x 215 mm Spread</li> <li>c. Binding: Saddle Staple</li> <li>d. Font type: Arial and Font size (minimum): 10</li> <li>e. Pictures shall be in full color</li> </ol> </li> <li>9. Packing dimensions (minimum):72 cm L x 34 cm W x 9 cm T</li> <li>10. Must be branded and brand new. The brand shall be permanently printed on the box.</li> </ol>	
Biology-Models of Human Anatomy		

1	<p><b>Model, Human Circulatory System</b></p> <p>Functional Specifications: Used to show details of blood flow.</p> <p>Performance Specifications: Must be able to illustrate how the respiratory and circulatory systems work together to transport nutrients, gases, and other molecules to and from the different parts of the body</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Life-size, colored relief model.</li> <li>2. Frontal plane is cutaway so blood circulation can be traced to the major organs and extremities.</li> <li>3. Made of non-toxic plastic material (Certificate of non-toxicity is required)</li> <li>4. With arterial system: aorta artery, brachial artery, iliac artery, renal artery, mesenteric artery, pulmonary artery, carotid artery, tibial artery, femoral artery, palmar digital artery, ulnar artery, radial artery, popliteal artery, subclavian artery</li> <li>5. With venous system: basilic vein, renal vein, iliac vein, pulmonary vein, femoral vein, popliteal vein, brachial vein, subclavian vein, palmar digital vein, tibial vein, dorsal venous arch, superior vena cava and inferior vena cava</li> <li>6. With heart, lungs, liver, spleen, kidneys, partial skeleton</li> <li>7. The model is washable and must be free from any labels.</li> <li>8. Paint shall be permanent and not be removed when washed with soap and water.</li> <li>9. With name of the model: HUMAN CIRCULATORY SYSTEM MODEL (Font style: Arial, Font size: 32, UPPERCASE, BOLD) permanently printed on the baseboard.</li> <li>10. With no sharp parts and defects.</li> <li>11. Mounted on a stable baseboard.</li> <li>12. Dimensions (minimum): 80cm H x 30cm L x 5cm W</li> <li>13. Safely packed in a box</li> <li>14. Comes with a plastic laminated key card that shall contain the actual- colored picture of the model including the name and labeled with the required parts.</li> <li>15. Key card details: <ol style="list-style-type: none"> <li>a. A4 size copy paper</li> <li>b. Margin of 1/2 inch on all sides; with 2 pt width border line</li> <li>c. Layout Orientation: Portrait</li> <li>d. Lamination thickness: minimum 0.30mm</li> <li>e. Title: HUMAN CIRCULATORY SYSTEM MODEL KEY CARD shall be placed at the top-center (Font style: Arial, Font Size: 24, UPPERCASE, BOLD)</li> <li>f. The model picture in white background shall be big enough to occupy the center part of the card.</li> <li>g. Labels shall be without frame (Font style: Arial, Font size: 12, First letter of the label is capitalized, )</li> <li>h. Line with arrowhead of 1.25 pt width shall point to the specific part being labeled</li> </ol> </li> <li>16. Must be branded and brand new. The brand shall be permanently marked/printed on the baseboard.</li> </ol>	
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2	<p><b>Model, Human Endocrine System</b></p> <p>Functional Specifications: Used as a visual representation of the endocrine glands in a human body.</p> <p>Performance Specifications: Must be able to illustrate the hormones involved in the female and male reproductive systems; and other hormones present in the human body.</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Exhibits frontal section of the human body showing all the glands in the endocrine system.</li> <li>2. Both male and female glands are present.</li> <li>3. Features: Pineal, hypothalamus, pituitary, thyroid, parathyroid, thymus, adrenal cortex, kidney, pancreas, testes, ovary, and uterus</li> <li>4. Colorful relief model made of non-toxic plastic material (Certificate of non-toxicity is required)</li> <li>5. With no sharp parts and defects.</li> <li>6. The model is washable and must be free from any labels.</li> <li>7. Paint shall be permanent and not be removed when washed with soap and water.</li> <li>8. With name of the model: HUMAN ENDOCRINE SYSTEM MODEL (Font style: Arial, Font size: 28, UPPERCASE, BOLD) permanently marked/printed on the baseboard.</li> <li>9. Mounted on a stable baseboard.</li> <li>10. Dimensions (minimum): 38cm L x 24cm W x 6cm H</li> <li>11. Safely packed in a box</li> <li>12. Comes with a plastic laminated key card that shall contain the actual-colored picture of the model including the name and labeled with the required parts.</li> <li>13. Key card details: <ol style="list-style-type: none"> <li>a. A4 size copy paper</li> <li>b. Margin of 1/2 inch on all sides; with 2 pt width border line</li> <li>c. Layout Orientation: Landscape</li> <li>d. Lamination thickness: minimum 0.30mm</li> <li>e. Title: HUMAN ENDOCRINE SYSTEM MODEL KEY CARD shall be placed at the top-center (Font style: Arial, Font Size: 26, UPPERCASE, BOLD)</li> <li>f. The model picture in white background shall be big enough to occupy the center part of the card.</li> <li>g. Labels shall be without frame (Font style: Arial, Font size: 12, First letter of the label is capitalized).</li> <li>h. Line with arrowhead of 1.25 pt width shall point to the specific part being labeled.</li> </ol> </li> <li>14. Must be branded and brand new. The brand shall be permanently marked/printed on the baseboard.</li> </ol>	
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3	<p><b>Model, Human Nervous System</b></p> <p>Functional Specifications: Used to illustrate the schematic representation of the central and peripheral nervous system.</p> <p>Performance Specifications: Must be able to show the complex network of nerve cells and the motor nerves pathways.</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. One-half life-size, colored, relief model made of non-toxic plastic material (Certificate of non-toxicity is required).</li> <li>2. The model shows the structure of the nervous system (brain, cerebrum, cerebellum, spinal cord, radial nerve, ulnar nerve, median nerve, lumbar plexus, femoral nerve, sacral plexus, sciatic nerve, brachial plexus, intercostal nerve, common peroneal nerve, tibial nerve, saphenous nerve, finger nerve and toe nerve).</li> <li>3. The pathway of the main nerves is well illustrated in relation to the skeleton.</li> <li>4. The model is washable, free from any label, sharp parts and defects.</li> <li>5. Paint shall be permanent and not be removed when washed with soap and water.</li> <li>6. With name of the model: HUMAN NERVOUS SYSTEM MODEL (Font style: Arial, Font size: 30, UPPERCASE, BOLD) permanently marked/printed on the base.</li> <li>7. Mounted on a stable baseboard.</li> <li>8. Dimensions (minimum): 80cm H x 30cm L x 5 cm W</li> <li>9. Safely packed in a box.</li> <li>10. Comes with a plastic laminated key card that shall contain the actual-colored picture of the model including the name; labeled with the required parts.</li> <li>11. Key card details: <ol style="list-style-type: none"> <li>a. A4 size copy paper</li> <li>b. Margin of 1/2 inch on all sides; with 2 pt width border line</li> <li>c. Layout Orientation: Portrait</li> <li>d. Lamination thickness: minimum 0.30 mm</li> <li>e. Title: HUMAN NERVOUS SYSTEM MODEL KEY CARD shall be placed at the top-center (Font style: Arial, Font Size: 20, UPPERCASE, BOLD)</li> <li>f. The model picture in white background shall be big enough to occupy the center part of the card.</li> <li>g. Labels shall be without frame (Font style: Arial, Font size: 12, First letter of the label is capitalized).</li> <li>h. Line with arrowhead of 1.25 pt width shall point to the specific part being labeled.</li> </ol> </li> <li>12. Must be branded and brand new. The brand shall be permanently marked/printed on the baseboard.</li> </ol>	
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4	<p><b>Model, Human Torso</b></p> <p>Functional Specifications: Used to visualize the structures/organs found in the human body.</p> <p>Performance Specifications: Must be able to illustrate how the organs are connected in a system.</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Life-size, smooth-finish, plastic material mounted on a stable base.</li> <li>2. Detachable head</li> <li>3. Open back, exposed spine with 2 to 4 removable vertebra and spinal cord</li> <li>4. With interchangeable male and female reproductive organs</li> <li>5. (Minimum) 32 dissectible parts that include: <ol style="list-style-type: none"> <li>a.) removable head (parts of mouth and nasopharynx exposed)</li> <li>b.) with brain exposed (1 to 8 parts) with arteries</li> <li>c.) eye with optic nerve</li> <li>d.) female breast plate with plate rib;</li> <li>e.) right and left lung (2 to 4 parts)</li> <li>f.) heart (2-parts)</li> <li>g.) stomach (2-parts)</li> <li>h.) liver with gall bladder,</li> <li>i.) intestinal tract with appendix flap (3 to 4 parts)</li> <li>j.) kidney half</li> <li>k.) 3-part female genital organ with removable fetus</li> <li>l.) 4-part male genital organ</li> </ol> </li> <li>6. Height (minimum): 84.5 cm</li> <li>7. True to life color and free from toxic materials (Certificate of non-toxicity is required).</li> <li>8. Will be able to stand upright with removable parts intact and not falling.</li> <li>9. The model is washable, free from any labels and sharp parts.</li> <li>10. Paint shall be permanent and not be removed when washed with soap and water.</li> <li>11. With name of the model: HUMAN TORSO MODEL (Font style: Arial, Font size: 36, UPPERCASE, BOLD) permanently marked/printed on the base.</li> <li>12. Enclosed in a polystyrene foam and packed in a sturdy box</li> <li>13. With English User's manual that includes description of the model, diagram with labels, and guide on how to assemble/disassemble the model.</li> <li>14. Manual details: <ol style="list-style-type: none"> <li>a. Material: Inside pages: Book Paper, 80 gsm (minimum 0.08mm) Cover: Paper board, 280 gsm (minimum 0.30 mm)</li> <li>b. Size (minimum): 165 mm x 215 mm Fold; (minimum): 330 mm x 215 mm Spread</li> <li>c. Binding: Saddle Staple</li> <li>d. Font type: Arial and Font size (minimum): 10</li> <li>e. Pictures shall be in full color</li> </ol> </li> <li>15. Must be branded and brand new. The brand shall be permanently marked/printed on the base.</li> </ol>	
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1	<p><b>Model, Atomic Orbital, 82-pc</b>  Functional Specifications: Used as a model/visual three dimensional (3D) representation of the shapes of the 14 different atomic orbitals  Performance Specifications: A) Must be able to  a) represent visually the 14 different atomic orbitals  b) assemble/build the 14 atomic orbitals (basic s, p and d atomic orbitals )  i) one (1) pc 1s-orbital, unhybridized  ii) one (1) pc 2s-orbital, unhybridized  iii) three (3) pc 2p-orbital unhybridized  iv) five (5) 3d-orbital- unhybridized  v) one unit with one 2s plus three 2p- orbitals as well vi) as one sp hybrid orbital  vii) one (1) pc sp unhybridized change to one pc sp hybridized  viii) one (1) pc sp<sup>2</sup> unhybridized change to one pc sp<sup>2</sup> hybridized  ix) one (1) pc sp<sup>3</sup> unhybridized change to one pc sp<sup>3</sup> hybridized.  Design Specifications:  1. The pink &amp; purple pear-shaped lobes to represent the 2-wave (positive and negative) phases of the s, p &amp; d atomic orbitals. The pink and purple, pear-shaped lobes represent the phase  Material : Plastic  2. Opaque white spheres represent atomic nuclei.  Material : Plastic  3. With 14 easy-to-assemble atomic orbitals ((basic s, p and d atomic orbitals)  a) 1 pc - 1s, Unhybridized  b) 1 pc - 2s, Unhybridized  c) 3 pc - 2p, Unhybridized  d) 5 pc - 3d, Unhybridized  e) 1 pc with one 2s plus three 2p orbitals, Unhybridized  f) 1 pc sp, hybrid orbital, Hybridized  g) 1 pc sp<sup>2</sup> hybrid orbital, Hybridized  h) 1 pc sp<sup>3</sup> hybrid orbital, Hybridized  4. Approximate model heights including clear, colorless base range from 50–90 mm.  a) 50 mm (s orbital),  b) 90 mm (p orbital), and  c) 80 mm (d orbital).  5. The set is composed of the following:  a) 9 pc Grey atomic orbital parts  b) 17 pc Purple atomic orbital parts  c) 19 pc Pink atomic orbital parts  d) 2 pc White octahedral atom parts  e) 1 pc Black octahedral 23-24 mm carbon atom part  f) 1 pc Pink monovalent 17-18 mm atom part  g) 1 pc Pink monovalent 23-24 mm atom part  h) 1 pc Purple d atomic disc-shaped orbital part  i) 1 pc Black tetrahedral 23-24 mm carbon atom part  j) 1 pc Black trigonal bipyramidal 23-24 mm carbon atom part  k) 1 pc Pink octahedral 23-24 mm atom part  l) (1) Hydrogen H- Bond 17-18 mm atom part  m) 2 pc White 3-hole 17-18 mm atom parts  n) 2 pc White 7-hole atom parts  o) 8 pc Grey rigid 27-28 mm bonds  p) 14 pc clear transparent Pedestal Stand/ bases  6. With durable storage case with four compartments for segregation of parts  a) Material of storage box: ABS plastic  b) Color: Grey  c) Submission of the original copy of the Test certificate/s issued by the testing unit, like DOST</p>	
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	<p>material testing facilities or at any DOST- accredited testing institution attesting that the material of the compartmentalized storage box, is Acrylonitrile butadiene styrene (ABS), to validate the conformity of the material to the technical specifications. A representative of the Procuring Entity should be present during preparation and submission of the material test specimens to testing facility. All expenses for the said test shall be shouldered by the Supplier.</p> <p>7.) For Contents/ List of materials, In Table form</p> <p>a) For atoms: quantity, name of element(symbol), color code, (number of holes, type of bond angles), diameter of the sphere</p> <p>b) For links; bond types and use</p> <p>8. With assembly guides, individual worksheets and instructional sheets/leaflets in English</p> <p>9. With User's Manual/Teacher's manual in English with full background information</p> <p>10. For numbers #8-9, the technical specifications (a- e) must be followed:</p> <p>a) For Contents/ List of materials, In Table form</p> <p>b) for User's Manual, Instruction Sheets/Assembly Guides, In sentences format</p> <p>i) With sentences, grammatically correct and</p> <p>ii) With correct spelling and terminologies, punctuations and others</p> <p>c) In original print, not photocopied</p> <p>d) In colored pictures, drawings/illustrations</p> <p>e) in 0.3 mm minimum thickness plastic laminated User's Manual/Teacher's Manual/Assembly Guides/ instructional leaflets that shall contain the actual colored picture of the model including the name: labeled with the required parts with details as follows:</p> <p>i) Paper Size : A4 size , 80 gsm</p> <p>ii) Font : Times New Roman</p> <p>iii) Font size : 12</p> <p>iv) Margins on all sides with 2 point width border line</p> <p>v) Line with arrow head of 1.25 point with width shall point to the specific part being labeled</p> <p>11. Must be free from breakage, cracks , chipped rims, sharp edges, all surface irregularities and all other defects not stated herein.</p> <p>12. Comes with a brand marked permanently in the box</p> <p>13. Must be brand new</p>	
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2	<p><b>Model, Biochemistry Molecular, (262 atom parts)</b></p> <p>Functional Specifications: Used as a model/visual 3D representation of some biomolecules: proteins, nucleic acids, lipids, and carbohydrates, their structures</p> <p>Performance Specifications: A) Must be able to visually</p> <p>a) represent some biomolecules proteins, nucleic acids, lipids, and carbohydrates, their structures, and relate them to their function.</p> <p>b) observe the chemical bonding</p> <p>c) determine whether the biomolecule is polar or non polar given its structure</p> <p>B) Assemble all the different biomolecules and study them</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Type : Compact/Semi-space filling models</li> <li>2. Shape of atom parts : Solid spheres</li> <li>3. Material of spheres : Plastic</li> <li>4. Diameter of sphere/atom       <ol style="list-style-type: none"> <li>a) Hydrogen atom : 16-17mm</li> <li>b) Carbon, nitrogen and oxygen atom: 22-23.5 mm</li> </ol> </li> <li>5. For compact models, bonds are represented by       <ol style="list-style-type: none"> <li>a) short links</li> <li>b) v-bonds links</li> </ol> </li> <li>6. Material of links : Plastic</li> <li>7. Length of links       <ol style="list-style-type: none"> <li>a) short link : 2 mm-11 mm</li> <li>b)v-bonds links : 13-14 mm</li> </ol> </li> <li>8. Color of links:       <ol style="list-style-type: none"> <li>a) short link : white/translucent</li> <li>b) v-bonds link : white links</li> </ol> </li> <li>9. With 262 color-coded plastic atoms and 260 links</li> <li>10. The Biochemistry Molecular Model set includes the following:       <ol style="list-style-type: none"> <li>A. 262 color-coded plastic atom parts           <table border="0"> <thead> <tr> <th>Quantity</th> <th>Element</th> <th>Color</th> <th>No of Holes</th> <th>Shape</th> </tr> </thead> <tbody> <tr> <td>i) 68</td> <td>Black Carbon</td> <td>atoms</td> <td></td> <td></td> </tr> <tr> <td>42</td> <td>Carbon black</td> <td>four tetrahedral</td> <td></td> <td></td> </tr> <tr> <td>24</td> <td>Carbon black</td> <td>three trigonal</td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>Carbon black</td> <td>two linear</td> <td></td> <td></td> </tr> <tr> <td>ii) 34</td> <td>Blue nitrogen</td> <td>atoms</td> <td></td> <td></td> </tr> <tr> <td>12</td> <td>Nitrogen Blue</td> <td>4 tetrahedral</td> <td></td> <td></td> </tr> <tr> <td>12</td> <td>Nitrogen Blue</td> <td>3 trigonal</td> <td></td> <td></td> </tr> <tr> <td>10</td> <td>Nitrogen Blue</td> <td>2 angular</td> <td></td> <td></td> </tr> <tr> <td>iii) 40</td> <td>Red oxygen</td> <td>atoms</td> <td></td> <td></td> </tr> <tr> <td>20</td> <td>Oxygen red</td> <td>2 angular</td> <td></td> <td></td> </tr> <tr> <td>10</td> <td>Oxygen red</td> <td>2 angular</td> <td></td> <td></td> </tr> <tr> <td>10</td> <td>Oxygen red</td> <td>1 linear</td> <td></td> <td></td> </tr> <tr> <td>iv) 110</td> <td>White hydrogen</td> <td>atoms</td> <td></td> <td></td> </tr> <tr> <td>100</td> <td>Hydrogen white</td> <td>molydome links</td> <td></td> <td></td> </tr> <tr> <td>10</td> <td>Hydrogen white</td> <td>2 holes linear</td> <td></td> <td></td> </tr> <tr> <td>v) Two(2)</td> <td>Yellow to hole</td> <td>angular sulfur atoms</td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>Sulfur yellow</td> <td>2 angular</td> <td></td> <td></td> </tr> <tr> <td>vi) Six (6)</td> <td>Purple tetrahedral</td> <td>atoms</td> <td></td> <td></td> </tr> <tr> <td>6</td> <td>Phosphorous purple</td> <td>4 tetrahedral</td> <td></td> <td></td> </tr> <tr> <td>vii) 2</td> <td>Grey metal</td> <td>atoms</td> <td></td> <td></td> </tr> <tr> <td>1</td> <td>Metal grey</td> <td>4 tetrahedral</td> <td></td> <td></td> </tr> <tr> <td>1</td> <td>Metal grey</td> <td>6 octahedral</td> <td></td> <td></td> </tr> <tr> <td>viii) 150</td> <td>NV-links,</td> <td>colorless</td> <td></td> <td></td> </tr> </tbody> </table> </li> </ol> </li> </ol>	Quantity	Element	Color	No of Holes	Shape	i) 68	Black Carbon	atoms			42	Carbon black	four tetrahedral			24	Carbon black	three trigonal			2	Carbon black	two linear			ii) 34	Blue nitrogen	atoms			12	Nitrogen Blue	4 tetrahedral			12	Nitrogen Blue	3 trigonal			10	Nitrogen Blue	2 angular			iii) 40	Red oxygen	atoms			20	Oxygen red	2 angular			10	Oxygen red	2 angular			10	Oxygen red	1 linear			iv) 110	White hydrogen	atoms			100	Hydrogen white	molydome links			10	Hydrogen white	2 holes linear			v) Two(2)	Yellow to hole	angular sulfur atoms			2	Sulfur yellow	2 angular			vi) Six (6)	Purple tetrahedral	atoms			6	Phosphorous purple	4 tetrahedral			vii) 2	Grey metal	atoms			1	Metal grey	4 tetrahedral			1	Metal grey	6 octahedral			viii) 150	NV-links,	colorless			
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	<p>ix) 100 Short white links  x) 10 V-links, grey  C. With two pc link remover tool (color: cream)</p> <p>11. With two durable large storage boxes  a) Material of storage boxes: ABS plastic  b) Color: Grey  c) Submission of the original copy of the Test certificate/s issued by the testing unit, like DOST material testing facilities or at any DOST-accredited testing institution attesting that the material of the two large storage boxes, is Acrylonitrile butadiene styrene (ABS), to validate the conformity of the material the technical specifications. A representative of the Procuring Entity should be present during preparation and submission of the material test specimens to testing facility. All expenses for the said test shall be shouldered by the Supplier, with the following dimensions:  Length : 238-239 mm  Width : 167-169 mm  Thickness : 6.0-9.0 mm</p> <p>12. With contents/ list of materials in table form, as to:  a) For atoms: quantity, name of element(symbol), color code,  (number of holes, type of bond angles), diameter of the sphere  b) For links; bond types and use</p> <p>13. With Assembly Guides, individual worksheets and instructional leaflets in English</p> <p>14. With User's Manual/Teacher's instruction manual in English with full background information</p> <p>15. For numbers #13 to 14; technical specifications(a-e) must be followed:  a) For Contents List of materials, In Table form  b) For User's Manual, Instruction Sheets/Assembly Guides, In sentences format  i) With sentences grammatically correct and  ii) With correct spelling and terminologies, punctuations and others  c) In original print, not photocopied  d) In colored pictures, drawings/illustrations  e) in 0.3 mm minimum thickness plastic laminated Assembly guides/instructional leaflets that shall contain the actualcolored picture of the model including the name labeled with the required parts with details as follows:  i) Paper Size : A4 size , 80 gsm  ii) Font: Times New Roman  iii) Font size: 12  iv) Margins on all sides with 2point width border line  v) Line with arrow head of 1.25 point with width shall point to the</p>	
