

NED UNIVERSITY OF ENGINEERING & TECHNOLOGY
PROCUREMENT CELL

Tele # 99261261- 68, (Ext. 2291) Fax # 99261255, E-mail: ddff@neduet.edu.pk

"Say NO to Corruption"

No. PC/ M-IV/112703/ 579

Dated: 12/09-2017.

TENDER NOTICE

Sealed Bids on C&F cost based on "Single Stage One Envelope" are invited from the Manufacturers / Authorized Dealers / Distributors / Suppliers registered with Income Tax and GST Departments for following Procurements:

S#	Tender		Tender Schedule – Date and Time				Tender Fee
	Number	Work	Issue / Sale		Submission	Opening	
			From	To			
1	PC(M-IV)/NED / /Equip/Electrical- II/19/17	Import of Laboratory Equipment for Electrical Engineering	14-09-2017	04-10-2017	05-10-2017 10-00 A.M	05-10-2017 10-30 A.M	1000/-
2.	PC(M- IV)/NED/ Equip/Bio-Med (I) 18/17	Import of Laboratory Equipment for Bio- Medical Engineering	14-09-2017	04-10-2017	05-10-2017 10-30 A.M	05-10-2017 11-00 A.M	1000/-

Bid Security @ 2% of the total bid cost PO in favor of Director Finance

Tender Documents can be purchased from ADP-II office against PO in favour of Director Finance & shall be opened as per above schedule in same office.

A complete detail and specifications of the aforesaid tenders can be downloaded from the University website and SPPRA Website www.pprasindh.gov.pk. Procuring Agency may reject all or any bid subject to the provision of relevant Rules of SPPRA. Bidders are requested to give their Best and Final Prices as "No Negotiations" are expected.

In case of unavoidable circumstances on submission / opening date & time or if government declare holiday the tender shall be submitted/opened on the next working day at the same time & venue. For further information (if requires) may contact in person or via e-mail to ADP-II at Tel: 99261261- 68 (Ext. 2202) e-mail: adfp2@neduet.edu.pk

Director Procurement

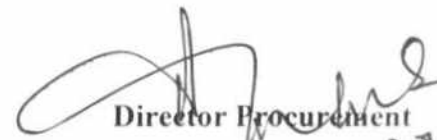


NOTIFICATION

With reference to this University Office Order No. DR(Estab)/(1193)Vol-II/6331 dated: 16.06.2016, the Procurement Committee under Rule 7 of the Sindh Public Procurement Rules (as amended) comprising of the following Members has been constituted for Procurement of Laboratory Equipment for Department of Electrical Engineering (vide Case File No. PC/ (M-IV)/NED/Equip/Electrical-II/19/17), as follows:

- | | |
|--|------------------|
| 1. Dr. Muhammad Ali Memon
Ag. Chairman Electrical Engg. Deptt.
NEDUET, Karachi | Convener |
| 2. Mr. Muhammad Mabroor Khan
Administrative Officer
Center for Excellence in Marine Biology
University of Karachi | Member |
| 3. Mr. Fawad Ul Hasan Kamran
Assistant Director Procurement-II
NEDUET, Karachi | Member/Secretary |

The TOR / functions / responsibilities of the aforesaid Procurement Committee will be in accordance with Rule-8 of SPP Rules. The tender will be opened on 05-10-2017 at 10:30 AM in the office of Assistant Director Procurement-II.


Director Procurement
14-9-2017

Copy to:
All Concerned.



NOTIFICATION

With reference to this University Office Order No. DR(Estab)/(1193)Vol-II/6331 dated: 16.06.2016, the Procurement Committee under Rule 7 of the Sindh Public Procurement Rules (as amended) comprising of the following Members has been constituted for Import of Laboratory Equipment for Department of Bio-Medical Engineering (vide Case File No. PC/ (M-IV)/NED/ Equip/Bio-Med(1)/18/17), as follows:

- | | |
|--|------------------|
| 1. Prof. Dr. Ali Raza Jafri
Chairman, Deptt. of Bio-Medical Engg.
NEDUET, Karachi | Convener |
| 2. Mr. Muhammad Mabroor Khan
Administrative Officer
Center for Excellence in Marine Biology
University of Karachi | Member |
| 3. Mr. Fawad Ul Hasan Kamran
Assistant Director Procurement-II
NEDUET, Karachi | Member/Secretary |

The TOR / functions / responsibilities of the aforesaid Procurement Committee will be in accordance with Rule-8 of SPP Rules. The tender will be opened on 05-10-2017 at 11:00 AM in the office of Assistant Director Procurement-II.


Director Procurement
14/9/2017

Copy to:
All Concerned.



NED UNIVERSITY OF ENGINEERING & TECHNOLOGY
PROCUREMENT CELL

Tele # 99261261-8, (Ext # 2291), Fax # 99261255, E-mail: ddff@neduet.edu.pk

Director Procurement

"Say No To Corruption"

30

No. DP/107555/246
Aug 09, 2017

The Director (CB)
Sindh Public Procurement Regulatory Authority
Government of Sindh, Barrack 8, Secretariat 4A, Court Road
Karachi

Sub: Procurement Plan 2017-18

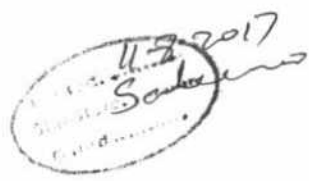
Ref: Your letter No. A.D(A)/SPPRA/(33902/NED-Engg & Tech/2017/18
Date : 08.08.2017

Enclosed please find herewith the Annual Procurement Plan for the year 2017-18 of NED University of Engineering & Technology. You are requested to kindly arrange to hoist the aforesaid procurement plan of this University on SPPRA website.

Your early response to this request shall be highly appreciated.

Thank you and assuring you of our best cooperation at all the times.


Director Procurement
09/8/2017

11-8-2017


NED UNIVERSITY OF ENGINEERING AND TECHNOLOGY
ANNUAL PROCUREMENT PLAN FOR THE YEAR 2017-18

Sr.No.	Description Procurement	Budget Allocated Rs. Million	Budget Head	Timing of Procurement				Remarks			
				1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Timing of procurement may subject to the requirement of department			
1	Purchase of Durable Goods	13.269	Transport	-	-	√	-	*	*	*	*
			Machinery & Equipment	√	√	√	√	*	*	*	*
			Furniture	√	√	√	√	*	*	*	*
2	Repair & Maintenance of durable goods	12.961	Maintenance of Transport	√	√	√	√	*	*	*	*
			Machinery & Equipment	√	√	√	√	*	*	*	*
			Furniture & Fixture	√	√	√	√	*	*	*	*
			Admin /Acad. Building	-	-	-	√	*	*	*	*
3	Printing Stationary & Publication	17.174	Printing & Stationery office	√	√	√	√	*	*	*	*
			Printing & Stationery Computer	√	√	√	√	*	*	*	*
4	Commodities & Services (POL)	14.542	POL	√	√	√	√	*	*	*	*
5	Uniform And Liveries	0.660	Uniform	√	√	√	√	*	*	*	*
6	Renewal of Software Licence all Deptt.	2.750	Renewal of Software	√	√	√	√	*	*	*	*
7	Student Affairs	0.599	Purchase of Sport Material	√	-	-	-	*	*	*	*
8	Registrar Office	4.879	Entry Test	-	√	-	-	*	*	*	*
		8.831	Convocation Expenses	-	-	√	-	*	*	*	*
9	Abul Kalam Library	9.317	News Paper periodicals and Book	√	√	√	√	*	*	*	*
		0.266	Book Bank	√	√	√	√	*	*	*	*
10	Medical Department	0.532	Purchase of Medicine	√	√	√	√	*	*	*	*
11	Internet Department	0.799	Linkage	√	√	√	√	*	*	*	*
12	Conduct of Examination	22.000	Printing Jobs	√	√	√	√	*	*	*	*
13	ARC's	11.282	a. ARC Hardware	√	√	√	√	*	*	*	*
		*	b. ARC Plumbing	√	√	√	√	*	*	*	*
		*	c. ARC Painting	√	√	√	√	*	*	*	*
		*	d. ARC Horticulture items	√	√	√	√	*	*	*	*
		*	e. ARC Janitorial Items	√	√	√	√	*	*	*	*
		*	f. ARC Stationery	√	√	√	√	*	*	*	*
		*	g. ARC Paper	√	√	√	√	*	*	*	*
		*	h. ARC Electrical	√	√	√	√	*	*	*	*
14	Lab Charges	3.113	For B E	√	√	√	√	*	*	*	*
		0.921	For Masters	√	√	√	√	*	*	*	*
15	Publication / Advertisement	1.430	Advertisement	√	√	√	√	*	*	*	*
	Insurance Services			√	√	√	√	*	*	*	*
	Hiring of sanitary and security Staff	5.00		√	√	√	√	*	*	*	*
16	Networking & other items for IT Dept.	4.00		-	√	√	√	*	*	*	*
	UDWP ACCOUNT	145.604									
16	Renovation of Old Girls Hostel Unit No. 2	1.575	UDWP 57.2	√	√	√	√	*	*	*	*
17	Commissioning of One Onixs Stabilizer for I.T. Department	0.140	UDWP 57.4	√	√	√	√	*	*	*	*

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NED UNIVERSITY OF ENGINEERING AND TECHNOLOGY
ANNUAL PROCUREMENT PLAN FOR THE YEAR 2017-18

Sr.No.	Description Procurement	Budget Allocated Rs. Million	Budget Head	Timing of Procurement				Remarks			
				1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Timing of procurement may subject to the requirement of department			
31	Providing 03 Nos. Air Conditioners for undergraduate Computer Laboratory, Department of Architecture & Planning	0.280	UDWP 57.21	√	√	√	√	*	*	*	*
32	Flooring of Reference Library of Department of Architecture & Planning at City Campus	0.468	UDWP 57.23	√	√	√	√	*	*	*	*
33	Procurement of various Computing and Furniture items for Department of Metallurgical Engineering	1.422	UDWP 57.24	√	√	√	√	*	*	*	*
34	Procurement of Office Equipment for Directorate of Finance	0.100	UDWP 57.28	√	√	√	√	*	*	*	*
35	Procurement of various Laboratory Equipment for Telecommunication Laboratories, Department of Electronic Engineering.	5.352	UDWP 57.31	√	√	√	√	*	*	*	*
36	Upgradation of five (05) Laboratories for Department of Computer and Information Systems Engineering.	4.445	UDWP 57.33	√	√	√	√	*	*	*	*
37	Repair of Car Parking shade LEJ Campus NED University	0.070	UDWP 57.36	√	√	√	√	*	*	*	*
38	Procurement of UPS & Gas Cylinder for Department of Polymer & Petrochemical Engineering	0.730	UDWP 59.2	√	√	√	√	*	*	*	*
39	Aluminum Glass Partition for Chemical Reaction Laboratory at Polymer & Petrochemical Engineering	0.434	UDWP 59.3	√	√	√	√	*	*	*	*
40	Supply, Installation, Testing & Commissioning of LT Panel with Laying of Cable for Departments of Chemical/Materials/Polymer & Petrochemical Engineering	10.806	UDWP 59.4	√	√	√	√	*	*	*	*
41	Procurement of Paint Materials for Department of Architecture and Planning at City Campus	0.114	UDWP 59.6	√	√	√	√	*	*	*	*
42	Partition in Room, Adjacent to Room No. 76, Department of Mechanical Engineering	0.221	UDWP 59.7	√	√	√	√	*	*	*	*
43	Procurement of Photo Copier Machine for Procurement Cell	0.400	UDWP 59.8	√	√	√	√	*	*	*	*

