



Republic of the Philippine
TARLAC STATE UNIVERSITY
Romulo Blvd., San Vicente, Tarlac City
Tel. No.: (045) 982 4630
Website: www.tsu.edu.ph



Bidding Documents

(This Bidding Documents is in conformance with the Sixth Edition of the Philippine Bidding Documents for the Procurement of Goods)

For the Project

Supply and Delivery of Electronics Engineering Equipment

**With an Approved Budget for the Contract (ABC) of
Five Million One Hundred Thousand Pesos (₱ 5,100,000.00)**

**Invitation to Bid No. Goods 2026-007
PhilGEPS Reference No.: 13047084**

**July 2020
6th Edition**

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Glossary of Acronyms, Terms, and Abbreviations

ABC – Approved Budget for the Contract.

BAC – Bids and Awards Committee.

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

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

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

BIR – Bureau of Internal Revenue.

BSP – Bangko Sentral ng Pilipinas.

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

CDA - Cooperative Development Authority.

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

CIF – Cost Insurance and Freight.

CIP – Carriage and Insurance Paid.

CPI – Consumer Price Index.

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

DTI – Department of Trade and Industry.

EXW – Ex works.

FCA – “Free Carrier” shipping point.

FOB – “Free on Board” shipping point.

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

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

GFI – Government Financial Institution.

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

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

GOP – Government of the Philippines.

GPPB – Government Procurement Policy Board.

INCOTERMS – International Commercial Terms.

Infrastructure Projects – Include the construction, improvement, rehabilitation, demolition, repair, restoration or maintenance of roads and bridges, railways, airports, seaports, communication facilities, civil works components of information technology projects, irrigation, flood control and drainage, water supply, sanitation, sewerage and solid waste management systems, shore protection, energy/power and electrification facilities, national buildings, school buildings, hospital buildings, and other related construction projects of the government. Also referred to as *civil works or works*. (2016 revised IRR, Section 5[u])

LGUs – Local Government Units.

NFCC – Net Financial Contracting Capacity.

NGA – National Government Agency.

PhilGEPS - Philippine Government Electronic Procurement System.

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

PSA – Philippine Statistics Authority.

SEC – Securities and Exchange Commission.

SLCC – Single Largest Completed Contract.

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

UN – United Nations.

Section I. Invitation to Bid



Republic of the Philippine
TARLAC STATE UNIVERSITY
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INVITATION TO BID

For the Project

Supply and Delivery of Electronics Engineering Equipment

Invitation to Bid No. Goods 2026-007

1. The Tarlac State University, through General Appropriation Act (GAA) 2025 - Continuing intends to apply the sum of **Five Million One Hundred Thousand Pesos (₱ 5,100,000.00)** to payments under the contracts for the project: **Supply and Delivery of Electronics Engineering Equipment**.

Bids received in excess of the ABC for shall be automatically rejected at bid opening.

2. The Tarlac State University now invites bids for the project **Supply and Delivery of Electronics Engineering Equipments**. Delivery of the Goods is required within **One Hundred Twenty (120) calendar days** from the receipt of the Notice to Proceed. Bidders must have completed, within the last five (5) years prior to the date of submission and receipt of bids, a contract similar to the Project. The description of an eligible bidder is contained in the Bidding Documents, particularly, in Section II. Instructions to Bidders.
3. Bidding will be conducted through open competitive bidding procedures using a non-discretionary “pass/fail” criterion as specified in the 2016 Revised Implementing Rules and Regulations (IRR) of Republic Act (RA) 9184, otherwise known as the “Government Procurement Reform Act”.

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 5183.

4. Interested bidders may obtain further information from **Tarlac State University** and inspect the Bidding Documents at the address given below during Tuesday to Friday from 7:00 A.M. to 6:00 P.M:

BAC Secretariat

Motorpool and Administration Building
Tarlac State University
Romulo Blvd., San Vicente, Tarlac City
Tel. No. (045) 606-8110, Extension: 142 / 0998 846 0206
Email: [**tsubacsec2025@gmail.com**](mailto:tsubacsec2025@gmail.com)

5. A complete set of Bidding Documents may be acquired by interested Bidders from **June 10, 2026 to June 30, 2026**, from the aforementioned address upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, in the amount of **₱ 10,000.00**.

It may also be downloaded free of charge from the website of the Philippine Government Electronic Procurement System (PhilGEPS) and the website of the Procuring Entity, provided that Bidders shall pay the applicable fee for the Bidding Documents not later than the submission of their bids.

6. The Tarlac State University will hold a Pre-Bid Conference on **June 18, 2026 (3:00 P.M.)** at the Bids and Awards Committee Conference Room, 3rd Floor, Motorpool and Administration Building, Tarlac State University, Romulo Blvd., San Vicente, Tarlac City, which shall be open to prospective bidders.
7. Three (3) copies of the bid proposals (one original, and additional copy 1 and 2) must be submitted to the BAC which must be duly received by the BAC Secretariat through manual submission at the office address indicated in the bidding documents, on **June 30, 2026 at 2:30 P.M.** Failure of bidders to comply with the said request of additional copies shall not be a ground for disqualification.

Late submission shall not be accepted.

BAC Secretariat

Motorpool and Administration Building
 Tarlac State University
 Romulo Blvd., San Vicente, Tarlac City
 Tel. No. (045) 606-8110, Extension: 142 / 0998 846 0206
 Email: bacsec@tsu.edu.ph

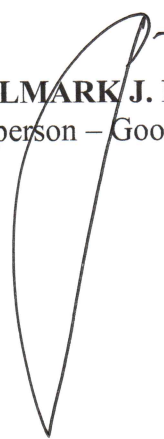
8. All Bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in ITB Clause 14.
9. Bid opening shall be on **June 30, 2026, at 3:00 P.M.**, at the Bids and Awards Committee Conference Room, 3rd Floor, Motorpool and Administration Building, Tarlac State University, Romulo Blvd., San Vicente, Tarlac City. Bids will be opened in the presence of the bidders' representatives who choose to attend at the address below.
10. The Summary of the procurement activities is as follows:

Activities	Date and Time	Venue
Posted to PhilGEPS	June 10, 2026	N/A
Pre-Bid Conference	June 18, 2026 (3:00 PM)	BAC Conference Room, 3 rd Floor, Motorpool and Administration Building, Tarlac State University, Romulo Blvd., San Vicente, Tarlac City
Deadline of Submission of Bids	June 30, 2026 (2:30 PM)	
Opening of Bids	June 30, 2026 (3:00 PM)	

11. The Tarlac State University reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of the 2016 Revised IRR of RA 9184, without thereby incurring any liability to the affected bidder or bidders.
12. For further information, please refer to:

Ms. Mariel C. Santos
 BAC Secretariat
 Motorpool and Administration Building
 Tarlac State University
 Romulo Blvd., San Vicente, Tarlac City
 Tel. No. (045) 606-8110, Extension: 142 / 0998 846 0206
 Email: tsubacsec2025@gmail.com

ATTY. WILMARK J. RAMOS, DBA
BAC Chairperson – Goods and Services *dy*

A large, stylized handwritten signature in black ink, appearing to be 'WJ Ramos', written over the printed name.

Section II. Instructions to Bidders

1. Scope of Bid

1.1. The Tarlac State University wishes to receive Bids for the project: **Supply and Delivery of Electronics Engineering Equipment**, with identification number **Invitation to Bid No. Goods 2026-007**.

1.2. The procurement project (referred to herein as “Project”) is composed of **One (1) Lot** the details of which are described in Section VII. Technical Specifications.

