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 IT Equipment for the University (APP 2022)

With an Approved Budget for the Contract (ABC) *of*
Nine Million Four Hundred Eighty-Two Thousand One Hundred Fifty Pesos (₱ 9,482,150.00)

Invitation to Bid No. 2021-014
PhilGeps Reference No.: 8153552

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
Romulo Blvd., San Vicente, Tarlac City
Tel. No.: (045) 982 4630
Website: www.tsu.edu.ph

INVITATION TO BID

For the Project

Supply and Delivery of IT Equipment for the University (APP 2022)

Invitation to Bid No. 2021-014

1. The Tarlac State University, through Regular Agency Fund (RAF) and Special Fund (SB) 2021 intends to apply the sum of **Nine Million Four Hundred Eighty-Two Thousand One Hundred Fifty Pesos (₱ 9,482,150.00)** to payments under the contracts for the project: **Supply and Delivery of IT Equipment for the University (APP 2022)** comprising of the following lots with their corresponding Approved Budget for the Contracts (ABCs):

Lot Number	Description	ABC, ₱
Lot 1	Computers and Printers	8,522,400.00
Lot 2	Network Equipment	959,750.00

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

2. The Tarlac State University now invites bids for the project: **Supply and Delivery of IT Equipment for the University (APP 2022).** Delivery of the Goods is required within **ninety (90) 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 8:00 A.M. to 5:00 P.M:

5. A complete set of Bidding Documents may be acquired by interested Bidders from **November 5, 2021** to **November 24, 2021** from the aforementioned address upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB, as indicated below:

Lot Number	Bidding Documents Fee, ₱
Lot 1	7,500.00
Lot 2	500.00

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 **November 12, 2021 (2:00 P.M.) via Zoom Meeting. Meeting ID: 895 4451 3020 Passcode: 756263,** which shall be open to prospective bidders.

7. Bids must be duly received by the BAC Secretariat at the address below on or before **November 24, 2021 (2:00 P.M.)**. Late bids shall not be accepted.

BAC Secretariat
Gender and Development Building
Tarlac State University
Romulo Blvd., San Vicente, Tarlac City
Tel. No. (045) 606-8142
Email: **bacsec@tsu.edu.ph** / **jmamanankil@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 **November 24, 2021**, at 2:00 P.M.**,** at the Business Center Audio-Visual Room, 2nd Floor, Business Center Bldg., 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 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.

11. For further information, please refer to:

Ms. Jhenna Micah A. Manankil/Ms. Maria Ysabela S. Galang
BAC Secretariat
Gender and Development Building
Tarlac State University
Romulo Blvd., San Vicente, Tarlac City
Tel. No. (045) 606-8142
Email: **bacsec@tsu.edu.ph** / **jmamanankil@tsu.edu.ph**

(sgd) CONSOLACION S. LAGMAN
BAC Chairperson

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 IT Equipment for the University (APP 2022)**, with identification number **Invitation to Bid No. 2021-014**.

1.2. The procurement project (referred to herein as "Project"") is composed of two (2) lots, the details of which are described in Section VII. Technical Specifications.

2. Funding Information

2.1. The GOP through the source of funding as indicated below for **2022** in the amount of **₱ 9,482,150.00**.

2.2. The source of funding is the **General Appropriations Act (GAA 2022)**.

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 shall have a SLCC that is at least one (1) contract similar to the Project with a value, adjusted to current prices using the PSA's CPI, that is at least equivalent to fifty percent (50 %) of the ABC or the Bidder shall have a SLCC that is at least two (2) contracts that are similar to the Project with the aggregate amount of the contracts being equivalent to at least fifty percent (50 %) of the ABC, provided that the largest of these similar contracts must have a value that is at least equivalent to one half of the percentage of the ABC as required above.

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 March 24, 2022. 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 grouped into two (2) lots which shall be awarded as two (2) 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	The bid security shall be in the form of a Bid Securing Declaration, or any of the following forms and amounts: a. The amount of not less than 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	The ABC for each lot is given below. <table><tr><td>Lot Number</td><td>Description</td><td>ABC, ₱</td></tr><tr><td>Lot 1</td><td>Computers and Printers</td><td>8,522,400.00</td></tr><tr><td>Lot 2</td><td>Network Equipment</td><td>959,750.00</td></tr></table>
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	**Delivery and Documents –** For purposes of the Contract, "EXW," "FOB," "FCA," "CIF," "CIP," "DDP" and other trade terms used to describe the obligations of the parties shall have the meanings assigned to them by the current edition of INCOTERMS published by the International Chamber of Commerce, Paris. The Delivery terms of this Contract shall be as follows: 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." Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in Section VI. Schedule of Requirements.
	Packaging – The Supplier shall provide such packaging of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in this Contract. The packaging shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packaging case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit. The packaging, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified below, and in any subsequent instructions ordered by the Procuring Entity. The outer packaging must be clearly marked on at least four (4) sides as follows: Name of the Procuring Entity Name of the Supplier Contract Description Final Destination Gross weight Any special lifting instructions Any special handling instructions Any relevant HAZCHEM classifications A packaging list identifying the contents and quantities of the package is to be placed on an accessible point of the outer packaging if practical. If not practical the packaging list is to be placed inside the outer packaging but outside the secondary packaging.
	Transportation – Where the Supplier is required under Contract to deliver the Goods CIF, CIP, or DDP, transport of the Goods to the port of destination or such other named place of destination in the Philippines, as shall be specified in this Contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price.

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

Section VI. Schedule of Requirements

The delivery date for the Goods covered by the Contract shall be within ninety (90) calendar days upon receipt of the Notice to Proceed.

Section VII. Technical Specifications

Item No.	Description
	Lot 1 – Computers and Printers
1.	Computer, Desktop, with OS, monitor, keyboard, mouse, and UPS Processor: Intel i5 10th Gen or latest equivalent OS: Pre-loaded OEM Windows 10 Pro 64bit English (Genuine Microsoft OS Media Kit CD Included, Proof of OS genuinity must be included) Memory: 8 GB (2 x 4 GB) DDR4, 2666 MHz, ECC/Non-ECCS DRAM Hard Drive: 512 GB SSD Graphics: Integrated Graphics Ports: at least 1 RJ-45 port 10/100/1000 Mbps (rear), at least 6 USB Ports (USB 2.0/3.0) Ports (front and rear), 1 Universal Audio Jack (front), 1 Line-out re-tasking Line-in audio port (rear), with Display Output ports (rear) Display: at least 21.5" Wide Screen Monitor with LED Back Light (same brand as computer and compatible to the unit's primary display output port) Peripherals: Keyboard, Optical Scroll Mouse (must be same brand as the computer) Form Factor: Small Form Factor Warranty: 5 years on-site repair (labor and parts) by an authorized technician UPS: Line Interactive, with Automatic Voltage Regulation, can start on batteries without mains, with data line surge protection, 4 universal outlets, 1 universal socket adapter, LED user interface, and On/Off button, Rating: 650 VA/360 W, Input Voltage Range (without using batteries): 160 V – 290 V, Output Voltage: 230 V, Output Frequency (auto-sensing): 50 Hz default, Input: IEC C14 (Input cord is included), Communication Ports: USB, Format: Tower, with 2 years Local Supplier Warranty
2.	Computer, Desktop, with OS, monitor, keyboard, mouse, and UPS Processor: Intel® Core™ i7 10th Generation or latest Equivalent OS: Pre-loaded OEM Windows 10 Pro 64bit English (Genuine Microsoft OS Media Kit CD Included, Proof of OS genuinity must be included) Memory: 16 GB (2 x 8 GB) DDR4, 2666 MHz, ECC/Non-ECCS DRAM Storage: 512 GB NVMe Class 35 Solid State Drive + 1TB HDD Video Card: NVIDIA GTX 1660 Ports: at least 1 RJ-45 port 10/100/1000 Mbps (rear), at least 6 USB Ports (USB 2.0/3.0) (front and rear), 1 Universal Audio Jack (front), 1 Line-out re-tasking Line-in audio port (rear), with Display Output ports (rear) Display: at least 24" Wide Screen IPS Monitor (same brand as computer and compatible to the unit's primary display output port) Peripherals: Keyboard, Optical Scroll Mouse (must be same brand as the computer) Warranty: 5 years on-site repair (labor and parts) by an authorized technician UPS: Line Interactive, with Automatic Voltage Regulation, can start on batteries without mains, with data line surge protection, 4 universal outlets, 1 universal socket adapter, LED user interface, and On/Off button, Rating: 1200 VA/600 W, Input Voltage Range (without using batteries): 160 V – 290 V, Output Voltage: 230 V, Output Frequency (auto-sensing): 50 Hz default, Input: IEC C14 (Input cord is included), Communication Ports: USB, Format: Tower, with 2 years Local Supplier Warranty
3.	Computer, Desktop, with OS, monitor, keyboard, mouse, and UPS Processor: Intel® Core™ i5 10th Generation or latest Equivalent OS: Pre-loaded OEM Windows 10 Pro 64bit English (Genuine Microsoft OS Media Kit CD Included, Proof of OS genuinity must be included) Memory: 16 GB (2 x 8 GB) DDR4, 2666 MHz, ECC/Non-ECCSDRAM Storage: 512 GB NVMe Class 35 Solid State Drive + 1TB HDD Video Card: NVIDIA GTX 1650Ti

