

**Tender No. 12/2022**

# **UNIVERSITY OF CHAKWAL**



## **TENDER DOCUMENT**

**For**

## **PURCHASE OF MEDICAL & LAB EQUIPMENT**

**Issued To:** \_\_\_\_\_

**Deputy Director P&S  
Ph. No.: 0543-552511**

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**UNIVERSITY OF CHAKWAL**  
Procurement Department  
Main Campus, Talagang Road, Chakwal.  
[Tel:0543-552511](tel:0543-552511)

### **CORRIGENDUM**

The tender notice which was published in Nawai-waqat Newspaper dated 10-11-2022 vide IPL-11529 regarding Purchase of Medical & Lab Equipment. The said tender notice and bidding documents have been revised and the revised bidding documents are uploaded on PPRA Punjab Website as well as UOC Website. Please note the following changes:-

<b>Purchase of Medical &amp; Lab Equipment</b>	<b>Closing Time and Date</b>	<b>Opening Time and Date</b>
The Closing Time & Date and Opening Time & Date have been extended as mentioned in next columns.	16-12-2022 till 11:00AM	16-12-2022 at 11:30AM
<b>Sr.No.39-Specifications</b> of bidding documents have been revised.		

**Note: - All other terms and condition will remain same.**

**SULTAN MAHMOOD**  
**Deputy Director (P&S)/Convener, CPC**

## 1. **Invitation To the Bid**

- 1.1. Bids/Tenders are invited for **Purchase of Medical & Laboratory Equipment** from Sales Tax and Income Tax Registered firms.

## 2. **Instructions to the Bidders**

- 2.1. Procurement will be made under Punjab Procurement Rules (PPRA), 2014.
- 2.2. It will be clearly understood that the Terms and Conditions mentioned in this document are intended to be strictly enforced.
- 2.3. Bidders must ensure that they submit all the required documents indicated in the Tender / Bidding Documents at the time of opening of Technical Bids and no request for submission of missing documents will be entertained after opening of the Technical Bids.
- 2.4. Bids without supporting documents, undertaking, valid documentary evidence, and bids not conforming to terms and conditions given in the Tender Document will be liable for rejection. Bids received after due date and time, and bids without Bid Security in shape of Demand Draft, Pay Order, CDR or less than required amount or Bid Security in shape of Cheque or Cross Cheque shall be rejected.
- 2.5. No supporting document will be accepted, at all, after opening of the Technical Bids.
- 2.6. The bidder must quote rates of each item in a lot/package, partial bidding in a lot is allowed.
- 2.7. **Mode of Advertisement:**

As per Rule 12(1) the advertisement is being placed on [www.uoc.edu.pk](http://www.uoc.edu.pk) and on the website of PPRA Punjab [www.ppra.punjab.gov.pk](http://www.ppra.punjab.gov.pk)

### 2.8. **Type of Open Competitive Bidding**

As per Rule No. 38(2) a, single stage two envelope procedure shall be followed with details given below:

- 2.8.1. The bid shall comprise of a single package containing two separate envelopes. Each envelope shall contain separately the financial proposal and the technical proposal;
- 2.8.2. The envelopes shall be marked as “FINANCIAL PROPOSAL” and “TECHNICAL PROPOSAL” in bold and legible letters to avoid confusion;
- 2.8.3. Initially, only the envelope marked “TECHNICAL PROPOSAL” shall be opened; The envelope marked as “FINANCIAL PROPOSAL” shall be retained in the custody of procuring agency without being opened;
- 2.8.4. The Purchaser shall evaluate the technical proposal under **PPRA Rule # 32** and in a manner prescribed in this document, without reference to the price and reject any proposal which does not conform to the specified requirements as listed in said sections. During the technical evaluation no amendments in the technical proposal shall be permitted;
- 2.8.5. The financial proposals of technically qualified bidders shall be opened publicly at a time, and venue announced and communicated to the bidders in advance;
- 2.8.6. After the evaluation and approval of the technical proposal the procuring shall at a time within the bid validity period, publicly open the financial proposals of the technically accepted and qualified bids only. The financial

proposal of bids found technically non-responsive shall be returned un-opened the respective bidders.

**2.9. Bid Data Sheet (Information for the Bidders)**

1	Procuring Agency	University of Chakwal
2	Tender Number	12/2022
3	Name of Tender	Purchase of Medical & Laboratory Equipment
4	Tender Document available place	Office of the Deputy Director (P&S), University of Chakwal (Main Campus), Main Talagang Road, Chakwal.
5	Cost of Tender Document	<b>Rs.1000/-</b> payable at BOP through <b>Deposit Slip</b> in <b>A/C No. 6010211599100019, Main Recurring Account</b> of University of Chakwal.
6	Bid Security	Amount mentioned in Clause No. 9 of the Tender Document in shape of Bank Guarantee, CDR, Pay Order, Bank Draft etc., in favor of “Treasurer, University of Chakwal, Chakwal”
7	Performance Guarantee	10% of Contract Value after issuance of Letter of Acceptance
8	Tender Addressed to	Convener, Purchase Committee, University of Chakwal.
9	Contact Number	Ph. 0543-552511
10	Due date, time and place of submission of Tender Document	<b>16-12-2022 till 11:00 AM</b> Office of the Deputy Director (P&S), University of Chakwal (Main Campus), Main Talagang Road, Chakwal.
11	Date, time and place of Technical Bid Opening	<b>16-12-2022 at 11:30 AM</b> at <b>Seminar Hall</b> , Ground Floor, Engineering Building, University of Chakwal (Main Campus), Main Talagang Road, Chakwal.
12	Date, time and place of the Financial Proposals	Shall be intimated subsequently to Technically Qualified firms

## **Terms and Conditions of the Tender**

### **3. Definitions**

- 3.1. "Purchaser" means the procuring agency i.e. University of Chakwal.
- 3.2. "UOC" means University of Chakwal.
- 3.3. "Bidder/Tenderer" means the Firm/Company/Supplier/Distributor that may provide or provides the Goods and related services to any of the public sector organization under the contract and have registered for the relevant business thereof.
- 3.4. "Contract" means the agreement entered into between the Purchaser and the Contractor, in form of Supply Order or as recorded in the Contract Form signed by the parties, including all Schedules and Attachments thereto and all documents incorporated by reference therein.
- 3.5. "Contractor/The Successful Bidder" means the person whose Tender has been accepted and awarded letter of Acceptance followed by the Supply Order or Contract by the Purchaser.
- 3.6. "Contract Value" means that portion of the Contract Price adjusted to give effect to such additions or deductions as are provided for in the Contract which is properly apportion-able to the Goods or Services in question.
- 3.7. "Goods" means equipment, machinery, and/or other materials which the Contractor is required to supply to the Purchaser under the Contract.
- 3.8. "Services" means installation, configuration, deployment, commissioning, testing, training, support, after sale service, etc. of Goods and other such obligations which the Contractor is required to provide to the Purchaser under the Contract.
- 3.9. "PPRA" means Punjab Procurement Regulatory Authority.

### **4. Tender Eligibility**

Eligible Bidder/Tenderer is one who:

- 4.1. has valid registration certificates for Income Tax and Sales Tax;
- 4.2. is an active Income Tax Payer;
- 4.3. has got the experience in supply of relevant items;
- 4.4. conforms to the clause of "Responsiveness of Bid" given in this tender document;
- 4.5. Has not been blacklisted.

### **5. Examination of the Tender Document**

The bidder/Tenderer is expected to examine the Tender Document, including all terms and conditions.

### **6. Amendment of the Tender Document**

- 6.1. The Purchase Committee of University of Chakwal at any stage prior to the deadline for submission of the Tender, at its own initiative or in response to a clarification requested by the Bidder(s), amend the Tender Document, on any account, for any reason. All amendment(s) shall be part of the Tender Document and binding on the Bidder(s).
- 6.2. The Purchaser shall notify the amendment(s) in writing to the prospective

Tenderers/Bidders.

- 6.3. The Purchaser may, at its exclusive discretion, amend the Tender Document to extend the deadline for the submission of the Tender, in which case all rights and obligations of the Purchaser and the Tenderers previously subject to the deadline shall thereafter be subject to the deadline as extended.

## 7. Bid Currency

Bidder should quote price in **Pak Rupees only** and payments shall also be made in Pakistan Rupees only.

## 8. Validity Period of the Bid

- 8.1. Validity period of the bids shall be **180 days**.
- 8.2. In exceptional circumstances, the Purchase Committee of University of Chakwal may ask the Bidders for an extension of the period of validity. The request and the responses shall be made in writing. A bidder accepting the request will not be required nor permitted to modify its tender.

## 9. Bid Security

- 9.1. Bidder will submit derity drawn in the name of **Treasurer, University of Chakwal** detail given below:

Item Name	Budgetary Amount	Amount of Bid Security
Purchase of Medical & Laboratory Equipment	Rs.56,000,000/-	Rs.1,120,000/-

- 9.2. Cheque or Cross Cheque shall not be accepted at all.
- 9.3. The amount submitted as Bid Security shall be refunded to the unsuccessful bidders after the decision for the award of the said tender.
- 9.4. The Bid Security of Successful Bidder(s) may be converted as part of the Performance Guarantee for successful execution of the work.
- 9.5. Subject to the award of contract, the Bid Security in form of CDR, Demand Draft, Pay Order shall be returned to successful bidder against submission of Performance Guarantee
- 9.6. If the Bid Security is found less than the required amount then the bid will be rejected irrespective of the rates and the stage of the bid process.
- 9.7. The Bid Security may be forfeited if a Bidder:
- Refuses to accept Letter of Acceptance of the Bid; or
  - Fails to furnish Performance Security.

