

University of Agriculture, Faisalabad

Bidding Documents

Tender No.1/2016

SPECIAL INSTRUCTIONS

- No cutting erasing is allowed in the Tender bid.
- Bid offered strictly in accordance with the bid document will only be accepted.
- Preferably type the tender details in the bid offer.

Contents

Section I	3
Invitation for Bids	3
Section II.	5
Instructions to Bidders	
Table of Clauses	6
Section III.	27
Bid Data Sheet	27
Section IV	31
General Condition of Contract	32
Section V.	
Special Conditions of Contract	45
Table of Clauses	46
Section VI.	49
Schedule of Requirement	50
Section VII	
Technical Specifications	52
Section VIII.	
Sample Forms	64
Bids Form & Price Schedule	66,67
Manufacturer's Authorization Form	68

Section I.

Invitation for Bids

UNIVERSITY OF AGRICULTURE, FAISALABAD (TENDER NOTICE No.1/2016)

Sealed tenders are invited from Income Tax and Sales Tax registered firms on the basis of Single Stage (two envelop procedure) for supply/installation/commissioning of Laboratory Equipment for the Department of Plant Breeding & Genetics at University of Agriculture, Faisalabad.

Tender No.1/2016			
Date of Receiving and Opening	25.01.2016	Receiving Time	11:00 a.m.
		Opening Time	11:30 a.m.
		Bid Security	2% of the quoted
			Value
		Tender Fee	Rs.500/-

The bidding documents can be obtained from the Directorate of Procurement & Inventory Control on deposit of tender fee in the University Income Account (No.11-9/NBP, UAF Branch) immediately after appearance of Tender Notice at respective mode of publication. The bidding documents can also be down loaded from UAF websitewww.uaf.edu.pk /Directorate of Procurement & Inventory Control (DPIC) immediately after appearance of Tender Notice at respective mode of publication. In that case, please attach CDR/bank draft against the tender fee (Non Refundable) in favour of Director (DPIC) with the Technical Bid. For Cities other than Faisalabad add Rs.200/- in the Tender Fee amount.

DR. SHAHID AFZAL GILL
Director (DPIC)
(For & On behalf of the Committee)
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Section II.

Instructions to Bidders

Table of Clauses

Α.	Introduc	uon	
	1.	Source of Funds	
	2.	Eligible Bidders	7
	3.	Eligible Goods and Services	7
	4.	Cost of Bidding	7
ъ	m. p. i	Par Danier de	0
В.	The Bidd	ling Documents Content of Bidding Documents	
	5. 6.		
	0. 7.	Clarification of Bidding Documents	
	7.	Amendment of Bidding Documents	0
C.	Preparat	ion of Bids	9
	8.	Language of Bid	
	9.	Documents Constituting the Bid	
	10.	Bid Form	
	11.	Bid Prices	10
	12.	Bid Currencies	11
	13.	Documents Establishing Bidder's Eligibility and Qualification	
	14.	Documents Establishing Goods' Eligibility and Conformity to Biddin	
		Documents	_
	15.	Bid Security	
	16.	Period of Validity of Bids	
	17.	Format and Signing of Bid	14
D.		on of Bids	
	18.	Sealing and Marking of Bids	
	19.	Deadline for Submission of Bids	
	20.	Late Bids	
	21.	Modification and Withdrawal of Bids	15
E	Onening	and Evaluation of Bids	16
1.	22.	Opening of Bids by the Purchaser	
	23.	Clarification of Bids	
	24.		
	25.	Conversion to Single Currency	
	26.	Evaluation and Comparison of Bids	
	27.	Domestic Preference	
	28.	Contacting the Purchaser	
	20.		22
F.	Award of	f Contract	22
	29.	Post-qualification	22
	30.	Award Criteria	23
	31.	Purchaser's Right to Vary Quantities at Time of Award	23
	32.	Purchaser's Right to Accept Any Bid and to Reject Any or All Bids	24
	33.	Notification of Award	
	34.	Signing of Contract	24
	35.	Performance Security	24
	36.	Corrupt or Fraudulent Practices	24
	37.	Blacklisting and deregistration	25

Instructions to Bidders

A. Introduction

1. Source of Funds

University of Agriculture, Faisalabad.

- 2. Eligible Bidders
- 2.1 The invitation for Bids is opened to all supplier having trade relations with Pakistan and registration for National Tax Number &Sales Tax Number with Federal Board of Revenue
- 2.2 Bidders should not be associated, or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Purchaser to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the goods to be purchased under this Invitation for Bids.
- 2.3 Only Government owned enterprises may participate, only if they are legally allowed.
- 2.4 bidders shall not be under a declaration of ineligibility in accordance with ITB 36.1&37 by any Government organization. The bidder shall provide affidavit to this effect.

3. Eligible Goods and Services

- 3.1 All goods and related services to be supplied under the contract shall have their origin in eligible source countries, and all expenditures made under the contract will be limited to such goods and services.
- 3.2 For purposes of this clause, "origin" means the place where the goods are mined, grown, or produced, or the place from which the related services are supplied. Goods are produced when, through manufacturing, processing, or substantial and major assembly of components, a commercially-recognized product results that is substantially different in basic characteristics or in purpose or utility from its components.
- 3.3 The origin of goods and services is distinct from the nationality of the Bidder.

4. Cost of Bidding

4.1 The Bidder shall bear all costs associated with the preparation and submission of its bid, and the Purchaser named in the bid date sheet, hereinafter referred to as "the purchaser" will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

B. The Bidding Documents

5. Content of Bidding Documents

- 5.1 The goods required, bidding procedures, and contract terms are prescribed in the bidding documents. In addition to the Invitation for Bids, the bidding documents include:
 - (a) Instructions to Bidders (ITB)
 - (b) Bid Data Sheet
 - (c) General Conditions of Contract (GCC)
 - (d) Special Conditions of Contract (SCC)
 - (e) Schedule of Requirements
 - (f) Technical Specifications
 - (g) Bid Form and Price Schedules
 - (h) Bank Guarantee Form if applicable
 - (i) Manufacturer's Authorization Form
 - (j) Integrity pact.
 - (k) Mechanism of Blacklisting and Deregistration
- 5.2 The Bidder is expected to examine all instructions, forms, terms, and specifications in the bidding documents. Failure to furnish all information required by the bidding documents or to submit a bid not substantially responsive to the bidding documents in every respect will be at the Bidder's risk and may result in the rejection of its bid.

6. Clarification of Bidding Documents

6.1 A prospective Bidder requiring any clarification of the bidding documents may notify the Purchaser in writing at the Purchaser's address indicated in the **Bid Data Sheet.** The Purchaser will respond in writing to any request for clarification of the bidding documents which it receives prior to the deadline for the submission of bids prescribed in ITB Clause 19.1. Written copies of the Purchaser's response (including an explanation of the query but without identifying the source of inquiry) will be sent to all prospective bidders that have received the bidding documents.

7. Amendment of Bidding Documents

- 7.1 At any time prior to the deadline for submission of bids, the Purchaser, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, may modify the bidding documents by amendment.
- 7.2 All prospective bidders that have received the bidding documents will be notified of the amendment in writing and will be binding on them.
- 7.3 In order to allow prospective bidders reasonable time in which to take the amendment into account in preparing their bids, the

Purchaser, at its discretion, may extend the deadline for the submission of bids.

C. Preparation of Bids

8. Language of Bid

8.1 The bid prepared by the Bidder, as well as all correspondence and documents relating to the bid exchanged by the Bidder and the Purchaser shall be written in English. Supporting documents and printed literature furnished by the Bidder may be in another language provided they are accompanied by an accurate translation of the relevant passages in the language specified above, in which case, for purposes of interpretation of the Bid, the translation shall govern.

9. Documents Constituting the Bid

- 9.1 The bid prepared by the Bidder shall comprise the following components:
 - (a) a Bid Form and a Price Schedule completed in accordance with ITB Clauses 10, 11, and 12;
 - (b) documentary evidence established in accordance with ITB Clause 13 that the Bidder is eligible to bid and is qualified to perform the contract if its bid is accepted;
 - (c) documentary evidence established in accordance with ITB Clause 14 that the goods and ancillary services to be supplied by the Bidder are eligible goods and services and conform to the bidding documents; and
 - (d) bid security furnished in accordance with ITB Clause 15.

10. Bid Form

- 10.1 The Bidder shall complete the Bid Form and the appropriate Price Schedule furnished in the bidding documents, indicating the goods to be supplied, a brief description of the goods, their country of origin, quantity, and prices.
- 10.2 Bidders tendering for engineering goods produced in Pakistan shall be accorded a price preference in rupees up to a specific percentage (in proportion to the value addition) of the lowest quoted landed cost of an item of foreign origin with similar specifications as mentioned in the tenders:
 - (1) Provided that-
 - (a) The saving in foreign exchange is not less than the amount of price preference: and
 - (b) It is ensured that in each case of such preference, the total import requirements for producing the supplies tendered for locally manufactured items has been duly indicated by the bidders.

- (2) Price preference shall be allowed as under:-
 - (a) Having minimum of twenty percent value addition through indigenous manufacturing price preference shall fifteen percent;
 - (b) Having over twenty percent and up to thirty percent value addition through indigenous manufacturing, price preference shall be twenty percent, and
 - (c) Having over thirty percent value addition through indigenous manufacturing, price preference shall be twenty five percent.
- (3) For the purpose of granting a margin of domestic preference bids will be classified into following groups.
- **Group.A.** Bids offering engineering goods produced in Pakistan.
- **Group.B.** Bids offering good of foreign origin to be imported by the purchaser through the supplier's Local (Pakistan) Agent.
- **Group.C.** Bids offering good of foreign origin to be imported by the purchaser directly.

11. Bid Prices

- 11.1 The Bidder shall indicate on the appropriate Price Schedule the unit prices (where applicable) and total bid price of the goods it proposes to supply under the contract.
- 11.2 Prices indicated on the Price Schedule shall be entered separately in the following manner or specified otherwise in the Bid Data Sheet:
 - a). for goods offered from within Pakistan;

the price shall be quoted on FOR UAF basis. (FOR means the price of goods quoted by the bidder shall be inclusive of all costs, expenses, charges, duties and taxes etc. whatsoever incidental to their delivery, installation and commissioning as the case may be at UAF site).

b). for goods offered from abroad by the local agent of Pakistan:

the price shall be quoted on Free in Stores Plus (FIS+) UAF basis. (FIS+ means the price of goods quoted by the bidder shall be inclusive of all domestic and abroadcosts, expenses, charges, duties and taxes etc.

whatsoever except customs duty and of the Pakistanincidentalto their delivery installation/commissioning at UAF site). The bidder, in quoting the price, shall be free to use transportation in abroad other than Israel.

c) for goods offered from abroad by the foreign principal directly:

the price shall be quoted CFR/CPT Karachi seaport or Lahore airport Pakistan, as the case may be. The bidder shall also add all cost expenses, charges, duties and taxes etc. whatsoever expect customs duties, incidental to delivery installation/commissioning of goodsfrom the port of destination to UAF site. The bidder, in quoting the price, shall be free to use transportation in abroad other than Israel.

- 11.3 The terms CFR, CPT, etc., shall be governed by the rules prescribed in the current edition of *Incoterms* published by the International Chamber of Commerce, Paris or otherwise specified in the Bid Data Sheet and SCC
- 11.4 The Bidder's separation of price components in accordance with ITB Clause 11.2 above will be solely for the purpose of facilitating the comparison of bids by the Purchaser and will not in any way limit the Purchaser's right to contract on any of the terms offered.
- 11.5 Prices quoted by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to variation on any account, unless otherwise specified in the Bid Data Sheet. A bid submitted with an adjustable price quotation will be treated as non-responsive and will be rejected, pursuant to ITB Clause 24. If, however, in accordance with the Bid Data Sheet, prices quoted by the Bidder shall be subject to adjustment during the performance of the contract, a bid submitted with a fixed price quotation will not be rejected, but the price adjustment would be treated as zero.

12. Bid Currencies

- 12.1 Prices shall be quoted in the following currencies:
 - (a) For goods and services that the Bidder will supply from within the Purchaser Country, the prices shall be quoted in Pak Rupees, unless otherwise specified in the **Bid Data Sheet.**
 - (b) For goods and services that the Bidder will supply from outside the Purchaser Country, the prices shall be quoted in any currency. However the payment will only be made by the purchaser in pak rupees in case of ITB clause 11.2 (b) and SCC.