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	<p>specific part being labeled</p> <p>16. Must be free from breakage, cracks, chipped rims, sharp edges, all surface irregularities and all other defects not stated herein</p> <p>17. Must be have a brand printed permanently on the box</p> <p>18. Must be brand new</p>	
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3	<p><b>Model, Crystal Structures Set (Graphite, diamond, sodium chloride, carbon dioxide)</b>  Functional Specifications: Used as a model/ visual 3D representation of five crystal compounds</p> <p>Performance Specifications: A) Must be able to visually:  a) represent the four different types of crystals and their properties: ionic, covalent, molecular, and metallic  b) describe the difference in structure of crystalline (diamond) and amorphous (graphite) solids and  d) observe the difference of the ionic, covalent and metallic bonds and  e) determine whether a crystal molecule is polar or non polar given its structure  B) Assemble the four crystal structures</p> <p>Design Specifications:  1. Type : Open/Ball and stick  2 Shape of atom parts :Solid spheres  3 Material of spheres : Plastic with the following dimensions:  a)Sodium, carbon: 22-23.5 mm  b) Copper : 25-25.5 mm  c) Chlorine : 32-32.5 mm  4. Types of links/bonds  a) Medium (Single, rigid) links  b) Long (double/triple, flexible) links  5. Material of links: Flexible plastic low density plastic  6. Length of solid links/rods  a)Medium: 19-27 mm  b) Long : 43-44 mm  7. Color of links/bonds  Medium links: grey white/purple  Long links : gray</p> <p>8. The Crystal structure set is composed of the following:  a) Diamond- covalent crystal model (30 atoms) + links = 70 pc</p> <p>I.  Element Number of Holes angle shape color  Quantity  i)  carbon 4 109.5° tetrahedral black 30  ii)placed in resealable plastic bag</p> <p>II. Links/Bonds  i)  size color quantity  Medium links/bonds Grey white 40  ii)placed in resealable plastic bag</p> <p>b. Sodium chloride (NaCl)-i/onic crystal model (27 atoms)+links= 81  pc  I.  Element Number of Holes shape color Quantity  i)chlorine 6 octahedral green 13</p>	
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	<p>ii) Sodium 6 octahedral Silver grey/grey 14  ii) placed in resealable plastic bag</p> <p>II. Links/Bonds  i)  size color quantity  Medium li Grey white 54  ii) placed in resealable plastic bag</p> <p>c. c) Graphite - covalent crystal model (45 atoms )  + links = 100 pc  This kit is designed to make a three layer model of graphite having 15 carbon atoms in each layer.</p> <p>I.  Element Number of Holes color Quantity  i) carbon 5 black 39  ii) placed in resealable plastic bag</p> <p>II. Links/Bonds  size color quantity  i) Long connectors Grey/white 15  ii) Medium connectors (single, rigid) Grey/white 46  iii) placed in two separate resealable plastic bag</p> <p>d. d) Copper - metallic crystal model/ 14 atoms +  links = 50 pc  Crystal structure: face center cubic</p> <p>I.  Element Number of Holes color Quantity  i) copper 8 red 8  ii) copper 6 red 6  ii) placed in two separate Ziploc plastic bag</p> <p>II. Links/Bonds-36 pc  size color Length quantity  i) medium Grey white 65 mm 24  ii) long Grey/white 100 mm 12  iii) placed in two separate resealable plastic bag</p> <p>9. With Link remover tool/Assembly tool  10. With 1 pc durable plastic storage box  a) Material: ABS plastic  b) Color: Grey  c) Submission of the original copy of the Test certificate/s issued by the testing unit, like DOST material testing facilities or at any DOST-accredited testing institution attesting that the material of the compartmentalized storage box, is Acrylonitrile butadiene styrene (ABS), to validate the conformity of the material to the technical specifications.  A representative of the Procuring Entity should be present during preparation and submission of the material test specimens to testing facility. All expenses for the said test shall be shouldered by the Supplier, with the following dimensions:</p> <p>11. Package Dimensions  a) Length : 235-239 mm  b) Width : 167-171 mm  c) Thickness : 68-71 mm</p> <p>12. With contents/ list in table form, as to:  a) For atoms: quantity, name of element(symbol),</p>	
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	<p>color code, (number of holes,type of bond angles), diameter of the sphere</p> <p>b) For links; bond types and use</p> <p>13. With Assembly Guides, individual worksheets and instructional leaflets in English</p> <p>14. With User's Manual/Teacher's instruction manual in English with full background information</p> <p>15. For numbers #12 to 14; they must follow technical specifications a-e:</p> <p>a) For Contents List of materials, In Table form</p> <p>b) for User's Manual, Instruction Sheets/Assembly Guides, In sentences format</p> <p>i) With sentences grammatically correct and</p> <p>ii) With correct spelling and terminologies, punctuations and others</p> <p>c) In original print, not photocopied</p> <p>d) In colored pictures, drawings/illustrations</p> <p>e) in 0.3 minimum thickness plastic laminated keycard that shall contain the actual colored picture of the model including the name: labeled with the required parts with details as follows:</p> <p>i) Paper Size : A4 size , 80 gsm</p> <p>ii) Font : Times New Roman</p> <p>iii) Font size : 12</p> <p>iv) Margins on all sides with 2 point width border line</p> <p>v) Line with arrow head of 1.25 point with width shall point to the specific part being labeled.</p> <p>16. Must be free from breakage, cracks , chipped rims, sharp edges, all surface irregularities and all other defects not stated herein</p> <p>17. Comes with a brand marked permanently in the box</p> <p>18. Must be brand new</p>	
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4	<p><b>Model, Molecular, Inorganic/Organic (307-pc)</b>  Functional Specifications: Used as a model/visual three dimensional (3D) representation of the different inorganic/organic compounds  Performance Specifications: Must be able to :</p> <ol style="list-style-type: none"> <li>a) visually represent the molecular structures of many inorganic/organic molecules and</li> <li>b) assemble inorganic/organic compounds to show covalent and ionic bonding and c) determine whether a molecule is polar or non polar given its structure</li> </ol> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Type : Ball and stick</li> <li>2. Shape of atom parts : Solid spheres</li> <li>3. Material of spheres : Plastic</li> <li>4. Diameter of sphere/atom <ol style="list-style-type: none"> <li>a) Hydrogen and chlorine atoms : 17-17.5 mm</li> <li>b) Other atoms : 23-23.5 mm</li> </ol> </li> <li>5. Material of links: Flexible plastic low density polyethylene (LDPE) solid links</li> <li>6. Length, color and quantity of solid links/rods <ol style="list-style-type: none"> <li>a) Short links <ol style="list-style-type: none"> <li>i) Type : For space filling</li> <li>ii) Length : 11-12 mm</li> <li>ii) Color : Translucent/white</li> <li>iii)Quantity: 60 pc</li> </ol> </li> <li>b) Medium links <ol style="list-style-type: none"> <li>i) Type : Single, rigid</li> <li>ii) Length : 27-28 mm</li> <li>iii) Color : Grey</li> <li>iv)Quantity: 60 pc</li> </ol> </li> <li>c) Long links <ol style="list-style-type: none"> <li>i) Type : Double/triple/flexible</li> <li>ii) Length : 43-44 mm</li> <li>iii) Color : Grey</li> <li>iv) Quantity : 30 pc</li> </ol> </li> </ol> </li> <li>7. With 126 atoms, 30 orbitals, 150 links and 1 short link remover tool</li> <li>8. The inorganic/organic molecular model set is composed of the following: <ol style="list-style-type: none"> <li>I. <table border="0"> <thead> <tr> <th>Shape</th> <th>Number of Holes</th> <th>Angle</th> <th>Element/Atom</th> <th>Color</th> <th>Qty (pc)</th> </tr> </thead> <tbody> <tr> <td>a)</td> <td>Tetrahedral</td> <td>4 109<sub>o</sub></td> <td>28'</td> <td>Carbon black</td> <td>30</td> </tr> <tr> <td>b)</td> <td>Trigonal</td> <td>5 90<sub>o</sub>/120<sub>o</sub></td> <td></td> <td>Carbon black</td> <td>8</td> </tr> <tr> <td>c)</td> <td>Linear</td> <td>2 180<sub>o</sub></td> <td></td> <td>Carbon black</td> <td>2</td> </tr> <tr> <td>d)</td> <td>Trigonal</td> <td>3 120<sub>o</sub></td> <td></td> <td>Carbon black</td> <td>6</td> </tr> <tr> <td>e)</td> <td>Divalent</td> <td>2 105<sub>o</sub></td> <td></td> <td>oxygen red</td> <td>14</td> </tr> <tr> <td>f)</td> <td>Monovalent</td> <td>1</td> <td>hydrogen</td> <td>white</td> <td>45</td> </tr> <tr> <td>g)</td> <td>Tetrahedral</td> <td>4 109<sub>o</sub></td> <td>28'</td> <td>Nitrogen blue</td> <td>4</td> </tr> <tr> <td>h)</td> <td>Divalent</td> <td>2 105<sub>o</sub></td> <td></td> <td>Sulfur yellow</td> <td>1</td> </tr> <tr> <td>i)</td> <td>Tetrahedral</td> <td>4 109<sub>o</sub></td> <td>28'</td> <td>Sulfur yellow</td> <td>1</td> </tr> <tr> <td>j)</td> <td>Tetrahedral</td> <td>4 109<sub>o</sub></td> <td>28'</td> <td>Phosphorous purple</td> <td>4</td> </tr> <tr> <td>k)</td> <td>monovalent</td> <td>1 180<sub>o</sub></td> <td></td> <td>Chlorine Green</td> <td>8</td> </tr> <tr> <td>l)</td> <td>Octahedral</td> <td>6 90<sub>o</sub></td> <td></td> <td>metal Silver/grey</td> <td>2</td> </tr> <tr> <td>m)</td> <td>Divalent atom</td> <td></td> <td></td> <td>grey</td> <td>1</td> </tr> </tbody> </table> </li> </ol> </li> </ol>	Shape	Number of Holes	Angle	Element/Atom	Color	Qty (pc)	a)	Tetrahedral	4 109 <sub>o</sub>	28'	Carbon black	30	b)	Trigonal	5 90 <sub>o</sub> /120 <sub>o</sub>		Carbon black	8	c)	Linear	2 180 <sub>o</sub>		Carbon black	2	d)	Trigonal	3 120 <sub>o</sub>		Carbon black	6	e)	Divalent	2 105 <sub>o</sub>		oxygen red	14	f)	Monovalent	1	hydrogen	white	45	g)	Tetrahedral	4 109 <sub>o</sub>	28'	Nitrogen blue	4	h)	Divalent	2 105 <sub>o</sub>		Sulfur yellow	1	i)	Tetrahedral	4 109 <sub>o</sub>	28'	Sulfur yellow	1	j)	Tetrahedral	4 109 <sub>o</sub>	28'	Phosphorous purple	4	k)	monovalent	1 180 <sub>o</sub>		Chlorine Green	8	l)	Octahedral	6 90 <sub>o</sub>		metal Silver/grey	2	m)	Divalent atom			grey	1
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<p>II. Orbitals: 30 c Orbitals Length Color Qty(pc) a) Pi orbital 38 mm purple 6 b) Pi orbitals 38 mm pink 6 c) P orbitals 38 mm purple 6 d) P orbitals 38 mm pink 6 e) P orbitals 38 mm beige 6</p> <p>II. Links(Represented the bonds): 150 links Material of bonds/links: Rigid, non-toxic flexible plastic(LDPE) Links Type/Kind of bonds Length Color Qty (pc) a) Medium Single, rigid 27mm grey 60 b) Long Double/triple/flexible 43mm grey 30 c) Short 11mm translucent 60 For space filling-white</p> <p>9. One (1) pc Link remover tool/Assembly tool 10. With durable storage box a) Material of storage box: ABS plastic b) Color: Grey c) Submission of the original copy of the Test certificate/s issued by the testing unit, like DOST material testing facilities or at any DOST accredited testing institution attesting that the material of the compartmentalized storage box, is Acrylonitrile butadiene styrene (ABS), to validate the conformity of the material to the technical specifications. A representative of the Procuring Entity should be present during preparation and submission of the material test specimens to testing facility. All expenses for the said test shall be shouldered by the Supplier, with the following dimensions : a) Length : 238-239 mm b) Width : 167-168 mm c) Thickness : 68-70 mm</p> <p>11. With contents/ list of materials, in table form, as : a) For atoms: quantity, name of element(symbol), color code, (number of holes, type of bond angles), diameter of the sphere . b) For links; bond types and</p> <p>12. With Assembly guides, Individual Worksheets and Instructional leaflets</p> <p>13. With User's Manual/Teacher's Manual in English with full background information</p> <p>14. For numbers #12 to 13; technical specifications (a-e) must be strictly followed: a) For Contents/ List of materials, In Table form b) For User's Manual, Instruction Sheets/Assembly Guides, In sentences format i) With sentences grammatically correct and ii) With correct spelling and terminologies, punctuations and others c) In original print, not photocopied d) With colored pictures, drawings/illustrations e) in 0.3 mm minimum thickness plastic laminated that shall contain the actual colored picture of the model including the name labeled with the required parts with details as follows: i) Paper Size: A4 size, 80 gsm ii) Font: Times New Roman iii) Font size: 12 iv) Margins on all sides with 2point width border</p>	
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	<p>line v) Line with arrow head of 1.25 point with width shall point to the specific part being labeled 15. Comes with a brand marked permanently on the box 16. Must be brand new.</p>	
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5	<p><b>Model, Sublevel Orbitals of the Atom (Quantum)</b></p> <p>Functional Specifications: Used as a visual representation of the spatial three-dimensional (3D) model of the shapes of the orbitals ( azimuthal quantum number) of the sublevels of the major energy levels of the first ten elements of the Periodic Table Performance Specifications: Must be able to : A)visually represent the spatial three-dimensional (3D) model of the shapes of the orbitals to describe the quantum mechanical model (azimuthal quantum model) of the first ten elements in the Periodic Table</p> <p>a) two (2) p orbitals</p> <p>i) 1s-orbital and</p> <p>ii) 2s-orbital,</p> <p>b) the three (3) p orbitals</p> <p>i) 2px -orbital</p> <p>ii) 2py-orbital, and</p> <p>iii) 2pz-orbital</p> <p>c) the position and number of electrons along the x, y and z axis d) the orbitals of the sublevels of the major energy levels B) Assemble the sublevel orbital of the first ten elements of the Periodic Table based on the electronic configuration of each, to review on the four (4) quantum numbers and rules in filling up the orbitals ( the Aufbau Principle, Pauli's exclusion principle, and Hund's rule) , to study and learn the correct position and number of electrons along the x, y and z axis,as well as the orbitals of the sublevels of the major energy levels</p> <p>Design Specifications:</p> <p>1. With 12 Models of the Sublevel orbitals of the atom</p> <p>2. With color-coded components which include the following:</p> <p>3. ORBITALS</p> <p>a) 1s-orbitals (K shell)</p> <p>Shape of 1s orbital: Small sphere</p> <p>Material : Plastic</p> <p>Color : Blue</p> <p>Quantity : 12 pc</p> <p>b) 2s-orbitals (L shell)</p> <p>Shape of 2s orbital : Large sphere</p> <p>Material : Plastic</p> <p>Color : Orange</p> <p>Quantity : 12 pc</p> <p>c) p-orbitals (M shell)</p> <p>i) px -orbitals</p> <p>Shape of orbital : Pear shaped lobes</p> <p>Material : Plastic</p> <p>Color : Red</p> <p>Quantity : 24 pc</p> <p>ii) py-orbitals</p> <p>Shape of orbital: Pear shaped lobes</p> <p>Material : Plastic</p> <p>Color : Yellow</p> <p>Quantity : 24 pc</p> <p>iii) pz -orbital</p> <p>Shape of orbital : Pear shaped lobes</p> <p>Material : Plastic</p> <p>Color : Green</p> <p>Quantity : 24 pc</p> <p>d) Bases</p>	
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	<p>Shape : Spherical  Material : Plastic  Color : White  Quantity : 12 pc</p> <p>e) Crossbars (x and z axes)  Shape : Cross-shaped  Material : Durable non-toxic plastic  Color : White  Quantity : 12 pc</p> <p>f) Electrons  Shape : Small circular cutouts in a plastic sheet  Material : Plastic  Color : Black  Quantity : 1 whole plastic sheet with cut out 128 pc electrons</p> <p>g) Uprights (y axes)  Shape : Long, cylindrical sticks  Material : Plastic  Color : Cream  Quantity: 12 pc</p> <p>4. Individually packed per item as segregated above in separate resealable plastic bags  5. With durable plastic storage box</p> <p>a) Material: ABS plastic  b) Color: Grey  c) Submission of the original copy of the Test certificate/s issued by the testing unit, like DOST material testing facilities or at any DOST accredited testing institution attesting that the material of the storage box, is Acrylonitrile butadiene styrene (ABS), to validate the conformity of the material to the technical specifications. A representative of the Procuring Entity should be present during preparation and submission of the material test specimens to testing facility. All expenses for the said test shall be shouldered by the Supplier.</p> <p>6. With List of Contents in the set  7. With Teacher's Guide  8. With 30 Student Worksheets and Guides, Part I and Part II  9. With quantum numbers chart provided on each student worksheet to help students assemble the models starting with the 1s orbitals. 10. Detailed instructions provided.  11. For numbers 6-10, the following technical specifications from (a-e) must be followed:  a) For Contents/ List of materials, In Table form  b) For User's Manual, Teacher's Guide, Student Worksheets, Instruction Sheets/Assembly Guides, In sentences format  i) With sentences grammatically correct and  ii) With correct spelling and terminologies, punctuations and others  c) In original print, not photocopied  d) In colored pictures, drawings/illustrations  e) in 0.3 mm minimum thickness plastic laminated keycard that shall contain the actual colored picture of the model including the name: labeled with the required parts with details as follows:  i) Paper Size : A4 size , 80 gsm  ii) Font : Times New Roman  iii) Font size : 12  iv) Orientation: Portrait  v) Margins on all sides with 2 point width border line</p>	
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	<p>vi) Line with arrow head of 1.25 point with width shall point to the specific part being labeled</p> <p>12. Must be free from breakage, cracks , chipped rims, sharp edges, all surface irregularities and all other defects not stated herein</p> <p>13. Comes with a brand marked permanently on the box</p> <p>14. Must be brand new</p>	
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6	<p><b>Model, VSEPR, 14 shapes (50-pc)</b>  Functional Specifications:  a) Used as a visual 3D representation of the 14 different shapes of simple molecules with corresponding angles to perform exercises on VSEPR theory using models  b) describe the geometry of simple compounds  Performance Specifications:  A) Must be able to visually:  a) represent all the 14 different shapes of simple molecules with corresponding angles to perform exercises on VSEPR theory  b) describe the geometry of simple compounds  B) Assemble the 14 different shapes of VSEPR Models and study them  Design Specifications:  1. Type: Ball and stick  2. Shape of atom parts: Solid spheres  3. Material of spheres: Plastic  4. Diameter of sphere/atom a) Hydrogen, halogen, and metal sphere/atom:-16-17.5 mm b) Other atoms: 22-23.5 mm  5. The VSEPR Theory model set is composed of the following:  I. With central atoms to construct 14 VSEPR shapes  Color Number of holes Shape Example  Metallic grey 2 Linear Beryllium in BeCl<sub>2</sub>  yellow 3 Trigonal planar Sulfur in SO<sub>3</sub>  yellow 3 Trigonal Sulfur in SO<sub>2</sub>  black 4 tetrahedral Carbon in CH<sub>4</sub>  yellow 4 tetrahedral Sulfur in SO<sub>3</sub><sup>2-</sup>  red 4 tetrahedral Oxygen in H<sub>2</sub>O  Light green 4 tetrahedral Fluorine in HF  Light brown 5 Trigonal pyramidal Phosphorous in PCl<sub>5</sub>  yellow 5 Trigonal pyramidal Sulfur in SF<sub>4</sub>  Green 5 Trigonal pyramidal Chlorine in ClF<sub>3</sub>  purple 5 Trigonal pyramidal Xenon in XeF<sub>2</sub>  grey 6 octahedral Metal complexes  brown 6 octahedral Bromine in BrF<sub>5</sub>  copper 6 octahedral Copper complexes  b. With the following links/bonds: Quantity(pc)  Color Links Bonds 50 grey medium links single bonds 15 purple medium links lone pairs 6 white short links cyanide group 6. Comes with short link remover tool  7. With durable plastic storage box  a) Material: ABS plastic  b) Color: Grey  c) Submission of the original copy of the Test certificate/s issued by the testing unit, like DOST material testing facilities or at any DOST accredited testing institution attesting that the material of the four compartmentalized storage box, is Acrylonitrile butadiene styrene (ABS), to validate the conformity of the material to the technical specifications. A representative of the Procuring Entity should be present during preparation and submission of the material test specimens to testing facility. All expenses for the said test shall be shouldered by the Supplier  8. With contents/ list of materials in table form</p>	
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	<p>9. With detailed assembly guides and instructional leaflets s provided.</p> <p>10. With assembly guides, individual worksheets and instructional leaflets</p> <p>11. With User's Manual/Teacher's instruction manual in English with full background information.</p> <p>12. For numbers #8 to 10 technical specifications (a-e) must be strictly followed:</p> <p>a) For Contents List of materials, In Table form</p> <p>b) for User's Manual, Instruction Sheets/Assembly Guides, In sentences format i) With sentences grammatically correct and ii) With correct spelling and terminologies, punctuations and others</p> <p>c) In original print, not photocopied</p> <p>d) In colored pictures, drawings/illustrations</p> <p>e) in 0.3 mm minimum thickness plastic laminated keycard that shall contain the actual colored picture of the model including the name: labeled with the required parts with details as follows:</p> <p>i) Paper Size : A4 size , 80 gsm</p> <p>ii) Font : Times New Roman</p> <p>iii) Font size : 12</p> <p>iv) Orientation: Portrait</p> <p>v) Margins on all sides with 2 point width border line</p> <p>vi) Line with arrow head of 1.25 point with width shall point to the specific part being labeled.</p> <p>13. Must be free from breakage, cracks , chipped rims, sharp edges, all surface irregularities and all other defects not stated herein</p> <p>14. Comes with a brand printed permanently onto the box</p> <p>15. Must be brand new</p>	
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**Lot 2-Chemistry - Chemicals and Laboratory Glass wares, Tools and Accessories**