## 10. Bid Preparation and Submission

- 10.1. The Tender shall be filed in / accompanied by the prescribed Forms, Annexes, Schedules, Drawings, Documents, Brochures, Literature, etc. which shall be completely filled in, stamped and signed by the Tenderer or his Authorized Representative. In case of copies, photocopies may be attested.
- 10.2. The Bids/Tenders should be submitted in two parts (1) **Technical Proposal** and (2) **Financial Proposal**. The Technical Proposal and Financial Proposal shall be submitted in separate covers.



### **10.3. Technical Proposal**

The Technical Proposal will enable the Purchase/Technical Committee to evaluate whether the bidder is technically competent and capable of executing the order and the specifications offered by the bidder meet the ones given in the Tender/Bid Documents. Only those bids which qualify in the technical stage will be eligible for the Financial Proposal opening. The Financial Proposals of bidders who failed in the Technical stage will not be opened.

**10.4.** The Technical Proposal form as given in the Bid/Tender Document shall be filled, signed and stamped in all pages. The Purchase Committee will not be responsible for the errors committed in the bids by the bidders.

**10.5.** The Technical Proposal should not strictly contain any Price/Cost indications as such otherwise the bids will be summarily rejected.

**10.6.** The Bidder should quote only one brand/model/make of each item.

**10.7. Detail and Order of Documents to be furnished with the Technical proposal (Envelope A):**

The documents attached with the Technical Bid must be signed and stamped by the Authorized Representative of the Bidder. The documents attached must be numbered and attached in the following order:

**10.7.1.** Covering letter (*Annexure-A*) duly signed and stamped by authorized representative.

**10.7.2.** Copy of Income Tax Registration Certificate (*Annexure-B*).

**10.7.3.** Copy of Sales Tax Registration Certificate (*Annexure-C*).

**10.7.4.** Detailed specification of items (*Annexure-D*).

**10.7.5.** At least two relevant Supply Orders/Contracts received in the last three years (*Annexure-E*).

**10.7.6.** Affidavit/Undertaking on Stamp Paper (*Annexure-F*).

## **11. Financial Proposal**

**11.1.** The Financial Proposal of the bidder shall also include the price break up of taxes/duties. All taxes/duties as applicable shall be responsibility of the bidders.

**11.2.** The cost quoted by the bidder shall be kept firm and unchanged for a period specified in the Bid/Tender Documents from the date of opening of the bids. The bidder shall keep the price firm/unchanged during the period of Contract including during the period of extension of time if any.

**11.3.** The quoted price will be inclusive of all taxes, duties, levies, insurance, freight (transportation charges), etc.

**11.4.** The Bid is liable for rejection if Financial Proposal contains conditional offer.

**11.5. Details to be furnished with Financial proposal (Envelope B)**

**11.5.1.** Financial Proposal Covering Letter (*Annexure G*).

**11.5.2.** Financial Proposal Form duly filled, signed and stamped by the Bidder (*Annexure H*).

**11.5.3.** Bid Security of **Rs. 1,120,000/-**

## **11.6. Sealing the Bid**

**11.6.1.** The Technical Proposal shall be placed in a separate cover (**Envelope-A**) and sealed appropriately. The Technical Proposal cover shall be marked as **“Technical Proposal for Purchase of Medical & Laboratory Equipment”** – Bid Ref.: due on: \_The “FROM” address and “TO” address shall be written without fail.

**11.6.2.** The Financial Proposal (**Envelope-B**) shall contain rates of item quoted by the bidder. The Financial Proposal cover shall be marked as **“Financial Proposal for Purchase of Medical & Laboratory Equipment”** – Bid Ref.: due on: \_\_\_\_The “FROM” address and “TO” address shall be written without fail.

**11.6.3. Out Cover:** The Technical Proposal cover (Envelope-A) and Financial Proposal cover (Envelope B) shall then be put in a single outer envelope and sealed. The outer cover shall be marked as **“Bid for Purchase of Medical & Laboratory Equipment”** –Bid Ref.: due on \_\_\_\_\_. The “FROM” address and “TO” address shall be written without fail.

## **11.7. Mode of Submission of Bids**

**11.7.1.** The Bid should be addressed to “Convener, Purchase Committee, University of Chakwal”.

**11.7.2.** The Bids received after Due Date and Time or Unsealed or incomplete or submitted by Fax or Email will be summarily rejected.

## **12. Modification/Withdrawal of the Tender**

**12.1.** The Bidder may, by written notice served on the Purchaser, modify or withdraw the Tender after submission of the Tender, prior to the deadline for submission of the Tender.

**12.2.** The Tender, withdrawn after the deadline for submission of the Tender and prior to the expiration of the period of the Tender validity, shall result in forfeiture of the Bid Security.

## **13. Bid Opening**

### **13.1. Technical Proposal Opening**

The bid’s outer cover and Technical Proposal cover will be opened by the Purchase Committee of University of Chakwal on the date and time as specified in the Tender Notice /Bid Data Sheet. The bids will be opened in the presence of the bidders who choose to be present. A maximum of two representatives for each bidder would be allowed to attend the Bid Opening.

### **13.2. Suppression of facts and misleading information**

**13.2.1.** During the bid evaluation, if any suppression or misrepresentation of information is brought to the notice of the Purchase Committee, the Committee shall have the right to reject the Bid and if it happens so after selection of the Bidder, the Purchase Committee may terminate the Contract or award of the Contract or further processing of the Bid as the case may be and that will be without any compensation to the Bidder and the Bid Security/Performance Guarantee, as the case may be, shall be forfeited.

- 13.2.2. It is the Bidder's responsibility to prove the Bidder's requisite qualification, experience and capacity to undertake the project to the entire satisfaction of the Purchase Committee failing which the Bid may be rejected.

#### **14. Preliminary Examination**

- 14.1. The Procuring Agency shall examine the bids to determine whether they are complete, whether any computational errors have been made, whether the required documents have been furnished and properly signed, and whether the bids are generally in order.
- 14.2. In the financial bids (at the time of opening the financial proposal) the arithmetical errors shall be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the total price shall be corrected. If the Bidders/Suppliers do not accept the correction of the errors, its bid shall be rejected. If there is a discrepancy between words and figures, the amount in words shall prevail.

#### **15. Determination of Responsiveness of the Bid**

- 15.1. The Purchaser shall determine the substantial responsiveness of the Tender to the Tender Document, prior to the Tender evaluation, on the basis of the contents of the Tender itself without recourse to extrinsic evidence. A substantially responsive Bid is one which:
- 15.1.1. meets eligibility criteria for the Bidder / the Goods / the Services;
  - 15.1.2. meets all the mandatory requirements of the evaluation criteria;
  - 15.1.3. meets the Technical Specifications for the Goods / the Services;
  - 15.1.4. meets the delivery period / point for the Goods / the Services;
  - 15.1.5. is accompanied by the required Bid Security;
  - 15.1.6. is otherwise complete and generally in order;
  - 15.1.7. Conforms to all terms and conditions of the Tender Document, without material deviation or reservation;
  - 15.1.8. which offers one Brand/Model/Make for each item (which does not contain any option);
- 15.2. A material deviation or reservation is one which affects the scope, quality or performance of the Goods or limits the Purchaser's rights or the Bidder's obligations under the Contract.
- 15.3. The Tender determined as not substantially responsive shall not subsequently be made responsive by the Tenderer by correction or withdrawal of the material deviation or reservation. However, the Purchaser may waive off any minor non-conformity or inconsistency or informality or irregularity in the Tender.

#### **16. Technical Evaluation Criteria**

The Bidders who have duly complied with the Eligibility/Qualification and Evaluation will be eligible for further processing.

The Bids which do not conform to the Technical Specifications or Bid conditions or the Bids from the Bidders without adequate capabilities for supply and maintenance / warranty services will be rejected.

The Eligible/Technically Qualified Bidders will be considered for further evaluation.

Under PPRA Rules # 31, Technical Bids will be evaluated on the basis of following criteria and Financial Bids of only those bidders will be opened who have fulfilled the criteria:

<b>Evaluation Criteria</b>			<b>Requirement</b>
Sales Tax Registration			<b>Mandatory</b>
Income Tax Registration			<b>Mandatory</b>
Conformance to the required specification of items given in Schedule of Requirement			<b>Mandatory</b>
At least two relevant Supply Orders/Contracts received in the last three years			<b>Mandatory</b>
Affidavit /Bidder's Undertaking on stamp paper			<b>Mandatory</b>
<b>S. No.</b>	<b>Item Name and Description</b>	<b>Marks</b>	<b>Maximum Marks</b>
<b>1</b>	<b>Past Performance/ Experience of the Bidder (Reg with GST/NTN)</b>	--	<b>10</b>
1.1	1 - 3 year experience	2	--
1.2	4 - 8 year experience	4	--
1.3	9 - 15 year experience	6	--
1.4	Above 15	10	--
<b>2</b>	<b>Relevant Experience</b>	--	<b>10</b>
2.1	1 - 5 year experience	3	--
2.2	6 - 10 year experience	6	--
2.3	11 & above year experience	10	--
<b>3</b>	<b>Financial Position/ Status</b>	--	<b>10</b>
3.1	Last sales tax paid Form	4	--
3.2	Bank Certificate (satisfactory)	2	--
3.3	Statement Worth (Min 2 m)	4	--
<b>4</b>	<b>Technical Evaluation of quoted items</b>	--	<b>70</b>
4.1	Specification attached at Annex-A	50	
4.2	Workshop for Equipment	5	
4.3	Men Power related to Equipment in details	5	
4.4	Delivery schedule as per need	2.5	
4.5	List of clients / where such items delivered	2.5	
4.6	Guarantee / Warranty (as the case may be)	5	
<b>TOTAL</b>		<b>--</b>	<b>100</b>

The bidder must provide Verifiable documentary proof against all the mandatory requirement along with the Technical Proposal and no document will be received or considered after opening of the Technical Proposal.