2. Funding Information

2.1. The GOP through the source of funding as indicated below for **2025 – continuing** in the amount of **₱ 5,100,000.00**

2.2. The source of funding is the **General Appropriation Act (GAA)**.

3. Bidding Requirements

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

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

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

4. Corrupt, Fraudulent, Collusive, and Coercive Practices

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

5. Eligible Bidders

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

5.2. Foreign ownership limited to those allowed under the rules may participate in this Project.

5.3. Pursuant to Section 23.4.1.3 of the 2016 revised IRR of RA No.9184, the Bidder must have a SLCC that is similar to the Project, as described in the **BDS**, with a value, adjusted to current prices using the PSA’s CPI, that is at least equivalent to **fifty percent (50%) of the total ABC of the project**.

5.4. The Bidders shall comply with the eligibility criteria under Section 23.4.1 of the 2016 IRR of RA No. 9184.

6. Origin of Goods

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

7. Subcontracts

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

The Procuring Entity has prescribed that subcontracting is not allowed

8. Pre-Bid Conference

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

9. Clarification and Amendment of Bidding Documents

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

10. Documents comprising the Bid: Eligibility and Technical Components

10.1. The first envelope shall contain the eligibility and technical documents of the Bid as specified in **Section VIII. Checklist of Technical and Financial Documents**.

10.2. The Bidder's **SLCC** as indicated in **ITB** Clause 5.3 should have been completed **within five (5) years** prior to the deadline for the submission and receipt of bids.

10.3. If the eligibility requirements or statements, the bids, and all other documents for submission to the BAC are in foreign language other than English, it must be accompanied by a translation in English, which shall be authenticated by the appropriate Philippine foreign service establishment, post, or the equivalent office having jurisdiction over the foreign bidder's affairs in the Philippines. Similar to the required authentication above, for Contracting Parties to the Apostille Convention, only the translated documents shall be authenticated through an apostille pursuant to GPPB Resolution No. 13-2019 dated 23 May 2019. The English translation shall govern, for purposes of interpretation of the bid.

11. Documents comprising the Bid: Financial Component

11.1. The second bid envelope shall contain the financial documents for the Bid as specified in **Section VIII. Checklist of Technical and Financial Documents**.

11.2. If the Bidder claims preference as a Domestic Bidder or Domestic Entity, a certification issued by DTI shall be provided by the Bidder in accordance with Section 43.1.3 of the 2016 revised IRR of RA No. 9184.

11.3. Any bid exceeding the ABC indicated in paragraph 1 of the **IB** shall not be accepted.

11.4. For Foreign-funded Procurement, a ceiling may be applied to bid prices provided the conditions are met under Section 31.2 of the 2016 revised IRR of RA No. 9184.

12. Bid Prices

12.1. Prices indicated on the Price Schedule shall be entered separately in the following manner:

- a. For Goods offered from within the Procuring Entity's country:
 - i. The price of the Goods quoted EXW (ex-works, ex-factory, 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 e.
- b. For Goods offered from abroad:
 - i. Unless otherwise stated in the **BDS**, the price of the Goods shall be quoted delivered duty paid (DDP) with the place of destination in the Philippines as specified in the **BDS**. In quoting the price, the Bidder shall be free to use transportation through carriers registered in any eligible country. Similarly, the Bidder may obtain insurance services from any eligible source country.
 - ii. The price of other (incidental) services, if any, as listed in **Section VII. Technical Specifications**.

13. Bid and Payment Currencies

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

13.2. Payment of the contract price shall be made in Philippine Pesos.

14. Bid Security

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

14.2. The Bid and bid security shall be valid until **October 28, 2026**. Any Bid not accompanied by an acceptable bid security shall be rejected by the Procuring Entity as non-responsive.

15. Sealing and Marking of Bids

15.1. Each Bidder shall submit one copy of the first and second components of its Bid.

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

15.3. If the Procuring Entity allows the submission of bids through online submission or any other electronic means, the Bidder shall submit an electronic copy of its Bid, which must be

digitally signed. An electronic copy that cannot be opened or is corrupted shall be considered non-responsive and, thus, automatically disqualified.

16. Deadline for Submission of Bids

- 16.1. The Bidders shall submit on the specified date and time and either at its physical address or through online submission as indicated in paragraph 7 of the **IB**.

17. Opening and Preliminary Examination of Bids

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

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

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

18. Domestic Preference

- 18.1. The Procuring Entity will grant a margin of preference for the purpose of comparison of Bids in accordance with Section 43.1.2 of the 2016 revised IRR of RA No. 9184.

19. Detailed Evaluation and Comparison of Bids

- 19.1. The Procuring BAC shall immediately conduct a detailed evaluation of all Bids rated "*passed*," using non-discretionary pass/fail criteria. The BAC shall consider the conditions in the evaluation of Bids under Section 32.2 of the 2016 revised IRR of RA No. 9184.
- 19.2. If the Project allows partial bids, bidders may submit a proposal on any of the lots or items, and evaluation will be undertaken on a per lot or item basis, as the case maybe. In this case, the Bid Security as required by **ITB** Clause 15 shall be submitted for each lot or item separately.
- 19.3. The descriptions of the lots or items are indicated in **Section VII. Technical Specifications**, and the ABCs of these lots or items are indicated in the **BDS** for purposes of the NFCC computation pursuant to Section 23.4.2.6 of the 2016 revised IRR of RA No. 9184. The NFCC must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder.
- 19.4. **The Project shall be awarded as one project having several items that shall be awarded as separate contracts.**
- 19.5. Except for bidders submitting a committed Line of Credit from a Universal or Commercial Bank in lieu of its NFCC computation, all Bids must include the NFCC computation pursuant to Section 23.4.1.4 of the 2016 revised IRR of RA No. 9184, which must be sufficient for the total of the ABCs for all the lots or items participated in by the prospective Bidder. For bidders submitting the committed Line of Credit, it must be at least equal to ten percent (10%) of the ABCs for all the lots or items participated in by the prospective Bidder.

20. Post-Qualification

- 20.1. Within a **non-extendible period of five (5) calendar days** from receipt by the Bidder of the notice from the BAC that it submitted the Lowest Calculated Bid, the Bidder shall submit its latest income and business tax returns filed and paid through the BIR Electronic Filing and Payment System (eFPS) and other appropriate licenses and permits required by law and stated in the **BDS**.

21. Signing of the Contract

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

Section III. Bid Data Sheet

ITB Clause					
5.3	For this purpose, contracts similar to the Project shall be the supply and delivery of similar goods comprising the Project.				
7.1	No further instructions.				
12	The price of the Goods shall be quoted DDP Tarlac City, Philippines or the applicable International Commercial Terms (INCOTERMS) for this Project.				
14.1	<p>The bid security shall be in the form of a Bid Securing Declaration, or any of the following forms and amounts:</p> <ul style="list-style-type: none"> a. The amount of not less than two percent (2 %) of ABC, if bid security is in cash, cashier's/manager's check, bank draft/guarantee or irrevocable letter of credit; or b. The amount of not less than five percent (5 %) of ABC if bid security is in Surety Bond. 				
19.3	<p>The ABC for the project</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">Lot No.</th> <th style="text-align: center;">ABC, Php</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1.</td> <td style="text-align: center;">5,100,000.00</td> </tr> </tbody> </table>	Lot No.	ABC, Php	1.	5,100,000.00
Lot No.	ABC, Php				
1.	5,100,000.00				
20.2	No further requirements.				
21.2	No further requirements.				