Chemistry - Chemicals		
Item	Specification	<p><b>Statement of Compliance</b>                      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>
1	<p><b>Benedict's Solution, 100 mL/bottle</b>                      Functional Specifications: Used to test for levels/traces of simple reducing sugars                      Performance Specifications: Must be able to test for the presence (levels of traces) of reducing sugars such as glucose. A positive test with Benedict's reagent is shown by a color change from clear blue to:</p> <ul style="list-style-type: none"> <li>a) blue solution - 0 g % (no trace of simple reducing sugar)</li> <li>b) green precipitate- 0.5 to 1.0 g % (traces of simple reducing sugar)</li> <li>c) yellow precipitate- 1.0-1.5 g % (low simple reducing sugar)</li> <li>d) orange precipitate - 1.5 to 2.0 g % (moderate simple reducing sugar)</li> <li>e) brick-red precipitate - greater than 2.0 g % (high presence of simple reducing sugar)</li> </ul> <p>Design Specifications:</p> <ul style="list-style-type: none"> <li>1. Features an aqua blue liquid</li> <li>2. Chemical Formula: <math>\text{CuSO}_4 \cdot 5\text{H}_2\text{O} + \text{Na}_2\text{CO}_3 + \text{Na}_2\text{C}_6\text{H}_5\text{O}_7</math></li> <li>3. Capacity: 100 mL</li> <li>4. Comes in original screw type plastic packing with threaded chemical seal pack bottle.</li> <li>5. Properly labeled with full chemical name, chemical formula, the name and address of the manufacturer and with appropriate hazard warning</li> <li>6. With manufacturing and expiry date, chemical assay, and other useful information regarding the product.</li> <li>7. Expiration dates should be at least two years</li> <li>8. Accompanied with Certificate of Analysis and SDS (Safety Data Sheet)</li> <li>9. Comes with a brand printed permanently on the product label</li> <li>10. Must be brand new</li> </ul>	