(3)

NED UNIVERSITY OF ENGINEERING AND TECHNOLOGY
ANNUAL PROCUREMENT PLAN FOR THE YEAR 2017-18

Sr.No.	Description Procurement	Budget Allocated Rs. Million	Budget Head	Timing of Procurement				Remarks			
				1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	Timing of procurement may subject to the requirement of department			
56	"Design Theory and Assessment of Recycled Structures in Earthquake Prone Regions"		Research Project	√	√	√	√	*	*	*	*
57	Permanent Equipment	3.810	Research Project	√	√	√	√	*	*	*	*
58	Establishment of Departmental outcome based education cell (DOBEC) Facility at department of Civil Engineering	2.50	Research Project	√	√	√	√	*	*	*	*
59	Renovation of Undergraduate Computer Laboratory (UGCL) for department of Civil Engineering	3.001	Research Project	√	√	√	√	*	*	*	*
60	Procurement of Laboratory Equipment for Department of Earthquake Engineering	4.00	Research Project	√	√	√	√	*	*	*	*
61	Procurement of Computing & Networking Items for Department of Electronic Engineering	0.50	PhD Research Project	√	√	√	√	*	*	*	*
62	Procurement of Laptop and Printer	0.14	Research Project	√	√	√	√	*	*	*	*
63	Procurement under the PhD Research Project "Wireless Interconnected mobile robot network based mapping and scanning systems" approved by AS&RB	1.00	Research Project	√	√	√	√	*	*	*	*
64	Procurement of CCD Camera under PhD Research Project "Intrinsic Modalities Based Multi Modal Biometric System" Department of Electronic Engineering	0.50	Research Project	√	√	√	√	*	*	*	*
65	Procurement under the Research Project "Assessment of Inelastic Dynamic Response"	5.00	Research Project	√	√	√	√	*	*	*	*
66	Procurement of under Research Project – PSF-/NSFC-Eng-S-NED(05) entitled "Design Theory and Assessment of Recycled Structure in Earthquake Prone Regions"	5.00	Research Project	√	√	√	√	*	*	*	*
67	Procurement under Research Project "Topological Optimization of the Part Build via Additive Manufacturing Process"	1.00	Research Project	√	√	√	√	*	*	*	*
68	Behaviour of RC Beam Strengthened in Shear and Flexure Loading Regions using Textile Reinforced Mortar	1.00	Research Project	√	√	√	√	*	*	*	*

2

Name of Department / Development Scheme: COMMENCEMENT OF NEW ENGINEERING PROGRAMMES &
INFRASTRUCTURE DEVELOPMENT (M-IV)
Procurement Plan 2017 - 2018

S.No	Name /Title of Procurement including items to be executed	Estimated Cost including GST	Head of Account / Sub-Head of Account	Approved Allocated Funds	Source of Funds	Nature of Procurement	Method of Procurement	Anticipated Date of			Remarks
								Advertisement	Start	Completion	
1	Remaining Equipment for Polymer Processing and Testing Laboratory	39,125	Laboratory Equipment	39,125	PSDP (HEC)	Import	National Competitive Bidding	July 2017	August 2017	December-2017	
2	Remaining Equipment for Smart Grid Trainer with SCADA Control System and SCADA-Net System Laboratory	26,849	Laboratory Equipment	26,849	PSDP (HEC)	Import	National Competitive Bidding	August 2017	September 2017	December-2017	
3	Remaining Equipment for Bio-Medical Engineering	12,000	Laboratory Equipment	12,000	PSDP (HEC)	Import	National Competitive Bidding	August 2017	September 2017	December-2017	
4	Construction of Building and related infrastructure	174,391	Infrastructure including overall supervision and escalation	174,391	PSDP (HEC)	Local	National Competitive Bidding	September 2017	November 2017	December-2018	
5	Software for Bio-Medical Engineering, Construction Engineering, Urban Engineering	9,555	Computing & Networking Facilities	9,555	PSDP (HEC)	Local	National Competitive Bidding	August 2017	October 2017	December-2017	
6	Teaching Aids (Remaining items)	2,232	Computing & Networking Facilities	2,232	PSDP (HEC)	Local	National Competitive Bidding	September 2017	November 2017	March-2018	
7	Office Equipment (Remaining items)	1,238	Computing & Networking Facilities	1,238	PSDP (HEC)	Local	National Competitive Bidding	September 2017	November 2017	March-2018	

Prepared by:

Engr. Raza ur Rehman
Focal Person (Mega-IV)

Engr. Ashfaq Ahmed Khan
Project Coordinator (Mega-IV)

NED UNIVERSITY OF ENGINEERING & TECHNOLOGY

No. DR (Estab)/(1003)/5736

Dated: 27/05/2016

30

OFFICE ORDER

In supersession of this office order No. DR (Estab)/(1003)/11418 dated 02-11-2015, the University Administration has constituted the Complaint Redressal Standing Committee comprising of the following officers to address complaints regarding all procurement issues in the University in pursuance of Clause 31(1) of the SPPRA rules:

- | | | |
|----|---|----------|
| 1. | Prof. Dr. Saad Ahmed Qazi
Dean (ECE) | Convener |
| 2. | Independent Professional from the relevant field | Member |
| 3. | Nominee of Accountant General Sindh | Member |


Ag. REGISTRAR

To:

The Convener & all members

Copy for information to:

1. Dean (ECE)
2. Director Planning & Projects
3. Director Finance
4. Director, Procurement Cell
5. Ag. Resident Auditor



**PURCHASE SECTION
NED UNIVERSITY OF ENGINEERING & TECHNOLOGY, KARACHI.
BY REGISTERED A.D./COURIER SERVICE.**

CONTRACT SCHEDULE

- 1. Contract No. _____ Date: _____/____/00
- 2. Name & Address of Contractor _____
- 3. Contract # / Total Qty. & Value _____
- 4. Indent # / Qty. & Value _____
- 5. Indent # / Qty. & Value _____
- 6. Particulars: _____

As below.

Item No.	Description of Store	Acctg Unit	Price per A.U	Total Qty Reqd.	Total Value

INSTRUCTIONS

- Store material as per list. Central Store's charge is not to be levied by the Central Store to the contractor.
- Delivery of material at site to be done up to the site of contractor's site address of store.
- Material to be delivered in neat & clean condition. Kindly ensure that all material is in good condition.
- Material to be delivered in neat & clean condition. Kindly ensure that all material is in good condition.

GRAND TOTAL (Value in Words)

- 7. Date of Delivery _____
- 8. Price of Delivery (A.U) _____
- 9. Name & Address of Contractor _____

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NED UNIVERSITY OF ENGINEERING & TECHNOLOGY
PROCUREMENT CELL

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"Say NO to Corruption"

Director Procurement

No. PC/ M-IV/112703/ 579

Dated: 12/9/2017.

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Director Procurement

ARTICLES OF AGREEMENT

This **Agreement** made this _____ day of _____ 2015, by and between the Vice Chancellor, NED University of Engineering and Technology, Karachi, including his successors in office and Assignees/ Agents, acting through the Director Procurement, hereinafter called the "**University**" of the one part.

And
of _____

(Name and signature authorized person)

_____, located at _____, hereinafter called the "**Contractor**" which expression shall include their successors, local representatives of the second part.

Whereas the **University** requires laboratory equipment at NED University, and whereas the Contractor has agreed to supply, install, put into operation and demonstrate the working of the said equipment valued at Rs. _____ (in figures and words) in the period of _____ months, subject to the terms and conditions set forth, hereinafter, which have been accepted by the **Contractor**.

(amount in figures and words)

Now this Agreement witnesses as follows:

1. In this agreement words and expressions shall have the same meaning as are respectively to them in the **Conditions of Contract** herein after referred to.
2. The following documents which, for the purpose of identification, have been signed by _____ on behalf of the **Contractor**, any by _____ (Name and signature authorized person) _____ on behalf of the **University**, all of which (name and designation of the authorized person) shall be deemed to form and be read constructed as a part of this **Agreement** viz.:
 - a) Articles of Agreement
 - b) Instructions of Tenderers:
 - c) Conditions of Contract:
 - d) Contractor's Offer including the relevant correspondence prior to signing of this Agreement with all Annexures duly filled in:
 - e) The specifications of equipment; and
 - f) Bill of Quantity with prices.

INSTRUCTIONS TO TENDERERS

- The NED University of Engineering and Technology, Karachi intends to purchase Laboratory Equipment under the approved schemes. The purchase will be financed through the cash provided by the Government of Pakistan through Higher Education Commission Islamabad.
- This Tender is issued for the supply, installation, putting into operation and demonstration of the working of the Laboratory Equipment as per the schedule of requirements given in this Tender Document.

PREPARATION OF TENDER.

1. Language of Tender

The Tender along with any accompanying literature shall be prepared in English language only.

2. Submission of Tender

- a) The **Tender** shall be enclosed in a double cover. The outer cover shall bear address of the Director Procurement, NED University of Engineering and Technology, Karachi, without any indication that it enclosed a tender. The inner cover shall be marked with the title of the Tender, number of invitation to the Tender and the date of opening of the Tender, and **must be sealed**.
- b) The **Form for Tender**, (Annexure-A) **Tender Particulars (Annexure-B) and Forms of Schedule to Tender** (Annexure "C1" & "C2") enclosed herewith, shall be submitted in duplicate. The authorized person signing the tender documents must state his full name and authorized position designation underneath his signature.
- c) The **erasing and /or alterations**, if any, in the Tender shall be authenticated by the authorized person by his full signature.
- d) The **Tender** shall be accompanied with the **original quotations** from the manufacturers, in case the Tender is submitted through their authorized agents or distributors, and shall be supported by credentials establishing the experience and standing of the manufacturers and /or their authorized agents or distributors.
- e) **Ambiguous and incorrect answers** and/or incorrect filling of Tender Documents will render the tender liable to rejection.
- f) **Quotations** through cable, telegraph, fax, or e-mail will not be considered.

- (77)
- c) The Stores offered by the tenders must be of a quality suitable for the purposed and operations for which they are required, and must be capable of rendering the required performance and services at site in the local conditions of extreme tropical climate, air, dust, water, power and fuel at Karachi.
 - d) The Hardware for operation of the Stores will be made available by the NED University of Engineering and Technology, Karachi.
 - e) The electric supply for operation of the Stores will be available at 220 volt single phase, or 380 volt three phase, and 50 cycles.
 - f) The Stores offered shall be complete with their standard accessories and must be accompanied by their normal instructions book/manual.
 - g) Wherever possible or feasible, each item of Stores offered must have its own protection devices, e.g, overload protection by circuit breakers or fuses, or voltage stabilizer for electric equipment.
 - h) Unless stipulated otherwise in the specifications for any item, the Stores conforming to ASA, SAE, SSI or DIN will be acceptable.
 - i) The successful bidders may be asked to supply list of spares for 5 years satisfactory operation of any item of the Stores, prior to award of the contract.