13. Documents Establishing Bidder's Eligibility and Qualification

- 13.1 Pursuant to ITB Clause 9, the Bidder shall furnish, as part of its bid, documents establishing the Bidder's eligibility to bid and its qualifications to perform the contract if its bid is accepted.
- 13.2 The documentary evidence of the Bidder's eligibility to bid shall establish to the Purchaser's satisfaction that the Bidder, at the time of submission of its bid, is from an eligible country as defined under ITB Clause 2.
- 13.3 The documentary evidence of the Bidder's qualifications to perform the contract if its bid is accepted shall establish to the Purchaser's satisfaction:
 - (a) that, in the case of a Bidder offering to supply goods under the contract which the Bidder did not manufacture or otherwise produce, the Bidder has been duly authorized by the goods' Manufacturer or producer to supply the goods in the Purchaser Country;
 - (b) that the Bidder has the financial, technical, and production capability necessary to perform the contract;
 - (c) that, in the case of a Bidder not doing business within the Purchaser Country, the Bidder is or will be (if awarded the contract) represented by an Agent in that country equipped and able to carry out the Supplier's maintenance, repair, and spare parts-stocking obligations prescribed in the Conditions of Contract and/or Technical Specifications; and
 - (d) that the Bidder meets the qualification criteria listed in the **Bid Data Sheet.**
- 14. Documents
 Establishing
 Goods'
 Eligibility
 and
 Conformity
 to Bidding
 Documents
- 14.1 Pursuant to ITB Clause 9, the Bidder shall furnish, as part of its bid, documents establishing the eligibility and conformity to the bidding documents of all goods and services which the Bidder proposes to supply under the contract.
- 14.2 The documentary evidence of the eligibility of the goods and services shall consist of a statement in the Price Schedule of the country of origin of the goods and services offered which shall be confirmed by a certificate of origin issued at the time of shipment.
- 14.3 The documentary evidence of conformity of the goods and services to the bidding documents may be in the form of literature, drawings, and data, and shall consist of:
 - (a) a detailed description of the essential technical and performance characteristics of the goods;
 - (b) a list giving full particulars, including available sources and current prices of spare parts, special tools, etc.,

necessary for the proper and continuing functioning of the goods for a period to be specified in the **Bid Data Sheet**, following commencement of the use of the goods by the Purchaser; and

- (c) an item-by-item commentary on the Purchaser's Technical Specifications demonstrating substantial responsiveness of the goods and services to those specifications, or a statement of deviations and exceptions to the provisions of the Technical Specifications.
- 14.4 For purposes of the commentary to be furnished pursuant to ITB Clause 14.3(c) above, the Bidder shall note that standards for workmanship, material, and equipment, as well as references to brand names or catalogue numbers designated by the Purchaser in its Technical Specifications, are intended to be descriptive only and not restrictive. The Bidder may substitute alternative standards, brand names, and/or catalogue numbers in its bid, provided that it demonstrates to the Purchaser's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications.

15. Bid Security

- 15.1 Pursuant to ITB Clause 9, the Bidder shall furnish, as part of its bid, a bid security @ 2% of the quoted value or in the amount specified otherwise in the **Bid Data Sheet.**
- 15.2 The bid security is required to protect the Purchaser against the risk of Bidder's conduct which would warrant the security's forfeiture, pursuant to ITB Clause 15.7.
- 15.3 The bid security shall be denominated in the currency of the bid or in another freely convertible currency, and shall be in one of the following forms:
 - (a) Call deposit receipt (CDR).
- 15.4 Any bid not secured in accordance with ITB Clauses 15.1 and 15.3 will be rejected by the Purchaser as nonresponsive, pursuant to ITB Clause 24.
- 15.5 Unsuccessful bidders' bid securities will be discharged or returned as promptly as possible but not later than thirty (30) days after the expiration of the period of bid validity prescribed by the Purchaser pursuant to ITB Clause 16.
- 15.6 The successful Bidder's bid security will be discharged upon the Bidder signing the contract, pursuant to ITB Clause 34, and furnishing the performance security, pursuant to ITB Clause 35.
- 15.7 The bid security may be forfeited:
 - (a) if a Bidder:

- (i) withdraws its bid during the period of bid validity specified by the Bidder on the Bid Form, or
- (ii) does not accept the correction of errors pursuant to ITB Clause 24.2; or
- (b) in the case of a successful Bidder, if the Bidder fails:
 - (i) to sign the contract in accordance with ITB Clause 34; or
 - (ii) to furnish performance security in accordance with ITB Clause 35.

16. Period of Validity of Bids

- 16.1 Bids shall remain valid for the period specified in the **Bid Data Sheet** after the deadline date of bid submission prescribed by the Purchaser, pursuant to ITB Clause 19. A bid valid for a shorter period shall be rejected by the Purchaser as nonresponsive.
- 16.2 In exceptional circumstances, the Purchaser may solicit the Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. The bid security provided under ITB Clause 15 shall also be suitably extended. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request will not be required nor permitted to modify its bid.

17. Format and Signing of Bid

- 17.1 The Bidder shall prepare an original bid indicated in the **Bid Data Sheet,** clearly marking each "TECHNICAL BID" and "FINANCIAL BID," as appropriate. In the event of any discrepancy between them, the original shall govern.
- 17.2 The original bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to bind the Bidder to the contract. All pages of the bid, except for unamended printed literature, shall be initialed by the person or persons signing the bid.
- 17.3 Any interlineations, erasures, or overwriting shall be valid only if they are initialed by the person or persons signing the bid.
- 17.4 The Bidder shall furnish information as described in the Form of Bid on commissions or gratuities, if any, paid or to be paid to agents relating to this Bid, and to contract execution if the Bidder is awarded the contract.

D. Submission of Bids

18. Sealing and Marking of Bids

- 18.1 The Bidder shall seal the Technical and Financial Bid in separate envelopes, duly marking the envelopes as "TECHNICAL" and "FINANCIAL." The envelopes shall then be sealed in an outer envelope.
- 18.2 The inner and outer envelopes shall:
 - (a) be addressed to the Purchaser at the address given in the **Bid Data Sheet;** and
 - (b) bear the Project name indicated in the Bid Data Sheet, the Invitation for Bids (IFB) title and number indicated in the Bid Data Sheet, and a statement: "DO NOT OPEN BEFORE," to be completed with the time and the date specified in the **Bid Data Sheet**, pursuant to ITB Clause 22.1.
- 18.3 The inner envelopes shall also indicate the name and address of the Bidder to enable the bid to be returned unopened in case it is declared "late."
- 18.4 If the outer envelope is not sealed and marked as required by ITB Clause 18.2, the Purchaser will assume no responsibility for the bid's misplacement or premature opening.

19. Deadline for Submission of Bids

- 19.1 Bids must be received by the Purchaser at the address specified under ITB Clause 18.2 (a) not later than the time and date specified in the **Bid Data Sheet.**
- 19.2 The Purchaser may, at its discretion, extend this deadline for the submission of bids by amending the bidding documents in accordance with ITB Clause 7, in which case all rights and obligations of the Purchaser and bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

20. Late Bids

20.1 Any bid received by the Purchaser after the deadline for submission of bids prescribed by the Purchaser pursuant to ITB Clause 19 will be rejected and returned unopened to the Bidder.

21. Modification and Withdrawal of Bids

- 21.1 The Bidder may modify or withdraw its bid after the bid's submission, provided that written notice of the modification, including substitution or withdrawal of the bids, is received by the Purchaser prior to the deadline prescribed for submission of bids.
- 21.2 The Bidder's modification or withdrawal notice shall be prepared, sealed, marked, and dispatched in accordance with the provisions of ITB Clause 18. A withdrawal notice may also be sent by fax, but followed by a signed confirmation copy, postmarked not later than the deadline for submission of bids.
- 21.3 No bid may be modified after the deadline for submission of

bids.

21.4 No bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Bid Form. Withdrawal of a bid during this interval may result in the Bidder's forfeiture of its bid security, pursuant to the ITB Clause 15.7.

E. Opening and Evaluation of Bids

22. Opening of Bids by the Purchaser

- 22.1 The Purchaser will open all bids in the presence of bidders' representatives who choose to attend, at the time, on the date, and at the place specified in the **Bid Data Sheet.** The bidders' representatives who are present shall sign a register evidencing their attendance.
- 22.2 The bidders' names, bid modifications or withdrawals, bid prices, discounts, and the presence or absence of requisite bid security and such other details as the Purchaser, at its discretion, may consider appropriate, will be announced at the opening. No bid shall be rejected at bid opening, except for late bids, which shall be returned unopened to the Bidder pursuant to ITB Clause 20.
- 22.3 Bids (and modifications sent pursuant to ITB Clause 21.2) that are not opened and read out at bid opening shall not be considered further for evaluation, irrespective of the circumstances.
- 22.4 The Purchaser will prepare minutes of the bid opening.

23. Clarification of Bids

23.1 During evaluation of the bids, the Purchaser may, at its discretion, ask the Bidder for a clarification of its bid. The request for clarification and the response shall be in writing, and no change in the prices or substance of the bid shall be sought, offered, or permitted.

24. Preliminary Examination

- 24.1 The Purchaser will examine the bids to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the bids are generally in order.
- 24.2 Arithmetical errors will 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 there is a discrepancy between words and figures, the amount in words will prevail. If the Supplier does not accept the correction of the errors, its bid will be rejected, and its bid

security may be forfeited.

- 24.3 The Purchaser may waive any minor informality, nonconformity, or irregularity in a bid which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any Bidder.
- 24.4 Prior to the detailed evaluation, pursuant to ITB Clause 26, the Purchaser will determine the substantial responsiveness of each bid to the bidding documents. For purposes of these Clauses, a substantially responsive bid is one which conforms to all the terms and conditions of the bidding documents without material deviations. Deviations from, or objections or reservations to critical provisions, **such as** those concerning Bid Security (ITB Clause 15), Applicable Law (GCC Clause 31), and Taxes and Duties (GCC Clause 33), will be deemed to be a material deviation. The Purchaser's determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.
- 24.5 If a bid is not substantially responsive, it will be rejected by the Purchaser and may not subsequently be made responsive by the Bidder by correction of the nonconformity.

25. Conversion to Single Currency

- 25.1 To facilitate evaluation and comparison, the Purchaser will convert all bid prices expressed in the amounts in various currencies in which the bid prices are payable to either:
 - (a) Purchaser Country at the selling exchange rate established for similar transactions by the State Bank of Pakistan and National Bank of Pakistan or specified otherwise;
 - 25.2 The currency selected for converting bid prices to a common base for the purpose of evaluation is Pak Rupees to be converted as per rate of the bank shown in ITB 25.1 (a) on the date of opening of the financial bid or specified otherwise in the **Bid Data Sheet.**

26. Evaluation and Comparison of Bids

- 26.1 The Purchaser will evaluate and compare the bids which have been determined to be substantially responsive, pursuant to ITB Clause 24.
- 26.2 The Purchaser's evaluation of a bid will take into account, in addition to the bid price quoted in accordance with ITB Clause 11.2, one or more of the following factors as specified in the **Bid Data Sheet**, and quantified in ITB Clause 26.3:
 - (a) delivery schedule offered in the bid;
 - (b) deviations in payment schedule from that specified in the Special Conditions of Contract;
 - (c) the cost of components, mandatory spare parts, and service:
 - (d) the availability in the Purchaser's country of spare parts and after-sales services for the equipment offered in the bid;
 - (e) the projected operating and maintenance costs during the life of the equipment;
 - (f) the performance and productivity of the equipment offered; and/or
 - (g) other specific criteria indicated in the **Bid Data Sheet** and/or in the Technical Specifications.
- 26.3 For factors retained in the Bid Data Sheet pursuant to ITB 26.2, one or more of the following quantification methods will be applied, as detailed in the Bid Data Sheet:
 - (a) Delivery schedule.
 - (i) The goods covered under this invitation are required to be delivered (shipped) within an acceptable range of weeks specified in the Schedule of Requirement. No credit will be given to earlier deliveries, and bids offering delivery beyond this range will be treated as nonresponsive. Within this acceptable range, an adjustment per week, as specified in the **Bid Data Sheet**, will be added for evaluation to the bid price of bids offering deliveries later than the earliest delivery period specified in the Schedule of Requirements.
 - (b) Deviation in payment schedule.
 - (i) The SCC stipulates the payment schedule offered by the Purchaser. If a bid deviates from the schedule it will be considered as non-responsive bid.

- (c) Cost of spare parts.
 - (i) The list of items and quantities of major assemblies, components, and selected spare parts, likely to be required during the initial period of operation shall be specified by the bidder. The total cost of these items, at the unit prices quoted in each bid, will be added to the bid price.

or

- (ii) The bidder will draw up a list of high-usage and high-value items of components and spare parts, along with estimated quantities of usage in the initial period of operation. The total cost of these items and quantities will be computed from spare parts unit prices submitted by the Bidder and added to the bid price.
- (d) Spare parts and after sales service facilities in the Purchaser's country.

The cost to the Purchaser of establishing the minimum service facilities and parts inventories, if outlined in the **Bid Data Sheet** or elsewhere in the bidding documents, if quoted separately, shall be added to the bid price.

(e) *Operating and maintenance costs.*

Since the operating and maintenance costs of the goods under procurement form a major part of the life cycle cost of the equipment, these costs will be evaluated in accordance with the criteria specified in the **Bid Data Sheet** or in the Technical Specifications.