2	<p><b>Boric Acid, 100 grams/bottle</b></p> <p>Functional Specifications: Used as a substrate in Flame test to visually identify boron or its specific unknown metalloid ion based on the characteristic color it emits on the Bunsen flame.</p> <p>Performance Specifications: Must be used as a substrate in Flame test to visually identify boron, or its ion based on the characteristic color it emits on the Bunsen flame. Boric acid emits a bright green color which indicates the presence of boron or its ion</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Features a colorless or white, odorless and crystalline solid</li> <li>2. Chemical formula : <math>H_3BO_3</math></li> <li>3. Mass/bottle : 100 g</li> <li>4. Comes in original screw type plastic packing with threaded chemical seal pack bottle.</li> <li>5. Properly labeled with full chemical name, chemical formula, the name and address of the manufacturer and with appropriate hazard warning</li> <li>6. With manufacturing and expiry date, chemical assay, and other useful information regarding the product.</li> <li>7. Expiration dates should be at least two years</li> <li>8. Accompanied with Certificate of Analysis and SDS( Safety Data Sheet)</li> <li>9. Comes with a brand printed permanently on the product label</li> <li>10. Must be brand new</li> </ol>	
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3	<p><b>Calcium Chloride, 100 grams / bottle</b></p> <p>Functional Specifications: Used as a substrate in Flame test to visually identify calcium or its ion based on the characteristic color it emits on the Bunsen flame.</p> <p>Performance Specifications: Used as a substrate in Flame test to visually identify calcium element, or an unknown metalloid ion based on the characteristic color the chemical emits on the Bunsen flame. Calcium chloride emits an orange red/yellowish red color which indicates the presence of the calcium ion</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Features a white powder, crystals or granules</li> <li>2. Chemical Formula : CaCl<sub>2</sub></li> <li>3. Mass per bottle : 100 grams</li> <li>4. Comes in original screw type plastic packing with threaded chemical seal pack bottle.</li> <li>5. Properly labeled with full chemical name, chemical formula, the name and address of the manufacturer and with appropriate hazard warning.</li> <li>6. With manufacturing and expiry date, chemical assay, and other useful information regarding the product.</li> <li>7. Expiration dates should be at least two years</li> <li>8. Accompanied with Certificate of Analysis and with SDS (Safety Data Sheet)</li> <li>9. With brand printed permanently on the product label</li> <li>10. Must be brand new</li> </ol>	
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4	<p><b>Copper Sulfate, CuSO<sub>4</sub>, 100 grams/bottle</b></p> <p>Functional Specifications: Used as : a) an oxidizing agent or oxidant and is reduced in a spontaneous [chemical (redox) reaction decreasing its oxidation state with metals above it, like zinc, in the Activity Series of Metals]</p> <p>b) a substrate in Flame test to visually identify copper or its ion based on the characteristic color it emits on the Bunsen flame .</p> <p>Performance Specifications: Must be able to a) oxidize the other reactant of a spontaneous redox reaction by gaining electrons reducing its oxidation state with metals above it, like zinc, in the Activity Series of Metals, resulting in copper in the free state and the salt of the metal being displaced.</p> <p>b) a substrate in Flame test to visually identify copper or its ion based on the characteristic color it emits on the Bunsen flame. Copper sulfate emits blue green color on the Bunsen flame.</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Features a blue, odorless crystalline solid</li> <li>2. Chemical formula : CuSO<sub>4</sub></li> <li>3. Mass per bottle : 100 g</li> <li>4. Comes in original screw type plastic packing with threaded chemical seal pack bottle.</li> <li>5. Properly labeled with full chemical name, chemical formula, the name and address of the manufacturer and with appropriate hazard warning.</li> <li>6. With manufacturing and expiry date, chemical assay, and other useful information regarding the product.</li> <li>7. Expiration dates should be at least two years</li> <li>8. Accompanied with Certificate of Analysis and SDS (Safety Data Sheet)</li> <li>9. With brand printed permanently on the product label</li> <li>10. Must be brand new</li> </ol>	
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5	<p><b>Magnesium Ribbon, 25 grams, 1 roll</b></p> <p>Functional Specifications: Used as a reactant and is ignited over a flame to demonstrate a highly exothermic combustion reaction</p> <p>Performance Specifications: Must be able to produce a highly exothermic combustion reaction resulting in a blinding white light and intense heat when ignited over a flame. A white powdery solid, magnesium oxide is produced</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Features a relatively soft, lightweight solid metal</li> <li>2. Color : Shiny silvery gray--white</li> <li>3. Chemical formula : Mg</li> <li>4. Form : Solid (ribbon)</li> <li>5. Mass per roll : 25-27 g</li> <li>6. Number of roll : 1 roll</li> <li>7. Comes in original plastic packing</li> <li>8. Properly labeled with full chemical name, chemical formula, the name and address of the manufacturer and with appropriate hazard warning.</li> <li>9. With manufacturing and expiry date, chemical assay, and other useful information regarding the product.</li> <li>10. Expiration dates should be at least two years</li> <li>11. Accompanied with Certificate of Analysis and SDS ( Safety Data Sheet)</li> <li>12. Comes with a brand printed permanently on the product label</li> <li>13. Must be brand new</li> </ol>	
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6	<p><b>Manganese Dioxide, 50 grams / bottle</b>  Functional Specifications: Used as a catalyst to demonstrate decomposition reaction of hydrogen peroxide and observe its effect on the rate of chemical reaction  Performance Specifications: Must be used as a catalyst and to undergo a spontaneous chemical reaction in the decomposition of hydrogen peroxide to produce bubbles of oxygen gas and water and to demonstrate its effect on the rate of chemical reaction  Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Form: Solid powder</li> <li>2. Color : Brown-black solid/ blackish or brown solid</li> <li>3. Chemical formula : MnO<sub>2</sub></li> <li>4. Mass per bottle : 50 g</li> <li>5. Comes in original screw type plastic packing with threaded chemical seal pack bottle.</li> <li>6. Properly labeled with full chemical name, chemical formula, the name and address of the manufacturer and with appropriate hazard warning.</li> <li>7. With manufacturing and expiry date, chemical assay, and other useful information regarding the product.</li> <li>8. Expiration dates should be at least two years</li> <li>9. Accompanied with Certificate of Analysis and SDS (Safety Data Sheet)</li> <li>10. Comes with a brand printed permanently on the product label</li> <li>11. Must be brand new</li> </ol>	
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7	<p><b>Phenolphthalein, 100 grams/bottle</b></p> <p>Functional Specifications: Used as an indicator to effect a color change to distinguish an acid from a base and in performing acid base titration</p> <p>Performance Specifications: Must be used as an indicator to distinguish and acid from a base and in performing acidbase titration, as it indicates the change in pH by changing its color, the results vary:</p> <p>a) For a base, it gives a pink color b) For an acid, it is colorless</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Features a white to cream, odorless solid powder</li> <li>2. Chemical formula: C<sub>20</sub>H<sub>14</sub>O<sub>4</sub></li> <li>3. Mass per bottle: 100 g</li> <li>4. Comes in original screw type plastic packing with threaded chemical seal pack bottle.</li> <li>5. Properly labeled with full chemical name, chemical formula, the name and address of the manufacturer and with appropriate hazard warning</li> <li>6. With manufacturing and expiry date, chemical assay, and other useful information regarding the product.</li> <li>7. Expiration dates should be at least two years</li> <li>8. Accompanied with Certificate of Analysis and SDS (Safety Data Sheet)</li> <li>9. Comes with a brand printed permanently on the product label</li> <li>10. Must be brand new</li> </ol>	
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8	<p><b>Potassium Chloride, 100 grams / bottle</b>  Functional Specifications: Used as a substrate in Flame test to visually identify a specific element or an unknown metalloid ion based on the characteristic color it emits on the Bunsen flame.  Performance Specifications: Must be used as :  a) a substrate in Flame test to visually identify potassium element, or its ion based on the characteristic color it emits on the Bunsen flame.  Potassium chloride emits a light lilac color which indicates the presence of the potassium ion  b) as a catalyst and to undergo a spontaneous chemical reaction in the decomposition of hydrogen peroxide to produce bubbles of oxygen gas and water to demonstrate the effect of catalyst on the rate of chemical reaction  Design Specifications:  1. Features a white crystalline solid  2. Chemical formula : KCl  3. Mass per bottle: 100 g  4. Comes in original screw type plastic packing with threaded chemical seal pack bottle.  5. Properly labeled with full chemical name, chemical formula, the name and address of the manufacturer and with appropriate hazard warning  6. With manufacturing and expiry date, chemical assay, and other useful information regarding the product.  7. Expiration dates should be at least two years  8. Accompanied with Certificate of Analysis and SDS (Safety Data Sheet)  9. Comes with a brand printed permanently on the product label  10. Must be brand new</p>	
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9	<p><b>Potassium Iodide, 100 grams / bottle</b></p> <p>Functional Specifications: Used as:</p> <p>a) a substrate in Flame test to visually identify potassium or its ion based on the characteristic color it emits on the Bunsen flame</p> <p>b) a catalyst to demonstrate decomposition reaction of hydrogen peroxide to form water and oxygen</p> <p>Performance Specifications: Must be:</p> <p>a) used as a substrate in Flame test to visually identify potassium, or its ion based on the characteristic color the chemical emits on the Bunsen flame.</p> <p>Potassium iodide emits a lilac color which indicates the presence of the potassium ion</p> <p>b) able to undergo a spontaneous decomposition of hydrogen peroxide into bubbles of oxygen gas and water</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Features white granules and crystals solid</li> <li>2. Chemical formula: KI</li> <li>3. Mass per bottle: 100 g</li> <li>4. Comes in original screw type plastic packing with threaded chemical seal pack bottle.</li> <li>5. Properly labeled with full chemical name, chemical formula, the name and address of the manufacturer and with appropriate hazard warning</li> <li>6. With manufacturing and expiry date, chemical assay, and other useful information regarding the product.</li> <li>7. Expiration dates should be at least two years</li> <li>8. Accompanied with Certificate of Analysis and SDS (Safety Data Sheet)</li> <li>9. Comes with a brand printed permanently on the product label</li> <li>10. Must be brand new</li> </ol>	
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10	<p><b>Sodium Hydroxide (Lye), 250 grams/bottle</b></p> <p>Functional Specifications: Used:</p> <p>a) to differentiate an acid from a base</p> <p>b) as a titrant added from a base burette in acid base titration</p> <p>Performance Specifications:</p> <p>a) Must turn pink when added with drop/s of phenolphthalein and be able to neutralize an acid to form salt and water</p> <p>b) In acid-base titration, the sodium hydroxide is used as a titrant added from an base buret to a known quantity of the analyte (the unknown solution) until the reaction is complete. Knowing the volume of titrant added allows the determination of the concentration of the unknown using the formula:  <math display="block">N_a = N_b V_b / V_a</math></p> <p>c) pH value : pH 13-14</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Features a white semi-transparent odorless hygroscopic solid</li> <li>2. Chemical formula : NaOH</li> <li>3. Mass per bottle: 250 grams</li> <li>4. Comes in original screw type plastic packing with threaded chemical seal pack bottle.</li> <li>5. Properly labeled with full chemical name, chemical formula, the name and address of the manufacturer and with appropriate hazard warning</li> <li>6. With manufacturing and expiry date, chemical assay, and other useful information regarding the product.</li> <li>7. Expiration dates should be at least two years</li> <li>8. Accompanied with Certificate of Analysis and SDS ( Safety Data Sheet)</li> <li>9. Comes with a brand printed permanently on the product label</li> <li>10. Must be brand new</li> </ol>	
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11	<p><b>Zinc Chloride, 100 grams / bottle</b></p> <p>Functional Specifications: Used as a substrate in Flame test to visually identify zinc or its ion based on the characteristic color it emits on the Bunsen flame.</p> <p>Performance Specifications: Must be used as a substrate in Flame test to visually identify zinc element or its ion based on the characteristic color it emits on the Bunsen flame. Zinc chloride emits a blue green to pale green/colorless color which indicates the presence of the zinc ion</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Features a white crystalline/granular solid powder</li> <li>2. Chemical Formula: ZnCl<sub>2</sub></li> <li>3. Mass per plastic bottle: 100 grams</li> <li>4. Comes in original screw type plastic packing with threaded chemical seal pack bottle.</li> <li>5. Properly labeled with full chemical name, chemical Formula, the name and address of the manufacturer and with appropriate hazard warning</li> <li>6. With manufacturing and expiry date, chemical assay, and other useful information regarding the product.</li> <li>7. Expiration dates should be at least two years</li> <li>8. Accompanied with Certificate of Analysis and SDS (Safety Data Sheet)</li> <li>9. Comes with a brand marked permanently on the product label</li> <li>10. Must be brand new</li> </ol>	
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12	<p><b>Zinc metal, pellets/mossy, 100 grams / bottle</b>  Functional Specifications: Used as a reducing agent to reduce the other reactant of a single displacement (redox reaction) with metals above it in the Activity Series of Metals  Performance Specifications: Must be able to reduce the other reactant of a single displacement (redox) reaction with metals above it in the Activity Series of Metals, , like zinc, to produce salt and the displaced metal in its free state  Design Specifications:  1. Features a bluish white, or as a grey powder/pellets/mossy solid  2. Chemical Formula: Zn  3. Mass per plastic bottle: 100 grams  4. Comes in original screw type plastic packing, with threaded chemical seal pack bottle.  5. Properly labeled with full chemical name, chemical formula, the name and address of the manufacturer and with appropriate hazard warning  6. With manufacturing and expiry date, chemical assay, and other useful information regarding the product.  7. Expiration dates should be at least two years  8. Accompanied with Certificate of Analysis and SDS (Safety Data Sheet)  9. Comes with a brand printed permanently on the product label  10. Must be brand new</p>	
Chemistry - Laboratory Glasswares, Tools and Accessories		
<b>Item Number</b>	<b>Description</b>	

