

University of Agriculture, Faisalabad

Bidding Documents

Tender No.95/2019

SPECIAL INSTRUCTIONS

- No cutting, erasing is allowed in the Tender bid.
- Bid offered strictly in accordance with the bid document will only be accepted.
- Only typed bid will be accepted
- Call Deposit Receipt (CDR) will be preferred. However, any other bank instrument may also be accepted except Bank Guarantee. CDR including other instruments will be deposited in the University relevant account and in that eventuality, the release of the requisite amount would be made in shape of crossed cheque after deductions of necessary taxes and bank charges

THIS IS FOR STRICT COMPLIANCE, FAILING WHICH THE RESPECTIVE BID SHALL STAND CANCELLED

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Section I.

Invitation for Bids

UNIVERSITY OF AGRICULTURE, FAISALABAD (TENDER NOTICE No.95/2019)

Sealed tenders are invited from Income Tax and Sales Tax registered firms on the basis of Two Stage (one envelop procedure) for the purchase of Chemicals, Glassware, Plasticware etc., through Framework Contract for the financial year 2019-20 at University of Agriculture, Faisalabad. Only those firms are allowed to participate who will certify that they have their own business/OR having authorized dealership.

Date of Receiving and Opening 23.05.2019	Receiving Time Opening Time Bid Security	02:30 p.m. 03:00 p.m. 2% of the
	-	Estimated Cost
	Tender Fee	Rs.500/-

- 1. The bidding documents are available in the office of the Treasurer (**Tender Cell**) and the same may be obtained subject to the payment of the cost of the printing and provision of the document (tender Fee) as mentioned above to be deposited in the University Income Account (No.11-9/NBP, UAF Branch). The bidding documents can also be down loaded free of from the **UAF** website cost http://uaf.edu.pk/directorates/dpiv/dpiv_tenders.html
- 2. The all interested bidders will submit the bids in the Tender Cell, 1st Floor Admn. Block Treasurer's Office, University of Agriculture, Faisalabad (UAF) as per scheduled mentioned above.

UMAR SAEED Director (DPIC)

(For & On behalf of the Committee) Phone#041-9200898, 9200161 Extn.3503/3504/3505

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Section II.

Instructions to Bidders

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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) Manufacturer's Authorization Form
 - (i) Integrity pact.
 - (j) 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:

the price shall be quoted Cost and Freight (CFR), Carriage Pad to (Duty Paid) (CPT) Karachi seaport or Lahore/Faisalabad airport Pakistan, as the case may be. The bidder shall also add all cost expenses, charges, duties and taxes etc. whatsoever expect customs, incidental to

delivery installation/commissioning of goods from the port of destination to UAF site. The bidder, in quoting the price, shall be free to use transportation in abroad except transit and means of transport through/of Israel. The LC at sight, as on Usance basis and Advance Payment will be governed as per following:-

i. LC AT SIGHT

The bidder shall provide Performa Invoice of principal on CPT/CFR basis as per supply order along with Insurance / Cover Note and CDR within fortnight in favor of Director (DPIC) as security equal to 100% amount of the goods to initiate the LC at sight.

ii. LC ON USANCE BASIS

In case the bidder, is unable to provide CDR in favor of Director (DPIC) as security equal to 100% amount of the goods to be imported, may chose this option and shall provide Performa Invoice of principal on CPT/CFR basis as per supply order along with Insurance / Cover Note **within fortnight** to initiate the LC on usance basis (minimum usance period 60 days from the date of Airway Bill **OR** 90 days from the date of Bill of Lading).

iii. ADVANCE PAYMENT

The bidder shall provide Performa Invoice of principal on CPT/CFR basis as per supply order along with Insurance / Cover Note and CDR within fortnight in favor of Director (DPIC) as security equal to 100% amount of the goods to be imported to proceed for advance payment to the exporter. However, this option will be had where the value of the goods to be imported is up to US \$ 10,000 or varied in accordance with the instructions of the State Bank of Pakistan and Pakistan Customs issued from time to time and remittance will also be made accordingly.

iv. OPEN ACCOUNT

In case the bidder has not opted for import through LC (at sight or Usance basis or advance payment) may opt this option and shall provide Performa Invoice of principal on CPT/CFR basis as per supply order **within fortnight**. However, remittance will be made maximum up to six months from the date of filing of Goods Declaration (GD) form or otherwise as per Foreign Exchange Manual of State Bank of Pakistan and Pakistan Customs or instruction issued in this regard from time to time.

v. CONTRACT / COLLECTION

In case the bidder has not opted the options referred to "i to iv" above and may opt for this option. The bidder shall provide Performa Invoice of principal on CPT/CFR basis as per supply order **within fortnight**. The minimum period for remittance will be 60 days from the date of Airway Bill **OR** 90 days from the date of Bill

of Lading. However, remittance will be made as per Foreign Exchange Manual of State Bank of Pakistan and Pakistan Customs or instruction issued in this regard from time to time.

vi. INCIDENTAL CHARGES FOR IMPORT OF GOODS:

All charges (Inside/outside Pakistan) like insurance, LC/bank and clearance of consignment from port/custom authorities will be borne by the bidder.

vii. RELEASE OF CDR

In case of LC at sight and advance payment to exporter, the CDR equal to 100% amount of the shipment as security will be released by Director (DPIC) after receiving of satisfactory inspection/installation/commissioning report from convener tender committee concerned.

viii. INITIATION OF REMITTANCE TO THE EXPORTER

In case of LC on usance basis, import on Open Account and Contract / Collection basis, the Director (DPIC) will initiate remittance through the concern bank to the exporter after receiving the satisfactory inspection/installation/commissioning report from the purchaser or the convener tender committee as the case may be.

DELIVERY PERIOD

After receiving the transmitted LC (at sight OR Usance Basis) OR swift acknowledgment against advance payment / proof of advance payment OR supply order on "Open Account" or "Contract / Collection" basis, the local supplier is responsible to provide complete set of shipping documents [i.e. Airway Bill/Seaway Bill/Bill of Lading, Commercial Invoice, Packing List, Country of Origin Certificate and any other document(s) related to shipment (if required) along with detail of bidder's clearing agent for issuance of authority letter for clearance of consignment from port / custom authorities] within 6 weeks from the date of opening of LC (at sight or usance basis), advance payment and date of supply order for import of goods on "Open Account" or "Contract / Collection" basis. Moreover, after clearance of consignment by bidder from port / custom authorities, will deliver the consignment to the purchaser along with complete set of post shipment documents within 05 days from the date of Authority Letter. After expiry of the requisite period, firm will require to apply for extension in delivery period. However, after due scrutiny the Committee may extend the delivery period with liquidated damages as per applicable rate if the delay is on part of the bidder or without liquidated damages if the delay is on the part of the procuring agency or due to "force majeure".

NOTE:

In case of late submission of Proforma Invoice, shipping documents and delivery of goods, difference of exchange rate on higher side as well as liquidated damages shall be recovered out of belongings of the bidders @ 0.67% of the value of the goods up to maximum 10% of the value of goods.

- 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 Estimated Cost 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

16.1 Bids shall remain valid for the period specified in the Bid Data

Validity of Bids

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 and 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. Postqualification

- 29.1 In the absence of prequalification, the Purchaser will determine 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 any bank instrument as desired in Page # 1 of Bidding Document. 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 and the bid security will be retained to meet the requirement of performance security.
- 35.2 Failure of the successful Bidder to comply with the requirement of 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.
	B- Bidding Documents
ITB 5.1(h)	Not applicable
ITB 6.1	Purchaser's address: Prof. Dr. Zahir Ahmad Zahir, Institute of Soil & Environmental Sciences through
	Directorate of Procurement & Inventory Control (DPIC) University of Agriculture, Faisalabad Phone No. 041-9200898
	i. Prof. Dr. Zahir Ahmad Zahir, Institute of Soil & Environmental Sciences ii. Dr. Shahnawaz ul Rehman, Assistant Professor, CABB iii. Dr. Ghulam Mustafa, Assistant Professor, CABB
	C-Preparation of Bid
ITB 8.1	Language of the bid. "English"
ITB 11.2	Prices on F.O.R. basis is required
ITB 11.2 (c)	Not applicable
ITB 11.3	
ITB 13.3 (d)	Qualification requirements attached with Technical Bid:- 1. Company /Bidder Profile: a. Experience in the relevant field minimum 3 Years
	b. HR strength/Manpower with the Bidder
	c. Technical expertise with the bidder
	d. Sound financial position (minimum balance of Rs. 0.5 million as on closing date of the tender)
	e. Name of owner/proprietor

	C C CONTO
	f. Copy of CNIC
	g. Date of Establishment, Age of Firm
	h. Copy of NTN and Sales Tax Registration
	i. Income Tax & Sales Tax Returns for Tax year 2018
	j. Copy of Professional Tax
	k. Affidavit (Submission of undertaking on legal valid stamp paper (valuing Rs.100/-) that the firm not blacklisted by any of Provincial or Federal Government Department, Agency, Organization or autonomous body or private Sector Organization anywhere in Pakistan
	1. Only authorized Direct and Indirect genuine source suppliers are eligible
ITB 15.1	Amount of bid security.
	2% of the Estimated Cost in shape of Call Deposit Receipt (CDR) in favour of Director (DPIC), UAF to be attached with the technical Bid. However, if attached with financial bid, please mention CDR No., Date
ITD 16.1	and Bank Name
ITB 16.1	Bid validity period. 90 Days
ITB 17.1	Bid: Single Stage (two envelop procedure)
ITD 10 2 (a)	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.95/2019
ITB 19.1	Deadline for bid submission.23.05.2019
	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 during whole life of the goods after the expiry of warranty period.
ITB 26.3 (e)	The bidder will provide:- 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

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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 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) 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 inSCC.**

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 Director (DPIC) 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 Director (DPIC) 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

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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% for the warranty period of one year of the value of Supply Order or Contract in shape of CDR or any bank instrument except bank guarantee in favour of Director (DPIC), UAF within Seven (07) days from the issuance of acceptance and 10% performance security letters from the Purchaser for permanent equipment. 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 or any bank instrument except bank guarantee in favour of Director (DPIC) already received in lieu of earnest money in case of general type/consumable good(s) will be retained by the office for 3 month from the day of supply of the respective good(s) or fully consumed whichever is earlier.

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. The representative of the firm(s) shall present the Authority Letter from the respective firm in the tender opening meetings with them, failing which he will not allowed to sit in the said meeting

4. 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.

5. **Bid Prices (11.2 ITB)**

a). <u>for goods offered from within Pakistan;</u>

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) If the firm quoted the rates on CFR/CPT basis, the firm is bound to quote the FOR prices also

6. **Payment (GCC Clause 16)**

7. Prices (GCC Clause 17)

GCC17.1: The successful bidder(s) shall provide the price reasonability certificate to the effect that the rates quoted are reasonable in accordance with the market. If it is found at any stage, the quoted rates are higher than the market ones or the item(s) have been provided to any other Institute/Department etc at less rates than the quoted ones. The firm undertakes to refund the difference amount to the purchaser on demand.

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 (Convener)

ii. Prof. Dr. Zahir Ahmad Zahir, (Member)

Institute of Soil & Environmental Sciences

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 (CFR/CPT, etc.) made directly with Foreign Principal /

- 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.
- 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:

Sr. #	Description	Quantity	Estimated Cost
1.	Chemicals, Glassware	Mentioned in	Mentioned in
	& Plasticware etc.	technical	technical
		specifications	specifications
		available at page 54	available at page 54
		of the bidding	of the bidding
		document	document

Section VII.

Technical Specifications

TECHNICAL SPECIFICATIONS

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

List of Chemical/glassware/Plasticware

Sr.	Name of	Analytical/	Cat. No.	Estimated	Estimated
No	Chemical/Glassware/	Commercial		Quantity	Amount
	Plasticware	etc.		to be	
				procured	
				in F/Y	
				2018-19	
1	Acetone	Analytical	8222512500	7.5L	8400
<u>2</u>	Methanol	Analytical	8222832500	2.5 L	1600
<u>3</u>	ammonia solution max 33%	Analytical	1054322500	2.5 L	3000
4	Acetic acid	Analytical	1000632510	5 L	10126
<u>5</u>	Phenol Reagent	Analytical	1597	1 Kg	1275.00
<u>6</u>	CoS04	Analytical	1297	1 Kg	19000
<u>7</u>	Phenol Red	Analytical	1072410005	5gm	5175
<u>8</u>	Safranine 0	Analytical	S88	25 gm	1696
9	Rose bengal GPR	Analytical	414855.121	500 gm	24231.6
<u>10</u>	3,5 Dinitroisalicylic Acid	Analytical	5146	25 gm	5000
<u>11</u>	Dimetfn i Sulfoxide	Anal\tical	1380	1L	1813.5
<u>12</u>	Ninhydrin	Analytical	1.949194.0026	50 gm	10800
<u>13</u>	Xylene	Analytical	1.94600.2521	2.5 L	2160
<u>14</u>	Immersion Oil	Analytical	A3494.0500	500 ml	8915
<u>15</u>	hydrochloric acid	Analytical	1133	5Kg	3500
<u>16</u>	HEPES Free Add	Analytical	5310	200 gm	6655
<u>17</u>	Acetonitrile	Analytical	546	2L	5500
<u>18</u>	Formaline Pure	Analytical	3955	2.5 L	2250
<u>19</u>	Iodine Crystal	Anal) tical	232	200 gm	8848
<u>20</u>	Iron chloride anhydrous	Analytical	8039451000	2 kg	11600
<u>21</u>	Ethyienediaminetetracetic Acid	Analytical	204	3 Kg	18144
<u>22</u>	Tetracosane	Analytical	8210890025	25 gm	6180
<u>23</u>	Pbenanthrene	Analytical	8221220250	250 gm	33194
<u>24</u>	Anthracene	Analytical	8201090100	100 gm	5418
<u>25</u>	chitin from Shrimp shell	Analytical	C7170-100G	300 gm	68400
<u>26</u>	Potassium standard solution	Analytical	1702300500	2 L	14384
<u>27</u>	sooium standard solution	Analytical	1702380500	2 L	13672
<u>28</u>	calcium sulphate	Analytical	4027	1 kg	1228
<u>29</u>	poly ethylene Glycol	Analytical	2277	1 Kg	2500
<u>30</u>	Zinc oxide	Analytical	2647	l kg	1696
<u>31</u>	Potassium dichromate	Analytical	422	2 kg	5616
<u>32</u>	Oi ammonium oxalate	Analytical	1011920250	250 pm I	5205
<u>33</u>	Ammonium acetate	Analytical	1011151000	I 5 Kg	22366
<u>34</u>	1 Ascorbic acid powdered	Analytical	832	500 gm	3861
<u>35</u>	Sodium dihydrogen phosphate				
	dihydrochloride	Analytical	1063420250	1 kg	16820
<u>36</u>	D-biotin	Analytical	8510230001	2 gm	91040
<u>37</u>	tetramethyl p phenylene di			_	
	amine dlhydrochloride	Analytical	8211010005	5 gm	5923
38	anthrone	Analytical	1014680010	10pm	11107
<u>39</u>	crystal violet	Analytical	1014080025	50 gm	10490
<u>40</u>	Bromocresol green	Analytical	1013	50 gm	13000.00
41	Congorot	Analytical	1013400025	100 gm	20918
42	L Proline	Analytical	8160190100	200 gm	29658
<u>43</u>	methyl red	Analytical	1060780100	100 gm	62077

		T			
44	p-nitro phenol	Analytical	78	1 1 kg	7134
45	Gallic Acid	Analytical	842649.025	250 gm	16464
<u>46</u>	ammonia	Analytical	1054322500	2.5 L	3000
<u>47</u>	10 X TAE buffer	Analytical	8720	4 L	8506.3
48	tris hydrochloride	Analytical	9310	1 Kg	10066
<u>49</u>	Barium chloride dehydrate	Analytical	1017171000	1 kg	10932
<u>50</u>	tryptic soya broth	Analytical	1.05459.0500	2 kg	14400
<u>51</u>	Sodium Salinite	Analytical	1497	25 gm	1500
<u>52</u>	methyl red	Analytical	1505	25 gm	1133
<u>53</u>	bromothymol blue	Analytical	1019	25 gm	3000
<u>54</u>	Chromotropic Acid Sodium Salt	Analytical	4945	25 gm	10750
<u>55</u>	1,5 Diphenylcarbazid	Analytical	4210	25 gm	3393
<u>56</u>	sliver nitrate	Analytical	900	10 mg	13560
<u>57</u>	mercury (li) chloride	Analytical	2175	1 kg	45630
<u>58</u>	potassium antimony (iii) oxide	Analytical	343	250	7644
	tartrate hemihydrate			250 gm	7644
<u>59</u>	sodium mtroprusside dihydrate	Analytical	1.94924.0121	100 gm	3600
<u>60</u>	potassium hydrogen phthalate	Analytical	1051041000	2 kg	5900
<u>61</u>	ammonium metavenadate	Analytical	4608	500	6669
<u>62</u>	LE AD 2 Carbonate	Analytical	1205	500 gm	4000
<u>63</u>	ammonium hydrogen	A made to	704	F00	F33
	carbonate	Analytical	721	500 gm	520
<u>64</u>	M Sodium Hexa Mata	A	4.444	4.1.	4420
C.F.	Phosphate	Analytical	1441	1 kg	1120
<u>65</u>	di- sodium tetraborate to	A a l i a l	1002100250	250	7707
	hydrate	Analytical	1063100250	250 gm	7787
66	zinc sulfate heptahydrate	Analytical	1088830500	2 Kg	19584
<u>67</u>	succinic add	Analytical	8144130100	200 ml	10418
<u>68</u>	Calium Chloride di hydrate	Anah Inal	1023820500	500 gm	3714
<u>69</u>	Perchloric Acid Dl- Malic acid	Analytical	1582	1.5 Kg	13500
<u>70</u>		Analytical	343 388	1 Kg	2500 8400
71	Natrium Nitrate Reinst 2,4-dinitrophenyl Hydrazine	Analytical	4678	1 kg	11000
72 73	Trichloro Acetic Acid	Analytica Analytica	165	100 gm	3276
74	Iron Chloride Hexahydrate	Analytica	8019451000	500 gm 1 kg	5800
75	Sodium Molybedate	Analytica	1005210250		53720
<u>75</u>	Bromophenol Blue Indicator	Analytica		1 Kg	
	Safranine O, High Purity	•	6.18287E+13 888	5 gm	2160
77		Analytica Analytica		25 gm	1696.5
<u>78</u>	Streptomycine sulfate	,	5711	100GM	5556
<u>79</u>	Potassium Iodide Briquettes 99%	Analytica	2260	1 kg	14625
90	Gluconic Acid Potassium	Analytica	2360	1 kg	14025
<u>80</u>	Salt	Allalytica	246425	100 am	E200
01	Diethlenetriamine-	Analytica	346125	100 gm	5208
<u>81</u>		Allalytica	1083900250	250 am	12609
82	pentaacelic acid	Analytica	PHR1176	250 gm	17718
83	d-Tryptophan	Analytica	2070	1 gm	80682
84	Agrose Lead Nitrate	Analytica	2070	200 gm	
		,	12650	2 kg	8974
<u>85</u>	Albumin, Bovine Serum	Analytica	12659	1 Kg	81516
86	Potassium nitrate	Analytivcal	1050631000	3 kg	12360
<u>87</u>	Glycerol	Analytivcal	3834	5 L	6552
<u>88</u>	Sulphuric acid	Analytivcal	1007312500	5 L	7500
<u>89</u>	Calcium nitrate	Analytivcal	1231	7 kg	9415
90	Hydrgen peroxide solution	Analytivcal	1146	1 KG	1950
91	Nitric acid	Analytivcal	1.93406.2521	5 L	3600
92	Nicklel Sulphate	Analytivcal	1.93650.0521	1 kg	12000
93	Agar Agar	Analytivcal	12177	11 kg	140844
94	Yeast Extract Powder	Analytivcal	1.03753.05000	10 kg	54000
95	Dextrose anhydrous purifies	Analytivcal	6.17809E+13	1 KG	1440
96	Ammonium Molybdate tetra	Analytivcal	96	250 GM	17248
<u> 30</u>	Animomani worybuate tetra	Allalytiveal	70	230 OM	1/24ŏ

	hydrate				
97	Tris Buffer Grade	Analytivcal	648314	100 ML	4560
98	Glycin	Analytivcal	816013.0521	500 gm	2400
99	Ammonium Dihydrogen	Analytivcal	1014400050	50 gm	
	Phosphate	,		5 5 8	16654
100	di-sodium hydrogen	Analytivcal	1197530250	250 GM	10001
	phosphate dehydrate	,	1197880280	200 0111	7831
101	Potassium dihydrogen	Analytivcal	1048751000	10 KG	7031
	phosphate	,	1010721000	10110	62220
102	Tri-sodium Citrate di hydrate	Analytivcal	1064485000	1 KG	5000
103	Tri.calcium phosphate	Analytivcal	1235	500 GM	945
104	Citric acid monohydrate	Analytivcal	1288	1 KG	1404
105	Sodium chloride	Analytivcal	1064041000	10 KG	17000
106	Ammonium Molybdate tetra	Analytivcal	96	250 GM	17000
	hydrate	, mary er car		230 011	17248
<u>107</u>	Sodium hydroxide	Analytivcal	6203	5 KG	10349
108	Potassium sulphate cryst	Analytivcal	594	1 KG	1287
109	Potassium sulphate cryst	Analytivcal	40	2 KG	3042
110	Manganese chloride	Analytivcal	2164	8 KG	22176
111	Calcium Gluconate	Analytivcal	1883	500 GM	2500
112	Cupric nitrate	Analytivcal	1310	500 GM	2756
113	Sucrose	Analytivcal	848	2 KG	2456
114	Ferous sulphate	Analytivcal	684	3 KG	2456
115	•	Analytivcal	366	1 kg	1775
116	Manganese oxide powder Potassium di hydrogen	Analytivcal	1048731000	5 Kg	1//5
110	phosphate	Analytivcal	1048/31000	J Kg	21095
117	Ammonium Sulphate	Analytivcal	790	2 kg	
118	•	Analytivcal	1063291000	3 kg	2250
119	Sodium Hydrogen Carbonate Potassium chloride extra	Analytivcal	372	1 kg	2350
119		Analytivcal	372	2 kg	2002
120	pure Calcium chlorde	Analytivcal	1089	2 kg	2082 2700
121		Analytivcal	701	1 L	
122	Ammonium Hydro oxide Orthro phosphoric acid	Analytivcal	1005732510	2.5 L	660
123	Acetic acid Glacial	Analytivcal	5516	2.5 L 2.5 L	14803
124	Sodium Hypochlorite	Analytivcal	1459	5 kg	1088
124	solution	Analytivcal	1439	3 Kg	2750
125	Ammonium meta vanadat	Analytivcal	4608	500 gm	3750
		Analytivcal			6669
<u>126</u> <u>127</u>	D glucose anhydrous Sodium bromide	Analytivcal	1083421000 1063630250	5 kg	12000
127 128		Analytivcal	98	250 gm	87260
129	Iron chloride 6 hydrate	Analytivcal	311	1 kg	3393
130	Sodium sulphate 5-Sulphosalicylic acid	Analytivcal	259	1 kg 500 gm	1023
130	dehydrate	Analytiveal	437	Joo giii	E722
131	Boric Acid	Analytivcal	1004	A 150	5733
		Analytivcal	2142	4 kg	4896
<u>132</u>	MgCl2.6 h2o Magnessium chloride	Analytivedi	2142	3 kg	// 222
133		Analytivcal	1297	500 am	4233
\vdash	Cobalt sulphate			500 gm	9500
134 125	Molybdic acid	Analytivcal	5074	25 gm	2500
135	Mannitol Manganasa sulphata 1	Analytivcal	386	500 gm	1790
<u>136</u>	Manganese sulphate -1	Analytivcal	374	1 Kg	2740
127	Hydrate	Applytives	4500	1 1	2740
<u>137</u>	Potassium sodium tartrate -	Analytivcal	4590	1 kg	222
400	4-hydrate	Ameliativi	255	0.17	2223
138	Lead nitrate pure cryst	Analytivcal	255	2 Kg	8994
139	Calcium carbonate	Analytivcal	1.93666.0521	500 gm	2160
140	Cobalt chloride	Analytivcal	1294	500 gm	6318
<u>141</u>	Toluene	Analytivcal	181	1 L	3000

142	n-Hexane	Analytivcal	2939	2.5 1	2164
143	Pentane	Analytivcal	1574	1 L	3000
144	a-ketoburyrc acid di-sodium	Analytivcal	3846	1 L	3000
-	salt	,	20.10	12	3000
145	Indole acetic acid	Analytivcal	8207040010	10 gm	9615
146	Gibberellic acid	Analytivcal	5154	25 gm	15000
147	2-thiobarbituric acid	Analytivcal	10818000025	25 gm	8200
148	Tryptamine free base	Analytivcal	8184450010	10 gm	6355
149	L-Histidine	Analytivcal	837	25 gm	0333
	hydrochloridemonohydrate	7	037	25 gm	2750
150	Indole 3 butyric acid	Analytivcal	5168	25 gm	5000
151	ACC	Analytivcal	25	1 gm	38000
152	L-Tryptophan	Analytivcal	399698-25GM	25 gm	25188
153	Ethidium bromide	Analytivcal	1116150001	1 gm	5500
154	L-Methionine	Analytivcal	5180	25 gm	3126.00
155	L-Lactic acid	Analytivcal	1163	500 gm	1860
156	Brilliant blue G	Analytivcal	112553005	25 gm	6480
157	L-Glutamic acid	Analytivcal	772	500gm	6500.00
158	L-Aspartic acid	Analytivcal	5115	500gms	5100.00
159	Proteinase K	Analytivcal	539480	100gms	4320
160	Silver Nitrate	Analytivcal	900	Gm	6786.00
161	Kinetin	Analytivcal	K0753-1G	1gms	19700
162	2 – Mercapto ethanol 99%	Analytivcal	8057401000	1 L	11159
163	D-Gluconic Acid Solution	Analytivcal	8220570100	100ml	3250
164	Sodium Acetate Trihydrate	Analytivcal	1062679050	50 kg	122169
165	Trion X-100	Analytivcal	1122981001	1L	36666
166	Sodium Thiosulfate	Analytical	439	500gm	30000
	Anhydrous	,	1.57	2005111	950
167	Potassium Chloride	Analytical	372	Kg	1041.30
168	Hepes (Free Acid)	Analytical	5310	100gms	3327.5
169	Potassium Chromate	Analytical	391	500gm	4718.00
170	Iodine 99%	Analytical	1177	500gms	17500
171	Crystal Violet	Analytical	754	25gm	877.50
172	Iron(III) Chloride Anhydrous	Analytical	8039451000	1KG	7773
173	Mercuric chloride	Analytical	280	100gms	11211
174	Tryptic Soy Agar	Analytical	1.5458.0500	0.5kg	4560
175	Tryptic Soy Broth	Analytical	1.05459.0500	0.5kg	3600
176	Congo Red	Analytical	1300	25gm	1370
177	Phenolphthalein	Analytical	1600	100gm	1158.3
178	Eriochrome Black Tea (EBT)	Analytical	1031700025	25gms	3900
179	Copper Sulfate	Analytical	1027841000	2 KG	14274
180	Yeast Extract Powder	Analytical	1.03753.05000	0.5kg	5400
181	Chloroform 99%	Analytical	155	2.5 ltr	3136
182	Sodium Tungstate dehydrate	Analytical	461	500gm	15000.00
183	Methyl Red	Analytical	1505	25gm	1133
184	Sodium Hydroxide	Analytical	1064629050	50kg	69235
185	Nutrient Gelatin	Analytical	L7230	6x5ml	3870
186	Citric Acid	Analytical	8187071000	1KG	5930
187	Casamino acid	Analytical	2240	500GM	13685.1
188	D-Lactose	Analytical	1129390010	10G	11797
189	Boric Acid	Analytical	1007650500	500GM	102792
190	Tris Hydroxymenthyl amino	Analytical	147	500GM	
	Methane	,			5265
<u>191</u>	Dodecyl Sulphate Sodium	Analytical	8220509020	20KG	
	Salt			-	80549
192	Potassium Sulfate	Analytical	594	Kg	1287
193	Iron (II) Sulfate Heptahydrate	Analytical	1039650100	100GM	3034
	3 (, Sanate rieptanyarate	,	1007000100	10001/1	J J J J T