Demonstration (If necessary) of Multimedia Projector will be held for confirmation of specifications of the quoted model.

Conformance to the required specification of items given in Schedule of Requirement will be evaluated by the Technical Evaluation Committee.

The Purchase Committee and Technical Evaluation Committee may ask for physical Demonstration of any item given in the Tender Document for confirmation of specifications.

## **17. Financial Proposal Evaluation**

- 17.1. Technically qualified/successful bidder(s)/Tenderer(s) shall be called for opening of the Financial Proposal(s). The Financial Proposals will be opened in the presence of the Bidders at the time and venue indicated by the Purchaser accordingly. The technically Eligible/Successful Bidder(s)/Tenderer(s) or their authorized representatives against each Lot shall be allowed to take part in the Financial Proposal(s) opening against their relevant Lot(s).
- 17.2. Financial Proposal evaluation will be conducted under the Punjab Procurement Rules, 2014. The Price evaluation will include all duties, taxes and expenses etc. In case of any exemption of duties and taxes made by the Government in favor of the Purchaser, the contractor shall be bound to adjust the same in the Financial Proposal.

## **18. Rejection and Acceptance of the Tender/Bid**

- 18.1. The Purchaser shall have the right, at his exclusive discretion, to increase / decrease the quantity of any or all item(s), under PPRA Rules 2014 without any change in unit prices or other terms and conditions, accept a Tender, reject any or all tender(s), cancel / annul the Tendering process at any time prior to award of Contract, without assigning any reason or any obligation to inform the Tenderer of the grounds for the Purchaser's action, and without thereby incurring any liability to the Tenderer and the decision of the Purchaser shall be final.
- 18.2. **The Tender / bid shall be rejected if:**
  - 18.2.1. It is substantially non-responsive; or
  - 18.2.2. The bidder does not meet any of the mandatory criteria mentioned in Clause No. 15; or
  - 18.2.3. It does not contain the documentary proof against any of the mandatory criteria mentioned in Clause No. 15; or
  - 18.2.4. **The bid is incomplete, conditional, alternative, late; or**
  - 18.2.5. the bidder does not attach Bid Security in Shape of Demand Draft, Pay Order, CDR; or
  - 18.2.6. the bid security is not attached or it is less than the required amount; or
  - 18.2.7. the Bidder submits more than one Bids against one Tender; or
  - 18.2.8. the Bidder tries to influence the Purchase Committee / Contract award; or
  - 18.2.9. the Bidder engages in corrupt or fraudulent practices in competing for the Contract award; or
  - 18.2.10. there is any discrepancy between bidding documents and bidder's proposal i.e. any non-conformity or inconsistency or informality or irregularity in the submitted bid; or
  - 18.2.11. the Bidder submits any financial conditions as part of its bid which are not in conformity with tender document.

## **19. Contacting the Procuring Agency**

- 19.1.** No Bidder shall contact the Purchase Committee of UOC on any matter relating to its bid, from the time of the bid opening to the time the Contract is awarded.
- 19.2.** Any effort by a Bidder to influence the Procuring Agency in its decisions on bid evaluation, bid comparison, or Contract Award will disqualify the bidder and rejection of the bid. Canvassing by any Bidder at any stage of the Tender evaluation is strictly prohibited.

## **20. Announcement of Evaluation Report**

- 19.1** The Procuring Agency shall announce the results of bid evaluation in the form of a report giving justification for acceptance or rejection of bids at least ten days prior to the award of Contract. The report shall be made available on PPRA website and all the bidders shall be informed of this.

## **21. Award of Contract**

- 21.1.** The Tender will be awarded to the Lowest Evaluated Bidder(s) (item wise/Lot wise) who have been declared Technically Qualified.

## **22. Letter Of Acceptance (LOA)**

After acceptance of the Bids by the CPC, Letter of Acceptance (LOA) will be issued only to the Successful Bidder(s).

## **23. Payment of Performance Guarantee (PG)**

- 23.1.** The Successful Bidder(s) will be required to remit the Performance Guarantee equivalent to 10% of the value of the contract price. The PG should be paid by way of Cash Deposit Receipt (CDR), Pay Order, Demand Draft drawn in favor of “Treasurer University of Chakwal, Chakwal” as unconditional Guarantee.
- 23.2.** The Performance Guarantee will be forfeited if the Successful Bidder withdraws the Bid during the period of Bid validity specified in the Bid Documents or if the Bidder(s) fails to sign the contract.

## **24. Refund of Bid Security (BS)**

The Bid Security (BS) of the Successful Bidder may be adjusted towards Performance Guarantee payable by the firm. If the successful Bidder(s) submits Performance Guarantee for the stipulated value in full by way of Cash Deposit Receipt (CDR), Bank Draft or Pay Order the BS will be refunded. The BS of the unsuccessful Bidder will be refunded on the written request of the Bidder. The Bid Security of the successful bidder shall be released upon his request provided the bidder submits the Performance Guarantee in the shape of Cash Deposit Receipt (CDR), Bank Draft or Pay Order.

## **25. Issuance of Supply Order or Signing the Contract**

- 25.1. The Purchase Committee shall issue Supply Order or sign a Contract with the Successful bidder who has submitted the Performance Guarantee.
- 25.2. The Successful Bidder will provide the **stamp paper of 0.25% of total order value** for issuance of Supply Order or Signing the Contract.

## **26. Redressal of grievances by the procuring agency**

- 26.1. Any bidder feeling aggrieved by any act of the procuring agency after the submission of his bid may lodge a written complaint concerning his grievances not later than 10 days after the announcement of the bid evaluation report.
- 26.2. The committee shall investigate and decide upon the complaint within fifteen days of the receipt of the complaint.
- 26.3. Mere fact of lodging of a complaint shall not warrant suspension of the procurement process.
- 26.4. Any bidder not satisfied with the decision of the committee of the procuring agency may lodge an appeal in the relevant court of jurisdiction.

## **General Conditions of Contract / Supply Order**

### **27. Delivery of Items**

- 27.1. The Supplier will be responsible for **delivery of Items** of Purchase of Laboratory Equipment and in case of items which requires installation, the Bidder will be responsible for installation of items at UOC, Main Campus, Talagang Road, Chakwal.
- 27.2. Delivery Period will be **Ninty (90) days** counted *after issuance of Letter of Acceptance*.
- 27.3. After delivery of items, the Bidder must get the items inspected at UOC, Main Campus, Talagang Road, Chakwal.
- 27.4. The supplier will bear all costs associated with the preparation, delivery and installation of the Items and the Purchaser will in no case be responsible or liable for those costs. The supplier will make such arrangements to ensure safe delivery of goods. Any damage sustained during transportation / delivery will be rectified by the supplier at his cost.

### **28. Liquidated Damages**

- 28.1. When the supplier fails to deliver or install the goods or both within the time period specified in the contract, the Purchase Committee may, without prejudice to any other remedy it may have under the contract, deduct from the contract price, as liquidated damages, a sum equivalent to 0.25% of the price of the delayed goods per day of delay, maximum up to 10% of the price of total value of the contract.
- 28.2. The Successful Bidder will be responsible to provide the delivery, Delivery Challan and Bill within the delivery period in order to avoid Late Delivery Charges.

## **29. Inspection and Tests**

- 29.1. The Inspection Committee of UOC shall inspect and test the Goods supplied, the Services provided, under the Contract/Supply Order, to verify their conformity to the Technical Specifications.
- 29.2. Inspection will be done at University of Chakwal.
- 29.3. Inspection Committee may verify the authenticity of items.
- 29.4. After the inspection or test if the Inspection Committee is of the opinion that items do not conform to the specification and the criteria mentioned above, the Inspection Committee may reject them, and the supplier shall either replace the rejected goods or make all alterations necessary to meet the requirements of the specifications free of cost to University of Chakwal.

## **30. Release of Performance Guarantee (PG)**

The Performance Guarantee will be refunded to the Successful Bidder(s) *after one year of completion of delivery and installation of Goods (Inspection).*

## **31. Contract Amendment**

- 31.1. The Purchaser may, at any time, by written notice served on the Contractor, alter, amend, omit, increase, decrease or otherwise change the nature, quality, quantity and scope, of all / any of the Goods / the Services / the Works, in whole or in part.
- 31.2. No variation in or modification in the Contract shall be made, except by written amendment signed by both the Purchaser and the Contractor.

## **32. Termination for Default**

The Purchase Committee of UOC may, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the tenderer, terminate this Contract in whole or in part if:

- 32.1. the bidder fails to provide services within the period(s) specified in the Contract, or within any extension thereof granted by the Procuring entity.
- 32.2. the successful bidder fails to deliver goods and services as per its technical specifications offered in the bid
- 32.3. the successful bidder fails to perform any other obligation(s) under the Contract.
- 32.4. the bidder, in the judgment of the Purchase Committee has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

## **33. Blacklisting**

If the Contractor fails / delays in performance of any of the obligations, under the Contract / Letter of Acceptance, violates any of the provisions of the Contract / Letter of Acceptance, commits breach of any of the terms and conditions of the Contract / Letter of Acceptance or found to have engaged in corrupt or fraudulent practices in competing for the award of contract / Letter of Acceptance or during the execution of the contract / Letter of Acceptance, the Purchaser may without prejudice to any other right of action / remedy it may have, blacklist the Contractor, either indefinitely or for a stated period, for future tenders in public sector, as per mechanism provided in Punjab Procurement Rules, 2014.