- (f) Performance and productivity of the equipment.
 - (i) Goods offered shall have a minimum productivity specified under the relevant provision in the Technical Specifications to be considered responsive. Evaluation shall be based on the cost per unit of the actual productivity of goods offered in the bid or otherwise specified in the **Bid Data Sheet** or in the Technical Specifications.

(g) Specific additional criteria

Other specific additional criteria to be considered in the evaluation and the evaluation method shall be detailed in the **Bid Data Sheet** and/or the Technical Specifications.

26.4. Delivery Schedule.

As mentioned in Bid Data Sheet.

27. Domestic Preference

- 27.1 If the **Bid Data Sheet** so specifies, the Purchaser will grant a margin of preference to goods manufactured in the Purchaser's country for the purpose of bid comparison, in accordance with the procedures outlined in subsequent paragraphs, provided the Bidder shall have established to the satisfaction of the Purchaser that its bid complies with the criteria specified in ITB Clause 10.2 (a):
- 27.2 The Purchaser will first review the bids to confirm the appropriateness of, and to modify as necessary, the bid group classification to which bidders assigned their bids in preparing their Bid Forms and Price Schedules, pursuant to ITB Clauses 10 and 11.
- 27.3 All evaluated bids in each group will then be compared among themselves to determine the lowest evaluated bid of each group. The lowest evaluated bid of each group will next be compared with the lowest evaluated bids of the other groups. If this comparison results in a bid from Group A or Group B being the lowest, it will be selected for contract award.
- 27.4 If, as a result of the preceding comparison, the lowest evaluated bid is from Group C, all Group C bids will then be further compared with the lowest evaluated bid from Group A, after adding to the evaluated bid price of the imported goods offered in each Group C bid, for the purpose of this further comparison only:
 - (a) the amount of customs duties and other import taxes that a nonexempt importer would have to pay for the importation of goods offered in each Group C bid;

If the Group A bid in the further comparison is the lowest, it will be selected for award. If not, the lowest evaluated bid from Group C, as determined from the comparison under ITB Clause 27.3 above, will be selected for award.

28. Contacting the Purchaser

- 28.1 From the time of bid opening to the time of contract award, if any bidder wishes to contact the Purchaser on any matter related to the bid, it should do so in writing.
- 28.2 Any effort by a Bidder to influence the Purchaser in its decisions on bid evaluation, bid comparison, or contract award may result in the rejection of the Bidder's bid.

F. Award of Contract

29. Post-

29.1 In the absence of prequalification, the Purchaser will determine

qualification

to its satisfaction whether the Bidder that is selected as having submitted the lowest evaluated responsive bid is qualified to perform the contract satisfactorily, in accordance with the criteria listed in ITB Clause 13.3.

- 29.2 The determination will take into account the Bidder's financial, technical, and production capabilities. It will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB Clause 13.3, as well as such other information as the Purchaser deems necessary and appropriate.
- 29.3 An affirmative determination will be a prerequisite for award of the contract to the Bidder. A negative determination will result in rejection of the Bidder's bid, in which event the Purchaser will proceed to the next lowest evaluated bid to make a similar determination of that Bidder's capabilities to perform satisfactorily.

30. Award Criteria

- 30.1 Subject to ITB Clause 32, the Purchaser will award the contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined to be the lowest evaluated bid, provided further that the Bidder is determined to be qualified to perform the contract satisfactorily.
- 31. Purchaser's
 Right to Vary
 Quantities at
 Time of
 Award
- 31.1 The Purchaser reserves the right at the time of contract award to increase or decrease, as per requirement, the quantity of goods and services originally specified in the Schedule of Requirements without any change in unit price or other terms and conditions.

32. Purchaser's Right to Accept Bid and to Reject All Bids

32.1 The Purchaser reserves the right to accept bid and to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to the affected Bidder or bidders.

33. Notification of Award

- 33.1 Prior to the expiration of the period of bid validity, the Purchaser will notify/inform the successful and unsuccessful Bidder in writing by letter or by Fax/ e-mail, or telephonically, that its bid has been accepted and unaccepted as the case may by.
- 33.2 The notification of award will constitute the formation of the Contract.
- 33.3 Upon the successful Bidder's furnishing of the performance security pursuant to ITB Clause 35, the Purchaser will discharge bid security to each unsuccessful Bidder on his written request, pursuant to ITB Clause 15.
- 33.4 If, after notification of award, a Bidder wishes to ascertain the grounds on which its bid was not selected, it should address its request to the Purchaser. The Purchaser will promptly respond in writing to the unsuccessful Bidder.

34. Signing of Contract

34.1 After 10 days from the announcement of evaluation report, the Purchaser will send supply order or Formal Contract as the case may be to successful bidder. In case of formal contract, the successful bidder will send back the contract to the purchaser duly signed within 7 days from the issuance date. Failing which the Purchaser reserves the right under ITB Clause 15.7.

35. Performance Security

- 35.1 Within Seven (07) days from the issuance of acceptance letter from the Purchaser, the successful Bidder shall furnish the performance security in shape of CDR or Bank guarantee at the discretion of the Purchaser. In case the amount of bid security is equal or greater than the value of the goods to be supplied then the bidder shall not require furnishing the performance security separately, it will be retained or deducted from the bidder's claim on bidder's choice.
- 35.2 Failure of the successful Bidder to comply with the requirement of ITB Clause 34.2 or ITB Clause 35.1 shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security, in which event the Purchaser may make the award to the next lowest evaluated Bidder or call for new bids.

36. Corrupt or Fraudulent Practices

36.1 The purchaser as well as Bidders/Suppliers/Contractors should observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, the PPRA Govt. of the Punjab;

- (a) the terms set forth below as follows:
 - (i) "corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and
 - (ii) "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Purchaser, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Purchaser of the benefits of free and open competition;
- (b) The purchaser will reject a proposal for award if it determines that the Bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;
- (c) The Purchaser will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a University Contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a University Contract.
- 36.2 Furthermore, Bidders shall be aware of the provision stated in Clauses 5.4 and 24.1 of the General Conditions of Contract.

37.**Blacklisting**/37.1 the Purchaser reserves the right to blacklist or deregister (may **Deregistration** impose Permanent or temporary bar for participation in the procurement proceedings respectively) the bidder as follows:-

(a) **Blacklisting:** The bidder who

- (i) Fail to perform contractual obligations or the performance under the contract is not upto the mark;
- (ii) Found to be indulging in corrupt or fraudulent practices;
- (iii)Commit an action causing or liable to cause loss to the University;
- (iv)Furnish false information;
- (b) **Deregistration:** The bidder who
 - (i) Submit bid as employee of the firm, or proprietor or shareholder being an employee of the University:
 - (ii) Show non-responsive attitude in case of summoning by the University.

- (iii) Back out from their offers after opening of tender;
- (iv) Misbehave with the University employee;
- 37.2 The bidder shall provide affidavit that the firm was not declared blacklisted or deregistered by any of the Federal and Provincial Government institution.

Section III.

Bid Data Sheet

Bid Data Sheet

The following specific data for the goods to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions herein shall prevail over those in ITB.

	A-Introduction		
ITB 2.1	The invitation for Bids is opened to all suppliers having registration for National Tax Number &Sales Tax Number with Federal Board of Revenue.		
ITB2.3	Government owned enterprises may participate, only if they are legally allowed.		
ITB 2.4	In addition to the contents of ITB 2.4 the bidder shall not be blacklisted by any organization of the Government of the Punjab as well as Federal Government. The bidder shall provide affidavit to this effect.		
ITB 4.1	Name of Purchaser: Prof. Dr. Hafeez Ahmad Sadaqat, Department of Plant Breeding and Genetics, University of Agriculture, Faisalabad (UAF)		
	B- Bidding Documents		
ITB 5.1(h)	Not applicable		
ITB 6.1	Purchaser's address: Prof. Dr. Hafeez Ahmad Sadaqat, Department of Plant Breeding and Genetics, UAF, telephone, and facsimile numbers through		
	Directorate of Procurement & Inventory Control (P&IC) University of Agriculture, Faisalabad Phone No. 041-9200898 Fax. 041-9200898		
	FOR TECHNICAL RESPONSE:		
	1. Prof. Dr. Hafeez Ahmad Sadaqat, Department of Plant		
	 Breeding & Genetics Dr. Ihsan Khaliq, Associate Professor, Department of Plant Breeding & Genetics 		
	3. Dr. Irfan Afzal, Assistant Professor, Department of Agronomy		
	4. Dr. Muhammad Usman, Assistant Professor, Institute of Horticultural Sciences		
	5. Dr. Shahid Afzal Gill, Director (DPIC)		
	C-Preparation of Bid		
ITB 8.1	Language of the bid. "English"		
ITB 11.2 (a & b)	Prices on FOR and FIS Plus as per 11.2 (a & b) respectively shall be mentioned separately		
ITB 11.2 (c)	Not applicable		

ITB 11.3	
ITB 13.3 (d)	Qualification requirements. 1. Company /Bidder Profile:
	a. Experience in the relevant field minimum 3 Yearsb. HR strength/Manpower with the Bidder
	c. Direct or indirect genuine source / relationship with the Principal
	d. Technical expertise with the bidder
	e. Sound financial position of the bidder (cash available equal to 50% of the quoted value as per bank statement) or 5 time sales volume of quoted value as per Income tax returns of last financial year.
	f. Name of owner/proprietor
	g. Copy of CNIC
	h. Date of Establishment, Age of Firm
	i. Copy of NTN and Sales Tax Registration
	j. Copy of Professional Tax
	k. Copy of Punjab Revenue Authority (PRA) (if required)
ITB 15.1	Amount of bid security.
116 15.1	2% of the quoted value in shape of Call Deposit Receipt (CDR) in favour of Director (DPIC), UAF to be attached with Technical Bid.
ITB 16.1	Bid validity period. 90 Days
ITB 17.1	Bid: Financial and Technical Separately. Also a soft copy of Technical Bid Only
	D-Submission of Bid
ITB 18.2 (a)	Address for bid submission. Directorate of Procurement & Inventory Control, University of Agriculture, Faisalabad
ITB 18.2 (b)	Tender Notice No.1/2016
ITB 19.1	Deadline for bid submission.25.01.2016
	E-Bid Evaluation
ITB 25.1(a)	State Bank or a Commercial Bank to be read as State Bank of Pakistan and National Bank of Pakistan
ITB 25.2	The common base currency is PAK Rupee to be converted as per rate of the bank shown in ITB 25.1(a) of the bid data sheet on the date of opening of the financial bid.
ITB 26.3 (a)(i)	The SCC stipulates the payment schedule offered by the purchaser. If a bid deviates from the schedule then it will be considered as non-responsive.
ITB 26.3 (c)	The bidder will provide the cost of spare parts required to be replaced
ITB 26.3 (e)	during whole life of the goods after the expiry of warranty period. The bidder will provide:-
11B 20.5 (e)	i) Cost of consumables
	ii) Unit of energy consumption per hour
	iii) Life cycle of the goods
ITB 26.3 (f)	Performance and productivity of Articles.
. ,	As per Technical Specification
ITB 26.3 (g)	As per specification.

ITB 27	As per ITB clause 10.2 prior to the award of procurement contract
ITB 33	Subject to PPRA Rule 2014/UAF Procurement Rule 2014, the bidder
	with the lowest evaluated bid, if not in conflict with any other law, shall
	be awarded the procurement contract within the original or extended bid
	validity period after 10 days of announcement of the evaluation report.

Section IV.

General Conditions of Contract

Table of Clauses

1.	Definitions	33
2.	Application	34
3.	Country of Origin	34
4.	Standards	34
5.	Use of Contract Documents and Information; Inspection and Audit b	y
	Purchaser	
6.	Patent Rights	35
7.	Performance Security	35
8.	Inspections and Tests	35
9.	Packing	36
10.	Delivery and Documents	36
11.	Insurance	37
12.	Transpor-tation	37
13.	Incidental Services	38
14.	Spare Parts	38
15.	Warranty	38
16.	Payment	39
17.	Prices	40
18.	Change Orders	40
19.	Contract Amendments	40
20.	Assignment	40
21.	Subcontracts	40
22.	Delays in the Supplier's Performance	41
23.	Liquidated Damages	41
24.	Termination for Default	41
25.	Force Majeure	42
26.	Termination for Insolvency	42
27.	Termination for Convenience	43
28.	Settlement of Disputes	43
29.	Limitation of Liability	44
30.	Governing Language	44
31.	Applicable Law	
32.	Notices	44
33.	Taxes and Duties	44

General Conditions of Contract

1. Definitions

- 1.1 In this Contract, the following terms shall be interpreted as indicated:
 - (a) "The Contract" means the agreement entered into between the Purchaser and the Supplier, as recorded in the Contract Form signed by the parties, or the supply order issued by the purchaser to the supplier, as the case may be, including all attachments and appendices thereto and all documents incorporated by reference therein.
 - (b) "The Contract Price" means the price payable to the Supplier under the Contract for the full and proper performance of its contractual obligations.
 - (c) "The Goods" means all of the equipment, machinery, and/or other materials which the Supplier is required to supply to the Purchaser under the Contract.
 - (d) "The Services" means those services ancillary to the supply of the Goods, such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training, and other such obligations of the Supplier covered under the Contract.
 - (e) "GCC" means the General Conditions of Contract contained in this section.
 - (f) "SCC" means the Special Conditions of Contract.
 - (g) "The Purchaser" means the organization purchasing the Goods, as mentioned in Bid Data Sheet.
 - (h) "The Purchaser's country" is **Pakistan.**
 - (i) "The Supplier" means the individual or firm supplying the Goods and Services under this Contract and **named** in Supply Order.
 - (j) "The University" means the **University of Agriculture**, **Faisalabad**.
 - (k) "The Project Site," where applicable, means the place or places named in Bid Data Sheet and technical specifications
 - (l) "Day" means calendar day.