Section IV. General Conditions of Contract

1. Scope of Contract

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

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

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

2. Advance Payment and Terms of Payment

2.1. Advance payment of the contract amount is provided under Annex “D” of the revised 2016 IRR of RA No. 9184.

2.2. The Procuring Entity is allowed to determine the terms of payment on the partial or staggered delivery of the Goods procured, provided such partial payment shall correspond to the value of the goods delivered and accepted in accordance with prevailing accounting and auditing rules and regulations. The terms of payment are indicated in the **SCC**.

3. Performance Security

Within ten (10) calendar days from receipt of the Notice of Award by the Bidder from the Procuring Entity but in no case later than prior to the signing of the Contract by both parties, the successful Bidder shall furnish the performance security in any of the forms prescribed in Section 39 of the 2016 revised IRR of RA No. 9184

4. Inspection and Tests

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

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

5. Warranty

6.1. In order to assure that manufacturing defects shall be corrected by the Supplier, a warranty shall be required from the Supplier as provided under Section 62.1 of the 2016 revised IRR of RA No. 9184.

6.2. The Procuring Entity shall promptly notify the Supplier in writing of any claims arising under this warranty. Upon receipt of such notice, the Supplier shall, repair or replace the

defective Goods or parts thereof without cost to the Procuring Entity, pursuant to the Generic Procurement Manual.

6. Liability of the Supplier

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

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

Section V. Special Conditions of Contract

GCC Clause	
1	<p>Delivery and Documents –</p> <p>For purposes of the Contract, “EXW,” “FOB,” “FCA,” “CIF,” “CIP,” “DDP” and other trade terms used to describe the obligations of the parties shall have the meanings assigned to them by the current edition of INCOTERMS published by the International Chamber of Commerce, Paris. The Delivery terms of this Contract shall be as follows:</p> <p>The delivery terms applicable to this Contract are delivered to Tarlac State University, Romulo Blvd., San Vicente, Tarlac City. Risk and title will pass from the Supplier to the Procuring Entity upon receipt and final acceptance of the Goods at their destination.”</p> <p>Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in Section VI. Schedule of Requirements.</p>
	<p>Packaging –</p> <p>The Supplier shall provide such packaging of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in this Contract. The packaging shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packaging case size and weights shall take into consideration, where appropriate, the remoteness of the Goods’ final destination and the absence of heavy handling facilities at all points in transit.</p> <p>The packaging, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified below, and in any subsequent instructions ordered by the Procuring Entity.</p> <p>The outer packaging must be clearly marked on at least four (4) sides as follows:</p> <p>Name of the Procuring Entity Name of the Supplier Contract Description Final Destination Gross weight Any special lifting instructions Any special handling instructions Any relevant HAZCHEM classifications</p> <p>A packaging list identifying the contents and quantities of the package is to be placed on an accessible point of the outer packaging if practical. If not practical the packaging list is to be placed inside the outer packaging but outside the secondary packaging.</p>
	<p>Transportation –</p> <p>Where the Supplier is required under Contract to deliver the Goods CIF, CIP, or DDP, transport of the Goods to the port of destination or such other named place of destination in the Philippines, as shall be specified in this Contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price.</p>

	<p>Where the Supplier is required under this Contract to transport the Goods to a specified place of destination within the Philippines, defined as the Project Site, transport to such place of destination in the Philippines, including insurance and storage, as shall be specified in this Contract, shall be arranged by the Supplier, and related costs shall be included in the contract price.</p> <p>Where the Supplier is required under Contract to deliver the Goods CIF, CIP or DDP, Goods are to be transported on carriers of Philippine registry. In the event that no carrier of Philippine registry is available, Goods may be shipped by a carrier which is not of Philippine registry provided that the Supplier obtains and presents to the Procuring Entity certification to this effect from the nearest Philippine consulate to the port of dispatch. In the event that carriers of Philippine registry are available but their schedule delays the Supplier in its performance of this Contract the period from when the Goods were first ready for shipment and the actual date of shipment the period of delay will be considered force majeure.</p> <p>The Procuring Entity accepts no liability for the damage of Goods during transit other than those prescribed by INCOTERMS for DDP deliveries. In the case of Goods supplied from within the Philippines or supplied by domestic Suppliers risk and title will not be deemed to have passed to the Procuring Entity until their receipt and final acceptance at the final destination.</p>
	<p>Intellectual Property Rights –</p> <p>The Supplier shall indemnify the Procuring Entity against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof.</p>
4	<p>The inspections and tests that will be conducted are: visual and sensory inspection and test.</p>

Section VI. Schedule of Requirements

The delivery date for the Goods covered by the Contract shall be within One Hundred Twenty (120) calendar days upon receipt of the Notice to Proceed.

Section VII. Technical Specifications

Item No.	Description
Electronics Engineering Equipment	
1.	<p>Advanced Telecommunications Experimenter Power Source: Multi-voltage plug pack Power Supply: 9V to 15V DC, 1A maximum Protection: Reverse polarity and self-resetting circuit breaker protection above 16V Absolute Maximum Supply Input: 30V DC Operating Temperature Range: 10 to 30 degrees C Storage Temperature Range: 5 to 40 degrees C Humidity: Up to 90% RH, non-condensing Accessories: Patch Cords: 20 x 2mm-2mm stackable patch cords Scope leads: 3 x 2mm-to-BNC coaxial oscilloscope leads Headphones: 1 x lightweight stereo headphones, 24ohm, 3.5mm male stereo plug Plug Pack: multi-input voltage with 12V/1A output, regulated (tip must be positive)</p> <p>Required System Capabilities: The single board unit shall enable the student to quickly build a working model of thirty or more analog or digital modulation encoding techniques. Student shall be able to construct experiments by patching together fundamental functional module blocks that correspond to those used in the standard notation of telecoms “Block Diagrams”. The functional modules shall directly correspond to the individual symbols employed in standard telecommunication block diagrams. Using these modules in a variety of configurations the fundamental module set shall provide a wide range of analog and digital telecommunications signals and experiments. The system shall be capable of expanding to include more advanced or specialized telecommunications experiments via a plug-in expansion interface. The expansion boards will likewise implement additional fundamental functional circuit blocks, as well as student project capability.</p> <p>Required System Capabilities: The system shall have the option to have an in-built multichannel PC-based test instrument with USB interface, providing oscilloscope, spectrum and meter measurement functionality, as well as signal generation/function generator, via PC-based software.</p> <p>A complete set of documentation including User Manual and Student Text shall be included with each system. The text shall provide step by step instructions on a wide range of analog and digital experiments and shall cover, but not limited to the following;</p> <p>The system shall provide in a single housing, the following independently functioning modules that can be patched together by the student to carry out telecommunications experiments;</p> <ul style="list-style-type: none"> • Amplitude Modulation (AM) • Double Sideband Modulation (DSBSC) • Amplitude Demodulation • Double Sideband Demodulation • Single Sideband Modulation and Demodulation • FM Modulation • FM Demodulation • Sampling and Reconstruction • PCM Encoding and PCM Decoding