### **34. Force Majeure**

Majeure means an act of nature or an event beyond the control of the Supplier and not involving the Supplier's fault or negligence directly or indirectly purporting to mis-planning, mismanagement and /or lack of ore sight to handle the situation. Such events may include but are not restricted to acts of the Procuring Agency in its sovereign capacity, wars or evolutions, fires, floods, earthquakes, strikes, epidemics, quarantine restrictions and freight embargoes. If a Force Majeure situation arises, the Suppliers hall promptly notify the Procuring Agency in writing with sufficient and valid evidence of such condition and the cause there of the Committee constituted for Redressal of grievances, shall examine the pros and cons of the case and all reasonable alternative means for completion of purchase order under the Contract and shall submit its recommendations to the competent authority. However, unless otherwise directed by the Procuring Agency in writing, the Supplier shall continue toper form its obligations under the Contract as far as is reasonably practical and shall seek reasonable alternative means for performance not prevented by the Force Majeure event.

### **35. Termination for Insolvency**

The Procuring Agency may at any time terminate the Contract by giving written notice of 30days' time to the Supplier if the Supplier becomes bankrupt or otherwise insolvent. In this event, termination shall be without compensation to the Supplier, provided that such termination shall not prejudice or affect any right of action or remedy which has accrued or shall accrue thereafter to the Parties.

### **36. Forfeiture of Performance Security**

- 36.1.** If the Contractor fails / delays in performance of any of the obligations, under the Contract / violates any of the provisions of the Contract / commits breach of any of the terms and conditions of the Contract / Letter of Acceptance, the Purchaser may, without prejudice to any other right of action / remedy it may have, forfeit Performance Security of the Contractor.
- 36.2.** Failure to supply required items/services within the specified time period will invoke penalty as specified in this document.

### **37. Payment**

- 37.1.** 100% payment will be made after withholding applicable taxes by UOC to the Successful Bidder after delivery and installation of goods and on receipt of the following documents:
- i. Triplicate Original Delivery Challan.
  - ii. Triplicate Original Bill/Invoice.
  - iii. Triplicate General Sales Tax Invoice
  - iv. Inspection/Completion report

### **38. Warranty**

- 38.1.** Warranty of Equipment, Apparatus and instrument shall be one year.
- 38.2.** The Supplier shall confirm that the goods supplied under this contract are new and unused. The Supplier shall further warrant that all goods supplied under this contract shall have no defect arising from design materials or workmanship or from any act or omission of the supplier that may arise under the normal use of the supplied goods in the conditions prevailing in the University.
- 38.3.** The Purchase Committee shall notify the supplier in writing of any claim arising under the warranty. Upon receipt of such notice, the supplier shall repair or replace the defective goods or parts within **15days**, inclusive of, where applicable, the cost of inland delivery of the repaired or replaced goods or parts from the port of entry to the final destination and their installation.

### 39. SPECIFICATIONS

#### Mechatronics System Design Lab

Sr.#	Item	Description	Qty
1	Digital Oscilloscope	Frequency Range 100 MHz	5
2	Function Generator	Frequency Range 0-100 MHz	5
3	Consumable items	Ics, resistors, capacitors, sensors, motors, bread boards, transistors etc.	1
4	PCB Machine Drill Bits	LPKF laser & Electronics Model: ProtoMat E33 Drill Bits	2
5	3D Printer	Printing size: 220*220*300mm Printing Method: TF card/ On Line / Off Line Layer Thickness: 0.05-0.4mm Dual Y-axis Motors Magnetic Build Plate Power off Resume Printing Enclosed Structure	2
6	PIC Trainer Kits	For programming of Microchip 8 bit PIC MCUs, 16 bit MCUs, DSPIC DSCs and serial EEPROMs Power Supply USB or Power adaptor Programmable clock/ Data speed (500 kHz - 2.5 MHz)	2

#### Robotics and Automation Lab

Sr.#	Item	Specification	Qty.
1	Quadcopter (GAPTER: Educational Copter using ROS and MAVLINK or equivalent or higher)	ROS-Enabled Drone	2
		Internet Connectivity: Using a 3G/4G WiFi model	
		Can interface with Pixhawk open-source flight controller platform	
		Ordoid XU4 SBC: Odroid XU4 single-board computer is integrated with Pixhawk to provide the best performance possible for the autopilot.	
		3D Sensor: unique feature in Gapter as compared to other COTS drone. Asus Live Pro 3D sensor	
2	Educational ROS Robot (Turtlbot3 Burger or equivalent or higher)	360 degree LiDAR for SLAM and Naigation	2
		Scalable Structure	
		Single Board Computer Raspberry Pi 3	
		Open CR (32-bit ARM Cortex - M7	
		Dynamixel motors 2	
		Sprocket Wheels for Tire and Caterpillar	
Li-Po battery 11.1 v 1,800 mAh			
3	Educational ROS Robot (Turtlbot3 Waffle Pi or equivalent or higher)	360 degree LiDAR for SLAM and Naigation	2
		Scalable Structure	
		Single Board Computer Raspberry Pi 3	
		Open CR (32-bit ARM Cortex - M7	
		Dynamixel motors 2	
		Sprocket Wheels for Tire and Caterpillar	
Li-Po battery 11.1 v 1,800 mAh			
4	Manipulator (Open Manipulator-X -RM-X52-TNM) or Equivalent or higher) with hand	Motors: Dynamixel Pro H54P-200-S500-R x2 H54P-100-S500-R x2 H54P-100-S500-R x2	1
		DOF: 6	
		Payload Capacity: 3 Kg	
		Speed (Each joint, deg/sec) 180	
		Weight (kg) 5.5	

		Rated Voltage (VDC) 24	
		Software ROS (Ubuntu Linux)	
6	PLC Trainers	PLC Trainer: 32 digital input channel, 32 digital output channel, 24 V DC operating system 8 AC input & 8 AC output channel in digital channel (110V AC to 220V AC), 10 Analogue inputs and 10 Analogue outputs, 0 to 12 V DC Trainer Module Accessories: contactors, limit switches, indicator lamps, relays, toggle switches. or better available.	3

### **Instrumentation and Control Lab**

Sr.#	Item	Description	Qty.
1	PID Trainer kit	Open and closed responses of different processes under different configuration using P, PI, PD, PID, analog and digital controllers, experimental verification of PID Tuning. Should have temperature and light sensor module along with it to explain PID auto tuning. On board circuits of P, PI, PD, PID. Should be provided with the interface to display signal on CRO	2
2	Linear Inverted Pendulum, Double Stage	Hardware platform is based on PC and DSP-based motion controller. Experiment verification and demonstration program of DOS version, with source codes provided. MATLAB Windows2000 experiment program, with SIMULINK as user interface can build model, perform simulation and analysis, evaluate control performance, and improve control system directly. Valid Distance Travel 720mm, Max Motion Velocity 6000mm/friction System between Dolly and Sliding Bar <0.02N.s/m. Length*width*height=1000mm* 220mm*150mm	1
3	DC Servo Control trainer	DC servo motor, encoder, driving belt and inertia disc. 24V DC Output Intelligent Servo Driver, Motor DC 70W, Encoder DC 1000 P/R	1
4	3 DOF Helicopter Simulator	Hardware platform based on PC and DSP-based motion controller. Experimental entity platform provided for the major of aviation. • Comprehensive experiment kit, covering the dynamic modeling, classic control experiment, modern control experiment, optimized control experiment and intelligent control experiments. Pitch Angle -30 ~ 40, Cruise Angle 0 ~ 360 Max. Travel Speed 60RPM. Dimension 1300mmx360mmx400mm	1
5	Magnetic Levitation	Complete System for lab including all accessories and cards for interfacing with computers	1
6	Base Platform for Instrumentation and Control	Integrated suit of all necessary instruments, Oscilloscope (multi-channel), DMM (adjustable), Function Generator (10MHz) (multiple waves), Variable Power Supply, Bode Analyzer, Dynamic Signal Analyzer, Arbitrary Waveform Generator, Impedance Analyzer, DIO, Two wire Current Voltage Analyzer, Three wire Current Voltage Analyzer. Includes Basic Breadboard for Circuits and Electronics, Complete integration and visualization on Computer (real-time) for teaching circuit concepts, All necessary cables/power cords included (Area specific) DMM Probes, Oscilloscope and Function Generator Cables included.	1