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<u>194</u>	Sodium Bicarbinate	Analytical	2736	1KG	994.5
<u>195</u>	Sodium Sulfide Anhydrous	Analytical	318	500GM	1000
<u>196</u>	Sodium chloride	Analytical	83	Kg	760
<u>197</u>	Di-Potassium hydrogen	Analytical	1197540250	250gm	0.500
100	hosphate	A malustical	10/4/25000	5 W.	9689
<u>198</u>	Sodium Hydroxide Pellets	Analytical Analytical	1064625000 181	5 Kg	11268
<u>199</u>	Toluene D-Maltose	Analytical		Ltr 500GM	870
<u>200</u> <u>201</u>	Ammonium Oxalate	Analytical	2160 5312	500GW	4563
201	monohydrate	Allalytical	3312	Joogin	1462.50
202	Tryptic soy broth	Analytical	1.05459.0500	500GM	3600
203	Piperazine N-N	Analytical	8073259025	25Kg	3000
	bis(ethanosulphonic acid	7 4 6	0073237023	25115	134824
204	Piperazine	Analytical	5195	500GM	5500
205	2-Chlorophenol	Analytical	8022539030	30Kg	106872
206	Triton	Analytical	1086032500	2.5L	21030
207	Thio barbituric acid	Analytical	1081800025	25GM	8200
208	Potassium Hexacyanoferrate	Analytical	1049730100	100GM	4715
209	Hexadecyl trimethyl	Analytical	8141190500	500GM	
	ammonium bromide				
	(HDTMA)				3366
<u>210</u>	Iron chloride	Analytical	8039451000	25GM	4800
<u>211</u>	Succinic acid	Analytical	267	500gm	2000
<u>212</u>	Thiamine chloride	Analytical	5871	100GM	4488
	hydrochloride				
<u>213</u>	Di sodium hydrogen	Analytical	183	3 kg	7761
	phosphate				
<u>214</u>	Bradford Reagent	Analytical	2740	1Kit	23667.6
215	L-Glutamine	Analytical	D8900	10L	21168
<u>216</u>	Anthrone	Analytical	4680	25gm	6800.00
217	Ammonium chloride	Analytical	1.93621.0521	1.5kg	4680
218	Riboflavin	Analytical	886	25gm	2223
<u>219</u>	Ethylene diamine tetra acetic acid (EDTA)	Analytical	382	500ml	1626
220	Tris hydrochloride	Analytical	9310	500GM	4300
221	Ninhydrin	Analytical	1536	25gm	5560
222	Ferous Ammonium Sulphate	Analytical	203505	2Kg	9000
<u>223</u>	Hydroxlamine Hydrochloride	Analytical	379921	500gm	3500
<u>224</u>	Sodium arsenate	Analytical	a6756	100gm	14500
<u>225</u>	Chromotropic acid	Analytical	126225	25gm	5500
<u>226</u>	Gel Loading Dye Blue (6X) –	Analytical	B7021S	4.0 ml	11115
	4.0 ml				
<u>227</u>	Magnesium Sulfate (MgSo4)	Analytical	B1003S	60.1 ml	5265
	Solution – 6.0 ml				
<u>228</u>	Gel Loadind Dye Purple (6x) –	Analytical	B7024S	4.0 ml	11115
<u> </u>	4.0 ml				
<u>229</u>	BSA-Molecular Biology Grade	Analytical	B9000S	12 mg	7020
222	– 12 mg	Amal III	16500500	4 77	45000
230	Agarose	Analytical	16500500	1 Kg	46800
<u>231</u>	SYBER GreenER QPCR Super Mix	Analytical	11762100	100Rxn	57000
<u>232</u>	Primers PCR Grade 50nmol	Analytical	-	Each Base	38
<u>233</u>	Standard Taq Reaction Buffer	Analytical	B9014S	6.0 ml	3000
	Pack – 6.0 ml		<u> </u>		
<u>234</u>	One Taq Standard Reaction	Analytical	B9022S	8.0 ml	3000
	Buffer Pack – 8.0 ml				
<u>235</u>	cDNA Synthesis Kit	Analytical	18080300	100Rxn	4500
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235 Bromocresol Purple		T			•	
238 Buffer solution pH7	<u>236</u>	Bromocresol Purple	-			
239 Buffer solution pH9.18 Analytical 1030 2 L 1731.60			· · · · · · · · · · · · · · · · · · ·			
240 Calcium Chloride anhydrous Analytical 3459 1 Kg 1579-50	<u>238</u>		·			
241 EDTA-FeNa trihydrate					+	
242 Ethyl alcohol	<u>240</u>	Calcium Chloride anhydrous	·	3459		
Magnesium sulfate	<u>241</u>	EDTA-FeNa trihydrate	·	361		
anhydrous	<u>242</u>	Ethyl alcohol	Analytical	1399		
heptahydrate	<u>243</u>	-	Analytical	334	1 Kg	1638.00
245 Ammonium Nitrate	<u>244</u>	-	Analytical	3973	1 Kg	906.75
Salicylic Acid,	245		Analytical	765	1 Kg	18000
249 96-well PCR plate (25 plates/pack)	<u>246</u>	Salicylic Acid,	Analytical	2405		2050.00
plates/pack	<u>247</u>	Primers at 50nmol scale	Analytical		01 base	36
249 PCR TUBES & Caps strips Analytical C250 strips/pack) C250 strips/pack) C250 strips/pack) Analytical O1 case 14000 C251 200 ul Yellow Tips (1000 Analytical O1 case 14000 C251 200 ul Yellow Tips (1000 Analytical O1 case 14000 C250	<u>248</u>		Analytical		01 pck	8000
251 200 ul Yellow Tips (1000 tips/bag)	<u>249</u>	PCR TUBES & Caps strips	Analytical		01 case	15000
tips/bag0	<u>250</u>	10 ul Tips (100 tips/bag)	Analytical		01 case	14000
252 1000 ul Blue Tips (1000 tips/bag)	<u>251</u>		Analytical		01 case	14000
Caps (1000 tubes/bag)	<u>252</u>	1000 ul Blue Tips (1000	Analytical		01 Case	24000
254 AlumaSeals Sealing films (100/pck)	<u>253</u>		Analytical		01 case	25000
Plates (100/pck)	<u>254</u>	AlumaSeals Sealing films	Analytical		01 Pek	6500
Spreaders Spreaders Spreaders Spreaders Spreaders Taq PCR Master Mix (2x) Analytical O1 Vial 8000	<u>255</u>		Analytical		01 Pek	6500
DI Vial 13000 259 DNA Ladder, 1 kb Plus Analytical O1 vial 9500 (500ul) O1 Vial 9500	<u>256</u>	, ,	Analytical		01 Pek	21000
DNA Ladder, 1 kb Plus (500ul)	<u>257</u>	Taq PCR Master Mix (2x)	Analytical		01 Vial	8000
(500ul) 260 100bp DNA Ladder (500 ul) Analytical 01 Vial 8500	<u>258</u>	dNTPs, Set (100mM)	Analytical		01 vial	13000
261 First-Strand cDNA Synthesis Analytical	<u>259</u>	•	Analytical		01 vial	9500
Kit (50 rxn)	<u>260</u>	100bp DNA Ladder (500 ul)	Analytical		01 Vial	8500
262 SYBR Green One-Step qRT-PCR Master Mix(2x) Analytical 01 Vial 39,590.00 263 Kjeldahl flask with ground joint socket 500ml, 24/29 Analytical 070.202.05 500 ml 1327.95 264 Measuring Cylinder Round Base Class A, 5ml Analytical 138.202.01 5 ml 286.65 Measuring Cylinder Round Base Class A, 10ml Analytical 138.202.02 10 ml 298.35 265 Measuring Cylinder Round Base Class A, 25ml Analytical 138.202.03 25 ml 304.20 267 Measuring Cylinder Round Base Class A, 50ml Analytical 138.202.04 50 ml 310.05 268 Measuring Cylinder Round Base Class A, 100ml Analytical 138.202.05 100 ml 421.20 269 Measuring Cylinder Round Base Class A, 250ml Analytical 138.202.06 250 ml 538.20 270 Measuring Cylinder Round Base Class A, 1000ml Analytical 138.202.08 1000ml 2103.66 271 Measuring Cylinder Round Base Class A, 2000ml Analytical 138.202.09 2000ml 2679.30 272 <td><u>261</u></td> <td>-</td> <td>Analytical</td> <td></td> <td>01 Kit</td> <td>36000</td>	<u>261</u>	-	Analytical		01 Kit	36000
joint socket 500ml, 24/29 264 Measuring Cylinder Round Base Class A, 5ml 265 Measuring Cylinder Round Base Class A, 10ml 266 Measuring Cylinder Round Base Class A, 25ml 267 Measuring Cylinder Round Base Class A, 25ml 268 Measuring Cylinder Round Base Class A, 50ml 269 Measuring Cylinder Round Base Class A, 100ml 269 Measuring Cylinder Round Base Class A, 25ml 260 Measuring Cylinder Round Base Class A, 100ml 261 Measuring Cylinder Round Base Class A, 100ml 262 Measuring Cylinder Round Base Class A, 100ml 263 Measuring Cylinder Round Base Class A, 100ml 264 Measuring Cylinder Round Base Class Analytical Analytical A, 250ml 265 Measuring Cylinder Round Base Class Analytical Analytical A, 250ml 270 Measuring Cylinder Round Base Class Analytical Analytical Analytical A, 2000ml 271 Measuring Cylinder Round Base Class Analytical Analytical Analytical Analytical Analytical A, 2000ml 272 Conical Flask 25ml graduated Analytical 231.202.02 50 ml 222.30	<u>262</u>	SYBR Green One-Step qRT-	Analytical		01 Vial	39,590.00
Base Class A, 5ml 265 Measuring Cylinder Round Base Class A, 10ml 138.202.02 10 ml 298.35 266 Measuring Cylinder Round Base Class A, 25ml Analytical 138.202.03 25 ml 304.20 267 Measuring Cylinder Round Base Class A, 50ml Analytical 138.202.04 50 ml 310.05 268 Measuring Cylinder Round Base Class A, 100ml Analytical 138.202.05 100 ml 421.20 269 Measuring Cylinder Round Base Class A, 250ml Analytical 138.202.06 250 ml 538.20 270 Measuring Cylinder Round Base Class A, 1000ml Analytical 138.202.08 1000ml 2103.66 271 Measuring Cylinder Round Base Class A, 2000ml Analytical 138.202.09 2000ml 2679.30 272 Conical Flask 25ml graduated Analytical 231.202.01 25 ml 163.80 273 Conical Flask 50ml graduated Analytical 231.202.02 50 ml 222.30	<u>263</u>		Analytical	070.202.05	500 ml	1327.95
265 Measuring Cylinder Round Base Class A, 10ml Analytical 138.202.02 10 ml 298.35 266 Measuring Cylinder Round Base Class A, 25ml Analytical 138.202.03 25 ml 304.20 267 Measuring Cylinder Round Base Class A, 50ml Analytical 138.202.04 50 ml 310.05 268 Measuring Cylinder Round Base Class A, 100ml Analytical 138.202.05 100 ml 421.20 269 Measuring Cylinder Round Base Class A, 250ml Analytical 138.202.06 250 ml 538.20 270 Measuring Cylinder Round Base Class A, 1000ml Analytical 138.202.08 1000ml 2103.66 271 Measuring Cylinder Round Base Class A, 2000ml Analytical 138.202.09 2000ml 2679.30 272 Conical Flask 25ml graduated Analytical 231.202.01 25 ml 163.80 273 Conical Flask 50ml graduated Analytical 231.202.02 50 ml 222.30	<u>264</u>	Measuring Cylinder Round	Analytical	138.202.01	5 ml	286.65
A, 25ml 267 Measuring Cylinder Round Base Class A, 50ml 268 Measuring Cylinder Round Base Class A, 100ml 269 Measuring Cylinder Round Base Class A, 250ml 270 Measuring Cylinder Round Base Class A, 1000ml 271 Measuring Cylinder Round Base Class A, 1000ml 272 Measuring Cylinder Round Base Class A, 2000ml 273 Conical Flask 25ml graduated Analytical Analytical Analytical Analytical Analytical 231.202.01 274 Conical Flask 50ml graduated Analytical Analytical 231.202.02 275 Measuring Cylinder Round Base Class Analytical Analytical 231.202.01 276 Conical Flask 50ml graduated Analytical 231.202.02 277 Conical Flask 50ml graduated Analytical 231.202.02 278 Conical Flask 50ml graduated Analytical 231.202.02 279 Somble State S	<u>265</u>	Measuring Cylinder Round Base Class A, 10ml	Analytical	138.202.02	10 ml	298.35
268 Measuring Cylinder Round Base Class A, 100ml Analytical 138.202.05 100 ml 421.20 269 Measuring Cylinder Round Base Class A, 250ml Analytical 138.202.06 250 ml 538.20 270 Measuring Cylinder Round Base Class A, 1000ml Analytical 138.202.08 1000ml 2103.66 271 Measuring Cylinder Round Base Class A, 2000ml Analytical 138.202.09 2000ml 2679.30 272 Conical Flask 25ml graduated Analytical 231.202.01 25 ml 163.80 273 Conical Flask 50ml graduated Analytical 231.202.02 50 ml 222.30		Measuring Cylinder Round Base Class A, 25ml	,			
A, 100ml A, 100ml 138.202.06 250 ml 538.20 269 Measuring Cylinder Round Base Class A, 250ml Analytical 138.202.06 250 ml 538.20 270 Measuring Cylinder Round Base Class A, 1000ml Analytical 138.202.08 1000ml 2103.66 271 Measuring Cylinder Round Base Class A, 2000ml Analytical 138.202.09 2000ml 2679.30 272 Conical Flask 25ml graduated Analytical 231.202.01 25 ml 163.80 273 Conical Flask 50ml graduated Analytical 231.202.02 50 ml 222.30		A, 50ml	,			
A, 250ml Analytical 138.202.08 1000ml 2103.66 270 Measuring Cylinder Round Base Class A, 1000ml Analytical 138.202.09 2000ml 2679.30 271 Measuring Cylinder Round Base Class A, 2000ml Analytical 138.202.09 2000ml 2679.30 272 Conical Flask 25ml graduated Analytical 231.202.01 25 ml 163.80 273 Conical Flask 50ml graduated Analytical 231.202.02 50 ml 222.30		A, 100ml				
A, 1000ml A, 1000ml 271 Measuring Cylinder Round Base Class A, 2000ml Analytical 138.202.09 2000ml 2679.30 272 Conical Flask 25ml graduated Analytical 231.202.01 25 ml 163.80 273 Conical Flask 50ml graduated Analytical 231.202.02 50 ml 222.30		A, 250ml	,			
A, 2000ml Conical Flask 25ml graduated Analytical 231.202.01 25 ml 163.80 Conical Flask 50ml graduated Analytical 231.202.02 50 ml 222.30		A, 1000ml	,			
273 Conical Flask 50ml graduated Analytical 231.202.02 50 ml 222.30		A, 2000ml				
251.202.02 50 Hi		_				
Z/4 Communication Staddated Allalvileal / 1 / 1 / 1 / 1 1 1 1 1 1	<u>274</u>	Conical Flask 100ml graduated	Analytical	231.202.02	100 ml	245.70

275	Conical Flask 250ml graduated	Analytical	231.202.04	250 ml	280.80
276	Conical Flask 500ml graduated	Analytical	231.202.04	500 ml	374.40
		· ·			
<u>277</u>	Conical Flask 1000ml graduated	Analytical	231.202.06	1000 ml	479.70
<u>278</u>	Conical Flask 2000ml graduated	Analytical	231.202.07	2000 ml	760.50
<u>279</u>	Volumetric Flask Class A with PP	Analytical	129.202.01	5 ml	269.10
280	Stopper 5ml Volumetric Flask Class A with PP	Analytical	129.202.02	10 ml	280.80
281	Stopper 10ml Volumetric Flask Class A with PP	Analytical	129.202.02A	20 ml	333.45
282	Stopper 20ml Volumetric Flask Class A with PP	Analytical	129.202.03	25 ml	321.75
283	Stopper 25ml Volumetric Flask Class A with PP	Analytical	129.202.04	50 ml	339.30
284	Stopper 50ml Volumetric Flask Class A with PP	Analytical	129.202.05	100 ml	348.66
	Stopper 100ml Volumetric Flask Class A with PP	•			
285	Stopper 200ml	Analytical	129.202.06	200 ml	520.65
<u>286</u>	Volumetric Flask Class A with PP Stopper 1000ml	Analytical	129.202.09	1000 ml	1123.20
<u>287</u>	Volumetric Flask Class A with PP Stopper 2000ml	Analytical	129.202.10	2000 ml	2094.30
<u>288</u>	Beaker Low form with	Analytical	229.202.01	10 ml	81.90
	graduation and spout Boro 10ml				
<u>289</u>	Beaker Low form with	Analytical	229.202.02	25 ml	93.60
	graduation and spout Boro 25ml				
290	Beaker Low form with	Analytical	229.202.03	50 ml	105.30
	graduation and spout Boro 50ml		229.202.03		100.50
201		Applytical	229.202.04	100 ml	128.70
<u>291</u>	Beaker Low form with graduation and spout Boro	Analytical	229.202.04	100 mi	128.70
	100ml				
292	Beaker Low form with	Analytical	229.202.05	250 ml	152.10
	graduation and spout Boro 250ml				
<u>293</u>	Beaker Low form with	Analytical	229.202.06	500 ml	210.60
255	graduation and spout Boro	Attarycical	227.202.00	300 III	210.00
204	500ml	A sal Park	220, 202, 07	1000 1	220.20
<u>294</u>	Beaker Low form with	Analytical	229.202.07	1000 ml	339.30
	graduation and spout Boro 1000ml				
295	Beaker Low form with	Analytical	229.202.08	2000 ml	1638.00
	graduation and spout Boro 2000ml	,			
<u>296</u>	Beaker Low form with	Analytical	229.202.09	5000 ml	7020.00
	graduation and spout Boro 5000ml				
207				A	26000
<u>297</u>	Burette			4	36000
<u>298</u>	Pipette			4	3000
<u>299</u>	China Dish			12	1140
300	Plastic beaker			48	6720
<u>301</u>	Petri dish Plastic 90mm			2 Box	12000.00
<u>302</u>	Falcon tube 15ml			200	3600.00
<u>303</u>	Falcon tube 50ml			200	8000.00
<u>304</u>	Falcon tube 15ml rack			2	1900.00
<u>305</u>	Eppendroff tube 1.5ml			3 Pack	2400.00
<u>306</u>	PCR Tube 0.2ml			Pkt of 1000	1200.00
<u>307</u>	PCR Tube 0.5ml			Pkt of	1200.00
308	Filter paper sheet			1000 2 Pack of	4000.00
	1 1			100	

<u>309</u>	Filter Paper whatman No:-	Pkt of 100	3000.00
	40, 41. 42. 44.		
<u>310</u>	Filter Paper whatman No:-1	Pkt of 100	1400.00
<u>311</u>	Aluminium foil	29 rolls	7000.00
<u>312</u>	Parafilm roll	12 roll	42000.00
<u>313</u>	Yellow tips	Pack	250.00
<u>314</u>	Blue tips	Pack	250.00
<u>315</u>	Cuvette Quartz	2 Pairs	1200.00
<u>316</u>	Cuvette plastic	6	360.00

3644712.22

List of Chemical/glassware/Plasticware

Sr.	Name of Chemical/Glassware/	Analytical/	Cat.	Estimated	Estimated
No	Plasticware	Commercial	No.	Quantity to	Amount
		etc.		be procured	
				in F/Y 2018- 19	
<u>1</u>	Bradford Reagent	Analytical		1 Liter	
<u> </u>	NBT	Analytical		1 g	
<u> </u>	Potassium Phosphate	Analytical		1 kg	
<u> 4</u>	Triton X	Analytical		500 ml	
<u> </u>	Methionine	Analytical		1 kg	
<u> </u>	Ribolavin	Analytical		250 g	
<u>=</u>	Guicol	Analytical		100 g	
<u> </u>	Hydrogen peroxide	Analytical		1 litre	
9	Sulphuric Acid.	Analytical		10 Litre	
10	Nitric Acid.	Analytical		2.5 Litre	
11	Perchloric Acid.	Analytical		2.5 Litre	
12	Potassium Standards	Analytical		1 litre	
13	Acetone	Analytical		10 Litre	
14	Methyl Red.	Analytical		200 g	1
15	Petroleum Ether.	Analytical		2.5 Litre	
16	Potassium Permanganate	Analytical		1 kg	
17	Potassium Acetate	Analytical		1 kg	
18	Silver Nitrate	Analytical		100 g	
19	Cetyltrimethylammoni um	Analytical		500 g	
	bromide	1 222002 9 02 0 002			
20	EDTA	Analytical		1 kg	
21	SDS	Analytical		1 kg	
22	Copper(II) Sulphate	Analytical		1 kg	
23	Potassium Sulphate	Analytical		1 kg	
24	Iron (II) Sulfate	Analytical		1 kg	
25	Boric Acid	Analytical		1 kg	
26	di-Sodium hydrogen phosphate	Analytical		1 kg	
27	Iron (III) Nitrate	Analytical		1 kg	
28	Hydrochloric Acid 37%	Analytical		2.5 Litre	
29	Acetic Acid 100%	Analytical		5 Litre	
30	Hydrogen peroxide solution 35%	Analytical		1 Litre	
31	Ethanol Absolute	Analytical		2.5 Litre	
32	Buffer Solution pH 4.00 ± 0.02	Analytical		1 Litre	
33	Potassium dihydrogen phosphate	Analytical		1 kg	
<u>34</u>	Toluene	Analytical		2.5 Litre	
35	Potassium Standards Solution	Analytical		500 ml	
<u>36</u>	Phosphorous Standard Solution	Analytical		500 ml	
<u>37</u>	Sodium Standard Solution	Analytical		500 ml	
<u>38</u>	Ammonium Molybdate	Analytical		500 g	
<u>39</u>	Ammonium Vanadate	Analytical		500 g	
<u>40</u>	Sodium Hydroxide	Analytical		1 kg	
<u>41</u>	Bromocresol green	Analytical		25 g	
42	Potassium Chloride	Analytical		1 kg	

43	Ammonium Hydroxide	Analytical	2.5 Litre
44	Ammonium Acetate	Analytical	1 kg
45	Sodium bicarbonate	Analytical	1 kg
46	Ammonium Sulphate	Analytical	1 kg
47	P-Nitrophenol	Analytical	25 g
48		•	
<u>40</u> 49	Hydromethyl aminomethane	Analytical	1 kg
	Diphenyl amine	Analytical	250 g
<u>50</u>	Ferrous Ammonium Sulphate	Analytical	1 kg
<u>51</u>	orthophoric Acid	Analytical	2.5 Litre
<u>52</u>	Potassium dichromate	Analytical	1 kg
<u>53</u>	Sulphuric Acid.	Analytical	12.5 Litre
<u>54</u>	Nitric Acid.	Analytical	5 Litre
<u>55</u>	Perchloric Acid.	Analytical	2.5 Litre
<u>56</u>	Hydrochloric Acid	Analytical	25 Litre
<u>57</u>	Potassium Sulphate	Analytical	5 kg
<u>58</u>	Copper Sulphate	Analytical	2 kg
<u>59</u>	Ferrous Sulphate	Analytical	2 kg
<u>60</u>	Boric Acid	Analytical	2 kg
<u>61</u>	Sodium Hydroxide	Analytical	3 kg
<u>62</u>	Sodium bicarbonate	Analytical	1 kg
<u>63</u>	Ammonium Molybdate	Analytical	500 g
<u>64</u>	Ammonium Metavanadate	Analytical	250 g
<u>65</u>	Potassium dihydrogen phosphate	Analytical	1 kg
<u>66</u>	Ethylene diamine tetra acetic	Analytical	1 kg
	acid disodium salt		
<u>67</u>	Ammonium acetate solution	Analytical	1 Litre
<u>68</u>	Acetic Acid	Analytical	2.5 Litre
<u>69</u>	Potassium Chloride	Analytical	1 kg
<u>70</u>	Hydrogen peroxide	Analytical	2 Litre
<u>71</u>	Glucose	Analytical	1 kg
<u>72</u>	Peptone	Analytical	500 g
<u>73</u>	Magnesium sulphate	Analytical	1 kg
<u>74</u>	Agar	Analytical	500g
<u>75</u>	Ethanol	Analytical	5 Litre
<u>76</u>	Dextrose	Analytical	1 kg
<u>77</u>	Azomethine H	Analytical	10 g
<u>78</u>	Folin Ciocalten reagent	Analytical	500 ml
<u>79</u>	Phenolic acid standards	Analytical	1 Litre
<u>80</u>	Calcium chloride	Analytical	1 kg
81	Trichloroacetice acid	Analytical	1 Litre
82	Tetrazolium chloride	Analytical	1 kg
83	Acetone	Analytical	30 Litre
84	Trichloroacetice acid 97%	Analytical	10 kg
85	Perchloric Acid.	Analytical	10 Litre
86	Glacial Acetic Acid	Analytical	5 kg
87	Salicylic Acid	Analytical	1 kg
88	Sulphosalicylic Acid	Analytical	2.5 kg
89	Ninhydrin	Analytical	500 g
90	Dithiothreitol	Analytical	150 ml
91	Phosphoric Acid	Analytical	4 Litre
92	Thiobarbituric Acid	Analytical	250 g
93	Sulphuric Acid.	Commercial	10 Litre
94	Broc Acid	Analytical	4 kg
95	Calcium chloride	Analytical	2 kg
96	Sodium chloride	Analytical	1 kg
97	Calcium sulphate	Analytical	500 g
98	Sodium Carbonate	Analytical	1500 g
99	Folin Ciocalten reagent	Analytical	500 g
100	Potassium Phosphate Buffer	Analytical	2 kg
101	Sodium Phosphate Buffer	Analytical	2 kg
101	Soutum i nospitate Dunei	Allarytical	∠ng

<u>102</u>	Safranin	Analytical	250 g
<u>103</u>	Fast green	Analytical	100 g
104	Kinetin	Analytical	10 g

List of Glassware

<u>1</u>	Glass Beaker 100 ml	6 Nos.
<u>2</u>	Glass Beaker 500 ml	6 Nos.
<u>3</u>	Glass Beaker 1000 ml	6 Nos.
<u>4</u>	Manual Pippette	6 Nos.
<u>5</u>	Volumetric Flask 250 ml	3 Nos.
<u>6</u>	Violumetric Flask 100 ml	3 Nos.
<u>7</u>	Volumetric Flask 1000 ml	6 Nos.
<u>8</u>	China Dish	30 Nos.
9	China Cup	30 Nos.
<u>10</u>	Kjeldhal digestion tubes	10 Nos.
<u>11</u>	Round bottom flask 250 ml	6 Nos.
<u>12</u>	Soxhlet condenser (RFK 100) + Extraction tube	6 Nos.
	(100H)	
<u>13</u>	Measuring cylinder 50 ml	3 Nos.
<u>14</u>	Measuring cylinder 100 ml	3 Nos.
<u>15</u>	Measuring cylinder 250 ml	3 Nos.
<u>16</u>	Measuring cylinder 500 ml	3 Nos.
<u>17</u>	Measuring cylinder 1000 ml	3 Nos.
<u>18</u>	Bulb Pipette & graduated pipette	3 Nos.
<u>19</u>	Burette	3 Nos.
<u>20</u>	Boiling tube	3 Nos.
<u>21</u>	Funnal	5 Nos.
22	Ignition tube	1 Kg
<u>23</u>	Thermometer	5 Nos.
<u>24</u>	Wash Bottle	2 Nos.
<u>25</u>	Lab coat	2 Nos.
<u>26</u>	Filter paper whattman	2 packets
<u>27</u>	Petri plates (9cm)	100 Nos.
<u>28</u>	Glass Beaker (1000 ml)	10 Nos.
<u>29</u>	Glass Beaker (500 ml)	15 Nos.
<u>30</u>	Glass Beaker (250 ml)	15 Nos.
<u>31</u>	Volumetric flask (1000 ml)	25 Nos.
<u>32</u>	Volumetric flask (500 ml)	20 Nos.
<u>33</u>	Volumetric flask (250 ml)	25 Nos.
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Sr. No	Name of Chemical/Glassware/ Plasticware	Analytical/ Commercial etc.	Cat. No.	Estimated Quantity to be procured	Estimated Amount
				in F/Y 2018- 19	
<u>1</u>	Agar Agar	Analytical		2000 gm	26000
<u>2</u>	Glucose	Analytical		4000 gm	14000
<u>3</u>	Nutrient Agar	Analytical		1000 gm	5500
4	Cotton roll	Commercial		150 roll	37500
<u>5</u>	Mthylated Spirit	Commercial		50 Liter	50,000
<u>6</u>	Potato Starch	Analytical		1500 gm	9000

Sr. No	Name of Chemical	Catalog	gue No.	Packing
1	2,4 dinitrophenyl hydrazine	D199303	Sigma Aldrich	25 gm
2	Proteose peptone No. 3	107229	Merck	500 gm
<u>3</u>	Calcium phosphate monobasic	567545	Merck	500 gm