		Ports: at least 1 RJ-45 port 10/100/1000 Mbps (rear), at least 6 USB Ports (USB 2.0/3.0) (front and rear), 1 Universal Audio Jack (front), 1 Line-out re-tasking Line-in audio port (rear), with Display Output ports (rear) Display: at least 24" Wide Screen IPS Monitor (same brand as computer and compatible to the unit's primary display output port) Peripherals: Keyboard, Optical scroll mouse (must be same brand as the computer) Warranty: 5 years on-site repair (labor and parts) by an authorized technician UPS: Line Interactive, with Automatic Voltage Regulation, can start on batteries without mains, with data line surge protection, 4 universal outlets, 1 universal socket adapter, LED user interface, and On/Off button, Rating: 1200 VA/600 W, Input Voltage Range (without using batteries): 160 V – 290 V, Output Voltage: 230 V, Output Frequency (auto-sensing): 50 Hz default, Input: IEC C14 (Input cord is included), Communication Ports: USB, Format: Tower, with 2 years Local Supplier Warranty
4.		Computer, Desktop, with OS, monitor, keyboard, mouse, and UPS Processor Intel® 10th Gen Intel® Core™ i7 processor or latest equivalent OS: Pre-loaded OEM Windows 10 Pro 64bit English (Genuine Microsoft OS Media Kit CD Included, Proof of OS genuinity must be included) Memory:32 GB (2 x 16 GB) DDR4, 3200 MHz Storage: 512 GB M.2 PCIe NVMe SSD + 2 TB 7200 RPM 3.5" SATA HDD Video Card: NVIDIA® GeForce® RTX 3070 8 GB GDDR6 Ports: at least 1 RJ-45 port 10/100/1000 Mbps (rear), at least has WiFi and Bluetooth module, at least 6 USB Ports (USB 2.0/3.0) (front and rear), 1 Universal Audio Jack (front), 1 Line-out re-tasking Line-in audio port (rear), with Display Output ports (rear) Display: at least 23" Wide Screen IPS Monitor, 1920 x 1080 resolution, Display Position Adjustments: Height-adjustable stand (130 mm), Tilt (-5° to 21°), Swivel (-45° to 45°), Pivot (-90° to 90°) (same brand as computer and compatible to the unit's primary display output port) Peripherals: Keyboard, Optical scroll mouse (must be same brand with the computer) Warranty: 5 years on-site repair (labor and parts) by an authorized technician UPS: Line Interactive, with Automatic Voltage Regulation, can start on batteries without mains, with data line surge protection, 4 universal outlets, 1 universal socket adapter, LED user interface, and On/Off button, Rating: 650 VA/360 W, Input Voltage Range (without using batteries): 160 V – 290 V, Output Voltage: 230 V, Output Frequency (auto-sensing): 50 Hz default, Input: IEC C14 (Input cord is included), Communication Ports: USB, Format: Tower, with 2 years Local Supplier Warranty
5.		Computer, Tablet CPU Speed: Octa Core 2.0 Hz Battery Capacity: 7,040 mAh Size: 10.4" Technology (Main Display): TFT Rear Camera: 8.0 MP Front Camera: 5.0 MP RAM Size: 3GB ROM Size: 64GB Location Technology: GPS, Glonass, Beidou, Galileo Wi-Fi: 802.11 a / b / g / n / ac 2.4 G+5 GHz, VHT80 Bluetooth Version: 5.0 OS: Android Sensors: Accelerometer, Gyro Sensor, Geomagnetic Sensor, Hall Sensor, Light Sensor Warranty: at least 1 year
6.		Presenter (For Mac and Windows) Connection Type: Bluetooth low energy technology and 2.4 GHz wireless connection Wireless range: 65 ft (20 m) Indicator lights (LED): Battery and Connectivity LED " Battery Life: 12 months + 1 extra week without laser pointer Laser: Class 2 laser Max Output: less than 1mW "

	Wavelength: 640 – 660 nm (red light) Warranty: at least 1 year
7.	External Hard Drive, Portable Storage Capacity: 1 TB Interface: USB 3.0 interface plug-and-play Data Transfer: 640 Mbps (5 Gbps) Dimensions (L X W X H): 114.8 mm x 78 mm x 11.7 mm Warranty: 3 Years Local Supplier Warranty
8.	Scanner, High Speed Scanner Type: A4 sheet-fed, one-pass duplex color scanner Sensor Type: Contact Image Sensor (CIS) x 2 Scanning Method: Fixed carriage and moving document Optical Resolution: 600 x 600 dpi Output Resolution: 50 - 1,200 dpi (in 1 dpi increments) Scanner Bit Depth (Color) : 48-bit input, 24-bit output Max. Document Size: 215.9 mm x 3,048 mm Scan Speed Resolution: 200 dpi: 26 ppm / 52 ipm (Monochrome, Color) 300dpi: 26 ppm / 52 ipm (Monochrome, Color) 600 dpi: 21 ppm / 42 ipm (Monochrome), 7.0 ppm / 14 ipm (Color)" ADF Capacity: 50 sheets (80 g/m^2) Daily Duty Cycle: up to 3,000 sheets/day Interface: USB 2.0 Warranty: at least 1 year
9.	Automatic Voltage Regulator (AVR) Maximum Output Voltage: 3000 VA Range of Input Voltage: 140 V-250 V Input/Output Voltage 110 V and 220 V Accuracy of Voltage: 220 V $\pm$ 3 % and 110V $\pm$ 6 % Over-Voltage Protection Value: 246 V $\pm$ 4% Under-Voltage Protection Value: 84 V $\pm$4% Warranty: at least 1 year
10.	Web Camera, HD 720p Widescreen Format: 16:9 Mono Noise Reducing Microphone Video Resolution: 1280 x 720 pixels Photos: up to 5.0 megapixels (software enhanced) Built-in mic with RightSound™ technology Interface: USB 2.0 Mounting Type: Clip/Stand RightLight™ 2 technology Video and photo capture Warranty: at least 1 year
11.	Printer, Inkjet, Monochrome, Multi-function, with Maintenance Box Minimum Ink Droplet Volume: 2.8 pl Control Panel: 2.4 LCD Touch Screen Print Direction: Bi-directional printing Nozzle Configuration: 400 x 2 Nozzle Black Maximum Resolution: 1200 x 2400 dpi Print Speed: Draft, A4 (Black/Color): Approx. 39 ppm Copy Speed: Up to 17 ipm Scanner Type: Flatbed color image scanner Sensor Type: CIS Optical Resolution: 1200 x 2400 dpi Paper Feed Method: Friction Feed Connectivity: USB 2.0 Network: Wi-Fi IEEE 802.11b/g/n, Wi-Fi Direct With Maintenance Box Warranty: at least 1 year

12.	Printer, Laser, Single Function
	Print Speed Black: Normal: Up to 20 ppm
	First Page Out: Black: As fast as 8.3 sec
	Print Quality Black (Best): Up to 600 x 600 dpi, FastRes 1200 (1200 dpi quality)
	Duty Cycle (Monthly, A4): Up to 10,000 pages
	Print Technology: Laser
	Processor Speed: 400 MHz
	Connectivity, standard: 1 Hi-Speed USB 2.0
	Paper handling input, standard: 150-sheet input tray, 10-sheet priority tray
	Paper handling output, standard: 100-sheet output tray
	Dimensions (approximate): Maximum: 331 x 215 x 178 mm
	Warranty: 3 years on-site repair (labor and parts) by an authorized technician
13.	Printer, Ink Tank, Colored, Multi-function
	Printer Functions: Print, Scan, Copy with ADF
	Print Method: PrecisionCore Printhead
	Minimum Ink Droplet Volume: 3.3 pl
	Control Panel: 2.4 " Color LCD
	Print Direction: Bi-directional printing, Uni-directional printing
	Nozzle Configuration: 400 nozzles Black, 128 nozzles per color
	Maximum Resolution: 4800 x 1200 dpi (with Variable-Sized Droplet Technology)
	Print Speed: Draft, A4 (Black/Color): Up to 33 ppm/20 ppm
	Copy Speed: ISO 29183, A4 Simplex Flatbed (Black/Color):
	Up to 11 ipm/5.5 ipm
	Scanner Type: Flatbed color image scanner
	Sensor Type: CIS
	Optical Resolution: 1200 dpi x 2400 dpi
	Paper Feed Method: Friction Feed
	Connectivity: Standard: USB 2.0
	Ethernet, Wi-Fi IEEE 802.11b/g/n, Wi-Fi Direct
	Dimensions (approximate): 375 x 347 x 231 mm
	Warranty: at least 1 year
14.	Photo Printer
	Print Method: On-demand inkjet
	Maximum Print Resolution: 5760 x 1440 dpi
	Minimum Ink Droplet Volume: 1.5 pl
	Print Direction: Bi-directional printing, Uni-directional printing
	Nozzle Configuration: 90 per color (Cyan, Light Cyan, Magenta, Light Magenta, Yellow, Black)
	Print Speed: Up to 15 ppm/15 ppm Paper Sizes: A3+, A3, B4, A4, A5, A6, B5, 10 x 15cm (4 x 6"), 13 x 18 cm (5 x 7"), 16:9 wide size, Letter (8.5 x 11"), Legal (8.5 x 14"), Half Letter (5.5 x 8.5"), 9 x 13 cm (3.5 x 5"), 13 x 20 cm (5 x 8"), 20 x 25 cm (8 x 10"), Envelopes: #10 (4.125 x 9.5"), DL (110 x 220 mm), C4 (229 x 324 mm), C6(114 x 162 mm)
	Warranty: at least 1 year
15.	Label Printer, Portable
	Width: 6, 9, 12, 18, 24 mm Tape
	Type: LK Tape Cartridges
	Printing: Cutter Type: Automatic Full Cut
	Printing Technology: Thermal Transfer
	Printing Resolution: 180 dpi/128 dot
	Text Data: Printable Lines: PC/App Dependent
	Memory: Files (Built-in Memory): PC/App Dependent
	Print Setting: Repeat Printing: Up to 99 (App)/999 (PC)
	Character Settings: Font Sizes: 6 (App)/PC Dependent
	Vertical Printing: Yes
	Mirror Printing: Yes
	Barcode Printing: Yes
	Wire Wrap: Yes

	Flag Style (Double-sided): Yes Double-sided Tab: Yes*Image Printing: Yes Interface: USB, Bluetooth Operating System: iOS, Android (Mobile), Windows, Mac OS (PC) Battery: 6 AAA AC Adapter: Bundled Warranty: at least 1 year
	Lot 2 – Network Equipment
16.	Gigabit Switch, 24 Port, Unmanaged, Rack Mount Number of Ports: 24 – 10/100/1000 Gigabit ports Standards: IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-TX Fast Ethernet, IEEE 802.3ab 1000BASE-T Gigabit Ethernet, ANSI/IEEE 802.3 NWay auto-negotiation, IEEE 802.3x Flow Control Data Transfer Rates: Ethernet: 10 Mbps (half duplex), 20 Mbps (full duplex) Fast Ethernet: 100 Mbps (half duplex), 200 Mbps (full duplex) Gigabit Ethernet: 2000 Mbps (full duplex) Features: IEEE 802.3az Energy Efficient Ethernet (EEE), Link status detection power saving, RoHS Compliance Media Interface Exchange: Auto MDI/MDIX Transmission Method: Store-and-Forward switching method MAC Address Table:8K MAC addresses RAM Buffer: 512 KB RAM for data buffering Switching Capacity: 48 Gbps LEDs: Power LED, 24 Link/Activity/Speed LEDs (one per port) Dimensions (approximate): 11.02 x 7.09 x 1.73" (280 x 180 x 44 mm) Warranty: at least 1 year
17.	Gigabit Switch, 16 Port, Unmanaged, Rack Mount Number of Ports: 16 – 10/100/1000 Gigabit ports Standards: IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-TX Fast Ethernet, IEEE 802.3ab 1000BASE-T Gigabit Ethernet, ANSI/IEEE 802.3 NWay auto-negotiation, IEEE 802.3x Flow Control Data Transfer Rates: Ethernet: 10 Mbps (half duplex), 20 Mbps (full duplex) Fast Ethernet: 100 Mbps (half duplex), 200 Mbps (full duplex) Gigabit Ethernet: 2000 Mbps (full duplex) Features: IEEE 802.3az Energy Efficient Ethernet (EEE), Link status detection power saving, RoHS Compliance Media Interface Exchange: Auto MDI/MDIX Transmission Method: Store-and-Forward switching method MAC Address Table:8K MAC addresses RAM Buffer: 512 KB RAM for data buffering Switching Capacity: 32 Gbps LEDs: Power LED, 16 Link/Activity/Speed LEDs (one per port) Dimensions (approximate): 11.02 x 4.92 x 1.73" (280 x 125 x 44 mm) Warranty: at least 1 year
18.	Gigabit, 8 Port, Unmanaged, Rack Mount Number of Ports: 8 – 10/100/1000 Mbps ports (ports 1-4 are PoE enabled) Standards: IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-TX Fast Ethernet, IEEE 802.3ab 1000BASE-T Gigabit Ethernet, ANSI/IEEE 802.3 NWay Auto-negotiation, IEEE 802.3x Flow Control, IEEE 802.1p QoS, IEEE 802.3az EEE" Data Transfer Rates: Ethernet: 10 Mbps (half duplex), 20 Mbps (full duplex) Fast Ethernet: 100 Mbps (half duplex), 200 Mbps (full duplex) Gigabit Ethernet: 2000 Mbps (full duplex) Media Interface Exchange: Auto MDI/MDIX adjustment for all ports Transmission Method: Store and forward MAC Address Table: 4K MAC Entries