5. Literature

The tenders must finish with their bids catalogues giving full technical details of the Stores to enable the University to check their offers technically against the prescribed specifications failing which the offers will be liable to rejection.

6. Principals Name, Certificate and Invoice.

- a) The tenderers are required to mention in their quotations/offers the name and address of their Principals along with a certificate authorized them (tenderers) to quote on their (Principals) behalf as under:

"This is to certify that M/s. _____ located at _____ have obtained quotations from us against tender inquiry No. _____ dated _____ from NED University of Engineering and Technology, Karachi due for operation on _____ and have agreed to make available the Equipment on the quotations and terms and conditions of the tender".

The above condition does not apply to the manufacturers bidding directly.

- b) The tenderers must also furnish along with their offers their Principals original Proforma Invoice failing which their offers will be rejection.

7. Country of Origin.

The tenderers must state in his Tender the Country of Origin of the Stores offered.

8. Alternative Proposal

If any tenderer elects to submit alternative proposal(s) complete information on the alternative items including all data relating to technical specifications in Vol-I, II & III shall be given as per Annexure "F".

- (v) The transportation charges for transporting the Stores from the port to the Laboratories of the NED University including the charges for loading the Stores at the port and unloading the same at the NED University of Engineering and Technology, Karachi.

For the purpose of evaluation/comparison of bids, as stated in Clause-15, the total price for the Stores under this Category shall be sum of the amounts mentioned for Parts 1 & 2 above.

- (c) In addition to what is stated in para a) & b) above, the prices given in Annexure- C1 & C2 shall also include the following for the Stores of both the Categories-A & B.
- i. Supply, detailing, manufacturer, factory testing, export preparation and all costs incidental to shipping/transport up to the stage of installation in the Laboratory of the NED University.
 - ii. Responsibility for any loss and /or damage at any stage from manufacturer to installation in the Laboratory of the NED University.
 - iii. Provision for clean on boards bills of landing.
 - iv. The cost of export taxes, fees and charges levied and out going incurred on exporting goods in the country of origin.
 - v. The expenses on account of the certificate of origin, Invoices or any other documents issued in the country or origin.

10. Validity of Prices/Tender

- a) The prices quoted shall be valid for a period of at least 120 days from the date of opening of the tender.
- b) Until the final Contract is executed, the successful bidder shall be bound by the terms and conditions of the Tender Document.

11. Acceptance of the Terms

- a) The submission of the tender against this tender inquiry by the tenderer means that the tenderer has read and accepted the terms and conditions relating to all the tender documents and annexures, and that he/she have thoroughly examined the specifications and particulars in the tender inquiry. Further tender shall be deemed to be fully aware of the nature of the Stores and the purpose for which they are required and shall be bound to accept the Contract if placed with him/her on the basis of the prices and of the delivery schedule as indicated in Clause 12 hereof within validity of his/her Tender.

- b) The NED University is neither bound to accept the lowest or any other offer nor is it bound to assign reason for rejection of any offer.
- c) The NED University reserves the right to award the contract to one bidder or divide it among several bidders.
- d) The NED University reserves the right to increase or decrease the quantity of the Stores at its discretion without assigning any reason whatsoever.
- e) The NED University reserves the right to cancel the offer of the tenderer whose bid has been found/ evaluated to be the lowest if it is revealed to the NED University that the tenders does not have the capability or financial resources or facilities to carryout the Contract in accordance with the terms and conditions of this Tender Document.

15. Evaluation of Bids

- a) In comparing bids the NED University will consider, besides the prices quoted, such other factors as compliance with specifications, relative quality of stores, past experience of the tenderer, after-sales services facilities available in Pakistan and the tenderer's capacity to perform.
- b) The evaluation criteria specifically mentioned in the specifications will also be considered for evaluation of the bids.
- c) For the purpose of evaluation, the prices to be compared shall be the total prices inclusive of all duties, taxes freight charges etc. as stated in Clause 9 titled "Prices" above.
 - (i) For the items quoted in Annexure-C-1, the total prices as mentioned in Clause-9(b) shall be compared.
 - (ii) For comparison of the items quoted in Annexure C-1 with those quoted in Annexure C-2, the total prices as mentioned in Clause- 9(a) including the charges/cost packing, making handling, insurance, inspection guarantees, clearance, fright/transportation upto the NED University Laboratory duties, taxes, levies, octrois, etc.

16. Errors in the Bids.

- (i) Any arithmetic errors found during evaluation of bids will be rectified on the following basis:
 - a) If there is a discrepancy between the unit price that is obtained by multiplying the unit price and quantity, the price shall prevail and the total price shall be corrected by the University.
 - b) If there is a discrepancy between the words and figures, the amount in figures shall prevail.

CONDITIONS OF CONTRACT

1. Scope of the Contract

- a) The **Scope of the Contract** shall be the supply, delivery, installation, putting into operation and demonstration of the working of the Stores in the Laboratory of the NED University, Karachi, in accordance with the technical Specifications and Bill of Quantities enclosed in this Tender Document.
- b) The Contractor shall within a period of one month of the execution of the agreement furnish to the University a **detailed program** for supply and delivery of various items of the Stores for necessary approval by the University.

2. Definition of Terms

In writing these Conditions of Contract, Specification and Bill of Quantities, the following words shall have the meaning hereby indicated, unless is something in the subject matter or Contract Inconsistent with such constructions:

- i. **The University** shall mean the NED University of Engineering and Technology, Karachi.
- ii. **The Vice Chancellor** shall mean the Vice Chancellor of NED University of Engineering and Technology, Karachi, including his successor in office and assignees, empowered to act in all matters pertaining to the University either directly or through the Director Procurement, NED University of Engineering and Technology, Karachi.
- iii. **The Contractor or Supplier** shall mean the Tenderer (Bidder) whose Bid has been accepted by the University and shall include the Bidder's executors, administrators, successors and permitted assignees.
- iv. **The Stores** shall mean and include all the Laboratory Equipment, literature, materials and articles to be provided by the Contractor under the Contract.
- v. **The Contract** shall mean the agreement signed by the Contractor for the supply, delivery, installation, putting into operation and demonstration for the working of the Stores, as stated under the Scope of the Contract above.
- vi. **The Contract Price** shall mean the sum mentioned in or calculated in accordance with the provisions of the Contract, which is to be paid to the Contractor for satisfactory execution of the Contract in accordance with these conditions of Contract.

- c) In case any of the items of the Stores are to be imported by the Contractor, the **Import shall be arranged by the Contractor** himself/ herself with such packing and marking and through such means as deemed fit by him/her for safe and secure delivery at NED University of Engineering and Technology, Karachi. The packing of the equipment shall be usual export packing to ensure safe journey by air, sea, rail and road, as the case may be, of the Stores to destination. Each packing shall be clearly marked in English with the following:

- | | | |
|------|----------------------------|--|
| i. | Port of Destination: | Karachi |
| ii. | Name of Ship: | _____ |
| iii. | Name of the Consignee: | Director Procurement, NED
University of Engineering and
Technology, Karachi |
| i. | Name of the Contractor: | CONTRACTOR'S NAME & ADDRESS |
| ii. | Case Number & Contractor: | _____ |
| iii. | Net Weight & Dimensions: | (length, Breadth & Height) |
| iv. | Gross Weight: | (KG.) |
| v. | Number & Date of Contract: | _____ |
| vi. | Marking: | NED University of Engineering and
Technology, Karachi
in a 6 in. x 4 in. rectangle |

6. Transportation and Shipment

a. For Stores to be Imported

- (i) All those items of Stores which are to be imported by the Contractor shall be **shipped** by whatever means the Contractor deems fit **at his/ her risk and cost**. The Contractor must keep the university informed of the shipping arrangements, schedule of shipping, arrival at the port, clearance from the port, and transportation from the port to the NED University at Karachi.
- (ii) **All costs** of loading of the Stores from the wharves at port of shipment and also the cost of ship wharf age / berthing, demurrage charges, stevedoring, handling charges and other port and river dues in respect of shipment companies vessels at the port of shipment and all other expenditure up to the stage of placing the Stores at rest on board the ship and the freight charges shall be **borne by the Contractor**.
- (iii) Similarly all costs of unloading the Stores at the wharves, wharf age / berthing, demurrage, stevedoring, handling charges and other port dues at the port of arrival in Pakistan and transportation from the port up to the stage of placing the Stores position in the laboratory of the NED University, shall be borne by the **Contractor**. In order to facilitate the clearance of the Stores at the port of arrival, a clearing agent will be engaged by the University, in consultation with the Contractor, who will get the Stores cleared with the assistance of the University and the Contractor, and the clearing agent's charges shall be **borne by the Contractor**.

8. Insurance

The **Contractor shall arrange** the insurance for the Stores from Messrs. National Insurance Company Limited (NICL) at his/ her risk and cost. The prices quoted in the offer of the Contractor shall include the cost of insurance.

9. On-arrival Inspection

There shall be inspection of the Stores by the representatives of this University after arrival in the laboratory of the NED University in presence of the Contractor of his authorized representatives and the representative of the Insurance Company. This **inspection report**, which, inter-alia, should indicate, the condition in which each item of the Stores has been received, shall be signed by the above representative. The Contractor shall coordinate with the Director Procurement, NED University and the insurance company, for arranging the inspection at such date and time as is convenient to the above representatives.

10. Taking Over

Upon receipt of the equipment in the Laboratory of the NED University and after inspection, as stated in Clause 9 above, the NED University will issue a **Taking-over certificate** in respect of those items of Stores which are received in acceptable condition. The taking-over of the damaged items will be withheld until the same are repaired / replaced and are re-inspected and found in acceptable condition.

11. Installation and Demonstration of Stores

a). Installation

- i) After inspection and taking over of the Stores, as stated in Clauses 9 and 10 above, the **Contractor shall install** those items of Stores which are to be permanently positioned in place in the laboratories of the NED University. For this purpose, the Contractor shall co-ordinate with the Project Coordinator Mega-IV, NED University, for making arrangements for the Hardware needed for the installation.
- ii) The cost of hardware **for installation** shall be borne by the NED University. The Contractor shall provide, along with his offer, the details of the hardware needed for each item of the stores separately. The technical and other personnel needed for installation of the Stores shall be provided by the Contractor at his cost. The entire cost of installation, configuration, application except that of the needed hardware, shall be borne by the Contractor.

- ii. One hundred percent (100%) of the letter of credit amount will be paid against presentation of the shipping documents to the bank through the above letter of credit. The required shipping documents include:
- Clean on board bill of lading;
 - Contractor's detailed invoice showing description of the Stores, specifications, quantity, unit price and local price.
 - Detailed packing list;
 - Certificate of origin of the Stores' and
 - Certificate of pre-shipment/after-fabrication inspection or authorization to ship the Stores as per Clause-7.

Part-2: Payment in Pakistani Rupees

The Rupee component of the price of the Stores as stated in Clause 9 b) of "Instruction to Tenderers" will be paid to the Contractor in the following manner:

- i. For all those items of Stores for which the taking over certificate has been issued by the NED University, as stated in Clause 10 above, the NED University will pay to the Contractor seventy percent (70%) of the total price of the items quoted by the Contractor, the remaining thirty percent (30%) will be paid after presentation of the completion certificate, as stated in Clause 12 above.
- ii. The payment for those items of Stores for which the completion certificate has not been issued by the NED University, as stated in Clause 10 above, will be withheld and released only after the damaged items are replaced/repared, re-inspected and found in satisfactory condition with consequent issuance of the completion certificate. The payment will be made in the same manner as states in cause 13 a) i above.