4	Cobalt sulfate hepta hydrate	102556	Merck	250 gm
5	Methanol	113351	Merck	2.5 L
6	Gluconic acid potassium salt	820601	Merck	100 gm
	Picric acid	820001	Sigma	100 giii
<u>7</u>	Picric acid	197378	Aldrich	500 gm
<u>8</u>	Ferric citrate	103862	Merck	1 Kg
9	Sodium citrate	567446	Merck	100 gm (1kg)
10	Agar	12177	Merck	1 kg
11	Lactose	137045	Merck	10 gm
12	Thiamine hydrogen chloride	137013	Sigma	20 8
	Thanine Hydrogen enonae	T-4625	Aldrich	25 gm
<u>13</u>	L-Proline	107430	Merck	100 gm
14	EDTA	4005	Merck	500 GM
<u>15</u>	Bradford Reagent	110306	Merck	500 ml
16	L-Tryptophan	6540	Merck	100 gm
17	Bromocresol purple	103025	Merck	5 gm
18	Acetone	100012	Merck	2.5L
19	Tuluene	107019	Merck	2.5L
	Iron III sulfate	107019		Z.JL
<u>20</u>	non in sunate	307718	Sigma Aldrich	1kg
21	Potassium di chromata			F00 ~
<u>21</u>	Potassium di chromate	104865	Merck	500 gm
22	Succinic acid	822260	Merck	1kg
<u>23</u>	Glycerol	104092	Merck	1L
24	Sodium carbonate anhydrous	106392	Merck	1 kg
<u>25</u>	Molybdic acid	100400	Merck	1kg
<u>26</u>	Manganese (II) chloride tetra hydrate	105927	Merck	1 kg
<u>27</u>	Anthrone	101468	Merck	10gm
28	5-Sulfo salicylic acid dehydrate	800691	Merck	250gm
29	Glucose	108342	Merck	1Kg
30	Calcium phosphate tribasic		Sigma	
		C5267	Aldrich	500 gm
<u>31</u>	Magnesium chloride hexahydrate	105833	Merck	1 kg
<u>32</u>	Potassium sulphate	105153	Merck	1 kg
33	Ammonium acetate	101116	Merck	1 kg
34	Aluminum chloride	845019	Merck	1 kg
35	Di sodium hydrogen phosphate	106566	Merck	500 gm
36	Nitric acid	101799	Merck	2.5 L
37	Sodium di hydrogen phosphate	106370	Merck	250 gm
38	Sodium acetate	106268	Merck	1 kg
39	Ethyle acetate	100789	Merck	2.5 L
40	P-iodo nitro tetrazolium	100763	Merck	2.J L
41	a-ketobutyric acid	K-401	Sigma Aldrich	25 gm
42	1-Aminocyclopropane 1- Carboxylic acid	149101	Merck	1 gm
43	Sodium Chloride	106404	Merk	1 KG
44	Potassium Iodide	105043		
			Merck	500 gm
<u>45</u>	Manganese sulphate	102786	Merck	1 kg
<u>46</u>	Ninhydrin	106762	Merck	10 gm
<u>47</u>	Sodium Molybdate	106524	Merck	1 kg
<u>48</u>	Citric acid tri sodium salt	S 4641	Sigma Aldrich	500 gm
49	n-Hexane	100795	Merck	2.5 L
	TSB			
<u>50</u>		105459	Merck	500 gm
<u>51</u>	Tryptone	T7293	Sigma Aldrich	500 gm
<u>52</u>	Bovine serum albumin	12659	Merck	100 gm
53	Yeast extract powder		Sigma	
==	,	Y1625	Aldrich	500 gm
<u>54</u>	Sodium Lauryl Sarcosine	814715	Merck	100 gm
		61743	Sigma Aldrich	25 gm
		01/43	Auticii	

<u>55</u>	Trimethoprim	9231	Sigma Aldrich	5 gm
<u>56</u>	Casamino acid	2240	Merck	500 gm

List of chemicals for Frame work Contract

Sr. No	Name of Items	Cat. No.	Pack	Price
<u>1</u>	Acetone	A3855,2500	2.5lit	8435
<u>2</u>	Sodium nitrite	A2195,1000	Kg	4732
3	Ammonium thiocyanate	A3298,0500	500gm	6172
4	Potassium ferrocyanide	A1867,0500	500gm	5555
<u>5</u>	Hydrochloric acid	A0659,1000PE	1 lit	3703
<u>6</u>	Sulfuric acid	A0417,1000	1lit	4321
<u>7</u>	Aluminium choride	A1057,1000	Kg	7407
<u>8</u>	Ninhydrin	A0902,0010	10gm	4115
9	Potassium chloride	A1362,1000	Kg	3703
<u>10</u>	Sodium dihydrogen phosphate	A1939,1000	Kg	4526
<u>11</u>	L(+)- Ascorbic acid	A3604,0100	100gm	3703
<u>12</u>	Tween®20	162312.1611	1lit	12344
<u>13</u>	Thiobarbituric Acid	A4670,0025	25gm	5555
14	Ethanol	A2795,2500	2.5lit	5761
<u>15</u>	Agarose low EEO	A2114,0100	100gm	24072
<u>16</u>	Triethanolamine	A5932,1000	1 lit	5143
<u>17</u>	Chloroform pure	A0642,2500	2.5 lit	11933
<u>18</u>	Petroleum ether 40 – 60	A0758,2500	2.5 lit	9258
19	Toluene	141745.1611	1 lit	6584
20	Methanol	A1833,2500	2.5 lit	6172
21	Xylene	131769.1612	2.5 lit	14196
22	Glycine	A4444,1000	1 Kg	5441
23	Phenolphthalein	A1132,0100	100gm	3692
24	TEMED	A1148,0100	100ml	5052
25	Iron(II) sulfate	A1359,1000	1 Kg	3886
26	D(+)- Glucose	A3617,1000	1 Kg	3498
<u>27</u>	D(+)- Sucrose	A1125,1000	1Kg	3498
28	Zinc acetate dehydrate	A4324,1000	1 kg	8938
<u>29</u>	Citric acid anhydrous	A2344,1000	1 kg	5635
<u>30</u>	Tris for buffer solutions	A1379,1000	1 kg	10493
<u>31</u>	Tween ® 80	A1390,1000	1 lit	9327
<u>32</u>	SDS	A7249,1000	1 Kg	8938
33	Zinc sulfate	A1050,1000	1 kg	5635
34	Nitric acid	A3122,,2500	2.5 lit	4858
<u>35</u>	Sodium chloride	A1371,1000	1 Kg	3498
<u>36</u>	Nitric acid	A3122,2500	2.5 lit	4858
<u>37</u>	Formaldehyde	A2628,2500	2.5 lit	4663
38	Boric acid	A3581,1000	1 Kg	5052
39	Acetic acid	A0820,2500PE	2.5 lit	8744
40	Giemsa – Solution	A0885,0500	500ml	4858
41	Ethyl acetate	A0681,2500	2.5lit	6024
42	Glycerol	A4443,2500	2.5lit	12047
43	SDS	A1502,1000	1 kg	10104
44	Ammonium persulfate	A0834,1000	1 Kg	5246
45	TEMED	A1148,0100	100ml	5052
46	Ammonium Acetate	131114.1211	1 kg	11853
47	Cetyltrimethylammonium Bromide	A6284,0500	500gm	18654
48	EDTA	A3553,1000	1 Kg	11270
49	Isoaml Alcohol	121079.1212	2.5 lit	21763

<u>50</u>	Sodium hydroxide	A1551,1000	1 Kg	4275
<u>51</u>	Ammonium Acetate	131114.1211	1 kg	11853
<u>52</u>	DNA Ladder 100 bp	A5216,0025	250ug	48966
<u>53</u>	DNA – Isolation reagent for genomic			
	DNA	A3418,0050	50 ml	24486
<u>54</u>	DNA Isolation Spin-Kit Agarose	A5193,0050	50 Isol.	16905
<u>55</u>	DNA Marker phage Lambda	A5194,0005	50 ug	6412
<u>56</u>	DNasel	A3778,0500	500 mg	56350
<u>57</u>	Ortho – Phosphoric acid	A4231,2500	2.5 lit	7772
<u>58</u>	Starch	A2223,1000	1 Kg	4275
<u>59</u>	Boric acid	A3581,1000	1 Kg	5052
<u>60</u>	Silver nitrate	A1376,0100	100gm	36142
<u>61</u>	Dimethyl sulfoxide	A2765,2500	2.5lit	12436
<u>62</u>	Isoamyl alcohol	A3611,1000	1 lit	10104
<u>63</u>	Ethidium Bromide	A1151,0001	1 gm	4858
<u>64</u>	PCR 2X master	W1401	1 mL	16000

Sr. No	Name of Chemical	Analytical/ Commercial	Cat. No	Estimated Quantity to be procured in F/Y 2018-19	Estimated Amount
1	Ethanol	Lab grade		300 lit	4000/2.5 lit
2	Ammonium Sulphate	Lab grade		1 kg	1800/kg
<u>3</u>	Blades Microtome Disposable	Lab grade		2pkt	14000/Pkt
4	Copper Sulfate	Lab grade		2 kg	2200/kg
<u>5</u>	Call pack Diluent for Hematology	Lab grade		40 lit	26000/20lit
<u>6</u>	DPX	Lab grade		1000ml	6500/500ml
<u>7</u>	Di Sodium Hydrogen	Lab grade		4 kg	2400/kg
8	Eosin	Lab grade		25g	1800/25g
9	Hydrogen Per oxide	Lab grade		1 lit	1800/ltr
10	Formalin	Lab grade		20 lit	1800/2.5 lit
11	Giemsa Stain	Lab grade		25g	1800/25g
<u>12</u>	Homatoxline	Lab grade		25g	9800/25g
<u>13</u>	Methyl Alcohol	Lab grade		10 lit	1800/2.5lit
<u>14</u>	Picric Acid	Lab grade		1000 g	6500/500g
<u>15</u>	Potash Alum	Lab grade		2 kg	4800/kg
<u>16</u>	Iodide	Lab grade		1 kg	18000/kg
<u>17</u>	Paraffin	Lab grade		15 kg	4800/2.5kg
<u>18</u>	Sodium di hydrogen	Lab grade		5kg	1800/kg
<u>19</u>	Wright stein	Lab grade		25g	2200/25g
<u>20</u>	Ammonium Acid	Lab grade		5 kg	4000/kg
<u>21</u>	Eppendrof Tube	Lab grade		20 pkt	600/pkt
<u>22</u>	Sulfuric Acid	Lab grade		2.5 lit	4800/2.5lit
<u>23</u>	Potassium Iodide	Lab grade		1 kg	14000/kg
<u>24</u>	Oxalic Acid	Lab grade		1 kg	2200/kg
<u>25</u>	Diethyl ether	Lab grade		5lit	14500/lit
<u>26</u>	Sodium Sulfite	Lab grade		1 kg	1800/kg
<u>27</u>	EDTA	Lab grade		1 kg	4000/kg
<u>28</u>	Xylene	Lab grade		10 lit	1800/2.5lit
<u>29</u>	Glycerin	Lab grade		5 lit	2000/2.5
<u>30</u>	Yellow tips	Lab grade		50	400/pkt
<u>31</u>	Glacial Acetic Acid	Lab grade		5lit	2200/2.5lit
<u>32</u>	Di Sodium hydrogen phosphate	Lab grade		5kg	2400/kg
<u>33</u>	Sodium Chloride	Lab grade		3kg	1200/kg
34	Hydrochloric Acid	Lab grade		10 lit	4800/kg
35	Mercuric Oxide	Lab grade		25g	4800/25g
36	Oil Immersion	Lab grade		1000 ml	6500/500ml
<u>37</u>	Potassium di hydrogen Phosphate	Lab grade		3 kg	3400/kg
38	Cover slips	Lab grade		10pkt	250/ pkt

<u>39</u>	Slides	Lab grade	60 pkt	150/pkt
40	Counting chamber	Lab grade	10 No	6500/E
41	Dropper	Lab grade	25 No	10/E
42	Gloves Polythen	Lab grade	100 pkt	100/pkt
43	PCV Tube	Lab grade	15 pkt	60/E
44	Plastic Mould	Lab grade	1250 No	10/E
<u>45</u>	Petri Plate	Lab grade	6 pkt	175/E
<u>46</u>	Staining Jars	Lab grade	30 No	1200/E
<u>47</u>	WBC Pipette	Lab grade	12 No	400/E
48	RBC Pipette	Lab grade	12 No	400/E
<u>49</u>	Hemocytometer	Lab grade	10 No	6500/E
<u>50</u>	Pipette filler	Lab grade	600 No	600/E
<u>51</u>	Staining Basket	Lab grade	15 No	1800/E
<u>52</u>	Filter Paper	Lab grade	01 pkt	2000/pkt

Sr. No	Name of Chemical/Glassware/ Plasticware	Analytical/ Commercial etc.	Cat. No.	Estimated Quantity to be procured in F/Y 2018-19	Estimated Amount
<u>1</u>	AI Rod	Commercial	6588	4000	80000
<u>2</u>	AI Gloves	Commercial	6589	5000	40000
<u>3</u>	Latex Gloves	Commercial	586051	12 Box	6000
4	Liquid Paraffin	Commercial	P002	10 liters	1500
<u>5</u>	Mustard Oil	Commercial		40 liters	8000
<u>6</u>	Conical Flask 250 ml	Commercial	630435- 250	12	1200
<u>7</u>	Nutrient Agar	Commercial	M00010	500 gram	6500
8	Nutrient Broth	Commercial	CMoo1	500 gram	6800
9	Glass Slide	Commercial	287-860	24 Packet	1920
<u>10</u>	Cover Slip	Commercial	287-903	12 packet	240
<u>11</u>	Antibiotic Sensitivity Discs Gentamycin (50 packing)	Commercial	1364758	05	1750
<u>12</u>	Antibiotic Sensitivity Discs Enrofloxacin	Commercial	14111912	05	1750
<u>13</u>	Antibiotic Sensitivity Discs Penicillin	Commercial	14111913	05	1750
<u>14</u>	Antibiotic Sensitivity Discs Oxytetracycline	Commercial	14111914	05	1750
<u>15</u>	Antibiotic Sensitivity Discs Ciprofloxacin	Commercial	14111915	05	1750
<u>16</u>	Sodium Citrate	Commercial	67h1001	500 gram	1000
<u>17</u>	Eosin	Commercial	15405/0025	25 gram	2400
	Nigrosin		15405/0029	25 gram	3000
<u>18</u>	Pippetor	Commercial	Model-A 190220000	2	6400
<u>19</u>	Pippetor Tips	Commercial	Model-A 190220000	1000	300
<u>20</u>	Folleys Catheter 24 guage 3 way	Commercial	19005/0230	24	9600
<u>21</u>	Glycerol	Commercial	526k43391	2.5litre	3500
22	Iodide	Commercial	86818	500gram	6500
23	Sodium Chloride	Commercial	1613	1kg	600
24	Glacial Acetic Acid	Commercial	914557	1kg	230
<u>25</u>	Potassium Permagnate	Commercial	567	1kg	1700
26	Volumetric flask 500ml	Commercial		1	350
<u>27</u>	Dettol	Commercial	8501	2 liters	1080
28	Fillter paper large	Commercial	8582	1 packet(100)	1700
<u>29</u>	Tris	Commercial	R00377	250 gram	1750
<u>30</u>	Formaline	Commercial		5 liters	400

<u>31</u>	Methanol	Commercial	5 liters	500

2 Acetic acid, glacial 99% EP Cat # 1005- 4400	Sr. No	Name of Chemical	Analytical/ Commercial	Estimated Quantity to be procured in F/Y 2018-19	Estimated Amount
2 Acetic acid, glacial 99% EP Cat # 1005- 4400	<u>1</u>	, 0			
4400			Analytical	4L	2520
4 Acetylacetone 99% EP Cat # 1014-4400		4400	_		1260
2 Acetylcholine chloride, 98+% Cat # — 25G 9266 6 Acriflavine hydrochloride Cat # J60048 — 10G 6875 2 AGAR TECHNICAL (AGAR NO 3) — 500G 8775 8 Alcohol amylicuspuris — — 500G 8775 9 Aluminum acetate, basic hydrate Cat # — 100G 8424 10 Aluminum acetate, basic hydrate Cat # — 100G 8424 10 Aluminum acetate, basic hydrate Cat # — 100G 8424 11 Ammonium hydroxide 25~28%EP Cat # — 500G 126 12 Ammonium sulfamate 98.5% EP Cat # — 500G 1680 12 Ammonium sulfamate 98.5% EP Cat # — 500G 1680 13 Ammonium hydrogen citrate, reagent grade, ACS Cat # AM0332 — 500G 980 15 di-Ammonium hydrogen citrate, reagent grade, ACS Cat # AM0332 — 500G 1960 12 Ammonium inortill sulfate hexahydrate 98% EP Cat # 1075-4405 — 500G <td></td> <td></td> <td>_</td> <td></td> <td>5265</td>			_		5265
L02168		•	_	1L	6720
Z AGAR TECHNICAL (AGAR NO 3) - 500G 8775 B Alcohol amylicuspuris - - 100G 8424 Aluminum acetate, basic hydrate Cat # A11620 - 100G 8424 10 Aluminum ammonium sulfate dodecahydrate 99% EP Cat # 1031-4 - 500G 1260 11 Ammonium hydroxide 25~28%EP Cat # 1052-4405 - 1L 840 12 Ammonium acetate 98% EP Cat # 1052-4405 - 500G 1680 13 Ammonium sulfamate 98.5% EP Cat # 1082-4405 - 500G 1540 14 Ammonium chloride 99% EP Cat # 1082-4405 - 500G 980 15 di-Ammonium hydrogen citrate, reagent grade, ACS Cat # AM0332 - 500G 980 16 Ammonium iron(II) sulfate hexahydrate 98% EP Cat # 1068-4405 - 500G 1960 17 Ammonium nitrate 99% EP Cat # 1075-4405 - 500G 1260 18 Ammonium persulfate 98% EP Cat # 1082-4405 - 500G 1260 18 Ammonium sulfate 98% EP Cat # 1082-4405 <	<u>5</u>	1	_		9266
Cat # LP0013B	<u>6</u>	Acriflavine hydrochloride Cat # J60048	_	10G	6879
Alcohol amylicuspuris	<u>7</u>	· · · · · · · · · · · · · · · · · · ·	_	500G	8775
Aluminum acetate, basic hydrate Cat # A A11620	8				0.770
10		Aluminum acetate, basic hydrate Cat #	_	100G	8424
11 Ammonium hydroxide 25~28%EP Cat # 1065-4400 - 1L 840 12 Ammonium acetate 98% EP Cat # 1052-4405 - 500G 1680 13 Ammonium sulfamate 98.5% EP Cat # 1081-4405 - 500G 1540 14 Ammonium chloride 99% EP Cat # 1060-4405 - 500G 980 15 di-Ammonium hydrogen citrate, reagent grade, ACS Cat # AM0332 - 500G 7670 16 Ammonium iron(II) sulfate hexahydrate 98% EP Cat # 1068-4405 - 500G 1960 17 Ammonium irrate 99% EP Cat # 1075-4405 - 500G 1260 18 Ammonium oxalate monohydrate 99% EP Cat # 1076-4405 - 500G 2240 19 Ammonium persulfate 98% EP Cat # 1082-4400 - 1KG 1400 20 Ammonium sulfate 99% EP Cat # 1082-4400 - 1KG 1400 21 Aniline Blue, water soluble GR Cat # 1082-4400 - 1KG 1400 21 Aniline Blue, water soluble GR Cat # 1099-4425 - 25G 2520 22 L(+)-Ascorbic acid 99%	<u>10</u>	Aluminium ammonium sulfate	_		
12	11	Ammonium hydroxide 25~28%EP Cat #			
Adult	40		_	1L	840
1081-4405		4405	_	500G	1680
1060-4405	<u>13</u>			500G	1540
di-Ammonium hydrogen citrate, reagent grade, ACS Cat # AM0332	14		_	500G	980
16	<u>15</u>		_		7670
17	<u>16</u>	Ammonium iron(II) sulfate hexahydrate	_	500G	1960
18	<u>17</u>	Ammonium nitrate 99% EP Cat # 1075-	_		
19	<u>18</u>	Ammonium oxalate monohydrate 99%	_		
Ammonium sulfate 99% EP Cat # 1082- 4400	<u>19</u>	Ammonium persulfate 98% EP Cat #	_		
A400	20			300G	1200
1087-4125	<u>20</u>	4400	_	1KG	1400
23 D-Lactose Cat # J66376	<u>21</u>		_	25G	2520
23 D-Lactose Cat # J66376	<u>22</u>	1 ' '	_	25G	980
24 Methyl Red GR Cat # 5565-4125	23				31731
25 Barbituric acid, 99% Cat # A10934			_		1820
A105		 	_		5195
27 Rose Bengal Cat # A17053	<u>26</u>	Barium carbonate 99% GR Cat # 2002-	_	500G	6300
28 Benzoic acid 99.5% EP Cat # 2018-4405	<u>27</u>		_		9126
1405	28	-	_		1400
30 Boric acid 99.5% EP Cat # 2036-4405 _ 500G 1400 31 Bromocresol Green GR Cat # 2043-4125 _ 25G 7420 32 Calcium carbonate 98% EP Cat # 2505-4400 _ 1KG 1540 33 Calcium chloride anhydrous CP Cat # 2507-1400 _ 1KG 2380 34 Calcium gluconate 98% EP Cat # 2509- _ _ _	<u>29</u>		_	500G	980
31 Bromocresol Green GR Cat # 2043-4125	30		_		1400
4400 - 1KG 1540 33 Calcium chloride anhydrous CP Cat # 2507-1400 - 1KG 2380 34 Calcium gluconate 98% EP Cat # 2509- - 1KG 2380			_		7420
33 Calcium chloride anhydrous CP Cat # - 1KG 2380 34 Calcium gluconate 98% EP Cat # 2509- - 1KG 2380	32	Calcium carbonate 98% EP Cat # 2505-	_		1540
34 Calcium gluconate 98% EP Cat # 2509-	<u>33</u>	Calcium chloride anhydrous CP Cat #	_		2380
14405	<u>34</u>		_	500G	3500

<u>35</u>	Calcium lactate			N/Q
36	Calcium phosphate monobasic 95% EP	_		11/Q
30	Cat # 2518-4405	_	500G	1680
<u>37</u>	Calcium phosphate tribasic CP Cat #		3000	1000
37	2519-1405	_	500G	2240
38	DL-Camphor 96% EP Cat # 2524-4405		500G	3500
39	Carbon tetrachloride	_	3000	N/Q
40	Cedar oil EP Cat # 2536-4425	_	25G	980
	Chloroform 99.8% HPLC Cat # 2548-	_	230	960
<u>41</u>	2304	_	41	9540
42			4L	8540
42	Cholesterol EP Cat # 2552-4425	<u> </u>	25G	2800
<u>43</u>	Chromium(III) chloride, anhydrous,		5.0	10671
	99.9% (metals basis) Cat # 0356	_	5G	10671
44	Citric acid monohydrate 99.5% EP Cat #		5000	1120
	2562-4405	_	500G	1120
<u>45</u>	Cobalt(II) oxide, 95% Cat # 023141	_	25G	26676
<u>46</u>	Copper(II) chloride anhydrous 95% CP			
	Cat # 2645-1405	_	500G	7700
<u>47</u>	Copper(I) oxide 95% CP Cat # 2580-			
	1405	_	500G	5880
<u>48</u>	D(-)-Fructose 98% EP Cat # 4047-4405		500G	1960
<u>49</u>	D(+)-Galactose 98% GR Cat # 4053-			
	4125		25G	2660
<u>50</u>	Dextrose(Glucose) 98% EP Cat # 3020-			
	4405		500G	840
<u>51</u>	Ammonium phosphate dibasic 99% EP			
	Cat # 1078-4405	_	500G	1260
<u>52</u>	Diethyl ether/Solvent D.E.E		1L	0
53	Diphenylcarbazone 60% GR Cat # 3066-	<u></u>		
	4125	_	25G	6580
<u>54</u>	Potassium oxalate monohydrate 99% EP		250	0500
	Cat # 6604-4405	_	500G	2240
<u>55</u>	Sodium phosphate dibasic anhydrous		3000	2240
33	99% EP Cat # 7613-4405	_	500G	1540
<u>56</u>	D(+)-Maltose monohydrate 92% EP Cat		3000	1340
30	# 5522-4425	_	25G	1400
57	Ethanol/Solvent E		2.5L	3627
		_	2.3L	3027
<u>58</u>	Methylene blue, carbol solution, for	_	500MI	5 200 00
	microscopy Cat # AZ02060500		500ML	5,200.00
<u>59</u>	Iron(III) sulfate n-hydrate 60~80% EP		117.0	
	Cat # 16029-74		1KG	0
<u>60</u>	Iron(III) sulfate hydrate, reagent grade		477.6	7020
	Cat # HI03521000		1KG	7930
<u>61</u>	Iron(II) sulfate heptahydrate 98~102.5%		5000	000
	EP Cat # 5017-4405		500G	980
<u>62</u>	Formaldehyde 35% EP Cat # 4044-4400		1L	1260
<u>63</u>	Formic acid 85% EP Cat # 4046-4405		500G	1260
<u>64</u>	Iron(III) chloride, anhydrous, 98% Cat #			
	012357		10G	11092
<u>65</u>	Gelatin CP Cat # 4055-1405		500G	2380
<u>66</u>	Crystal Violet GR Cat # 2601-4125		25G	1400
<u>67</u>	Glycerine 99% EP Cat # 4066-4405		500G	1540
<u>68</u>	Hematoxylin, C.I. 75290, pH indicator			
	Cat # HE00700005		5G	5720
<u>69</u>	Tris(hydroxymethyl)aminomethane 99%			
	EP Cat # 8565-4405		500G	7000
<u>70</u>	Iodine 99% EP Cat # 5010-4405		500G	13720
71	Iron(II) chloride, anhydrous, 99.5%			
	(metals basis) Cat # 031141		5G	17691
<u>72</u>	Isoamyl alcohol 98% EP Cat # 5029-			2.071
-	4405		500ML	2380
	1100	İ	JOUNIL	2300

73	Leishman Stain Cat # A11644	25G	10389
74	Lead(II) acetate trihydrate 99% EP Cat #	250	10307
_	5075-4405	500G	2125
<u>75</u>	Lithium chloride anhydrous 98% EP Cat		
	# 5086-4405	500G	5000
<u>76</u>	MAC-CONKEY AGAR Cat #		
	CM0007B	500G	9214
77	Magnesium chloride anhydrous 98% EP	2002	721.
_	Cat # 5504-4405	500G	4125
78	Magnesium hydroxide CP Cat # 5506-	2002	1120
	1405	500G	1375
<u>79</u>	D(+)-Maltose monohydrate 92% EP Cat		10,10
	# 5522-4425	25G	1250
80	Mercury(II) iodide, red 99% GR Cat #	200	1200
	5543-4125	25G	2000
81	2-Mercapto-1-methylimidazole, 98%	200	2000
	Cat # A13094	25G	18533
82	Methyl alcohol 99.5% EP Cat # 5558-	200	13000
	4404	4L	2240
83	Methyl acetate 99% EP Cat # 5555-4400	1L	2375
84	Methyl Red GR Cat # 5565-4125	25G	1625
85	Methyl salicylate 98% EP Cat # 5569-	200	1020
	4405	500G	2250
86	Sodium nitrite 98% EP Cat # 7601-4405	500G	1125
87	1-Naphthol 97% EP Cat # 5597-4425	25G	1250
88	Nicotinic acid 99.5% EP Cat # 5614-	233	1250
	4405	500G	5625
89	NUTRIENT AGAR Cat # CM0003B	500G	8336
90	Oxalic acid dihydrate 99.5~100.2% EP	2000	0330
	Cat # 5640-4405	500G	1375
91	Paraffin liquid EP Cat # 6503-4405	500ML	1125
92	Perchloric acid 70% GR Cat # 6513-	3001112	1123
	4105	500G	4125
93	Picric acid, extra pure (with approx. 30%	2000	1120
	H2O) Cat # AC17690250	250G	14560
94	Potassium bromide 99~100.5% EP Cat #		
_	6563-4405	500G	2000
95	Potassium chloride 99% EP Cat # 6566-		
_	4405	500G	875
96	Potassium hydroxide, pellet 85% EP Cat		
	# 6584-4405	500G	1375
97	Potassium iodide 99.5% EP Cat # 6599-		
	4425	25G	875
98	Potassium nitrate 99% EP Cat # 6603-		
	4405	500G	1500
99	Potassium sulfate 99% EP Cat # 6621-		
	4405	500G	1125
<u>100</u>	Pyridine 99.5% EP Cat # 6631-4405	500ML	4125
<u>101</u>	Silver(I) nitrate 99.8% GR Cat # 7520-		
	4125	25G	8750
<u>102</u>	Silver(I) sulfate 99.5% GR Cat # 7524-		
L	4125	25G	8500
<u>103</u>	Single super phosphate		
104	Sodium acetate anhydrous 99% EP Cat #		
	7527-4405	500G	1125
<u>105</u>	Sodium hydrogen carbonate 99~100.5%		
	EP Cat # 7566-4405	500G	750
<u>106</u>	Sodium hydrogen carbonate 99~100.5%		
	EP Cat # 7566-4400	1KG	1250
<u>107</u>	Sodium chloride 99% EP Cat # 7548-		
	4400	1KG	1125
		•	