	RAM Buffer: 512 KB Switching Capacity: 16 Gbps LEDs: Per unit: Power/PoE Max Per port: Activity/Link and Speed Per PoE port: Power/Status Dimensions (approximate): 7.5 x 4.7 x 1.5" (190 x 120 x 38 mm) Warranty: at least 1 year
19.	Layer 3 Access Switch, 24 Port, with SFP+ Ports, Supplied with Two (2) Pieces of MFF Transceiver Modules JL255A Aruba 2930F 24G PoE+ 4SFP+ Switch (To be compatible with the existing network devices) I/O ports and slots: 24 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only4 SFP+ 1/10GbE ports; PHY-less Additional ports and slots: 1 dual-personality (RJ-45 or USB micro-B) serial console port Memory and processor: Dual Core ARM Cortex A9 @ 1016 MHz, 1 GB DDR3 SDRAM; Packet buffer size: 12.38 MB 4.5MB Ingress/7.785 Egress,4 GB eMMC IPv6 Ready Certified Switching capacity: 128 Gbps Routing table size: 2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP MAC address table size: 32,768 entries Must be supplied with 2 pieces of MFF Transceiver Modules Warranty: at least 2-year hardware replacement warranty
20.	10G 16 Port Managed POE+ Gigabit Switch with SFP+ Ports Supplied with Two (2) Pieces MFF Modules Enclosure Characteristics: SGCC Steel Total Non-Blocking Throughput: 160 Gbps Switching Capacity: 320 Gbps Forwarding Rate: 238.10 Mpps Max. DC Power Consumption: 36W (Excludes SFP/SFP+ Modules) Power Method: AC: 100-240VAC/50-60 Hz, Universal Input; DC: 56 W, 25 to 16V, with 2.5 mm DC Power Inline Connector Supported Voltage Range: 100 to 240 VAC, 25 to 16 VDC Power Supply: AC/DC, Internal, 56 W DC LEDs Per Data Port Speed/Link/Activity Networking Interfaces (12) 1/10 Gbps SFP+ Ethernet Ports (4) 1/10 Gbps RJ45 Ethernet Ports Management Interface (1) RJ45 Serial Port, Ethernet In/Out Band Rack Mounted, 1U High ESD/EMP Protection: Air: ± 24 kV, Contact: ± 24 kV Shock and Vibration: ETSI300-019-1.4 Standard Operating Temperature: -5 to 40° C (23 to 104° F) Operating Humidity: 5 to 95% Noncondensing Certifications: CE, FCC, IC Core Switching Features ANSI/TIA-1057: LLDP-Media Endpoint Discovery (MED) • IEEE 802.1AB: Link Layer Discovery Protocol (LLDP) • IEEE 802.1D: Spanning Tree Compatibility • IEEE 802.1S: Multiple Spanning Tree Compatibility • IEEE 802.1W: Rapid Spanning Tree Compatibility • IEEE 802.1Q: Virtual LANs with Port-Based VLANs

• IEEE 802.1p: Ethernet Priority with User Provisioning and Mapping
• IEEE 802.1X: Port-Based Authentication with Guest VLAN Support
• IEEE 802.3ab: 1000BASE-T
• IEEE 802.3an-2006: 10GBASE-T
• IEEE 802.1ak: Virtual Bridged Local Area Networks - Amendment 07: Multiple Registration Protocol
• IEEE 802.3ac: VLAN Tagging
• IEEE 802.3ad: Link Aggregation
• IEEE 802.3x: Flow Control
• IEEE 802.1D-2004: Generic Attribute Registration Protocol: Clause 12 (GARP)
• IEEE 802.1D-2004: Dynamic L2 multicast registration: Clause 10 (GMRP)
• IEEE 802.1Q-2003: Dynamic VLAN registration: Clause 11.2 (GVRP)
• RFC 4541: Considerations for Internet Group Management Protocol (IGMP) Snooping Switches

Advance 2Layer 2 features
Broadcast Storm Recovery
• Broadcast/Multicast/Unknown Unicast Storm Recovery
• DHCP Snooping
• IGMP Snooping Querier
• Independent VLAN Learning (IVL) Support
• Jumbo Ethernet Frame Support
• Port MAC Locking
• Port Mirroring
• Protected Ports
• Static MAC Filtering
• TACACS+
• Voice VLANs
• Unauthenticated VLAN
• Internal 802.1X Authentication Server
Platform Specifications

DHCP Server Maximum Number of Pools: 128
Maximum Number of Leases (Total): 2048

• Routing Number of Routes: 16
Number of Routing Interfaces: 15

• VLANs: 4093
• MAC Addresses: 16,384
• MSTP Instances: 4
• LAGs: 32
• ACLs: 100 with 10 Rules per Port
• Traffic Classes (Queues): 8
System Facilities
Event and Error Logging Facility
• Run-Time and Configuration Download Capability
• PING Utility
• FTP/TFTP Transfers via IPv4/IPv6
• Malicious Code Detection
• BootP and DHCP
• RFC 2021: Remote Network Monitoring Management Information Base Version 2
• RFC 2030: Simple Network Time Protocol (SNTP)
• RFC 2819: Remote Network Monitoring Management Information Base
• RFC 2865: RADIUS Client
• RFC 2866: RADIUS Accounting
• RFC 2868: RADIUS Attributes for Tunnel Protocol Support
• RFC 2869: RADIUS Extensions

	• RFC 3579: RADIUS Support for EAP • RFC 3580: IEEE 802.1X RADIUS Usage Guidelines • RFC 3164: BSD Syslog Protoco Management Web UI • Industry-Standard CLI • IPv6 Management • Password Management • Auto install Support for Firmware Images and Configuration Files • SNMP v1, v2, and v3 • SSH 1.5 and 2.0 • SSL 3.0 and TLS 1.0 • Telnet (Multi-Session Support) Layer 3 Routing: Static Routing QOS Access Control Lists (ACLs), Permit/Deny Actions for Inbound IP and Layer 2 Traffic Classification Based on: Time-Based ACL Source/Destination IP Address TCP/UDP Source/Destination Port IP Protocol Type Type of Service (ToS) or Differentiated Services (DSCP) Field Source/Destination MAC Address Ether Type IEEE 802.1p User Priority VLAN ID RFC 1858: Security Considerations for IP Fragment Filtering • Optional ACL Rule Attributes Assign Flow to a Specific Class of Service (CoS) Queue Redirect Matching Traffic Flows • Differentiated Services (DiffServ) Classify Traffic Based on Same Criteria as ACLs Mark the IP DSCP or Precedence Header Fields, Optional Police the Flow to a Specific Rate with Two-Color Aware Support RFC 2474: Definition of the Differentiated Services Field (DS field) in the IPv4 and IPv6 Headers RFC 2475: An Architecture for Differentiated Services RFC 2597: Assured Forwarding Per-Hop Behavior (PHB) Group RFC 3246: An Expedited Forwarding PHB RFC 3260: New Terminology and Clarifications for DiffServ • Class of Service (CoS) Queue Mapping Configuration AutoVoIP: Automatic CoS Settings for VoIP IP DSCP-to-Queue Mapping Configurable Interface Trust Mode (IEEE 802.1p, DSCP, or Untrusted) Interface Egress Shaping Rate Strict Priority versus Weighted Scheduling per Queue Warranty: at least 1 year
21.	Network Crimping Tool Ratchet Controlled, With Flat Cable Cutter and Striper, For use on Western Electric (WE)/Stewart Stamping (SS)-type, 6-and 8-position modular telephone plugs, rj45, cat5 cables, and coaxial cable
22.	Network Tone Tracer and Probe Vibration: Random, 2 g, 5 Hz-500 Hz Safety: EN 61010-1, Category: None Battery: 9 V alkaline

	Application: Copper cabling media including 75- or 50-Ohm Coaxial cable; Two Conductor control, security, generic cabling. 10 Base-T or 10/100 Base-T datacom networks. UTP cable. Shielded Twisted Pair supported in Cable map function Toner Specifications Display: LED Control: Thumbwheel switch Toner interface: Main Mod8 port for tone generation on all 4 pairs of UTP / STP cabling. F Connector for coaxial cabling Banana Jack Plugs (2) - two conductor wiring Toner frequency: signal: encoded digital signal Analog signal: 500 - 1200Hz, 4 songs Output power: 5 V p-p Probe Specs Display: (8) LED indicators, Sync LED indicator Control: Thumbwheel switch, volume control wheel Tone detection: Detects digital signal for Locate, Isolate, and Cable Map Detects analog signal (500-1200Hz) and other analog toners. Toner interface: Main Mod8 port for cable map on all 4 pairs of UTP / STP cabling. Warranty: at least 1 year
23	IP PHONE MITEL IP420 (compatible to existing system) 130x28 pixels, backlit display Half-duplex speakerphone Audio Controls LED Indicator SIP protocol VLAN, DiffServ/ToS G.711 uLaw/aLaw, G.722, G.723, G.726, G.729a, iLBC, Linear 16bit Built-in 10/100 Ethernet switch 802.3af PoE Class 1 (2.4W idle / 3.2W active / 3.9W max) DHCP, Static IP Addressing Local PoE Adapter w/ License Bundle, Essential On-site Warranty : at least 1-year warranty

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.

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.

A. Eligibility and Technical Documents (*Contents of Envelope 1*)	
☐	1. Photocopy of valid PhilGEPS Certificate of Registration
☐	2. Photocopy of valid Certificate of Registration from SEC, DTI, or CDA, whichever is applicable
☐	3. Photocopy of valid Mayor's/Business Permit
☐	4. Photocopy of valid Tax Clearance
☐	5. Statement of all on-going government and private contracts, including contracts awarded but not yet started, if any
☐	6. Statement of Single Largest Completed Contract (SLCC), similar to the contract to be bid, in accordance with ITB Clause 5.3
☐	7. Audited Financial Statements stamped "received" by the BIR or its duly accredited and authorized institutions
☐	8. NFCC computation
☐	9. *If applicable,* a valid 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
☐	10. Bid Securing Declaration or Bid Security, in the form, amount and validity period, as prescribed in ITB Clause 14.1
☐	11. Bidder's Compliance to the Technical Specifications
☐	12. Omnibus Sworn Statement, which shall be duly notarized
A. Financial Documents (*Contents of Envelope 2*)	
☐	1. Financial Bid Form in the prescribed form
☐	2. Schedule of Prices

Section IX. Bidding Forms

TABLE OF CONTENTS

[*Bidder's Letterhead*]

<div align="right">[*Date*]</div>

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

List of All Ongoing Government and Private Contracts, Including Contracts Awarded But Not Yet Started

Row 1: Name of Contract Row 2: Location of Project Row 3: Contract Price	Row 1: Procuring Entity Row 2: Contact Person/Address Row 3: Telephone No.	Description of Goods	Row 1: Date of Award Row 2: Date Started Row 3: Contract Duration	Value of Outstanding Goods

Attached herewith are the following documents: Notice of Award, Notice to Proceed, and Official Receipts/Invoices, 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.