	<ul style="list-style-type: none"> • Bandwidth Limiting and restoring of digital Signals • Amplitude Shift Keying (ASK) • Frequency Shift Keying (FSK) • Binary Phase Shift Keying (BPSK) • Quadrature Phase Shift Keying (QPSK) • Spread Spectrum – DSSS Modulation and Demodulation
2.	<p>Add-on Module: Signals and Systems Board Trainer must comply and perform the following:</p> <ul style="list-style-type: none"> • FIR Filter Analysis and Design • IIR Filter Analysis and Design • Computation of Transforms • Periodic Signals • Non-periodic Signals • Measurements on Filter Response • Sampling and Quantization <p>Circuit Blocks</p> <p>A. DSP Engine ADC input:</p> <ul style="list-style-type: none"> • Internal analog input: 1x12 bit ADC, with user configurable sampling frequency & level shifting • Input filtering: 1st order LPF, f-dB=8,8kHz • Input signal range: Full scale+/- 2V pk Vpp. Protected with zener-diode clamps • Input Impedance: 400kohm, DC coupled • Input DC offset: <+/-0.1V DAC output: • Out signal range: +/- 3.3Vpk • Output impedance: 330ohm, DC coupled • Output DC offset: <+/-0.1V • DC output to input gain: $3.3/2 = +1.65$ CLK output: • Output signal level: 0-+4 V • Output impedance: 47-ohm, DC coupled • Sampling rate range: 100-20ksps; user configurable; dependent on filter order. Untuned Fs accuracy +/- 8%. Tuning of sampling rate via software <p>Circuit Blocks</p> <p>B. Arbitrary Waveform Generator</p> <ul style="list-style-type: none"> • Output signal range: +/- 4 Vpk • Output impedance: 330-ohm, DC coupled • Output DC offset: Tuneable by user via software control • Output sample length: 10-500 samples maximum, for both channels. <p>User definable</p> <ul style="list-style-type: none"> • Output sample rate: fixed, one sample every 20us (50ksps) <p>C. Integrator</p> <ul style="list-style-type: none"> • Input signal range: +/- 4V pk Vpp. • Input impedance: 56kohm, DC Coupled • Input DC offset: < +/- -0.1V • INTEGRATION RATE: $k=9500/\text{sec}$ (approx.) • Output signal range: +/- 10Vpk • Output impedance: 330-ohm, DC coupled • Output DC offset< +/- -0.1V <p>D. Integrate & Dump / Hold</p> <ul style="list-style-type: none"> • Input signal range: +/- 4V pk Vpp.

	<ul style="list-style-type: none"> • Input impedance: 56kohm, DC Coupled • Input DC offset: < +/- -0.1V • Input signal level: digital,00-+4v • Input impedance 56kohm, DC coupled • CLK frequency: <20 kHz
3.	<p>Controllable Resistive Load</p> <ul style="list-style-type: none"> • Must be an all-purpose heavy-duty three-phase resistive load with adjustable power consumption up to 0.3 kW. • The resistance of each phase is separately adjustable in 15 steps from 7020 Ω to 470 Ω. • Resistance per phase adjustable in 15 steps: 7020Ω/500Ω/2330Ω/1750Ω/1400Ω/1170Ω/1000Ω/875Ω/780Ω/700Ω/640Ω/580Ω/540Ω/500Ω/470Ω • For 230 V mains voltage, the maximum power rating is 112 W per phase. • R-tolerance: +/- 2 % • Insulation in stage 0 (load disconnected): > 1 MΩ • Fuse 1.6 A per phase • Inputs with 4 mm safety sockets • With 400 mm table-top housing with dimensions: 300 mm x 400 mm x 180 mm • Mains voltage: 115 V / 230 V 50 Hz • Control input is mains voltage tolerant • Load-controlled fans • Phase detection for stress-reduced switching • Over temperature sensors with automatic shutdown and fault indication • Burn-off-proof resistors <p>Must have the following modes of operation:</p> <ol style="list-style-type: none"> 1. Direct manual control via buttons on the device: In this stand-alone mode, no further control devices are required and the load can easily be integrated into existing set-ups. Both, balanced load configurations and unbalanced configurations are supported. 2. Triggered switching: Triggered switching of a user defined balanced or unbalanced load configurations is also possible via the control input. In this way, the influence of loads on transformers or generators can be investigated and demonstrated 3. Remote control: The resistive load can also be controlled via the analog input 0 to 10 V This allows a direct control of balanced load levels as well as a triggered or scenario-based switching of the resistors
4.	<p>Controllable Capacitive Load</p> <ul style="list-style-type: none"> • Capacitance per phase adjustable in 15 steps: 0.57μF/1.14μF/1.7μF/2.35μF/ 2.9 μF/ 3.5 μF/ 4.1 μF/ 4.7 μF/ 5.3 μF/ 5.8 μF/ 6.4 μF/ 7.0 μF/ 7.6 μF/ 8.2 μF/ 8.8 μF • For a 230 V mains voltage, the maximum power rating is 145 var per phase. • C-tolerance: +/- 5 % • Insulation in stage 0 (load disconnected): > 1 MΩ Fuse 1.6 A per phase • Inputs with 4 mm safety sockets • 400 mm table-top housing with dimensions: 300 mm x 400 mm x 180 mm • Mains voltage: 115 V / 230 V 50 Hz Control input is mains voltage tolerant Load-controlled fans • Phase detection for stress-reduced switching • Over temperature sensors with automatic shutdown and fault indication
5.	<p>Controllable Inductive Load</p> <ul style="list-style-type: none"> • Inductance per phase adjustable in 15 steps: 16 H/ 8 H/ 5,3 H/ 4 H/ 3,2 H/ 2,7 H/ 2,3 H/ 2 H/ 1,78 H/ 1,6 H/ 1,45 H/ 1,33 H/ 1,23 H/ 1,14 H/ 1,07 H • For a 230 V mains voltage, the maximum power rating is 157 var per phase. • L-tolerance: +/- 10 %

	<ul style="list-style-type: none"> • Insulation in stage 0 (load disconnected): > 1 MΩ • Inputs with 4 mm safety sockets • Load-controlled fans • Phase detection for stress-reduced switching
6.	<p>Two (2) level Panel Frame and Storage Mount</p> <p>Frame:</p> <ul style="list-style-type: none"> • 3-level frame for training panels in DIN A4 equivalent height, for high load • With aluminum profile rails with 2 brush strips and reinforced with rectangular steel tubing on the rear side • 2 T-bases of rectangular steel tubing • with 2 M8 wing screws • Width: 1550 mm, Height: 1090 mm, Depth: 300 mm
7.	<p>RMS Meters</p> <p>Voltage: 3/10/30/100/300/1000 V, Ri = 10 MΩ Current: 0.1/0.3/1/3/10/30 A, Ri = 10 mΩ</p> <p>AV-Polarity indicator: 2 LEDs Instrument: Moving coil (Class 2.5) Scale division: 0 to 10 and 0 to 3</p> <p>Continuous overload protection in all measurement ranges up to 1000 V and 30 A</p>
8.	<p>Power Factor Meter</p> <p>Power factor: 0...1...0</p> <p>Phase angle: -90°(cap.)- 0 - +90°(ind.) Voltage range: 3...1000 V, Ri = 1 MΩ</p> <p>Current range: 0.1...30 A, Ri = 10 mΩ</p> <p>Frequency range: 20 Hz... 2 kHz</p> <p>No voltage range/current range switching Instrument: moving coil, class 2.5</p> <p>192 x 96 mm (W x H) Scale length: 119 MM</p> <p>Continuous overload protection in all measurement ranges up to 1000 V and 30 A</p>
9.	<p>Set of bridging plugs, leads and cables</p> <p>Safety Bridging Plugs, set of 10 (2 sets) Color: Black</p> <p>Current rating: 32 A</p> <p>Safety Bridging Plugs, set of 10 (1 set) Color: Yellow / Green</p> <p>Current rating: 32 A</p> <p>Safety experiment cables, 32 A, set of 34 (1 set)</p> <p>Safety experiment cables, 32 A, yellow/green, set of 5 (1 set)</p>
<p>Note: With Training and Installation included.</p>	

Section VIII. Bid Documents Checklist

This Bid Documents Checklist is provided to guide the Bidder in preparing his/her bid. The checklist may be used by the Bidder to verify if the Bid includes all the prescribed documents.