Sodium citrate dihydrate 99% EP Cat #	460	G 12 14 1 1 2004 FB G "			
EP Cat # 7566-4405 500G 750	<u>108</u>	Sodium citrate dihydrate 99% EP Cat # 7555-4405		500G	1375
EP Cat # 7566-4405 500G 750	109	Sodium hydrogen carbonate 99~100.5%			
EP Cat # 7566-4400		EP Cat # 7566-4405		500G	750
111 Sodium hydroxide, pellet 97% EP Cat #	<u>110</u>				
7570-4405 Sodium nitrate 99% EP Cat # 7599-4405 SoOG 1125				1KG	1250
112 Sodium nitrate 99% EP Cat # 7599-4405 Sodium perchlorate monohydrate 98% EP Cat # 7732-4405 Sodium perchlorate monohydrate 98% EP Cat # 7732-4405 Sodium sulfate anhydrous 99% EP Cat # 7630-4405 Soug 750 115	<u>111</u>				
13					
EP Cat # 7732-4405 500G 3375	-			500G	1125
114	<u>113</u>	-			
T630-4405 Starch, soluble EP Cat # 7663-4405 500G 1500				500G	3375
115	<u>114</u>	<u>*</u>			
116					
1.2					
97% GR Cat # 1046-4125 25G 2250 118	-			500G	750
118 Sulfuric Acid 95% EP Cat # 7683-4405 500G 3861 119 Thiourea, extra pure Cat # TI03001000 1KG 5590 120 Sodium citrate dihydrate 99% EP Cat # 7555-4405 500G 1375 121 Trichloroacetic acid, flake 99% EP Cat # 8549-4405 500G 6000 122 Urea phosphate 25G 9828 123 Uric acid, 99% Cat # A13346 25G 9828 124 Vacutainer evacuated glass container 2125 Xylene 80% EP Cat # 8587-4404 4L 3375 125 Zinc carbonate basic, 97%, Zn >58.0% cat # A14590 250gm 6178 127 Glass Beakers 50 ml 12 Nos. 1200 128 Glass Beakers 250 ml 12 Nos. 1200 129 Glass Beakers 250 ml 2 12 Nos. 1200 130 Glass Beakers 500 ml 6 Nos. 900 131 Glass Beakers 1000 ml 6 Nos. 1200 132 Glass Flasks 100ml 12 Nos. 1200 133 Glass Flasks 100ml 12 Nos. 1200 134 Glass Flasks 100ml 6 Nos. 1150 135 Glass Flasks 100ml 6 Nos. 1150 136 Graduated glass cylinders 100 ml 6 Nos. 1450 137 Graduated glass cylinders 500 ml 6 Nos. 950 138 Glass Pipette Iml 6 Nos. 400 139 Glass Pipette 5ml 6 Nos. 600 140 Glass Pipette 10ml 12 Nos. 2000 141 Glass Pipette 10ml 12 Nos. 2000 142 Dropping Bottles 24 Nos. 2400 144 Centrifuge Tubes Plastic 15ml. 200 Nos. 3000 144 Centrifuge Tubes Plastic 15ml. 200 Nos. 3000 144 Centrifuge Tubes Plastic 15ml. 200 Nos. 3000 145 Centrifuge Tubes Plastic 15ml. 200 Nos. 3000 146 Centrifuge Tubes Plastic 15ml. 200 Nos. 3000 147 Centrifuge Tubes Plastic 15ml. 200 Nos. 3000 148 Centrifuge Tubes Plastic 15ml. 200 Nos. 3000 149 Centrifuge Tubes Plastic 15ml. 200 Nos. 3000 140 Centrifuge Tubes Plastic 15ml. 200 Nos. 3000	<u>117</u>			4.5.~	
Thiourea, extra pure Cat # TI03001000	4.5-				
Sodium citrate dihydrate 99% EP Cat # 7555-4405 500G 1375 121 Trichloroacetic acid, flake 99% EP Cat # 8549-4405 500G 6000 6000 122 Urea phosphate 123 Uric acid, 99% Cat # A13346 25G 9828 124 Vacutainer evacuated glass container 125 Xylene 80% EP Cat # 8587-4404 4L 3375 126 Zinc carbonate basic, 97%, Zn >58.0% cat # A14590 250gm 6178 122 Glass Beakers 50 ml 12 Nos. 800 128 Glass Beakers 100 ml 12 Nos. 1200 130 Glass Beakers 500 ml 12 Nos. 1200 131 Glass Beakers 500 ml 6 Nos. 1200 132 Glass Flasks 100ml 12 Nos. 1200 132 Glass Flasks 100ml 12 Nos. 1200 133 Glass Flasks 250ml 12 Nos. 1200 134 Glass Flasks 500ml 12 Nos. 1200 135 Glass Flasks 250ml 12 Nos. 1200 136 Graduated glass cylinders 100 ml 6 Nos. 1450 136 Graduated glass cylinders 500 ml 6 Nos. 400 137 Graduated glass cylinders 500 ml 6 Nos. 400 139 Glass Pipette 1ml 6 Nos. 400 139 Glass Pipette 5ml 6 Nos. 600 140 Glass Pipette 10ml 12 Nos. 600 142 Pipette Filler/sucker 10 Nos. 2000 143 Dropping Bottles 24 Nos. 2400 144 Centrifuge Tubes Plastic 15ml. 200 Nos. 3000 145 Centrifug					
7555-4405 500G 1375	-			1KG	5590
Trichloroacetic acid, flake 99% EP Cat # 8549-4405 500G 6000	<u>120</u>			500G	1075
8549-4405 500G 6000 122 Urea phosphate 25G 9828 124 Vacutainer evacuated glass container 125 Xylene 80% EP Cat # 8587-4404 4L 3375 126 Zinc carbonate basic, 97%, Zn >58.0% cat # A14590 250gm 6178 127 Glass Beakers 50 ml 12 Nos. 800 128 Glass Beakers 100 ml 12 Nos. 1200 129 Glass Beakers 250 ml 12 Nos. 1200 130 Glass Beakers 500 ml 6 Nos. 900 131 Glass Beakers 1000 ml 6 Nos. 1200 132 Glass Flasks 100ml 12 Nos. 1200 133 Glass Flasks 250ml 12 Nos. 1200 134 Glass Flasks 500ml 6 Nos. 1200 135 Glass Flasks 500ml 12 Nos. 1200 136 Glass Flasks 500ml 6 Nos. 1450 137 Graduated glass cylinders 100 ml 6 Nos. 700 138 Glass Pipette 1ml 6 Nos. 400 139 Glass Pipette 5ml 6 Nos. 600 140 Glass Pipette 10ml 12 Nos. 600 141 Glass Pipette Filler/sucker 10 Nos. 2000 142 Dropping Bottles 24 Nos. 2400 144 Centrifuge Tubes Plastic 15ml. 200 Nos. 3000	404			500G	1375
122 Urea phosphate 123 Uric acid, 99% Cat # A13346 25G 9828 124 Vacutainer evacuated glass container 125 Xylene 80% EP Cat # 8587-4404 4L 3375 126 Zinc carbonate basic, 97%, Zn >58.0% cat # A14590 250gm 6178 127 Glass Beakers 50 ml 12 Nos. 800 128 Glass Beakers 50 ml 12 Nos. 1200 129 Glass Beakers 250 ml 12 Nos. 1200 130 Glass Beakers 500 ml 6 Nos. 900 131 Glass Beakers 1000 ml 6 Nos. 1200 132 Glass Flasks 100ml 12 Nos. 1200 133 Glass Flasks 500ml 12 Nos. 1200 134 Glass Flasks 1000ml 6 Nos. 1150 135 Glass Flasks 1000ml 6 Nos. 1450 136 Graduated glass cylinders 100 ml 6 Nos. 700 137 Graduated glass cylinders 500 ml 6 Nos. 600 139 Glass Pipette 1ml 6 Nos. <td><u>121</u></td> <td>·</td> <td></td> <td>5000</td> <td>6000</td>	<u>121</u>	·		5000	6000
123 Uric acid, 99% Cat # A13346 25G 9828 124 Vacutainer evacuated glass container 125 Xylene 80% EP Cat # 8587-4404 4L 3375 126 Zinc carbonate basic, 97%, Zn >58.0% cat # A14590 250gm 6178 127 Glass Beakers 50 ml 12 Nos. 800 128 Glass Beakers 100 ml 12 Nos. 1200 129 Glass Beakers 250 ml 12 Nos. 1200 130 Glass Beakers 500 ml 6 Nos. 900 131 Glass Beakers 1000 ml 12 Nos. 1200 132 Glass Flasks 100ml 12 Nos. 1200 133 Glass Flasks 100ml 12 Nos. 1200 134 Glass Flasks 500ml 12 Nos. 1200 135 Glass Flasks 500ml 6 Nos. 1150 136 Graduated glass cylinders 100 ml 6 Nos. 700 137 Graduated glass cylinders 500 ml 6 Nos. 950 138 Glass Pipette 1ml 6 Nos. 400 139 Glass Pipette 5ml 6 Nos. 600 140 Glass Slides 100 Pkt. 8000 141 Glass Pipette 10ml 2 Nos. 2000 142 Dropping Bottles 24 Nos. 2400 144 Centrifuge Tubes Plastic 15ml. 200 Nos. 3000	122			500G	6000
124 Vacutainer evacuated glass container 125 Xylene 80% EP Cat # 8587-4404 4L 3375 126 Zinc carbonate basic, 97%, Zn >58.0% cat # A14590 250gm 6178 127 Glass Beakers 50 ml 12 Nos. 800 128 Glass Beakers 100 ml 12 Nos. 1200 129 Glass Beakers 250 ml 12 Nos. 1200 130 Glass Beakers 500 ml 6 Nos. 900 131 Glass Flasks 1000 ml 6 Nos. 1200 132 Glass Flasks 100ml 12 Nos. 1200 133 Glass Flasks 250ml 12 Nos. 1200 134 Glass Flasks 500ml 12 Nos. 1200 134 Glass Flasks 500ml 6 Nos. 1450 135 Glass Flasks 500ml 6 Nos. 1450 135 Graduated glass cylinders 100 ml 6 Nos. 700 137 Graduated glass cylinders 500 ml 6 Nos. 950 138 Glass Pipette 1ml 6 Nos. 6 Nos. 139 G		1 1		250	0020
125 Xylene 80% EP Cat # 8587-4404 4L 3375 126 Zinc carbonate basic, 97%, Zn >58.0% 250gm 6178 127 Glass Beakers 50 ml 12 Nos. 800 128 Glass Beakers 100 ml 12 Nos. 1200 129 Glass Beakers 250 ml 12 Nos. 1200 130 Glass Beakers 500 ml 6 Nos. 900 131 Glass Flasks 1000 ml 6 Nos. 1200 132 Glass Flasks 250ml 12 Nos. 1200 133 Glass Flasks 500ml 12 Nos. 1200 134 Glass Flasks 250ml 12 Nos. 1200 134 Glass Flasks 500ml 6 Nos. 1150 135 Glass Flasks 500ml 6 Nos. 1450 136 Graduated glass cylinders 100 ml 6 Nos. 700 137 Graduated glass cylinders 500 ml 6 Nos. 950 138 Glass Pipette 1ml 6 Nos. 600 139 Glass Pipette 5ml 6 Nos. 600 140	-			250	9828
126 Zinc carbonate basic, 97%, Zn >58.0% 250gm 6178 127 Glass Beakers 50 ml				AT	2275
cat # A14590 250gm 6178 127 Glass Beakers 50 ml				4L	33/3
127 Glass Beakers 50 ml	126	, , , , , , , , , , , , , , , , , , ,		250	6170
128 Glass Beakers 100 ml	127				
129 Glass Beakers 250 ml			_		+
130 Glass Beakers 500 ml			_		
131 Glass Beakers 1000 ml			_		
132 Glass Flasks 100ml	-				
133 Glass Flasks 250ml					
134 Glass Flasks 500ml			_		
135 Glass Flasks 1000ml					
136 Graduated glass cylinders 100 ml _ 6 Nos. 700 137 Graduated glass cylinders 500 ml _ 6 Nos. 950 138 Glass Pipette 1ml _ 6 Nos. 400 139 Glass Pipette 5ml _ 6 Nos. 600 140 Glass Slides _ 100 Pkt. 8000 141 Glass Pipette 10ml _ 12 Nos. 600 142 Pipette Filler/sucker _ 10 Nos. 2000 143 Dropping Bottles _ 24 Nos. 2400 144 Centrifuge Tubes Plastic 15ml. _ 200 Nos. 3000					
137 Graduated glass cylinders 500 ml _ 6 Nos. 950 138 Glass Pipette 1ml _ 6 Nos. 400 139 Glass Pipette 5ml _ 6 Nos. 600 140 Glass Slides _ 100 Pkt. 8000 141 Glass Pipette 10ml _ 12 Nos. 600 142 Pipette Filler/sucker _ 10 Nos. 2000 143 Dropping Bottles _ 24 Nos. 2400 144 Centrifuge Tubes Plastic 15ml. _ 200 Nos. 3000			<u> </u>		
138 Glass Pipette 1ml _ 6 Nos. 400 139 Glass Pipette 5ml _ 6 Nos. 600 140 Glass Slides _ 100 Pkt. 8000 141 Glass Pipette 10ml _ 12 Nos. 600 142 Pipette Filler/sucker _ 10 Nos. 2000 143 Dropping Bottles _ 24 Nos. 2400 144 Centrifuge Tubes Plastic 15ml. _ 200 Nos. 3000		<u> </u>	_		+
139 Glass Pipette 5ml _ 6 Nos. 600 140 Glass Slides _ 100 Pkt. 8000 141 Glass Pipette 10ml _ 12 Nos. 600 142 Pipette Filler/sucker _ 10 Nos. 2000 143 Dropping Bottles _ 24 Nos. 2400 144 Centrifuge Tubes Plastic 15ml. _ 200 Nos. 3000		Č Ž			
140 Glass Slides _ 100 Pkt. 8000 141 Glass Pipette 10ml _ 12 Nos. 600 142 Pipette Filler/sucker _ 10 Nos. 2000 143 Dropping Bottles _ 24 Nos. 2400 144 Centrifuge Tubes Plastic 15ml. _ 200 Nos. 3000		*	_		
141 Glass Pipette 10ml	-				
142 Pipette Filler/sucker - 10 Nos. 2000 143 Dropping Bottles _ 24 Nos. 2400 144 Centrifuge Tubes Plastic 15ml. _ 200 Nos. 3000			_		
- 10 Nos. 2000 143 Dropping Bottles _ 24 Nos. 2400 144 Centrifuge Tubes Plastic 15ml. _ 200 Nos. 3000		1	_	12 1105.	000
144 Centrifuge Tubes Plastic 15ml. _ 200 Nos. 3000		1 ipone i moi/suckei		10 Nos.	2000
	<u>143</u>	Dropping Bottles		24 Nos.	2400
	144	Centrifuge Tubes Plastic 15ml.		200 Nos.	3000
	<u>145</u>		-	200 Nos.	4400

Sr	Name of Chemical	Analytical/	Cat. No.	Estimate	Estimate
		Commercia		d Quantity	d
N		1		to be procured in	Amount
0				F/Y 2018- 19	
1	NUTRIENT BROTH	Analytical	cat#CM0001B	500gm	7722
<u>2</u>	NUTRIENT AGAR	_	cat#CM0003B	500gm	6669
<u>3</u>	MAC-CONKEY BROTH	_	cat#CM0005B	500gm	8424
4	MAC-CONKEY AGAR	_	cat#CM0007B	500gm	7371
<u>5</u>	BRAIN HEART INFUSION	_	cat#CM1135B	500gm	6318
<u>6</u>	CAMPYLOBACTER AGAR BASE	_	cat#CM0689B	500gm	19656
<u></u>	BRUCELLA AGAR (USA)	_	cat#CM0691B	500gm	14742
<u>8</u>	MUELLER HINTON AGAR	_	cat#CM0337B	500gm	7020
9	SIMMONS CITRATE AGAR	_	cat#CM0155B	500gm	9828
	S S AGAR	_	cat#CM0099B	500gm	10530
11	SABOURAUD DEXTROSE AGAR	_	cat#CM0041B	500gm	5616
12	TETRATHIONATE BROTH BASE	_	Cat # CM0029B	500gm	6000
<u>13</u>		_	ca+#CN40472D	F00~~	6340
1.0	MEDIUM TRYPTONE COVA PROTU	_	cat#CM0173B	500gm	6318
14		_	cat#CM0129B	500gm	4300
15 16		_	cat#CM0401B	500gm	19656
10	110	_	cat#CM0145B	500gm	15444
17			cat#CM0131B	500gm	4600
18		_	Cat#Civio131B	Joogiii	4000
===	AGAR	_	cat#CM0151B	500gm	16146
19	TETRATHIONATE BROTH (USA)		cat#CM0671B	500gm	11934
20		_	cat#CM0361B	500gm	16146
21	TRIPLE SUGAR IRON AGAR	_	cat#CM0277B	500gm	6669
22	BRAIN HEART INFUSION	_	cat#CM1136B	500gm	21060
23		_		500gm	41250
24		_	cat#CM0139B	500gm	13338
25	XLD MEDIUM	_	cat#CM0469B	500gm	6669
26	Chrome Agar	_		500gm	12350
<u>27</u>	Loria Broth	_	cat#02-384-500	500gm	18800
<u>28</u>	Peptone BIO	_	cat#6511-1105	2 kg	28000
<u>29</u>	LAB-LEMCO POWDER (BEEF				
	EXTRACT)	_	cat#LP0029B	1 kg	24000
<u>30</u>	YEAST EXTRACT (POWDER)		cat#LP0021B	2 kg	36000
<u>31</u>	Sodium chloride 99% EP		cat#7548-4405	2 kg	2000
<u>32</u>	Hydrogen peroxide 30% EP	_	cat#4104-4400	1kg	1000
33	Isopropyl alcohol 99.5% EP	_	cat#5035-4404	4L	2700
34	Isoamyl alcohol 98% EP	_	cat#5029-4405	500ml	1700
<u>35</u>		_	cat#4090-4400	1 Kg	2223
<u>36</u>	,				
	w/w, synthesis grade	_	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1 Kg	11583
37	Potassium iodide 99.5% EP	_	cat#6599-4425	25gm	700
38		_	cat#2536-4425	25gm	700
39	Dimethyl sulfoxide 99.5% EP	_	cat#3047-4405	500gm	1400
40	Sulfuric acid 95% 95% GR	_	cat#7781-4100	1 kg	3042
41	Phenol 99% EP	_	cat#6521-4400	1 kg	1400
42	Glycerine 99% EP	_	cat#4066-4405	500gm	1100
<u>43</u>	Sodium deoxycholate, 97%	_	cat#J62288	25gm	8190
45	Phenol red GR 1-Naphthol 97% EP	_	cat#6522-4125	25gm	2400 1000
46	•	_	cat#5597-4425 cat#4000-4405	25gm 500gm	1800
47		_	cat#4000-4405		1100
4/	Potassium hydroxide, pellet	<u> </u>	Lai#0304-4405	500gm	1100

	85% EP				
48	Sodium acetate anhydrous 99%				
	EP	_	cat#7527-4405	500gm	900
49	Dextrose 98% EP		cat#3020-4405	1000gm	1200
<u>50</u>	Lactose monohydrate EP	_	cat#5058-4405	500gm	1000
<u>51</u>	D-Mannitol 99.5% EP	_	cat#5534-4405	500gm	2100
<u>52</u>	D(-)-Fructose 98% EP	_	cat#4047-4425	25gm	500
<u>53</u>	L(+)-Arabinose EP	_	cat#1123-4425	25gm	7600
<u>54</u>	L-Ornithine hydrochloride, extra		cat#OR0055002		
	pure	_	5	25gm	3100
<u>55</u>	Tetramethyl-p-phenylenediami				
	ne dihydrochloride	_		5 G	7500
<u>56</u>	Lactophenol Cotton Blue	<u> </u>		100 ML	6000
<u>57</u>	KOVAC's Reagent	<u> </u>		100 ML	4500
<u>58</u>	Acetic Acid	_		2.5 Ltr.	2,200.00
<u>59</u>	Glass Beakers 50 ml	<u> </u>		12 Nos.	800
<u>60</u>	Glass Beakers 100 ml	_		12 Nos.	1200
<u>61</u>	Glass Beakers 250 ml	_		12 Nos.	1200
<u>62</u>	Glass Beakers 500 ml	<u> </u>		6 Nos.	900
<u>63</u>	Glass Beakers 1000 ml	_		6 Nos.	1200
<u>64</u>	Glass Flasks 100ml	<u> </u>		12 Nos.	1200
<u>65</u>	Glass Flasks 250ml	<u> </u>		12 Nos.	1200
<u>66</u>	Glass Flasks 500ml	<u> </u>		6 Nos.	1150
<u>67</u>	Glass Flasks 1000ml	<u> </u>		6 Nos.	1450
<u>68</u>	Graduated glass cylinders 100				
	ml	_		6 Nos.	700
<u>69</u>	Graduated glass cylinders 500				
	ml	_		6 Nos.	950
<u>70</u>	Glass Pipette 1ml	<u> </u>		6 Nos.	400
<u>71</u>	Glass Pipette 5ml	_		6 Nos.	600
<u>72</u>	Glass Slides			100 Pkt.	8000
<u>73</u>	Glass Pipette 10ml			12 Nos.	600
<u>74</u>	Pipette Filler/sucker			10 Nos.	2000
<u>75</u>	Dropping Bottles			24 Nos.	2400
<u>76</u>	Centrifuge Tubes Plastic 15ml.	<u> </u>		200 Nos.	3000
<u>77</u>	Falcon Tubes Plastic 50ml.			200 Nos.	4400

Analytical grade Chemicals

1 1,1,2,2 Tetrachloroelhane 2.5 Ltr 5000 2 1-Bromodecane 250 ml 5000 3 1-Bromohexane 250 mL 6500 4 1-Methylimidazole 1 Ltr 12000 5 1-Napthol 1 kg 4000	
3 1-Bromohexane 250 mL 6500 4 1-Methylimidazole 1 Ltr 12000	
4 1-Methylimidazole 1 Ltr 12000	
5 1-Napthol 1 kg 4000	
1 = 1 ·································	
6 1-Napthol-3,6-Disulfomic Acid 1 kg 5000	
2 1-Napthylamine-7-Sulfoinc Acid 500 gm 5000	
2 Naphthol Beta Naphthol 1 kg 6000	
9 2- Propanol 2.5 ltr 4000	
10 2-methoxyethanol 250 ml 6000	
11 2-Nitro aniline 25 g 7500	
12 3,3,4,4-Benzo- 500 gm	
Phenontetracarboxylic	
dianhydride 10000	
13 3,5-Dinitrosalicylic Acid 500 gm 5000	
14 3-Amino Benzoic Acid 500 gm 4000	
15 3-Chloroanisole 250 gm 5000	
<u>16</u> 3-Chlorodbenzoic Acid 500 gm 5000	
17 4,4'-Oxydianiline 500g 8000	
18 4-Aminophenol 250 gm 3500	
19 4-Chlorophenol 250 gm 3500	
20 4-nitro aniline 250 gm 6500	
21 4-Nitroanisole 250 gm 5500	
22 4-Nitrophenol 500 gm 5500	
Acetaldehyde 2 Kg 4000	
24 Acetamid 500 gm 4500	
25 Acetamiprid 100g 6000	
26 Acetanilide 2 Ltr 6500	
27 Acetic Acid (HPLC) 2.5Ltr 3500	
28 Acetonitrile 2.5 Ltr 5000	
29 Acetyl salicylic Acid 500 gm 5000	
30 Acriic Acid 500 ml 4000	
31 Acryl amide -BIS 500 gm 4000	
32 Adipic acid 1Kg 5000	
33 Agar agar 500 gm 6000	
34 Aluminium Acetate 1 kg 5000	
35 Aluminium Nitrate 500 GM 5500 36 Aluminum Carbonate 1 kg 5000	
37 Aluminum chloride 500 gm 4000 38 Aluminum Hydroxide 1 kg 6000	
39 Aluminum Oxide 500 gm 3000	
40 Aluminum Sulfate 500 gm 4000	
41 Amberlite 500 gm 70003	
42 Ammonium Acetate 1 kg 4500	
43 Ammonium Bromide 500 gm 4000	
44 Ammonium chloride 500 gm 6500	
45 Ammonium Citrate 1 kg 7000	
46 Ammonium Dichromate 1 kg 7000	
47 Ammonium Dihydrogen 500 gm	
Phosphate 4000	
48 Ammonium Fluoride 500g 12000	
49 Ammonium Hydrogen Carbonate 1 kg 5000	
50 Ammonium Hydrogen Phosphate 1 kg 5000	
51 Ammonium Iron (II) Sulfate 500 gm 3500	

<u>52</u>	Ammonium Iron (III) Sulfate	1 kg	6000
53	Ammonium metavanadate	500 G	8000
54	Ammonium per sulfate	1Kg	4000
55	Ammonium Sulfamate	1 kg	5500
<u>56</u>	Ammonium Sulfate	1 kg	7000
<u>57</u>	Ammonium Thiocyante	1 kg	6500
58	Ammonium tungstate	1 Kg	5000
<u>58</u>	Ammonium Vanadate	500 gm	2000
60	Amylase	250 gm	1500
61	Aniline	230 gm	5000
62	Anisole	250 gm	2000
	Anthracene		
63	Anthron	500 gm	5000
<u>64</u>	Antimon Antimany Trichloride	1 kg	6000
<u>65</u>	3	500 gm	4100
<u>66</u>	Antimon (III) Sulfid	500 gm	4000
<u>67</u>	Antimony Metal (Powder)	500 gm	6000
<u>68</u>	Arsenic Trioxide	1 kg	7000
<u>69</u>	Ascorbic Acid	1 kg	4500
<u>70</u>	Barium Carbonate	500 gm	5000
<u>71</u>	Barium Chloride	500 gm	3000
<u>72</u>	Barium Sulphate	1 kg	6000
<u>73</u>	Benzaldehyde	500 gm	7000
<u>74</u>	Benzene (HPLC)	2.5 ltr	8000
<u>75</u>	Benzil	250 gm	5000
<u>76</u>	Benzimidazole	250 gm	5000
<u>77</u>	Benzophenone	500 gm	7000
<u>78</u>	Benzophenone-3,3',4,4'-	250 -	9000
70	tetracarboxylic dianhydride	250 g	8000
<u>79</u>	Benzyl bromide	250 ml	5000
80	Bismuth Chloride	1Kg	12000
81	Bismuth nitrate pentahydrate Bismuth Ox chloride	1Kg	8000
82		500 gm	5000
83	Bismuth Oxide	500 gm	6000
84	Bismuth oxynitrate	500 gm	6000
<u>85</u>	Bismuth tungstate Boric Acid	500 g	6500
86	Bromine Bromine	2 kg	8500
<u>87</u>		1 kg	6000
88	Butanol (L. H. O. (L. (L.) weinseure (L. (L.)	2.5ltr	5500
<u>89</u>	C ₄ H ₆ O ₆ (L(+) weinsaure L (+) Trataric Acid	1Kg	6500
90	Cadmium Acetate	200g	15000
91	Cadmium Carbonate	500 gm	4500
92	Cadmium chloride	500 gm	8500
93	Cadmium Chloride Cadmium Chloride	500 gm	4000
94	Cadmium Nitrate	500 gm	5500
95	Cadmium Sulfate	50 gm	8000
96	Caffeine	1 KG	5000
97	Calcium Bicarbonate	1 Kg	6000
98	Calcium Chloride	500g	5000
99	Calcium Hydrogen Phosphate	2 Kg	7000
100	Calcium Hydroxide	1 kg	4500
101	Calcium Nitrate	500 gm	8000
<u>101</u> 102	Calcium Sulphate	1 kg	9000
103	Carbendazim	100g	6200
104	Carbon disulfide	500 mL	7500
105	Carboxymethy cellulose	+	
		1 kg	6200
<u>106</u>	Cellulose, Microcrystalline	1 kg	2500