7	6DoF Force Sensor	Ranging from mili-Newtons to some Newtons Force Range (1mN-3N)	1
8	PCIx DAQ Card	Digital I/O Inputs : 16 channels ; TTL levels Outputs : 16 channels ; TTL levels Timer Counter Internal pacer timer : 16 bit, 8MHz input External pacer timer : 16 bit, 8MHz input Machine independent timer : 16 bit, 8MHz input Power Requirements : +5V 350mA (max) General Environment Operating temperature: 0°C - 50°C Storage temperature: -20°C to 70°C Humidity: 0 to 90% non-condensing Dimensions: 175mm x 105mm	1
9	Strain Guage Amplifier	High frequency, High voltage Full Range: (-7.6 to 7.6) mv\ V (-38 to 38) mV @ 5V excitation Type: Four Wire radiometric Drift: <math>\pm 0.05\%</math> Linearity: $\pm 0.01\%$ Update: Selectable, 10 or 80 SPS (Samples per second) BRIDGE EXCITATION Voltage: 5 Volts DC $\pm 0.1$ V @ 59 mA Bridge Impedance: Total (85 to 10000) $\Omega$ (operates with four 350 $\Omega$ cell in parallel) TARE INPUT Type: Remote volt free contact, up to 10 metres distance OUTPUT CURRENT Current Source: Range (0 to 21.5) mA , Max Load 750 $\Omega$ Current Sink: Range (0 to 21.5) mA , Supply (10 to 30) V dc, Voltage effect 0.2 uA/V Accuracy: (mA Out/ 2000) or 5 uA which ever is the greater, Drift 1 uA/°C OUTPUT VOLTAGE Range: (0 to 10.1) V or (-10.1 to 10.1) V, Accuracy $\pm 5$ mV Current Drive: $\pm 2$ mA, Min load 5000 $\Omega$ @ 10 V PUSH BUTTON CONFIGURATION Type: Independent “low” “High” front panel push buttons allow user to manually set low and high output points.	1
10	Piezoelectric Amplifier	High frequency, High voltage, Maximum Voltage: $\pm 200$ volts peak Maximum Current: $\pm 200$ mA peak Output Power: 40 watts peak Frequency Range: DC to 250 KHz Bandwidth Into 1 K ohm resistive load: Flat, DC to 300 KHz; 3db roll-off, 400 KHz; Into capacitive load: see chart below. Voltage Gain: Variable gain, adjustable from 0 to 20X Phase Shift: $-0.083^\circ$ per KHz, typical Slew Rate (no load): 380 volts / $\mu$ second Maximum Input Voltage: $\pm 10$ volts peak Maximum DC Component: $\pm 10$ volts DC Input Coupling: Direct DC coupling only Input Impedance: 10K ohm Output Coupling: DC coupling Variable DC Offset: Normally zero volts. Adjustable to $\pm 200$ volts peak Load Impedance: Capable of driving any load within the voltage and current limitations of the amplifier Output Noise (300 KHz bandwidth): 2 mvrms with input shorted AC Power Source: User settable: 100-130 VAC, 50/60 Hz; or 200-250 VAC, 50/60 Hz Circuit Protection: Overload, short circuit and thermal protection.	1
11	Digital Storage Oscilloscope	Frequency Range = 100MHz	3
12	Power Supply	Regulated DC Power Supply, 0~30V DC, 10A	3

13	Digital Multimeter	DC Voltage: 200mV/2V/20V/200V/1000V, AC Voltage: 4V/40V/400V/1000V, DC Current: 400 $\mu$ A/4000 $\mu$ A/40A/400mA/10A, Resistance: 400W/4kW/40kW/400kW/4MW/40MW, Capacitance: 40nF/400nF/4 $\mu$ F/40 $\mu$ F/400 $\mu$ F/4mF/40mF, Temperature: -30°C~800°C LCD Size: 700mm x 50mm	3
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### **Thermo-Fluids & Mechanics Lab**

Sr.#	Item	Description/Specifications	Qty.
1	Maxwell Vibration Needle	The tube fitted with wire chuck and mirror, graduated scales and verniers on sliding weights. Two solid and two hollow cylinders each 10cm long accurately fitting the bore of a hollow brass tube 40cm long	2
2	Force Triangular Apparatus	Base Board: 350(L) x 350(W) mm Raised Table: 200mm above base board, $\varnothing$ 300mm Protractor: 0...360°, 1° resolution 3 x pulley bracket 3 x Load hanger	2
3	Bell Crank Lever Apparatus	Aluminum base with rubber feet 90° Bell Crank Lever Hanger positions from fulcrum: 200, 250, 300, 350, 400 mm Spring Balance: 6kgf, 0.1kgf resolution 1 x Load hanger Weights set	2
4	Rope brake and dynamometer	Driven With The Help Of Electric Motor. Rope Wound Around The Dynamometer & With The Help Of Spring Balance Motor Driven Maximum Load Applied 20 Kg. Manually Operated Maximum Load Applied 7.5 Kg.	2
5	Creep test apparatus	Loading arm: 4 : 1 loading ratio Polypropylene specimens (10 each) Specimen: 22mm gauge length, 4.8(W) x 1.6(t) mm nominal Load hanger: 1N Dial gauge, 0.01mm resolution, 25mm travel Thermometer Transparent specimen cover Hot and cold packs	2

### **Workshop Lab**

Sr.	Items Required	Specification	Qty.
1	TIG Welder (Miller Dynasty 280 DX)	SPECIFICATIONS: 208-575 V Material Thickness Steel: 0.004 in. (0.1 mm) - 3/8 in. (9.5 mm). Aluminum: 0.012 in. (0.3 mm) - 3/8 in. (9.5 mm) Weldable Metals: Aluminum, Specialty Metals, Steel, Stainless Steel Input Voltage 208 V 220/230/240 V 380/400 V 460/480 V 575 V Input Phase 1- and 3-Phase Input Hz 50 / 60 Hz Current Type AC / DC Max Open Circuit Voltage 60 VDC Equivalent or better specifications are acceptable.	1

## Laboratory Equipment for HND Department

Sr. #	Name of Item	Specifications	Qty.
1	<b>WEIGHING SCALE (ADULT)</b>	Weighs up to 150 kg (sensitivity 100 g) Large LCD display (73 x 29 mm) or equivalence to best quality	1
2-	<b>STADIOMETER (ADULT)</b>	Measuring range in inch:1.4 - 90" or available in best quality /sample or equivalence to best quality	1
3-	<b>ANALYTICAL BALANCE</b>	Weighing capacity 0.001 g to 220 g, Digital Display Fully automatic, Tare function or equivalence to best quality	2
4-	<b>SKIN FOLD CALIPERS</b>	Caliper Measures: 0-60mm - 0 - 2.5 inches	15
5-	<b>MEASURING TAPES</b>	Measuring range=25ft	10
6-	<b>MUAC TAPE – MID UPPER ARM CIRCUMFERENCE (In Boxes)</b>	RED: 0 – 21cm, Yellow: 21-23cm, Green From 23cm, PVC, 0.35mm thickness, flexible, not stretchable, washable, graduation: of 2mm (accuracy 1mm)	25
7-	<b>BIOELECTRICAL IMPEDANCE DEVICES</b>	Number of electrode:8 7 inch LCD display Measuring age range: 18-85 touch screen, weight range: 300 kg Accuracy 96% Output terminal: USB Quick result or equivalence to best quality	1
8-	<b>MERCURY BLOOD PRESSURE SET</b>	Glass tube: 3mm or 3.5mm Cotton Cuff (Standard) 32cm 2 Tube Latex Bladder Standard Green Latex Bulb Standard Air Release Valve Accuracy : 2mmHg or equivalence to best quality	2
9-	<b>BLOOD GLUCOSE MONITORING SYSTEM</b>	Memory-10 blood glucose test results Measurement units=mg/dL or mmol/L Measurement range=20~600 mg/dL or 1.1 ~ 33.3mmo/L	5
10-	<b>HOT AIR OVEN</b>	Capacity=60L Temperature Range= Ambient 5°C to 250°C Set Accuracy=±1.0°C LED Display 2 stainless steel trays Over heat alarm or equivalence to best quality	1
11-	<b>pH METER benchtop type</b>	0-14 pH RANGE, Electrode stand, Beaker 50ml, 3MKCL solution 50ml, Calibration standard solution pH 4, 7 & 10 (50ml each), pH electrode built in temperature sensor <b>Or equivalence to best quality</b>	1
12-	<b>MUFFLE FURNACE</b>	Temp. Range: 100-1200°C Temp. Resolution Ratio: 1°C Temp. motion: ±1°C	1

		Temp. Rising time to max temp: $\leq 30$ min or equivalence to best quality	
13-	<b>DESICCATOR</b>	Clear Glass Vacuum Desiccator with Porcelain Plate or equivalence to best quality	2
14-	<b>SOXHLET APPARATUS FOR FAT</b>	Temperature Range: Room temperature Measuring Range: 0.1-100% Temperature accuracy: $\pm 1^\circ\text{C}$ Sample weight 0.5-15g Solvent cup volume 150 mL Solvent recovery $\geq 85\%$ Display Digital Touch screen or equivalence to best quality	1
15	<b>KJELDAHL SYSTEM FOR TOTAL PROTEINS</b>	Measuring range mg N 0.1 to 200, Reproducibility 1%, Recovery 99.5% , Detection 0.1 mg N, distillation time 5min to collect 100 mL, Sodium Hydroxide 0-100mL or equivalence to best quality	1
16	<b>GERBER CENTRIFUGE FOR MILK FAT DETERMINATION</b>	Maximum Speed 600 to 1400 rpm Temperature Range: - Ambient Temp to $68^\circ\text{C}$ Timer Range: - 1 to 99 minutes Operated on 220 volts Net weight 18kg 5 selectable modes for centrifugation (Gerber test, Röse-Gottlieb, Babcock, Solubility and Free Mode) Up to 36 Butyrometers, Centrifugation drum of stainless steel Security lid locking device, Automatic unbalance switch Electrical brake or equivalence to best quality	1
17	<b>VISCOMETER</b>	Viscosity (cP or mPa•s), % Torque, Speed/Spindle. Auto range Push for determining full scale range (FSR) viscosity. Accuracy: $\pm 1.0\%$ of range, Repeatability: $\pm 0.2\%$ , Range 1 cps to 2 million cps (1-15cp only achievable with Optional UL Adaptor) 18 speeds from 0.3 to 100 rpm with stand set of 4 spindles or equivalence to best quality	1
18	<b>REFRIGERATOR</b>	Medium size 18-20 CFT or equivalence to best quality	1
19	<b>COMPOUND MICROSCOPE</b>	LED Binocular Compound Lab Microscope W/ Double Layer Mechanical Stage + Blank Slides, Cover Slips, & Lens Cleaning Paper, 4x 10x, 40x 100x Immersion oil Dust cover With camera or equivalence to best quality	1
20	<b>COOKING RANGE</b>	5 Burner Gas Cooker Panel & Top + Sides Metal Heavy Grates Big Size Burners Double Door or available in best quality	1
21	<b>FOOD FACTORY</b>	Juice Extractor with Large Feed Tube Glass Blender Chopper Glass Dry Mill Dough Maker Whisk Glass Meat Grinder Slicer/Shredder Juice Cup	1