14. Warranty/Guaranty

- a. The Contractor shall **warranty** that the stores shall be fit for the purposes and operation mentioned in the relevant clause of the "Instructions to the Tenderers" and **Condition of Contract**" notwithstanding the fact that the entire Stores, or any item or part of the Stores, bear or are found to bear a patent or trade mark.
- b. The Contractor shall guarantee supply of good quantity Stores in accordance with the Specifications and as states in Clauses 4 and 5 of the "Instruction to the Tenderers". Further, the Stores shall be brand new and absolutely free from all defects in material, quality and workmanship. In case of defects, the defective Stores, or the defective parts/components of the Stores thereof, shall be replaced by the Contractor free of cost to NED University within reasonable time.

17. Bankruptcy

If the **Contractor** shall become **bankrupt** or have a receiving order made against him/ her or compound with his/ her creditors, or being a corporation commence to be wound up, not being a voluntary winding up for purpose of amalgamation or reconstruction, or carry on business under a receiver for the benefit of its creditors or any of them, **the University shall be at liberty to:**

- a. **Terminate the Contract** forthwith by a notice in writing to the Contractor or to the liquidator or receiver or to any person in whom the Contract may become vested, and to act in the manner provided in Clause 16 above as through the last mentioned notice has been the notice referred in such Clause and the Stores have been out of the Contractor's hand; and /or
- b. Give such liquidator, receiver or person the option of **carrying out the Contract** subject to his/her providing a guarantee for the due and faithful performance of the Contract upto an amount to be determined by the University.

18. Termination of Contract

- a) If, for any cause as set forth in Clause 19 hereafter, the Contractor finds it impracticable to continue operation or, if owing to force majeure or to any cause beyond its control, the NED University finds it impossible to continue operation, then **prompt notification** in writing shall be given by the party affected to the other.
- b) If the delay or difficulties so caused cannot be expected to cease or become avoidable, or if operation cannot be resume within six months, then either party shall have the right to terminate the Contract by giving **ten(10) days written notice** to the other.
- c) In the event of termination of the Contract under this Clause; **payment** will be made to the Contractor as follows:
 - i) The Contractor shall be paid for all the Stores for which the completion certificate has been issued, as stated in Clause 12, and for all reimbursable expenses due and unpaid.
 - ii) The Contractor shall also be paid reasonable for any work done during the said six months period as well as for settlement of any financial commitment made in connection with proper performance of the Contract and which are not reasonably defrayed by payments under i) above.
 - iii) On termination of the contract for any cause, the Contractor shall see to the orderly suspension and termination of operation with due consideration to the interests of the NED University with respect to completion, safeguarding or storing of the Stores product for the performance of the Contract and the salvage and resale thereof.

22. Delay in Delivery-Liquidated Damages

- a) Should the **progress** of the Contract at any time **lagging behind** the program agreed between the University and the Contractor, the University will notify the Contractor in writing and the Contractor shall there upon take such steps as he/she may deem fit to **expedite the progress** of the Contract. Non-issuance of this notice by the University shall not in any way absolve the Contractor of the liquidated damages as stated in Clause 22 b) below.
- b) If the Contractor **fails to complete the Contract**, in full or part, within the time laid down in the Contract Agreement or any extension thereof, there shall be deducted from the Contract Price, as **liquidated damages**, a sum of one half of one percent (**0.5%**) of the **Contract price** of each unit of the delayed Stores for each calendar week of delay subject to the maximum of five percent (5%) of the Contract Price of the unit or units so delayed, and such deduction shall be in full satisfaction of the Contractor's liability for the said failure.

23. Period of Guarantee

- a) The terms **period of guarantee** shall mean the period of **twelve (12) months** from the date on which the Stores have been put into operation and demonstrated to NED University staff. In any case this period shall not exceed eighteen (18) months from the date of taking-over certificate.
- b) During the period of guarantee, the Contractor shall **remedy**, at his/her expense, **all defects** in design, materials, and workmanship that may develop or are revealed under normal use of the said Stores upon receiving written notice from the NED University, the notice shall indicate in what respect the Stores are faulty.
- c) The provisions of this Clause include all **expenses** that Contractor may have to incur for delivery and installation of such replacement parts, materials; and equipment as are needed for satisfactory operation of the Stores at the NED University premises.

24. Non-assignment

The Contractor shall **not have the right to assign or transfer** without the prior approval of the University the benefit and obligations of the Contract or any part thereof.

25. Expenditure under Contract

The Contractor shall not make any expenditure for the purpose of this Contract in any **country not authorized** by the Government of Pakistan.

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Annexure "A"

**FORM OF TENDER
(Letter of Offer)**

Tender Reference No.: _____ dated _____

Name of Contract: _____

The Director Procurement,
NED University of Engineering and
Technology, Karachi

Dear Sir,

1. Having examined the Tender Documents including instructions to Tenderers, Conditions of Contract Specifications, Drawings, Schedule of prices and Addenda Nos. _____ for the execution of the above-name Contract, we the undersigned, being a company doing business under the name and address _____ and being duly incorporated under the laws of Pakistan hereby offer to execute and complete such Contract and remedy any defects therein in conformity with the said Documents including Address thereto for the total Tender price of Rs. _____ (in figures and words) or such other sum as may be ascertained in accordance with the and Documents.
2. We understand that all the schedules attached hereto form parts this Tender.
3. As security for due performance of the undertakings and obligations of this Tender, we submit herewith a Bid Bond referred in Clause 3 of the Instructions Tenderers and as per Annexure "D", in the amount of Rs. _____ (in words and figures) drawn in favour of or payable to NED University of Engineering and Technology, Karachi, and valid for a period of 28 days beyond the period of validity of this Tender.
4. We undertake, if our Tender is accepted, to complete the whole of the work comprised in the above-named Contract within the time stated in Clause 12 of the Instructions to Tenderers.
5. We agree to abide by this Tender for the period of 120 days beyond the date of opening of the Tender, and it shall remain binding upon us and may be accepted at any time before the expiration of this period.
6. Unless and until a formal Contract Agreement is signed, this together with your acceptance thereof, shall constitute a binding contract between us.
7. We undertaking, if our Tender is accepted, to execute the Contract Performance Bond referred to in Clause 3 of the Instructions to Tenderers and as per Annexure "E" for the due performance of the Contract.

TENDER PARTICULARS

THE TENDERERS MUST SUPPLY THE FOLLOWING SPECIFIC INFORMATION FOR EACH ITEM OR GROUP OF ITEMS OF THE STORES:

1. Conformation of Stores

- Whether the Stores offered conform to particulars specified in the Schedules; if not details of deviations must be stated in Annexure "F"

2. Manufacturing Details:

- (i) Brand of Equipment
- (ii) Name and address of Manufacturer: and
- (iii) Country of Origin of Stores.

3. Delivery Schedule:

- (i) Earliest date by which delivery can be effected
- (ii) Complete schedule of delivery: and
- (iii) If the delivery period is different for different items, it must be indicated item wise

4. Packing Specification:

Whether the specifications for packing given in the Tender Documents will be adhered to



ANNEXURE-C-2

**FORM OF SCHEDULE TO TENDER FOR STORES
IMPORTED FROM APPROVED COUNTIES.**

Due by _____ hours on _____
(Time) (Date) (Month) (Year)

SCHEDULE TO TENDER NO. _____ dated _____

The Tender will be opened at _____ hours on _____
(Time) (Date) (Month) (Year)

Delivery on or before _____
(Date) (Month) (Year)

Part: 1. The rates quoted in the Table below must be on C&F basis:

S. No.	Code/Item No.	Description of Stores	Detailed specifications or Stores with Model No.	Quantity of Stores	Unit	Rate per Unit	Currency	Total C&F price	Currency of Origin
1*	2	3	4	5	6	7	8	9	10

Part 2. The rates quoted in the Table below must be in Pakistani Rupees:

S.No.	Code/Item No.	Description of Stores	Quantity of Stores	Unit	Rate per Unit	Total Price
1	2	3	4	5	6	7

(Continued on the next page)

Annexure "D"

BID BOND
(Bank Guarantee)

Guarantee No. _____
Executed on _____
Expiry date _____

Letter by the Guarantor (Bank) to the Employer (University)

Name of Guarantor (Bank) with address: _____

Name of Principal (Tenderer) with address: _____

Penal sum of Security (Bond), (in figures and words): _____

Tender Reference No. _____ date of tender _____

KNOW ALL MEN BY THESE PRESENT, that in pursuance of the terms of the Tender and at the request of the said principal (Tenderer), we the Guarantor above-named are held and firmly bound unto the Vice Chancellor, NED University of Engineering and Technology, Karachi, acting through the Director Procurement, NED University of Engineering and Technology, Karachi, (hereinafter called the "Employer" (University)) in the sum stated above, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal (Tenderer) has submitted the accompanying Tender numbered and dated as above for supply, installation, putting into operation and demonstration of equipment in the laboratories NED University of Engineering and Technology, Karachi, to the said Employer (University): and

Whereas, the Employer (University) has required as a condition for considering the said Tender that the principal (Tenderer) furnish a Bid Bond in the above said sum to the Employer (University), conditioned as under;

- 1) That the Bid Bond shall remain valid for a period of 28 days beyond the period of validity of the Tender;

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IN WITNESS WHEREOF, the above bounden Guarantor has executed the Instrument under its seal on the date indicated above, the name and seal of the Guarantor being hereto affixed and these presents duly signed by its undersigned representative pursuant to the authority of its governing body.

Guarantor (Bank)

Witness:

1. _____
(Signature)

(Signature)

Name, Title, Address and Seal)

(Name)

2. _____
(Signature)

(Title)

Name, Title, Address and Seal)

(Corporate Guarantor Seal)

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Our total liability under this Guarantee is limited to the sum stated above and it is a condition of any liability attaching to us under this Guarantee that the claim for payment in writing shall be received by us within the validity period of this Guarantee, failing which we shall be discharged of our liability, if any under this Guarantee.

We, _____ (the Guarantor), waiving all objections and defenses under the Contract, do hereby irrevocably and independently guarantee to pay to the employer (University) without delay upon the Employer's (University) to prove or to show grounds or reasons for such demand any sum or sums up to the amount stated above, against the Employer's (University's) written declaration that the Principal (Contractor) has refused or failed to perform the obligations under the Contract which payment will be effected by the Guarantor to the Employer's (University's) designated Bank and Account Number.

PROVIDED ALSO THAT the Employer (University) shall be the sole and final judge for deciding whether the Principal (Contractor) has duly performed his obligations under the Contract or has defaulted in fulfilling the said obligations, and the Guarantor shall pay without objection any sum or sums up to the amount stated above upon first written demand from the Employer (University) forthwith and without any reference to the Principal (Contractor) or any other person.