107	Cellulose Acetate	1 kg	5000
108	cerium sulphate	250 gm	6500
109	Cetyltrimethylammonium bromide	8	
	(CTAB)	500 gm	5500
110	Cetyltrimethylammonium chloride	G	
	(CTAC)	500 gm	5000
<u>111</u>	Chloroauric acid	1gm	11000
112	Chlorobutane	2.5 Ltr	6500
113	Chloroform	2.5 ltr	4500
114	Choline chloride	1 kg	8000
115	Chromic Acid	500 gm	6000
116	Chromium (III) Nitrate	500 gm	9000
117	Chromium (III) Sulfate	500 gm	8500
118	Chromium chloride	1 kg	10000
119	Cinnamic Acid	500 gm	8000
120	Citric Acid	1 kg	6500
121	Cobalt (II) Chloride	1Kg	7000
122	Cobalt Nitrate	1Kg	7500
123	Cobalt Nitrate Cobalt Nitrate	1Kg	5500
124	Cobat Sulphate	1Kg	8000
<u>124</u> 125	Congo Red	250 gm	4700
126			5000
127	Copper Acetate	1kg	
	Copper Chloride	1Kg	5000
128	Copper Nitrate	1Kg	4000
129	copper oxide	500 g	9500
<u>130</u>	Copper Sulfate	500 gm	9000
<u>131</u>	Crystal Violet	250 gm	4000
<u>132</u>	CTAB	1Kg	5000
<u>133</u>	Di- Sodium Hydrogen Phosphate	1 Kg	6300
<u>134</u>	Diacetyl monoxim	500 gm	6000
<u>135</u>	Diatomaceous Earth (Slica)	1 kg	7000
<u>136</u>	Diethanolamine	500 g	8500
<u>137</u>	Diethyl ether	1L	12000
<u>138</u>	Diethylene Glycol	01 ltr	4000
<u>139</u>	Diethylenetriamine	1L	5000
<u>140</u>	Dimethylsulphoxide (DMSO)	1L	15000
<u>141</u>	Dithio oxamide	100 gm	6200
<u>142</u>	Epichloriderin	500 ml	4500
<u>143</u>	Erichrome Black-T (EBT)	250 gm	5000
<u>144</u>	Ethidium Bromide	100 gm	6000
<u>145</u>	Ethyl Silicate	01 ltr	8500
<u>146</u>	Ethyl voilet	25 g	12000
<u>147</u>	Ethylene glycol	2.5 L	10000
148	Ethylenediamine	1 Ltr	6500
149	Ethylenediamine Hydrochloride	500 gm	6000
150	Ethylenediaminetetra acetic Acid	1 Kg	
	Disodium (EDTA)		5500
<u>151</u>	Eugenol	250 ml	4500
<u>152</u>	Europium nitrate hexahydrate	10 gm	9500
<u>153</u>	Ferric Acetate	1Kg	5500
154	ferric nitrate nonahydrate	1 kg	12000
155	Ferric Sulphide	1Kg	9000
156	Folin & Ciocalteus's	2 Ltr	9000
157	Formaldehyde	5 ltr	4500
158	Formic acid	1 L	3500
159	Fumaric acid	1Kg	5000
160	Furfurol Furfurol	500 ml	6000
100	1 diluioi	500 IIII	UUUU

161	Fuxhsin Pulrer	250 gm	6800
162	Gallic Acid	250 gm	7500
163	Gluconic Acid (solutuin 50% extra	250 ml	
	pure)		4700
<u>164</u>	Glucose	2 Kg	4000
<u>165</u>	Gold (III) chloride/auric chloride	1 gm	25000
<u>166</u>	Graphite	1Kg	7500
<u>167</u>	Graphite, Powder	2 Kg	2000
<u>168</u>	Hexafluorotitanic acid	500 gm	6500
<u>169</u>	Hexamethylenetetramine	250 gm	8000
<u>170</u>	Hydrazine	1 L	9500
<u>171</u>	Hydrogen Peroxide (Extra pure)	2 Ltr	6000
<u>172</u>	Hydroquinine	1 kg	4500
<u>173</u>	Hydroxyethyl Cellulose	500 gm	6500
<u>174</u>	Hydroxyl ammonium Chloride	1 Kg	7500
<u>175</u>	Hydroxylamine Hydrochloride	500 gm	6500
<u>176</u>	Iron (II) Chloride (FeCl2)	1 kg	7000
<u>177</u>	Iron (II) Sulphate (FeSO4)	1 kg	7500
178	Iron (III) Chloride (FeCl3)	1 kg	6500
<u>179</u>	Iron (III) Nitrate (Fe(NO3)3	1 kg	6500
180	Iron napthtenate	500gm	11500
<u>181</u>	Iron Sulphide	1 kg	8000
<u>182</u>	K ₃ (FECCN) ₆	01 Kg	6000
<u>183</u>	Lactose	1 kg	4500
<u>184</u>	Lanthanum Chloride	500 gm	9000
<u>185</u>	Lead Acetate	1 kg	8000
<u>186</u>	Lead Carbonate	2 kg	7800
<u>187</u>	lead nitrate	500 g	12000
<u>188</u>	Lead Sulphate	2 kg	5800
<u>189</u>	Lithium Borohydride	250 gm	9000
<u>190</u>	Lithium tert-butoxide	500 gm	7000
<u>191</u>	Litmus	500 gm	6000
<u>192</u>	maganese chloride	1Kg	6000
<u>193</u>	Magnesium Chloride	01 Kg	5500
<u>194</u>	Magnesium Hydrogen Carbonate	01 Kg	6500
<u>195</u>	Magnesium oxide	500 gm	4000
<u>196</u>	Magnesium Oxide Light	01 Kg	4500
<u>197</u>	Magnesium sulfate	1Kg	5000
<u>198</u>	Malic Acid	01 Kg	6800
<u>199</u>	Malonic Acid	500 gm	7000
<u>200</u>	Mangan (II) Chloride 1- hydrate	01 Kg	8500
<u>201</u>	Manganes Dioxide	500 gm	9000
<u>202</u>	Manganese (II) Chloride 4-hyrate	01 Kg	7800
<u>203</u>	Manganese (II) acetat	01 Kg	6500
<u>204</u>	Manganese (II) Sulfate	01 KG	7000
<u>205</u>	Manitol	01 Kg	6000
<u>206</u>	Melachite green	100 g	4500
<u>207</u>	Melamine	1Kg	5000
<u>208</u>	Melhyl Acrylate	01 ltr	7600
<u>209</u>	Mercuric Chloride	500 gm	15000
<u>210</u>	Mercuric Iodide	500 gm	16000
<u>211</u>	Mercuric Sulphide	500 gm	20000
<u>212</u>	Mercurous Chloride	500 gm	11000
<u>213</u>	Mercury (II) Nitrate	500 grm	12000
<u>214</u>	Mercury (II) Sulphate	500 grm	13000
<u>215</u>	Metaphophoric Acid	500 gm	6000
<u>216</u>	Methlene blue	500 gm	9000

217	Methyl Cellulose	500 gm	4500
218	Methyl Green	500 gm	6500
	Methyl Orange		
<u>219</u>	•	500 gm	6000
220	Methylene blue	100g	3000
<u>221</u>	Methylene diphenyl diisocyanate (MDI)	500g	5000
222	Molybdenum (VI) oxide	250 gm	9000
	` ′	-	4000
223	Molybdenum acetate	250 gm	
224 225	Molybdenum oxide	250 gm	6500
	Molybdenum sulphide Murexide	250 gm	6000
226		500 gm 500 ml	5000
227	N,N- Dimethylanilline		6000
228	N,N-dimethylformamide	1 L	7000
229	Naphthol	01 Kg	6000
230	Nicke (II) Nitrate	01 Kg	6000
<u>231</u>	Nicked Oxide	500 gm	7000
232	Nickel nitrate hexahydrate	1 Kg	6500
233	Nikel (II) Sulfate	01 Kg	8000
234	Nikel Carbonate	01 Kg	9000
235	Nikel Chloride	01 Kg	12000
<u>236</u>	Ninhydrin	500 gm	7000
<u>237</u>	N-Isopropylmethacrylamide	100 g	8000
<u>238</u>	Nitric Acid	500 litr	30000
<u>239</u>	Nitrobenzoic Acid	500 gm 250 gm	9000
<u>240</u>	N-N Dinethylformamide	2.5 ltr	9000
<u>241</u>	Oleic Acid	1ltr	7500
<u>242</u>	Osmium chloride	100 g	9500
<u>243</u>	Oxalic Acid	3 kg	8500
<u>244</u>	Palladium (II) chloride	5 g	12000
<u>245</u>	Pathalic Acid	1 Kg	6000
<u>246</u>	Peptone	01 Kg	6000
<u>247</u>	Petroleum Spirit	5 litr	9000
<u>248</u>	Phenol Phthalein	250 gm	6500
<u>249</u>	Phenol Red	250 gm	6000
<u>250</u>	Phenyl boronic acid	100 g	8000
<u>251</u>	Phenyl hydrazine	250 ml	6500
<u>252</u>	Phenyl Phosphate Dinatriumsal	500 gm	
	(Dihydrate)		9800
<u>253</u>	Phenylenediamine	250 gm	7000
<u>254</u>	Phosphoric acid	1 L	5000
<u>255</u>	Phosphorus Acid	1 Ltr	6000
<u>256</u>	Polyethylene Glycol	2.5 ltr	7000
<u>257</u>	Polyethyleneglycol (PEG-2000)	1Kg	1000
<u>258</u>	Polyvinyl Alcohol	01 Kg	9000
<u>259</u>	Polyvinyl Pyrrolidon	01 Kg	10000
<u>260</u>	Potassium Bromate	01 Kg	6000
<u>261</u>	Potassium Carbonate	1 kg	4500
<u>262</u>	Potassium Dichromate	01 Kg	5000
263	Potassium Dihydrogen	500 gm	
	Orthophosphate	_	4500
<u>264</u>	Potassium Dihydrogen Phosphate	01 Kg	6000
<u>265</u>	Potassium Ferrocyanide	01 Kg	7000
<u> 266</u>	Potassium Fluoride	500 gm	8000
<u>267</u>	Potassium Hydroxide	1Kg	4000
<u> 268</u>	Potassium Nitrite	01 kg	5500
269	Potassium Permanganate	01 Kg	6500
270	Potassium Phosphate (Dibasic	01 Kg	7500
	ı	<u>. </u>	1

	Anliydroles)		
<u>271</u>	Potassium Phosphate Tri Basic	1 kg	8500
272	Potassium Sodium Tatrate	1 kg	6000
273	Potassium Thiocyanate	1 kg	0000
	(Hexacyanoterrate)		5000
<u>274</u>	Potasssium Antimon (II) Oxid	01 Kg	
	Tartate		6000
<u>275</u>	Potasssium Bi Carbonate	01 Kg	7500
<u>276</u>	Potasssium Bromide	01 Kg	6000
<u>277</u>	Potasssium Chloride	01 Kg	7000
<u>278</u>	Potasssium Chromate	01 Kg	8000
<u>279</u>	Potasssium Dihydrogen Mono	500 gm	7000
<u>280</u>	Potasssium Hydrogen Phathalate	500 gm	
	(C8H5KO4) Potasssium		5000
204	Biphthalate	01 1/ - 500	6000
281	Potasssium Hydrogen Phosphate	01 Kg 500grm	7000
<u>282</u>	Potasssium Hydrogen Tartrate	500 gm	8000
283	Potasssium Iodate	01 Kg	6000
284	Potasssium Iodie	02 Kg	6500
285	Potasssium Per Iodate	500 gm	5500
286	Potasssium Peroxy Disulphate	01 Kg	4500
<u>287</u>	Potasssium Pyroantimonate K (Sb) OH6)	250 gm	6000
288	Potasssium Sulfate	01 Kg	6000
289	Pottasium permagnate	1 Kg	6000
290	Proline Proline	500 mg	6000
<u>291</u>	Propandiol (1-2 Prophlenglcol)	01 ltr	7500
292	Pyromellitic dianhydride	250 gm	6000
293	Qurecetin	100 gm	8000
294	Resorcinol	1 kg	7000
295	Rhodamine B	100 g	6000
296	Ruthenium chloride	50 g	6000
297	Saccharose	02 Kg	6500
298	Scandium chloride	50 g	6000
299	Selenium powder	100 gm	5000
300	Silicic Acid	1 kg	5000
301	Silver nitrate	50g	20000
302	Silver Sulphate	50g	15000
303	Sodium alginate	1 Kg	5000
304	Sodium Azide	1 kg	7000
305	Sodium Bisultite	1 kg	6500
306	Sodium borohydride	250 g	12000
307	Sodium Bromide	01 Kg	6500
308	sodium carbonate	1 Kg	4000
309	Sodium Chloride	01 Kg	6000
310	Sodium citrate	1Kg	7000
<u>311</u>	Sodium Cobal(II)tinitrite	500 gm	6000
<u>312</u>	Sodium Cyanide	1 kg	5500
<u>313</u>	Sodium Di sulfate	01 Kg	7500
<u>314</u>	Sodium Dihydrogen Phosphate	01 Kg	6500
<u>315</u>	Sodium dodecyl sulfate	500 gm	6000
<u>316</u>	Sodium Dotrcyl Sulfate	01 Kg	6000
<u>317</u>	Sodium Hecxamethyl Phosphate	01 Kg	5000
318	Sodium Hydrogen Carbonate	01 Kg	7000
319	Sodium Hydroxide	1Kg	3500
320	Sodium hypophosphite	500 g	8000
<u>321</u>	Sodium Lauryl Sulfate	1 KG	6000

322	Sodium Matel	1 Kg	5000
323	Sodium Meta- Phosphate	1 Kg	9000
324	Sodium Metasilicate	500 gm	6500
325	Sodium Molydbate	1 Kg	7000
326	Sodium nitrate	1 Kg	4000
327	Sodium Nitrite	01 Kg	6500
328	Sodium Nitroprusside	500 gm	4500
329	Sodium Per-Chlorate	01 Kg	9000
	Sodium Per-Chlorate Sodium Peroxide	01 Kg	
330			9000
331	Sodium Phosphate Sodium Potasssium Tatrate	01 Kg	6000
332		01 Kg	6000
333	Sodium Silicate	01 Kg	7000
334	Sodium Sulfate	1Kg	4000
<u>335</u>	sodium sulfide	500 g	6500
<u>336</u>	Sodium Sulfite	01 Kg	7000
<u>337</u>	Sodium Tangstate	100 gm	8500
<u>338</u>	Sodium Thiosulfate	2 Kg	4500
<u>339</u>	Sodium Todide	500 gm	6500
<u>340</u>	Stannic Chloride	01 Kg	5000
<u>341</u>	stannic oxide	500 g	9500
<u>342</u>	Stannous chloride	500 g	4000
<u>343</u>	Starch	2 Kg	5000
<u>344</u>	Stearic Acid	01 Kg	6500
<u>345</u>	Strontium nitrate	250 g	5000
<u>346</u>	Strontium Nitrate	500 gm	4500
<u>347</u>	Strositium Carbonate	500 gm	5000
<u>348</u>	Succinic acid	1Kg	7000
<u>349</u>	Succinimide	1 Kg	6000
<u>350</u>	Sulphanilic Acid	1 kg	5000
<u>351</u>	Tannic acid	100 g	5000
<u>352</u>	Tartaric acid	01 ltr	6500
<u>353</u>	Tetahydrofuran	2.5 Ltr	7500
354	Tetraethoxysilan Liquid	1 Kg	4500
355	Thiamine Hydrochloride	1 Kg	6500
356	Thiobarbituric acid	100 g	7500
357	Thiourea	1 kg	8000
358	Tin Chloride	500 GM	4000
359	Tin-mertal Powder	500gm	7500
360	Titanium tetraisoprop oxide	500 mL	6500
361	Titripex111	1 Ltr	4500
362	Toluene	2.5 Lts	6000
363	Toluenesulfonic acid (C7H8O35)	1kg	7500
364	Tri. Sod citrate	1ltr	9000
365	Trichloroacetic Acid	1ltr	7500
366	Trielhanolamine	01 Ltr	6500
367	Trielhylamine	2ltr	6500
368	Triethanolamine(2,2,2	500gm	0.500
300	Nitrilotriethand)	Joogin	7500
369	Trimethyl Ammonium Bromide	500gm	7500
370	Triphenyltin chloride	500gm	7000
371	Tris	500gm	5500
372	Tris hydrochloride	2ltr	5500
373	Triton x-100	1kg	6000
374	Tungstic acid	250 gm	5000
375	Tungstophosphoric acid hydrate	250 gm	6500
376	Urea Urea		5000
377	vanadium oxide	1 Kg	
<u>3//</u>	vanadium oxide	250 gm	5500

<u>378</u>	Xylene	2.5 Ltr	6500
<u>379</u>	Xylene Cyanol	100 gm	6000
<u>380</u>	Xylenol Orange	100 gm	5000
<u>381</u>	Yeast Extract	1 Kg	6500
<u>382</u>	Zeolite	100g	6000
<u>383</u>	Zinc acetate	1 Kg	8500
<u>384</u>	Zinc Chloride	1 Kg	9500
<u>385</u>	Zinc Metal	1 kg	8500
<u>386</u>	Zinc napthtenate	500g	5500
<u>387</u>	zinc nitate hexahydrate	1 Kg	5500
<u>388</u>	Zinc Nitrate	1 kg	9500
<u>389</u>	Zinc Oxalate	1 kg	7500
<u>390</u>	Zinc Powder	01 Kg	6500
<u>391</u>	Zinc Sulphate	1 KG	4000
<u>392</u>	Zirconium chloride	500 g	9000
<u>393</u>	Zirconium Nitrate	01 kg	9000
<u>394</u>	zirconium oxide	250 g	5000
<u>395</u>	Zirconium Oxy chloride	01 kg	8500
<u>396</u>	Zirconium oxynitrate	500 g	10000
<u>397</u>	zirconium phosphate	250 g	6000
<u>398</u>	zirconium sulphide	250 g	6900

COMMERCIAL CHEMICALS

Sr.No	Chemical Name	Estimated Quantity	Estimated Price (PKR)
<u>1</u>	Acetone	100 L	10000
<u>2</u>	Benzene	100 L	20000
<u>3</u>	Ethanol	100 L	30000
<u>4</u>	Ehylene glycol	50 L	15000
<u>5</u>	Glycerol	50 L	15000
<u>6</u>	Hexane	100 L	25000
<u>7</u>	Hydrogen per Oxide	100 L	12000
8	Isopropanol	100 L	25000
9	Hydrochloric acid	100 L	8000
<u>10</u>	Methanol	100 L	10000
<u>11</u>	Nitric acid	100 L	25000
<u>12</u>	Sulfuric acid	100 L	6000

Sr.No	Name of Items	Specification	Qty	Price per item (Rs)
<u>1</u>	96-wellplate		12	750
<u>2</u>	Beaker	1000 ml	500	400
<u>3</u>	Beaker	500 ml	500	350
<u>4</u>	Beaker	250 ml	500	300
<u>5</u>	Beaker	100 ml	500	300
<u>6</u>	Burette (Rota FLow)	50 ml	100	400
<u>7</u>	Burette Stand	Iron	100	500
8	Burner		100	350
<u>9</u>	Capillary Tubes	pack	100	400
<u>10</u>	China Dish	medium	200	120
<u>11</u>	Condenser	24/29	50	550
<u>12</u>	Conical Flask	500 ml	500	350
<u>13</u>	Conical Flask	250 ml	500	280
<u>14</u>	Cylinder	250 mL	200	450
<u>15</u>	Cylinder	100 mL	200	350
<u>16</u>	Cylinder	10 ml	100	250
<u>17</u>	Eppendorf (1.5ml)	pack	20	1000

<u>18</u>	Filter Paper (Sheet)	pack	20	1200
19	Filter Paper (Whatman)	pack	20	1000
20	Funnel (Glass)	medium	200	120
21	Fusion Tubes	pack	200	150
22	Stirring Rod	Glass	250	20
23	Gloves	pack	100	300
24	Iron Stand with Clamp	F ***	50	650
25	Media Bottle with Screw			
_	Cap	1000 ml	50	650
<u>26</u>	Media Bottle with Screw	500 ml	50	550
<u>27</u>	Cap Media Bottle with Screw	500 ml	50	550
<u> </u>	Cap	250 ml	100	450
<u>28</u>	Media Bottle with Screw			
	Cap	100 ml	50	350
<u>29</u>	Petri Dish (Large)	6 inch	100	75
<u>30</u>	Petri Dish (Small)	4 inch	100	65
<u>31</u>	pH paper		100	75
<u>32</u>	Pipette	10 ml	200	50
<u>33</u>	Pipette	5 ml	200	65
<u>34</u>	Pipette	1 ml	50	65
<u>35</u>	Pipette sucker pump	10 mL	200	550
<u>36</u>	Plastic Transfer Pipettes	pack	20	1200
<u>37</u>	Reagent Bottle with Stop			
	Cock	500 ml	50	250
<u>38</u>	Reagent Bottle with Stop Cock	250 ml	50	200
<u>39</u>	Reagent Bottle with Stop	230 1111	30	200
33	Cock	100 ml	50	150
<u>40</u>	Round bootom flask 1 neck			
	(Quick fit)	500 ml	50	500
<u>41</u>	Round bootom flask 1 neck			
	(Quick fit)	250 ml	50	450
<u>42</u>	Round bootom flask 1 neck			
	(Quick fit)	100 ml	50	400
<u>43</u>	Round bootom flask 2 neck			
	(Quick Fit)	500 ml	50	900
<u>44</u>	Round bootom flask 2 neck			
	(Quick Fit)	250 ml	50	800
<u>45</u>	Round bootom flask 2 neck	100 1	50	750
4.0	(Quick Fit)	100 ml	50	750
<u>46</u>	Round bootom flask 3 neck	5001	_	1500
47	(Quick Fit)	500 ml	5	1500
<u>47</u>	Round bootom flask 3 neck (Quick Fit)	250 ml	5	1300
48	Round bootom flask 3 neck	230 IIII	, ,	1300
<u> </u>	(Quick Fit)	100 ml	5	1100
49	Separating Funnel	500 ml	20	600
50	Separating Funnel	250 ml	20	500
<u>51</u>	Separating Funnel	125 ml	20	400
<u>52</u>	Soxhlet	250 mL	20	2000
<u>53</u>	Spatula	Medium	50	10
54	Test tube stand	*	50	120
55	Thermometer	100 ⋅C	50	80
<u>56</u>	Thermometer	300 C	20	120
<u>57</u>	Tripod Stand		20	200
<u>58</u>	Volumetric Flask	2000 ml	10	750
<u>59</u>	Volumetric Flask	1000 ml	10	650
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<u>60</u>	Volumetric Flask	500 ml	20	500			
<u>61</u>	Volumetric Flask	250 ml	20		450		
<u>62</u>	Volumetric Flask	100 ml	20		400		
Sr. No	Name of Chemical/Glassware/ Plasticware	Analytical/ Commercia etc.	Cat. No.	Estimated Quantity to be procured	Estimated Amount		
				in F/Y 2018-19			
<u>1</u>	Zinc Chloride	Analytical		2 Kg	10000/-		
<u>2</u>	Cobalt Chloride	Analytical		2 Kg	25000/-		
<u>3</u>	Magnesium Chloride	Analytical		2 Kg	10000/-		
4	Copper Chloride	Analytical		2 Kg	10000/-		
<u>5</u>	NaOH	Analytical		2 Kg	10000/-		
<u>6</u>	KOH	Analytical		2 Kg	10000/-		
<u>7</u> 8	NH4OH NaBH4	Analytical Analytical		2 Kg	15000/-		
9	4-Nitrophenol	Analytical		2 Kg 2.5 L	15000/-		
10	4-Aminophenol	Analytical		2.5 L	10000/-		
11	Bismuth Chloride	Analytical		2.5 L 2 Kg	15000/-		
12	Calcium Chloride	Analytical		2 Kg	10000/-		
13	HCl	Analytical		5L	20000/-		
14	HNO3	Analytical		5L	20000/-		
15	H ₂ SO ₄	Analytical		5L	20000/-		
<u>16</u>	APTS (3.Aminopropyl triethoxysilane)	Analytical		1L	20000/-		
<u>17</u>	Fe ₂ O ₃	Analytical		500 g	10000/-		
18	Al_2O_3	Analytical		500 g	15000/-		
<u>19</u>	Ethanol (C ₂ H ₆ O)	Analytical		5 L	15000/-		
<u>20</u>	Iron nitrate or Ferric nitrate (FeCNO ₃) ₃ .9H ₂ O	Analytical		1 Kg	10000/-		
<u>21</u>	Toluene	Analytical		2.5 L	15000/-		
<u>22</u>	Acetone	Analytical		2.5 L	15000/-		
<u>23</u>	Magnesium methoxide solution	Analytical		2.5 L	10000/-		
<u>24</u>	Tetramethylammonium hydroxide (TMAH)	e Analytical		500 g	10000/-		
<u>25</u>	Indium	Analytical		100 g	10000/-		
<u>26</u>	Titanium (IV) isopropoxide	Analytical		500 g	25000/-		
<u>27</u>	Titanium(IV) butoxide	Analytical		500 g	25000/-		
<u>28</u>	Titanium(IV) chloride	Analytical		500 g	25000/-		
<u>29</u>	Titanium(IV) bis(ammonium lactato)dihydroxide solution	Analytical		500 g	25000/-		
<u>30</u>	Tetraethyl orthosilicate (Tetraethoxysilane) / TEOS	Analytical		500 g	25000/-		
31	Zirconium(IV) propoxide solution			2.5 L	15000/-		
32	Zirconium(IV) butoxide solution	Analytical		2.5 L	15000/-		
33	Methylene Blue solid form	Analytical		1 Kg	10000/-		
<u>34</u>	Titanium(IV) oxide, anatase	Analytical		1 Kg	10000/-		
<u>35</u> <u>36</u>	Titanium(IV) oxide, rutile Glacial acid	Analytical		1 Kg	15000/- 15000/-		
37	2-Propanol	Analytical Analytical		2.5 L 2 L	15000/-		
38	Sodium tetraborate decahydrate	Analytical					
	(Borax)			1 Kg	10000/-		
<u>39</u> 40	Boric acid Acetic acid	Analytical	+	2.5 L 2.5 L	15000/- 15000/-		
41	Acetyl chloride	Analytical Analytical		2.5 L 1 Kg	15000/-		
42	Triethylamine	Analytical		1 kg	10000/-		
43	AlCl ₃	Analytical		1 kg	10000/-		
44	Tin Oxide	Analytical		1 kg	15000/-		
45	Oleic acid	Analytical		1 kg	10000/-		
46	Copper acetate	Analytical		1 kg	10000/-		
47	Citric acid	Analytical		1 kg	10000/-		
_=	1	1 111111 110111		1 1 15	10000/		

48	Sodium Citrate Tribasic	Analytical	1 kg	10000/-
<u>49</u>	Manganese Chloride tetra hydrated	Analytical	1 kg	15000/-
<u>50</u>	Zinc Chaloride	Analytical	1 kg	10000/-
<u>51</u>	Iron(III) Chaloride	Analytical	1 kg	20000/-
<u>52</u>	Iron(II) Chaloride	Analytical	1 kg	10000/-
<u>53</u>	Poly-Ethylene Glycol	Analytical	1 kg	10000/-
<u>54</u>	Zinc Chloride	Analytical	1 kg	5000/-
<u>55</u>	Titanium Bromide	Analytical	1 kg	5000/-
<u>56</u>	Aluminium Hydroxide	Analytical	1 kg	10000/-
<u>57</u>	Triethoxycaprylylsilane	Analytical	1 kg	10000/-
<u>58</u>	Glass Beakers (50ml)		100 Pieces	20000/-
<u>59</u>	Glass Beakers (100ml)		100 Pieces	20000/-
<u>60</u>	Glass Beakers (250ml)		100 Pieces	20000/-
<u>61</u>	Glass Beakers (500ml)		100 Pieces	20000/-
<u>62</u>	Glass Beakers (1000ml)		100 Pieces	20000/-
<u>63</u>	Burette stand		50 Pieces	30000/-
<u>64</u>	Burettes		100 Pieces	60000/-
<u>65</u>	Flasks		100 Pieces	20000/-
<u>66</u>	Conical funnels		100 Pieces	20000/-
<u>67</u>	Magnetic bars		100 Pieces	20000/-
<u>68</u>	High temperature evaporating dishes		100 Pieces	30000/-