The Bidder, in submitting the required documents, must use the prescribed forms found in Section X. Bidding Forms. However, should a bidder choose to use a different formatting style for a required document, the bidder must ensure that the substance in the form given in Section X for that particular document is substantially captured in the equivalent document.

I. TECHNICAL COMPONENT ENVELOPE

Class "A" Documents

Legal Documents

- (a) Valid PhilGEPS Registration Certificate (Platinum Membership) (all pages) in accordance with Section 8.5.2 of the IRR;

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, except under conditions provided for in Sections 23.4.1.3 and 23.4.2.4 of the 2016 revised IRR of RA No. 9184, within the relevant period as provided in the Bidding Documents; and
- (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).

Section IX. Bidding Forms

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[Bidder's Letterhead]

[Date]

To: Tarlac State University
Re: Invitation to Bid No.

Statement of Single Largest Completed Contract Similar to the Contract to be Bid

Row 1: Name of Contract Row 2: Location	Contract Price	Row 1: Procuring Entity Row 2: Address Row 3: Contact Person/Tel. No.	Description of Goods	Date of Award	Date Completed

Attached herewith are the following documents: Contract Agreement, Notice of Award, Notice to Proceed, Official Receipt/Invoice, Certificate of Final Inspection, and Certificate of Acceptance, as evidences in support of the foregoing information.

I/We certify that the foregoing information and all of the supporting documents are true and correct.

[Signature]
[Name of Bidder or Authorized Representative]
[Position or Title]

BID SECURING DECLARATION

REPUBLIC OF THE PHILIPPINES)

CITY OF _____) S.S.

Project Invitation to Bid No.: *[Insert number]*

To: Tarlac State University

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.
2. I/We accept that: (a) I/we will be automatically disqualified from bidding for any procurement contract with any procuring entity for a period of two (2) years upon receipt of your Blacklisting Order; and, (b) I/we will pay the applicable fine provided under Section 6 of 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 23.1(b), 34.2, 40.1 and 69.1, except 69.1(f), of the IRR of RA No. 9184; 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; and
 - c. I am/we are declared the bidder with the Lowest Calculated Responsive Bid, 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]*.

*[Insert NAME OF BIDDER OR ITS
AUTHORIZED REPRESENTATIVE]*

[Insert signatory's legal capacity]

Affiant

[Jurat]

[Format shall be based on the latest Rules on Notarial Practice]

[Bidder's Letterhead]

[Date]

To: Tarlac State University
 Re: Invitation to Bid No.

Compliance to the Technical Specifications

Item No.	Description	Bidder's Compliance State "Comply" below if your offer is complying with the specifications, otherwise state "We are offering the same goods with the following specifications [State the complete specifications of the alternative offer]"
Electronics Engineering Equipment		
1.	<p>Advanced Telecommunications Experimenter Power Source: Multi-voltage plug pack Power Supply: 9V to 15V DC, 1A maximum Protection: Reverse polarity and self-resetting circuit breaker protection above 16V Absolute Maximum Supply Input: 30V DC Operating Temperature Range: 10 to 30 degrees C Storage Temperature Range: 5 to 40 degrees C Humidity: Up to 90% RH, non-condensing Accessories: Patch Cords: 20 x 2mm-2mm stackable patch cords Scope leads: 3 x 2mm-to-BNC coaxial oscilloscope leads Headphones: 1 x lightweight stereo headphones, 24ohm, 3.5mm male stereo plug Plug Pack: multi-input voltage with 12V/1A output, regulated (tip must be positive)</p> <p>Required System Capabilities: The single board unit shall enable the student to quickly build a working model of thirty or more analog or digital modulation encoding techniques. Student shall be able to construct experiments by patching together fundamental functional module blocks that correspond to those used in the standard notation of telecoms "Block Diagrams". The functional modules shall directly correspond to the individual symbols employed in standard telecommunication block diagrams. Using these modules in a variety of configurations the fundamental module set shall provide a wide range of analog and digital telecommunications signals and experiments. The system shall be capable of expanding to include more advanced or specialized telecommunications experiments via a plug-in expansion interface. The expansion boards will likewise implement additional fundamental functional circuit blocks, as well as student project capability.</p> <p>Required System Capabilities: The system shall have the option to have an in-built multichannel PC-based test instrument with USB interface, providing oscilloscope,</p>	

	<p>spectrum and meter measurement functionality, as well as signal generation/function generator, via PC-based software.</p> <p>A complete set of documentation including User Manual and Student Text shall be included with each system. The text shall provide step by step instructions on a wide range of analog and digital experiments and shall cover, but not limited to the following;</p> <p>The system shall provide in a single housing, the following independently functioning modules that can be patched together by the student to carry out telecommunications experiments;</p> <ul style="list-style-type: none"> • Amplitude Modulation (AM) • Double Sideband Modulation (DSBSC) • Amplitude Demodulation • Double Sideband Demodulation • Single Sideband Modulation and Demodulation • FM Modulation • FM Demodulation • Sampling and Reconstruction • PCM Encoding and PCM Decoding • Bandwidth Limiting and restoring of digital Signals • Amplitude Shift Keying (ASK) • Frequency Shift Keying (FSK) • Binary Phase Shift Keying (BPSK) • Quadrature Phase Shift Keying (QPSK) • Spread Spectrum – DSSS Modulation and Demodulation 	
2.	<p>Add-on Module: Signals and Systems Board</p> <p>Trainer must comply and perform the following:</p> <ul style="list-style-type: none"> • FIR Filter Analysis and Design • IIR Filter Analysis and Design • Computation of Transforms • Periodic Signals • Non-periodic Signals • Measurements on Filter Response • Sampling and Quantization <p>Circuit Blocks</p> <p>A. DSP Engine</p> <p>ADC input:</p> <ul style="list-style-type: none"> • Internal analog input: 1x12 bit ADC, with user configurable sampling frequency & level shifting • Input filtering: 1st order LPF, f-dB=8,8kHz • Input signal range: Full scale+/- 2V pk Vpp. Protected with zener-diode clamps • Input Impedance: 400kohm, DC coupled • Input DC offset: <+/-0.1V DAC output: • Out signal range: +/- 3.3Vpk • Output impedance: 330ohm, DC coupled • Output DC offset: <+/-0.1V • DC output to input gain: $3.3/2 = +1.65$ CLK output: • Output signal level: 0-+4 V • Output impedance: 47-ohm, DC coupled • Sampling rate range: 100-20ksps; user configurable; dependent on filter order. Untuned Fs accuracy +/- 8%. Tuning of sampling rate via software <p>Circuit Blocks</p>	