IN WITNESS WHEREOF, the above bounden Guarantor, has executed this Instrument under its seal on the date indicated above, the name and corporate seal of the Guarantor being, hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Witness:

Guarantor (Bank)

1. _____
(Signature)

(Signature)

Name, Title and Address (Seal)

(Name)

2. _____
(Signature)

(Title)

Name, Title and Address (Seal)

(Corporate Guarantor (Seal))

NED UNIVERSITY OF ENGINEERING AND TECHNOLOGY, KARACHI
DEPARTMENT OF ELECTRICAL ENGINEERING
SPECIFICATIONS AND QUANTITIES OF EQUIPMENT

Smart Grid Trainer, With SCADA Control and SCADA-Net Systems Laboratory

Item Code	Item	Description/Specification	Qty.	Unit Price	Total
EED / SGTL - 01	Smart Grid Trainer including following	The smart grid power system application trainer includes the following modules:			
1.1	Supply / Busbars	Supply / Busbars Basic Frame: Anodised aluminium structure. Possibility of housing until 12 different modules, at the same time. Automatic anchorage system for any module. Automatic earth connection system.	01		
1.2	Power Supply	Power Supply: This module has the followings elements: One three-phase power supply output connector. One three-phase power supply output with red, yellow and green connectors. Two single-phase power supply output. One single-phase standard type power supply output. Ground terminal. One security key. A removable key 6 with two positions (ON and OFF) acts as main switch. One emergency stop switch. Module state indicators.	01		
1.3	Synchronism Module	Synchronism Module: This module has the followings elements: Phase Synchronization Lamps and Phase RST sequences test connectors. - Busbar module 1 (Generation): - Busbar module 2 (Transportation): - Busbar module 3 (Coupling): - Busbar module 4 (Consumption): - Busbar module 5 (Transportation): These modules are to represent the generation, transmission, distribution and sub-transmission substations busbars and it included the main commutation elements as power circuit breaker, isolating switches, double busbar. With the aid of these modules is possible to coupling or decoupling all necessary elements of the power system simulator. Basically the busbars modules have similar elements, as: Input/Outputs double Busbar power connectors. Single-phase power supply input. Isolators open/close selectors. Circuit breaker open/close selector.	01		

1.7	AC Motors Speed Controller	<p>The unit contains the most advanced microprocessor technology together with IGBT semiconductor technology.</p> <p>This advanced-design automatic voltage regulator is used for the excitation of indirectly excited synchronous machines. This unit is only suitable for this one area of application. The regulator can also be switched over to function as a reactive power, power factor, and field current regulator.</p> <p>AC Motors Speed Controller:</p> <p>This speed regulator has numerous inputs and outputs allow using the SPEED CONTROLLER for power supply standard asynchronous ac motor for simulation of prime mover of generation system.</p> <p>Each part of the SPEED CONTROLLER is correctly identified in order to facilitate the operation and fast identification.</p> <p>Elements of AVR:</p> <ul style="list-style-type: none"> Ground protection connector. Three-Phase power output supply connectors. Control enable/disable switch. Remote/Local mode switch. Local control set-point slider. Input /Output signal connector. Input /Output AVR signal connector. Power supply Switch. <p>The capacity range of SPEED CONTROLLER is for 3 phase 400 V supply from 0.4 kW to 7 kW.</p> <p>The overload capacity of SPEED CONTROLLER is 150% for 1 min and 200% for 3s (in High Duty mode).</p> <p>The inverters with capacities of 5.5 kW and above can be used in dual rating; this means that the same inverter can be used for next higher capacity (in Low Duty mode). For example a 5.5 kW inverter can be used for a 7.5 kW motor; in this case the overload is 120% for 1 min. The braking transistor is included as standard. The braking resistor is included as standard up to 7.5 kW units.</p> <p>The main features of SPEED CONTROLLERS are:</p> <ul style="list-style-type: none"> Safety enables: Built-in EMC filter for all capacities. Sensor less vector control mode (100% torque at 0 Hz). Advanced PID functions (dancer control). Brake control function. Logic gates for logic combination of input and output functions and delay timer (10 steps). Positioning function (when encoder option is used). <p>3 slots for 3 different options at the same time</p>	01	
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		<p>With all this values it is possible to simulate a great No. of line configurations, beginning with different line distances with different types of conductor, through the unbalanced lines with different conductors groups (Simplex, Duplex, Triplex and Quadruplex). At the same time it is possible to simulate transient state with different short-circuits injection using a fault injection module.</p> <p>The unit is protected with a grounding connection that comes from the metallic caging and that is accessible through a terminal in the front of the module.</p>		
1.11	Energy Consumption Module	<p>Energy Consumption Module:</p> <p>With this module is possible to simulate any proper consumption in the power system or we can test any element of the power system separately under different load conditions.</p> <p>It has differentiated part on resistive, inductive and capacitive zones and it allows all types of combinations between them, so we can simulate pure resistive, inductive and capacitive load as well as different series-parallel combination of them.</p> <p>Metallic box.</p> <p>Diagram in the front panel.</p> <p>Variable resistive loads: 3 x [150 Ω (500 W)].</p> <p>Fixed resistive loads: 3 x [150 Ω (500 W) + 150 Ω (500 W)].</p> <p>Inductive loads: 6 x [0, 33, 78, 140, 193, 236 mH]. (2 A Max.).</p> <p>Capacitive loads: 3 x [3 x 3.5 μF] + 3 x [3 x 7 μF] + 3 x [3 x 14 μF].</p> <p>Ground connector.</p>	01	
1.12	Generators Protection and Control Device Unit	<p>Generators Protection and Control Device Unit:</p> <p>The GPCDU is a control unit for engine-generator simulator system.</p> <p>The numerous inputs and outputs, along with a modular software structure, allow you to use the GPCDU for a wide range of applications with only a single part No.. This includes stand-by, AMF (automatic mains failure), peak shaving, import-export or distributed generation, among others.</p> <p>Also the GPCDU is compatible for island, island parallel, mains parallel and multiple unit mains parallel operations.</p> <p>Each part of the GPCDU is correctly identified in order to facilitate the operation and fast identification.</p> <p>All the adjustments are executed with the management software from a PC.</p> <p>Elements of the GPCDU:</p>	01	

		<p>analyse the line protection elements functionality, following a fault in the system.</p> <p>The short-circuit injection possibility, corresponding to different types of faults, are:</p> <p>Three-pole short-circuit. Two-pole short-circuit. Two-pole-ground short circuit. Single-pole-ground short-circuit.</p> <p>Units reconfigurations and interconnections between modules.</p>		
EED / SGTL - 2 2.1	<p>SCADA Control System including 2.1 & 2.2</p> <p>Control Interface Box</p>	<p>SCADA Control System:</p> <p>The Complete SCADA System includes: Control Interface Box plus Data Acquisition Board plus Computer Control, Data Acquisition and Data Management Software.</p> <p>Control Interface Box:</p> <p>The Control Interface Box is part of the SCADA system.</p> <p>Control interface box with process diagram in the front panel and with the same distribution that the different elements located in the unit, for an easy understanding by the student.</p> <p>All equipment, with their respective signals, are properly manipulated from computer output.</p> <p>Equipment connectors in the interface have different pin numbers to avoid connection errors.</p> <p>Single cable between the control interface box and computer.</p> <p>The control elements are permanently computer controlled, without necessity of changes or connections during the whole process test procedure.</p> <p>Simultaneous visualization in the computer of all parameters involved in the process. Real time curves representation about system responses.</p> <p>Storage of all the process data and results in a file. Graphic representation, in real time, of all the process/system responses.</p> <p>All values can be changed at any time from the keyboard allowing the analysis about curves and responses of the whole process.</p> <p>All values are displayed on only one screen in the computer.</p> <p>Shield and filtered signals to avoid external interferences.</p> <p>Real time computer control with flexibility of modifications from the computer keyboard of the parameters, at any moment during the process.</p> <p>Real time computer control for parameters involved in the process simultaneously.</p>	<p>One complete system</p> <p>01</p>	

		This unit allows the 30 students of the classroom to visualize simultaneously all the results and the manipulation of the unit, during the process, by using a projector or an electronic blackboard.			
EED / SGTL – 3	SCADA-NET System including 3.1 to 3.4	<p>SCADA-NET System This system consists on the adaptation of different units controlling from computers integrated in a local network. This system allows viewing / controlling some different units remotely, from any computer integrated in the local net, through the computers connected to the unit. Then, the No. of possible users who can work with the same unit is higher than in a usual way of working (usually only one).</p> <p>User (Student) Software: This software package will allow the user to handle all the signals coming from the different elements, but with the limitations decided by the manager and its Software, in order to give the user (student) the proper and adequate information for a better knowledge and proper understanding. It will include the "password access". To ask the manager the unit he will work with. To see any unit working but with previous manager acceptance. To work and control any unit, with previous manager acceptance. To chat with the manager. To send the files and questions to the manager, in real time.</p> <p>Manager (Instructor) Software: This teacher software will allow handling all the signals coming from the unit, in order to suit to the users/students computers working with any unit. It will allow the users/students organisation and managing by the manager/teacher. It will allow to managing the users/students passwords and how to work and to use this system. It will allow getting "access" to the unit and its software. It will allow the interconnection, at any time, between the Manager and User for: Receiving the manager questions from the user. Guiding the user for using the units the different elements. Asking questions, technical o theoretical, related with any unit, as: unit itself, unit operation, unit results, etc.</p>	One complete system		
3.1	User (Student) Software				
3.3	Manager (Instructor) Software				

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NED UNIVERSITY OF ENGINEERING & TECHNOLOGY
PROCUREMENT CELL

Tel: # 99261261- 68; (Ext. 2291) Fax # 99261255, E-mail: ddff@neduet.edu.pk

Director Procurement

"Say NO to Corruption"

No. PC/ M-IV/112703/ 579

Dated: 12/9/2017.

TENDER NOTICE

Sealed Bids on C&F cost based on "Single Stage One Envelope" are invited from the Manufacturers / Authorized Dealers / Distributors / Suppliers registered with Income Tax and GST Departments for following Procurements:


S#	Tender		Tender Schedule – Date and Time				Tender Fee
	Number	Work	Issue / Sale		Submission	Opening	
			From	To			
1	PC(M-IV)/NED / /Equip/Electrical- II/19/17	Import of Laboratory Equipment for Electrical Engineering	14-09-2017	04-10-2017	05-10-2017 10-00 A.M	05-10-2017 10-30 A.M	1000/-
2.	PC(M- IV)/NED/ Equip/Bio-Med (I) 18/17	Import of Laboratory Equipment for Bio- Medical Engineering	14-09-2017	04-10-2017	05-10-2017 10-30 A.M	05-10-2017 11-00 A.M	1000/-

Bid Security @ 2% of the total bid cost PO in favor of Director Finance

Tender Documents can be purchased from ADP-II office against PO in favour of Director Finance & shall be opened as per above schedule in same office.

- A complete detail and specifications of the aforesaid tenders can be downloaded from the University website and SPPRA Website www.pprasinidh.gov.pk. Procuring Agency may reject all or any bid subject to the provision of relevant Rules of SPPRA. Bidders are requested to give their Best and Final Prices as "No Negotiations" are expected.

In case of unavoidable circumstances on submission / opening date & time or if government declare holiday the tender shall be submitted/opened on the next working day at the same time & venue. For further information (if requires) may contact in person or via e-mail to Directorate of Finance at Tel: 99261261- 68 (Ext. 2202) e-mail: adfp2@neduet.edu.pk


Director Procurement

ARTICLES OF AGREEMENT

This Agreement made this _____ day of _____ 2017, by and between the Vice Chancellor, NED University of Engineering and Technology, Karachi, including his successors in office and Assignees/ Agents, acting through the Director Procurement, hereinafter called the "University" of the one part.