<div align="right">

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

</div>

[*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*]

[*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*]

Bid-Securing Declaration

Republic of the Philippines
City/Municipality Of _____) **S.S.**

x---x

Invitation to Bid *[Insert reference 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 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 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 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;

    c. I am/we are declared as 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].*

[*Signature*]
[*Name of Bidder's Authorized Representative*
[*Signatory's legal capacity*]
Affiant

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 and Signature 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*]

<div align="right">[*Date*]</div>

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

<div align="center">

Compliance to the Technical Specifications

</div>

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*
	Lot 1 – Computers and Printers	
1.	Computer, Desktop, with OS, monitor, keyboard, mouse, and UPS Processor: Intel i5 10th Gen or latest equivalent OS: Pre-loaded OEM Windows 10 Pro 64bit English (Genuine Microsoft OS Media Kit CD Included, Proof of OS genuinity must be included) Memory: 8 GB (2 x 4 GB) DDR4, 2666 MHz, ECC/Non-ECCS DRAM Hard Drive: 512 GB SSD Graphics: Integrated Graphics Ports: at least 1 RJ-45 port 10/100/1000 Mbps (rear), at least 6 USB Ports (USB 2.0/3.0) Ports (front and rear), 1 Universal Audio Jack (front), 1 Line-out re-tasking Line-in audio port (rear), with Display Output ports (rear) Display: at least 21.5" Wide Screen Monitor with LED Back Light (same brand as computer and compatible to the unit's primary display output port) Peripherals: Keyboard, Optical Scroll Mouse (must be same brand as the computer) Form Factor: Small Form Factor Warranty: 5 years on-site repair (labor and parts) by an authorized technician UPS: Line Interactive, with Automatic Voltage Regulation, can start on batteries without mains, with data line surge protection, 4 universal outlets, 1 universal socket adapter, LED user interface, and On/Off button, Rating: 650 VA/360 W, Input Voltage Range (without using batteries): 160 V – 290 V, Output Voltage: 230 V, Output Frequency (auto-sensing): 50 Hz default, Input: IEC C14 (Input cord is included), Communication Ports: USB, Format: Tower, with 2 years Local Supplier Warranty	
2.	Computer, Desktop, with OS, monitor, keyboard, mouse, and UPS Processor: Intel® Core™ i7 10th Generation or latest Equivalent OS: Pre-loaded OEM Windows 10 Pro 64bit English (Genuine Microsoft OS Media Kit CD Included, Proof of OS genuinity must be included) Memory: 16 GB (2 x 8 GB) DDR4, 2666 MHz, ECC/Non-ECCS DRAM	

	Storage: 512 GB NVMe Class 35 Solid State Drive + 1TB HDD Video Card: NVIDIA GTX 1660 Ports: at least 1 RJ-45 port 10/100/1000 Mbps (rear), at least 6 USB Ports (USB 2.0/3.0) (front and rear), 1 Universal Audio Jack (front), 1 Line-out re-tasking Line-in audio port (rear), with Display Output ports (rear) Display: at least 24" Wide Screen IPS Monitor (same brand as computer and compatible to the unit's primary display output port) Peripherals: Keyboard, Optical Scroll Mouse (must be same brand as the computer) Warranty: 5 years on-site repair (labor and parts) by an authorized technician UPS: Line Interactive, with Automatic Voltage Regulation, can start on batteries without mains, with data line surge protection, 4 universal outlets, 1 universal socket adapter, LED user interface, and On/Off button, Rating: 1200 VA/600 W, Input Voltage Range (without using batteries): 160 V – 290 V, Output Voltage: 230 V, Output Frequency (auto-sensing): 50 Hz default, Input: IEC C14 (Input cord is included), Communication Ports: USB, Format: Tower, with 2 years Local Supplier Warranty	
3.	Computer, Desktop, with OS, monitor, keyboard, mouse, and UPS Processor: Intel® Core™ i5 10th Generation or latest Equivalent OS: Pre-loaded OEM Windows 10 Pro 64bit English (Genuine Microsoft OS Media Kit CD Included, Proof of OS genuinity must be included) Memory: 16 GB (2 x 8 GB) DDR4, 2666 MHz, ECC/Non-ECCSDRAM Storage: 512 GB NVMe Class 35 Solid State Drive + 1TB HDD Video Card: NVIDIA GTX 1650Ti Ports: at least 1 RJ-45 port 10/100/1000 Mbps (rear), at least 6 USB Ports (USB 2.0/3.0) (front and rear), 1 Universal Audio Jack (front), 1 Line-out re-tasking Line-in audio port (rear), with Display Output ports (rear) Display: at least 24" Wide Screen IPS Monitor (same brand as computer and compatible to the unit's primary display output port) Peripherals: Keyboard, Optical scroll mouse (must be same brand as the computer) Warranty: 5 years on-site repair (labor and parts) by an authorized technician UPS: Line Interactive, with Automatic Voltage Regulation, can start on batteries without mains, with data line surge protection, 4 universal outlets, 1 universal socket adapter, LED user interface, and On/Off button, Rating: 1200 VA/600 W, Input Voltage Range (without using batteries): 160 V – 290 V, Output Voltage: 230 V, Output Frequency (auto-sensing): 50 Hz default, Input: IEC C14 (Input cord is included), Communication Ports: USB, Format: Tower, with 2 years Local Supplier Warranty	
4.	Computer, Desktop, with OS, monitor, keyboard, mouse, and UPS Processor Intel® 10th Gen Intel® Core™ i7 processor or latest equivalent OS: Pre-loaded OEM Windows 10 Pro 64bit English (Genuine Microsoft OS Media Kit CD Included, Proof of OS genuinity must be included) Memory:32 GB (2 x 16 GB) DDR4, 3200 MHz	

	Storage: 512 GB M.2 PCIe NVMe SSD + 2 TB 7200 RPM 3.5" SATA HDD Video Card: NVIDIA® GeForce® RTX 3070 8 GB GDDR6 Ports: at least 1 RJ-45 port 10/100/1000 Mbps (rear), at least has WiFi and Bluetooth module, at least 6 USB Ports (USB 2.0/3.0) (front and rear), 1 Universal Audio Jack (front), 1 Line-out re-tasking Line-in audio port (rear), with Display Output ports (rear) Display: at least 23" Wide Screen IPS Monitor, 1920 x 1080 resolution, Display Position Adjustments: Height-adjustable stand (130 mm), Tilt (-5° to 21°), Swivel (-45° to 45°), Pivot (-90° to 90°) (same brand as computer and compatible to the unit's primary display output port) Peripherals: Keyboard, Optical scroll mouse (must be same brand with the computer) Warranty: 5 years on-site repair (labor and parts) by an authorized technician UPS: Line Interactive, with Automatic Voltage Regulation, can start on batteries without mains, with data line surge protection, 4 universal outlets, 1 universal socket adapter, LED user interface, and On/Off button, Rating: 650 VA/360 W, Input Voltage Range (without using batteries): 160 V – 290 V, Output Voltage: 230 V, Output Frequency (auto-sensing): 50 Hz default, Input: IEC C14 (Input cord is included), Communication Ports: USB, Format: Tower, with 2 years Local Supplier Warranty	
5.	Computer, Tablet CPU Speed: Octa Core 2.0 Hz Battery Capacity: 7,040 mAh Size: 10.4" Technology (Main Display): TFT Rear Camera: 8.0 MP Front Camera: 5.0 MP RAM Size: 3GB ROM Size: 64GB Location Technology: GPS, Glonass, Beidou, Galileo Wi-Fi: 802.11 a / b / g / n / ac 2.4 G+5 GHz, VHT80 Bluetooth Version: 5.0 OS: Android Sensors: Accelerometer, Gyro Sensor, Geomagnetic Sensor, Hall Sensor, Light Sensor Warranty: at least 1 year	
6.	Presenter (For Mac and Windows) Connection Type: Bluetooth low energy technology and 2.4 GHz wireless connection Wireless range: 65 ft (20 m) Indicator lights (LED): Battery and Connectivity LED " Battery Life: 12 months + 1 extra week without laser pointer Laser: Class 2 laser Max Output: less than 1mW " Wavelength: 640 – 660 nm (red light) Warranty: at least 1 year	
7.	External Hard Drive, Portable Storage Capacity: 1 TB Interface: USB 3.0 interface plug-and-play Data Transfer: 640 Mbps (5 Gbps) Dimensions (L X W X H): 114.8 mm x 78 mm x 11.7 mm Warranty: 3 Years Local Supplier Warranty	
8.	Scanner, High Speed Scanner Type: A4 sheet-fed, one-pass duplex color scanner	

	Sensor Type: Contact Image Sensor (CIS) x 2 Scanning Method: Fixed carriage and moving document Optical Resolution: 600 x 600 dpi Output Resolution: 50 - 1,200 dpi (in 1 dpi increments) Scanner Bit Depth (Color) : 48-bit input, 24-bit output Max. Document Size: 215.9 mm x 3,048 mm Scan Speed Resolution: 200 dpi: 26 ppm / 52 ipm (Monochrome, Color) 300dpi: 26 ppm / 52 ipm (Monochrome, Color) 600 dpi: 21 ppm / 42 ipm (Monochrome), 7.0 ppm / 14 ipm (Color)" ADF Capacity: 50 sheets (80 g/m^2) Daily Duty Cycle: up to 3,000 sheets/day Interface: USB 2.0 Warranty: at least 1 year	
9.	Automatic Voltage Regulator (AVR) Maximum Output Voltage: 3000 VA Range of Input Voltage: 140 V-250 V Input/Output Voltage 110 V and 220 V Accuracy of Voltage: 220 V ± 3 % and 110V ± 6 % Over-Voltage Protection Value: 246 V ± 4% Under-Voltage Protection Value: 84 V ±4% Warranty: at least 1 year	
10.	Web Camera, HD 720p Widescreen Format: 16:9 Mono Noise Reducing Microphone Video Resolution: 1280 x 720 pixels Photos: up to 5.0 megapixels (software enhanced) Built-in mic with RightSound™ technology Interface: USB 2.0 Mounting Type: Clip/Stand RightLight™ 2 technology Video and photo capture Warranty: at least 1 year	
11.	Printer, Inkjet, Monochrome, Multi-function, with Maintenance Box Minimum Ink Droplet Volume: 2.8 pl Control Panel: 2.4 LCD Touch Screen Print Direction: Bi-directional printing Nozzle Configuration: 400 x 2 Nozzle Black Maximum Resolution: 1200 x 2400 dpi Print Speed: Draft, A4 (Black/Color): Approx. 39 ppm Copy Speed: Up to 17 ipm Scanner Type: Flatbed color image scanner Sensor Type: CIS Optical Resolution: 1200 x 2400 dpi Paper Feed Method: Friction Feed Connectivity: USB 2.0 Network: Wi-Fi IEEE 802.11b/g/n, Wi-Fi Direct With Maintenance Box Warranty: at least 1 year	
12.	Printer, Laser, Single Function Print Speed Black: Normal: Up to 20 ppm First Page Out: Black: As fast as 8.3 sec Print Quality Black (Best): Up to 600 x 600 dpi, FastRes 1200 (1200 dpi quality) Duty Cycle (Monthly, A4): Up to 10,000 pages Print Technology: Laser	