	<p>B. Arbitrary Waveform Generator</p> <ul style="list-style-type: none"> • Output signal range: +/- 4 Vpk • Output impedance: 330-ohm, DC coupled • Output DC offset: Tuneable by user via software control • Output sample length: 10-500 samples maximum, for both channels. User definable • Output sample rate: fixed, one sample every 20us (50ksps) <p>C. Integrator</p> <ul style="list-style-type: none"> • Input signal range: +/- 4V pk Vpp. • Input impedance: 56kohm, DC Coupled • Input DC offset: < +/- -0.1V • INTEGRATION RATE: k=9500/sec (approx.) • Output signal range: +/- 10Vpk • Output impedance: 330-ohm, DC coupled • Output DC offset< +/- -0.1V <p>D. Integrate & Dump / Hold</p> <ul style="list-style-type: none"> • Input signal range: +/- 4V pk Vpp. • Input impedance: 56kohm, DC Coupled • Input DC offset: < +/- -0.1V • Input signal level: digital,00-+4v • Input impedance 56kohm, DC coupled • CLK frequency: <20 kHz 	
3.	<p>Controllable Resistive Load</p> <ul style="list-style-type: none"> • Must be an all-purpose heavy-duty three-phase resistive load with adjustable power consumption up to 0.3 kW. • The resistance of each phase is separately adjustable in 15 steps from 7020 Ω to 470 Ω. • Resistance per phase adjustable in 15 steps: 7020Ω/500Ω/2330Ω/1750Ω/1400Ω/1170Ω/1000Ω/875Ω/780Ω/700Ω/640Ω/580Ω/540Ω/500Ω/470Ω • For 230 V mains voltage, the maximum power rating is 112 W per phase. • R-tolerance: +/- 2 % • Insulation in stage 0 (load disconnected): > 1 MΩ • Fuse 1.6 A per phase • Inputs with 4 mm safety sockets • With 400 mm table-top housing with dimensions: 300 mm x 400 mm x 180 mm • Mains voltage: 115 V / 230 V 50 Hz • Control input is mains voltage tolerant • Load-controlled fans • Phase detection for stress-reduced switching • Over temperature sensors with automatic shutdown and fault indication • Burn-off-proof resistors <p>Must have the following modes of operation:</p> <ol style="list-style-type: none"> 1. Direct manual control via buttons on the device: In this stand-alone mode, no further control devices are required and the load can easily be integrated into existing set-ups. Both, balanced load configurations and unbalanced configurations are supported. 2. Triggered switching: Triggered switching of a user defined balanced or unbalanced load configurations is also possible via the control input. In this way, the influence of loads on transformers or generators can be investigated and demonstrated 	

	<p>3. Remote control: The resistive load can also be controlled via the analog input 0 to 10 V This allows a direct control of balanced load levels as well as a triggered or scenario-based switching of the resistors</p>	
4.	<p>Controllable Capacitive Load</p> <ul style="list-style-type: none"> Capacitance per phase adjustable in 15 steps: 0.57µF/1.14µF/1.7µF/2.35µF/ 2.9 µF/ 3.5 µF/ 4.1 µF/ 4.7 µF/ 5.3 µF/ 5.8 µF/ 6.4 µF/ 7.0 µF/ 7.6 µF/ 8.2 µF/ 8.8 µF <p>For a 230 V mains voltage, the maximum power rating is 145 var per phase. C-tolerance: +/- 5 % Insulation in stage 0 (load disconnected): > 1 MΩ Fuse 1.6 A per phase Inputs with 4 mm safety sockets 400 mm table-top housing with dimensions: 300 mm x 400 mm x 180 mm Mains voltage: 115 V / 230 V 50 Hz Control input is mains voltage tolerant Load-controlled fans Phase detection for stress-reduced switching Over temperature sensors with automatic shutdown and fault indication</p>	
5.	<p>Controllable Inductive Load</p> <ul style="list-style-type: none"> Inductance per phase adjustable in 15 steps: 16 H/ 8 H/ 5,3 H/ 4 H/ 3,2 H/ 2,7 H/ 2,3 H/ 2 H/ 1,78 H/ 1,6 H/ 1,45 H/ 1,33 H/ 1,23 H/ 1,14 H/ 1,07 H For a 230 V mains voltage, the maximum power rating is 157 var per phase. L-tolerance: +/- 10 % Insulation in stage 0 (load disconnected): > 1 MΩ Inputs with 4 mm safety sockets Load-controlled fans Phase detection for stress-reduced switching 	
6.	<p>Two (2) level Panel Frame and Storage Mount</p> <p>Frame:</p> <ul style="list-style-type: none"> 3-level frame for training panels in DIN A4 equivalent height, for high load With aluminum profile rails with 2 brush strips and reinforced with rectangular steel tubing on the rear side 2 T-bases of rectangular steel tubing with 2 M8 wing screws Width: 1550 mm, Height: 1090 mm, Depth: 300 mm 	
7.	<p>RMS Meters</p> <p>Voltage: 3/10/30/100/300/1000 V, Ri = 10 MΩ Current: 0.1/0.3/1/3/10/30 A, Ri = 10 mΩ AV-Polarity indicator: 2 LEDs Instrument: Moving coil (Class 2.5) Scale division: 0 to 10 and 0 to 3 Continuous overload protection in all measurement ranges up to 1000 V and 30 A</p>	
8.	<p>Power Factor Meter</p> <p>Power factor: 0...1...0 Phase angle: -90°(cap.)- 0 - +90°(ind.) Voltage range: 3...1000 V, Ri = 1 MΩ Current range: 0.1...30 A, Ri = 10 mΩ Frequency range: 20 Hz... 2 kHz No voltage range/current range switching Instrument: moving coil, class 2.5 192 x 96 mm (W x H) Scale length: 119 MM Continuous overload protection in all measurement ranges up to 1000 V and 30 A</p>	
9.	<p>Set of bridging plugs, leads and cables</p> <p>Safety Bridging Plugs, set of 10 (2 sets) Color: Black</p>	

	<p>Current rating: 32 A</p> <p>Safety Bridging Plugs, set of 10 (1 set) Color: Yellow / Green Current rating: 32 A</p> <p>Safety experiment cables, 32 A, set of 34 (1 set)</p> <p>Safety experiment cables, 32 A, yellow/green, set of 5 (1 set)</p>	
<p>Note: With Training and Installation included.</p>		

Note: Bidders must state in the Statement of Compliance either “**Comply**” or “**Not Comply**” against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of “Comply” or “Not Comply” must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer’s un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidders statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the provision of **ITB** Clause 4.

Attached herewith are the manufacturer’s product literature(s) and certification(s) that we are authorized to sell the goods.

We certify that the foregoing information and the supporting documents are true and correct.

[Signature]
 [Name of Authorized Signatory]
[Position/Title of Authorized Signatory]

Omnibus Sworn Statement

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

AFFIDAVIT

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

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

- b. *If a sole proprietorship:* I am the sole proprietor or authorized representative of *[Name of Bidder]* with office address at *[address of Bidder]*;
- c. *If a partnership, corporation, cooperative, or joint venture:* I am the duly authorized and designated representative of *[Name of Bidder]* with office address at *[address of Bidder]*;

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

- a. *If a sole proprietorship:* As the owner and sole proprietor, or authorized representative of *[Name of Bidder]*, I have full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for *[Name of the Project]* of the *[Name of the Procuring Entity]*, as shown in the attached *duly notarized Special Power of Attorney*;
 - b. *If a partnership, corporation, cooperative, or joint venture:* I am granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for *[Name of the Project]* of the *[Name of the Procuring Entity]*, as shown in the attached *[state title of attached document showing proof of authorization (e.g., duly notarized Secretary's Certificate, Board/Partnership Resolution, or Special Power of Attorney, whichever is applicable)]*;
3. *[Name of Bidder]* is not "blacklisted" or barred from bidding by the Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units, foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the Government Procurement Policy Board, by itself or by relation, membership, association, affiliation, or controlling interest with another blacklisted person or entity as defined and provided for in the Uniform Guidelines on Blacklisting;
4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;
5. *[Name of Bidder]* is authorizing the Head of the Procuring Entity or its duly authorized representative(s) to verify all the documents submitted;