1	<p><b>Beaker, borosilicate, 100 mL</b></p> <p>Functional Specifications: Used to contain/hold/prepare solids and liquids during chemical reaction and to heat them over a Bunsen burner's flame up to more than 150°C for normal, standard use service</p> <p>Performance Specifications: Must be able to contain/hold /prepare solids and liquids during chemical reaction up to 100 mL capacity and heats them over a Bunsen burner's flame up to more than 150°C for normal, standard use service</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Type: Griffin, low form</li> <li>2. Shape: Cylindrical container with straight sides, a flat bottom, and with a small spout (or "beak") to aid in pouring</li> <li>3. Material: Borosilicate, clear and transparent bubble-free glass with the following dimensions: <ol style="list-style-type: none"> <li>a) Outside diameter: 50 mm-52 mm</li> <li>b) Height: 70 mm-72 mm</li> <li>c) Thickness: 1.5 mm-2.0 mm</li> </ol> </li> <li>4. Capacity: 100 mL ± 5% etched onto the glass;"</li> <li>5. Graduation starts at : 20 mL in 10 mL increments.</li> <li>6. Graduation range: 20 mL to 80 mL</li> <li>7. With permanent white enamel graduations of approximate volumes, inscriptions</li> <li>8. With large white marking spot</li> <li>9. Features an easy-pour spout</li> <li>10. With single graduated metric scale</li> <li>11. Can withstand heating up to 200-230°C for normal, standard use service</li> <li>12. Wrapped in paper, enclosed in bubble wrap, and packed in a compartmentalized box</li> <li>13. Must be free from breakage, cracks, chipped rims and other defects</li> <li>14. Comes with a brand, with five (5) years existence in the glass wares industry</li> </ol>	
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2	<p><b>Beaker, borosilicate, 1000 mL</b></p> <p>Functional Specifications: Used to serve as container for mixing and for heating liquids.</p> <p>Performance Specifications: Must be able to serve as container for mixing and for heating liquids.</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Griffin type, borosilicate, transparent, bubble-free glass</li> <li>2. Shape: a cylindrical container with flat bottom</li> <li>3. Thickness range: 1.5 mm to 2.0 mm</li> <li>4. Permanent white graduations, with white enamel marking spot</li> <li>5. Features an easy-pour spout</li> <li>6. Capacity: 1000 mL; <math>\pm 10\%</math> enameled onto the glass</li> <li>7. Single graduated metric scale</li> <li>8. Graduation starts at 200 mL in 100 mL increments</li> <li>9. Height range: 140 mm to 160 mm</li> <li>10. Outside diameter: 100 mm to 110 mm</li> <li>11. There must be no cracks and sharp parts</li> <li>12. Safely packed in a compartmentalized box</li> </ol>	
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3	<p><b>Beaker, borosilicate, 250 mL</b>  Functional Specifications: Used to contain/hold/prepare solids and liquids during chemical reaction and to heat them over a Bunsen burner's flame up to more than 100°C for normal, standard use service  Performance Specifications: Must be able to contain/hold /prepare solids and liquids during chemical reaction and heats them over a Bunsen burner's flame up to more than 100°C for normal, standard use service  Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Features a cylindrical container with straight sides, a flat bottom, with a beaded rim and with a small spout (or "beak") to aid in pouring.</li> <li>2. Material: Borosilicate, clear, smooth, and transparent bubble-free glass with the following dimensions:  Outside diameter: 68-70mm  Height: 90-92 mm  Thickness: 1.5 mm to 2.0 mm</li> <li>3. Type: Griffin, low form</li> <li>4. Features an easy-pour spout</li> <li>5. With permanent colored graduations of approximate volumes, large colored easy to read block letters, numbers and inscriptions/markings enameled onto the glass, which includes the following: <ol style="list-style-type: none"> <li>a) Capacity: 250 mL</li> <li>b) Manufacturer's name or trademark</li> <li>c) With large white marking spot</li> <li>d) With double graduated metric scale <ol style="list-style-type: none"> <li>d1) With marking graduation to fill: starts at 25 mL in 25mL increments</li> <li>d2) With marking graduation to empty: starts at 0 mL in 200 mL increments</li> <li>d3) Graduation interval: 25 mL</li> <li>d4) Graduation range: 25 mL to 200 mL</li> </ol> </li> </ol> </li> <li>6. Must be able to stand solidly/is stable when placed on a level surface</li> <li>7. Must be free from breakage, cracks, chipped rims, sharp edges, striae, surface irregularities including all other defects not stated herein</li> <li>8. Must be able to withstand heating of water up to 150 deg C</li> <li>9. Wrapped in paper, enclosed in bubble wrap and packed individually in a compartmentalized box</li> <li>10. Comes with a brand enameled permanently onto the glass</li> <li>11. Must be brand new</li> </ol>	
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4	<p><b>Beaker, borosilicate, 50 mL</b></p> <p>Functional Specifications: Used to contain/hold/prepare solids and liquids during chemical reaction and to heat them over a Bunsen burner's flame up to more than 100 °C</p> <p>Performance Specifications: Must be able to contain/hold /prepare solids and liquids during chemical reaction and heats them over a Bunsen burner's flame up to more than 100 °C</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Features a cylindrical container with straight sides, a flat bottom with a beaded rim and a small spout (or "beak") to aid in pouring</li> <li>2. Material: Borosilicate, clear, smooth, and transparent bubble-free glass with the following dimensions: Outer diameter: 40-42 mm Height: 55-57 mm Thickness: 1.5 to 2.0 mm</li> <li>3. Type: Griffin, low form</li> <li>4. Features an easy-pour spout</li> <li>5. With permanent colored graduations of approximate volumes, large colored easy to read block letters, numbers and inscriptions/ markings enameled onto the glass, which includes the following: <ol style="list-style-type: none"> <li>a) Capacity: 50 mL</li> <li>b) Manufacturer's name or trademark</li> <li>c) With large white marking spot</li> <li>d) With single graduated metric scale</li> <li>d1) With marking graduation to fill: starts at 10 mL in 10 mL increments</li> <li>d2) Graduation interval: 10 mL</li> <li>d3) Graduation range: 10 mL to 40 mL</li> </ol> </li> <li>6. Must be able to stand solidly/is stable when placed on a level surface</li> <li>7. Must be free from breakage, cracks, chipped rims, sharp edges, striae, surface irregularities including all other defects not stated herein</li> <li>8. Wrapped in paper, enclosed in bubble wrap and packed individually in compartmentalized box.</li> <li>9. Comes with a brand enamelled permanently onto the glass</li> <li>10. Must be brand new</li> </ol>	
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5	<p><b>Beaker, borosilicate, 500 mL</b></p> <p>Functional Specifications:</p> <p>a) Used to contain/hold/prepare solids and liquids during chemical reaction and to heat them over a Bunsen burner's flame up to 150°C for normal, standard use service and</p> <p>b) to serve as a water bath when heating flammable chemicals instead of an open flame to prevent ignition.</p> <p>Performance Specifications:</p> <p>a) Must be able to contain/hold /prepare solids and liquids during chemical reaction and heats them over a Bunsen burner's flame up to 150°C for normal, standard use service and to serve as a water bath</p> <p>b) to serve as a water bath when heating flammable chemicals instead of an open flame to prevent ignition.</p> <p>Design Specifications: 1. Type: Berzellius, tall form</p> <p>2. Shape: Cylindrical container with straight sides, a flat bottom, with a small spout (or "beak") to aid pouring</p> <p>3. Material : Borosilicate, clear, bubble free glass , Berzellius. tall form</p> <p>with the following dimensions:</p> <p>a) Outside Diameter Range :75 mm- 80 mm</p> <p>b) Height range: 136 mm -140 mm</p> <p>c) Thickness :1.5 mm to 2.0 mm</p> <p>4. Capacity :500 mL ; ± 5% etched/embossed onto the glass</p> <p>5. With permanent white enamel graduations of approximate volumes, inscriptions and</p> <p>6. With large white marking spot</p> <p>7. With easy pour spout</p> <p>8. Double graduated metric scale</p> <p>9. Marked to fill: Graduation starts at 50 mL in 50 mL increments</p> <p>10. Marked to empty: Graduation starts at 0 mL in 50 mL increments</p> <p>11. Can withstand heating up to 200-230°C for normal, standard use service</p> <p>12. Wrapped in paper, enclosed in bubble wrap and packed individually in a compartmentalized box</p> <p>13. Must be free from breakage, cracks , chipped rims and other defects</p> <p>14. Comes with a brand, with five (5) years existence in the glass wares industry</p>	
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6	<p><b>Burette, 10 mL capacity (acid)</b>  Functional Specifications: Used to hold/contain the acid up to 10 mL capacity as a titrant to be delivered/ dispensed to titrate the base in acid-base titration to determine unknown concentration of base  Performance Specifications: Must hold/contain the acid up to 10 mL capacity as a titrant to be delivered/ dispensed to titrate the base (with color change from pink to colorless when end point is reached) in acid-base titration to determine unknown concentration of base  Design Specifications:  1. Features a long,vertical cylindrical glass tube with a volumetric graduation on its full length,with a leak-free plastic stopcock at its lower end and a tapered capillary tube at the stopcock's outlet.  2. Material : Clear, transparent, smooth, bubble-free high quality borosilicate glass, with the following dimensions: Length of burette: 510-620 mm  3. Fitted with grease-free interchangeable with 1.5 to 2 mm bore plastic leak-free stopcock plug.  Material of stopcock :PTFE key  a) Manufacturer's name or trademark  4. With permanent, durable colored markings in fine, clear, continuous, sharp, of uniform width, distinct colored graduation lines of approximate volumes, clearly legible and indelible block letters, inscriptions/markings under normal conditions of use of the burettes, and large, easy-to-read numbers every 0.5 mL enamelled permanently onto the glass before the first graduation line which includes the following:  b) Capacity: 10 mL  c) Sub. Div. : 0.05 ml  d)Tolerance: <math>\pm 0.02</math>-<math>\pm 0.03</math> mL  e) Class: A  f) Unit of volume: mL  g) Ex  h) Reference Temp: 20°C-27°C  5. With Statement of Accuracy /Certificate of Accuracy) latest issued by the concerned institution which must conform to the authoritative standards appropriate to the goods' country of origin  6. Marked with an individual serial number (Serially Numbered)  7. Individually placed in bubble wrap, enclosed in a polystyrene and packed in a padded sturdy box.  8. Must be free from breakage, leaks, cracks, scratches, chipped rims, sharp edges, striae, surface irregularities including all other defects not stated herein.  9. Includes Operations Manual in English  10. With Activity Sheets/Teacher's Manual in English  11. Comes with a brand enamelled permanently</p>	
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7	<p><b>Burette, 10 mL capacity (base)</b>  Functional Specifications: Used to hold/contain the base as a titrant to be delivered/ dispensed to titrate an acid up to 10 mL capacity in acid-base titration to determine unknown concentration of acid  Performance Specifications: Must hold/contain the base as a titrant to be delivered/ dispensed to titrate an acid up to 10 mL capacity (with color change from colorless to very faint pink when end point is reached) in acid-base titration to determine unknown concentration of acid  Design Specifications:  1. Features a long, graduated glass tube, with a leakage-free stopcock at its lower end and a tapered capillary tube at the screw type stopcock's outlet.  2. Material : Clear, transparent, bubble-free, smooth borosilicate glass, with the following dimensions:  a) Length of burette: 444.5-520 mm  3. With PTFE (screw-thread type/needle valve-Rotaflow leak-proof plastic) stopcock  4. With permanent, durable colored markings in fine, clear, continuous, sharp, of uniform width, distinct colored graduation lines of approximate volumes, clearly legible and indelible block letters and inscriptions with large, easy-to-read numbers every 0.5-1.0 mL subdivisions enamelled permanently onto the glass, before the first graduation line, which includes the following:  a) Manufacturer's name or trademark  b) Capacity: 10 mL  c) Sub. Div. : 0.05 ml  d) Tolerance: 0.05 mL  d) Class: B  e) Unit of volume: mL  f) Ex  g) Reference Temp: 20°C-27°C  5. With machine Jet flow control which is made from thick walled capillary tubing which forms an integral part of the burette shall have no cavity at the join likely to trap air bubbles.  6. With Statement of Accuracy /Certificate of Accuracy) latest issued by the concerned institution which must conform to the authoritative standards appropriate to the goods' country of origin  7. Marked with an individual serial number (Serially Numbered).  8. Individually placed in bubble wrap, enclosed in polystyrene and packed in a padded sturdy box  10. Must be free from breakage, leaks, cracks, scratches, chipped rims, sharp edges, striae, surface irregularities including all other defects not stated herein.</p>	
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	<p>11. Includes Operations Manual in English 12. With Activity Sheets/Teacher's Manual in English 13. Comes with a brand enamelled permanently onto the glass 14. Must be brand new</p>	
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8	<p><b>Burner, Alcohol, glass, 150 mL Capacity</b>  Functional Specifications: Used to produce hot, consistent open flame for slow/gentle heating of glasswares and substances  Performance Specifications:  Must be able to produce hot, consistent open flame  a)for slow/gentle heating of glasswares and substances  b)can withstand prolonged heating without breaking  c) visually determine the identity of an unknown metal or metalloid ion based on the characteristic color the chemical/salt emits on the Bunsen flame to investigate reactions of ions and apply these in qualitative analysis through an activity, on Flame Test  d) bend a glass tubing  e) heat, to sterilize, to accelerate, and to trigger chemical reactions,  f) for combustion purposes and techniques  Design Specifications:  1. Features a globe-shaped body and flat base (bottom) with threaded mouth  2. Material : Sturdy, heavy walled, clear, transparent, smooth, bubble-free glass  3. Capacity : 150 mL  4. With rust/corrosive-free wick holder permanently attached to a threaded base  a) Material of wick holder and cover/caps : Nickel- plated brass  b) Type of wick holder : Threaded  5. With one (1) pc cotton fiber/strand braided wick perfectly fitted to the wick tube  a) Material of wick : Cotton fiber/strand  b)Type of wick: Well-braided  c)Length of wick : 178-1809 mm  d)Diameter : 5-6 mm  6. With shiny, smooth, and corrosion-free metal snuff/snap-on cover/cap  7 With ten (10) pc replacement well-braided cotton fiber/strand wicks  8. Wrapped in paper, enclosed in bubble wrap and packed in a compartmentalized box  9. Must be free from rust, breakage, cracks, scratches, chipped rims, sharp edges, striae, surface irregularities including all other defects not stated herein.  10. Comes with a brand printed permanently onto the box  11. Must be brand new</p>	
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9	<p><b>Burner, Bunsen</b>  Functional Specifications: Used to:  a) produce single, hot, continuous, consistent open blue flame  b) for slow/gentle heating of glasswares and substances,  c) rapidly heat high-boiling liquids with low flammability like water  d) heat, sterilize/accelerate/ trigger chemical reactions,  e) for combustion purposes  Performance Specifications:  Must be able to produce a single, hot, continuous, consistent open blue flame to:  a) visually determine the hottest part of the Bunsen flame  b) visually determine the identity of an unknown metal or metalloid ion based on the characteristic color the chemical/salt emits on the Bunsen flame to investigate reactions of ions and apply these in qualitative analysis through an activity, on Flame Test  c) bend a glass tubing  d) used as a heating medium to demonstrate distillation, as one of the simple separation techniques  e) slow/gentle heating of glasswares and substances  f) rapidly heat high-boiling liquids with low flammability like water  g) heat, to sterilize, to accelerate, and to trigger chemical reactions,  h) for combustion purposes and techniques  Design Specifications:  1. Type : Gas type with accessories  2. Features a long, hollow burner tube with stabilizer top and serrated inlet tube  3. Material for burner tube : Aluminum, with the following dimensions:  . a) Diameter of burner tube: 11-12 mm diameter  b) Over-all height: 152-155 mm  4. With flame stabilizer  5. With threaded gas needle valve (located opposite to serrated inlet tube)  6. Material of base: Nickel-plated zinc-alloy  7. Must be able to stand solidly/is stable when placed on a level surface  8. Individually packed in a sturdy box  9. With User's Manual and Operations Guide in English  10. Comes with Activity Sheets with Teacher's Manual in English  11. For numbers #9 to 10; the technical specifications (a-e) must be followed:  a) For Contents List of materials, In Table form</p>	
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	<p>b) For User's Manual, Instruction Sheets/Assembly Guides, In sentences format</p> <ul style="list-style-type: none"><li>i) With sentences grammatically correct and</li><li>ii) With correct spelling and terminologies, punctuations and others</li><li>c) In original print, not photocopied</li><li>d) In colored pictures, drawings/illustrations</li><li>e) In 0.3 mm minimum thickness plastic laminated keycard</li></ul> <p>that shall contain the actual colored picture of the model including the name: labeled with the required parts with details as follows:</p> <ul style="list-style-type: none"><li>i) Paper Size : A4 size , 80 gsm</li><li>ii) Font : Times New Roman</li><li>iii) Font size : 12</li><li>iv) Margins on all sides with 2 point width border line</li><li>v) Line with arrow head of 1.25 point with width shall point to the specific part being labeled</li></ul> <p>12. Must be free from rust, cracks, chipped rims and sharp edges, surface irregularities and all other defects not stated herein.</p> <p>13. Comes with a brand printed permanently on the box</p> <p>14. Must be brand new</p>	
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10	<p><b>Cork Borer</b>  Functional Specifications: Used to bore or to cut a round hole of six different diameters in a cork/rubber stopper with a steel ramrod/eject rod pushing the removed cork out of the borer  Performance Specifications: Must be able to bore or to cut a round hole of six different diameters in a cork or rubber stopper and remove cork out of the borer by pushing it with a steel ramrod/eject rod  Design Specifications:  1. Shape of cork borer : Long, hollow round rod/tube with sharpened ends  2. Material of tube/rod : Nickel-plated steel borer  3. A set of six (6) different diameter sizes:(4 mm, 4.5 mm, 6 mm, 8 mm, 9.5 mm, 11 mm)  4. Comes with a handles which are individually and permanently numbered (1-6) for easy identificationhandle  a) Shape of handle: T-shaped  b) Material of handle : Hard plastic  c) Finish: Smooth  d)Color of handle: Red  5. Includes a ramrod/eject rod pushing the removed cork out of the borer  Material of ramrod/eject rod: Steel  6. Packaging: Resealable plastic pouch  7. Comes with a brand</p>	
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11	<p><b>Cork Stopper # 5 (for Ø 16mm test tube)</b></p> <p>Functional Specifications: Used to seal the openings of 16 mm diameter test tubes and other laboratory glassware to prevent leaks, hazards and contamination to yield positive results during chemical reactions</p> <p>Performance Specifications: Must be able to seal the openings of 16 x 150 mm test tubes and other laboratory glassware and to prevent leaks, hazards and contamination to yield positive results during chemical reactions</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Features an extra Select Grade cylindrical with a tapered bottom end with fewer lenticels (crevices)</li> <li>2. Material of cork : Elastic and near impermeable with the following dimensions: <ol style="list-style-type: none"> <li>a) Height : 22-22.5 mm</li> <li>b) Top Ø : 15-15.5 mm</li> <li>c) Bottom Ø: 13-13.5 mm</li> </ol> </li> <li>3. Number of cork stopper: #5</li> <li>4. Must perfectly fit the 16 x 150 mm test tube</li> <li>5. Must be free from defect of discontinuities in the cork tissue such as "lung", exfoliation, and insect,ant/worm galleries and all other defects not stated herein.</li> <li>6. Packed in a resealable plastic bag</li> <li>7. With brand printed permanently on the resealable plastic bag</li> <li>8. Must be brand new</li> </ol>	
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12	<p><b>Crucible with lid/cover</b></p> <p>Functional Specifications: Used as a container to heat metals or other substances may be melted or subjected to very high temperatures</p> <p>Performance Specifications: Must be able to contain elements, compounds, metals, organic compounds or other substances to be melted or subjected to very high temperatures to determine mass relationship in a chemical reaction</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Features a high/tall form cylindrical crucible</li> <li>2. Capacity : 30 mL</li> <li>3. Material : Porcelain, with the following dimensions: <ol style="list-style-type: none"> <li>a) Height : 43-50 mm</li> <li>b) Base diameter: 24-26 mm</li> <li>c) Top diameter: 33-40 mm</li> </ol> </li> <li>4. Glazed inside and out, except outside bottom and rim.</li> <li>5. With crucible cover completely glazed except for rim.</li> <li>6. Must be able to stand solidly flat/is stable when placed on a level surface</li> <li>7. Must be free from breakage, cracks, chipped rims and sharp edges, surface irregularities and all other defects not stated herein</li> <li>8. Comes with a brand printed permanently in the compartmentalized sturdy box</li> <li>9. Must be brand new</li> </ol>	
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13	<p><b>Dish, Evaporating, 75 mL</b></p> <p>Functional Specifications: Used to contain/hold substances and to heat chemical solutions gradually, driving off the water to leave residual chemical solute</p> <p>Performance Specifications: Must be able to contain/hold substances and to demonstrate evaporation, as one of the techniques in separating mixtures, by heating chemical solutions gradually, driving off the water to leave residual chemical solute</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Features a deep form, broad, and wider at the top, with round bottom</li> <li>2. Material : Porcelain, with the following dimensions: <ol style="list-style-type: none"> <li>a) Diameter : 80-84 mm</li> <li>b) Height/depth : 30-35 mm high</li> </ol> </li> <li>3. Capacity: 75 mL</li> <li>4. With pouring lip/spout</li> <li>5. Must be free from breakage, cracks, chipped rims and sharp edges, other surface irregularities and other defects not stated herein.</li> <li>6. Must be able to contain the salt solution for an experiment on evaporation</li> <li>7. Must be free from breakage, cracks, scratches, chipped rims, sharp edges, surface irregularities including all other defects not stated herein.</li> <li>8. Each dish is individually packed, wrapped in paper, and packed in a sturdy box</li> <li>9. Comes with a brand printed permanently in the sturdy box</li> <li>10. Must be brand new</li> </ol>	
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14	<p><b>Double burette clamp/holder</b></p> <p>Functional Specifications: Used to hold and secure two burettes on a stand, so that each burette is fixed and more convenient for the experiment.</p> <p>Performance Specifications: Must be used to hold and secure two burettes simultaneously on a stand, so that the burettes are fixed and more convenient to perform acid-base titration experiment to determine concentration of solutions.</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Features a double Y-shaped or butterfly-shaped items which have spring action clamps.</li> <li>2. Material of body: Die cast aluminum with chemical resistant white enamel finish, with the following dimensions: Length range : 245-262 mm Width range : 120-127 mm</li> <li>3. Color of body : White enamel</li> <li>4. Material of sleeves/jaws/grips : Vinyl or rubber for excellent grip</li> <li>5. Color of sleeves/jaws/grips : Colored Distance between sleeves/jaws/grips : 85 -120 mm</li> <li>6. With 4 spring action clamps, 2 on each opening</li> <li>7. With two separate adjusting knobs or squeeze clamping mechanism</li> <li>8. Color of adjusting knobs : Colored</li> <li>9. Mounts directly to standard support rod with built in hook connector.</li> <li>10. The dual metal burette clamp supports burettes from 10-100 mL (10-100 cc).</li> <li>11. They can be attached to support stand rods from 16 mm to 17 mm diameter</li> <li>12. Must be free from breakage, cracks, scratches, chipped rims, sharp edges, striae, surface irregularities including all other defects not stated herein.</li> <li>13. Comes with a brand marked permanently onto the body/box</li> <li>14. Must be brand new</li> </ol>	
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15	<p><b>Filter Paper, crepe, 580mm x 580 mm sheet, Grade 0905</b></p> <p>Functional Specifications: Used to filter/separate mixtures solids from liquids</p> <p>Performance Specifications: Must be able to filter solids from liquids to demonstrate filtration, as one of the techniques in separating mixtures (solids from liquids)</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Type: Technical use</li> <li>2. Shape of filter paper : Square</li> <li>3. Material: Cellulose with the following dimensions: <ol style="list-style-type: none"> <li>a) Length: 580-580.5 mm</li> <li>b) Width : 580-580.5 mm</li> </ol> </li> <li>4. Color: White to cream</li> <li>5. Surface: Creped, very coarse textured surface</li> <li>6. Grade 0905</li> <li>7. Initial Filtration Speed: 5 sec/10 mL</li> <li>8. Flow rate : High</li> <li>9. Packed in a brown filter paper tube</li> <li>10. Must be free from dirt and all other surface imperfections including all other defects not stated herein</li> <li>11. Comes with a brand marked permanently printed in the filter paper tube</li> <li>12. Must be brand new</li> </ol>	
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16	<p>Flask, Erlenmeyer, borosilicate, narrow-mouth, 250 mL</p> <p><b>Functional Specifications: Used to :</b></p> <ol style="list-style-type: none"> <li>a) contain/hold a small chemical reaction,</li> <li>b) mix solids and liquids,</li> <li>c) heat substances over a Bunsen/alcohol burner's flame up to over 100 °C or</li> <li>d) collect them in a titration/distillation experiment</li> </ol> <p><b>Performance Specifications: Must be able to:</b></p> <ol style="list-style-type: none"> <li>a) contain/hold a small chemical reaction ,</li> <li>b) mixes solids and liquids during chemical reaction,</li> <li>c) heats substances up to 100°C over a Bunsen burner's flame up to 250 mL, or</li> <li>d) serves as a reaction vessel in a titration experiment, and to collect distillate during distillation</li> </ol> <p><b>Design Specifications:</b></p> <ol style="list-style-type: none"> <li>1. Features a conical body, a cylindrical short neck , narrow mouth, with sloping sides, beaded rim, and with a flat bottom</li> <li>2. Material : Clear, and transparent bubble-free, smooth, borosilicate, glass with the following dimensions: <ol style="list-style-type: none"> <li>a) Outside diameter: 80-82 mm</li> <li>b) Height: 130-132 mm</li> <li>c) Thickness: 1.5 to 2.0mm</li> </ol> </li> <li>3. Neck inside diameter range : 28 to 30 mm</li> <li>4. With uniform wall thickness</li> <li>5. With narrow mouth, heavy duty beaded rim, graduated</li> <li>6. With permanent durable white enamel graduations of approximate volumes, large white block letters, numbers and easy to read inscriptions enamelled onto the glass, which includes the following: <ol style="list-style-type: none"> <li>a) Manufacturer's name or trademark</li> <li>b) Capacity: 250 mL</li> <li>c) With large white marking spot</li> <li>d) With single graduated metric scale <ol style="list-style-type: none"> <li>d1) Graduation range : 50 -200 mL</li> <li>d2) Graduation interval: 25 mL</li> <li>d3) Graduation starts at: 50 mL in 25 mL increments</li> </ol> </li> <li>e) Tolerance: <math>\pm 6\%</math> and other inscriptions enamelled onto the glass</li> </ol> </li> <li>7. Wrapped in paper and individually packed in a compartmentalized box</li> <li>8. Must be free from breakage, cracks, scratches, chipped rims, sharp edges, striae, surface irregularities including all other defects not stated herein</li> <li>9. Must be able to withstand heating of water up to 100 deg C</li> <li>10. Placed in bubble wrap and packed in a sturdy box to help prevent glass breakage.</li> <li>11. Comes with a brand enamelled</li> </ol>	
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	<p>permanently onto the glass</p> <p><b>11. Must have a brand printed permanently on the glass</b></p> <p><b>12. Must be brand new</b></p>	
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17	<p><b>Funnel, borosilicate, fluted</b></p> <p>Functional Specifications: Used to direct the smooth flow of the liquid or fine-grained substances into another container to prevent spills</p> <p>Performance Specifications: Must be able to direct the smooth flow of the liquid or fine-grained substances into another container to prevent spills</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Type : 60 ° angle, Fluted short stem funnel</li> <li>2. Shape: A wide, inverted conical top with narrow short circular tube at the bottom, with depressed inside flutings</li> <li>3. Material: Borosilicate, clear, transparent, bubble-free glass, with the following dimensions: <ol style="list-style-type: none"> <li>a) Top outside diameter: 75-86 mm</li> <li>b) Stem outer diameter : 8-9.5 mm</li> <li>c) Stem length : 72-76 mm</li> <li>d) Total Height : 139-140 mm</li> </ol> </li> <li>4. With heavy beaded rim/edge and heavy uniform wall for strength.</li> <li>5. With slanted fire polished tip, filter angle (angled 60°) and depressed inside fluting help reduce filtering time</li> <li>6. Wrapped in paper, enclosed in bubble wrap, and individually packed in a sturdy box</li> <li>7. Must be free from breakage, cracks, scratches, chipped rims, sharp edges, striae, surface irregularities including all other defects not stated herein</li> <li>8. Comes with a brand embossed onto the glass</li> <li>9. Must be brand new</li> </ol>	
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18	<p><b>Glass Tubing</b></p> <p>Functional Specifications: Used to contain/hold/mix liquids or gases during chemical reactions and to connect other pieces of equipment/glasswares to a gas or liquid assembly</p> <p>Performance Specifications: Must be able to:</p> <p>a) be bent to connect other pieces of equipment/glasswares to a gas or liquid assembly like in the activity " Flowing Up" and connect Florence flask to the Liebig condenser as a substitute for distilling flask for Distillation set up</p> <p>b) contain/hold/mix liquids or gases during chemical reactions, to relate the rate of gas effusion with molar mass and demonstrate Graham's law of effusion in an experiment where a white ring mass is observed</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Shape : Long slender hollow glass</li> <li>2. Material : Soda lime, clear, transparent, bubble-free glass tubing, with the following dimensions: <ol style="list-style-type: none"> <li>a) Outside diameter : 6.0-6.5 mm</li> <li>b) Wall thickness : 1.0-1.2 mm</li> <li>c) Length: 1219-1500 mm</li> </ol> </li> <li>3. With fire polished ends</li> <li>4. Individually wrapped in used newspaper, enclosed in a bubble wrap, and packed in a sturdy box</li> <li>5. Must be free from breakage, cracks, scratches, chipped rims, sharp edges, striae, surface irregularities including all other defects not stated herein</li> <li>6. Comes with a brand printed permanently on its packaging (sturdy paper tube with cover)</li> <li>7. Must be brand new</li> </ol>	