	Processor Speed: 400 MHz Connectivity, standard: 1 Hi-Speed USB 2.0 Paper handling input, standard: 150-sheet input tray, 10-sheet priority tray Paper handling output, standard: 100-sheet output tray Dimensions (approximate): Maximum: 331 x 215 x 178 mm Warranty: 3 years on-site repair (labor and parts) by an authorized technician	
13.	Printer, Ink Tank, Colored, Multi-function Printer Functions: Print, Scan, Copy with ADF Print Method: PrecisionCore Printhead Minimum Ink Droplet Volume: 3.3 pl Control Panel: 2.4 " Color LCD Print Direction: Bi-directional printing, Uni-directional printing Nozzle Configuration: 400 nozzles Black, 128 nozzles per color Maximum Resolution: 4800 x 1200 dpi (with Variable-Sized Droplet Technology) Print Speed: Draft, A4 (Black/Color): Up to 33 ppm/20 ppm Copy Speed: ISO 29183, A4 Simplex Flatbed (Black/Color): Up to 11 ipm/5.5 ipm Scanner Type: Flatbed color image scanner Sensor Type: CIS Optical Resolution: 1200 dpi x 2400 dpi Paper Feed Method: Friction Feed Connectivity: Standard: USB 2.0 Ethernet, Wi-Fi IEEE 802.11b/g/n, Wi-Fi Direct Dimensions (approximate): 375 x 347 x 231 mm Warranty: at least 1 year	
14.	Photo Printer Print Method: On-demand inkjet Maximum Print Resolution: 5760 x 1440 dpi Minimum Ink Droplet Volume: 1.5 pl Print Direction: Bi-directional printing, Uni-directional printing Nozzle Configuration: 90 per color (Cyan, Light Cyan, Magenta, Light Magenta, Yellow, Black) Print Speed: Up to 15 ppm/15 ppm Paper Sizes: A3+, A3, B4, A4, A5, A6, B5, 10 x 15cm (4 x 6"), 13 x 18 cm (5 x 7"), 16:9 wide size, Letter (8.5 x 11"), Legal (8.5 x 14"), Half Letter (5.5 x 8.5"), 9 x 13 cm (3.5 x 5"), 13 x 20 cm (5 x 8"), 20 x 25 cm (8 x 10"), Envelopes: #10 (4.125 x 9.5"), DL (110 x 220 mm), C4 (229 x 324 mm), C6(114 x 162 mm) Warranty: at least 1 year	
15.	Label Printer, Portable Width: 6, 9, 12, 18, 24 mm Tape Type: LK Tape Cartridges Printing: Cutter Type: Automatic Full Cut Printing Technology: Thermal Transfer Printing Resolution: 180 dpi/128 dot Text Data: Printable Lines: PC/App Dependent Memory: Files (Built-in Memory): PC/App Dependent Print Setting: Repeat Printing: Up to 99 (App)/999 (PC) Character Settings: Font Sizes: 6 (App)/PC Dependent Vertical Printing: Yes Mirror Printing: Yes Barcode Printing: Yes Wire Wrap: Yes Flag Style (Double-sided): Yes Double-sided Tab: Yes*Image Printing: Yes	

| | Interface: USB, Bluetooth
Operating System: iOS, Android (Mobile), Windows, Mac OS (PC)
Battery: 6 AAA
AC Adapter: Bundled
Warranty: at least 1 year | |

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*]

[*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*
	Lot 2 – Network Equipment	
16.	Gigabit Switch, 24 Port, Unmanaged, Rack Mount Number of Ports: 24 – 10/100/1000 Gigabit ports Standards: IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-TX Fast Ethernet, IEEE 802.3ab 1000BASE-T Gigabit Ethernet, ANSI/IEEE 802.3 NWay auto-negotiation, IEEE 802.3x Flow Control Data Transfer Rates: Ethernet: 10 Mbps (half duplex), 20 Mbps (full duplex) Fast Ethernet: 100 Mbps (half duplex), 200 Mbps (full duplex) Gigabit Ethernet: 2000 Mbps (full duplex) Features: IEEE 802.3az Energy Efficient Ethernet (EEE), Link status detection power saving, RoHS Compliance Media Interface Exchange: Auto MDI/MDIX Transmission Method: Store-and-Forward switching method MAC Address Table:8K MAC addresses RAM Buffer: 512 KB RAM for data buffering Switching Capacity: 48 Gbps LEDs: Power LED, 24 Link/Activity/Speed LEDs (one per port) Dimensions (approximate): 11.02 x 7.09 x 1.73" (280 x 180 x 44 mm) Warranty: at least 1 year	
17.	Gigabit Switch, 16 Port, Unmanaged, Rack Mount Number of Ports: 16 – 10/100/1000 Gigabit ports Standards: IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-TX Fast Ethernet, IEEE 802.3ab 1000BASE-T Gigabit Ethernet, ANSI/IEEE 802.3 NWay auto-negotiation, IEEE 802.3x Flow Control Data Transfer Rates: Ethernet: 10 Mbps (half duplex), 20 Mbps (full duplex) Fast Ethernet: 100 Mbps (half duplex), 200 Mbps (full duplex) Gigabit Ethernet: 2000 Mbps (full duplex) Features: IEEE 802.3az Energy Efficient Ethernet (EEE), Link status detection power saving, RoHS Compliance Media Interface Exchange: Auto MDI/MDIX Transmission Method: Store-and-Forward switching method MAC Address Table:8K MAC addresses RAM Buffer: 512 KB RAM for data buffering	

	Switching Capacity: 32 Gbps LEDs: Power LED, 16 Link/Activity/Speed LEDs (one per port) Dimensions (approximate): 11.02 x 4.92 x 1.73" (280 x 125 x 44 mm) Warranty: at least 1 year
18.	Gigabit, 8 Port, Unmanaged, Rack Mount Number of Ports: 8 – 10/100/1000 Mbps ports (ports 1-4 are PoE enabled) Standards: IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-TX Fast Ethernet, IEEE 802.3ab 1000BASE-T Gigabit Ethernet, ANSI/IEEE 802.3 NWay Auto-negotiation, IEEE 802.3x Flow Control, IEEE 802.1p QoS, IEEE 802.3az EEE" Data Transfer Rates: Ethernet: 10 Mbps (half duplex), 20 Mbps (full duplex) Fast Ethernet: 100 Mbps (half duplex), 200 Mbps (full duplex) Gigabit Ethernet: 2000 Mbps (full duplex) Media Interface Exchange: Auto MDI/MDIX adjustment for all ports Transmission Method: Store and forward MAC Address Table: 4K MAC Entries RAM Buffer: 512 KB Switching Capacity: 16 Gbps LEDs: Per unit: Power/PoE Max Per port: Activity/Link and Speed Per PoE port: Power/Status Dimensions (approximate): 7.5 x 4.7 x 1.5" (190 x 120 x 38 mm) Warranty: at least 1 year
19.	Layer 3 Access Switch, 24 Port, with SFP+ Ports, Supplied with Two (2) Pieces of MFF Transceiver Modules JL255A Aruba 2930F 24G PoE+ 4SFP+ Switch (To be compatible with the existing network devices) I/O ports and slots: 24 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only4 SFP+ 1/10GbE ports; PHY-less Additional ports and slots: 1 dual-personality (RJ-45 or USB micro-B) serial console port Memory and processor: Dual Core ARM Cortex A9 @ 1016 MHz, 1 GB DDR3 SDRAM; Packet buffer size: 12.38 MB 4.5MB Ingress/7.785 Egress,4 GB eMMC IPv6 Ready Certified Switching capacity: 128 Gbps Routing table size: 2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP MAC address table size: 32,768 entries Must be supplied with 2 pieces of MFF Transceiver Modules Warranty: at least 2-year hardware replacement warranty
20.	10G 16 Port Managed POE+ Gigabit Switch with SFP+ Ports Supplied with Two (2) Pieces MFF Modules Enclosure Characteristics: SGCC Steel Total Non-Blocking Throughput: 160 Gbps Switching Capacity: 320 Gbps Forwarding Rate: 238.10 Mpps

Max. DC Power Consumption: 36W (Excludes SFP/SFP+ Modules)
Power Method: AC: 100-240VAC/50-60 Hz, Universal Input; DC: 56 W, 25 to 16V, with 2.5 mm DC Power Inline Connector
Supported Voltage Range: 100 to 240 VAC, 25 to 16 VDC
Power Supply: AC/DC, Internal, 56 W DC
LEDs Per Data Port   Speed/Link/Activity
Networking Interfaces   (12) 1/10 Gbps SFP+ Ethernet Ports
(4) 1/10 Gbps RJ45 Ethernet Ports
Management Interface   (1) RJ45 Serial Port, Ethernet In/Out Band
Rack Mounted, 1U High
ESD/EMP Protection: Air: ± 24 kV, Contact: ± 24 kV
Shock and Vibration: ETSI300-019-1.4 Standard
Operating Temperature: -5 to 40° C (23 to 104° F)
Operating Humidity: 5 to 95% Noncondensing
Certifications: CE, FCC, IC
Core Switching Features

ANSI/TIA-1057: LLDP-Media Endpoint Discovery (MED)
• IEEE 802.1AB: Link Layer Discovery Protocol (LLDP)
• IEEE 802.1D: Spanning Tree Compatibility
• IEEE 802.1S: Multiple Spanning Tree Compatibility
• IEEE 802.1W: Rapid Spanning Tree Compatibility
• IEEE 802.1Q: Virtual LANs with Port-Based VLANs
• IEEE 802.1p: Ethernet Priority with User Provisioning and Mapping
• IEEE 802.1X: Port-Based Authentication with Guest VLAN Support
• IEEE 802.3ab: 1000BASE-T
• IEEE 802.3an-2006: 10GBASE-T
• IEEE 802.1ak: Virtual Bridged Local Area Networks - Amendment 07: Multiple Registration Protocol
• IEEE 802.3ac: VLAN Tagging
• IEEE 802.3ad: Link Aggregation
• IEEE 802.3x: Flow Control
• IEEE 802.1D-2004: Generic Attribute Registration Protocol: Clause 12 (GARP)
• IEEE 802.1D-2004: Dynamic L2 multicast registration: Clause 10 (GMRP)
• IEEE 802.1Q-2003: Dynamic VLAN registration: Clause 11.2 (GVRP)
• RFC 4541: Considerations for Internet Group Management Protocol (IGMP) Snooping Switches

Advance 2Layer 2 features
Broadcast Storm Recovery
• Broadcast/Multicast/Unknown Unicast Storm Recovery
• DHCP Snooping
• IGMP Snooping Querier
• Independent VLAN Learning (IVL) Support
• Jumbo Ethernet Frame Support
• Port MAC Locking
• Port Mirroring
• Protected Ports
• Static MAC Filtering
• TACACS+

| | • Voice VLANs
• Unauthenticated VLAN
• Internal 802.1X Authentication Server
Platform Specifications