		Stainless Steel Body Safety Locking Handles 2 Processing Speeds 1000 Watts 220V ~ 240V - 50Hz or available in best quality or equivalence to best quality	
22	<b>MEASURING CUPS</b>	¼ cup ¾ cup ½ cup 1 cup or available in best quality	2 Set
23	<b>MEASURING SPOONS</b>	1.25ml 2.5ml 5ml 7.5ml 15ml or available in best quality	2 Set
24	<b>MEASURING JUGS</b>	1000ml, 500ml, 250ml or available in best quality	3 different sizes
25	<b>DIGITAL WEIGHING SCALE</b>	weigh upto 7000 g x 1 g or available in best quality	1
26	<b>A DINNER SET (PLATES, CUPS, SAUCERS, SERVING BOWLS)</b>	For 12 Persons or available in best quality	1
27	<b>WATER SET</b>	For 12 persons Glass or equivalence to best quality	1
28	<b>A 12 PIECE CUTLERY SET</b>	For 12 persons or equivalence to best quality	1
29	<b>Microwave oven</b>	Large Capacity/Grill Cooking /Auto Cook Menu/30 Litres/Micro wave or available in best quality	1
30	<b>WATER DISPENSER</b>	(Wide Voltage/Child Safety Lock/ 12L Refrigerator) or available in best quality	1
31	<b>FIRST AID KIT</b>	Contains all necessary items or available in best quality	1
32	<b>BLOOD LANCET NEEDLES FOR BLOOD SUGAR TEST-ROUND</b>	Sterilized by gamma-radiation Smooth tri-bevel needle tip for comfortable sampling experience or available in best quality or available in best quality	4 Packs
33	<b>BLOOD GLUCOSE TEST STRIPS</b>	Results displayed in about 5 seconds. or available in best quality	5 Packs
34	<b>DIAL BP APPARATUS</b>	Dial has 20 to 300 mm HG scale with 2mm of Hg resolution. or available in best quality	2

## Laboratory Equipment for Pharmacy Department

Sr.#	Items	Specifications	Qty.
1	Analytical balance	0.001g to 300g, Fully Automatic, Digital Display, Overload Alarm, Tare Function	5
2	Autoclave	20 – 30 L Capacity Desktop, Sterilization temperature 121°C-134°C, Net Weight 40-50Kg, Digital Display	2
3	Digital Rotational viscometer	(With 8S)-Digital Display, All accessories	1
4	Centrifuge machines	Upto 13000rpm, 06 tubes +Stoppers	15
5	Compound microscope	With minimum 3 magnifications, 10X, 40X, 100X, Fluorescent light	50
6	Digital balance	Up to 3 – 5 kg with extra led display	20
7	Heating mantle	250mL/500mL, With stirrer, Desktop, Electric, temperature range upto 350°C	12 + 12
8	Magnetic stirrer hotplate with stand	Electric, upto 2000 rpm, RT-100-300°C	12
9	Mechanical stirrer With adjustable stand	Rotating blades, Frequency upto 60Hz	1
10	Melting point apparatus	Gallen Kemp type (Digital), minimum 300°C, minimum 3 sample pockets	18
11	Refrigerator	Medium size, 18-20 CFT	3
12	Deep Freezer	Vertical 11-14 CFT	1
13	pH-meter bench top type with buffer solutions (different pH)	Digital display, Bulb stand, pH range (0-14)	5
14	Sonicator with lid	SS, 3-3.3 litre capacity (digital display)	3
15	UV-Visible spectrophotometer	Double beam spectrophotometer, Software, Smart USB, Wavelength range 190-1100nm, bandwidth 2nm, working mode T,A,C,E, colored screen, connectivity to PC	2
16	Vortex mixture	Minimum 2000rpm, spiral, Desktop, Continuous + touch	10
17	Water distillation plant (electric)	SS, 5 liter capacity	5
18	Burners, Tripod stand , Wire Guaze	Bunsen burners, metal stands,	40
19	Desiccator with plates and silica beads	Small + medium +large, glass, with vacuum nozzle	8+8+8
20	Electric water bath (06 holes)	6 holes with stoppers and digital display, metal	10
21	Flask shaker with stand	Reciprocating type	2
22	Fume hood	Dimensions 2x4 (working area), overall height ≈ 6.6 feet, aerodynamic, floor mounted, powder coated, SS, Airflow mounted on work top(SS), Sink, Water tap drain Arrangement, 6mm with moveable sash with motorized system up & down, powder coated brass nozzles, fluorescent light, minimum 2 electric sockets, manual on/off button	2
23	Glass distillation assembly	4 liter/hr output capacity	5
24	Heat Gun 2000W	2000 W	3

25	Hot air Oven (53 liter)	Two shelves, digital display , upto 99 °C	4
26	Pestle and mortar 3"	Porcelain	15
27	Pestle and mortar 4"	Porcelain	15
28	Pestle and mortar 6"	Porcelain	15
29	Pycnometer	50ml + 25ml, with capillary stoppers	20+20
30	Thermometer(mercury)	Clinical + large	20+40
31	Barometer	Analogue	10
32	Basic Dissection Kit	Medium + Large size with all basic tools	30
33	Dropper	Plastic 3ml	50
34	ECG machine	3 channels, built inn rechargeable battery, ECG paper rolls, ECG gel, ECG cable, Power cables, 1 set of clamp electrodes, 1 set of bulb electrodes, earthing cable, user manual guide	2
35	ESR Stand	5-6 Tubes, metal	10
36	Frontal writing lever with pen	SS, Sketch pen tips	10
37	Hematocrit Centrifuge machine	Upto 16000rpm, LED display, speed & timer, safety alarm, mechanical door lock, sealent, speed adjustment up& down, table top	1
38	Histology slides	All cell slides 100 piece box	3sets
39	Human skeleton	Life Size	2
40	Human torso	Large, 19 parts	2
41	Student kymograph apparatus	Output voltage 0-25V, 0-250mV, 0-2.5V and 0-25V controlled by variable, socket 2/4mm, frequency < 25W at maximum output current of 250mA, mode selection 1-50 pulses/seconds, cylinder included, power 2 W, pulse width continuous, single and trigger via contact arms on spindle included, Dimensions 255 × 180× 135mm (10 ×7×5 inch) H×D×W, weight approx. 7kg <b>Accessories</b> (Kymograph plastic drum (6 inches or 8 inches, weight set with hangers, side arm for assembly, muscle chamber, muscle and heart assembly, muscle and heart bath, electrode assembly complete with lead, frog heart clip, muscle lever with pen, heart lever with pen, pen filler, ink bottle, thread-1 reel, kymograph charts, package of sheets	15
42	Magnetic stirrer bars	PTFE coated, cylindrical shape, smooth surface, white color, 30mm × 7mm, 25mm× 7mm, 20mm × 6mm	4 sets each
43	Micropipette	(10,100,1000 µl) Made in USA,UK, Germany or Equivalent	3+3+3
44	Micropipette tips	200µL, 300µL, 1000µL	1 box each(3)
45	Model of human bones	Disarticulated , Replica, life size, white color, PVC Skull (composed of 22 pieces of bones), vertebral column ( composed of 7 cervical vertebra, 12 thoracic vertebra and 5 lumber vertebra, a piece of sacrum, a piece of coccyx), bony thorax( composed of 24 ribs, a piece of coastal cartilage and a piece of sternum), bony pelvis( composed of sacrum, coccyx, and 2 pieces of hip bones), bones of upper extremities( composed of 64 pieces of separate able bones), bones of lower extremities( composed of 62 pieces of separate able bones), each piece is individually packed in thick carton	1

46	Model of human ear	Large With stand	1
47	Model of human heart	Large With stand	1
48	Model of human kidney	Large With stand	1
49	Model of human lungs	Large With stand	1
50	Model of human stomach	Large With stand	1
51	Model of human eye	Large With stand	1
52	Model of human liver	Large With stand	1
53	Model of human brain	Large With stand	1
54	Neubauer chamber	0.0025mmSq, good quality	30
55	Filled Oxygen cylinder with accessories	With stand trolley, key and accessories	5
56	Patella hammer	Plastic, pointing end	15
57	Perimeter with object	Good Quality , graduated, metal	10
58	Pinhole Oculars	Single pin hole, long handle , 9 inch	10
59	RBC pipette	Red bead 0.5-101 markings, suction rubber tube, mouth piece, with isotonic solutions	20
60	WBC pipette	white bead 0.5-11 markings, suction rubber tube, mouth piece, with hematological stain solution	20
61	<i>Sahli's</i> hemoglobinomtr	Complete set	20
62	Snellen's eye chart (Far vision acuity)	Chart plastic body	6
63	Snellen's eye chart (near visual acuity)	Chart plastic body	6
64	Sphygmomanometer (mercury)	Cuff size upto 40cm ( adult), manual, mercury operated, mercury lock, metal casing, table top	20
65	Spray Bottles	Plastic good quality	20
66	Stethoscope	Good quality	20
67	Stop watch	Digital	20
68	Student Spirometer	9L Capacity (Fibre) with all accessories	3
69	Surgical tray	SS, thick, 40×30cm	10
70	Student Tissue organ bath	800ml, transparent plastic bottomless jar, glass spiral fluid warming coil, glass or metal oxygen tube, lever with frontal writing point, ink pen for recording, motor with stirrer, temperature upto 38c	15
71	Western green tubes	300mm	10 Pkts
72	Wooden boards	Dissection Wooden sheets	5
73	Lancet	1×1000 Universal	5 Pkts
74	Rabbit Restrainer Wood	Cage type	10
75	Aspirator	Flow rate 20L/min, 15 L tank, 2 taps, vacuum gauge type	3
76	Veterinary BP apparatus with parameters monitor	With all accessories and cuff sizes	2
77	Grinder & Blender	220 V, SS jar, upto 12000 rpm, lab scale	2
78	Iodine chamber	Glass	4
79	Microtome	Semiautomatic, adjustable retraction, motorized feed derived, finger protection guard, LCD Display, touchpad	1
80	Percolator	Small + medium + large (stainless steel with lid +stand)	2+2+2
81	Rota evaporator + chiller	Digital display + thermostat temperature 99°C Made in USA, Germany, Japan or Equivalent	2