2. Application

2.1 These General Conditions shall apply to the extent that they are not superseded by provisions of other parts of the Contract.

3. Country of Origin

- 3.1 All Goods and Services supplied under the Contract shall have their origin in the countries as elaborated in the Technical Specifications.
- 3.2 For purposes of this Clause, "origin" means the place where the Goods were mined, grown, or produced, or from which the Services are supplied. Goods are produced when, through manufacturing, processing, or substantial and major assembly of components, a commercially recognized new product results that is substantially different in basic characteristics or in purpose or utility from its components.
- 3.3 The origin of Goods and Services is distinct from the nationality of the Supplier.

4. Standards

- 4.1 The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, to the authoritative standards appropriate to the Goods' country of origin. Such standards shall be the latest issued by the concerned institution.
- 5. Use of
 Contract
 Documents
 and
 Information;
 Inspection and
 Audit by
 Purchaser
- 5.1 The Supplier shall not, without the Purchaser's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the Purchaser in connection therewith, to any person other than a person employed by the Supplier in the performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.
- 5.2 The Supplier shall not, without the Purchaser's prior written consent, make use of any document or information enumerated in GCC Clause 5.1 except for purposes of performing the Contract.
- 5.3 Any document, other than the Contract itself, enumerated in GCC Clause 5.1 shall remain the property of the Purchaser and shall be returned (all copies) to the Purchaser on completion of the Supplier's performance under the Contract if so required by the Purchaser.
- 5.4 The Supplier shall permit the Purchaser to inspect the Supplier's accounts and records relating to the performance of the Supplier and to have them audited by auditors appointed by the Purchaser, if so required by the Purchaser.

6. Patent Rights

6.1 The Supplier shall indemnify the Purchaser against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof in the Purchaser's country.

7. Performance Security

- 7.1 Within Seven (07) days from the issuance of acceptance letter from the Purchaser, the successful Bidder shall furnish the performance security in shape of CDR or Bank guarantee at the discretion of the Purchaser in the amount **specified in SCC.** In case the amount of bid security is equal or greater than the value of the goods to be supplied then the bidder shall not require furnishing the performance security separately, it will be retained or deducted from the bidder's claim on bidder's choice.
- 7.2 The proceeds of the performance security shall be payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.
- 7.3 The performance security shall be denominated in the currency of the Contract, or in a freely convertible currency acceptable to the Purchaser and shall be in one of the following forms:
 - (a) bank guarantee or CDR issued by a reputable bank located in the Purchaser's country or abroad, acceptable to the Purchaser, in the form provided in the bidding documents or another form acceptable to the Purchaser.
- 7.4 The performance security will be discharged by the Purchaser and returned to the Supplier not later than thirty (30) days following the date of completion of the Supplier's performance obligations under the Contract, including any warranty obligations, unless otherwise **specified in SCC.**

8. Inspections and Tests

- 8.1 The Purchaser or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract specifications at no extra cost to the Purchaser. SCC and the Technical Specifications shall specify what inspections and tests the Purchaser requires and where they are to be conducted. The Purchaser shall notify the Supplier in writing, in a timely manner, of the identity of any representatives retained for these purposes.
- 8.2 The inspections and tests may be conducted on the premises of the Supplier or its subcontractor(s), at point of delivery, and/or at the Goods' final destination. If conducted on the premises of the Supplier or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no

charge to the Purchaser.

- 8.3 Should any inspected or tested Goods fail to conform to the Specifications, the Purchaser may reject the Goods, and the Supplier shall either replace the rejected Goods or make alterations necessary to meet specification requirements free of cost to the Purchaser.
- 8.4 The Purchaser's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival in the Purchaser's country shall in no way be limited or waived by reason of the Goods having previously been inspected, tested, and passed by the Purchaser or its representative prior to the Goods' shipment from the country of origin.
- 8.5 Nothing in GCC Clause 8 shall in any way release the Supplier from any warranty or other obligations under this Contract.

9. Packing

- 9.1 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.
- 9.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified in SCC, and in any subsequent instructions ordered by the Purchaser.

10. Delivery and Documents

- 10.1 Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in the Schedule of Requirements. The details of shipping and/or other documents to be furnished by the Supplier are specified in SCC.
- 10.2 For purposes of the Contract, "CFR," "CPT", the terms used to describe the obligations of the parties shall have the meanings assigned to them by the current edition of *Incoterms* published by the International Chamber of Commerce, Paris.
- 10.3 Documents to be submitted by the Supplier are specified in SCC.

11. Insurance

- 11.1 The Goods supplied under the Contract shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage, and delivery in the manner **specified in the SCC.**
- 11.2 Where delivery of the Goods is required by the Purchaser on a CFR or CPT basis, the Purchaser shall arrange and pay for cargo insurance, naming the supplier as beneficiary.

12. Transportation

- 12.1 Where the Supplier is required under Contract to deliver the Goods FOB, transport of the Goods, up to and including the point of putting the Goods on board the vessel at the specified port of loading, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price. Where the Supplier is required under the Contract to deliver the Goods FCA, transport of the Goods and delivery into the custody of the carrier at the place named by the Purchaser or other agreed point shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price.
- 12.2 Where the Supplier is required under Contract to deliver the Goods CFR or CPT, transport of the Goods to the port of destination or such other named place of destination in the Purchaser's country, as shall be specified in the Contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price.
- 12.3 Where the Supplier is required under the Contract to transport the Goods to a specified place of destination within the Purchaser's country, defined as the Project Site, transport to such place of destination in the Purchaser's country, including insurance and storage, as shall be specified in the Contract, shall be arranged by the Supplier, and related costs shall be included in the Contract Price.
- 12.4 Where the Supplier is required under Contract to deliver the Goods CFR or CPT, no restriction shall be placed on the choice of carrier. Where the Supplier is required under Contract (a) to deliver the Goods FOB or FCA, and (b) to arrange on behalf and at the expense of the Purchaser for international transportation on specified carriers or on national flag carriers of the Purchaser's country, the Supplier may arrange for such transportation on alternative carriers if the specified or national flag carriers are not available to transport the Goods within the period(s) specified in the Contract.

13. Incidental Services

- 13.1 The Supplier may be required to provide any or all of the following services, including additional services, if any, specified in SCC:
 - (a) performance or supervision of on-site assembly and/or start-up of the supplied Goods;
 - (b) furnishing of tools required for assembly and/or maintenance of the supplied Goods;
 - (c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods;
 - (d) performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and
 - (e) training of the Purchaser's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods.
- 13.2 Prices charged by the Supplier for incidental services, if not included in the Contract Price for the Goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.

14. Spare Parts

- 14.1 As **specified in SCC**, the Supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the Supplier:
 - (a) such spare parts as the Purchaser may elect to purchase from the Supplier, provided that this election shall not relieve the Supplier of any warranty obligations under the Contract; and
 - (b) in the event of termination of production of the spare parts:
 - (i) advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements; and
 - (ii) following such termination, furnishing at no cost to the Purchaser, the blueprints, drawings, and specifications of the spare parts, if requested.

15. Warranty

15.1 The Supplier warrants that the Goods supplied under the Contract are new, unused, of the most recent or current models, and that they incorporate all recent improvements in

design and materials unless provided otherwise in the Contract. The Supplier further warrants that all Goods supplied under this Contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the Purchaser's specifications) or from any act or omission of the Supplier, that may develop under normal use of the supplied Goods in the conditions prevailing in the country of final destination.

- 15.2 This warranty shall remain valid for twelve (12) months after the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the Contract, or for eighteen (18) months after the date of shipment from the port or place of loading in the source country, whichever period concludes earlier, unless specified otherwise in SCC.
- 15.3 The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty.
- 15.4 Upon receipt of such notice, the Supplier shall, within the period specified in notice or in SCC and with all reasonable speed, repair or replace the defective Goods or parts thereof, without costs to the Purchaser.
- 15.5 If the Supplier, having been notified, fails to remedy the defect(s) within the period specified in the notice or in SCC, the Purchaser may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.

16. Payment

- 16.1 The method and conditions of payment to be made to the Supplier under this Contract shall be **specified in SCC.**
- 16.2 The Supplier's request(s) for payment shall be made to the Purchaser in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and Services performed, and by documents submitted pursuant to GCC Clause 10, and upon fulfillment of other obligations stipulated in the Contract.
- 16.3 Payments shall be made promptly by the Purchaser, but in no case later than thirty (30) days after submission of an invoice or claim by the Supplier.
- 16.4 The currency or currencies in which payment is made to the Supplier under this Contract shall be **specified in SCC** subject to the following general principle: payment will be made in the currency or currencies in which the payment has been requested in the Supplier's bid.
- 16.5 All payments shall be made in the currency or currencies

specified in the SCC pursuant to GCC 16.4.

17. Prices

17.1 Prices charged by the Supplier for Goods delivered and Services performed under the Contract shall not vary from the prices quoted by the Supplier in its bid, with the exception of any price adjustments **authorized in SCC** or in the Purchaser's request for bid validity extension, as the case may be.

18. Change Orders

- 18.1 The Purchaser may at any time, by a written order given to the Supplier pursuant to GCC Clause 32, make changes within the general scope of the Contract in any one or more of the following:
 - (a) drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser:
 - (b) the method of shipment or packing;
 - (c) the place of delivery; and/or
 - (d) the Services to be provided by the Supplier.
- 18.2 If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or delivery schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this clause must be asserted within thirty (30) days from the date of the Supplier's receipt of the Purchaser's change order.

19. Contract Amendments

19.1 Subject to GCC Clause 18, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

20. Assignment

20.1 The Supplier shall not assign, in whole or in part, its obligations to perform under this Contract, except with the Purchaser's prior written consent.

21. Subcontracts

- 21.1 The Supplier shall notify the Purchaser in writing of all subcontracts awarded under this Contract if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the Supplier from any liability or obligation under the Contract.
- 21.2 Subcontracts must comply with the provisions of GCC Clause 3.

22. Delays in the Supplier's Performance

- 22.1 Delivery of the Goods and performance of Services shall be made by the Supplier in accordance with the time schedule prescribed by the Purchaser in the Schedule of Requirements.
- 22.2 If at any time during performance of the Contract, the Supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the Goods and performance of Services, the Supplier shall promptly notify the Purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may at its discretion extend the Supplier's time for performance, with or without liquidated damages, in which case the extension shall be ratified by the parties by amendment of Contract.
- 22.3 Except as provided under GCC Clause 25, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to GCC Clause 23, unless an extension of time is agreed upon pursuant to GCC Clause 22.2 without the application of liquidated damages.

23. Liquidated Damages

23.1 Subject to GCC Clause 25, if the Supplier fails to deliver any or all of the Goods or to perform the Services within the period(s) specified in the Contract, the Purchaser shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in SCC of the delivered price of the delayed Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the percentage **specified in SCC.** Once the maximum is reached, the Purchaser may consider termination of the Contract pursuant to GCC Clause 24.

24. Termination for Default

- 24.1 The Purchaser, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Supplier, may terminate this Contract in whole or in part:
 - (a) if the Supplier fails to deliver any or all of the Goods within the period(s) specified in the Contract, or within any extension thereof granted by the Purchaser pursuant to GCC Clause 22; or
 - (b) if the Supplier fails to perform any other obligation(s) under the Contract.
 - (c) if the Supplier, in the judgment of the Purchaser, has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

For the purpose of this clause:

"corrupt practice" means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.

"fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Purchaser of the benefits of free and open competition.

24.2 In the event the Purchaser terminates the Contract in whole or in part, pursuant to GCC Clause 24.1, the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or Services similar to those undelivered, and the Supplier shall be liable to the Purchaser for any excess costs for such similar Goods or Services. However, the Supplier shall continue performance of the Contract to the extent not terminated.

25. Force Majeure

- 25.1 Notwithstanding the provisions of GCC Clauses 22, 23, and 24, the Supplier shall not be liable for forfeiture of its performance security, liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
- 25.2 For purposes of this clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not restricted to, acts of the Purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.
- 25.3 If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

26. Termination for Insolvency

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

to the Purchaser.