DHCP Server Maximum Number of Pools: 128
Maximum Number of Leases (Total): 2048

• Routing Number of Routes: 16
Number of Routing Interfaces: 15

• VLANs: 4093
• MAC Addresses: 16,384
• MSTP Instances: 4
• LAGs: 32
• ACLs: 100 with 10 Rules per Port
• Traffic Classes (Queues): 8
System Facilities
Event and Error Logging Facility
• Run-Time and Configuration Download Capability
• PING Utility
• FTP/TFTP Transfers via IPv4/IPv6
• Malicious Code Detection
• BootP and DHCP
• RFC 2021: Remote Network Monitoring Management Information Base Version 2
• RFC 2030: Simple Network Time Protocol (SNTP)
• RFC 2819: Remote Network Monitoring Management Information Base
• RFC 2865: RADIUS Client
• RFC 2866: RADIUS Accounting
• RFC 2868: RADIUS Attributes for Tunnel Protocol Support
• RFC 2869: RADIUS Extensions
• RFC 3579: RADIUS Support for EAP
• RFC 3580: IEEE 802.1X RADIUS Usage Guidelines
• RFC 3164: BSD Syslog Protoco
Management
Web UI
• Industry-Standard CLI
• IPv6 Management
• Password Management
• Auto install Support for Firmware Images and Configuration Files
• SNMP v1, v2, and v3
• SSH 1.5 and 2.0
• SSL 3.0 and TLS 1.0
• Telnet (Multi-Session Support)
Layer 3 Routing: Static Routing
QOS
Access Control Lists (ACLs), Permit/Deny Actions for Inbound IP and Layer 2 Traffic Classification Based on: Time-Based ACL
Source/Destination IP Address
TCP/UDP Source/Destination Port
IP Protocol Type
Type of Service (ToS) or Differentiated Services (DSCP) Field
Source/Destination MAC Address
Ether Type
IEEE 802.1p User Priority | |

	VLAN ID RFC 1858: Security Considerations for IP Fragment Filtering • Optional ACL Rule Attributes Assign Flow to a Specific Class of Service (CoS) Queue Redirect Matching Traffic Flows • Differentiated Services (DiffServ) Classify Traffic Based on Same Criteria as ACLs Mark the IP DSCP or Precedence Header Fields, Optional Police the Flow to a Specific Rate with Two-Color Aware Support RFC 2474: Definition of the Differentiated Services Field (DS field) in the IPv4 and IPv6 Headers RFC 2475: An Architecture for Differentiated Services RFC 2597: Assured Forwarding Per-Hop Behavior (PHB) Group RFC 3246: An Expedited Forwarding PHB RFC 3260: New Terminology and Clarifications for DiffServ • Class of Service (CoS) Queue Mapping Configuration AutoVoIP: Automatic CoS Settings for VoIP IP DSCP-to-Queue Mapping Configurable Interface Trust Mode (IEEE 802.1p, DSCP, or Untrusted) Interface Egress Shaping Rate Strict Priority versus Weighted Scheduling per Queue Warranty: at least 1 year	
21.	Network Crimping Tool Ratchet Controlled, With Flat Cable Cutter and Striper, For use on Western Electric (WE)/Stewart Stamping (SS)-type, 6-and 8-position modular telephone plugs, rj45, cat5 cables, and coaxial cable	
22.	Network Tone Tracer and Probe Vibration: Random, 2 g, 5 Hz-500 Hz Safety: EN 61010-1, Category: None Battery: 9 V alkaline Application: Copper cabling media including 75- or 50-Ohm Coaxial cable; Two Conductor control, security, generic cabling. 10 Base-T or 10/100 Base-T datacom networks. UTP cable. Shielded Twisted Pair supported in Cable map function Toner Specifications Display: LED Control: Thumbwheel switch Toner interface: Main Mod8 port for tone generation on all 4 pairs of UTP / STP cabling. F Connector for coaxial cabling Banana Jack Plugs (2) - two conductor wiring Toner frequency: signal: encoded digital signal Analog signal: 500 - 1200Hz, 4 songs Output power: 5 V p-p Probe Specs Display: (8) LED indicators, Sync LED indicator Control: Thumbwheel switch, volume control wheel Tone detection: Detects digital signal for Locate, Isolate, and Cable Map Detects analog signal (500-1200Hz) and other analog toners. Toner interface: Main Mod8 port for cable map on all 4 pairs of UTP / STP cabling. Warranty: at least 1 year	

23	IP PHONE	
	MITEL IP420 (compatible to existing system)	
	130x28 pixels, backlit display	
	Half-duplex speakerphone	
	Audio Controls	
	LED Indicator	
	SIP protocol	
	VLAN, DiffServ/ToS	
	G.711 uLaw/aLaw, G.722, G.723, G.726, G.729a, iLBC, Linear 16bit	
	Built-in 10/100 Ethernet switch	
	802.3af PoE Class 1 (2.4W idle / 3.2W active / 3.9W max)	
	DHCP, Static IP Addressing	
	Local PoE Adapter	
	w/ License Bundle, Essential On-site	
	Warranty : at least 1-year warranty	

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.

A F F I D A V I T

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*]

<div align="right">

[*Date*]

</div>

FINANCIAL BID FORM

To: Tarlac State University

Re: Invitation to Bid No.

Having examined the Bidding Documents [*insert if any or delete, if none:* including 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 Bidding Documents for the sum of *[total Bid amount in words and figures]* or such other sums as may be ascertained in accordance with the Schedule of Prices attached herewith and made part of this Bid.

If our Bid is accepted, we commit to deliver the goods in accordance with the delivery schedule specified in the Schedule of Requirements.

If our Bid is accepted, we undertake to provide a performance security in the form, amounts, and within the times specified in the Bidding Documents.

We agree to abide by this Bid for the Bid Validity Period specified in **ITB** Clause 14.2 and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

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 as per **ITB** Clause 5 of the Bidding Documents.

We likewise certify/confirm that the undersigned, *[for sole proprietorships, insert:* as the owner and sole proprietor or authorized representative of [*Bidder*], has the full power and authority to participate, submit the bid, and to sign and execute the ensuing contract, on the latter's behalf for the [*Name of Project*] of the Tarlac State University*] [for partnerships, corporations, cooperatives, or joint ventures, insert:* is granted full power and authority by the [*Bidder*], to participate, submit the bid, and to sign and execute the ensuing contract on the latter's behalf for [*Name of Project*] of the Tarlac State University.

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

Dated this _____ day of _____ 20_____.

_____   _____
           [signature]   *[in the capacity of]*

Duly authorized to sign Bid for and on behalf of _____

[*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
	Lot 1 – Computers and Printers				
1.	Computer, Desktop, with OS, monitor, keyboard, mouse, and UPS Processor: Intel i5 10th Gen or latest equivalent OS: Pre-loaded OEM Windows 10 Pro 64bit English (Genuine Microsoft OS Media Kit CD Included, Proof of OS genuinity must be included) Memory: 8 GB (2 x 4 GB) DDR4, 2666 MHz, ECC/Non-ECCS DRAM Hard Drive: 512 GB SSD Graphics: Integrated Graphics Ports: at least 1 RJ-45 port 10/100/1000 Mbps (rear), at least 6 USB Ports (USB 2.0/3.0) Ports (front and rear), 1 Universal Audio Jack (front), 1 Line-out re-tasking Line-in audio port (rear), with Display Output ports (rear) Display: at least 21.5" Wide Screen Monitor with LED Back Light (same brand as computer and compatible to the unit's primary display output port) Peripherals: Keyboard, Optical Scroll Mouse (must be same brand as the computer) Form Factor: Small Form Factor Warranty: 5 years on-site repair (labor and parts) by an authorized technician UPS: Line Interactive, with Automatic Voltage Regulation, can start on batteries without mains, with data line surge protection, 4 universal outlets, 1 universal socket adapter, LED user interface, and On/Off button, Rating: 650 VA/360 W, Input Voltage Range (without using batteries): 160 V – 290 V, Output Voltage: 230 V, Output Frequency (auto-sensing): 50 Hz default, Input: IEC C14 (Input cord is included), Communication Ports: USB, Format: Tower, with 2 years Local Supplier Warranty	43	set		
2.	Computer, Desktop, with OS, monitor, keyboard, mouse, and UPS Processor: Intel® Core™ i7 10th Generation or latest Equivalent OS: Pre-loaded OEM Windows 10 Pro 64bit English (Genuine Microsoft OS Media Kit CD Included, Proof of OS genuinity must be included)	9	set		

	Memory: 16 GB (2 x 8 GB) DDR4, 2666 MHz, ECC/Non-ECCS DRAM Storage: 512 GB NVMe Class 35 Solid State Drive + 1TB HDD Video Card: NVIDIA GTX 1660 Ports: at least 1 RJ-45 port 10/100/1000 Mbps (rear), at least 6 USB Ports (USB 2.0/3.0) (front and rear), 1 Universal Audio Jack (front), 1 Line-out re-tasking Line-in audio port (rear), with Display Output ports (rear) Display: at least 24" Wide Screen IPS Monitor (same brand as computer and compatible to the unit's primary display output port) Peripherals: Keyboard, Optical Scroll Mouse (must be same brand as the computer) Warranty: 5 years on-site repair (labor and parts) by an authorized technician UPS: Line Interactive, with Automatic Voltage Regulation, can start on batteries without mains, with data line surge protection, 4 universal outlets, 1 universal socket adapter, LED user interface, and On/Off button, Rating: 1200 VA/600 W, Input Voltage Range (without using batteries): 160 V – 290 V, Output Voltage: 230 V, Output Frequency (auto-sensing): 50 Hz default, Input: IEC C14 (Input cord is included), Communication Ports: USB, Format: Tower, with 2 years Local Supplier Warranty					
3.	Computer, Desktop, with OS, monitor, keyboard, mouse, and UPS Processor: Intel® Core™ i5 10th Generation or latest Equivalent OS: Pre-loaded OEM Windows 10 Pro 64bit English (Genuine Microsoft OS Media Kit CD Included, Proof of OS genuinity must be included) Memory: 16 GB (2 x 8 GB) DDR4, 2666 MHz, ECC/Non-ECCSDRAM Storage: 512 GB NVMe Class 35 Solid State Drive + 1TB HDD Video Card: NVIDIA GTX 1650Ti Ports: at least 1 RJ-45 port 10/100/1000 Mbps (rear), at least 6 USB Ports (USB 2.0/3.0) (front and rear), 1 Universal Audio Jack (front), 1 Line-out re-tasking Line-in audio port (rear), with Display Output ports (rear) Display: at least 24" Wide Screen IPS Monitor (same brand as computer and compatible to the unit's primary display output port) Peripherals: Keyboard, Optical scroll mouse (must be same brand as the computer) Warranty: 5 years on-site repair (labor and parts) by an authorized technician UPS: Line Interactive, with Automatic Voltage Regulation, can start on batteries without mains, with data line surge protection, 4 universal outlets, 1 universal socket adapter, LED user interface, and On/Off button, Rating: 1200 VA/600 W,	50	set			