6. **Select one, delete the rest:**

- a. *If a sole proprietorship:* The owner or sole proprietor is not related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;
- b. *If a partnership or cooperative:* None of the officers and members of *[Name of Bidder]* is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of

the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

- c. *If a corporation or joint venture:* None of the officers, directors, and controlling stockholders of *[Name of Bidder]* is related to the Head of the Procuring Entity, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;
7. *[Name of Bidder]* complies with existing labor laws and standards; and
 8. *[Name of Bidder]* is aware of and has undertaken the following responsibilities as a Bidder:
 - a. Carefully examine all of the Bidding Documents;
 - b. Acknowledge all conditions, local or otherwise, affecting the implementation of the Contract;
 - c. Made an estimate of the facilities available and needed for the contract to be bid, if any; and
 - d. Inquire or secure Supplemental/Bid Bulletin(s) issued for the *[Name of the Project]*.
 9. *[Name of Bidder]* did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.
 10. In case advance payment was made or given, failure to perform or deliver any of obligations and undertakings in the contract shall be sufficient grounds to constitute criminal liability for Swindling (Estafa) or the commission of fraud with unfaithfulness or abuse of confidence through misappropriating or converting any payment received by a person or entity under an obligation involving the duty to delivery certain goods or services, to the prejudice of the public and the government of the Philippines pursuant to Article 315 of Act No. 3815 s. 1930, as amended, or the Revised Penal Code.

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

Bidder's Representative/Authorized Signatory

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

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

NAME OF NOTARY PUBLIC

Serial No. of Commission _____

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 _____

[Bidder's Letterhead]

[Date]

To: Tarlac State University
Re: Invitation to Bid No.

NET FINANCIAL CONTRACTING CAPACITY

Based on our Income Tax Return and Audited Financial Statement for the Fiscal Year [YEAR], duly submitted to the Bureau of Internal Revenue, and which form part of our Bid, the summary of our firm's financial condition is as given below:

		Year [YEAR]
1.	Total Assets	
2.	Current Assets	
3.	Total Liabilities	
4.	Current Liabilities	
5.	Net Worth (1-3)	
6.	Net Working Capital (2-4)	

Based on the aforementioned data and the Value of Outstanding Works from the Statement of All Ongoing Government and Private Contracts, which also form part of our Bid, our Net Financial Contracting Capacity (NFCC) is:

NFCC = [(current asset minus current liabilities) (**15**)] minus [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].

NFCC =

I/We certify that the foregoing information and all of the supporting documents are true and correct.

[Signature]
[Name of Bidder or Authorized Representative]
[Position or Title]

[Bidder's Letterhead]

[Date]

FINANCIAL BID FORM

To: Tarlac State University
Re: Invitation to Bid No.

Date : _____

Project Invitation to Bid No. : _____

To: Tarlac State University

Having examined the Philippine Bidding Documents (PBDs) including the Supplemental or Bid Bulletin Numbers *[insert numbers]*, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to *[supply/deliver/perform]* *[description of the Goods]* in conformity with the said PBDs for the sum of *[total Bid amount in words and figures]* or the total calculated bid price, as evaluated and corrected for computational errors, and other bid modifications in accordance with the Price Schedules attached herewith and made part of this Bid. The total bid price 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 herein or in the Price Schedules,

If our Bid is accepted, we undertake:

- a. to deliver the goods in accordance with the delivery schedule specified in the Schedule of Requirements of the Philippine Bidding Documents (PBDs);
- b. to provide a performance security in the form, amounts, and within the times prescribed in the PBDs;
- c. to abide by the Bid Validity Period specified in the PBDs and it shall remain binding upon us at any time before the expiration of that period.

[Insert this paragraph if Foreign-Assisted Project with the Development Partner:

Commissions or gratuities, if any, paid or to be paid by us to agents relating to this Bid, and to contract execution if we are awarded the contract, are listed below:

Name and address of agent	Amount and Purpose of Currency Commission or gratuity
_____	_____
_____	_____
_____	_____

[(if none, state "None")]

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 us.

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

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

The undersigned is authorized to submit the bid on behalf of *[name of the bidder]* as evidenced by the attached *[state the written authority]*.

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.

Name: _____

Legal capacity: _____

Signature: _____

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

Date: _____

[Bidder's Letterhead]

[Date]

To: Tarlac State University
 Re: Invitation to Bid No.

SCHEDULE OF PRICES

Item No.	Description	Qty.	Unit	Unit Price	Total Price
Electronics Engineering Equipment					
1.	<p>Advanced Telecommunications Experimenter Power Source: Multi-voltage plug pack Power Supply: 9V to 15V DC, 1A maximum Protection: Reverse polarity and self-resetting circuit breaker protection above 16V Absolute Maximum Supply Input: 30V DC Operating Temperature Range: 10 to 30 degrees C Storage Temperature Range: 5 to 40 degrees C Humidity: Up to 90% RH, non-condensing Accessories: Patch Cords: 20 x 2mm-2mm stackable patch cords Scope leads: 3 x 2mm-to-BNC coaxial oscilloscope leads Headphones: 1 x lightweight stereo headphones, 24ohm, 3.5mm male stereo plug Plug Pack: multi-input voltage with 12V/1A output, regulated (tip must be positive)</p> <p>Required System Capabilities: The single board unit shall enable the student to quickly build a working model of thirty or more analog or digital modulation encoding techniques. Student shall be able to construct experiments by patching together fundamental functional module blocks that correspond to those used in the standard notation of telecoms "Block Diagrams". The functional modules shall directly correspond to the individual symbols employed in standard telecommunication block diagrams. Using these modules in a variety of configurations the fundamental module set shall provide a wide range of analog and digital telecommunications signals and experiments. The system shall be capable of expanding to include more advanced or specialized telecommunications experiments via a plug-in expansion interface. The expansion boards will likewise implement additional fundamental functional circuit blocks, as well as student project capability.</p> <p>Required System Capabilities: The system shall have the option to have an in-built multichannel PC-based test instrument with USB</p>	1	set		

	<p>interface, providing oscilloscope, spectrum and meter measurement functionality, as well as signal generation/function generator, via PC-based software.</p> <p>A complete set of documentation including User Manual and Student Text shall be included with each system. The text shall provide step by step instructions on a wide range of analog and digital experiments and shall cover, but not limited to the following;</p> <p>The system shall provide in a single housing, the following independently functioning modules that can be patched together by the student to carry out telecommunications experiments;</p> <ul style="list-style-type: none"> • Amplitude Modulation (AM) • Double Sideband Modulation (DSBSC) • Amplitude Demodulation • Double Sideband Demodulation • Single Sideband Modulation and Demodulation • FM Modulation • FM Demodulation • Sampling and Reconstruction • PCM Encoding and PCM Decoding • Bandwidth Limiting and restoring of digital Signals • Amplitude Shift Keying (ASK) • Frequency Shift Keying (FSK) • Binary Phase Shift Keying (BPSK) • Quadrature Phase Shift Keying (QPSK) • Spread Spectrum – DSSS Modulation and Demodulation 				
2.	<p>Add-on Module: Signals and Systems Board Trainer must comply and perform the following:</p> <ul style="list-style-type: none"> • FIR Filter Analysis and Design • IIR Filter Analysis and Design • Computation of Transforms • Periodic Signals • Non-periodic Signals • Measurements on Filter Response • Sampling and Quantization <p>Circuit Blocks</p> <p>A. DSP Engine ADC input:</p> <ul style="list-style-type: none"> • Internal analog input: 1x12 bit ADC, with user configurable sampling frequency & level shifting • Input filtering: 1st order LPF, f-dB=8,8kHz • Input signal range: Full scale+/- 2V pk Vpp. Protected with zener-diode clamps • Input Impedance: 400kohm, DC coupled • Input DC offset: <+/-0.1V DAC output: • Out signal range: +/- 3.3Vpk • Output impedance: 330ohm, DC coupled • Output DC offset: <+/-0.1V 	6	set		