82	Soxhlet apparatus	Quick fit + pipes (Pyrex)	5
83	Tank for paper chromatography	20 x 20 with lid, glass	15
84	TLC plates	20 x 20 cm, Silica coated	03 Packs
85	Specimen jars	Glass (small + medium + large)	15 each
86	UV lamp	Locally made , Near and far lamps	2
87	Colony counter	digital display + Magnifying glass	2
88	Cool Incubator	5 - 70°C, all MS, 100L, Digital, Glass door, Data log, microprocessor controlled system , UV and normal light	1
89	Sterile culture swab sticks	Local (1×1000)	10
90	Inoculating wire loop	Local (1×1000)	10
91	Laminar flow hood (vertical)	HEPA filter, HEPA efficiency 99.99%, Fluorescent lamp and UV light, L× W× H= 54inch × 30inch × 78inch, total cabinet constructed in galvanized sheets with powder coating, SS base, With DOP test of filter, with base stand moveable, with front upper sash for protection	2
92	Vacuum filtration assembly with pump	Quick fit with fitting pipes, good quality with all accessories	2
93	Laminar flow hood (horizontal)	HEPA filter, HEPA efficiency 99.99%, Fluorescent lamp and UV light, total cabinet constructed in galvanized sheets with powder coating, SS base, With DOP test of filter, with base stand moveable, with front upper sash for protection	1
94	Dissolution Apparatus	digital with automated and manual injectors, in vessel temperature monitoring and sampling options, touch panel display, aligned vessel options, interchangeable dissolution necessary components, sampling options, automated temperature and speed control Made in USA, Germany, Japan or Equivalent	1
95	Autoclave	Moveable, digital control, 50L capacity, maximum work pressure 0.2-MPa, max work temp.134°C, heat evenness ≤ ± 1°C, timer range 0-99mins, temperature range up to 134°C, Cooling air release, sterilize, timing air release, timing alarm, overpressure, over temperature protection device, auto pressure release, lack water and over heat protection, overcurrent power cut off Dimensions: 510mm × 470mm × 1130mm (L × W × H), GW: 88 kg approx.	1
96	Weighing machine with height meter	Analogue	2
97	Stalagmometer	Good glass quality	50
98	Ostwald viscometer	Good glass quality, Capillary type, 29-30cm	50
99	Watch glass	3 inches	30
100	Antibiotic disks	All types	25 (diff. types)
101	Forceps	SS	30
102	Prepared microbial slides	Minimum 25 different slides	1 box
103	Meter rod	Metal	10

104	Tuning fork	256 or 512 Hz frequency, metal	1 box
105	Student spirometer (Plastic body)	Plastic, movable, mouth piece	3
106	Glucometer with strips	Digital, battery operated, universal	10
107	Centrifuge tubes	Plastic, 15ml, screw cap	1x500 (pack)
108	First Aid Box	With All items	10
109	Laboratory Scissors	Small, medium, large	20 each
110	Surgical gloves	Latex, box	5Boxes
111	Surgical caps	Green color any material	5Boxes
112	Surgical mask	Green color any material	5Boxes
113	Test tube stands	Steel	100
114	Thermal resistant gloves	Good quality	5 pairs
115	White lab coats	Good quality, Top KT	10
116	Green lab coats	Good quality, top KT	10
117	Burette stand	Metal with clamps	50
118	Funnel Stands	Metal	50
119	Safety glasses	Plastic universal size	10
120	Finger Pulse oximeter	LED display, portable, Battery operated, oxygen saturation, pulse rate, respiratory rate	10

**Annexure- A      Technical Proposal Covering Letter**

To

**The Convener,**  
Purchase Committee,  
University of Chakwal,  
Chakwal.

Dear Sir,

We are hereby submitting our Proposal, which includes the Technical Proposal and the Financial Proposal sealed in two separate envelopes. We have attached the **Technical Bid Form, Check List, Detailed Specifications** and the required **supporting documents** along with our Technical Bid.

Yours sincerely,

Authorized Signature

(In full and initials)

Name and Designation of Signatory Name of Firm Address

## Annexure- B Check List

The bidder must attach this list along with the Bid

### 1.1. Packing of the Bid

S#	Description	YES/NO
1	Whether the Bid is submitted in <b>Two Envelopes</b>	
2	<b>Technical Proposal</b>	<i>Envelope A</i>
3	<b>Financial Proposal</b>	<i>Envelope B</i>
4	Whether both Technical and Financial Proposals are put into another <b>Outer Envelope.</b>	

### 1.2. SUBMISSION AND ARRANGEMENT OF SUPPORTING DOCUMENTS

The Bidder must provide all the Supporting Documents, number all the pages of supporting documents, provide the page information and arrange the documents in the following order:

<b>Envelope A: Enclosures of Technical Proposal</b>		<b>Attached YES/NO</b>	<b>Page#</b>
1	<b>Covering Letter</b>		
2	Copy of <b>Income Tax Registration Certificate</b>		
3	Copy of <b>Sales Tax Registration Certificate</b>		
4	<b>Affidavit/Undertaking</b> on the Stamp Paper		
5	Specifications of quoted items on the Letter Head of the bidder		
6	Two Supply Orders for supply of relevant items received in the past		
7	The specified <b>catalogues / brochures</b> of items quoted by the bidder		
<b>Note:</b> All the above documents and any other supporting document must be numbered and page number must be mentioned in the column specified for the purpose.			
<b>Total Number of pages attached with the Technical Bid</b>		_____ <b>Pages</b>	
8	<b>Tender Document</b> duly signed and stamped each page by the bidder must be attached at the end of the Technical Bid but numbering is not required for this document.		

<b>Envelope B :Enclosures of Financial Proposal</b>		<b>Attached YES/No</b>	<b>Page #</b>
1	Financial Proposal Form duly filled, signed and stamped by the bidder		
2	Price Schedule Form duly filled, signed and stamped by the bidder		
3	Bid Security in shape of Bank Draft, Pay Order or CDR.		



## **Annexure- C Bid Form**

### A) Profile of the Bidder:

<b>S#</b>	<b>Particulars</b>	<b>BIDDER</b>
1	Name of the Company	
<u>2</u>	Year of Incorporation	
<u>3</u>	<b>Registered Office</b>	
	Address	
	Office Telephone Number	
	Fax Number	
<u>4</u>	<b>Contact Person</b>	
	Name of Authorized Representative	
	Personal Telephone Number	
	Email Address	
<u>5</u>	<b>Registration Detail</b>	
	NTN Registration Number	
	GST Registration Number	

### B) Bid Security (Please do not mention amount of CDR)

<b><u>S#</u></b>	<b>Particulars</b>	<b>Please Furnish Details</b>
1	Name of the Bank	
2	Instrument Number and Date	

**Annexure- D AFFIDAVIT/BIDDER'S UNDERTAKING ON THE STAMP PAPER**

Ref: **Tender No. 12/2022**

1. We have examined the Tender/Bid Document and we undertake to meet the requirements regarding supply of Items, warranty and services as required and are prescribed in the Tender Document.
2. It is certified that the information furnished here in and as per the document submitted is true and correct and nothing has been concealed or tampered with.
3. We have read the provisions of Tender/Bid Document and confirm that these are acceptable to us. We further declare that additional conditions, variations, deviations, if any, found in our response shall not be given effect to.
4. We agree to unconditionally accept all the terms and conditions set out in the Tender/Bid Document
5. We undertake, if our Bid is accepted, to supply the items within the delivery period mentioned in the Tender Document.
6. We understand that no document regarding evaluation criteria will be accepted after opening of the Technical Bids and we are bound to provide all the documentary proofs regarding evaluation criteria or any other supporting document at the time of opening of Technical Bids.
7. We agree that the Purchase Committee of University of Chakwal is not bound to accept the lowest or any of the bids received. We also agree that the Purchase Committee reserves the right in absolute sense to reject all the products/ services specified in the Bid Response without assigning any reason whatsoever under PPRA Rules 2014.
8. We also declare that our Company/Organization is not blacklisted by any of the Federal or Provincial Government in Pakistan.

*[Name and Signatures of authorized Person along with stamp]*

**Annexure- E**

**Financial Proposal Form**

**(to be attached with Financial Proposal)**

To

**The Convener,**  
Purchase Committee,  
University of Chakwal,  
Chakwal.

Dear Sir,

With Reference to your Tender No.12/2022 OF MEDICAL & LABORATORY EQUIPMENT; Please find attached our Financial Proposal for the sum of Rs. (insert amount in words and figures)\_. This amount is inclusive of all taxes.

We have attached the Bid Security of amount Rs.1,120,000/- (Rupees Fifty Thousand Only) having CDR, Demand Draft, Pay Order No. along with our Financial Bid.