	Input Voltage Range (without using batteries): 160 V – 290 V, Output Voltage: 230 V, Output Frequency (auto-sensing): 50 Hz default, Input: IEC C14 (Input cord is included), Communication Ports: USB, Format: Tower, with 2 years Local Supplier Warranty				
4.	Computer, Desktop, with OS, monitor, keyboard, mouse, and UPS Processor Intel® 10th Gen Intel® Core™ i7 processor or latest equivalent OS: Pre-loaded OEM Windows 10 Pro 64bit English (Genuine Microsoft OS Media Kit CD Included, Proof of OS genuinity must be included) Memory:32 GB (2 x 16 GB) DDR4, 3200 MHz Storage: 512 GB M.2 PCIe NVMe SSD + 2 TB 7200 RPM 3.5" SATA HDD Video Card: NVIDIA® GeForce® RTX 3070 8 GB GDDR6 Ports: at least 1 RJ-45 port 10/100/1000 Mbps (rear), at least has WiFi and Bluetooth module, at least 6 USB Ports (USB 2.0/3.0) (front and rear), 1 Universal Audio Jack (front), 1 Line-out re-tasking Line-in audio port (rear), with Display Output ports (rear) Display: at least 23" Wide Screen IPS Monitor, 1920 x 1080 resolution, Display Position Adjustments: Height-adjustable stand (130 mm), Tilt (-5° to 21°), Swivel (-45° to 45°), Pivot (-90° to 90°) (same brand as computer and compatible to the unit's primary display output port) Peripherals: Keyboard, Optical scroll mouse (must be same brand with the computer) Warranty: 5 years on-site repair (labor and parts) by an authorized technician UPS: Line Interactive, with Automatic Voltage Regulation, can start on batteries without mains, with data line surge protection, 4 universal outlets, 1 universal socket adapter, LED user interface, and On/Off button, Rating: 650 VA/360 W, Input Voltage Range (without using batteries): 160 V – 290 V, Output Voltage: 230 V, Output Frequency (auto-sensing): 50 Hz default, Input: IEC C14 (Input cord is included), Communication Ports: USB, Format: Tower, with 2 years Local Supplier Warranty	3	set		
5.	Computer, Tablet CPU Speed: Octa Core 2.0 Hz Battery Capacity: 7,040 mAh Size: 10.4" Technology (Main Display): TFT Rear Camera: 8.0 MP Front Camera: 5.0 MP RAM Size: 3GB ROM Size: 64GB Location Technology: GPS, Glonass, Beidou, Galileo	3	pc		

	Wi-Fi: 802.11 a / b / g / n / ac 2.4 G+5 GHz, VHT80 Bluetooth Version: 5.0 OS: Android Sensors: Accelerometer, Gyro Sensor, Geomagnetic Sensor, Hall Sensor, Light Sensor Warranty: at least 1 year				
6.	Presenter (For Mac and Windows) Connection Type: Bluetooth low energy technology and 2.4 GHz wireless connection Wireless range: 65 ft (20 m) Indicator lights (LED): Battery and Connectivity LED " Battery Life: 12 months + 1 extra week without laser pointer Laser: Class 2 laser Max Output: less than 1mW " Wavelength: 640 – 660 nm (red light) Warranty: at least 1 year	2	pc		
7.	External Hard Drive, Portable Storage Capacity: 1 TB Interface: USB 3.0 interface plug-and-play Data Transfer: 640 Mbps (5 Gbps) Dimensions (L X W X H): 114.8 mm x 78 mm x 11.7 mm Warranty: 3 Years Local Supplier Warranty	7	pc		
8.	Scanner, High Speed Scanner Type: A4 sheet-fed, one-pass duplex color scanner Sensor Type: Contact Image Sensor (CIS) x 2 Scanning Method: Fixed carriage and moving document Optical Resolution: 600 x 600 dpi Output Resolution: 50 - 1,200 dpi (in 1 dpi increments) Scanner Bit Depth (Color) : 48-bit input, 24-bit output Max. Document Size: 215.9 mm x 3,048 mm Scan Speed Resolution: 200 dpi: 26 ppm / 52 ipm (Monochrome, Color) 300dpi: 26 ppm / 52 ipm (Monochrome, Color) 600 dpi: 21 ppm / 42 ipm (Monochrome), 7.0 ppm / 14 ipm (Color)" ADF Capacity: 50 sheets (80 g/m^2) Daily Duty Cycle: up to 3,000 sheets/day Interface: USB 2.0 Warranty: at least 1 year	6	pc		
9.	Automatic Voltage Regulator (AVR) Maximum Output Voltage: 3000 VA Range of Input Voltage: 140 V-250 V Input/Output Voltage 110 V and 220 V Accuracy of Voltage: 220 V ± 3 % and 110V ± 6 % Over-Voltage Protection Value: 246 V ± 4% Under-Voltage Protection Value: 84 V ±4% Warranty: at least 1 year	1	pc		
10.	Web Camera, HD 720p Widescreen Format: 16:9	4	pc		

	Mono Noise Reducing Microphone Video Resolution: 1280 x 720 pixels Photos: up to 5.0 megapixels (software enhanced) Built-in mic with RightSound™ technology Interface: USB 2.0 Mounting Type: Clip/Stand RightLight™ 2 technology Video and photo capture Warranty: at least 1 year				
11.	Printer, Inkjet, Monochrome, Multi-function, with Maintenance Box Minimum Ink Droplet Volume: 2.8 pl Control Panel: 2.4 LCD Touch Screen Print Direction: Bi-directional printing Nozzle Configuration: 400 x 2 Nozzle Black Maximum Resolution: 1200 x 2400 dpi Print Speed: Draft, A4 (Black/Color): Approx. 39 ppm Copy Speed: Up to 17 ipm Scanner Type: Flatbed color image scanner Sensor Type: CIS Optical Resolution: 1200 x 2400 dpi Paper Feed Method: Friction Feed Connectivity: USB 2.0 Network: Wi-Fi IEEE 802.11b/g/n, Wi-Fi Direct With Maintenance Box Warranty: at least 1 year	11	set		
12.	Printer, Laser, Single Function Print Speed Black: Normal: Up to 20 ppm First Page Out: Black: As fast as 8.3 sec Print Quality Black (Best): Up to 600 x 600 dpi, FastRes 1200 (1200 dpi quality) Duty Cycle (Monthly, A4): Up to 10,000 pages Print Technology: Laser Processor Speed: 400 MHz Connectivity, standard: 1 Hi-Speed USB 2.0 Paper handling input, standard: 150-sheet input tray, 10-sheet priority tray Paper handling output, standard: 100-sheet output tray Dimensions (approximate): Maximum: 331 x 215 x 178 mm Warranty: 3 years on-site repair (labor and parts) by an authorized technician	5	pc		
13.	Printer, Ink Tank, Colored, Multi-function Printer Functions: Print, Scan, Copy with ADF Print Method: PrecisionCore Printhead Minimum Ink Droplet Volume: 3.3 pl Control Panel: 2.4 " Color LCD Print Direction: Bi-directional printing, Uni-directional printing Nozzle Configuration: 400 nozzles Black, 128 nozzles per color Maximum Resolution: 4800 x 1200 dpi (with Variable-Sized Droplet Technology) Print Speed: Draft, A4 (Black/Color): Up to 33 ppm/20 ppm	5	pc		

	Copy Speed: ISO 29183, A4 Simplex Flatbed (Black/Color): Up to 11 ipm/5.5 ipm Scanner Type: Flatbed color image scanner Sensor Type: CIS Optical Resolution: 1200 dpi x 2400 dpi Paper Feed Method: Friction Feed Connectivity: Standard: USB 2.0 Ethernet, Wi-Fi IEEE 802.11b/g/n, Wi-Fi Direct Dimensions (approximate): 375 x 347 x 231 mm Warranty: at least 1 year				
14.	Photo Printer Print Method: On-demand inkjet Maximum Print Resolution: 5760 x 1440 dpi Minimum Ink Droplet Volume: 1.5 pl Print Direction: Bi-directional printing, Uni-directional printing Nozzle Configuration: 90 per color (Cyan, Light Cyan, Magenta, Light Magenta, Yellow, Black) Print Speed: Up to 15 ppm/15 ppm Paper Sizes: A3+, A3, B4, A4, A5, A6, B5, 10 x 15cm (4 x 6"), 13 x 18 cm (5 x 7"), 16:9 wide size, Letter (8.5 x 11"), Legal (8.5 x 14"), Half Letter (5.5 x 8.5"), 9 x 13 cm (3.5 x 5"), 13 x 20 cm (5 x 8"), 20 x 25 cm (8 x 10"), Envelopes: #10 (4.125 x 9.5"), DL (110 x 220 mm), C4 (229 x 324 mm), C6(114 x 162 mm) Warranty: at least 1 year	1	pc		
15.	Label Printer, Portable Width: 6, 9, 12, 18, 24 mm Tape Type: LK Tape Cartridges Printing: Cutter Type: Automatic Full Cut Printing Technology: Thermal Transfer Printing Resolution: 180 dpi/128 dot Text Data: Printable Lines: PC/App Dependent Memory: Files (Built-in Memory): PC/App Dependent Print Setting: Repeat Printing: Up to 99 (App)/999 (PC) Character Settings: Font Sizes: 6 (App)/PC Dependent Vertical Printing: Yes Mirror Printing: Yes Barcode Printing: Yes Wire Wrap: Yes Flag Style (Double-sided): Yes Double-sided Tab: Yes*Image Printing: Yes Interface: USB, Bluetooth Operating System: iOS, Android (Mobile), Windows, Mac OS (PC) Battery: 6 AAA AC Adapter: Bundled Warranty: at least 1 year	1	pc		
				Total Bid Price	

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

[*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
	Lot 2 – Network Equipment				
16.	Gigabit Switch, 24 Port, Unmanaged, Rack Mount Number of Ports: 24 – 10/100/1000 Gigabit ports Standards: IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-TX Fast Ethernet, IEEE 802.3ab 1000BASE-T Gigabit Ethernet, ANSI/IEEE 802.3 NWay auto-negotiation, IEEE 802.3x Flow Control Data Transfer Rates: Ethernet: 10 Mbps (half duplex), 20 Mbps (full duplex) Fast Ethernet: 100 Mbps (half duplex), 200 Mbps (full duplex) Gigabit Ethernet: 2000 Mbps (full duplex) Features: IEEE 802.3az Energy Efficient Ethernet (EEE), Link status detection power saving, RoHS Compliance Media Interface Exchange: Auto MDI/MDIX Transmission Method: Store-and-Forward switching method MAC Address Table:8K MAC addresses RAM Buffer: 512 KB RAM for data buffering Switching Capacity: 48 Gbps LEDs: Power LED, 24 Link/Activity/Speed LEDs (one per port) Dimensions (approximate): 11.02 x 7.09 x 1.73" (280 x 180 x 44 mm) Warranty: at least 1 year	5	pc		
17.	Gigabit Switch, 16 Port, Unmanaged, Rack Mount Number of Ports: 16 – 10/100/1000 Gigabit ports Standards: IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-TX Fast Ethernet, IEEE 802.3ab 1000BASE-T Gigabit Ethernet, ANSI/IEEE 802.3 NWay auto-negotiation, IEEE 802.3x Flow Control Data Transfer Rates: Ethernet: 10 Mbps (half duplex), 20 Mbps (full duplex) Fast Ethernet: 100 Mbps (half duplex), 200 Mbps (full duplex) Gigabit Ethernet: 2000 Mbps (full duplex) Features: IEEE 802.3az Energy Efficient Ethernet (EEE), Link status detection power saving, RoHS Compliance	5	pc		