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19	<p><b>Gloves, Hand, super nitrile</b>  Functional Specifications: Used to protect hands against mechanical risks, microorganisms, chemical burns and splashes  Performance Specifications: Must be able to protect hands against mechanical risks, microorganisms, chemical burns and splashes  Design Specifications:  1. Features a slightly curved fingers and forward-facing thumb correspond to the natural position of the hand (hand-shaped)  2. Material : Nitrile, reusable, with the following dimensions:  a) Length of gloves : 330-360 mm  b) Thickness : 15 mil/0.38 mm minimum  The thickness must be measured from the cuff, palm and fingers  c) Submission of the original copy of the Test certificate/s issued by the testing unit, like DOST material testing facilities or at any DOST-accredited testing institution attesting that the material of the hand gloves, is super nitrile, to validate the conformity of the material to the technical specifications. A representative of the Procuring Entity should be present during preparation and submission of the material test specimens to testing facility. All expenses for the said test shall be shouldered by the Supplier.  d) With Certification from the manufacturer that the hand gloves is reusable and not disposable  3. Color : Green  4. Size : 8/Medium  5. Interior finish ( liner material) : Flocklined acid/solvent resistant)  6. Exterior finish : Embossed texture  7. Cuff style: Straight  8. Latex free to suit those with latex allergies  9. Non-slip wear resistant high elasticity , waterproof  10. Puncture resistant  11. With detailed imprints on each glove, on the following:  a) the glove size/s  b) the name of manufacturer  c) nitrile, flocklined  d) individual manufacturing lot  e) with pictograms for certification category requirements CE 0334 ( EN 420, EN 388, EN 374) designed for protection against mechanical risks, chemical risks, and micro-organisms)  12. Individually packed in pairs in a resealable plastic bag  13 With a statement of conformity from the manufacturer that the gloves complies with the specifications currently published and has been subject to the strict quality conditions imposed by internal management</p>	
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	<p>systems. 14. Comes with a brand printed permanently onto the gloves 15. Must be brand new</p>	
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20	<p><b>Graduated Cylinder, borosilicate, 10 mL</b>  Functional Specifications: Used to measure and to deliver the volume of liquids  Performance Specifications: Must be able to measure and to deliver the volume of liquids up to 10 mL capacity  Design Specifications:  1. Features a narrow cylindrical container with a small turned-out lip  2. Material: Borosilicate, clear, smooth, transparent and bubble-free glass  a) Thickness range : 1.3-1.4 mm  b) Outside diameter: 13-14 mm  c) Height: 177-178 mm  3. Features an easy-pour spout  4. With permanent white enamel graduations of approximate volumes, large white block letters, numbers and inscriptions/markings easy to read etched/engraved onto the glass, before the first graduation, which includes the following:  a) Manufacturer's name or trademark  b) Capacity: 10 mL  c) Graduations: 0.10  d) Class: A  e) Tolerance : <math>\pm 0.10 - \pm 0.20</math>  f) EX/TD  g) ISO/ASTM/Certification/s latest issued by the concerned institution which must conform to the standards appropriate to the goods' country of origin.  institution appropriate to the goods' country of origin.  h) 20°C-27°C  5. Single metric scale  a) Graduation Range : 1 to 10 mL  b) Graduation interval : 0.1 mL  6. With a hexagonal non-detachable glass base  7. With a bumper guard  45 of 101  8. With Statement of Accuracy (Certificate of Traceability) indicating accuracy traceable to standards of the country of origin  9. Placed in bubble wrap, and packed individually in a compartmentalized box  10. Must be free from breakage, cracks, scratches, chipped rims, sharp edges, striae, surface irregularities including all other defects not stated herein  11. Comes with a brand marked permanently onto the glass  12. Must be brand new</p>	
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21	<p><b>Graduated Cylinder, borosilicate, 100 mL</b>  Functional Specifications: Used to measure and to deliver the volume of liquids  Performance Specifications:  a) Must be able to measure and to deliver the volume of liquids up to 100 mL capacity  b) Used as a container to determine the volume of irregularly shaped solids by water displacement  Design Specifications:  1. Features a narrow cylindrical container with a small turned-out lip  2. Material : Borosilicate, clear and transparent bubble-free glass with the following dimensions:  a) Thickness range : 1.3-1.4 mm  b) Outside diameter: 29-31 mm  c) Height: 254-256 mm  3. Features an easy-pour spout  4. With permanent white enamel graduations of approximate volumes, large white block letters, numbers and inscriptions/markings easy to read etched/engraved onto the glass, before the first graduation, which includes the following:  a) Manufacturer's name or trademark  b) Capacity: 100 mL  c) Graduations: 1 mL  d) Class A  e) Tolerance : <math>\pm 0.60</math> mL  f) EX/TD  g) ISO/ASTM/Certification/s latest issued by the concerned institution which must conform to the standards appropriate to the goods' country of origin.  h) 20°C  5. With single graduated metric scale  a) Graduation range : 5 to 100 mL  b) Graduation Interval : 1 mL  6. With plastic bumper guard  7. With a hexagonal non-detachable glass base  8. With Statement of Accuracy (Certificate of Traceability) or Certification of Accuracy atest issued by the concerned institution which must conform to the authoritative standards lappropriate to the goods's country of origin  9. Placed in bubble wrap,and packed individually in a compartmentalized box  10. Must be free from breakage, cracks, scratches, chipped rims, sharp edges, striae, surface irregularities including all other defects not stated herein  11. Comes with a brand marked permanently onto the item  12. Must be brand new</p>	
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22	<p><b>Graduated pipette with rubber pipettor, borosilicate, 10 mL</b></p> <p>Functional Specifications: Used to measure the amount of liquid being dispensed/delivered/transferred to another container accurate up to 10 mL capacity</p> <p>Performance Specifications: Must be able to measure the amount of liquid being dispensed/ delivered/transferred to another container accurate up to 10 mL capacity</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Features a serological, transfer type straight tube with one constricted end</li> <li>2. Material : Borosilicate, reusable, clear, transparent bubble-free glass <ol style="list-style-type: none"> <li>a) With Certification from the manufacturer that the graduated pipette is reusable and not disposable</li> </ol> </li> <li>3. With permanent colored enamel graduations of approximate volumes, large white block letters, numbers and inscriptions/markings easy to read etched/engraved onto the glass, before the first graduation, which includes the following: <ol style="list-style-type: none"> <li>a) Manufacturer's name or trademark</li> <li>b) Capacity : 10 mL</li> <li>c) Color band code for 10 mL cap :Orange</li> <li>d) Graduation interval: 0.1 mL</li> <li>e) Class A</li> <li>f) Marked "TD" /Ex</li> <li>g) Tolerance : <math>\pm 0.06</math></li> <li>h) ISO/ASTM/Certification/s latest issued by the concerned institution which must conforms to the authoritative standards appropriate to the goods' country of origin.</li> <li>i) 20°C</li> </ol> </li> <li>4. Graduated to tip, zero at top</li> <li>5. Color code for 10 mL cap :Orange</li> <li>6. Top end is constricted</li> <li>7. Capacity: 10 mL</li> <li>8. Graduation interval: 0.1 mL</li> <li>9. Class A permanently marked on the glass Tolerance <math>\pm 0.06</math> mL</li> <li>10. Graduations , approximate volumes, capacity, and other markings are in permanent amber stain which resists aggressive washing solutions</li> <li>11. With Statement of Accuracy/ Certification of Accuracy latest issued by the concerned institution which must conform to the authoritative standards appropriate to the goods' country of origin</li> <li>12. With a statement of conformity from the manufacturer that the product complies with the specifications currently published and has been subject to the strict quality conditions imposed by internal management systems.</li> <li>13. Accessory : With Rubber pipettor</li> </ol>	
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	<p>a) Typ : Three (3) -way Safety Bulb-type Pipet Filler with S, E and A letters embossed on the rubber</p> <p>b) Material : Non-toxic natural rubber</p> <p>c) Color : Red/orange</p> <p>d) With pinch release valves that control air evacuation, liquid uptake, and liquid dispensing</p> <p>e) Fits standard size pipettes</p> <p>14. Packaging : Wrap glassware in newspaper and secure with a piece of masking tape and place in a bubble pouch, enclosed in polystyrene and packed in a sturdy box</p> <p>15. Must be free from breakage, cracks, scratches, chipped rims, sharp edges, striae, surface irregularities including all other defects not stated herein</p> <p>16. Comes with a brand printed permanently on the glass</p> <p>17. Must be brand new</p>	
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23	<p><b>Hydrometer for heavy liquids</b>  Functional Specifications: Used to measure relative density of heavy liquids based on the concept of buoyancy  Performance Specifications: Must be able to measure relative density of heavy liquids based on the concept of buoyancy, like glycerine  Design Specifications:  1. Type : Long Plain Form  2. Features a long cylindrical hollow glass tube with a bulb weighted at the pointed bottom with a steel ballast with graduations on the arrow stem for measuring.  3. Material : Clear , transparent bubble-free Glass, with the following dimensions:  a) Length : 300 - 330 mm  4. Specific Gravity Range: 1.00 - 2.00  5. Subdivision : 0.01  6. Comes with a ballast  a) Material of ballast : Glass  b) Heavy metals (lead, mercury)- free metal ballast  c) Material inside the ballast : Steel pellets and  d) With a binder  7. With Statement of Accuracy/ Certification of Accuracy latest issued by the concerned institution which must conform to the authoritative standards appropriate to the goods' country of origin  8. Individually serialized  9. Individually packed in a protective hard plastic case  10. With User's Manual in English  11. With Activity Sheets/Teacher's Manual in English  12. For numbers #10-11, the technical specifications (a-e) must be followed:  a) For Contents List of materials, In Table form  b) For User's Manual, Instruction Sheets/Assembly Guides, In sentences format  i) With sentences grammatically correct and  ii) With correct spelling and terminologies, punctuations and others  c) In original print, not photocopied  d) In colored pictures, drawings/illustrations  e) in 0.3 minimum thickness plastic laminated keycard that shall contain the actual colored picture of the model including the name labeled with the required parts with details as follows:  i) Paper Size : A4 size , 80 gsm  ii) Font : Times New Roman  iii) Font size: 12  iv) Margins on all sides with 2 point width border line  v) Line with arrow head of 1.25 point with width shall point to the specific part being labeled  13. Must be free from breakage, cracks, scratches, chipped rims, sharp</p>	
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	<p>edges, striae, surface irregularities including all other defects not stated herein.</p> <p>14. Must have a brand etched/engraved onto the glass</p> <p>15. Must be brand new</p>	
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24	<p><b>Hydrometer for light liquids</b>  Functional Specifications: Used to measure relative density of light liquids based on the concept of buoyancy like water  Performance Specifications: Must be able to measure the relative density of liquids lighter than water based on the concept of buoyancy  Design Specifications:  1. Type : Long Plain Form  2. Shape : Long cylindrical hollow glass tube with a bulb weighted at the bottom with a steel ballast with graduations on the narrow stem for measuring  3. Material : Clear , transparent bubble-free Glass , with the following dimensions:  a)Total Length: 300 - 330 mm  b)Subdivision : 0.005  4. Specific Gravity Range : 0.70 to 1.0  5. Accuracy : <math>\pm 1</math> subdivision  6. Comes with a ballast  a) With heavy metals (lead, mercury)- free metal ballast and glass  b) Material inside the ballast: Steel pellets and  c) With a binder  7. With Statement of Accuracy/ Certification of Accuracy latest issued by the concerned institution which must conform to the authoritative standards appropriate to the goods' country of origin  8. Individually serialized  9. Individually packed in a protective hard plastic case  10. With User's Manual in English  11. With Activity Sheets/Teacher's Manual in ENGLISH  12.For numbers #10-11; the technical specifications (a-e) must be strictly followed:  a) For Contents List of materials, In Table form  b) For User's Manual, Instruction Sheets/Assembly Guides, In sentences format  i) With sentences grammatically correct and  ii) With correct spelling and terminologies, punctuations and others  c) In original print, not photocopied  d) In colored pictures, drawings/illustrations  e) in 0.3 mm minimum thickness plastic laminated keycard that shall contain the actual colored picture of the model including the name labeled with the required parts with details as follows:  i) Paper Size : A4 size , 80 gsm  ii) Font : Times New Roman  iii) Font size : 12  iv) Margins on all sides with 2 point width border line  v) Line with arrow head of 1.25 point with width shall point to the specific part being labeled  13. Must be free from breakage, cracks,</p>	
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	<p>scratches, chipped rims, sharp edges, striae, surface irregularities including all other defects not stated herein</p> <p>14. With a brand etched/printed</p> <p>15. Must be brand new</p>	
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25	<p><b>Manometer, Open U-tube</b></p> <p>Functional Specifications: Used to indicate the difference in the heights of the manometric liquid to measure pressure</p> <p>Performance Specifications: Must be able to indicate the difference in the heights of the manometric liquid to measure pressure by getting the pressure difference</p> <p>Performance Specifications: Must be able to indicate the difference in the heights of the manometric liquid to measure pressure by getting the pressure difference</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Type : Differential pressure manometer</li> <li>2. Shape : U-shaped glass tube partially filled with liquid, with no moving parts and requires no calibration</li> <li>3. Material : Glass</li> <li>4. With a 50-52 cm arm with funnel top on one arm and 4.5-5.5 cm bent (90°) with 15-16 mm riffted tip on another arm for easy connection</li> <li>5. U-tube is mounted on a board, fixed on a wooden stand for vertical mounting using metal clips <ol style="list-style-type: none"> <li>a) Material of stand : Wood/en</li> <li>b) Dimensions of back plate <ol style="list-style-type: none"> <li>i) Length : 540-542 mm</li> <li>ii) Width : 90-102 mm</li> </ol> </li> </ol> </li> <li>6. A millimeter scale is fitted between the arms of the tube. <ol style="list-style-type: none"> <li>a) Scale having graduation range: 0-50 cm</li> <li>b) Graduation increment: 1 mm, with 0 at the bottom</li> </ol> </li> <li>7. Accessories: <ol style="list-style-type: none"> <li>a) With latex tubing, glass wall 2 mm thickness, 7.5-8.0 mm inner diameter.</li> <li>i) Material of rubber tubing: Non-toxic non-tacky latex rubber tubing for the laboratory activity.</li> <li>ii)Length of rubber tube: 3000-3005 mm</li> </ol> </li> <li>8. Stand with glass tube placed in bubble wrap, enclosed in bubble wrap and packed individually in a sturdy box</li> <li>9. Accessories enclosed in resealable plastic bag</li> <li>10. With User's Manual in English</li> <li>11. With Assembly Guides and Activity Sheets</li> <li>12. For numbers #10 and 11; they must be: <ol style="list-style-type: none"> <li>a) In Table form for List of materials, in A4 size, glossy paper,laminated</li> <li>b) In sentences format for instruction sheets/assembly guides <ol style="list-style-type: none"> <li>i) With sentences grammatically correct and</li> <li>ii) With correct spelling and terminologies, punctuations and others</li> <li>c)Printed in original copy, not photocopied</li> <li>d) In colored drawings/illustrations</li> <li>e) in 0.3 minimum thickness plastic laminated keycard that</li> </ol> </li> </ol> </li> </ol>	0
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	<p>shall contain the actual colored picture of the model including the name labeled with the required parts with details as follows:</p> <ul style="list-style-type: none"><li>i) Paper Size : A4 size , 80 gsm</li><li>ii) Font : Times New Roman</li><li>iii) Font size : 12</li><li>iv) Margins on all sides with 2 point width border line</li><li>v) Line with arrow head of 1.25 point with width shall point to the specific part being labeled</li></ul> <p>13. Must be free from breakage, cracks , chipped rims, sharp edges, all surface irregularities and all other defects not stated herein.</p> <p>14. Individually packed in a sturdy box</p> <p>15. Comes with a brand printed permanently onto the wooden stand</p> <p>16. Must be brand new</p>	
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26	<p><b>Mortar and Pestle, porcelain, 150 mL</b></p> <p>Functional Specifications: Used to pulverize/mash/grind and to mix materials in a mortar using a pestle</p> <p>Performance Specifications: Must be able to pulverize/mash/grind and mixes materials in a mortar using a pestle to demonstrate how particle size affects solubility and the rate of chemical reaction.</p> <p>Decreasing the size of the particles increases the rate of dissolving and speeds up the rate of reaction because the surface area of the reactant has been increased.</p> <p>Design Specifications:</p> <p>A. Mortar</p> <ol style="list-style-type: none"> <li>1. Shape of mortar : Deep form, bowl shape, with wide mouth , and with deeply molded, smooth rounded bottom</li> <li>2. Material for mortar and pestle: Porcelain, with the following dimensions: <ol style="list-style-type: none"> <li>a) Outside diameter : 130-132 mm</li> <li>b) Height/Depth : 65-85 mm</li> </ol> </li> <li>3. Capacity: 150 mL</li> <li>4. With pouring lip</li> <li>5. With unglazed grinding surface (interior) and uniformly glazed exterior</li> </ol> <p>B. Pestle:</p> <ol style="list-style-type: none"> <li>6. Shape of pestle: Cylindrical with bulbous bottom, with the following dimensions: <ol style="list-style-type: none"> <li>a) Length range : 133-160 mm and</li> <li>b) Diameter range: 28-40 mm diameter at its widest point.</li> </ol> </li> <li>7. Material of pestle: A heavy bat-shaped porcelain</li> <li>8. Uniformly glazed on its handle and rough on opposite end</li> <li>9. The set is individually wrapped, enclosed in a bubble wrap and packed in a sturdy box</li> <li>10. Must be free from breakage, cracks , chipped rims, sharp edges, all surface irregularities and all other defects not stated herein</li> <li>11. Comes with a brand marked permanently on the body/box</li> <li>12. Must be brand new</li> </ol>	0
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27	<p><b>Nichrome wire. 0.4, 100 ft</b></p> <p>Functional Specifications: Used as a wire loop and heating element on which a metal salt or solid ionic compound is made to adhere into it and is heated to emit a characteristic color on the Bunsen flame to identify the particular metal present in the compound</p> <p>Performance Specifications: Must be used as a wire loop on which a metal salt or solid ionic compound is made to adhere to, and is heated to emit a characteristic color on the Bunsen flame to identify the particular metal present in the compound in a laboratory activity, the Flame test</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Shape: Round wire</li> <li>2. Material of wire: Nichrome-Alloy of nickel and chromium, Ni80 Cr20 with the following dimensions: <ol style="list-style-type: none"> <li>a) AWG size: 26</li> <li>b) Diameter: 0.4 mm</li> <li>c) Length : 100 ft</li> </ol> </li> <li>3. Form: Soft, rust-free wire</li> <li>4. Color: Silvery grey</li> <li>5. Resistance : 2.57 ohms/foot</li> <li>6. Annealed soft</li> <li>7. Perfectly tensioned. Zero elongation, scratches, or other flaws.</li> <li>8. Comes in a spool</li> <li>9. Packed in a resealable plastic pouch</li> <li>10. Comes with a brand</li> </ol>	
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28	<p><b>Reagent Bottle, narrow-mouth, amber, borosilicate, 250 mL</b></p> <p>Functional Specifications: Used to contain/store and to provide UV protection of prepared light sensitive solutions/substances to prevent change/alteration in the composition of their contents</p> <p>Performance Specifications: Must be able to contains/store and to provide UV protection for the prepared light sensitive solutions/substances to prevent change/alteration in the composition of their contents.</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Shape : Cylindrical narrow-mouth bottle</li> <li>2. Material : Borosilicate, smooth, bubble-free glass with the following dimensions: <ol style="list-style-type: none"> <li>a) Bottle diameter range: 66-72 mm</li> <li>b) Neck I.D. range : 23-28 mm</li> <li>c) Over-all height: 130 to 150 mm</li> </ol> </li> <li>3. Color: Amber</li> <li>4. With approximate volumes, capacity, and other markings are in permanent white enamel which resists aggressive washing solutions <ol style="list-style-type: none"> <li>a) Manufacturer's name or trademark</li> <li>b) 250 mL</li> <li>c) white marking field/spot in permanent white enamel</li> </ol> </li> <li>5. With octagonal plastic stopper Socket size: 19/26 that fits the mouth well</li> <li>6. With a white marking field/spot in permanent white enamel <ol style="list-style-type: none"> <li>a) logo/brand name</li> <li>b) 250 mL</li> </ol> </li> <li>7. Wrapped in paper, enclosed in bubble wrap and packed individually in a padded sturdy box</li> <li>8. Must be free from breakage, cracks , chipped rims, sharp edges, striae, all surface irregularities including all other defects not stated herein</li> <li>9. Comes with a brand enamelled permanently onto the glass</li> <li>10. Must be brand new</li> </ol>	
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29	<p><b>Reagent Bottle, wide-mouth, transparent, borosilicate, 250 mL</b></p> <p>Functional Specifications: Used to hold/contain/store prepared solutions/ substances</p> <p>Performance Specifications: Must be able to hold/contain/store prepared solutions/substances</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Shape: Cylindrical wide-mouth bottle</li> <li>2. Material: Borosilicate, clear, smooth, transparent and bubble-free glass, with the following dimensions: <ol style="list-style-type: none"> <li>a) Bottle diameter : 69 mm to 73 mm</li> <li>b) Mouth diameter: 34 mm to 44 mm</li> <li>c) Height : 129 mm to 142 mm</li> </ol> </li> <li>3. With ground-in glass stopper</li> <li>4. With air tight seal</li> <li>5. With approximate volumes, capacity, and other markings are in permanent white enamel/stain which resists aggressive washing solutions <ol style="list-style-type: none"> <li>a) Manufacturer's name or trademark</li> <li>b) 250 mL</li> <li>c) white marking field/spot in permanent white enamel</li> </ol> </li> <li>6. Wrapped in paper, enclosed in bubble wrap and packed individually in a sturdy box</li> <li>7. Must be free from breakage, cracks , chipped rims, sharp edges, all surface irregularities and all other defects not stated herein</li> <li>8. Comes with a brand enamelled onto the glass</li> <li>9. Must be brand new</li> </ol>	
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30	<p><b>Rubber Stopper # 0 (for Ø 16mm test tube)</b></p> <p>Functional Specifications: Used to seal the openings of 16 mm diameter test tubes and other laboratory glassware that require a tighter seal or a greater degree of chemical resistance.to prevent leaks, hazards and contamination</p> <p>Performance Specifications: Must be able to seal the openings of 16 x 150 mm test tubes and other laboratory glassware that require a tighter seal or a greater degree of chemical resistance.to prevent leaks, hazards and contamination</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Shape: Cylindrical with a tapered bottom end</li> <li>2. Material : Rubber compound with the following dimensions: <ol style="list-style-type: none"> <li>a) Height : 25-25.5 mm</li> <li>b) Top Ø : 17-17.50 mm</li> <li>c) Bottom Ø : 13-13.5 mm</li> </ol> </li> <li>3. Hardness : 40-45 Duro</li> <li>4. Packed in resealable plastic bag</li> <li>5. With no. 0 embossed onto the rubber stopper</li> <li>6. Must be free from cracks, sharp edges, and all other surface imperfections including all other defects not stated herein</li> <li>7. Comes with a brand marked permanently in the bag</li> <li>8. Must be brand new</li> </ol>	
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31	<p><b>Rubber Stopper # 6 for Erlenmeyer Flask (narrow-mouth) 250 mL , 1 hole</b></p> <p>Functional Specifications: Used to seal the openings of narrow mouth 250 mL Erlenmeyer flasks and other laboratory glassware that require a tighter seal or a greater degree of chemical resistance with one 1) hole opening for insertion of a thermometer, glass tubing or stirrer for use during chemical reaction .to prevent leaks, hazards and contamination.</p> <p>Performance Specifications: Must be able to seal the openings of narrow mouth 250 mL Erlenmeyer flasks and other laboratory glassware that require a tighter seal or a greater degree of chemical resistance .with one (1) hole opening for insertion of a thermometer, glass tubing or stirrer for use during chemical reaction to prevent leaks, hazards and contamination.</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Shape: Cylindrical with a tapered bottom end</li> <li>2. Material : Premium grade SBR black rubber compound with the following dimensions: <ol style="list-style-type: none"> <li>a) Height: 25 mm</li> <li>b) Top Ø: 32 mm</li> <li>c)Bottom Ø : 26 mm</li> <li>d) Hole Ø: 5 mm</li> </ol> </li> <li>3. Number of holes :With one (1) hole</li> <li>4. Dimension tolerance on height, top and bottom diameter : <math>\pm 0.5</math> mm</li> <li>5. Hardness : <math>40 \pm 5</math> Duro</li> <li>6. Packed in resealable plastic bag</li> <li>7. Comes with a brand</li> </ol>	
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32	<p><b>Rubber Stopper # 6 for Erlenmeyer Flask (narrow-mouth) 250 mL , 2 holes</b></p> <p>Functional Specifications: Used to seal the openings of narrow mouth 250 mL Erlenmeyer flasks and other laboratory glassware that require a tighter seal or a greater degree of chemical resistance with two (2) holes opening for insertion of a thermometer, glass tubing or stirrer for use during chemical reaction to prevent leaks, hazards and contamination.</p> <p>Performance Specifications: Must be able to seal the openings of narrow mouth 250 mL Erlenmeyer flasks and other laboratory glassware that require a tighter seal or a greater degree of chemical resistance with two (2) holes opening for insertion of a thermometer, glass tubing or stirrer for use during chemical reaction to prevent leaks, hazards and contamination.</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Shape: Cylindrical with a tapered bottom end</li> <li>2. Material : Premium grade SBR black rubber compound with the following dimensions: <ol style="list-style-type: none"> <li>a) Height: 25 mm</li> <li>b) Top Ø: 32 mm</li> <li>c) Bottom Ø : 26 mm</li> <li>d) Hole Ø: 5 mm</li> </ol> </li> <li>3. Number of holes : Two (2) holes</li> <li>4. Dimension tolerance on height, top and bottom diameter : <math>\pm 0.5</math> mm</li> <li>5. Hardness : <math>40 \pm 5</math> Duro</li> <li>6. Packed in resealable plastic bag</li> <li>7. Comes with a brand</li> </ol>	
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33	<p><b>Safety Goggles, polycarbonate</b>  Functional Specifications: Used to protect eyes and face against chemical burns and splashes  Performance Specifications: Must be able to protect eyes and face against chemical burns and splashes  Design Specifications:  1 Features an angled vented portion that does not allow direct straight line from the exterior to the interior of the eyewear which encloses wide area surrounding the eyes  2. Material of lens : Polycarbonate lens  a) Submission of the original copy of the Test certificate/s issued by the testing unit, like DOST material testing facilities or at any DOST-accredited testing institution attesting that the material of the lens of the safety goggles, is polycarbonate, to validate the conformity of the material to the technical specifications. A representative of the Procuring Entity should be present during preparation and submission of the material test specimens to testing facility. All expenses for the said test shall be shouldered by the Supplier.  b) With Certification from the manufacturer that the pair of hand gloves is reusable and not disposable  3. Color of the lens: Clear  4. Lens type : Anti-splash, anti-fog treated/anti-scratch coating  5. With indirect ventilation channels (preventing penetration of splashes) one through each side of the frame to keep out large particles, dust, and liquids and splash hazards, improves air circulation and reduces fogging in hot/humid conditions  6. With wrap around elasticized adjustable headband integrated with goggle frame to prevent slippage and holds the goggle more securely  7. With pivoting headband clips to adjust strap around hard hats or hearing protection  8. Peel-off goggle covers available to extend the life of the lens  9. Can be worn over most prescription eyewear (OTG compatible)  10. With firm comfortable seal around forehead, cheeks, nose and temples protects against chemicals, dust and grindings  11. Shall bear mark ANZI Z87.1-2010 Standard for Chemical Splash and Dust Protection, Z87+D3 to indicate an impact protector type (ANSI Z87.1, CE EN 166 or CSA Z94.3 certification compliance) on the frame and the lens  12. The manufacturer or supplier certification mark must be present on all approved safety lenses, frames (front and temple), removable side</p>	
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	<p>shields, and other parts of the glasses, or goggles.</p> <p>13. Individually packed in a transparent plastic bag</p> <p>14. Labeling of the primary packaging displays, product name, product reference, manufacturer name, size, type, performance testing information for particular storage conditions (temperature, pressure, light, humidity, as appropriate or harmonized symbol as applicable.</p> <p>15. With issuance of certification statement from the manufacturer as to the:</p> <ul style="list-style-type: none"><li>a) Non-toxicity of the materials used</li><li>b) Material of the lens : polycarbonate</li><li>c) It is fog coated/scratch and impact resistant</li></ul> <p>16. Individually packed in a sturdy box/plastic bag</p> <p>17. Must be free from cracks, sharp edges, and all other surface imperfections including all other defects not stated herein</p> <p>18. Comes with a brand marked permanently on the box</p> <p>19. Must be brand new</p>	
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34	<p><b>Spatula, spoon, porcelain and glazed</b>  Functional Specifications: Used to hold/contain and transfer solids and liquids from one container to the other  Performance Specifications: Must be able to hold/contain and transfers solids and liquids from one container to the other  Design Specifications:  1. Features a white, broad, flat, blade (spatula) on one end and a spoon on the other end.  2. Material : Uniformly glazed smooth finish porcelain  a) Capacity: 0.3 mL  b) Over all Length : 121-142 mm  3. Must be free from breakage, cracks, chipped edges and all other defects not stated herein  4. Wrapped in paper, enclosed in bubble wrap and packed in a sturdy box.  5. Must be free from cracks, sharp edges, and all other surface imperfections including all other defects not stated herein.  6. Comes with a brand marked permanently in the box  7. Must be brand new</p>	
35	<p><b>Stirring Rod, Ø 6 mm x 250 mm long</b>  Functional Specifications: Used to mix liquids and solids  Performance Specifications: Must be able to mix liquids and solids well to speed up the dissolving process and increases the rate of reaction  Design Specifications:  1. Features a long, slender cylindrical solid glass, with the same thickness and slightly longer than a drinking straw and with rounded fire polished ends.  2. Material: Clear, transparent bubble-free stir stick solid borosilicate glass with the following dimensions:  a) Diameter( Ø) : 6-6.3 mm  b) Length: 250-254 mm long  3. With rounded and fire polished ends  4. Wrapped in paper, enclosed in bubble wrap and packed in a sturdy box  5. Must be free from breakage, cracks, chipped unpolished ends, all other surface imperfections including all other defects not stated herein  6. Comes with a brand marked permanently in the box  7. Must be brand new</p>	