Yours sincerely,

Authorized Signature

**Annexure- F      Price Schedule**

*(Please attach this page along with Financial Bid or quote rates on the Letter Head of the Bidder)*

**MECHATRONICS DEPARTMENT**

**Mechatronics System Design Lab**

Sr.#	Item	Specification	Qty.	Unit Price with GST	Total Amount With GST
1	Digital Oscilloscope		5		
2	Function Generator		5		
3	Consumable items		1		
4	PCB Machine Drill Bits		2		
5	3D Printer		2		
6	PIC Trainer Kits		2		

**ROBOTICS AND AUTOMATION LAB**

Sr.#	Item	Specification	Qty.	Unit Price with GST	Total Amount With GST
1	Quadcopter (GAPTER: Educational Copter using ROS and MAVLINK or equivalent or higher)		2		
2	Educational ROS Robot (Turtlbot3 Burger or equivalent or higher)		2		
3	Educational ROS Robot (Turtlbot3 Waffle Pi or equivalent or higher)		2		

4	Manipulator (Open Manipulator-X -RM-X52-TNM) or Equivalent or higher) with hand		1		
6	PLC Trainers		3		

Instrumentation and Control LAB

Sr.#	Item	Specification	Qty.	Unit Price with GST	Total Amount With GST
1	PID Trainer kit		2		
2	Linear Inverted Pendulum, Double Stage		1		
3	DC Servo Control trainer		1		
4	3 DOF Helicopter Simulator		1		
5	Magnetics Levitation		1		

6	Base Platform for Instrumentation and Control		1		
7	6DoF Force Sensor		1		
8	PCIx DAQ Card		1		
9	Strain Guage Amplifier		1		

10	Piezoelectric Amplifier		1		
11	Digital Storage Oscilloscope		3		
12	Power Supply		3		
13	Digital Multimeter		3		

### Thermo-Fluids & Mechanics Lab

Sr.#	Item	Specification	Qty.	Unit Price With GST	Total Amount with GST
1	Maxwell Vibration Needle		2		
2	Force Triangular Apparatus		2		
3	Bell Crank Lever Apparatus		2		
4	Rope brake and dynamometer		2		

5	Creep test apparatus		2		
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### Workshop Lab

Sr.	Items Required	Specifications	Qty.	Unit Price with GST	Total Amount With GST
1	TIG Welder (Miller Dynasty 280 DX)		1		

## **HND DEPARTMENT**

### Laboratory Equipment for HND Department

Sr. #	Name of Items	Specifications	Qty.	Unit Price with GST	Total Amount with GST
1	Weighing Scale		1		
2-	Stadiometer		1		
3-	Analytical Balance		1		
4-	Skin Fold Calipers		15		
5-	Measuring Tapes		10		
6-	Muac Tape – Mid Upper Arm Circumference		25		
7-	Bioelectrical Impedance Devices		1		
8-	Digital Blood Pressure Monitor		1		
9-	Blood Glucose Monitoring System		1		
10-	Bone Mineral Densitometer		1		



11-	Hot Air Oven		1		
12-	Vacuum Oven		1		
13-	Ph Meter		1		
14-	Titration Unit		1		
15-	Muffle Furnace-550°c		1		
16-	Desiccator		1		
17-	Soxhlet Apparatus For Fat		1		
18-	Bomb Calorimeter		1		
19-	Kjeldahl System For Total Proteins		1		
20-	Gerber Centrifuge For Milk Fat Determination		1		
21-	Gas Chromatography		1		
22-	HPLC		1		
23-	Viscometer		1		
24-	Refrigerator/ Freezer		1		
25-	Compound Microscope		2		
26-	Cooking Range		1		
27-	Food Factory		1		
28-	Measuring Cups		2 Set		
29-	Measuring Spoons		2 Set		
30-	Measuring Jugs		3 different sizes 1000ML, 500ML, 250ML		
31-	Digital Weighing Scale		1		
32-	A Dinner Set (Plates, Cups, Saucers ,Serving Bowls)		1		
33-	Water Set		2		
34-	A 12 Piece Cutlery Set		1		

35-	Microwave oven		1		
36-	Water Dispenser		1		
37-	FIRST AID KIT		1		
38-	Knives		2		
39-	Chef knife		2		
40-	Cutting Board		1		
41-	DIAL BP APPARATUS		2		

## **PHARMACY DEPARTMENT**

### **Laboratory Equipment for Pharmacy Department**

Sr.#	Items	Specifications	Qty.	Unit Price with GST	Total Amount with GST
1	Analytical balance		5		
2	Autoclave		2		
3	Digital Rotational viscometer		1		
4	Centrifuge machines		15		
5	Compound microscope		50		
6	Digital balance		20		
7	Heating mantle		12 + 12		
8	Magnetic stirrer hotplate with stand		12		
9	Mechanical stirrer With adjustable stand		1		
10	Melting point apparatus		18		
11	Refrigerator		3		
12	Deep Freezer		1		
13	pH-meter bench top type with buffer solutions (different pH)		5		
14	Sonicator with lid		3		

15	UV-Visible spectrophotometer		2		
16	Vortex mixture		10		
17	Water distillation plant (electric)		5		
18	Burners, Tripod stand , Wire Guaze		40		
19	Desiccator with plates and silica beads		8+8+8		
20	Electric water bath (06 holes)		10		
21	Flask shaker with stand		2		
22	Fume hood		2		
23	Glass distillation assembly		5		
24	Heat Gun 2000W		3		
25	Hot air Oven (53 liter)		4		
26	Pestle and mortar 3"		15		
27	Pestle and mortar 4"		15		
28	Pestle and mortar 6"		15		
29	Pycnometer		20+20		
30	Thermometer(mercury)		20+40		
31	Barometer		10		
32	Basic Dissection Kit		30		
33	Dropper		50		
34	ECG machine		2		
35	ESR Stand		10		
36	Frontal writing lever with pen		10		
37	Hematocrit Centrifuge machine		1		
38	Histology slides		3sets		
39	Human skeleton		2		
40	Human torso		2		
41	Student kymograph apparatus		15		
42	Magnetic stirrer bars		4 sets each		
43	Micropipette		3+3+3		
44	Micropipette tips		1 box each(3)		
45	Model of human bones		1		
46	Model of human ear		1		
47	Model of human heart		1		
48	Model of human kidney		1		
49	Model of human lungs		1		
50	Model of human stomach		1		
51	Model of human eye		1		
52	Model of human liver		1		
53	Model of human brain		1		
54	Neubauer chamber		30		
55	Filled Oxygen cylinder with accessories		5		
56	Patella hammer		15		
57	Perimeter with object		10		

58	Pinhole Oculars		10		
59	RBC pipette		20		
60	WBC pipette		20		
61	Sahli's hemoglobinometer		20		
62	Snellen's eye chart (Far vision acuity)		6		
63	Snellen's eye chart (near visual acuity)		6		
64	Sphygmomanometer (mercury)		20		
65	Spray Bottles		20		
66	Stethoscope		20		
67	Stop watch		20		
68	Student Spirometer		3		
69	Surgical tray		10		
70	Student Tissue organ bath		15		
71	Western green tubes		10 Pkts		
72	Wooden boards		5		
73	Lancet		5 Pkts		
74	Rabbit Restrainer Wood		10		
75	Aspirator		3		
76	Veterinary BP apparatus with parameters monitor		2		
77	Grinder & Blender		2		
78	Iodine chamber		4		
79	Microtome		1		
80	Percolator		2+2+2		
81	Rota evaporator + chiller		2		
82	Soxhlet apparatus		5		
83	Tank for paper chromatography		15		
84	TLC plates		03 Packs		
85	Specimen jars		15 each		
86	UV lamp		2		
87	Colony counter		2		
88	Cool Incubator		1		
89	Sterile culture swab sticks		10		
90	Inoculating wire loop		10		
91	Laminar flow hood (vertical)		2		
92	Vacuum filtration assembly with pump		2		
93	Laminar flow hood (horizontal)		1		
94	Dissolution Apparatus		1		
95	Autoclave		1		
96	Weighing machine with height meter		2		
97	Stalagmometer		50		

98	Ostwald viscometer		50		
99	Watch glass		30		
100	Antibiotic disks		25( different types)		
101	Forceps		30		
102	Prepared microbial slides		1 box		
103	Meter rod		10		
104	Tuning fork		1 box		
105	Student spirometer (Plastic body)		3		
106	Glucometer with strips		10		
107	Centrifuge tubes		1x500 (pack)		
108	First Aid Box		10		
109	Laboratory Scissors		20 each		
110	Surgical gloves		5Boxes		
111	Surgical caps		5Boxes		
112	Surgical mask		5Boxes		
113	Test tube stands		100		
114	Thermal resistant gloves		5 pairs		
115	White lab coats		10		
116	Green lab coats		10		
117	Burette stand		50		
118	Funnel Stands		50		
119	Safety glasses		10		
120	Finger Pulse oximeter		10		

## **Annexure- G Contract Agreement Form**

THIS AGREEMENT made the [day] day of [month] [year] between [University of Chakwal] (hereinafter called “the University”) of the one part and [name and address of Supplier] (hereinafter called “the Supplier”) of the other part:

WHEREAS the University invited Tenders for certain goods and related services, viz, [brief description of goods and related services] and has accepted a Tender by the Supplier (Supply of Applied Geology Laboratory Equipment) for the supply of those goods and related services in the sum of Rs. [Contract Price in figures and in words] (hereinafter called “the Contract Price”).

NOW THEREFORE the parties hereby agree as follow:

- 1- The following documents attached shall be deemed to form and integral part of this Contract:
  - i- Tender/Bid Document
  - ii- Letter of Acceptance
  - iii- Performance Guarantee equal to 10% of Contract Price in shape of CDR, Demand Draft or Pay Order.
- 2- The Terms and Conditions of Supply Order/Contract given in the Tender/Bid Document will be applicable.
- 3- The mutual rights and obligations of the University and the Supplier will be preserved in the light of the Terms and Conditions mentioned in the Tender /Bid Document.

IN WITNESS whereof the parties have caused this Contract to be executed in accordance with the laws of Pakistan on the day, month and year written above.

**For University of Chakwal**

**For the Supplier:**

Signature

Print Name

Title