27. Termination for Convenience

- 27.1 The Purchaser, by written notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.
- 27.2 The Goods that are complete and ready for shipment within thirty (30) days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices. For the remaining Goods, the Purchaser may elect:
 - (a) to have any portion completed and delivered at the Contract terms and prices; and/or
 - (b) to cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and Services and for materials and parts previously procured by the Supplier.

28. Settlement of Disputes

- 28.1 If any dispute or difference of any kind whatsoever shall arise between the Purchaser and the Supplier in connection with or arising out of the Contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.
- 28.2 If the parties have failed to resolve their dispute or difference by such mutual consultation, then either the Purchaser or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given.
 - 28.2.1 Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under the Contract.
 - 28.2.2 Arbitration proceedings shall be conducted in accordance with the rules of procedure **specified in the SCC.**
- 28.3 Notwithstanding any reference to arbitration herein,
 - (a) the parties shall continue to perform their respective obligations under the Contract unless they otherwise

agree; and

(b) the Purchaser shall pay the Supplier any monies due the Supplier.

29. Limitation of Liability

- 29.1 Except in cases of criminal negligence or willful misconduct, and in the case of infringement pursuant to Clause 6,
 - (a) the Supplier shall not be liable to the Purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Supplier to pay liquidated damages to the Purchaser and
 - (b) the aggregate liability of the Supplier to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment.

30. Governing Language

30.1 The Contract shall be written in the language **specified in SCC.** Subject to GCC Clause 31, the version of the Contract written in the specified language shall govern its interpretation. All correspondence and other documents pertaining to the Contract which are exchanged by the parties shall be written in the same language.

31. Applicable Law

- 31.1 The Contract shall be interpreted in accordance with the laws of the Purchaser's country, unless otherwise **specified in SCC.**
- 32. Notices
- 32.1 Any notice given by one party to the other pursuant to this Contract shall be sent to the other party in writing or facsimile and confirmed in writing to the other party's address **specified in SCC.**
- 32.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

33. Taxes and Duties

- 33.1 A foreign Supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the Purchaser's country and purchaser's country as **specified in SCC.**
- 33.2 A local Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted Goods to the Purchaser.

Section V.

Special Conditions of Contract

Table of Clauses

1.	Performance Security (GCC Clause /)	47
2.	Warranty (GCC Clause 15)	47
3.	Payment (GCC Clause 16)	
4.	Settlement of Disputes (GCC Clause 28)	
5.	Applicable Law (GCC Clause 31)	49
6.	Notices (GCC Clause 32)	49
7.	· · · · · · · · · · · · · · · · · · ·	

SPECIAL CONDITIONS OF CONTRACT

The following Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the General Conditions of Contract. The corresponding clause number of the GCC is indicated in parentheses.

1. Performance Security (GCC Clause 7)

GCC 7.1—

A. For goods offered from within Pakistan and abroad by the local agent by Pakistan:

the successful Bidder shall furnish the performance security @ 10% of the value of Supply Order or Contract in shape of CDR in favour of Director (P&IC), UAF for main Campus, and of Principal or Projector Director as the case may be for sub campuses within Seven (07) days from the issuance of acceptance letter from the Purchaser. In case the amount of bid security is equal or greater than the value of the performance security, then the bidder shall not require to furnish the performance security separately.

B. 2% CDR of general type good (s) will be kept for 3 months or when the good (s) are fully consumed whichever is earlier.

GCC 7.3 a): Bank Guarantee is not allowed

2. Inspection and Tests (GCC Clause 8)

GCC 8.1- By the concerned purchaser in accordance with the specifications or samples or both as required.

3. Delivery and Documents (GCC Clause 10)

GCC 10.1&10.3:

- A. For goods offered from abroad by the local agent in Pakistan:
- (i) Where the supplier shall is require under contract to deliver, install and commission the goods on FIS+ UAF basis, the supplier will ship the goods in favour of the Purchaser. The Purchaser will arrange clearance of the goods on the risk and expense of the supplier. All costs, expenses, charges, taxes, duties etc. whatsoever except customs duties incidental to delivery, installation and commission the goods from port of destination to UAF site shall be paid by the supplier. For clearance of the goods, the supplier shall provide copies of the following documents immediately after shipment of the goods:-
 - (a) Airway Bill / Bill of Lading as the case may be
- (b) Commercial Invoice
 - (c) Packing List
 - (d) Certificate of Origin

GCC 10.2: Not applicable

4. Insurance, Transportation and Incidental Charges etc.(GCC Clause 11, 12 & 13)

i. The supplier shall require to deliver, install and commission the goods on Free in Store Plus (FIS+), (all domestic & abroad costs, expenses/charges, duties, taxes, whatsoever including insurance, transportation, incidental and clearing charges etc. except customs duties shall be paid by the supplier) UAF.

5. Warranty (GCC Clause 15)

GCC15.2&15.4: One year free of cost labour and material etc. at site from the date of commissioning of goods.

6. Payment (GCC Clause 16)

GCC-16.1, 16.2&16.4:

- A. For goods offered from abroad by the local agent in Pakistan:
- (i) Where the supplier is required under contract to deliver, install and commission the goods on Free in Store Plus (FIS+). The Purchaser shall pay in Pak Rupees equivalent to price of the FIS+ goods as per selling exchange rates of the State Bank of Pakistan/National Bank of Pakistan prevailing on the date of opening of financial bid after complete commissioning/acceptance of the goods and submission of the bill whichever is later (not later than thirty days).

7. Prices (GCC Clause 17)

GCC17.1: No Price adjustment is allowed.

8. Change Orders (GCC Clause 18)

Not applicable

9. **Liquidated Damages** (GCC Clause 23)

GCC 23.1—Applicable rate:

The liquidated damages, if imposed, will be recovered at the rate of upto 0.67% of the value of goods supplied/installed/commission late per day or a part of a period exceeding the original delivery period, subject to the provision that the total liquidated damages thus imposed will not exceed 10% of the total value of the goods delivered/installed/commission late.

10. Settlement of Disputes (GCC Clause 28)

The settlement of dispute will be settled in accordance with mechanism for redresal of grievances and settlement of dispute as specified below:-

Complaints of bidder/contractor shall be disposed/settled by a committee and arbitration prior to the entry into force and after into force of procurement contract respectively. Accordingly, grievances committee with powers and terms of reference and method of arbitration are as under:-

A. Grievances Committee:

The committee comprises the following to address the complaints of the bidders prior to entry into force of the procurement contract:-

i. The Treasurer (E.mial address: treasurer uaf@yahoo.com) (Convener)

ii. Prof. Dr. Hafeez Ahmad Sadaqat, Deptt. of P.B.G. (Member)

iii. Resident Auditor or the Technical Expert(s) not (Member) below the rank of Assistant Professor

iv. The Director (DPIC) (Secretary)

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 under rule 37 of the UAF Procurement Rules 2014.

The committee shall address the complaints of bidders that may occur prior to the entry into force of the procurement contract. The committee shall investigate and decide upon the complaint within fifteen days of the receipt of the complaint. Mere fact of lodging of a complaint shall not warrant suspension of the procurement process.

Any bidder not satisfied with the decision of the committee may lodge an appeal in the relevant court of jurisdiction.

B. Arbitration:

After coming into force of the procurement contract, all matters of dispute or difference except regarding rejection of goods by the Inspector under GCC clause 8 (Standard Bidding Document) or cancellation of the contract by the Purchaser, under GCC Clause 24 and 27 (Standard Bidding Document) arising out of the agreement between the parties thereto, the settlement of which is not otherwise specially provided for in contract agreement, shall be referred to arbitration as under:-

(a) Foreign Currency Contracts (EXW/FOB/CFR/CPT, etc.) made directly with Foreign Principal / Manufacturer

- i. The dispute shall be referred for adjudication to two arbitrators one to be nominated by each party, who before entering upon the reference shall appoint an umpire by mutual agreement, and if they do not agree, a judge of the Superior Court will be requested to appoint the umpire. The arbitration proceedings shall be held in Pakistan and under Pakistan Law.
- ii. The venue of arbitration shall be the place from which the contract is issued or such other places as the Purchaser at his discretion may determine.
 - iii. Arbitration award so given will be firm and final.

(b)Indigenous (FOR) contracts

The settlement of dispute, if not otherwise especially provided for in the contract shall be referred for the decision of Vice Chancellor, University of Agriculture, Faisalabad. His decision shall be final and binding on both the parties. The work under the contract shall if reasonably possible continue, under the proceedings before the Vice Chancellor and no account of such proceeding unless they are subject of the dispute.

Note:

- The arbitration award shall be recorded in writing.
- EXW/FOB/CFR/CPT, etc., contracts made through local agents would be dealt under sub para-B (b) above.

(c) Prior Notice for arbitration:

If the supplier intends to go for arbitration, he shall have to give 30 days notice in writing informing the purchaser of his intention to refer to the points of differences or dispute of arbitration. He shall have to define clearly the point of difference and or dispute in his notice.

C. Court Jurisdiction

Only the Courts at Faisalabad shall have exclusive jurisdiction to adjudicate upon any "lis" brought by either of the parties in relation to the contract.'

11. Applicable Law (GCC Clause 31)

GCC 31.1—UAF Procurement Rules 2014 and Laws governing in Pakistan

12. Notices (GCC Clause 32)

GCC 32.1: The Supplier shall provide address for notice purposes:

13. Taxes and Duties (GCC Clause 33)

14. Stamp Act

In accordance with the Stamp Act 1899 amended from time to time, the contractor shall require to affix stamp duty @ 25 paisa per hundred rupees on the value of the contract.

Section VI.

Schedule of Requirements

Schedule of Requirements

Number Description Quantity Delivery schedule:
4 Weeks for FOR Supply
10 weeks for FIS+ Supply

	10 week	s for FIS+ Supply
Sr.No.	Item name	Quantity
Seed physiology section		
1	Dicky Jones Seed Moisture Tester	1
2	Electronic balance (top loading balance)	1
3	Seed Germinator	1
4	Spiral Probe	3
5	Grain dockage sieves of different perforations	1
6	Triple beam balance	1
7	Circline magnifier lamp	1
8	Purity working board	1
9	South Dakota Seed Blower	1
10	Stereo Microscope	1
11	Oven	1
12	Nobbe Trier	1
13	Bag Trier	1
14	APC UPS for germinator	1
15	RR Seed Moisture analyzer	1
16	CF mobile	1
17	Data loggers	20
18	Lab seed coater (150 mm)	1
19	Dry Store (12)	12
20	Thermo gradient table	1
Seed production section (major and vegetable crops)		
21	Vertical cooling cabinet/freezer	2
22	Dehumidifier	1
23	Dehumidifier (large)	1
24	Accelerated seed aging chamber	1
25	Camera	1
26	Shaking Incubator	1
27	_105 °C Ultra low temperature	1
28	Luminar Air Flow Cabinet	1
29	Autoclave	1
30	Sensoquest Gradient labcycler or Eppendorf Thermal cycler	1
31	Thermal cycler	1
32	Horizontal Electrophoresis+ Power Supply	1
33	Gel Documentation System	1
34	Multi-channel pipettes	1 each
35	Centrifuge Machine	1
36	Micro centrifuge	2
	•	

Section VII.

Technical Specifications

TECHNICAL SPECIFICATIONS

The bidder shall quote the goods along with the serial number mentioned below against each and also provide softy copy in Excel Sheet without price as technical bid. The quoted goods shall have point to point commentary.