Sr. No	Name of Chemical/Glassware/ Plasticware	Analytical / Commerci al etc.	Cat. No.	Estimated Quantity to be procured in F/Y 2018- 19	Estimated Amount
<u>1</u>	Taq Polymerase (vial)	Analytical		500 unit	2000
<u>2</u>	Ethidium bromide	Analytical		5g	8000
<u>3</u>	Urease enzyme (vial)	Analytical		1vial	20000
4	Streptokinase Enzyme	Analytical		1vial	25000
<u>5</u>	Protein Ladder	Analytical		Per vial	12000
<u>6</u>	BSA	Analytical		100 G	12000
7	Loading dye	Analytical		100ml,1ml	140,004,000
8	Dntp	Analytical		4×400μ1	11000 for all 4
9	Protinase K	Analytical		100 mg	9000
<u>10</u>	CTAB	Analytical		500g	7500
<u>11</u>	T4 DNA Ligase	Analytical		4000 U	1785
<u>12</u>	Ethanol	Analytical		2.5 L	2000
<u>13</u>	Phenol	Analytical		1kg	3000
14	Ependof stand	Analytical		each	600
<u>15</u>	Sodium acetate	Analytical		1kg	3500
<u>16</u>	Choloroform	Analytical		2.5L	2500
<u>17</u>	Agarose	Analytical		500g	24000
<u>18</u>	Na fitate	Analytical		25g	16000
<u>19</u>	NaOH	Analytical	GB34	100ml	2372
20	Nacl	Analytical	GB35	500ml	2847
<u>21</u>	Potassium Acetate	Analytical	GB36	500ml	5220
<u>22</u>	Ammonium Acetate	Analytical	GB11	100ml	2847
<u>23</u>	0.2 ml PCR thin wall tubes, 1000/bag	Analytical	GM02 PCR	One Bag	4,508.00
<u>24</u>	Floating water bath rack, 10 rack/bag	Analytical	GMP0 01	One Bag	2,372.90
<u>25</u>	0.1-10 ul Clear tip, 1000/bag, DNase, RNase free,10 bag/cs	Analytical	L-4999	10000/cs	1,708.50
<u>26</u>	1-200 ul Yellow tip, 1000/bag, DNase, RNase	Analytical	L-2346	10000/cs	1,708.50
<u>27</u>	50 -1000 ul Blue tip, 1000/bag, DNase, RNase free,10 bag/cs	Analytical	L - 1150	10000/cs	2,372.90

<u>28</u>	0.1 to 10 ul, clear tips,DNas/RNase free sterile, rack pack	Analytical	ST - 5100	96/rack	711.9
<u>29</u>	1 to 200 ul, yellow tips, DNas/RNase free sterile, rack pack	Analytical	ST - 2402	96/rack	711.9
<u>30</u>	Floating water bath rack, 10 rack/bag	Analytical	GMP0 01	1bag	2,372.90
<u>31</u>	1.5 ml microcentrifuge tube,	Analytical	XL- 2911	500/bag	1,850.80
<u>32</u>	2.0ml microcentrifuge tube,	Analytical	L-2057	500/bag	1,328.80
<u>33</u>	Plasmid Miniprep Purification Kit	Analytical	DP01	50r	4300.8
<u>34</u>	Plasmid Miniprep Purification Kit	Analytical	DP01- 300	300r	20643.2
<u>35</u>	Plasmid Miniprep Plus Purification Kit	Analytical	DP01- Plus	50r	5606.4
<u>36</u>	300 Plasmid Miniprep Plus Purification Kit	Analytical	DP01- Plus	300r	25344
<u>37</u>	DNA Clean/Extraction Kit	Analytical	DP034- 300	300r	21477.9
<u>38</u>	Micro-Elute DNA Clean/Extraction Kit	Analytical	DP034 ME	50r	5920
<u>39</u>	Gen-KB LC DNA Ladder, 50 ug RT - 20°C	Analytical	GM100 0- LC	100-500 loading	3322
<u>40</u>	Gen-KB LC DNA Ladder,	Analytical	GM100 0- LC	50 ug Bulk>- 200 vials	
<u>41</u>	Gen50 Plus DNA Ladder, 91 ug	Analytical	GM50 P	100-200 loading	5932.2
<u>42</u>	Gen100 DNA Ladder, 66 ug	Analytical	GM100	200-400 loading	5220.3
<u>43</u>	Gen100 LC DNA Ladder, 22.2 ug	Analytical	GM100 - LC	20-250 loading	1792
44	Primers at 25nmol scale	Analytical		01 base	28
45	Primers at 50nmol scale	Analytical		01 base	36
<u>46</u>	Primers at 200nmol scale	Analytical		01 base	94
<u>47</u>	Dual Labeled Probes @ 50nmol scale	Analytical		01 Primer	14,500.00
<u>48</u>	Single Labeled Probes @ 50nmol scale	Analytical		01 Primer	9,500.00
<u>49</u>	Tube Sequencing	Analytical		01 rxn	670
<u>50</u>	Plate Sequencing	Analytical		01 rxn	500
<u>51</u>	Gene Construct (Standard)	Analytical		01 base	45
<u>52</u>	Gene Construct (Complex)	Analytical		01 base	75
<u>53</u>	AxyPrep MAG PCR Clean-Up Kit (2,777 preps)	Analytical		01 kit	110,000.00
<u>54</u>	IMAG magnetic hand-held device (screw cap tubes)	Analytical		01 unit	52,000.00
<u>55</u>	IMAG magnetic hand-held device (96 – well plates)	Analytical		01 unit	72,000.00
<u>56</u>	Agarose LE (500gms)	Analytical		01 pck	26,000.00
<u>57</u>	96-well PCR plate (25 plates/pack)	Analytical		01 pck	8,000.00
<u>58</u>	PCR tubes & Caps strips (250 strips/pack)	Analytical		01 case	15,000.00
<u>59</u>	10 μl Tips (1000 tips/bag)	Analytical		01 case	14,000.00
<u>60</u>	200 µl Yellow Tips (1000 tips/bag)	Analytical		01 case	14,000.00
<u>61</u>	1000 µl Blue Tips (1000 tips/bag)	Analytical		01 case	24,000.00
<u>62</u>	0.2ml PCR tubes with attach caps (1000 tubes/bag)	Analytical		01 case	25,000.00
<u>63</u>	AlumaSeals Sealing Films (100/pck)	Analytical		01 pck	6,500.00
<u>64</u>	Adhesive films for Microtiter Plates (100/pck)	Analytical		01 pck	6,500.00
<u>65</u>	Lazy L Spreaders (500 spreaders)	Analytical		01 pck	21,000.00
<u>66</u>	Taq PCR Master Mix (2x)	Analytical		01 vial	8,000.00
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67	dNTPs, Set (100mM)	Analytical		01 vial	13,000.00
68	DNA Ladder, 1kb Plus (500ul)	Analytical		01 viai	9,500.00
<u>69</u>	100bp DNA Ladder (500ul)	Analytical		01 viai	8,500.00
<u>70</u>	First-Strand cDNA Synthesis Kit (50	Analytical		01 viai	36,000.00
<u>70</u>	rxn)	•			ŕ
<u>71</u>	M-MLV Reverse Transcriptase (100,000 units)	Analytical		01 vial	34,000.00
<u>72</u>	SYBR Green One-Step qRT-PCR Master Mix(2x)	Analytical		01 vial	39,590.00
<u>73</u>	EXOSAP-IT PCR Clean Up Kit (20 rxn)	Analytical		01 vial	5,300.00
74	EXOSAP-IT PCR Clean Up Kit (100 rxn)	Analytical		01 vial	16,000.00
<u>75</u>	EXOSAP-IT PCR Clean Up Kit (500 rxn)	Analytical		01 vial	53,000.00
<u>76</u>	EXOSAP-IT PCR Clean Up Kit (2,000 rxn)	Analytical		01 vial	158,000.00
<u>77</u>	VersaTaq Direct PCR Polymerase (200 rxn)	Analytical		01 vial	23,500.00
<u>78</u>	VersaTaq Direct PCR Polymerase (500 rxn)	Analytical		01 vial	47,250.00
<u>79</u>	Taq DNA Polymerase (1000 units)	Analytical		01 vial	4,500.00
<u>80</u>	dNTP Set (100x0.25ml)	Analytical		01 vial	9,500.00
<u>81</u>	EasyScript cDNA Synthesis Kit (100x20ul rxn)	Analytical		01 vial	27,000.00
<u>82</u>	Acetic Acid	Analytical	1.9340 2.2521	2.5	1950
<u>83</u>	Acetonitrile HPLC	Analytical	600030 250017 30	2.5	3300
84	1, Amino 2 Napathol 4, Sulfonice Acid	Analytical	194931 .0121	100	6000
<u>85</u>	4, Amino Anti Pyrine	Analytical	617829 010017 30	100	9000
<u>86</u>	Ammonium Acetate	Analytical	1.9361 7.0521	500	2250
<u>87</u>	Ammonium Carbonate	Analytical	193673 .0521	500	2550
<u>88</u>	Ammonium Chloride	Analytical	1.9362 1.0521	500	1950
<u>89</u>	Ammonium Dihydrogen Phosphate	Analytical	1.9361 3.0521	500	10500
<u>90</u>	Di Ammonium Hydrogen Phosphate	Analytical	1.9328 4.0521	500	1950
<u>91</u>	Di Ammonium Oxlate	Analytical	1.9328 1.0521	500	1500
<u>92</u>	Ammonium Sulphate	Analytical	1.9324 6.5021	5	3750
<u>93</u>	Ammonium Thiocyanate	Analytical	193659	kg	7350
<u>94</u>	Barrium Chloride	Analytical	1.9365 8.0521	500	1950
<u>95</u>	Barrium Hydroxide	Analytical	1.9365 6.0521	500	2100
<u>96</u>	Borice Acid	Analytical	1.9340 9.0521	500	2700
<u>97</u>	Bromocresol Green Indicator	Analytical	618401 005117 30	5	2550
98	Bromophenol Blue	Analytical	618287 000517	5	2700

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<u>99</u>	1, Butanol	Analytical	1.9450 2.2521	2.5	3750
<u>100</u>	Calcium Carbonate	Analytical	1.9366 6.0521	500 G	2700
<u>101</u>	Calcium Chloride	Analytical	1.9363 3.0521	500 G	2700
<u>102</u>	Calcium Hydroxide	Analytical	1.9327 4.0521	500 G	5250
<u>103</u>	Chloroform	Analytical	1.9450 6.2521	2.5 L	2250
<u>104</u>	Citiric Acid	Analytical	1.9362 7.0521	500	1500
<u>105</u>	Copper (ii) Sulphate Pentahydrate	Analytical	1.9361 6.0521	500	1500
<u>106</u>	Ethyle Acetate	Analytical	1.9451 2.2521	2.5	3000
<u>107</u>	EDTA Calcium Salt	Analytical	1.9332 2.0521	500	9000
<u>108</u>	EDTA Pottassium Salt	Analytical	1.9331 3.0521	500	6000
<u>109</u>	Frustose	Analytical	1.9490 5.0521	250	3000
<u>110</u>	Glycrole	Analytical	1.9450 1.2521	2.5	4500
111	Glycine	Analytical	816013 .0521	500	3000
<u>112</u>	Hydrogen Perxide	Analytical	1.9340 7.0521	5	4500
<u>113</u>	Iodine	Analytical	604760 010017 30	100	5250
<u>114</u>	Magnssium Chloride	Analytical	1.9363 3.5021	5	4500
<u>115</u>	Magnissium Nitrate	Analytical	1.9370 9.0521	500	1800
<u>116</u>	Methanol	Analytical	1.9451 6.2521	2.5	1470
<u>117</u>	Methyle Blue	Analytical	618204 002517 30	25	2550
<u>118</u>	Methyle Orange	Analytical	601322 002517 30	25	2850
<u>119</u>	Methyle Red	Analytical	606076 002517 30	25	3000
<u>120</u>	Nitric Acid	Analytical	1.9340 6.2521	2.5	2250
<u>121</u>	Phenol	Analytical	1.9490 3.0521	500	2100
<u>122</u>	Phloroglucinol	Analytical	1.9494 5.0026	25	12000
<u>123</u>	Pottasium Acetate	Analytical	1.9371 4.0521	500	3000
<u>124</u>	Pottasium Chloride	Analytical	1.9363 8.0521	500	1350
<u>125</u>	Pottassium Dichromate	Analytical	1.9321 5.0521	500	3000
<u>126</u>	Potassium Di Hydrogen Phosphate	Analytical	1.9360 5.0521	500	1500

128						
Pottassium Hydroxide	20250	500		Analytical	Pottassium Disulphate	<u>127</u>
129	1350	500	1.9350	Analytical	Pottassium Hydroxide	<u>128</u>
30	3625	100 G	1.9492	Analytical	Resocinol	<u>129</u>
131	3625	500 G	617631 100017	Analytical	Silica Gel for TLC	<u>130</u>
132	10500	25 G	1.9360	Analytical	Silver Nitrate	<u>131</u>
134 Sodium Nitro prusside	1500	500 G	1.9361	Analytical	Sodium Carnbonate	<u>132</u>
135 Sodium Sulphate Analytical 1,9363 500 G 186 5,0521 136	1500	500 G	1.9361	Analytical	Tri-sodium citrate di hydrart	<u>133</u>
135	4500	100 G		Analytical	Sodium Nitro prusside	<u>134</u>
136	1800	500 G	1.9363	Analytical	Sodium Sulphate	<u>135</u>
137 Sucrose	3750	500 G	1.9331	Analytical	Starch Slobal	<u>136</u>
138	2875	1 KG	1.9492	Analytical	Sucrose	<u>137</u>
139	11250	2.5	1.0073	Analytical	Sulfuric aCid	<u>138</u>
Thio Urea	11250	2.5	1.0071	Analytical	Hydrochloric Acid 37%	<u>139</u>
Thymol Blue	4500	500	1.9490	Analytical	Thio Urea	<u>140</u>
142 Trichoroacetic Acid Analytical 1.9497 1.0521 500 156 143 Methanol Analytical 822283 2.5 200 144 Chloroform EMPLURA Analytical 822265 2.5 350 145 TRIS HYDROCHLORIDE 500G Analytical 9310 500 537 500 146 Glycerol Analytical 4750 1 462 462 147 Bromophenol blue indicator ACS, Reag. Analytical 108122 5 500 500 148 TEMED Analytical 8930 100 600 600 149 Acetic acid (glacial) Analytical 100063 2.5 350 350 150 Ethidium Bromide Analytical 111615 1 687 687 151 EDTA Analytical 4005 500 375 152 Hydrogen peroxide 30% (stabilized) Analytical 822287 1 1000 475 153 Ninhydrin GR for analysis ACS, Reag. Ph Eur Analytical 108762 100 787 1000 787 154 Toluene for Analysis Analytical 108180 25 0025 2500 2500 2500	3000	25	618265 002517	Analytical	Thymol Blue	<u>141</u>
144	1500	500	1.9497	Analytical	Trichoroacetic Acid	<u>142</u>
145 TRIS HYDROCHLORIDE 500G Analytical 9310 500 537 146 Glycerol Analytical 4750 1 462 147 Bromophenol blue indicator ACS, Reag. 0005 148 TEMED Analytical 8930 100 600 149 Acetic acid (glacial) Analytical 100063 2.5 2500 150 Ethidium Bromide Analytical 111615 1 687 151 EDTA Analytical 4005 500 375 152 Hydrogen peroxide 30% (stabilized) Analytical 822287 1 475 153 Ninhydrin GR for analysis Analytical 106762 100 787 ACS,Reag. Ph Eur 0100 15823 2.5 350 154 Toluene for Analysis Analytical 108323 2.5 350 155 2-Thiobarbituric acid reagent for Sorbic acid 108180 25 102 155 2-Thiobarbituric acid reagent for Analytical 108180 25 102 155 2-Thiobarbituric acid reagent for Analytical 108180 25 102 155 2-Thiobarbituric acid reagent for Analytical 108180 25 102 156 2-Thiobarbituric acid reagent for Analytical 108180 25 102 156 2-Thiobarbituric acid reagent for Analytical 108180 25 102 157 158	2000	2.5	822283	Analytical	Methanol	<u>143</u>
145 TRIS HYDROCHLORIDE 500G Analytical 9310 500 537 146 Glycerol Analytical 4750 1 462 147 Bromophenol blue indicator ACS, Reag. Analytical 108122 5 500 148 TEMED Analytical 8930 100 600 149 Acetic acid (glacial) Analytical 100063 2.5 350 150 Ethidium Bromide Analytical 111615 1 687 151 EDTA Analytical 4005 500 375 152 Hydrogen peroxide 30% (stabilized) Analytical 822287 1 475 153 Ninhydrin GR for analysis Analytical 106762 100 787 4CS, Reag. Ph Eur 0100 1000 1	3500	2.5		Analytical	Chloroform EMPLURA	<u>144</u>
146 Glycerol Analytical 4750 1 462 147 Bromophenol blue indicator ACS, Reag. Analytical 108122 5 500 148 TEMED Analytical 8930 100 600 149 Acetic acid (glacial) Analytical 100063 2.5 350 150 Ethidium Bromide Analytical 111615 1 687 151 EDTA Analytical 4005 500 375 152 Hydrogen peroxide 30% (stabilized) Analytical 822287 1 475 153 Ninhydrin GR for analysis Analytical 106762 100 787 ACS,Reag. Ph Eur 0100 1000 787 154 Toluene for Analysis Analytical 108323 2.5 350 155 2-Thiobarbituric acid reagent for sorbic acid Analytical 108180 25 102	5375	500		Analytical	TRIS HYDROCHLORIDE 500G	<u>145</u>
Reag. 0005	4625		4750	Analytical		<u>146</u>
149 Acetic acid (glacial) Analytical 100063 2.5 2500 350 150 Ethidium Bromide Analytical 111615 1 0001 687 151 EDTA Analytical 4005 500 375 152 Hydrogen peroxide 30% (stabilized) Analytical 822287 1 1000 475 153 Ninhydrin GR for analysis ACS,Reag. Ph Eur Analytical 106762 100 787 787 154 Toluene for Analysis Analytical 108323 2.5 2500 2.5 350 155 2-Thiobarbituric acid reagent for sorbic acid Analytical 108180 25 102 25 102	5000		0005	-	Reag.	
2500 2500	6000					
151 EDTA Analytical 4005 500 375 152 Hydrogen peroxide 30% (stabilized) Analytical 822287 1 475 1000 153 Ninhydrin GR for analysis Analytical 106762 100 785 ACS,Reag. Ph Eur 0100 108323 2.5 350 154 Toluene for Analysis Analytical 108323 2.5 350 155 2-Thiobarbituric acid reagent for Analytical 108180 25 102 155 2-Thiobarbituric acid reagent for Sorbic acid 108180 25 102 155 2-Thiobarbituric acid reagent for Analytical 108180 25 102 155 2-Thiobarbituric acid reagent for Analytical 108180 25 102 156 107 108180 1081	3500		2500	-	,	
152 Hydrogen peroxide 30% (stabilized) Analytical 822287 1 1000 475 153 Ninhydrin GR for analysis ACS,Reag. Ph Eur Analytical 0100 1000 785 154 Toluene for Analysis Analytical 108323 2.5 2500 2.5 350 155 2-Thiobarbituric acid reagent for sorbic acid Analytical 108180 25 0025 25 102	6875		0001	-		<u>150</u>
1000 1000 1000 787 1000 1000 787 1000 10	3750					<u>151</u>
ACS,Reag. Ph Eur 0100 154 Toluene for Analysis Analytical 108323 2.5 2500 155 2-Thiobarbituric acid reagent for sorbic acid Analytical 108180 25 102	4750	1	1000	Analytical	Hydrogen peroxide 30% (stabilized)	<u>152</u>
2500 2500 2500 Analytical 108180 25 102 25 1	7875	100		Analytical	•	<u>153</u>
sorbic acid 0025	3500	2.5		Analytical	Toluene for Analysis	<u>154</u>
	10250	25		Analytical		<u>155</u>
TCA (Trichloroacetic Acid) Analytical 822342 1 875	8750	1	822342	Analytical	TCA (Trichloroacetic Acid)	<u>156</u>
	6875	500	822342	Analytical	TCA (Trichloroacetic Acid)	<u>157</u>
	27500	100		Analytical	Bovine Serum Albumin (BSA)	<u>158</u>

<u>159</u>	Potassium dihydrogen phosphate	Analytical	104873 1000	1	3687.5
<u>160</u>	L-Methionine	Analytical	816010 0025	25	3625
<u>161</u>	L-Methionine	Analytical	816010 0100	100	11125
<u>162</u>	p-Nitroblue Tetrazolium Chloride (NBT)	Analytical	484235 -1G	1	18625
163	Riboflavin	Analytical	7370	250	12250
<u>164</u>	Triton® X-100 for analysis	Analytical	108603 1000	1	8750
<u>165</u>	Ascorbic acid	Analytical	1831- 1kg	1	12375
166	Potassium Iodide	Analytical	193601	500	7500
<u>167</u>	2-Propanol	Analytical	109634 2500	2.5	2875
<u>168</u>	Tween 20	Analytical	9480	1	7250
<u>169</u>	Nitric acid 69% for analysis EMSURE	Analytical	101799 2500	2.5	7875
<u>170</u>	N-HEXANE FOR ANALYSIS	Analytical	107023 2511	2.5	3500
<u>171</u>	FOLIN-CIOCALTEU'S PHENOL REAGENT	Analytical	109001 0500	500	11750
<u>172</u>	Urea for synthesis	Analytical	818710 1000	1	4500
<u>173</u>	DI-POTASSIUM HYDROGEN PHOSPHAT	Analytical	105104 1000	1	3687.5
<u>174</u>	AMMONIUM DIHYDROGEN PHOSPHATE	Analytical	101126 0500	500	5875
175	Tris Base, Molecular Biology Grade	Analytical	648311	1	9625
176	Tris Base	Analytical	9310	500	4750
<u>177</u>	CITRIC ACID, ANHYDROUS 1KG	Analytical	3200	1	4125
<u>178</u>	5-SULFOSALICYLIC ACID DIHYDRATE	Analytical	800691 0250	250	7500
<u>179</u>	Potassium chloride	Analytical	104936 1000	1	2250
<u>180</u>	Hydrochloric acid 37%	Analytical	100319 2500	2.5	4875
<u>181</u>	phenolphthalein indicator	Analytical	107233 0100	100	6812.5
<u>182</u>	Ferrous ammonium sulfate	Analytical	103792 1000	1	8625
<u>183</u>	Sodium Carbonate	Analytical	106392 1000	1	3500
<u>184</u>	Sodium Hydroxide	Analytical	106498 1000	1	2375
<u>185</u>	sodium acetate	Analytical	7510	500	2875
<u>186</u>	Ammonium acetate	Analytical	2145	1	3375
<u>187</u>	Sodium Chloride	Analytical	106404 1000	1	2125
<u>188</u>	Copper(II) sulfate Pentahydrate	Analytical	102790 1000	1	7250
<u>189</u>	potassium Sulafte	Analytical	105153 1000	1	3375
<u>190</u>	Boric acid MB Grade	Analytical	2710	1	2375
<u>191</u>	potassium permaganate	Analytical	105082 1000	1	3500
<u>192</u>	Potassium dichromate	Analytical	104864 1000	1	15750
<u>193</u>	Ammonium heptamolybedate	Analytical	101180 0250	250	10875

194	Perchloric Acid	Analytical	193005	2.5	17000
405		A 1 1	2500	4	5750
<u>195</u>	Calcium carbonate	Analytical	102066 1000	1	5750
<u>196</u>	Silver nitrate	Analytical	193600	100	20000
			0100	100	1077
<u>197</u>	Manganese chloride	Analytical	105927 0100	100	4875
<u>198</u>	Indole-3-acetic acid	Analytical	820704	10	7375
			0010		
<u>199</u>	POTASSIUM SODIUM TARTRATE	Analytical	108087 1000	1	7500
<u>200</u>	D(+)GLUCOSE MONOHYDRT	Analytical	108342	1	3000
201	2 dagger D glygggg	A malestical	1000 25972-		8375
<u>201</u>	2-deoxy-D-glucose	Analytical	23972- 1G	1g	8373
<u>202</u>	TRITON X 100 supplement	Analytical	80046	5x5 mL	4.520
203		Analytical			4,639
	TWEEN 80 supplement (Tween 80)	1 mary treat	80031	2x50 mL	2,623
<u>204</u>	SHEEP BLOOD DEFIBRINATED	Analytical	83296	50 mL	11 450
205		Analytical	c10210	500	11,459
	BILE AESCULIN AGAR		610210	500 g	14,358
<u>206</u>	BLOOD AGAR BASE	Analytical	610005	500 g	6,820
<u>207</u>	DI OOD ACAR BASE No 2	Analytical	610188	500 ~	0,820
200	BLOOD AGAR BASE No.2	A 1 / 1	010188	500 g	6,820
<u>208</u>	BRAIN HEART INFUSION AGAR	Analytical	610007	500 g	10,741
<u>209</u>	GLYCEROL supplement (Glycerol)	Analytical	80021	4x50 mL	
210	GET CERCOE supprement (Gryceror)	Analytical	00021	TAGO IIIL	3,479
	CZAPEK DOX AGAR	7 maryticai	610095	500 g	6,820
<u>211</u>	DEXTROSE AGAR	Analytical	610002	500 g	5 257
212	L D MEDIUM (MUDIA DEDITAN)	Analytical	c10004	_	5,357
	L.B. MEDIUM (LURIA BERTANI)	•	610084	500 g	5,357
<u>213</u>	MAC CONKEY AGAR	Analytical	610028	500 g	6,516
<u>214</u>	NITRATE BROTH	Analytical	610322	500 a	0,510
245	NITRATE BROTH	A 1 . 1	010322	500 g	12,757
<u>215</u>	NUTRIENT AGAR	Analytical	610036	500 g	6,820
<u>216</u>	POTATO DEXTROSE AGAR	Analytical	610102	500 g	
<u>217</u>		Analytical			13,500
<u> 217</u>	POTATO DEXTROSE BROTH	Amaryticar	610106	500 g	4,197
<u>218</u>	TODD HEWITT BROTH	Analytical	610051	500 g	5 027
<u>219</u>	TED VIDEONIE WAREP	Analytical	C10005	_	5,937
	TRYPTONE WATER	-	610206	500 g	7,096
<u>220</u>	TRYPTOPHAN BROTH	Analytical	610197	500 g	14,082
<u>221</u>	VEAST EVTDACT ACAD	Analytical	611016	500 ~	11,002
222	YEAST EXTRACT AGAR	_	011010	500 g	9,750
<u>222</u>	AGAR BACTERIOLOGICAL	Analytical	611001	500 g	18,000
<u>223</u>	BEEF EXTRACT	Analytical	610497	500 g	
224		Analytical			8,284
<u> </u>	BILE SALT No. 3	Analytical	611901	500 g	

					33,134
<u>225</u>	BRAIN HEART INFUSION	Analytical	610495	500 g	28,413
<u>226</u>	GELATIN BACTERIOLOGICAL	Analytical	611002	500 g	4,142
<u>227</u>	GELATIN PANCREATIC PEPTONE	Analytical	611503	500 g	13,254
<u>228</u>	GLUCOSE	Analytical	611601	500 g	4,694
<u>229</u>	LACTOSE	Analytical	610498	500 g	4,418
<u>230</u>	LIVER EXTRACT	Analytical	612001	500 g	6,958
<u>231</u>	MALT EXTRACT	Analytical	611006	500 g	11,250
<u>232</u>	PEPTONE BACTERIOLOGICAL	Analytical	611701	500 g	8,698
<u>233</u>	PEPTONE MYCOLOGICAL	Analytical	612101	500 g	11,045
234	SODIUM CHLORIDE	Analytical	611000	500 g	4,777
<u>235</u>	SODIUM DESOXYCHOLATE	Analytical	612401	500 g	85,597
236	SUCROSE	Analytical	611801	500 g	4,777
237	TRYPTONE	Analytical	611004	500 g	7,096.28
238	TRYPTOSE	Analytical	611008	500 g	10,437.34
<u>239</u>	YEAST EXTRACT	Analytical	611005	500 g	7,200.00
240	Antibiotec Discs	Analytical		Each vial Of 50 Tests	450.00
<u>241</u>	Antibiotec Discs(Diagnostics)	Analytical		Each vial Of 50 Tests	1,800.00
<u>242</u>	Primers at 25nmol scale	Analytical		01 base	28
<u>243</u>	Primers at 50nmol scale	Analytical		01 base	36
<u>244</u>	Primers at 200nmol scale	Analytical		01 base	94
<u>245</u>	Dual Labeled Probes @ 50nmol scale	Analytical		01 Primer	14,500.00
<u>246</u>	Single Labeled Probes @ 50nmol scale	Analytical		01 Primer	9,500.00
<u>247</u>	Tube Sequencing	Analytical		01 rxn	670
248	Plate Sequencing	Analytical		01 rxn	500
249	Gene Construct (Standard)	Analytical		01 base	45
<u>250</u> <u>251</u>	Gene Construct (Complex) AxyPrep MAG PCR Clean-Up Kit	Analytical Analytical		01 base 01 kit	75 110,000.00
<u>252</u>	(2,777 preps) IMAG magnetic hand-held device (screw cap tubes)	Analytical		01 unit	52,000.00
<u>253</u>	IMAG magnetic hand-held device (96 – well plates)	Analytical		01 unit	72,000.00
254	Agarose LE (500gms)	Analytical		01 pck	26,000.00
255	96-well PCR plate (25 plates/pack)	Analytical		01 pck	8,000.00
<u>256</u>	PCR tubes & Caps strips (250 strips/pack)	Analytical		01 case	15,000.00
257	10 μl Tips (1000 tips/bag)	Analytical		01 case	14,000.00
258	200 µl Yellow Tips (1000 tips/bag)	Analytical		01 case	14,000.00
<u>259</u>	1000 μl Blue Tips (1000 tips/bag)	Analytical		01 case	24,000.00
<u>260</u>	0.2ml PCR tubes with attach caps (1000 tubes/bag)	Analytical		01 case	25,000.00
261	AlumaSeals Sealing Films (100/pck)	Analytical		01 pck	6,500.00