<p>36</p>	<p><b>Test tube brush</b>  Functional Specifications: Used to clean test tubes and other small sized glasswares  Performance Specifications: Must be able to clean test tubes and other small-sized glasswares with densely filled radial tip and head brush to make complete contact with walls, corners and bottom.  Design Specifications:  1. Features a radial tufted tip white nylon bristles and brush head lined against a rather sturdy wire handle with a looped end to make complete contact with walls, corners and bottom to clean test tubes and other small sized glasswares .  2. Material of bristles : Medium stiff nylon with the following dimensions:  a) Diameter of bristle section: 18-19 mm  b) Length of bristle section : 82-102 mm  c) Over-all length: 228 -229 mm  3. Material of handle: Galvanized steel wire  4. Type of wire handle : Common loop twisted wire  5. With circular wire loop for hanging  6. Packed in a resealable plastic bag  7. Must be free from rust, sharp edges, all other surface irregularities including all other defects not stated herein  8. Comes with a brand marked permanently in the box  9. Must be brand new</p>	
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37	<p><b>Test Tube, borosilicate, Ø 16 mm x 150 mm long</b></p> <p>Functional Specifications: Used to contain/hold a small chemical reaction , to mix small quantities of solids and liquids, and to heat small quantities of substances</p> <p>Performance Specifications: Must be able to contain/hold a small chemical reaction and , mixes solids and liquids, heats small quantity of substances up to more than 100°C over a Bunsen burner's flame</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Features a finger-like length of glass tubing, open at the top, usually with a rounded lip at the top, and a rounded 'U' shaped bottom</li> <li>2. Material of test tube: Borosilicate , clear, transparent and bubble-free, reusable glass, with rim, with the following dimensions: <ol style="list-style-type: none"> <li>a) Outside Diameter: 15.8-16.0 mm</li> <li>b) Thickness: 1.3 -1.4 mm</li> <li>c) Length: 150-152 mm</li> <li>d) Comes with a certification from the manufacturer that the test tube is reusable and not disposable</li> </ol> </li> <li>3. Capacity: 20 mL</li> <li>4. With heavy uniform wall thickness, excellent heat resistance</li> <li>5. With large, white enamel marking spot</li> <li>6. Test tubes must be reusable (not disposable)</li> <li>7. Wrapped individually in tissue paper, enclosed in bubble wrap and packed in compartmentalized box</li> <li>8. Must be free from breakage, cracks, chipped rims, surface irregularities and all other defects not stated herein</li> <li>9. Comes with a brand enamelled permanently in the glass</li> <li>10. Must be brand new</li> </ol>	
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38	<p><b>Thermometer, Laboratory type, Alcohol, -20°C to 110°C</b></p> <p>Functional Specifications: Used to measure the temperature</p> <p>Performance Specifications: Must measure the temperature , -20° to 110°C</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Type : Alcohol filled, partial immersion thermometer</li> <li>2. Features a small sealed tube made of glass that has a small hollow bulb filled partly with ethanol and partly with nitrogen and ethanol vapors on one end and a thin capillary opening running through the length of its center</li> <li>3. Material : Glass</li> <li>4. Color : White/yellow</li> <li>5. Non-toxic red-filled thermometer</li> <li>6. Partial immersion type with immersion line indicator and ring top</li> <li>7. With precision red alcohol-filled, reinforced bulbs, and with expansion chamber</li> <li>8. With white back with non-roll sleeve</li> <li>9. With clear and permanent markings; scale never washes out</li> <li>10. Provided with non-roll plastic case</li> <li>11. With continuous alcohol column with no separations</li> <li>12. All graduation lines, figures, and letters should be clear-cut, distinct, and filled with a permanent pigment of suitable color with the following dimensions: <ol style="list-style-type: none"> <li>a) Length: 200 mm ( min)</li> <li>b). Accuracy: <math>\pm 1^{\circ}C</math></li> <li>c) Range: -20°C to 110°C</li> <li>d) Division: 1°C</li> <li>e) Diameter: 5.8 to 6.2 mm</li> <li>f) Immersion line: 76 mm</li> </ol> </li> <li>13. With Statement of Accuracy/ Certification of Accuracy latest issued by the concerned institution which must conform to the authoritative standards appropriate to the goods' country of origin</li> <li>14. Must be free from breakage, cracks, chipped and sharp edges and surface irregularities including all other defects not stated herein.</li> <li>15. Comes with a brand printed permanently onto the glass</li> <li>16. Must be brand new</li> </ol>	
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39	<p><b>Tong, Crucible</b></p> <p>Functional Specifications: Used to lift and hold crucibles,remove the lids from crucibles, transfer evaporating dishes or picking small objects out of a reaction container</p> <p>Performance Specifications: Must be able to lift and hold crucibles, remove the lids from crucibles, transfer evaporating dishes or picking small objects out of a reaction container.</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Features a scissor-like and a long bent neck tongs, with two anti-skid pincers or pieces of metals that concave together, which allow the users to grasp a hot crucible, flasks, evaporating dishes, or even small beakers</li> <li>2. Material: Stainless steel, durable, stable, rust and heat resistant <ol style="list-style-type: none"> <li>a) Color: Silver</li> <li>b) Finish: Smooth</li> <li>c) Overall Length: 228 -229 mm</li> </ol> </li> <li>3. With riveted joints</li> <li>4. With serrated tips.</li> <li>5. Enclosed in resealable bag and packed in a sturdy box</li> <li>6. Must be free from rust, dirt, cracks, chipped and sharp edges and surface irregularities including all other defects not stated herein</li> <li>7. Comes with a brand marked permanently in a box</li> <li>8. Must be brand new</li> </ol>	
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40	<p><b>Universal pH indicator</b></p> <p>Functional Specifications: Used as an indicator to determine/measure the pH of substances, whether it is an acid, neutral or a base</p> <p>Performance Specifications: Must be used as an indicator to effect a color change when it is dipped into the different substances to determine/measure the pH of each, through comparison with the pH color chart provided, which corresponds to:</p> <p>a) For an acid : pH 0-pH 6;  b) For a base : pH 8-pH 14.  c) For distilled water : pH 7</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Type: Test strips</li> <li>2. Shape: Rectangle</li> <li>3. Material: Cellulose/Paper based</li> <li>4. Dimension of pH strip : <ol style="list-style-type: none"> <li>a) Length : 69 mm x 6 mm</li> </ol> </li> <li>5. Number of colors in indicator test strip: In four colors to test pH values</li> <li>6. Number of test strips : 100 pc strips</li> <li>7. Packaging: Clear, transparent box</li> <li>8. Shape of box: Square</li> <li>9. With complete color chart for comparison with the color change to get the pH reading of the sample being tested</li> <li>10. No sharp edges on box</li> <li>11. Measures pH 0-pH 14</li> <li>12. Comes with a brand</li> </ol>	
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41	<p><b>Vial, screw-neck, 25 ml. (with screw-type plastic cap)</b></p> <p>Functional Specifications: Used to hold/contain/store/mix small quantities of samples/ solutions/substances up to 25 mL</p> <p>Performance Specifications: Must be able to hold/contain/store/mix small quantities of samples up to 25 mL</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Type : Bottle with threaded Screw cap</li> <li>2. Shape : Bottle-like shape with a threaded neck, solid plastic closure and with a flat bottom.</li> <li>3. Material : Borosilicate clear, transparent, and bubble-free glass, with the following dimensions: <ol style="list-style-type: none"> <li>a) Outside Diameter : 25-50 mm</li> <li>b) Length: 60-80 mm</li> </ol> </li> <li>4. With screw- type solid plastic cap</li> <li>5. Shape of neck : Cylindrical, round</li> <li>6. Neck finish : Continuous thread</li> <li>7. Cap Color: Colored</li> <li>8. Cap Attached: No</li> <li>9. Cap Material : Plastic</li> <li>10. Closure style : Solid top, screw thread cap</li> <li>11. Capacity: 25 mL</li> <li>12. Packed individually in a compartmentalized/partitioned box</li> <li>13. Must be free from breakage , cracks, chipped and sharp edges and surface irregularities including all other defects not stated herein</li> <li>14. Comes with a brand marked permanently on the box</li> <li>15. Must be brand new</li> </ol>	
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42	<p><b>Vial, screw-neck, 50 mL. (with screw-type plastic cap)</b></p> <p>Functional Specifications: Used to hold/contain/store/mix small quantities of samples/ solutions/substances up to 50 mL</p> <p>Performance Specifications: Held/contained/stored/mixed samples/solutions/substances up to 50 mL</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Type : Bottle with threaded Screw cap</li> <li>2. Features a bottle-like shape with a threaded neck, screw cap plastic closure and with a flat bottom</li> <li>3. Material : Borosilicate,clear, transparent, and bubble-free glass with the following dimensions: <ol style="list-style-type: none"> <li>a) Outside Diameter : 25-50 mm</li> <li>b) Length : 100-108 mm</li> </ol> </li> <li>4. Capacity: 50 mL</li> <li>5. Shape of neck : Cylindrical, round</li> <li>6. Neck finish : Continuous thread</li> <li>7. Cap Color :Colored</li> <li>8. Cap Attached: No</li> <li>9. Cap Material : Plastic</li> <li>10. Closure style : Solid top, screw thread cap</li> <li>11. Packed individually in a compartmentalized box</li> <li>12. Must be free from breakage , cracks, chipped and sharp edges and surface irregularities including all other defects not stated herein</li> <li>13. Comes with a brand marked permanently on the box</li> </ol>	
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43	<p><b>Volumetric Flask, borosilicate 250 mL</b></p> <p>Functional Specifications: Used to measure/prepare/contain a precise volume of standard solutions at a certain temperature and precise dilution of solutions up to 250 mL</p> <p>Performance Specifications: Must be able to measure/prepare/contain a precise volume of standard solutions at a certain temperature and precise dilution of solutions up to 250 mL</p> <p>Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Type: Class A</li> <li>2. Shape : A round or pear-shaped bulb, a long thin neck topped by a snap cap and with flat bottom</li> <li>3. Material of body: Borosilicate , clear, transparent and bubble-free, glass with the following dimensions: <ol style="list-style-type: none"> <li>a) Height: 225 mm</li> <li>b) Outside diameter : 78 mm (approx.)</li> <li>c) Size: 250 mL</li> <li>d) Tolerance: <math>\pm 0.12</math> mL</li> </ol> </li> <li>4. With heavy duty rim</li> <li>5. Comes with snap cap <ol style="list-style-type: none"> <li>a) Material of snap cap :High density plastic (polyethylene)</li> <li>b) With octagonal grip</li> <li>c) Snap-cap : No. 250</li> <li>d) Color of snap cap: Blue</li> </ol> </li> <li>6. Must meet ASTM E- 694 for volumetric ware, ASTM E-542 for calibration of volumetric ware and ASTM E-288 for volumetric flasks.</li> <li>7. Calibrated "to contain" (marked "TC" or "IN")</li> <li>8. Manufacturer should be accredited by NIST standards or its equivalent to the country of origin to certify that their items are calibrated.</li> <li>9. Must be free from breakage, cracks, sharp rims and other defects</li> <li>10. Packaging : Roll up glassware in newspaper and secure with a piece of masking tape and place in a bubble pouch and individually packed in a sturdy box</li> <li>11. Comes with a brand, with five (5) years existence in the glasswares industry</li> <li>14. Must be brand new</li> </ol>	
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44	<p><b>Watch Glass, Ø 90 mm</b>  Functional Specifications: Used to:  a) cover glasswares like beakers  b) evaporates solvents in a sample and  c) holds/contains liquids and solids prior to heating.  Performance Specifications: Must be able to:  a) cover glasswares like beakers  b) evaporate solvents in a sample and  c) hold/contain liquids and solids prior to heating.  Design Specifications:  1. Shape : Circular concave  2. Material : Borosilicate, clear, transparent, and bubble-free glass with the following dimensions:  a) Diameter : 90-91 mm  b) Thickness range : 1.5 mm to 2.0 mm  3. Fire-polished rims/edges  4. Individually wrapped in used newspaper, enclosed in a bubble wrap, and packed in a sturdy box  5. Must have fire polished edges/rims, be free from breakage, cracks, chipped and sharp edges, surface irregularities including all other defects not stated herein  6. Comes with a brand marked permanently in the box  7. Must be brand new</p>	
45	<p><b>Tong, Beaker</b>  Functional Specifications: Used to hold heated beakers.  Performance Specifications: Must be able to secure hot beakers.  Design Specifications:  1. Scissor-like tool with plastic-coated jaws  2. Made of minimum 6.0 mm smooth finish chrome-plated steel  3. With flat riveted joint  4. Total length (minimum) : 254 mm  5. Holds beakers from 50mL to 1000 mL  6. Safely packed in a box  7. Must be branded and brand new. The brand shall be permanently printed on the box.</p>	