Sr.No.	Item name	Specifications	Justification	Quantity
Seed physiology section				
1	Dicky Jones Seed Moisture Tester	Model Mini JAC Plus or equivalent, Moisture range 5 - 45 %, Grain temp range 0-50C, LCD 106x56 pixels, 1.1 kg weight, Moisture repeatability 0.2% moisture, Moisture resolution 0.1% moisture	For determination of seed moisture contents in cereals	1
2	Electronic balance (top loading balance)	Model SP2001, Ohaus Scout Pro or Equivalent Portable Electronic Balance, 2000g x 0.1g SCOUT PRO SCALE ADAPTER INCLUDED OR Digital Microprocessor Controlled, Capacity 3000 g. Readability 0.1g, Tare range 3000 gm, Linearity < + 1 g, Response time 3 Second. Pan size 120 x 135 mm, Integral Weighing Below Hook, Weighing Units g, Newton, RS232, Draft Shield, Display LCD. Western Europe / USA / Japan or equivalent	For weighing of seeds	1
3	Seed Germinator	Capacity: 230-300 Liters, Temp. Range: 0°C ~ 70°C, Temperature range with illumination: 10 to 60°C, Temperature variation with illumination: +0.5 to 1C, Temp. Fluctuation: +0.1 to 0.5°C, Humidity: Range: 10% ~ 80% RH, Humidity range with illumination cassettes, with illumination: 10-75 % RH, Humidity fluctuation with illumination: Range: 0 to 10000Lux. 25 storable programs of 100 sections each for a maximum of 500 program segments for programming of day and night cycles, Integrated electronic chart recorder, Variety of options for the graphic display of process parameters, Real-time clock, 2 stainless steel racks, Germany, UK, Japan, Switzerland or Equivalent OR Preheating chamber assuring temperature accuracy and	Plant incubation at controlled fluctuated temperature, photoperiod and humidity	

		reproducible results. 25 storable programs of 100 sections each for a maximum of 500 program segments. LCD screen. Integrated electronic chart recorder. 2 variable positionable illumination cassettes with 5 daylight fluorescent illumination tubes. Controlled humidification and dehumidification system with capacitive humidity sensor. Visual and audible temperature alarm. 2 stainless steel racks. Temperature range without light: 0 - 70°C. Temperature range without light: 10 - 70°C. Temperature range without light: 10 - 70°C. Temperature range without light: 10 - 70°C. Temperature range with light cassettes and illumination: 10 - 60°C. Temperature variation with illumination ±0.1 - 0.5K. Humidity range without light cassettes 10 - 80% RH. Humidity range with light cassettes and illumination ±0.1 - 0.5K. Humidity range with light cassettes and illumination 10 - 75% RH. Humidity fluctuation with illumination ±2% RH. Illumination data per light cassette Fluora® growth lamps 6500Lux in the base of each shelves. Nominal voltage (±10%) 50 / 60 Hz (V) 200-240 1N~. Capacity: 240 – 250Liters. With stabilizer. Western Europe /		
4	Spiral Probe	USA / Japan or Equivalent 40inches Spiral Probe, 6	For sood sampling	3
	-	openings, net wt. 6 lbs	For seed sampling	
5	Grain dockage sieves of different perforations	Seedburo 1/13" ROUND STEEL SIEVE, 1/22" ROUND STEEL SIEVE, SET OF 2 COMMERCIAL SIEVES AND BOTTOM PAN	For seed sampling	1
6	Triple beam balance	TRIPLE BEAM BALANCE, 610g X 0.1g W/SS PLATE. Western Europe / USA / Japan Or Equivalent	For weighing purpose	1
7	Circline magnifier lamp	Seedburo product code MC100/C, The 5-inch, 3-diopter lens with magnification 75% at a focal length of 13", CIRCLINE MAGNIFIER DESK BASE COMPLETE W/BULB,220V, 50 HZ. OR Magnifier with high quality lenses and double lateral illumination, with support base, large base with adjustable height and orientation. 3x magnification.	For purity analysis	1

8	Purity working board	Purity Workboard and Diaphanoscope. Net wt.12 lbs. Actual dims 32" L x 10½" W x 4¼" H.	For purity analysis	1
9	South Dakota Seed Blower	SOUTH DAKOTA SEED BLOWER 757/A, 220 VOLT, 60 HZ, operates at 3,450 RPM, Column size 1½" I.D. x 23¼" H	For small seeded crops	1
10	Stereo Microscope	Zoom-Stereo Microscope, with binocular tube, 45° inclined, 360° rotable. Interpupillary distance adjustable from 48 - 75 mm. Zoom tube from 0.6x bis 5x; Zoom ratio 1: 8.3, 1 pair of eyepieces WFH 10x/22, High Eyepoint, total magnification 6x - 50x. Max. working distance 95 mm. Base with clear glass plate and stage clips. Incident and transmitted light to be used simultaneously. Incident light 12V/3W LED, variable intensity control. Transmitted light 12V/4W LED, variable intensity control. Eye shields, dust cover and instruction manual included. Europe, USA, Japan or Equivalent	For visual detection of other crop seeds and anatomical study	1
11	Oven	Temperature range: ambient temperature plus 5 °C to 300 °C, High temperature accuracy, Natural convection, Controller with LCD display, Electromechanical control of the exhaust air flap, 2 chrome-plated racks, Class 2 independent temperature safety device (DIN 12880) with visual temperature alarm, Capacity 255 liters or bigger, Temperature fluctuation 0.7C at 150C, uniformity 2C at 150C, Germany, USA, Japan, Switzerland or Equivalent	For drying of seeds/plant samples	1
12	Nobbe Trier	BRASS NOBBE TRIER 3/4" ODx 20" SINGLE TUBE W/ 1 OPENING	For collection of seed samples from sacs	1
13	Bag Trier	6" BAG TRIER WITH SHEATH	For collection of seed samples from sacs	1
14	APC UPS for germinator	APC 3 KV for smooth running of Germinator or Equivalent	Back up of electrify	1
15	RR Seed Moisture analyzer	Probe type: Measurement probe and software RRCAW-SW, Accuracy at 23 °C ±5 K: ±0.008 Aw / ±0.8 %RH / ±0.1 K, Temperature dependence: 0.001 K/K, 0.0002 Aw/K, Sensor: HYGROMER® WA-1 / Pt-100, 1/3 DIN Class BRange of application: -4085 °C / 0100 %RH, Dimensions /Weight: Ø 68 x 60 mm / 600 g OR	Moisture determination of all kind of seeds	1

		Capacity 110g, Repeatability (Std Dev) (g) 0.2% (3g sample) 0.05% (10g sample), Readability 0.05% / 0.005g, Sample Size 3g to 20g typical, 0.5g min, Bidirectional RS-232, 1 - 99 minutes, 30-second increments to 60 minutes, Halogen Heating Technology, 50°C to 160°C in 5° increments, Display Custom backlit LCD, Displays of % moisture or % solids or weight (g), temperature, time, Pan Size (Diameter) 90 mm. Included Accessories: Sample Pans (Quantity 50) Standard. Western Europe / USA / Japan or Equivalent		
16	CF mobile	Dimension (W x D x H) 660 x 570 x 370 mm, Weight 20 kg, Power supply 230 or 115 VAC, 50-60 Hz Swicthable 12 VDC voltage, PC with Window 7, 64 bit, Screen 15-17 inch, CFTS: CF Tray (set of 10 pcs)	For determination of maturity and ripening of seeds	1
17	Data loggers	Measurement range: -35~80°C (-31~176°F), Accuracy(Typ.) +/-0.3°C (+/-0.5°F), Measurement range 0~100%RH, Dimensions 123mm * 37mm * 23mm (4.8" * 1.5" * 0.9")	For monitoring of RH, temperature and dew point of seeds during storage and germination testing	20
18	Lab seed coater (150 mm)	Model RR220, Dimensions: W290mmxL520mmxH520mm, Mixing chamber:220 mm (Ø) x 220 mm (h), Total Weight: 29.5 kg, Batch quantity: 100 – 1,000 g, Treatment distribution: Liquid by spinning disk, directly (manually), powder directly (manually)	For coating and pelleting of seeds	1
19	Dry Store (12)	Rhino Research Dry store	For storage of	12
20	Thermo gradient table	capacity 8.4 L Seed Thermogradient table (2 m2), Raised rim 150 mm, Set transparant covers, Lighting, day and night cycle.	To evaluate germination of seeds at different temperatures	1
Seed production section (major and vegetable				
21	Vertical cooling cabinet/freezer	Oversized and balanced, (134A), refrigeration system, factory sealed and pre-lubricated for long life - holds 33°F degrees to 38°F. Each with Stabilizer. OR Capacity: 350 liters. Temperature range: 2 -10C. Microprocessor controller with digital display. Approx. 72 hours battery backup for alarms, loggings and temperature display in case of power cut. Visual and	Storage and Maintenance of Samples	2

acoustic alarm. Adjustable high/low emperature alarm. Power failure alarm. Probe failure alarm. Dependoor alarm. Contact for remote alarm. Dependoor alarm. Contact for remote alarm. Prepared for GSM alarm. Integrated data logger (software included). RS485/232 Interface. Computer USB data read out. Auto cycle if probe failure. Ambient temperature display. Strows all alarms. Direct download/upload on/from USB memory stick. 3- level password protected. Battery level indication. Integrated memory. Each with Stabilizer. Western Europe / USA / Japan or Fquivalent Aprilaire 4510 Model 1700 Dehumidifier filter or Equivalent Solve for Solve States / day. Control type: Hot gas defrosting device with electronic and thermostatic control. Sensor: Humidifying capacity at 32C – 90% 62Liters / day. Control type: Hot gas defrosting device with electronic and thermostatic control. Sensor: Humidifying sensor, Status indicator: bucket full signal light. Compressor: rotary. Safety: bucket full alarm with delay protection, Automatic control. Western Europe / USA / Japan or Equivalent 4 H30 Accelerated aging chamber OR Preheating chamber or Requivalent ecuracy and reproducible results. 25 storable programs of 100 sections each for a maximum of 500 program segments. LCD screen. Integrated electronic chart recorder. 2 variable positionable illumination casettes with 5 daylight fluorescent illumination and dehumidification and dehumidification and dehumidification and dehumidification sand demundification and dehumidification and dehumidifica	ı			
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failure alarm. Instrument failure alarm. Open door alarm. Contact for remote alarm. Prepared for GSM alarm. Integrated data logger (software included), RS485/232 Interface. Computer USB data read out. Auto cycle if probe failure. Ambient temperature display, Strows all alarms. Direct download/uploud on/from USB memory stick. 3- level password protected. Battery level indication. Integrated memory. Fach with Stabilizer, Western Europe / USA / Japan or Equivalent 22 Dehumidifier (lurge) Dehumidifier Filter or Fquivalent Dehumidifying capacity at 30C— 80% 52Licers / day, Dehumidifying capacity at 32C— 90% 62Licers / day, Dehumidifying capacity at 32C— 90% 62Licers / day, Dehumidifying capacity at 32C— 90% 62Licers / day, Seasor. Humidifying sensor, Status indicator: bucket full signal light. Compressor: rotary, Safety: bucket full alarm with delay protection, Automatic control. Western Europe / USA / Japan or Equivalent 4 Accelerated seed uging chamber Accelerated seed uging thember 4 HG30 Accelerated aging chamber OR Preheating chamber or Equivalent 4 HG30 Accelerated aging chamber of Doprogram segments. LCD screen. Integrated electronic chart recorder. 2 variable positionable illumination cassettes with 5 daylight fluorescent illumination ubes. Controlled humidification and dehumidification system with cigacitive humidity sensor. Visual and audible temperature alarm. 2 stainless steet racks. Temperature range without light: 0 - 70°C. Temperature range with light cassettes and illumination: 10 - 60°C. Temperature range with light cassettes and			high/low temperature alarm.	
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Temperature range without light: 0 - 70°C. Temperature range with light cassettes and illumination: 10 - 60°C. Temperature range without light: 10 - 70°C. Temperature range with light cassettes and				
0 - 70°C. Temperature range with light cassettes and illumination: 10 - 60°C. Temperature range without light: 10 - 70°C. Temperature range with light cassettes and				
with light cassettes and illumination: 10 - 60°C. Temperature range without light: 10 - 70°C. Temperature range with light cassettes and				
illumination: 10 - 60°C. Temperature range without light: 10 - 70°C. Temperature range with light cassettes and			1 0	
Temperature range without light: 10 - 70°C. Temperature range with light cassettes and				
10 - 70°C. Temperature range with light cassettes and				
with light cassettes and				
illumination: 10 - 60°C.			<u> </u>	
			illumination: 10 - 60°C.	