<u>262</u>	Adhesive films for Microtiter Plates (100/pck)	Analytical		01 pck	6,500.00
<u>263</u>	Lazy L Spreaders (500 spreaders)	Analytical		01 pck	21,000.00
264	Taq PCR Master Mix (2x)	Analytical		01 vial	8,000.00
<u> 265</u>	dNTPs, Set (100mM)	Analytical		01 vial	13,000.00
266	DNA Ladder, 1kb Plus (500ul)	Analytical		01 vial	9,500.00
267	100bp DNA Ladder (500ul)	Analytical		01 vial	8,500.00
<u>268</u>	First-Strand cDNA Synthesis Kit (50 rxn)	Analytical		01 kit	36,000.00
<u>269</u>	M-MLV Reverse Transcriptase (100,000 units)	Analytical		01 vial	34,000.00
<u>270</u>	SYBR Green One-Step qRT-PCR Master Mix(2x)	Analytical		01 vial	39,590.00
<u>271</u>	EXOSAP-IT PCR Clean Up Kit (20 rxn)	Analytical		01 vial	5,300.00
<u>272</u>	EXOSAP-IT PCR Clean Up Kit (100 rxn)	Analytical		01 vial	16,000.00
<u>273</u>	EXOSAP-IT PCR Clean Up Kit (500 rxn)	Analytical		01 vial	53,000.00
<u>274</u>	EXOSAP-IT PCR Clean Up Kit (2,000 rxn)	Analytical		01 vial	158,000.00
<u>275</u>	VersaTaq Direct PCR Polymerase (200 rxn)	Analytical		01 vial	23,500.00
<u>276</u>	VersaTaq Direct PCR Polymerase (500 rxn)	Analytical		01 vial	47,250.00
277	Taq DNA Polymerase (1000 units)	Analytical		01 vial	4,500.00
278	dNTP Set (100x0.25ml)	Analytical		01 vial	9,500.00
279	EasyScript cDNA Synthesis Kit (100x20ul rxn)	Analytical		01 vial	27,000.00
<u>280</u>	One step RT PCR Master Mix kit	Analytical	71978-	50 rxn	22385
<u>281</u>	First Strand c-DNA synthesis kit	Analytical	69001-	40 rxn	18755
<u>282</u>	Gel DNA extraction kit	Analytical	70852-	100 rxn	20570
<u>283</u>	PCR Cleanup kit	Analytical	70976-	100 rxn	22990
<u>284</u>	Rnase solution	Analytical	70856- 3	1 ml	3630
<u>285</u>	PCR Master Mix	Analytical	71007-	200 rxn	6050
<u>286</u>	Perfect DNA 100 bp ladder	Analytical	70539- 3	1000ul	6655
<u>287</u>	Perfect DNA 50 bp ladder	Analytical	70538-	1000ul	6655
288	Perfect DNA 1 kb DNA ladder	Analytical	70537-	1000ul	6655
<u>289</u>	Pefect Protein Marker 10 - 225 kda	Analytical	69079-	500ul	9680
<u>290</u>	Trail Mix Protein Marker	Analytical	70980-	500ul	12100
<u>291</u>	10mM dNTP MIX	Analytical	71004-	0.2ml	3630
<u>292</u>	NOVATAQ HOT START DNA POLYMERASE	Analytical	71091-	250 units	4840
<u>293</u>	KOD Hot Start Master Mix	Analytical	71842-	100 units	6655
294	ACRYLAMIDE:BIS,37.5 500ML	Analytical	1500	500ml	5045.7
295	ACRYLAMIDE, SOLID 200G	Analytical	1600	200g	7647.2
296	AGAROSE,OMNIPUR 100GM	Analytical	2090	100g	14943.5
297	AMMONIUM PERSULFATE	Analytical	2310	100g	1863.4

	100GM				
298	AMMONIUM PERSULFATE 50/EA	Analytical	2400	1PAC	8288.5
299	METHYLENE BIS ACRYLAM 25G	Analytical	2610	25g	2226.4
300	METHYLENE BIS ACYLAM 100G	Analytical	2620	100g	5045.7
301	BIS ACRYLAMIDE,2%SOL100ML	Analytical	2640	100g 100ml	1700
<u>302</u>	BORIC ACID 1KG	Analytical	2710	1kg	3073.4
303	BRADFORD METHOD ASSAY	Analytical	2740	1 kit	23667.6
303	KIT	Anaryticar	2740	1 KIU	23007.0
304	BROMOPHENOL BLUE 25GM	Analytical	2830	25G	3533.2
305	BSA,FRACTION V 5GM	Analytical	2905	5G	11095.7
306	CALCIUM CHLORIDE 500GM	Analytical	3000	500g	2553.1
307	DNA EXTRACTION BUFFER 20L	Analytical	3700	20L	14919.3
308	ETHIDIUM BROMIDE 5GM	Analytical	4340	5g	7598.8
309	ETHIDIUM BROMIDE SOL 10ML	Analytical	4410	10ml	2528.9
310	MAGNESIUM CHLORIDE 500GM	Analytical	5980	500G	3279.1
311	POTASSIUM CHLORIDE 500GM	Analytical	7300	500g	2286.9
312	SOD DODECYL-SULFATE 500G	Analytical	7910	500g	9595.3
313	10X TAE BUFFER LIQUID CONC	Analytical	8720	4L	8506.3
	4L				
314	10X TAE BUF LIQ CONC 20LT	Analytical	8725	20L	29850.7
<u>315</u>	25X TAE BUFFER-DRYMIX	Analytical	8750	1 pc	5118.3
<u>316</u>	25X TAE BUF.PREMIX PWD FOR	Analytical	8770	1 pac	46270.4
	20L				
<u>317</u>	5X TBE BUFFER CONC. 4L	Analytical	8800	41	4065.6
<u>318</u>	10XTBE BUFFER,LIQ.CON. 4L	Analytical	8820	41	5868.5
<u>319</u>	10XTBE BUFFER,LIQ.CON.	Analytical	8830	20L	23909.6
<u>320</u>	10XTBE BUFFER,LIQ.CON.	Analytical	8840	200L	190127.3
<u>321</u>	10X TBE BUFFER DRYMIX PK	Analytical	8850	1 pac	2528.9
<u>322</u>	TE BUFFER SOL,PH8.0 100ML	Analytical	8890	100ml	2855.6
<u>323</u>	100X TE BUFFER SOL PH8 1L	Analytical	8910	1L	9317
<u>324</u>	TEMED,OMNIPUR 25ML	Analytical	8920	25ML	1185.8
<u>325</u>	TEMED,OMNIPUR 100ML	Analytical	8930	100ML	4779.5
<u>326</u>	TEMED,OMNIPUR 100ML	Analytical	8930	100ml	4779.5
<u>327</u>	TRIS,OMNIPUR 500GM	Analytical	9210	500g	3630
<u>328</u>	TRIS,OMNIPUR	Analytical	9230	5kg	29415.1
<u>329</u>	TRIS HYDROCHLORIDE 500GM	Analytical	9310	500G	5033.6

Sr. No	Name of Chemical/Glassware/	Analytical	Brand Name	Cat. No	Estimated Q		Estimat
	Plastic ware	Commerci			to be procured in F/Y 2018-19		ed Amount
1	ABTS® BioChemica	al etc. Analytical	Applichem	A1088,0001	1	g	8686.8
<u>2</u>	Acetaldehyde, 99% for synthesis	Analytical	Applichem	15A656.160 9	250	ml	4572
<u>3</u>	Acetaldehyde, 99% for synthesis	Analytical	Applichem	15A656.161	1000	ml	8686.8
<u>4</u>	Acetamide Broth (UNE-EN 12780:2002) (Dehydrated Culture Media) for microbiology	Analytical	Applichem	416259.1210	500	g	40233.6
<u>5</u>	Acetic acid - Standard volumetric solution (1 M)	Analytical	Applichem	A2643,1000	1	L	6629.4
<u>6</u>	Acetic Acid 100 % BioChemica	Analytical	Applichem	A3701,2500 PE	2,5	L	10515.6
<u>7</u>	Acetic Acid 100 % for molecular biology	Analytical	Applichem	A3686,1000	1	L	7086.6
8	Acetone (Reag. Ph. Eur.) for analysis, ACS, ISO	Analytical	Applichem	131007.1211	1	L	5257.8
9	Acrylamide - Solution (30 %) - Mix 29 : 1 for molecular biology	Analytical	Applichem	A4983,0250	250	ml	7772.4
<u>10</u>	Acrylamide - Solution (30 %) - Mix 29 : 1 for molecular biology	Analytical	Applichem	A4983,0500	500	ml	13030.2
<u>11</u>	Acrylamide - Solution (30 %) - Mix 29 : 1 for molecular biology	Analytical	Applichem	A4983,1000	1	L	20802.6
<u>12</u>	Acrylamide - Solution (30 %) - Mix 37.5 : 1 for molecular biology	Analytical	Applichem	A3626,0250	250	ml	8001
<u>13</u>	Acrylamide - Solution (30 %) - Mix 37.5 : 1 for molecular biology	Analytical	Applichem	A3626,0500	500	ml	13716
<u>14</u>	Acrylamide - Solution (30 %) - Mix 37.5 : 1 for molecular biology	Analytical	Applichem	A3626,1000	1	L	22174.2
<u>15</u>	Acrylamide - Solution (40 %) - Mix 19:1 for molecular biology	Analytical	Applichem	A3658,0500	500	ml	16230.6
<u>16</u>	Acrylamide - Solution (40 %) - Mix 19:1 for molecular biology	Analytical	Applichem	A3658,1000	1	L	23774.4
<u>17</u>	Acrylamide - Solution (40 %) - Mix 29 : 1 for molecular biology	Analytical	Applichem	A0385,0500	500	ml	9144
<u>18</u>	Acrylamide - Solution (40 %) - Mix 29 : 1 for molecular biology	Analytical	Applichem	A0385,1000	1	L	16687.8
<u>19</u>	Acrylamide - Solution (40 %) - Mix 37.5 : 1 for molecular biology	Analytical	Applichem	A4989,0500	500	ml	14401.8
<u>20</u>	Acrylamide - Solution (40 %) - Mix 37.5 : 1 for molecular biology	Analytical	Applichem	A4989,1000	1	L	22860
<u>21</u>	Acrylamide - Solution (40 %) for molecular biology	Analytical	Applichem	A3632,0500	500	ml	13487.4
<u>22</u>	Acrylamide - Solution (40 %) for molecular biology	Analytical	Applichem	A3632,1000	1	L	23774.4
<u>23</u>	Acrylamide 2K Standard grade, pure	Analytical	Applichem	A1089,0500	500	g	7315.2
<u>24</u>	Acrylamide 2K Standard grade, pure	Analytical	Applichem	A1089,1000	1	kg	11201.4
<u>25</u>	Acrylamide 2K Standard grade, pure	Analytical	Applichem	A1089,5000	5	kg	43891.2
<u>26</u>	Acrylamide 4K - Solution (30 %)	Analytical	Applichem	A1154,1000	1	L	17145
<u>27</u>	Acrylamide 4K - Solution (30 %) - Mix 29 : 1	Analytical	Applichem	A0951,0500	500	ml	10287
<u>28</u>	Acrylamide 4K - Solution (30 %) - Mix 29 : 1	Analytical	Applichem	A0951,1000	1	L	17602.2
<u>29</u>	Acrylamide 4K - Solution (30 %) - Mix 37.5 : 1	Analytical	Applichem	A1672,0500	500	ml	10287
						_	

		.					
<u>30</u>	Acrylamide 4K - Solution (30 %) -	Analytical	Applichem	A1672,1000	1	L	17602.2
21	Mix 37.5:1	A a 1 4 ! 1	A	A0062 1000	1	т	10050 4
<u>31</u>	Acrylamide 4K - Solution (40 %)	Analytical	Applichem	A0962,1000	1	L	18059.4
<u>32</u>	Acrylamide 4K - Solution (40 %) -	Analytical	Applichem	A1640,0500	500	ml	10287
22	Mix 19:1	A14:1	A1: -1	A 1640 1000	1	т	10200
<u>33</u>	Acrylamide 4K - Solution (40 %) -	Analytical	Applichem	A1640,1000	1	L	18288
24	Mix 19:1	Amalystical	Ampliaham	A0950,0500	500	-m1	11201.4
<u>34</u>	Acrylamide 4K - Solution (40 %) - Mix 29 : 1	Analytical	Applichem	A0930,0300	300	ml	11201.4
<u>35</u>	Acrylamide 4K - Solution (40 %) -	Analytical	Applichem	A0950,1000	1	L	18745.2
33	Mix 29: 1	Anaryticai	Applichem	A0930,1000	1	L	10/43.2
<u>36</u>	Acrylamide 4K - Solution (40 %) -	Analytical	Applichem	A0946,1000	1	L	18745.2
<u>30</u>	Mix 32 : 1	7 mary ticar	Application	710740,1000	1	L	10743.2
<u>37</u>	Acrylamide 4K - Solution (40 %) -	Analytical	Applichem	A1577,0500	500	ml	11430
==	Mix 37.5 : 1	1 mary crour	i ippiionem	111277,0200	200	1111	11.50
<u>38</u>	Acrylamide 4K - Solution (40 %) -	Analytical	Applichem	A1577,1000	1	L	18745.2
_	Mix 37.5 : 1	, , , , , , , , , , , , , , , , , , ,					
<u>39</u>	Acrylamide 4K - Solution (40 %) -	Analytical	Applichem	A9546,0500	500	ml	11887.2
	Mix 49: 1 for SSCP			<u> </u>			
<u>40</u>	Acrylamide 4K ultrapure	Analytical	Applichem	A1090,0100	100	g	6858
<u>41</u>	Acrylamide 4K ultrapure	Analytical	Applichem	A1090,0500	500	g	24460.2
<u>42</u>	Acrylamide 4K ultrapure	Analytical	Applichem	A1090,1000	1	kg	41148
<u>43</u>	Acrylamide for molecular biology	Analytical	Applichem	A3812,0250	250	g	19659.6
<u>44</u>	Acrylamide for molecular biology	Analytical	Applichem	A3812,0500	500	g	34290
<u>45</u>	Acrylamide for molecular biology	Analytical	Applichem	A3812,1000	1	kg	56007
<u>46</u>	Actinomycin D BioChemica	Analytical	Applichem	A1489,0005	5	mg	6400.8
<u>47</u>	Adenine BioChemica	Analytical	Applichem	A0939,0025	25	g	8915.4
<u>48</u>	Adenine BioChemica	Analytical	Applichem	A0939,0100	100	g	30861
<u>49</u>	Adenosine 5'-Diphosphoric Acid	Analytical	Applichem	A0948,0001	1	g	9144
	Disodium Salt 2-hydrate						
	BioChemica						
<u>50</u>	Adenosine 5'-Diphosphoric Acid	Analytical	Applichem	A0948,0005	5	g	38176.2
	Disodium Salt 2-hydrate						
	BioChemica						
<u>51</u>	Adenosine 5'-Monophosphoric Acid	Analytical	Applichem	A1622,0010	10	g	10058.4
	Disodium SaltBioChemica	A 1 . 1	A 1' 1	4.12.40.000.5			5715
<u>52</u>	Adenosine 5'-triphosphoric Acid	Analytical	Applichem	A1348,0005	5	g	5715
F2	Disodium Salt BioChemica	A malartical	A month of a con-	A1348,0010	10		9829.8
<u>53</u>	Adenosine 5'-triphosphoric Acid Disodium Salt BioChemica	Analytical	Applichem	A1548,0010	10	g	9829.8
<u>54</u>	Adenosine 5'-triphosphoric Acid	Analytical	Applichem	A1348,0025	25	σ.	21945.6
<u> </u>	Disodium Salt BioChemica	Anarytical	Applichelli	A1540,0025	43	g	417 4 J.0
<u>55</u>	Adenosine 5'-triphosphoric Acid	Analytical	Applichem	A1348,0100	100	g	67208.4
	Disodium Salt BioChemica	1 mai y mean	1 ipplication	711070,0100	100	5	0,200. 1
<u>56</u>	Agar (USP) pure, pharma grade	Analytical	Applichem	141792.1208	100	g	19659.6
<u>57</u>	Agar (USP) pure, pharma grade	Analytical	Applichem	141792.1209	250	g g	48463.2
58	Agar (USP) pure, pharma grade	Analytical	Applichem	141792.1211	1000	g g	142417.
	See (-2-) Puzz, Priminin Brude				1000	ō	8
<u>59</u>	Agar Bacteriology grade	Analytical	Applichem	A0949,0100	100	g	5257.8
<u>60</u>	Agar Bacteriology grade	Analytical	Applichem	A0949,0250	250	g	11887.2
<u>61</u>	Agar Bacteriology grade	Analytical	Applichem	A0949,0500	500	g	21259.8
<u>62</u>	Agar Bacteriology grade	Analytical	Applichem	A0949,1000	1	kg	38404.8
<u>63</u>	Agar Bacteriology grade	Analytical	Applichem	A0949,5000	5	kg	149733
<u>64</u>	Agar, Technical (Ingredient) for	Analytical	Applichem	401792.1210	500	g	18745.2
	microbiology						_
<u>65</u>	Agarose Basic	Analytical	Applichem	A8963,0100	100	g	9372.6
<u>66</u>	Agarose Basic	Analytical	Applichem	A8963,0250	250	g	22631.4
<u>67</u>	Agarose Basic	Analytical	Applichem	A8963,0500	500	g	42748.2
<u>68</u>	Agarose Basic	Analytical	Applichem	A8963,1000	1	kg	80238.6
<u>69</u>	Agarose high EEO	Analytical	Applichem	A2115,0500	500	g	113842.
							8

<u>70</u>	Agarose low EEO (Agarose Standard)	Analytical	Applichem	A2114,0100	100	g	26746.2
<u>71</u>	Agarose low EEO (Agarose Standard)	Analytical	Applichem	A2114,0250	250	g	60121.8
<u>72</u>	Agarose low EEO (Agarose Standard)	Analytical	Applichem	A2114,0500	500	g	107670. 6
<u>73</u>	Agarose low EEO (Agarose Standard)	Analytical	Applichem	A2114,1000	1	kg	185851. 8
<u>74</u>	Agarose Low Melt Large DNA grade	Analytical	Applichem	A3762,0025	25	g	44119.8
<u>75</u>	Agarose medium EEO	Analytical	Applichem	A2116,0100	100	g	28346.4
<u>76</u>	Agarose medium EEO	Analytical	Applichem	A2116,0500	500	g	113842. 8
<u>77</u>	Agarose MP	Analytical	Applichem	A1091,0100	100	g	39776.4
<u>78</u>	Agarose MP	Analytical	Applichem	A1091,0250	250	g	93497.4
<u>79</u>	Agarose MP	Analytical	Applichem	A1091,0500	500	g	168021
<u>80</u>	Agnusid for HPLC	Analytical	Applichem	A6904,0020	20	mg	116128. 8
<u>81</u>	Albumin from chicken egg	Analytical	Applichem	A2245,0005	5	g	48234.6
<u>82</u>	Albumin from chicken egg	Analytical	Applichem	A2245,0010	10	g	90754.2
<u>83</u>	Albumin, human	Analytical	Applichem	A6611,0001	1	g	29260.8
<u>84</u>	Ammonium nitrate p. A.	Analytical	Applichem	A1031,1000	1	kg	5486.4
<u>85</u>	Ammonium Oxalate 1-hydrate (Reag. Ph. Eur.) for analysis, ACS	Analytical	Applichem	131136.1210	500	g	10515.6
<u>86</u>	Ammonium Persulfate for molecular biology	Analytical	Applichem	A2941,0100	100	g	4343.4
<u>87</u>	Ammonium Sulfate BioChemica	Analytical	Applichem	A1032,1000	1	kg	5486.4
<u>88</u>	Citric Acid 1-hydrate (USP, BP, Ph. Eur., JP) pure, pharma grade	Analytical	Applichem	141018.1211	1000	g	10972.8
<u>89</u>	DNA Ladder 100 bp	Analytical	Applichem	A5191,0005	50	μg	13258.8
<u>90</u>	DNA Ladder 100 bp	Analytical	Applichem	A5191,0025	250	μg	58064.4
<u>91</u>	DNA Ladder 100 bp (lyophilised)	Analytical	Applichem	A3470,0050	50	μg	16002
<u>92</u>	Iron(II) sulfate heptahydrate pure Ph. Eur., USP	Analytical	Applichem	A1359,1000	1	kg	4572
<u>93</u>	Lead(II) Acetate 3-hydrate pure	Analytical	Applichem	141466.1211	1000	g	11201.4
<u>94</u>	Potassium Sulfate pure	Analytical	Applichem		1000	g	6629.4
<u>95</u>	Potassium Thiocyanate (Reag. Ph. Eur.) for analysis, ACS, ISO	Analytical	Applichem		1000	g	29489.4
<u>96</u>	Potato Dextrose Agar	Analytical	Applichem		500	g	16687.8
<u>97</u>	Protease from Streptomyces griseus	Analytical	Applichem		5	g	144246. 6
<u>98</u>	Protein Marker I (14 - 116)	Analytical	Applichem		500	μl	10972.8
<u>99</u>	Protein Marker II (6.5 - 200) prestained	Analytical	Applichem		250	μl	22174.2
100	Protein Marker III (6.5 - 200)	Analytical	Applichem		1	ml	22174.2
<u>101</u>	Protein Marker IV (10 - 150)	Analytical	Applichem		500	μl	26746.2
<u>102</u>	Protein Marker VI (10 - 245) prestained	Analytical	Applichem		500	μl	24688.8
<u>103</u>	Proteinase K	Analytical	Applichem		25	mg	8001
<u>104</u>	Proteinase K	Analytical	Applichem		100	mg	18745.2
<u>105</u>	Proteinase K	Analytical	Applichem		500	mg	56235.6
<u>106</u>	Proteinase K – Solution	Analytical	Applichem		1	ml	5943.6
<u>107</u>	Proteinase K – Solution	Analytical	Applichem		5	ml	16459.2
<u>108</u>	Proteinase K – Solution	Analytical	Applichem		10	ml	29718
109	Proteinase K, recombinant	Analytical	Applichem		100	mg	17373.6
<u>110</u>	Proteinase K, recombinant	Analytical	Applichem		500	mg	51892.2
<u>111</u>	qPCR Cycler Validation Kit	Analytical	Applichem		2	Tes ts	129159
<u>112</u>	SDS BioChemica	Analytical	Applichem		1	kg	33375.6
113	SDS for molecular biology	Analytical	Applichem		100	g	11887.2

<u>114</u>	SDS for molecular biology	Analytical	Applichem	500	g	43891.2
<u>115</u>	SDS for molecular biology	Analytical	Applichem	1	kg	76581
<u>116</u>	Silver methanesulfonate pure	Analytical	Applichem	100	g	60579
<u>117</u>	Silver Nitrate BioChemica	Analytical	Applichem	100	g	56007
<u>118</u>	Silver Nitrate for analysis, ACS,	Analytical	Applichem	1000	g	541096.
	ISO					2
<u>119</u>	TAE buffer (10X)	Analytical	Applichem	1	L	6629.4
<u>120</u>	TAE buffer (10X)	Analytical	Applichem	5	L	26289
<u>121</u>	TAE buffer (10X)	Analytical	Applichem	10	L	42748.2
<u>122</u>	TAE buffer (10X) for molecular	Analytical	Applichem	1	L	9601.2
	biology					
<u>123</u>	TAE buffer (10X) for molecular	Analytical	Applichem	5	L	29946.6
	biology	<u> </u>				
124	TAE buffer (50X)	Analytical	Applichem	500	<u>ml</u>	5943.6
<u>125</u>	TAE buffer (50X)	Analytical	Applichem	1	L	10287
126	TAE buffer (50X)	Analytical	Applichem	5	L	38404.8
<u>127</u>	TAE buffer (50X) for molecular	Analytical	Applichem	500	ml	7315.2
120	biology	A = 1==4 * 1	A1: -1	1	т	102444
<u>128</u>	TAE buffer (50X) for molecular	Analytical	Applichem	1	L	12344.4
129	biology Tog DNA Polymorese	A = 01=1421	Appliabass	200	T T	20402.9
	Tag DNA Polymerase	Analytical	Applichem	200	U	30403.8
130	Taq DNA Polymerase	Analytical	Applichem	500	U U	38633.4
<u>131</u>	Taq DNA Polymerase	Analytical	Applichem	2500	U	167106. 6
132	Taq DNA Polymerase DNA-free	Analytical	Applichem	500	U	150876
132 133	TBA Agar (ISO 9308-1:2000)	Analytical	Applichem	30	dis	11201.4
133	(Prepared Plate (@ 55mm)) for	Anarytical	Applicaem	30	hes	11201.4
	microbiology				1168	
134	TBE buffer (10X)	Analytical	Applichem	500	ml	4114.8
135	TBE buffer (10X)	Analytical	Applichem	1	L	5486.4
136	TBE buffer (10X)	Analytical	Applichem	5	L	14630.4
137	TBE buffer (10X)	Analytical	Applichem	5	L	16002
138	TBE buffer (10X)	Analytical	Applichem	10	L	26517.6
139	TBE buffer (10X)	Analytical	Applichem	10	L	28346.4
140	TBE buffer (10X) for molecular	Analytical	Applichem	10	L	8458.2
	biology				~	
141	TBE buffer (10X) powder	Analytical	Applichem	1	L	4572
142	TBE buffer (10X) powder	Analytical	Applichem	5	L	11430
143	TBE buffer (10X) powder	Analytical	Applichem	10	L	20345.4
144	TBE buffer (5X)	Analytical	Applichem	5	L	10515.6
145	TBE buffer (5X) for molecular	Analytical	Applichem	5	L	12801.6
	biology					
<u>146</u>	TBE buffer (5X) for molecular	Analytical	Applichem	5	L	13944.6
	biology					
<u>147</u>	TBE buffer (5X) powder	Analytical	Applichem	5	L	8686.8
<u>148</u>	TBE buffer (5X) powder	Analytical	Applichem	10	L	15773.4
<u>149</u>	TE buffer (100X) pH 7.5	Analytical	Applichem	500	ml	4572
<u>150</u>	TE buffer (100X) pH 8.0	Analytical	Applichem	500	ml	4572
<u>151</u>	TE buffer (1X) pH 7.5	Analytical	Applichem	1	L	4114.8
<u>152</u>	TE buffer (1X) pH 8.0	Analytical	Applichem	1	L	4114.8
<u>153</u>	TE buffer (1X) pH 8.0 for	Analytical	Applichem	500	ml	4114.8
	molecular biology					
<u>154</u>	TE buffer (1X) pH 8.0 for	Analytical	Applichem	1	L	5715
	molecular biology					
<u>155</u>	TE buffer (1X) pH 8.0 low EDTA	Analytical	Applichem	500	ml	3886.2
	for molecular biology					
<u>156</u>	TE buffer (1X) pH 8.0 low EDTA	Analytical	Applichem	1	L	5257.8
	for molecular biology					
					1	5057.0
<u>157</u> <u>158</u>	TEMED TEMED	Analytical Analytical	Applichem Applichem	25 100	ml ml	5257.8 5943.6

<u>159</u>	TEMED	Analytical	Applichem	250	ml	11887.2
<u>160</u>	TEMED	Analytical	Applichem	500	ml	21031.2
<u>161</u>	Urea Bio Chemica	Analytical	Applichem	5	kg	17830.8