And
of _____

(Name and signature authorized person)

_____ located at _____ hereinafter called the "Contractor" which expression shall include their successors, local representatives of the second part.

Whereas the University requires laboratory equipment at NED University, and whereas the Contractor has agreed to supply, install, put into operation and demonstrate the working of the said equipment valued at Rs. _____ (in figures and words) in the period of _____ months, subject to the terms and conditions set forth, hereinafter, which have been accepted by the Contractor.

(amount in figures and words)

Now this Agreement witnesses as follows:

1. In this agreement words and expressions shall have the same meaning as are respectively to them in the **Conditions of Contract** herein after referred to.
2. The following documents which, for the purpose of identification, have been signed by _____ on behalf of the Contractor, any by _____ (Name and signature authorized person)

_____ on behalf of the University, all of which _____ (name and designation of the authorized person) shall be deemed to form and be read constructed as a part of this **Agreement** viz.:

- a) Articles of Agreement
- b) Instructions of Tenderers:
- c) Conditions of Contract:
- d) Contractor's Offer including the relevant correspondence prior to signing of this Agreement with all Annexures duly filled in:
- e) The specifications of equipment; and
- f) Bill of Quantity with prices.

INSTRUCTIONS TO TENDERERS

The NED University of Engineering and Technology, Karachi intends to purchase Laboratory Equipment under the approved schemes. The purchase will be financed through the cash provided by the Government of Pakistan through Higher Education Commission Islamabad. This Tender is issued for the supply, installation, putting into operation and demonstration of the working of the Laboratory Equipment as per the schedule of requirements given in this Tender Document.

PREPARATION OF TENDER.

1. Language of Tender

The Tender along with any accompanying literature shall be prepared in English language only.

2. Submission of Tender

- a) The Tender shall be enclosed in a double cover. The outer cover shall bear address of the Director Procurement, NED University of Engineering and Technology, Karachi, without any indication that it enclosed a tender. The inner cover shall be marked with the title of the Tender, number of invitation to the Tender and the date of opening of the Tender, and **must be sealed**.
- b) The **Form for Tender**, (Annexure-A) **Tender Particulars (Annexure-B) and Forms of Schedule to Tender** (Annexure "C1" & "C2") enclosed herewith, shall be submitted in duplicate. The authorized person signing the tender documents must state his full name and authorized position designation underneath his signature.
- c) The **erasing and /or alterations**, if any, in the Tender shall be authenticated by the authorized person by his full signature.
- d) The Tender shall be accompanied with the **original quotations** from the manufacturers, in case the Tender is submitted through their authorized agents or distributors, and shall be supported by credentials establishing the experience and standing of the manufacturers and /or their authorized agents or distributors.
- e) **Ambiguous and incorrect answers** and/or incorrect filling of Tender Documents will render the tender liable to rejection.
- f) **Quotations** through cable, telegraph, fax, or e-mail will not be considered.

- c) The Stores offered by the tenders must be of a quality suitable for the purposes and operations for which they are required, and must be capable of rendering the required performance and services at site in the local conditions of extreme tropical climate, air, dust, water, power and fuel at Karachi.
- d) The Hardware for operation of the Stores will be made available by the NED University of Engineering and Technology, Karachi.
- e) The electric supply for operation of the Stores will be available at 220 volt single phase, or 380 volt three phase, and 50 cycles.
- f) The Stores offered shall be complete with their standard accessories and must be accompanied by their normal instructions book/manual.
- g) Wherever possible or feasible, each item of Stores offered must have its own protection devices, e.g, overload protection by circuit breakers or fuses, or voltage stabilizer for electric equipment.
- h) Unless stipulated otherwise in the specifications for any item, the Stores conforming to ASA, SAE, SSI or DIN will be acceptable.
- i) The successful bidders may be asked to supply list of spares for 5 years satisfactory operation of any item of the Stores, prior to award of the contract.

5. Literature

The tenders must finish with their bids catalogues giving full technical details of the Stores to enable the University to check their offers technically against the prescribed specifications failing which the offers will be liable to rejection.

6. Principals Name, Certificate and Invoice.

- a) The tenderers are required to mention in their quotations/offers the name and address of their Principals along with a certificate authorized them (tenderers) to quote on their (Principals) behalf as under:

"This is to certify that M/s. _____ located at _____ have obtained quotations from us against tender inquiry No. _____ dated _____ from NED University of Engineering and Technology, Karachi due for operation on _____ and have agreed to make available the Equipment on the quotations and terms and conditions of the tender".

The above condition does not apply to the manufacturers bidding directly.

- b) The tenderers must also furnish along with their offers their Principals original Proforma invoice failing which their offers will be rejection.

7. Country of Origin.

The tenderers must state in his Tender the Country of Origin of the Stores offered.

8. Alternative Proposal

If any tenderer elects to submit alternative proposal(s) complete information on the alternative items including all data relating to technical specifications in Vol-I, II & III shall be given as per Annexure "F".

- (v) The transportation charges for transporting the Stores from the port to the Laboratories of the NED University including the charges for loading the Stores at the port and unloading the same at the NED University of Engineering and Technology, Karachi.

For the purpose of evaluation/comparison of bids, as stated in Clause-15, the total price for the Stores under this Category shall be sum of the amounts mentioned for Parts 1 & 2 above.

- (c) In addition to what is stated in para a) & b) above, the prices given in Annexure- C1 & C2 shall also include the following for the Stores of both the Categories-A & B.
- i. Supply, detailing, manufacturer, factory testing, export preparation and all costs incidental to shipping/transport up to the stage of installation in the Laboratory of the NED University.
 - ii. Responsibility for any loss and /or damage at any stage from manufacturer to installation in the Laboratory of the NED University.
 - iii. Provision for clean on boards bills of landing.
 - iv. The cost of export taxes, fees and charges levied and out going incurred on exporting goods in the country of origin.
 - v. The expenses on account of the certificate of origin, Invoices or any other documents issued in the country or origin.

10. Validity of Prices/Tender

- a) The prices quoted shall be valid for a period of at least 90 days from the date of opening of the tender.
- b) Until the final Contract is executed, the successful bidder shall be bound by the terms and conditions of the Tender Document.

11. Acceptance of the Terms

- a) The submission of the tender against this tender inquiry by the tenderer means that the tenderer has read and accepted the terms and conditions relating to all the tender documents and annexures, and that he/she have thoroughly examined the specifications and particulars in the tender inquiry. Further tender shall be deemed to be fully aware of the nature of the Stores and the purpose for which they are required and shall be bound to accept the Contract if placed with him/her on the basis of the prices and of the delivery schedule as indicated in Clause 12 hereof within validity of his/her Tender.

- b) The NED University is neither bound to accept the lowest or any other offer nor is it bound to assign reason for rejection of any offer.
- c) The NED University reserves the right to award the contract to one bidder or divide it among several bidders.
- d) The NED University reserves the right to increase or decrease the quantity of the Stores at its discretion without assigning any reason whatsoever.
- e) The NED University reserves the right to cancel the offer of the tenderer whose bid has been found/ evaluated to be the lowest if it is revealed to the NED University that the tenderer does not have the capability or financial resources or facilities to carryout the Contract in accordance with the terms and conditions of this Tender Document.

15. Evaluation of Bids

- a) In comparing bids the NED University will consider, besides the prices quoted, such other factors as compliance with specifications, relative quality of stores, past experience of the tenderer, after-sales services facilities available in Pakistan and the tenderer's capacity to perform.
- b) The evaluation criteria specifically mentioned in the specifications will also be considered for evaluation of the bids.
- c) For the purpose of evaluation, the prices to be compared shall be the total prices inclusive of all duties, taxes freight charges etc. as stated in Clause 9 titled "Prices" above.
 - (i) For the items quoted in Annexure-C-1, the total prices as mentioned in Clause-9(b) shall be compared.
 - (ii) For comparison of the items quoted in Annexure C-1 with those quoted in Annexure C-2, the total prices as mentioned in Clause- 9(a) including the charges/cost packing, making handling, insurance, inspection guarantees, clearance, freight/transportation upto the NED University Laboratory duties, taxes, levies, octrois, etc.

16. Errors in the Bids.

- (i) Any arithmetic errors found during evaluation of bids will be rectified on the following basis:
 - a) If there is a discrepancy between the unit price that is obtained by multiplying the unit price and quantity, the price shall prevail and the total price shall be corrected by the University.
 - b) If there is a discrepancy between the words and figures, the amount in figures shall prevail.

CONDITIONS OF CONTRACT

1. Scope of the Contract

- a) The **Scope of the Contract** shall be the supply, delivery, installation, putting into operation and demonstration of the working of the Stores in the Laboratory of the NED University, Karachi, in accordance with the technical Specifications and Bill of Quantities enclosed in this Tender Document.
- b) The Contractor shall, within a period of one month of the execution of the agreement furnish to the University a **detailed program** for supply and delivery of various items of the Stores for necessary approval by the University.

2. Definition of Terms

In writing these Conditions of Contract, Specification and Bill of Quantities, the following words shall have the meaning hereby indicated, unless is something in the subject matter or Contract inconsistent with such constructions:

- i. **The University** shall mean the NED University of Engineering and Technology, Karachi.
- ii. **The Vice Chancellor** shall mean the Vice Chancellor of NED University of Engineering and Technology, Karachi, including his successor in office and assignees, empowered to act in all matters pertaining to the University either directly or through the Director Procurement, NED University of Engineering and Technology, Karachi.
- iii. **The Contractor or Supplier** shall mean the Tenderer (Bidder) whose Bid has been accepted by the University and shall include the Bidder's executors, administrators, successors and permitted assignees.
- iv. **The Stores** shall mean and include all the Laboratory Equipment, literature, materials and articles to be provided by the Contractor under the Contract.
- v. **The Contract** shall mean the agreement signed by the Contractor for the supply, delivery, installation, putting into operation and demonstration for the working of the Stores, as stated under the Scope of the Contract above.
- vi. **The Contract Price** shall mean the sum mentioned in or calculated in accordance with the provisions of the Contract, which is to be paid to the Contractor for satisfactory execution of the Contract in accordance with these conditions of Contract.