		Temperature variation with	
		illumination(±0.5 - 1.0K.	
		Temperature fluctuation with	
		illumination $\pm 0.1 - 0.5$ K.	
		Humidity range without light	
		cassettes 10 - 80% RH.	
		Humidity range with light	
		cassettes and illumination 10 -	
		75% RH. Humidity fluctuation	
		with illumination ±2% RH.	
		Illumination data per light	
		cassette Fluora® growth lamps	
		6500Lux in the base of each	
		shelves. Nominal voltage (±10	
		%) 50 / 60 Hz (V) 200-240 1N~.	
		Capacity: 700Liters or more.	
		Western Europe / USA / Japan	
		or Equivalent	
25	Camera	DSLR Canon, D-700 or	1
		Equivalent	
26	Shaking Incubator	Temperature range: 20 C to 60	1
		C. Temperature accuracy: +/-	
		0.5°C at 37°C.Temperature	
		controller: PID Controller.	
		Shaking speed: 35 – 300rpm.	
		Shaking controller: Safety	
		Devices. Environmental	
		temperature range: 5oC to 30oC.	
		Overall size (WxDxH):	
		1130x810/900x780//850mm.	
		Power: 230V. Net Weight:	
		149Kg Dial Knob/ Digital	
		Display. Shaking capacity:	
		250ml x 42ea or 500ml x 30ea	
		(optional). With Stabilizer. OR	
		Digital Microprocessor PID	
		Control, Fix Value or Program	
		(up to 9 Segments), LCD Touch	
		Screen, Volume (L) 190,	
		Shaking Speed (rpm) 30-400,	
		Stroke (mm) 1-50 Step-less	
		Adjustment, Shaking Mode	
		Orbital, Tray (W x D) 800 x	
		430mm, Platform Spring rack,	
		Temperature Range 4 - 60°C,	
		Temperature Accuracy +0.1C,	
		Temperature Uniformity ±1°C	
		@37°C, 1 to 9999 minutes,	
		Control Mode, Constant	
		Temperature, Automatic Cooling	
		Control, interior chamber light,	
		Power-off, Recovery Switch,	
		Door Switch, Print Switch,	
		Over-temperature Protection,	
		Compressor Overload	
		Protection, Electrical, Leakage	
		Protection. With Stabilizer.	
		Western Europe / USA / Japan	
		or Equivalent	
	I	~	<u> </u>

27	_105 °C Ultra low temperature	Zhongke beauty lingli Model DW-ML328 or Equivalent ,Capacity328 liters, External size 940x840x1999 (WxDxH) mm ,Inside size 582x470x1200 (WxDxH) mm,Input power1500W,Weight 320/350KG (N.t / G.t). OR Ultra low temperature freezer. Digital display, microprocessor controlled, Temperature range: - 40 to -85C, Single compressor, Low energy consumption, Low noise level, Low heat dissipation, Insulated inner doors, door key lock, Heated door frame, Heated vacuum valve, 100% HCFC/CFC free, Approx. 72 hours battery backup for alarms, Visual and acoustic alarm, Integrated data logger, RS485 Interface Computer USB data read out, Direct download/upload on/from USB memory stick, 3-level password protected Battery level indication, Integrated memory, Capacity: 400 Liters or more with data storage device latest version. Manufacturer authorization letter must required. Western Europe / USA / Japan or Equivalent	For long terms storage or cryopreservation of plant, DNA, RNA, protein or bacterial samples	
28	Luminar Air Flow Cabinet	Overall Size (WxDxH): 880x850x1945mm. Inner Size (WxDxH): 780x630x720mm. Main Filter: HEPA filter (99.7% efficient in particle of 0.3u). Filter efficiency: Class 100. Air Flow. Power Source: 230V.Volume: 16m3/min. Velocity: 0.5m/sec +/-0.2. Window: Reinforced glass 5T. Fluorescent lamp: 20Wx1ea. Germicidal lamp (UV): 20Wx2ea. Fan motor: 1/3 Hp. OR Display: LED digital display, Pre-filter: Disposable, non washable polyester filter, Filter efficiency: > 99.999% at 0.3um, Airflow velocity: average of 0.3 to 0.5m/s, Noise level: <60dBA, Fluorescent lamp: 28W, UV Lamp: 30W, Power consumption: 600W, Front sash: Tempered glass, no less than 5mm, anti-ultraviolet radiation, Main Body Material: Adopting cold roll steel plate with corrosion proof coating, Base stand height: Included, Power: 220V, 50Hz. Western Europe /	Luminar air cabinet is required different stages of gene cloning and preparation of competent cells of <i>E. coli</i> to provide contaminations/germ free environment.	1

		USA / Japan or Equivalent		
29	Autoclave	Model BioClave Chamber or Equivalent Volume 16 L, Max pressure 29 PSI/2 Bar, Chamber Dimensions (mm) 9" x 13.75" (229 x 349), Tray Dimensions (mm) 6.5 x 10.75 in. (165 x 273), Exterior Dimensions (mm) 22 x 17.5 x 15.7 in. (559 x 445 x 399), Weight 89 lbs, Electrical 115 or 230V, 50-60Hz, 1600W. With Stabilizer. OR Capacity 85 Liters, Sterilization temperature 105—138°C, Range of sterilization time 1—300minutes, Melting temperature 60—100°C, Range of melting time 1—300minutes, Warming temperature 45—60°C, Range of melting time 1—9999minutes, Exhausting mode Fully automatic internal discharging Embedded with a steam trapping bottle, Way of opening lid Flip type, Preset range of timer 0 minute-6 days delayed, Preset range of timer 0-0.6MPa, Rated working pressure 0.27 MPa, Preset range of cooling 40-99°C for solid and agar modes and 40-80°C for liquid and waste lock OPEN temperature modes, drainage hose, water plate, exhaust bottle, Two stainless steel baskets. With Stabilizer. Western Europe /	For sterilizing a wide spectrum of laboratory tools	1
30	Sensoquest Gradient labcycler or Eppendorf Thermal cycler	USA / Japan or Equivalent TFT touch screen, Bilingual: English and German, Memory capacity for 680 five-step programs, Protocol function documents last 16 runs, 48, 96, 384 well silver blocks, Gradient or basic available, Triple-Block- System 3x21, Quick block changing system, Automatic lid, 85 V to 265 V without switching, 50 to 60 Hz, Power max 350 W, 25 W standby, Low heat emission and low noise, Length 444 mm, width 251 mm, height 201 mm, Heating rate 0.001 - 4.2 °C/s, cooling rate 0.001 - 3.6 °C/s, Block uniformity 0.4 °C, Re-start- function after power failure goes back to the last denaturing step, Cooling at 4 °C for indefinite time. With Stabilizer. OR Eppendorf Thermal cycler. Origin:Germany/United kingdom. Or Equivalent		1

		Block:96 well Silver block.	
		Heating technology of the block:	
		Peltier elements, Triple circuit	
		technology. Gradient Range:1-	
		24 C. Temprature control	
		range:30-99 C. Heating Rate:6.0	
		C/S. Cooling Rate: 4.5 C/S.	
		Ramp adjustable: 1-75 %. Block	
		± v	
		Temp accuracy: +0.2 . Special	
		Features: Vapo. Protect	
		technology: Allow Pcr reaction	
		as low as 5 ul. Usb: Yes. MMC:	
		Yes. Thermal sample protection:	
		Yes. Impulse Pcr:First heating	
		step upto 8 C/S. With Stabilizer.	
31	Thermal cycler	PCR: 96 x 0.2ml, 12 x	1
		0.2mlPCR 8 strips or 96 well	
		PCR plate, Heating Temperature	
		Range: 4 - 99°C, Lid	
		Temperature Range: 50 – 110°C,	
		Temperature Display Accuracy:	
		0.1°C, Temperature Accuracy	
		@55C: ±0.3°C, Max.	
		Heating/Cooling Rate: 3°C /sec,	
		Gradient Temperature Range:	
		30-99°C, Gradient Range: 1-	
		42°C, LCD Touch Screen	
		Display, power-off Protection,	
		Power Supply: 200-240V,	
		50/60Hz.	
32	Horizontal	(DYCP-31CN) Gel dimension:	1
	Electrophoresis+ Power Supply	$100 \times 70 \text{ (mm)}, 50 \times 70 \text{ (mm)};$	
	Fower Suppry	Runs up to 8 or 15	
		1	
		samples;Comb thickness: 1.0	
		-	
		samples;Comb thickness: 1.0	
		samples;Comb thickness: 1.0 and 1.5 (mm); Buffer volume:	
		samples;Comb thickness: 1.0 and 1.5 (mm); Buffer volume: about 260 (ml);Size (L X W X H):268×116×76 (mm);Weight:	
		samples;Comb thickness: 1.0 and 1.5 (mm); Buffer volume: about 260 (ml);Size (L X W X H):268×116×76 (mm);Weight: about 1.0 kg. + DYY - 6C,	
		samples;Comb thickness: 1.0 and 1.5 (mm); Buffer volume: about 260 (ml);Size (L X W X H):268×116×76 (mm);Weight: about 1.0 kg. + DYY - 6C, Power requirement:A.C.	
		samples;Comb thickness: 1.0 and 1.5 (mm); Buffer volume: about 260 (ml);Size (L X W X H):268×116×76 (mm);Weight: about 1.0 kg. + DYY - 6C, Power requirement:A.C. 220V±10% (50Hz ±2%); Input	
		samples;Comb thickness: 1.0 and 1.5 (mm); Buffer volume: about 260 (ml);Size (L X W X H):268×116×76 (mm);Weight: about 1.0 kg. + DYY - 6C, Power requirement:A.C. 220V±10% (50Hz ±2%); Input power: about 300 VA; Output	
		samples;Comb thickness: 1.0 and 1.5 (mm); Buffer volume: about 260 (ml);Size (L X W X H):268×116×76 (mm);Weight: about 1.0 kg. + DYY - 6C, Power requirement:A.C. 220V±10% (50Hz ±2%); Input power: about 300 VA; Output voltage: (6-600)V (Increase or	
		samples;Comb thickness: 1.0 and 1.5 (mm); Buffer volume: about 260 (ml);Size (L X W X H):268×116×76 (mm);Weight: about 1.0 kg. + DYY - 6C, Power requirement:A.C. 220V±10% (50Hz ±2%); Input power: about 300 VA; Output voltage: (6-600)V (Increase or decrease:1V/step); Output	
		samples;Comb thickness: 1.0 and 1.5 (mm); Buffer volume: about 260 (ml);Size (L X W X H):268×116×76 (mm);Weight: about 1.0 kg. + DYY - 6C, Power requirement:A.C. 220V±10% (50Hz ±2%); Input power: about 300 VA; Output voltage: (6-600)V (Increase or decrease:1V/step); Output current: (4-400) mA (Increase or	
		samples;Comb thickness: 1.0 and 1.5 (mm); Buffer volume: about 260 (ml);Size (L X W X H):268×116×76 (mm);Weight: about 1.0 kg. + DYY - 6C, Power requirement:A.C. 220V±10% (50Hz ±2%); Input power: about 300 VA; Output voltage: (6-600)V (Increase or decrease:1V/step); Output current: (4-400) mA (Increase or decrease:1mA/step); Output	
		samples;Comb thickness: 1.0 and 1.5 (mm); Buffer volume: about 260 (ml);Size (L X W X H):268×116×76 (mm);Weight: about 1.0 kg. + DYY - 6C, Power requirement:A.C. 220V±10% (50Hz ±2%); Input power: about 300 VA; Output voltage: (6-600)V (Increase or decrease:1V/step); Output current: (4-400) mA (Increase or decrease:1mA/step); Output power: 240 W Stability:	
		samples;Comb thickness: 1.0 and 1.5 (mm); Buffer volume: about 260 (ml);Size (L X W X H):268×116×76 (mm);Weight: about 1.0 kg. + DYY - 6C, Power requirement:A.C. 220V±10% (50Hz ±2%); Input power: about 300 VA; Output voltage: (6-600)V (Increase or decrease:1V/step); Output current: (4-400) mA (Increase or decrease:1mA/step); Output power: 240 W Stability: constant voltage ≤1%; constant	
		samples;Comb thickness: 1.0 and 1.5 (mm); Buffer volume: about 260 (ml);Size (L X W X H):268×116×76 (mm);Weight: about 1.0 kg. + DYY - 6C, Power requirement:A.C. 220V±10% (50Hz ±2%); Input power: about 300 VA; Output voltage: (6-600)V (Increase or decrease:1V/step); Output current: (4-400) mA (Increase or decrease:1mA/step); Output power: 240 W Stability: constant voltage ≤1%; constant current ≤2%; Adjustment	
		samples;Comb thickness: 1.0 and 1.5 (mm); Buffer volume: about 260 (ml);Size (L X W X H):268×116×76 (mm);Weight: about 1.0 kg. + DYY - 6C, Power requirement:A.C. 220V±10% (50Hz ±2%); Input power: about 300 VA; Output voltage: (6-600)V (Increase or decrease:1V/step); Output current: (4-400) mA (Increase or decrease:1mA/step); Output power: 240 W Stability: constant voltage ≤1%; constant current ≤2%; Adjustment rate:constant voltage ≤2%;	
		samples;Comb thickness: 1.0 and 1.5 (mm); Buffer volume: about 260 (ml);Size (L X W X H):268×116×76 (mm);Weight: about 1.0 kg. + DYY - 6C, Power requirement:A.C. 220V±10% (50Hz ±2%); Input power: about 300 VA; Output voltage: (6-600)V (Increase or decrease:1V/step); Output current: (4-400) mA (Increase or decrease:1mA/step); Output power: 240 W Stability: constant voltage ≤1%; constant current ≤2%; Adjustment rate:constant voltage ≤2%; constant current ≤3%; Size(W x	
		samples;Comb thickness: 1.0 and 1.5 (mm); Buffer volume: about 260 (ml);Size (L X W X H):268×116×76 (mm);Weight: about 1.0 kg. + DYY - 6C, Power requirement:A.C. 220V±10% (50Hz ±2%); Input power: about 300 VA; Output voltage: (6-600)V (Increase or decrease:1V/step); Output current: (4-400) mA (Increase or decrease:1mA/step); Output power: 240 W Stability: constant voltage ≤1%; constant current ≤2%; Adjustment rate:constant voltage ≤2%; constant current ≤3%; Size(W x D x H): 315 x 290 x 128 (mm);	
		samples;Comb thickness: 1.0 and 1.5 (mm); Buffer volume: about 260 (ml);Size (L X W X H):268×116×76 (mm);Weight: about 1.0 kg. + DYY - 6C, Power requirement:A.C. 220V±10% (50Hz ±2%); Input power: about 300 VA; Output voltage: (6-600)V (Increase or decrease:1V/step); Output current: (4-400) mA (Increase or decrease:1mA/step); Output power: 240 W Stability: constant voltage ≤1%; constant current ≤2%; Adjustment rate:constant voltage ≤2%; constant current ≤3%; Size(W x D x H): 315 x 290 x 128 (mm); Weight: about 5.0 kgs. With	
		samples;Comb thickness: 1.0 and 1.5 (mm); Buffer volume: about 260 (ml);Size (L X W X H):268×116×76 (mm);Weight: about 1.0 kg. + DYY - 6C, Power requirement:A.C. 220V±10% (50Hz ±2%); Input power: about 300 VA; Output voltage: (6-600)V (Increase or decrease:1V/step); Output current: (4-400) mA (Increase or decrease:1mA/step); Output power: 240 W Stability: constant voltage ≤1%; constant current ≤2%; Adjustment rate:constant voltage ≤2%; constant current ≤3%; Size(W x D x H): 315 x 290 x 128 (mm); Weight: about 5.0 kgs. With Stabilizer. OR The small	
		samples;Comb thickness: 1.0 and 1.5 (mm); Buffer volume: about 260 (ml);Size (L X W X H):268×116×76 (mm);Weight: about 1.0 kg. + DYY - 6C, Power requirement:A.C. 220V±10% (50Hz ±2%); Input power: about 300 VA; Output voltage: (6-600)V (Increase or decrease:1V/step); Output current: (4-400) mA (Increase or decrease:1mA/step); Output power: 240 W Stability: constant voltage ≤1%; constant current ≤2%; Adjustment rate:constant voltage ≤2%; constant current ≤3%; Size(W x D x H): 315 x 290 x 128 (mm); Weight: about 5.0 kgs. With Stabilizer. OR The small gel size maximizes run economy	
		samples;Comb thickness: 1.0 and 1.5 (mm); Buffer volume: about 260 (ml);Size (L X W X H):268×116×76 (mm);Weight: about 1.0 kg. + DYY - 6C, Power requirement:A.C. 220V±10% (50Hz ±2%); Input power: about 300 VA; Output voltage: (6-600)V (Increase or decrease:1V/step); Output current: (4-400) mA (Increase or decrease:1mA/step); Output power: 240 W Stability: constant voltage ≤1%; constant current ≤2%; Adjustment rate:constant voltage ≤2%; constant current ≤3%; Size(W x D x H): 315 x 290 x 128 (mm); Weight: about 5.0 kgs. With Stabilizer. OR The small	
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		samples;Comb thickness: 1.0 and 1.5 (mm); Buffer volume: about 260 (ml);Size (L X W X H):268×116×76 (mm);Weight: about 1.0 kg. + DYY - 6C, Power requirement:A.C. 220V±10% (50Hz ±2%); Input power: about 300 VA; Output voltage: (6-600)V (Increase or decrease:1V/step); Output current: (4-400) mA (Increase or decrease:1mA/step); Output power: 240 W Stability: constant voltage ≤1%; constant current ≤2%; Adjustment rate:constant voltage ≤2%; constant current ≤3%; Size(W x D x H): 315 x 290 x 128 (mm); Weight: about 5.0 kgs. With Stabilizer. OR The small gel size maximizes run economy but does not compromise versatility as two tray options are	
		samples;Comb thickness: 1.0 and 1.5 (mm); Buffer volume: about 260 (ml);Size (L X W X H):268×116×76 (mm);Weight: about 1.0 kg. + DYY - 6C, Power requirement:A.C. 220V±10% (50Hz ±2%); Input power: about 300 VA; Output voltage: (6-600)V (Increase or decrease:1V/step); Output current: (4-400) mA (Increase or decrease:1mA/step); Output power: 240 W Stability: constant voltage ≤1%; constant current ≤2%; Adjustment rate:constant voltage ≤2%; constant current ≤3%; Size(W x D x H): 315 x 290 x 128 (mm); Weight: about 5.0 kgs. With Stabilizer. OR The small gel size maximizes run economy but does not compromise versatility as two tray options are available 7x10cm, and combs ranging from preparative up to 8	
		samples;Comb thickness: 1.0 and 1.5 (mm); Buffer volume: about 260 (ml);Size (L X W X H):268×116×76 (mm);Weight: about 1.0 kg. + DYY - 6C, Power requirement:A.C. 220V±10% (50Hz ±2%); Input power: about 300 VA; Output voltage: (6-600)V (Increase or decrease:1V/step); Output current: (4-400) mA (Increase or decrease:1mA/step); Output power: 240 W Stability: constant voltage ≤1%; constant current ≤2%; Adjustment rate:constant voltage ≤2%; constant current ≤3%; Size(W x D x H): 315 x 290 x 128 (mm); Weight: about 5.0 kgs. With Stabilizer. OR The small gel size maximizes run economy but does not compromise versatility as two tray options are available 7x10cm, and combs ranging from preparative up to 8 samples. 7 x 10cm UV Tray, 2 x	
		samples;Comb thickness: 1.0 and 1.5 (mm); Buffer volume: about 260 (ml);Size (L X W X H):268×116×76 (mm); Weight: about 1.0 kg. + DYY - 6C, Power requirement:A.C. 220V±10% (50Hz ±2%); Input power: about 300 VA; Output voltage: (6-600)V (Increase or decrease:1V/step); Output current: (4-400) mA (Increase or decrease:1mA/step); Output power: 240 W Stability: constant voltage ≤1%; constant current ≤2%; Adjustment rate:constant voltage ≤2%; constant current ≤3%; Size(W x D x H): 315 x 290 x 128 (mm); Weight: about 5.0 kgs. With Stabilizer. OR The small gel size maximizes run economy but does not compromise versatility as two tray options are available 7x10cm, and combs ranging from preparative up to 8 samples. 7 x 10cm UV Tray, 2 x 8 sample combs, loading guides	
		samples;Comb thickness: 1.0 and 1.5 (mm); Buffer volume: about 260 (ml);Size (L X W X H):268×116×76 (mm);Weight: about 1.0 kg. + DYY - 6C, Power requirement:A.C. 220V±10% (50Hz ±2%); Input power: about 300 VA; Output voltage: (6-600)V (Increase or decrease:1V/step); Output current: (4-400) mA (Increase or decrease:1mA/step); Output power: 240 W Stability: constant voltage ≤1%; constant current ≤2%; Adjustment rate:constant voltage ≤2%; constant current ≤3%; Size(W x D x H): 315 x 290 x 128 (mm); Weight: about 5.0 kgs. With Stabilizer. OR The small gel size maximizes run economy but does not compromise versatility as two tray options are available 7x10cm, and combs ranging from preparative up to 8 samples. 7 x 10cm UV Tray, 2 x	