	<ul style="list-style-type: none"> • DC output to input gain: $3.3/2 = +1.65$ CLK output: • Output signal level: 0-+4 V • Output impedance: 47-ohm, DC coupled • Sampling rate range: 100-20ksps; user configurable; dependent on filter order. Untuned Fs accuracy +/- 8%. Tuning of sampling rate via software <p>Circuit Blocks</p> <p>B. Arbitrary Waveform Generator</p> <ul style="list-style-type: none"> • Output signal range: +/- 4 Vpk • Output impedance: 330-ohm, DC coupled • Output DC offset: Tuneable by user via software control • Output sample length: 10-500 samples maximum, for both channels. User definable • Output sample rate: fixed, one sample every 20us (50ksps) <p>C. Integrator</p> <ul style="list-style-type: none"> • Input signal range: +/- 4V pk Vpp. • Input impedance: 56kohm, DC Coupled • Input DC offset: < +/- -0.1V • INTEGRATION RATE: k=9500/sec (approx.) • Output signal range: +/- 10Vpk • Output impedance: 330-ohm, DC coupled • Output DC offset< +/- -0.1V <p>D. Integrate & Dump / Hold</p> <ul style="list-style-type: none"> • Input signal range: +/- 4V pk Vpp. • Input impedance: 56kohm, DC Coupled • Input DC offset: < +/- -0.1V • Input signal level: digital,00-+4v • Input impedance 56kohm, DC coupled • CLK frequency: <20 kHz 				
3.	<p>Controllable Resistive Load</p> <ul style="list-style-type: none"> • Must be an all-purpose heavy-duty three-phase resistive load with adjustable power consumption up to 0.3 kW. • The resistance of each phase is separately adjustable in 15 steps from 7020 Ω to 470 Ω. • Resistance per phase adjustable in 15 steps: 7020Ω/500Ω/2330Ω/1750Ω/1400Ω/1170Ω/1000Ω/875Ω/780Ω/700Ω/640Ω/580Ω/540Ω/500Ω/470Ω • For 230 V mains voltage, the maximum power rating is 112 W per phase. • R-tolerance: +/- 2 % • Insulation in stage 0 (load disconnected): > 1 MΩ 	1	set		

	<ul style="list-style-type: none"> • Fuse 1.6 A per phase • Inputs with 4 mm safety sockets • With 400 mm table-top housing with dimensions: 300 mm x 400 mm x 180 mm • Mains voltage: 115 V / 230 V 50 Hz • Control input is mains voltage tolerant • Load-controlled fans • Phase detection for stress-reduced switching • Over temperature sensors with automatic shutdown and fault indication • Burn-off-proof resistors <p>Must have the following modes of operation:</p> <ol style="list-style-type: none"> 1. Direct manual control via buttons on the device: In this stand-alone mode, no further control devices are required and the load can easily be integrated into existing set-ups. Both, balanced load configurations and unbalanced configurations are supported. 2. Triggered switching: Triggered switching of a user defined balanced or unbalanced load configurations is also possible via the control input. In this way, the influence of loads on transformers or generators can be investigated and demonstrated 3. Remote control: The resistive load can also be controlled via the analog input 0 to 10 V This allows a direct control of balanced load levels as well as a triggered or scenario-based switching of the resistors 				
4.	<p>Controllable Capacitive Load</p> <ul style="list-style-type: none"> • Capacitance per phase adjustable in 15 steps: 0.57µF/1.14µF/1.7µF/2.35µF/ 2.9 µF/ 3.5 µF/ 4.1 µF/ 4.7 µF/ 5.3 µF/ 5.8 µF/ 6.4 µF/ 7.0 µF/ 7.6 µF/ 8.2 µF/ 8.8 µF <p>For a 230 V mains voltage, the maximum power rating is 145 var per phase. C-tolerance: +/- 5 % Insulation in stage 0 (load disconnected): > 1 MΩ Fuse 1.6 A per phase Inputs with 4 mm safety sockets 400 mm table-top housing with dimensions: 300 mm x 400 mm x 180 mm Mains voltage: 115 V / 230 V 50 Hz Control input is mains voltage tolerant Load-controlled fans Phase detection for stress-reduced switching Over temperature sensors with automatic shutdown and fault indication</p>	1	set		
5.	<p>Controllable Inductive Load</p> <ul style="list-style-type: none"> • Inductance per phase adjustable in 15 steps: 16 H/ 8 H/ 5,3 H/ 4 H/ 3,2 H/ 2,7 H/ 2,3 H/ 2 H/ 1,78 H/ 1,6 H/ 1,45 H/ 1,33 H/ 1,23 H/ 1,14 H/ 1,07 H <p>For a 230 V mains voltage, the maximum power rating is 157 var per phase. L-tolerance: +/- 10 % Insulation in stage 0 (load disconnected): > 1 MΩ</p> <ul style="list-style-type: none"> • Inputs with 4 mm safety sockets • Load-controlled fans 	1	set		

	<ul style="list-style-type: none"> Phase detection for stress-reduced switching 				
6.	<p>Two (2) level Panel Frame and Storage Mount Frame:</p> <ul style="list-style-type: none"> 3-level frame for training panels in DIN A4 equivalent height, for high load With aluminum profile rails with 2 brush strips and reinforced with rectangular steel tubing on the rear side 2 T-bases of rectangular steel tubing with 2 M8 wing screws Width: 1550 mm, Height: 1090 mm, Depth: 300 mm 	1	set		
7.	<p>RMS Meters Voltage: 3/10/30/100/300/1000 V, Ri = 10 MΩ Current: 0.1/0.3/1/3/10/30 A, Ri = 10 mΩ AV-Polarity indicator: 2 LEDs Instrument: Moving coil (Class 2.5) Scale division: 0 to 10 and 0 to 3 Continuous overload protection in all measurement ranges up to 1000 V and 30 A</p>	1	set		
8.	<p>Power Factor Meter Power factor: 0...1...0 Phase angle: -90°(cap.)- 0 - +90°(ind.) Voltage range: 3...1000 V, Ri = 1 MOhm Current range: 0.1...30 A, Ri = 10 mOhm Frequency range: 20 Hz... 2 kHz No voltage range/current range switching Instrument: moving coil, class 2.5 192 x 96 mm (W x H) Scale length: 119 MM Continuous overload protection in all measurement ranges up to 1000 V and 30 A</p>	1	set		
9.	<p>Set of bridging plugs, leads and cables Safety Bridging Plugs, set of 10 (2 sets) Color: Black Current rating: 32 A</p> <p>Safety Bridging Plugs, set of 10 (1 set) Color: Yellow / Green Current rating: 32 A</p> <p>Safety experiment cables, 32 A, set of 34 (1 set)</p> <p>Safety experiment cables, 32 A, yellow/green, set of 5 (1 set)</p>	1	set		
Aggregate Bid Amount					

[Signature]
 [Name of Authorized Signatory]
 [Position/Title of Authorized Signatory]