CC-03

- c) In case any of the items of the Stores are to be imported by the Contractor, the import shall be arranged by the Contractor himself/ herself with such packing and marking and through such means as deemed fit by him/her for safe and secure delivery at NED University of Engineering and Technology, Karachi. The packing of the equipment shall be usual export packing to ensure safe journey by air, sea, rail and road, as the case may be, of the Stores to destination. Each packing shall be clearly marked in English with the following:

- | | | |
|------|----------------------------|--|
| i. | Port of Destination: | Karachi |
| ii. | Name of Ship: | |
| iii. | Name of the Consignee: | Director Procurement, NED
University of Engineering and
Technology, Karachi |
| i. | Name of the Contractor: | CONTRACTOR'S NAME & ADDRESS |
| ii. | Case Number & Contractor: | |
| iii. | Net Weight & Dimensions: | (length, Breadth & Height) |
| iv. | Gross Weight: | (KG.) |
| v. | Number & Date of Contract: | |
| vi. | Marking: | NED University of Engineering and
Technology, Karachi
in a 6 in. x 4 in. rectangle |

6. Transportation and Shipment

a. For Stores to be Imported

- (i) All those items of Stores which are to be imported by the Contractor shall be shipped by whatever means the Contractor deems fit at his/ her risk and cost. The Contractor must keep the university informed of the shipping arrangements, schedule of shipping, arrival at the port, clearance from the port, and transportation from the port to the NED University at Karachi.
- (ii) All costs of loading of the Stores from the wharves at port of shipment and also the cost of ship wharf age / berthing, demurrage charges, stevedoring, handling charges and other port and river dues in respect of shipment companies vessels at the port of shipment and all other expenditure up to the stage of placing the Stores at rest on board the ship and the freight charges shall be borne by the Contractor.
- (iii) Similarly all costs of unloading the Stores at the wharves, wharf age / berthing, demurrage, stevedoring, handling charges and other port dues at the port of arrival in Pakistan and transportation from the port up to the stage of placing the Stores position in the laboratory of the NED University shall be borne by the Contractor. In order to facilitate the clearance of the Stores at the port of arrival, a clearing agent will be engaged by the University, in consultation with the Contractor, who will get the Stores cleared with the assistance of the University and the Contractor, and the clearing agent's charges shall be borne by the Contractor.

8. Insurance

The Contractor shall arrange the insurance for the Stores from Messrs. National Insurance Company Limited (NICL) at his/ her risk and cost. The prices quoted in the offer of the Contractor shall include the cost of insurance.

9. On-arrival Inspection

There shall be inspection of the Stores by the representatives of this University after arrival in the laboratory of the NED University in presence of the Contractor of his authorized representatives and the representative of the Insurance Company. This inspection report, which, inter-alia, should indicate the condition in which each item of the Stores has been received, shall be signed by the above representative. The Contractor shall coordinate with the Director Procurement, NED University and the insurance company for arranging the inspection at such date and time as is convenient to the above representatives.

10. Taking Over

Upon receipt of the equipment in the Laboratory of the NED University and after inspection, as stated in Clause 9 above, the NED University will issue a Taking-over certificate in respect of those items of Stores which are received in acceptable condition. The taking-over of the damaged items will be withheld until the same are repaired / replaced and are re-inspected and found in acceptable condition.

11. Installation and Demonstration of Stores

a). Installation

i) After inspection and taking over of the Stores, as state in Clauses 9 and 10 above, the Contractor shall install those items of Stores which are to be permanently positioned in place in the laboratories of the NED University. For this purpose, the Contractor shall co-ordinate with the Project Coordinator Mega-IV, NED University, for making arrangements for the Hardware needed for the installation.

ii) The cost of hardware for installation shall be borne by the NED University. The Contractor shall provide, along with his offer, the details of the hardware needed for each item of the stores separately. The technical and other personnel needed for installation of the Stores shall be provided by the Contractor at his cost. The entire cost of installation, configuration, application except that of the needed hardware, shall be borne by the Contractor.

- ii. One hundred percent (100%) of the letter of credit amount will be paid against presentation of the shipping documents to the bank through the above letter of credit. The required shipping documents include:
 - Clean on board bill of lading;
 - Contractor's detailed invoice showing description of the Stores, specifications, quantity, unit price and local price.
 - Detailed packing list;
 - Certificate of origin of the Stores' and
 - Certificate of pre-shipment/after-fabrication inspection or authorization to ship the Stores as per Clause-7.

Part-2: Payment in Pakistani Rupees

The Rupee component of the price of the Stores as stated in Clause 9 b) of "Instruction to Tenderers" will be paid to the Contractor in the following manner:

- i. For all those items of Stores for which the taking over certificate has been issued by the NED University, as stated in Clause 10 above, the NED University will pay to the Contractor seventy percent (70%) of the total price of the items quoted by the Contractor, the remaining thirty percent (30%) will be paid after presentation of the completion certificate, as stated in Clause 12 above.
- ii. The payment for those items of Stores for which the completion certificate has not been issued by the NED University, as stated in Clause 10 above, will be withheld and released only after the damaged items are replaced/repared, re-inspected and found in satisfactory condition with consequent issuance of the completion certificate. The payment will be made in the same manner as states in cause 13 a) i above.

14. Warranty/Guaranty

- a. The Contractor shall warranty that the stores shall be fit for the purposes and operation mentioned in the relevant clause of the "Instructions to the Tenderers" and "Condition of Contract" notwithstanding the fact that the entire Stores, or any item or part of the Stores, bear or are found to bear a patent or trade mark.
- b. The Contractor shall guarantee supply of good quantity Stores in accordance with the Specifications and as states in Clauses 4 and 5 of the "Instruction to the Tenderers". Further, the Stores shall be brand new and absolutely free from all defects in material, quality and workmanship. In case of defects, the defective Stores, or the defective parts/components of the Stores thereof, shall be replaced by the Contractor free of cost to NED University within reasonable time.

17. Bankruptcy

If the Contractor shall become bankrupt or have a receiving order made against him/ her or compound with his/ her creditors, or being a corporation commence to be wound up, not being a voluntary winding up for purpose of amalgamation or reconstruction; or carry on business under a receiver for the benefit of its creditors or any of them, the University shall be at liberty to:

- a. **Terminate the Contract** forthwith by a notice in writing to the Contractor or to the liquidator or receiver or to any person in whom the Contract may become vested, and to act in the manner provided in Clause 16 above as through the last mentioned notice has been, the notice referred in such Clause and the Stores have been out of the Contractor's hand; and /or
- b. Give such liquidator, receiver or person the option of **carrying out the Contract** subject to his/her providing a guarantee for the due and faithful performance of the Contract upto an amount to be determined by the University

18. Termination of Contract

- a) If, for any cause as set forth in Clause 19 hereafter, the Contractor finds it impracticable to continue operation or, if owing to force majeure or to any cause beyond its control, the NED University finds it impossible to continue operation, then prompt notification in writing shall be given by the party affected to the other.
- b) If the delay or difficulties so caused cannot be expected to cease or become avoidable, or if operation cannot be resume within six months, then either party shall have the right to terminate the Contract by giving ten(10) days written notice to the other.
- c) In the event of termination of the Contract under this Clause, payment will be made to the Contractor as follows:-
 - i) The Contractor shall be paid for all the Stores for which the completion certificate has been issued, as stated in Clause 12, and for all reimbursable expenses due and unpaid.
 - ii) The Contractor shall also be paid reasonable for any work done during the said six months period as well as for settlement of any financial commitment made in connection with proper performance of the Contract and which are not reasonably defrayed by payments under i) above.
 - iii) On termination of the contract for any cause, the Contractor shall see to the orderly suspension and termination of operation with due consideration to the interests of the NED University with respect to completion, safeguarding or storing of the Stores product for the performance of the Contract and the salvage and resale thereof.

22. Delay in Delivery-Liquidated Damages

- a) Should the progress of the Contract at any time lagging behind the program agreed between the University and the Contractor, the University will notify the Contractor in writing and the Contractor shall there upon take such steps as he/she may deem fit to expedite the progress of the Contract. Non-issuance of this notice by the University shall not in any way absolve the Contractor of the liquidated damages as stated in Clause 22 b) below.
- b) If the Contractor fails to complete the Contract, in full or part, within the time laid down in the Contract Agreement or any extension thereof, there shall be deducted from the Contract Price, as liquidated damages, a sum of one half of one percent (0.5%) of the Contract price of each unit of the delayed Stores for each calendar week of delay subject to the maximum of five percent (5%) of the Contract Price of the unit or units so delayed, and such deduction shall be in full satisfaction of the Contractor's liability for the said failure.

23. Period of Guarantee

- a) The terms period of guarantee shall mean the period of twelve (12) months from the date on which the Stores have been put into operation and demonstrated to NED University staff. In any case this period shall not exceed eighteen (18) months from the date of taking-over certificate.
- b) During the period of guarantee, the Contractor shall remedy, at his/her expense, all defects in design, materials, and workmanship that may develop or are revealed under normal use of the said Stores upon receiving written notice from the NED University, the notice shall indicate in what respect the Stores are faulty.
- c) The provisions of this Clause include all expenses that Contractor may have to incur for delivery and installation of such replacement parts, materials, and equipment as are needed for satisfactory operation of the Stores at the NED University premises.

24. Non-assignment

The Contractor shall not have the right to assign or transfer without the prior approval of the University the benefit and obligations of the Contract or any part thereof.

25. Expenditure under Contract

The Contractor shall not make any expenditure for the purpose of this Contract in any country not authorized by the Government of Pakistan.

FORM OF TENDER
(Letter of Offer)

Tender Reference No.: _____ dated _____

Name of Contract: _____

The Director Procurement,
NED University of Engineering and
Technology, Karachi

Dear Sir,

1. Having examined the Tender Documents including instructions to Tenderers, Conditions of Contract Specifications, Drawings, Schedule of prices and Addenda Nos. _____ for the execution of the above-name Contract, we the undersigned, being a company doing business under the name and address _____ and being duly incorporated under the laws of Pakistan hereby offer to execute and complete such Contract and remedy any defects therein in conformity with the said Documents including Address thereto for the total Tender price of Rs. _____ (in figures and words) or such other sum as may be ascertained in accordance with the and Documents.
2. We understand that all the schedules attached hereto form parts this Tender.
3. As security for due performance of the undertakings and obligations of this Tender, we submit herewith a Bid Bond referred in Clause 3 of the Instructions Tenderers and as per Annexure "D", in the amount of Rs. _____ (in words and figures) drawn in favour of or payable to NED University of Engineering and Technology, Karachi, and valid for a period of 28 days beyond the period of validity of this Tender.
4. We undertake, if our Tender is accepted, to complete the whole of the work comprised in the above-named Contract within the time stated in Clause 12 of the Instructions to Tenderers.
5. We agree to abide by this Tender for the period of 120 days beyond the date of opening of the Tender, and it shall remain binding upon us and may be accepted at any time before the expiration of this period.
6. Unless and until a formal Contract Agreement is signed, this together with your acceptance thereof, shall constitute a binding contract between us.
7. We undertaking, if our Tender is accepted, to execute the Contract Performance Bond referred to in Clause 3 of the Instructions to Tenderers and as per Annexure "E" for the due performance of the Contract.

TENDER PARTICULARS

THE TENDERERS MUST SUPPLY THE FOLLOWING SPECIFIC INFORMATION FOR EACH ITEM OR GROUP OF ITEMS OF THE STORES:

1. *Conformation of Stores*

Whether the Stores offered conform to particulars specified in the Schedules; if not details of deviations must be stated in Annexure "F"

2. *Manufacturing Details:*

- (i) Brand of Equipment
- (ii) Name and address of Manufacturer: and
- (iii) Country of Origin of Stores.