33	Gel Documentation	function, Microprocessor control, up to ten programs, and can be set-up to run in constant voltage and constant modes. Two gel chambers can be connected at any one time. An optional timer can set to end the run and sound an alarm. Safety features include shrouded plugs and sockets, no load detection and ground leakage detection. 300V, 700MA, 100W, 1-999 Mins. With Stabilizer. Western Europe / USA / Japan or Equivalent		
	System	Pui Ching JS-680B gel imaging analysis system or Equivalent, all-in-one computer standalone system, save images by memory card or local netware. Multilanguage operation interface. Automatically recognize images of 8 bit, 10 bit, 12 bit and 16 bit. Molding Camera obscura using engineering plastic. With Stabilizer. OR Superior DNA and protein imaging. Integrated touch screen tablet for seamless imaging, standard epiblue illumination for Safe-dye compatibility and a 3-position filter wheel for expanded dye flexibility. UV trans-illumination comes with built in safety features, including a UV shielded viewport for real-time preview. DNA Gels, Protein Gels (fluorescent dyes), UV-excitable Fluorescence, Blue-excitable Fluorescence, Trans-UV Illumination (302 nm), Trans-UV Illumination (365 nm), EPI-white Illumination, EPI-blue Illumination, Orange (590 nm), Resolution 5MP, Lens Fixed, Filter Wheel 3 position, Integrated Computer Tablet, Image Capture Software, Field of View 32.6.0 x 25.0 cm. With Stabilizer. Western Europe / USA / Japan or Equivalent		
34	Multi-channel pipettes	Eppendorf research 8 channel pipettes: volume range of 0.5-10, and 10-100 μl or Equivalent	For genetic purity testing through DNA analysis	1 each
35	Centrifuge Machine	Digital microprocessor controlled, Centrifuging chamber of stainless steel, Motor overheating protection, Chamber overheating protection, Imbalance switch-off, Max Speed: 15000rpm, Max RCF:		1

		21300xg, Max capacity: 4 x 200ml, Temperature range: -20 to +40C, Timer: 1-99min or continuous Angle rotor: capacity 4 x 85ml, speed 9000rpm, 9500xg, adaptor		
		of 50 and 15ml falcon tubes. Angle rotor: capacity 32 x 15ml falcon tubes, speed 4500rpm,		
		3300xg, adaptor of 8 x 50 falcon tubes. Angle rotor: capacity 12 x 15ml, speed 12000rpm,		
		16500xg, Angle rotor: capacity 24 x 1.5/2ml, speed 15000rpm, 21000xg, Manufacturer		
		authorization letter must required		
		Western Europe / USA / Japan or Equivalent		
36	Micro centrifuge	RCF 15000xg and Max speed 15000rpm, Brushless DC motor drive capacity, 12 x 1.5ml, LCD	Spining of prep samples in microtubes	2
		display. Rotor for PCR tubes spin as well.		

Section VIII.

Sample Forms

Sample Forms

1.	Bid Form and Price Schedules	66,67
2.	Manufacturer's/Distributor's/Dealer's Certificate Form	68

1. Bid Form and Price Schedules

		T	Date:	
To:		Ten	der No.	
10.	Prof. Dr. Hafeez Ahmad Department of Plant Bre University of Agriculture Faisalabad.	eeding & Genetics,		
Gentlemen and Having		ocuments including	Γender No.1/2016, the receipt of v	which
is hereby duly	acknowledged, we, the	e undersigned, offer t	o supply and deliver [description of	goods
and services]in	conformity with the sai	d bidding documents	s for the sum of [total bid amount in	words
and figures]Or S	such other sums as may	y be ascertained in a	ccordance with the Schedule of I	Prices
attached herev	vith and made part of th	nis Bid. We understar	nd that failure to furnish all inform	nation
required by th	e bidding documents of	r to submit a bid not	substantially responsive to the bi-	dding
•	<u> </u>		ult in the rejection of its bid.	C
If our bi	d is accepted, we unde	ertake to provide a pe	erformance security in the form,	in the
	-	-	locuments and to deliver the goo	
	•	9	Schedule of Requirements. Failu	
	•	-	provisions of the bidding docume	
We agre	e to abide by this Bid	for the Bid Validity	Period specified in Clause 16.1 of	of the
Bid Data Shee	et and it shall remain b	inding upon us and n	nay be accepted at any time before	re the
expiration of t	hat period.		,	
Commis	sions or gratuities, if an	ny, paid or to be paid	by us to agents relating to this Bi	d, and
to contract exe	ecution if we are awarde	ed the contract, are li	sted below:	
	Name and address of agent	Amount and Currency	Commission or gratuity	
	(if none, state "none")			
thereof and yo	our notification of award	d, shall constitute a bi	, together with your written accepting Contract between us. or any bid you may receive.	tance
We certify/condocuments.	nfirm that we comply w	vith all requirements a	as per ITB Clause 2 of the bidding	,
	day of			
[signature]		[in the capacity	of]	
Duly authorize	ed to sign Bid for and o	n behalf of		

Price Schedule for Goods Offered from within the Purchaser's Country

(ITB clause 11.2 (a & b) **11.2 (a): FOR**

11.2 (a): FOR 11.2 (b): FIS Plus

Name of Bidder	.Tender Number	.Page of

1	2	3	4	5	6
Item	Description	Country of origin	Quantity	Price with out Sales Tax	Price With Sales Tax

Note: In case of discrepancy between unit price and total, the unit price shall prevail.

Manufacturer's/Distributor's/Dealer's Certificate Form

[See Clause 13.3 (a) of the Instructions to Bidders.]

To: [name of the Purchaser]

WHEREAS [name of the Manufacturer/Distributor/Dealer] who are established and reputable Manufacturer/Distributor/Dealer of [name and/or description of the goods] having factories/Warehouse/trading house at [address of factory]

do hereby authorize [name and address of Agent] to submit a bid, and subsequently negotiate and sign the Contract with you against Tender No. [reference of the Invitation to Bid] for the above goods manufactured by us.

We hereby extend our full guarantee and warranty as per Clause 15 of the General Conditions of Contract for the goods offered for supply by the above firm against this Invitation for Bids.

[signature for and on behalf of Manufacturer]

Note: This letter of authority should be on the letterhead of the Manufacturer/Distributor/Dealer and should be signed by a person competent and having the power of attorney to bind the Manufacturer. It should be included by the Bidder in its bid.