46	<p><b>Wash bottle, plastic, 250 mL</b>  Functional Specifications: Used to store and dispense water for diluting solutions, washing precipitates and rinsing glass wares.  Performance Specifications: Must be able to store and dispenses water in diluting, washing precipitates and rinsing activities.  Design Specifications:</p> <ol style="list-style-type: none"> <li>1. Translucent and non-toxic plastic material (Certificate of non-toxicity is required)</li> <li>2. Cylindrical body shape</li> <li>3. Easy squeeze dispensing; no leaks</li> <li>4. Capacity: 250 mL.</li> <li>5. Screw type closure with its angled stem and draw tube molded in one piece</li> <li>6. Must be brand new.</li> </ol>	
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**Lot 3-Mathematics - Manipulatives and Tools and Instruments**

<b>Item</b>	<b>Specification</b>	<b>Statement of Compliance</b>
		<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>

1	<p><b>Ghost Grid Whiteboard, Mobile Magnetic</b>  Functional Specifications: Used to aid classroom instructions especially in graphical representations such as linear, quadratic, polynomial, histogram, normal curve, etc.  Performance Specifications: Must be able to move from one place to another and to clearly show illustrations that do not exceed from 1 meter vertically and 1.2m horizontally guided with lines with 20mm spacing (horizontally and vertically).  Design Specifications: 1). Mobile Magnetic Ghost Grid Whiteboard; plain white on the other side  2). Material: Painted Steel  3). Frame: Aluminum, 1" edging;  4). Surface Material: Magnetic Painted Steel;  5). Grid Pattern: 2" x 2", ghots grid;  6). Full Dimensions: 74-75"W x 23-24"D x 69-70"H; 7). Board Dimensions: 72-73"W x 40-41"H;  8). Base Dimensions: 74-75"W x 23-24"D;  9). Tray Style: Full length  10). Casters: 4 pieces, 2-inch casters, two with locking brakes;  11). Must be properly packed using shipping carton.</p>	
2	<p><b>Calculator, Scientific</b>  Functional Specifications: Used to show mathematical computations.   Performance Specifications: Must be able to show correct mathematical calculations using its built-in functions/formula. Design Specifications:  1. Display: LCD, 2 line(s) X 10 characters (minimum), stably shows input expressions/equation, calculation result, and various indicators;  2. Built-in functions not less than 240 inclusion of the following:  a) Basic Calculations: arithmetic, fraction, percentage, degrees, minutes, seconds, radian (including conversion of the mentioned Basic Calculations);  b) Memory calculation, Logarithm and Hyperbolic functions;  c) Statistical functions (e.g.: Statistical relationships, standard deviation, Permutation, Combination, etc.); and  d) Trigonometric functions: sin, cos, tan, sin-1, cos-1, tan-1;  3. Basic keys and function keys are labeled permanently (resistant to finger rub and light acid (vinegar) contamination) and operates as such correspondingly;  4. Power requirement: two way dual (battery, built-in solar system), the unit consistently operational after replacing the battery for three trials, its solar system powers the unit normally in a well lit room without the battery;  5. Brand must be permanently printed on the case.</p>	
***Nothing follows***		

## ***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**

<b>Bid Form for Procurement of Goods .....</b>	<b>167</b>
<b>Price Schedule for Goods Offered from Within the Philippines .....</b>	<b>169</b>
<b>Price Schedule for Goods Offered from Abroad .....</b>	<b>170</b>
<b>Contract Form .....</b>	<b>171</b>
<b>Omnibus Sworn Statement Form .....</b>	<b>174</b>
<b>Bid Securing Declaration Form.....</b>	<b>178</b>

## **Bid Form for Procurement of Goods**

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

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### **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]***

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### 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]**

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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]*

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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 Criterion<sup>1</sup>]* 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]*

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Doc. No. \_\_\_\_\_

Page No. \_\_\_\_\_

Book No. \_\_\_\_\_

Series of \_\_\_\_\_.

## Section IX. Checklist of Technical and Financial Documents

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### I. TECHNICAL COMPONENT ENVELOPE

#### **Class "A" Documents**

##### Legal Documents

- a. Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages);

##### Technical Documents

- b. Statement of the prospective bidder of all its ongoing government and private contracts, including contracts awarded but not yet started, if any, whether similar or not similar in nature and complexity to the contract to be bid; **and**
- c. Statement of the bidder's Single Largest Completed Contract (SLCC) similar to the contract to be bid, within the relevant period as provided in the Bidding Documents; **and**
- d. Original copy of Bid Security. If in the form of a Surety Bond, submit also a certification issued by the Insurance Commission **or** Original copy of Notarized Bid Securing Declaration; **and**
- e. Conformity with the Technical Specifications, which may include production/delivery schedule, manpower requirements, and/or after-sales/parts, if applicable; **and**
- f. Original duly signed Omnibus Sworn Statement (OSS) **and** if applicable, Original Notarized Secretary's Certificate in case of a corporation, partnership, or cooperative; or Original Special Power of Attorney of all members of the joint venture giving full power and authority to its officer to sign the OSS and do acts to represent the Bidder.

##### Financial Documents

- g. The prospective bidder's computation of Net Financial Contracting Capacity (NFCC) **or** A committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation.

### **Class "B" Documents**

- h. If applicable, a duly signed joint venture agreement (JVA) in case the joint venture is already in existence **or** duly notarized statements from all the potential joint venture partners stating that they will enter into and abide by the provisions of the JVA in the instance that the bid is successful.

### **II. FINANCIAL COMPONENT ENVELOPE**

- i. Original of duly signed and accomplished Financial Bid Form; **and**
- j. Original of duly signed and accomplished Price Schedule(s).

#### Other documentary requirements under RA No. 12009 (as applicable)

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

Republic of the Philippines



Government Procurement Policy Board