3. *Delivery Schedule:*

- (i) Earliest date by which delivery can be effected
- (ii) Complete schedule of delivery: and
- (iii) If the delivery period is different for different items, it must be indicated item wise

4. *Packing Specification:*

Whether the specifications for packing given in the Tender Documents will be adhered to

ANNEXURE C-2

**FORM OF SCHEDULE TO TENDER FOR STORES
IMPORTED FROM APPROVED COUNTRIES.**

Due by _____ hours on _____
(Time) (Date) (Month) (Year)

SCHEDULE TO TENDER NO. _____ dated _____

The Tender will be opened at _____ hours on _____
(Time) (Date) (Month) (Year)

Delivery on or before _____
(Date) (Month) (Year)

Part 1: The rates quoted in the Table below must be on C&F basis:

S. No.	Code/Item No.	Description of Stores	Detailed specifications or Stores with Model No.	Quantity of Stores	Unit	Rate per Unit	Currency	Total C&F price	Currency of Origin
1	2	3	4	5	6	7	8	9	10

Part 2. The rates quoted in the Table below must be in Pakistani Rupees:

S. No.	Code/Item No.	Description of Stores	Quantity of Stores	Unit	Rate per Unit	Total Price
1	2	3	4	5	6	7

(Continued on the next page)

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Annexure "D"

BID BOND
(Bank Guarantee)

Guarantee No. _____
Executed on _____
Expiry date _____

Letter by the Guarantor (Bank) to the Employer (University)

Name of Guarantor (Bank) with address: _____

Name of Principal (Tenderer) with address: _____

Penal sum of Security (Bond), (in figures and words): _____

Tender Reference No. _____ date of tender _____

KNOW ALL MEN BY THESE PRESENT, that in pursuance of the terms of the Tender and at the request of the said principal (Tenderer), we the Guarantor above-named are held and firmly bound unto the Vice Chancellor, NED University of Engineering and Technology, Karachi, acting through the Director Procurement, NED University of Engineering and Technology, Karachi, (hereinafter called the "Employer" (University)) in the sum stated above, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal (Tenderer) has submitted the accompanying Tender numbered and dated as above for supply, installation, putting into operation and demonstration of equipment in the laboratories NED University of Engineering and Technology, Karachi, to the said Employer (University): and

Whereas, the Employer (University) has required as a condition for considering the said Tender that the principal (Tenderer) furnish a Bid Bond in the above said sum to the Employer (University), conditioned as under;

- 1) That the Bid Bond shall remain valid for a period of 28 days beyond the period of validity of the Tender;

IN WITNESS WHEREOF, the above bounden Guarantor has executed the Instrument under its seal on the date indicated above, the name and seal of the Guarantor being hereto affixed and these presents duly signed by its undersigned representative pursuant to the authority of its governing body.

Guarantor (Bank)

Witness:

1. _____
(Signature)

(Signature)

Name, Title, Address and Seal)

(Name)

2. _____
(Signature)

(Title)

Name, Title, Address and Seal)

(Corporate Guarantor Seal)

Our total liability under this Guarantee is limited to the sum stated above and it is a condition of any liability attaching to us under this Guarantee that the claim for payment in writing shall be received by us within the validity period of this Guarantee failing which we shall be discharged of our liability, if any under this Guarantee.

We, _____ (the Guarantor), waiving all objections and defenses under the Contract, do hereby irrevocably and independently guarantee to pay to the employer (University) without delay upon the Employer's (University) to prove or to show grounds or reasons for such demand any sum or sums up to the amount stated above, against the Employer's (University's) written declaration that the Principal (Contractor) has refused or failed to perform the obligations under the Contract which payment will be effected by the Guarantor to the Employer's (University's) designated Bank and Account Number.

PROVIDED ALSO THAT the Employer (University) shall be the sole and final judge for deciding whether the Principal (Contractor) has duly performed his obligations under the Contract or has defaulted in fulfilling the said obligations, and the Guarantor shall pay without objection any sum or sums up to the amount stated above upon first written demand from the Employer (University) forthwith and without any reference to the Principal (Contractor) or any other person.

IN WITNESS WHEREOF, the above bounden Guarantor has executed this Instrument under its seal on the date indicated above, the name and corporate seal of the Guarantor being, hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

Guarantor (Bank)

Witness:

1. _____
(Signature)

(Signature)

Name, Title and Address (Seal)

(Name)

2. _____
(Signature)

(Title)

Name, Title and Address (Seal)

(Corporate Guarantor (Seal))

NED UNIVERSITY OF ENGINEERING AND TECHNOLOGY
DEPARTMENT OF BIOMEDICAL ENGINEERING
SPECIFICATIONS AND QUANTITIES OF EQUIPMENT

BIOMECHANICS LABORATORY

Item Code	Item	Description/Specification	Qty.	Unit Price	Total Amount
BMD / BML - 01	Knee simulator	Knee simulator A fully flexible, functional model of knee joint Ability to demonstrate abduction, anteversion, retroversion and internal/external rotation. Model should include femur, tibia and portion of fibula, meniscus, patella with quadriceps tendon and joint ligaments, including the ACL and PCL. <i>3BScientific™ or similar</i>	01		
BMD / BML - 02	Force measurement load cell	Force measurement load cell Flex sensors 02 circular type, standard size 02 strip type, standard size 01 square type, standard size Capable to measure 50 to 100 N force • <i>Flexiforce™ or similar</i>	05		
BMD / BML - 03	3D accelerometer	3D accelerometer Roll/pitch (static & Dynamic), Yaw (Static, Dynamic, Magnetic Field reference, Active heading stabilization) • <i>Xsens MTi-1 Series or similar</i>	05		
BMD / BML - 04	PASSPORT	PASSPORT Standard Goniometer capable to measure hip, knee and elbow joint angles. Complete system with probes, angle sensor, interface and software. <i>Pasco™ or similar</i>	05		
BMD / BML - 05	Human Arm Model	Human Arm Model 01 Functional Shoulder Joint Model 01 Functional Elbow Joint Model 01 Hand Skeleton Model with ligaments and muscles • <i>3BScientific™ or similar</i>	03		
BMD / BML - 06	Jumping Mat	Jump mat Standard Jump mat with compatible software and computer. Capable to measure jumps, leg power, aerobic capacity and contact time. • <i>Fusionsport™ Jump Mat or similar</i>	02		
BMD / BML - 07	MatScan Pressure Mat	MatScan Pressure Mat Standard pressure sensing mat with software and compatible computer for measurement of static and dynamic pressures during walking. • <i>Tekscan™ or similar</i>	02		
BMD / BML - 08	FastcamsA6	FASTCAMSA6 1800 fps at 1280 x 1024 CMOS sensor, ethernet connector, standard accessories <i>Vision Research™ Phantom Miro C201 or similar</i>	01		

ROBOTICS AND CONTROL LABORATORY

BMD / RCL - 01	BIOLOID GP	BIOLOID GP Humanoid Robot <ul style="list-style-type: none"> • CM-530 (Main Controller-ARM Cortex(32bit) X 1 • AX-12A (Robot Exclusive Actuator, Dynamixel) X 8 • AX-18A (Robot Exclusive Actuator, Dynamixel) X 10 • Gyro Sensor (2 Axis) X 1 • DMS X 1 • RC-100A (Remote Controller) X 1 • Rechargeable Battery (11V, Li-Po, 1000mA/PCM) X 1 • Balance Battery Charger X 1 • Humanoid-Aluminum frame full set • Gripper frame set • Quick start (16 DOF humanoid assembly manual included) • Wrench, Screw Driver, Wrench Bolt, Cable Holder • RobotPlus Software CD • Aluminum Trunk 	01						
BMD / RCL - 02	LEGO Mindstorms Accessories	LEGO Mindstorms Accessories Set includes ; <ul style="list-style-type: none"> • Transformer 10V DC (Item # 45517) • EV3 Intelligent Brick (Item # 45500) • EV3 Rechargeable DC Battery (Item # 45501) • EV3 Large Servo Motor (Item # 45502) • EV3 Medium Servo Motor (Item # 45503) • EV3 Ultrasonic Sensor (Item # 45504) • EV3 Gyro Sensor (Item # 45505) • EV3 Colour Sensor (Item # 45506) • EV3 Touch Sensor (Item # 45507) • EV3 IR Beacon (Item # 45508) • EV3 Infrared Sensor (Item # 45509) • EV3 Cable Pack (Item # 45514) • Temperature Sensor (Item # 9749) • LE Replacement Pack LME 1 (Item # 2000700) • LE Replacement Pack LME 3 (Item # 2000702) • LE Replacement Pack LME 6 (Item # 2000705) 	05 Sets						
BMD / RCL - 03	Epsilon 300 - Lightweight Mobile Manipulator Arm	Pioneer Robot with arm Pioneer 3-AT Robot: <ul style="list-style-type: none"> • Specifications: <table style="width: 100%; border: none;"> <tr> <td style="width: 30%; vertical-align: top;">Construction</td> <td>Body: 1.6 mm aluminum (powder-coated) Tires: Reenforced Pneumatic</td> </tr> <tr> <td style="vertical-align: top;">Operation</td> <td>Robot Weight: 12 kg Operating Payload: Tile/floor 12 kg Grass/dirt 10 kg Asphalt 5 kg</td> </tr> </table>	Construction	Body: 1.6 mm aluminum (powder-coated) Tires: Reenforced Pneumatic	Operation	Robot Weight: 12 kg Operating Payload: Tile/floor 12 kg Grass/dirt 10 kg Asphalt 5 kg	01		
Construction	Body: 1.6 mm aluminum (powder-coated) Tires: Reenforced Pneumatic								
Operation	Robot Weight: 12 kg Operating Payload: Tile/floor 12 kg Grass/dirt 10 kg Asphalt 5 kg								

		Shoulder Pitch: 210° Elbow Roll: 300° Elbow Pitch: 210° Wrist Yaw: 210° Wrist Pitch: 210° Wrist Roll: 300° Power: 12V 2A Interface: Serial or USB Actin library and flexible Software: GUI/simulator, with inverse kinematics			
BMD / RCL - 06	31313 MINDSTORMS EV3	LEGO MINDSTORMS EV3 <ul style="list-style-type: none"> • The system includes the Intelligent EV3 Brick, a compact and powerful programmable computer that makes it possible to control motors and collect sensor feedback using the intuitive icon-based programming and data logging software that is delivered with the set. • The set includes; <ul style="list-style-type: none"> ○ 1 EV3 Programmable brick ○ 2 Large Motors ○ 1 Medium Motors ○ 2 Touch Sensors ○ 1 Color Sensor ○ 1 Ultrasonic Sensor ○ 1 Gyro Sensor ○ 7 Connector Cables ○ A USB Cable for Programming ○ A rechargeable battery for EV3 ○ A charger ○ Nearly 540 building elements, including beams, axles, gears and connectors ○ Storage bins for your Technic elements ○ Building instructions ○ Icon based Programming and data logging Software 	05		
BMD / RCL - 07	NAO H25 HUMANOID ROBOT	NAO H25 HUMANOID ROBOT <ul style="list-style-type: none"> • NAO is a programmable 57 cm tall humanoid robot with the following key components: <ul style="list-style-type: none"> ○ A body with 25 degrees of freedom (DOF), whose key elements are electric motors and actuators ○ A series of sensors - 2 cameras, 4 microphones, a Sonar distance sensor, 2 IR emitters and receivers, 1 inertial board, 9 tactile sensors, 8 pressure sensors ○ Various devices to express itself - voice synthesizer, LED lights, 2 high quality speakers ○ A CPU (located in the head) which runs a Linux kernel and supports ALDEBARAN's own proprietary middleware (NAOqi) ○ A second CPU (located in the torso) ○ A 55 Watt-Hours battery, giving NAO 1.5 hours autonomy or more depending on the usage 	01		