	Media Interface Exchange: Auto MDI/MDIX Transmission Method: Store-and-Forward switching method MAC Address Table:8K MAC addresses RAM Buffer: 512 KB RAM for data buffering Switching Capacity: 32 Gbps LEDs: Power LED, 16 Link/Activity/Speed LEDs (one per port) Dimensions (approximate): 11.02 x 4.92 x 1.73" (280 x 125 x 44 mm) Warranty: at least 1 year				
18.	Gigabit, 8 Port, Unmanaged, Rack Mount Number of Ports: 8 – 10/100/1000 Mbps ports (ports 1-4 are PoE enabled) Standards: IEEE 802.3 10BASE-T Ethernet, IEEE 802.3u 100BASE-TX Fast Ethernet, IEEE 802.3ab 1000BASE-T Gigabit Ethernet, ANSI/IEEE 802.3 NWay Auto-negotiation, IEEE 802.3x Flow Control, IEEE 802.1p QoS, IEEE 802.3az EEE" Data Transfer Rates: Ethernet: 10 Mbps (half duplex), 20 Mbps (full duplex) Fast Ethernet: 100 Mbps (half duplex), 200 Mbps (full duplex) Gigabit Ethernet: 2000 Mbps (full duplex) Media Interface Exchange: Auto MDI/MDIX adjustment for all ports Transmission Method: Store and forward MAC Address Table: 4K MAC Entries RAM Buffer: 512 KB Switching Capacity: 16 Gbps LEDs: Per unit: Power/PoE Max Per port: Activity/Link and Speed Per PoE port: Power/Status Dimensions (approximate): 7.5 x 4.7 x 1.5" (190 x 120 x 38 mm) Warranty: at least 1 year	5	pc		
19.	Layer 3 Access Switch, 24 Port, with SFP+ Ports, Supplied with Two (2) Pieces of MFF Transceiver Modules JL255A Aruba 2930F 24G PoE+ 4SFP+ Switch (To be compatible with the existing network devices) I/O ports and slots: 24 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only4 SFP+ 1/10GbE ports; PHY-less Additional ports and slots: 1 dual-personality (RJ- 45 or USB micro-B) serial console port Memory and processor: Dual Core ARM Cortex A9 @ 1016 MHz, 1 GB DDR3 SDRAM; Packet	1	set		

	buffer size: 12.38 MB 4.5MB Ingress/7.785 Egress,4 GB eMMC IPv6 Ready Certified Switching capacity: 128 Gbps Routing table size: 2,000 IPv4, 1,000 IPv6 in hardware, 200 OSPF, 256 Static, 10,000 RIP MAC address table size: 32,768 entries Must be supplied with 2 pieces of MFF Transceiver Modules Warranty: at least 2-year hardware replacement warranty					
20.	10G 16 Port Managed POE+ Gigabit Switch with SFP+ Ports Supplied with Two (2) Pieces MFF Modules Enclosure Characteristics: SGCC Steel Total Non-Blocking Throughput: 160 Gbps Switching Capacity: 320 Gbps Forwarding Rate: 238.10 Mpps Max. DC Power Consumption: 36W (Excludes SFP/SFP+ Modules) Power Method: AC: 100-240VAC/50-60 Hz, Universal Input; DC: 56 W, 25 to 16V, with 2.5 mm DC Power Inline Connector Supported Voltage Range: 100 to 240 VAC, 25 to 16 VDC Power Supply: AC/DC, Internal, 56 W DC LEDs Per Data Port Speed/Link/Activity Networking Interfaces (12) 1/10 Gbps SFP+ Ethernet Ports (4) 1/10 Gbps RJ45 Ethernet Ports Management Interface (1) RJ45 Serial Port, Ethernet In/Out Band Rack Mounted, 1U High ESD/EMP Protection: Air: ± 24 kV, Contact: ± 24 kV Shock and Vibration: ETSI300-019-1.4 Standard Operating Temperature: -5 to 40° C (23 to 104° F) Operating Humidity: 5 to 95% Noncondensing Certifications: CE, FCC, IC Core Switching Features ANSI/TIA-1057: LLDP-Media Endpoint Discovery (MED) • IEEE 802.1AB: Link Layer Discovery Protocol (LLDP) • IEEE 802.1D: Spanning Tree Compatibility • IEEE 802.1S: Multiple Spanning Tree Compatibility • IEEE 802.1W: Rapid Spanning Tree Compatibility • IEEE 802.1Q: Virtual LANs with Port-Based VLANs • IEEE 802.1p: Ethernet Priority with User Provisioning and Mapping • IEEE 802.1X: Port-Based Authentication with Guest VLAN Support • IEEE 802.3ab: 1000BASE-T • IEEE 802.3an-2006: 10GBASE-T	4	set			

• IEEE 802.1ak: Virtual Bridged Local Area Networks - Amendment 07: Multiple Registration Protocol • IEEE 802.3ac: VLAN Tagging • IEEE 802.3ad: Link Aggregation • IEEE 802.3x: Flow Control • IEEE 802.1D-2004: Generic Attribute Registration Protocol: Clause 12 (GARP) • IEEE 802.1D-2004: Dynamic L2 multicast registration: Clause 10 (GMRP) • IEEE 802.1Q-2003: Dynamic VLAN registration: Clause 11.2 (GVRP) • RFC 4541: Considerations for Internet Group Management Protocol (IGMP) Snooping Switches Advance 2Layer 2 features Broadcast Storm Recovery • Broadcast/Multicast/Unknown Unicast Storm Recovery • DHCP Snooping • IGMP Snooping Querier • Independent VLAN Learning (IVL) Support • Jumbo Ethernet Frame Support • Port MAC Locking • Port Mirroring • Protected Ports • Static MAC Filtering • TACACS+ • Voice VLANs • Unauthenticated VLAN • Internal 802.1X Authentication Server Platform Specifications DHCP Server Maximum Number of Pools: 128 Maximum Number of Leases (Total): 2048 • Routing Number of Routes: 16 Number of Routing Interfaces: 15 • VLANs: 4093 • MAC Addresses: 16,384 • MSTP Instances: 4 • LAGs: 32 • ACLs: 100 with 10 Rules per Port • Traffic Classes (Queues): 8 System Facilities Event and Error Logging Facility • Run-Time and Configuration Download Capability • PING Utility • FTP/TFTP Transfers via IPv4/IPv6 • Malicious Code Detection • BootP and DHCP • RFC 2021: Remote Network Monitoring Management Information Base Version 2 • RFC 2030: Simple Network Time Protocol (SNTP)				

• RFC 2819: Remote Network Monitoring Management Information Base • RFC 2865: RADIUS Client • RFC 2866: RADIUS Accounting • RFC 2868: RADIUS Attributes for Tunnel Protocol Support • RFC 2869: RADIUS Extensions • RFC 3579: RADIUS Support for EAP • RFC 3580: IEEE 802.1X RADIUS Usage Guidelines • RFC 3164: BSD Syslog Protoco Management Web UI • Industry-Standard CLI • IPv6 Management • Password Management • Auto install Support for Firmware Images and Configuration Files • SNMP v1, v2, and v3 • SSH 1.5 and 2.0 • SSL 3.0 and TLS 1.0 • Telnet (Multi-Session Support) Layer 3 Routing: Static Routing QOS Access Control Lists (ACLs), Permit/Deny Actions for Inbound IP and Layer 2 Traffic Classification Based on: Time-Based ACL Source/Destination IP Address TCP/UDP Source/Destination Port IP Protocol Type Type of Service (ToS) or Differentiated Services (DSCP) Field Source/Destination MAC Address Ether Type IEEE 802.1p User Priority VLAN ID RFC 1858: Security Considerations for IP Fragment Filtering • Optional ACL Rule Attributes Assign Flow to a Specific Class of Service (CoS) Queue Redirect Matching Traffic Flows • Differentiated Services (DiffServ) Classify Traffic Based on Same Criteria as ACLs Mark the IP DSCP or Precedence Header Fields, Optional Police the Flow to a Specific Rate with Two-Color Aware Support RFC 2474: Definition of the Differentiated Services Field (DS field) in the IPv4 and IPv6 Headers RFC 2475: An Architecture for Differentiated Services RFC 2597: Assured Forwarding Per-Hop Behavior (PHB) Group RFC 3246: An Expedited Forwarding PHB				

	RFC 3260: New Terminology and Clarifications for DiffServ • Class of Service (CoS) Queue Mapping Configuration AutoVoIP: Automatic CoS Settings for VoIP IP DSCP-to-Queue Mapping Configurable Interface Trust Mode (IEEE 802.1p, DSCP, or Untrusted) Interface Egress Shaping Rate Strict Priority versus Weighted Scheduling per Queue Warranty: at least 1 year				
21.	Network Crimping Tool Ratchet Controlled, With Flat Cable Cutter and Striper, For use on Western Electric (WE)/Stewart Stamping (SS)-type, 6-and 8-position modular telephone plugs, rj45, cat5 cables, and coaxial cable	10	pc		
22.	Network Tone Tracer and Probe Vibration: Random, 2 g, 5 Hz-500 Hz Safety: EN 61010-1, Category: None Battery: 9 V alkaline Application: Copper cabling media including 75- or 50-Ohm Coaxial cable; Two Conductor control, security, generic cabling. 10 Base-T or 10/100 Base-T datacom networks. UTP cable. Shielded Twisted Pair supported in Cable map function Toner Specifications Display: LED Control: Thumbwheel switch Toner interface: Main Mod8 port for tone generation on all 4 pairs of UTP / STP cabling. F Connector for coaxial cabling Banana Jack Plugs (2) - two conductor wiring Toner frequency: signal: encoded digital signal Analog signal: 500 - 1200Hz, 4 songs Output power: 5 V p-p Probe Specs Display: (8) LED indicators, Sync LED indicator Control: Thumbwheel switch, volume control wheel Tone detection: Detects digital signal for Locate, Isolate, and Cable Map Detects analog signal (500-1200Hz) and other analog toners. Toner interface: Main Mod8 port for cable map on all 4 pairs of UTP / STP cabling. Warranty: at least 1 year	2	set		
23	IP PHONE MITEL IP420 (compatible to existing system) 130x28 pixels, backlit display Half-duplex speakerphone Audio Controls LED Indicator SIP protocol VLAN, DiffServ/ToS	5	pc		

	G.711 uLaw/aLaw, G.722, G.723, G.726, G.729a, iLBC, Linear 16bit Built-in 10/100 Ethernet switch 802.3af PoE Class 1 (2.4W idle / 3.2W active / 3.9W max) DHCP, Static IP Addressing Local PoE Adapter w/ License Bundle, Essential On-site Warranty : at least 1-year warranty				
			Total Bid Price		

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