Sr. No	Name of Chemical/Gla ssware/ Plastic ware	SIZE	Analytical/ Commercial etc.	Cat. No	Piec e	Estimat ed Amoun t	Estimated Quanity to be procured in the F/Y 2018-19
<u>1</u>	BEAKERS	100ml	Analytical	2171/15	1	150.00	20
2	BEAKERS	250ml	Analytical	2171/21	1	275.00	20
3	BEAKERS	500ml	Analytical	2171/24	1	350.00	20
<u> </u>	BEAKERS	1000ml	Analytical	2171/28	1	575.00	20
<u>=</u> <u>=</u>	BURETTES	50ml	Analytical	3232/13	1	825.00	10
<u> </u>	BURETTES	100ml	Analytical	3232/15	1	1750.00	10
<u>≅</u> <u>7</u>	CYLINDERS	50ml	Analytical	3086/13	1	350.00	20
			•		1		20
<u>8</u>	CYLINDERS	100ml	Analytical	3086/15	1	725.00	
<u>9</u>	Petri dish	100mm	Analytical	4271/17 03	1	200.00	100
<u>10</u>	Petri dish	150mm	Analytical	4271/21 04	1	550.00	100
<u>11</u>	FLASKS, ERLENMEY ER	10ml	Analytical	5091/06	1	125.00	20
<u>12</u>	FLASKS,		J				20
==	ERLENMEY						
	ER	25ml	Analytical	5091/10	1	175.00	
<u>13</u>	FLASKS, ERLENMEY	20111	1 mary treat	2071/10		170.00	20
	ERLENWET	50ml	Analytical	5091/13	1	200.00	
1/1	FLASKS,	JUIII	Allarytical	3091/13	1	200.00	20
<u>14</u>	ERLENMEY ER	100ml	Analytical	5191/15	1	275.00	20
<u>15</u>	FLASKS,	1001111	Amaryticar	3171/13	1	213.00	20
<u>13</u>	ERLENMEY ER	250ml	Analytical	5091/21	1	425.00	20
16	_	2301111	Allarytical	3091/21	1	423.00	20
<u>16</u>	FLASKS, ERLENMEY ER	500ml	Analytical	5091/24	1	675.00	20
17		Journ	Allarytical	3091/24	1	073.00	20
<u>17</u>	FLASKS, ERLENMEY ER	1000ml	Analytical	5091/28	1	1100.00	20
10	_	10001111	Anaryticar	3071/20	1	1100.00	20
<u>18</u>	VOLUMETRI	50m1	Analytical	6752/12	1	510.00	20
10	C FLASKS	50ml	Analytical	6752/13	1	210.00	20
<u>19</u>	VOLUMETRI	1001	A m a 1 - 4 ! 1	6750/15	1	540.00	20
20	C FLASKS	100ml	Analytical	6752/15	1	540.00	20
<u>20</u>	VOLUMETRI	250 1		CE 50 10 1		1000.00	20
	C FLASKS	250ml	Analytical	6752/21	1	1200.00	20
<u>21</u>	VOLUMETRI	F00 -				1.000.00	20
	C FLASKS	500ml	Analytical	6752/24	1	1600.00	20
<u>22</u>	VOLUMETRI C FLASKS	1000ml	Analytical	6752/28	1	2100.00	20
<u>23</u>	VOLUMETRI						20
	C FLASKS	2000ml	Analytical	6752/29	1	4000.00	
<u>24</u>	FUNNEL	75mm	Analytical	7251/12	1	250.00	20
<u>25</u>	FUNNEL	100mm	Analytical	7251/12	1	325.00	20
<u>26</u>	PIPETTE	0.1ml	Analytical	8180/61	1	75.00	20
<u>27</u>	PIPETTE	0.2ml	Analytical	8180/62	1	75.00	20
28	PIPETTE	1ml	Analytical	8180/01	1	75.00	20
<u>29</u>	PIPETTE	2ml	Analytical	8180/03	1	95.00	20
30	PIPETTE	5ml	Analytical	8180/05	1	140.00	20

<u>31</u>	PIPETTE	10ml	Analytical	8180/06	1	225.00	20
32	PIPETTE	25ml	Analytical	8180/10	1	350.00	20

Sr. No	Name of Chemical/Glassware/ Plastic ware	Analytical/ Commercial etc.	Cat. No	Estimated Quantity to be procured in the F/Y 2018-19	Estimated Amount
<u>1</u>	Aluminum foils	Commercial		20	
<u>2</u>	Beakers Glass (1L)	Commercial		20	
<u>3</u>	Beakers Glass (500mL)	Commercial		20	
<u>4</u>	Beakers Plastic (1L)	Commercial		10	
<u>5</u>	Beakers Plastic (500mL)	Commercial		10	
<u>6</u>	Blood tubes (w anticoagulant)	Commercial		5	
<u>7</u>	Blood tubes (w/o anticoagulant)	Commercial		5	
<u>8</u>	Burette (Glass)	Commercial		10	
<u>9</u>	Burette Stand	Commercial		10	
<u>10</u>	Burner	Commercial		20	
<u>11</u>	Conical Flask (1L)	Commercial		20	
<u>12</u>	Conical Flask (250mL)	Commercial		20	
<u>13</u>	Conical Flask (500mL)	Commercial		20	
<u>14</u>	Conical Flask (500mL)	Commercial		20	
<u>15</u>	Cotton roll	Commercial		50	
<u>16</u>	Cotton swab, clinical	Commercial		10pkt	
<u>17</u>	Cover slips	Commercial		10pkt	
<u>18</u>	Cuvettes (Glass)	Commercial		2pair	
<u>19</u>	Cuvettes (Plastic)	Commercial		2pkt	
<u>20</u>	Cuvettes (Quartz)	Commercial		2pair	
<u>21</u>	Cylinder Glass (1L)	Commercial		20	
<u>22</u>	Cylinder Glass (500mL)	Commercial		20	
<u>23</u>	Cylinder Plastic (1L)	Commercial		20	
24	Cylinder Plastic (500mL)	Commercial		20	
<u>25</u>	Droppers	Commercial		2pkt	
<u>26</u>	Eppendorf tubes	Commercial		10pkt	
<u>27</u>	Eppendrof stands	Commercial		20	
<u>28</u>	Falcon Tubes (15 mL & 50 mL)	Commercial		25pkt each	
<u>29</u>	Filter paper Whatman sheets	Commercial		10pkt	
<u>30</u>	Glass slides	Commercial		20pkt	
<u>31</u>	Glass Test tube	Commercial		10gurs	
<u>32</u>	Glass tubes (capped)	Commercial		500	
<u>33</u>	Gloves	Commercial		10pkt	
<u>34</u>	Hb meter	Commercial		10	
<u>35</u>	Inoculation loop	Commercial		25	
<u>36</u>	Lancets	Commercial		10pkt	
<u>37</u>	Magnets	Commercial		25	
<u>38</u>	Micropipette	Commercial		5 set	
<u>39</u>	Micropipette tips (Blue)	Commercial		25pkt each	
<u>40</u>	Micropipette tips (White)	Commercial		25pkt	
<u>41</u>	Micropipette tips (Yellow)	Commercial		25pkt	
<u>42</u>	Parafilm	Commercial		10roll	
<u>43</u>	PCR tubes	Commercial		25pkt	
44	Petri plates (Glass)	Commercial		500	
<u>45</u>	Petri plates (Plastic)	Commercial		1000	
<u>46</u>	Pipettes Glass (10mL)	Commercial		20	
<u>47</u>	Pipettes Glass (1mL)	Commercial		20	
<u>48</u>	Pipettes Glass (5mL)	Commercial		20	
<u>49</u>	Reagent Bottles (1L)	Commercial		100	
<u>50</u>	Reagent Bottles (500mL)	Commercial		100	
<u>51</u>	Serological swab	Commercial		20pkt	
<u>52</u>	Test Tube stands	Commercial		100	
<u>53</u>	Thermometers	Commercial		10	

Γ4	TIC agreement with Chamb			
<u>54</u>	TLC apparatus with Chambe		10	
<u>55</u>	(German)	Commercial Commercial		
	TLC plates	Commercial	5pkt 20	
<u>56</u>	Volumetric Flask (100mL)	Commercial	20	
<u>57</u>	Volumetric Flask (1L)			
<u>58</u>	Volumetric Flask (250mL)	Commercial	20	
<u>59</u>	Volumetric Flask (500mL)	Commercial	20	
<u>60</u>	Westergen tube stand	Commercial	50.1	
<u>61</u>	Acetone (Commercial)	Commercial	50ml	
<u>62</u>	Agar	Commercial	5kg	
<u>63</u>	ALP Kit	Commercial	5	
<u>64</u>	Bilirubin Kit	Commercial	5	
<u>65</u>	Blood Grouping Kit	Commercial	5	
<u>66</u>	Cholesterol Kit	Commercial	5	
<u>67</u>	CK Kit	Commercial	5	
<u>68</u>	Creatinine Kit	Commercial	5	
<u>69</u>	DNS	Commercial	500g	
<u>70</u>	Ethanol	Commercial	100L	
<u>71</u>	Ethyl acetate (Commercial)	Commercial	50L	
<u>72</u>	Glucose Kit	Commercial	5	
<u>73</u>	Hb Kit	Commercial	5	
<u>74</u>	HBV strips/Kit	Commercial	5pkt	
<u>75</u>	HCV strips/Kit	Commercial	5pkt	
<u>76</u>	HDL Kit	Commercial	5	
<u>77</u>	Hydrogen Peroxide	Commercial	5L	
<u>78</u>	Isoamyl Alcohol	Commercial	10L	
<u>79</u>	LDL Kit	Commercial	5	
<u>80</u>	Methanol (Commercial)	Commercial	100L	
<u>81</u>	NBT	Commercial	100g	
<u>82</u>	Nessler's reagent	Commercial	5L	
<u>83</u>	n-Hexane (Commercial)	Commercial	50L	
84	Nutrient agar	Commercial	5kg	
<u>85</u>	Nutrient Broth	Commercial	5kg	
<u>86</u>	PDA	Commercial	5kg	
<u>87</u>	Peptone	Commercial	5kg	
<u>88</u>	Petroleum Ether (Commercial)	Commercial	50L	
<u>89</u>	Protein Kit	Commercial	5	
<u>90</u>	Protein ladder	Commercial	10	
<u>91</u>	SGOT Kit	Commercial	5	
<u>92</u>	SGPT Kit	Commercial	5	
<u>93</u>	Sodium carbonate (Commercial)	Commercial	50kg	
<u>94</u>	Sodium Chloride	Commercial	10kg	
<u>95</u>	Sodium EDTA	Commercial	5kg	
<u>96</u>	Starch	Commercial	5kg	
<u>97</u>	TLC Solution	Commercial	1L	
<u>98</u>	Triglycerides Kit	Commercial	5	
<u>99</u>	Urea Kit	Commercial	5	
<u>100</u>	Uric acid Kit	Commercial	5	
<u>101</u>	Urine Analysis Strips	Commercial	10PKT	
<u>102</u>	Yeast extract	Commercial	5Kg	
103	Zinc sulfate	Commercial	5kg	
104	n-Hexane (Commercial)	Commercial	50L	
105	Petroleum Ether (Commercial)	Commercial	50L	
106	Sodium carbonate (Commercial)	Commercial	50Kg	
			<u> </u>	

LIST OF CHEMICALS/GLASSWARE

Sr.No	Name of Chemicals/glassware	Analytical/	Quantity	Estimated Cost
		Commercial		
1	PEG-8000	Analytical	5 kg	4800/- kg
2	Trehalose	Analytical	1 kg	22000/- 250mg

<u>3</u>	Acetone	Analytical	100 lit	4800/- 2.5 lit
4	Sulphuric acid	Analytical	50 lit	4000/-
				2.5 lit
<u>5</u>	TCA	Analytical	10 kg	3500/-
				500 gm
<u>6</u>	Thiobarbituric acid	Analytical	100 gm	4800/-
-	7'	A14:1	£ 1	25 gm
7	Zinc sulphate	Analytical	5 kg	4500/- kg
8	Iron sulphate	Analytical	5 kg	2300/- kg
9	Manganese sulphate	Analytical	5 kg	4800/- kg 9800/-
<u>10</u>	Naphthalene acetic acid	Analytical	250 gm	100 gm
11	K ₂ CO ₃	Analytical	5 kg	3500/- kg
12	Ca(NO ₃)	Analytical	10 kg	3000/- kg
13	Mg(NO ₃)	Analytical	5 kg	6500/- kg
14	KHCO ₃	Analytical	5 kg	2000/- kg
<u>15</u>	MFS buffer	Analytical	5 llit	13000/- lit
<u>16</u>	Salicylic acid	Analytical	5 kg	9800/- kg
<u>17</u>	Methanol	Analytical	50 lit	1400/-
		7 · · · · ·		2.5 lit
<u>18</u>	Phenol	Analytical	10 kg	3500/- kg
19	Agar	Analytical	5 kg	6500/-
				500 gm
20	NaOH	Analytical	5 kg	1800/- kg
21	Perchloric acid	Analytical	25 lit	22000/- 2.5 lit
22	Petroleum ether	Analytical	25 lit	4800/-
				2.5 lit
23	Sodium chloride	Analytical	5 kg	1200/- kg
24	Ethanol absolute	Analytical	50 lit	7000/-
				2.5 lit
<u>25</u>	Potassium chloride	Analytical	5 kg	2200/- kg
<u>26</u>	Acetic acid	Analytical	25 lit	2400/-
				2.5 lit
<u>27</u>	Boric acid	Analytical	10 kg	2200/- kg
<u>28</u>	FFC SOP	Analytical	50 kg	12000/-
				50 kg
<u>29</u>	FFC MOP	Analytical	50 kg	9800/-
20	Folio Cinceltera m	A = 1 = 4 * 1	2.5.17	50 kg
30	Folic Ciocaltean reagent	Analytical	2.5 lit	18000/- 500 ml
<u>31</u>	Nutrient broth	Analytical	1 kg	6500/-
22	Culphocalicalia	A 1 1	F 1	500 gm
32	Sulphosalicylic acid	Analytical	5 kg	9000/- kg
33	MgSO ₄	Analytical	10 kg	1400/- kg
<u>34</u>	K ₂ SO ₄	Analytical	10 kg	2200/- kg
<u>35</u>	KH ₂ PO ₄	Analytical	10 kg	2400/- kg
<u>36</u>	Di-sod. hydrogen Phosphate	Analytical	10 kg	2800/- kg
<u>37</u>	Potassium dihydrogen	Analytical	10 kg	2800/- kg
<u> </u>	Phosphate	¹ maryticar	10 Kg	2000/- Kg
38	Mortal and pestle	Analytical	10 kg	600/- kg
39	Methionine	Analytical	500 gm	9000/- kg
			500 8111	100 gm
<u>40</u>	Riboflavin	Analytical	200 gm	3500/-
				25 gm
<u>41</u>	Fe Citrate	Analytical	100 gm	12000/-
		-	_	250 gm
<u>42</u>	NH ₂ NO ₃	Analytical	10 kg	9800/- kg
<u>43</u>	KNO ₃	Analytical	10 kg	4800/- kg
44	Toluene	Analytical	25 lit	4000/-
				2.5 lit
				

45	H_2O_2	Analytical	100 lit	1200/- lit
46	Phenylenediamine	Analytical	500 ml	12000/- 100 ml
47	Bacto-agar	Analytical	1 kg	12000/- 500 gm
48	Trypton	Analytical	1 kg	8000/-
				500 gm
<u>49</u>	NaCl	Analytical	10 kg	1200/- kg
<u>50</u>	Yeast extract	Analytical	3 kg	4500/-
				500 gm
<u>51</u>	HaAgarose LE	Analytical	100 gm	19000/- 100 gm
	molecular biology grate			
<u>52</u>	Sucrose	Analytical	5 kg	1800/- kg
<u>53</u>	2,6 dichlorophenol	Analytical	10 gm	12000/- 5gm
<u>54</u>	Lead acetate	Analytical	5 kg	6500/- kg
<u>55</u>	Sodium potassium	Analytical	5 kg	2400/- kg
	Tartrate			
<u>56</u>	Potassium oxalate	Analytical	5 kg	6500/- kg
<u>57</u>	GA ₃ Gibberellic acid	Analytical	100 gm	24000/-
				25 gm
<u>58</u>	Chloroform	Analytical	5 lit	3500/-
			1	2.5 lit
<u>59</u>	N-hexane	Analytical	10 lit	3500/-
_				2.5 lit
<u>60</u>	Nitric acid	Analytical	25 lit	3000/-
			40.1	2.5 lit
<u>61</u>	Copper sulphate	Analytical	10 kg	2900/- kg
<u>62</u>	Spirit	Analytical	50 lit	150/- lit
<u>63</u>	Corn meal agar	Analytical	1 kg	12000/- 500 gm
<u>64</u>	Nutrient agar	Analytical	1 kg	6500/-
65	DII ' D	A 1 . 1	50	500 gm
<u>65</u>	Phloxine B	Analytical	50gm	14000/-
<u>66</u>	Potato dextrose agar	Analytical	1 kg	25 gm 12000/- 500 gm
00	Medium	Anarytical	1 Kg	12000/- 300 gm
<u>67</u>	Rose Bangal dye	Analytical	50gm	7000/-
	Rose Builgar dye	7 maryticar	Jogin	25 gm
68	Silver nitrate	Analytical	100 gm	4500/-
			100 8	25 gm
<u>69</u>	Neon agar medium	Analytical	1 kg	6500/-
		j	8	500 gm
<u>70</u>	Phosphate buffer	Analytical	5 lit	14000/- lit
<u>71</u>	Potassium hydroxide	Analytical	5 kg	2400/- kg
<u>72</u>	Safranine dye	Analytical	50 gm	1500/-
	•			25 gm
<u>73</u>	Mercuric chloride	Analytical	500gm	9800/-
				100 gm
<u>74</u>	2,3,5 triphenyle tetrazolium	Analytical	10gm	12000/-
	chloride salt			10 gm
<u>75</u>	Colehicine	Analytical	2 gm	14500/-
				1 gm
<u>76</u>	Ethyle methane	Analytical	200gm	16500/- 100 gm
	Sulfonate		1	
<u>77</u>	Cadmium chloride	Analytical	2.5 kg	6500/-
				500 gm
<u>78</u>	Cobalt chloride	Analytical	2.5 kg	9000/-
		A 7 .* 7	F 1	250 gm
<u>79</u>	Ferric chloride	Analytical	5 kg	8800/- kg
<u>80</u>	Nickel chloride	Analytical	3 kg	4800/-
01	Mathyd blue	A14! 1	100	500 gm
<u>81</u>	Methyl blue	Analytical	100 gm	2400/-
02	Canda halam	A11	2.5.1	25 gm
<u>82</u>	Canda balsm	Analytical	2.5 kg	9000/-

				500 gm
83	KH ₂ PO ₄	Analytical	5 kg	200/- kg
84	HNO ₃	Analytical	10 lit	3000/-
<u> </u>	111(0)	7 mary treat	10 110	2.5 lit
85	NBT	Analytical	6 gm	15000/- 1gm
86	EDTA	Analytical	5 kg	4800/- kg
87	Guaiacol	Analytical	2 kg	19500/- 250gm
88	Ninhydrine	Analytical	100 gm	5500/-
		j	333 8	25 gm
<u>89</u>	NBT	Analytical	6 gm	9800/-
				1 gm
90	EDTA	Analytical	5 kg	4800/- kg
<u>91</u>	Guaiacol	Analytical	2 kg	19500/- 250gm
92	Ninhydrine	Analytical	100 gm	5500/-
				25 gm
<u>93</u>	Thiourea	Analytical	5 kg	2800/- kg
94	TCA	Analytical	2 kg	2800/- 500gm
<u>95</u>	TBA	Analytical	100 gm	6500/- 25gm
<u>96</u>	KI	Analytical	5 kg	19500/- 1kg
97	Glacial acetic acid	Analytical	20 lit	1800/-
				2.5 lit
<u>98</u>	Iodine	Analytical	3 kg	18500/-500gm
<u>99</u>	Sulphosalicylic acid	Analytical	5 kg	9800/- kg
100	Orthophosphoric acid	Analytical	20 lit	4800/-
				2.5 lit
<u>101</u>	Toluene	Analytical	10 lit	6500/-
				2.5 lit
<u>102</u>	Brilliant Blue	Analytical	15 gm	14500/-
				5 gm
<u>103</u>	Ethanol	Analytical	50 lit	4800/-
				2.5 lit
<u>104</u>	Folin Phenol reagent	Analytical	5 lit	14000/-500 ml
<u>105</u>	Triton-x	Analytical	2 lit	9000/- lit
<u>106</u>	Anthrone	Analytical	100 gm	9500/-
				25 gm
<u>107</u>	Tween-20	Analytical	3 lit	6000/- lit
<u>108</u>	Formaldehyde	Analytical	10 lit	2800/-
				2.5 lit
<u>109</u>	CTAB	Analytical	2 kg	14000/-500 m
<u>110</u>	Barium chloride	Analytical	10 kg	4000/- kg
<u>111</u>	Saffranine	Analytical	100 gm	3000/-
			100	25 gm
<u>112</u>	Toludine blue	Analytical	100 gm	4800/-
440	A 1 · · · ·	A T .* T	·	25 gm
<u>113</u>	Ascorbic acid	Analytical	5 kg	9000/- kg
<u>114</u>	HCLO ₄	Analytical	2.5 lit	3950/-
44-	E EDEA	A 7 . * 4		500 ml
<u>115</u>	Fe-EDTA	Analytical	5 kg	14500/- kg
<u>116</u>	Ammonium molybedate	Analytical	5 kg	18000/- kg
117	Ammonium metavenadate	Analytical	2.5 kg	12000/- 500 gm
<u>118</u>	Xylene	Analytical	15 lit	2400/-
110	Foot oness	A1	100 -	2.5 lit
<u>119</u>	Fast green	Analytical	100 gm	9000/-
120	Codium conhoust	A14! 1	101	25 gm
120	Sodium carbonate	Analytical	10 kg	1950/- kg
121	Potassium chloride	Analytical	10 kg	1950/- kg
122	Boric acid	Analytical	15 kg	2400/- kg
<u>123</u>	Calcium nitrate	Analytical	15 kg	4800/- kg
<u>124</u>	Potassium nitrate	Analytical	15 kg	6500/- kg
<u>125</u>	Ammonium hydrogen phosphate	Analytical	5 kg	2800/- kg

<u>126</u>	Magnesium sulphate	Analytical	15 kg	1800/- kg
<u>127</u>	FeC12	Analytical	5 kg	14000/- kg
<u>128</u>	Cadmium chloride	Analytical	5 kg	9800/-
				500 gm
129	1,2-dichloroethane	Analytical	10 lit	14500/- 2.5 lit

_	G . 10 . 1	1000	20/
<u>1</u>	Centrifuge tubes	1000	30/- each
		Nos.	
<u>2</u>	Eppendorf tubes	50 pkit	2400/- pkt
<u>3</u>	Petri Dish	1000	150/- each
		Nos.	
4	Blotter paper	1000	25/- each
		Nos.	
<u>5</u>	Plastic Tray	100 Nos.	900/- each
<u>6</u>	Flask	500 Nos.	450/- each
<u>7</u>	Glass slide	500 pkt	200/- pkt
8	Bottles	5000	20/- each
		Nos.	
9	Gloves	50 box	700/- box
<u>10</u>	Test tube stand steel	100 Nos.	200/- each
<u>11</u>	Digestion Flask	500 Nos.	450/- each
<u>12</u>	Flask holder	25 Nos.	600/- each
<u>13</u>	Starrier	100 Nos.	45/- each
<u>14</u>	Aluminum foil	50 roll	450/- roll
<u>15</u>	Pipette 5, 10ml	500 Nos.	250/- each
<u>16</u>	Petri Dishes	500 Nos.	300/- Pair
<u>17</u>	Slide box	50 Nos.	450/- each
<u>18</u>	Wash glass	100 Nos.	90/- each
<u>19</u>	Cover slips	100 ptt	150/- pkt
<u>20</u>	Slides 1	25 pkit	250/- pkt

Sr. No	Name of Chemical/Glassware/ Plasticware	Analytical/ Commercial etc.	Cat. No.	Estimated Quantity to be procured in F/Y 2018-19	Estimated Amount
<u>1</u>	Zinc Acetate	Commercial		500g	Rs. 900/-
<u>2</u>	Methanol	Commercial		1500ml	Rs. 1700/-
3	Di-methyl Formaldehyde	Commercial		500ml	Rs. 800/-
4	Sodium Hydroxide (Sol.)	Commercial		500ml	Rs. 750/-

Submitted for your kind perusal and further necessary action please. **List of Chemicals**

Sr. No	Name of Chemical/Glassware/ Plasticware	Analytical/ Commercial etc.	Cat. No.	Estimated Quantity to be procured in F/Y 2018-	Estimated Amount
<u>1</u>	Zinc Acetate	Commercial		500g	Rs. 900/-
<u>2</u>	Methanol	Commercial		1500ml	Rs. 700/-
<u>3</u>	Di-methyl formaldehyde	Commercial		500ml	Rs. 1800/-
4	Sodium hydroxide (Sol.)	Commercial		500ml	Rs. 1750
<u>5</u>	Meta-Cresol	Commercial		1200ml	Rs. 3000/-
<u>6</u>	Sulphuric Acid	Commercial		2000ml	Rs. 4000/-
<u>7</u>	Glabour Salt	Commercial		1000g	Rs. 1500/-
8	Sodium Carbonate	Commercial		1500g	Rs. 3000/-
<u>9</u>	Acetic Acid	Commercial		1500ml	Rs. 3000/-
<u>10</u>	Sodium Chloride	Commercial		500g	Rs. 500/-

Submitted for your kind perusal and further necessary action please.

Sr. No	Product Code & Description	Quantity (Kg)/Lit
<u>1</u>	ACT-500 (Anti Scale and Corrosion Inhibitor)	150
2	ACT700 (Non Oxidizing Biocide)	50
3	HCL	50

Sr. No	Name of chemicals	Quantity	Price
1	Bacto-agar	1x500 g	Rs:6600/-
2	Trypton	1x500 g	Rs:6800/-
3	NaCl	1x500 g	Rs:1000/-
4	Potassium acetate	1x1 kg	Rs:3500/-
<u>5</u>	Sucrose	1x1 Kg	Rs:1700/-
<u>6</u>	Yeast extract	1x500 g	Rs:3500/-
7	EDTA	1x1kg	Rs:3000/-
8	Agarose	1x500 g	Rs:15000/-
9	Tris base	1x1 Kg	Rs:7600/-
10	Ethanol absolute (100%)	1x2.5 L	Rs:2500/-
11	Iso-propanol	1x2.5 L	Rs:2400/-
12	Isoamyl alcohol	1x2.5 L	Rs:5500/-
13	Tris HCl	1x500 g	Rs:6700/-
14	MS Salts	1x100 L	Rs:14000/-
<u>15</u>	2,4-D	1x100 g	Rs:4800/-
16	NAA	1x100g	Rs:4600/-
17	TDZ	1x100g	Rs:10000/-
18	Indoleacetic acid	1x25 g	Rs. 6000/-
19	Indol-3-butyric acid	1x25 g	Rs:5600/-
20	6-Benzyl amino purine	1x25 g	Rs:4500/-
21	Gibberellic acid	1x5g	Rs. 8000/-
22	Zeatin Riboside	1x10 mg	Rs:6700/-
23	Agar plant	1x500 g	Rs:12000/-
24	Gellan gum powder	1x1 Kg	Rs. 10000/-
25	Tween-20	1x500ml	Rs:4500/-
26	Glycine	1x1 Kg	Rs:2300/-
27	Nicotinic acid	1x100 g	Rs:2100/-
28	Pyridoxin HCl	1x25 g	Rs:3500/-
29	Thiamin HCl	1x25 g	Rs:4300/-
30	Spectinomycin dihydrochloride	1x25 g	Rs:5600/-
31	Streptomycin sulfate	1x25 g	Rs:5700/-
32	Kanamycin	1x10 g	Rs:6500/-
33	Rifampicine	1x5 g	Rs:5700/-
34	Antibitic Geneticin	1x1g	Rs. 4600/-
35	Ampicilline	1x100 g	Rs:10000/-
<u>36</u>	Timenton	1x100 g	Rs, 7500/-
<u>37</u>	Cefatoxim	1x100 g	Rs, 7500/-
38	Phosphinothricin	1x10 g	Rs. 8000/-
39	Chloromphenicol Sodium	1x25 g	Rs:6000/-
40	Myoinositol	1x100 g	Rs:4700/-
41	Taq DNA Polymerase	1x500 U	Rs:1700/-
42	Platinum Taq Ploymerase	1x120 rxns	Rs:10000/-
43	dNTPs	1x(4x0.25) ml	Rs:7500/-
44	Real time supermix	5x 1ml	Rs. 25000/-
45	Real time plates and strips	1x96 well	Rs. Rs 500/-
46	Ethidium bromide	1x10 ml	Rs:4500/-
<u>40</u> 47	Primers synthesis	Each Nucleotide	Rs:30/-
4/	1 milets symmesis	Each Nucleotide	NS.3U/-

48	Synthetic oligos	Each Nucleotide	Rs:32/-
49	Albumin bovine	1x50 g	Rs:10000/-
<u>50</u>	Spermidine free base	1x1 g	Rs:4300/-
<u>51</u>	DEPC	1x25 ml	Rs:10000/-
<u>52</u>	Kinetin	1x1g	Rs:2500/-
<u>53</u>	X-GAL	1x10 ml	Rs:10000/-
<u>54</u>	IPTG	10x1.5ml	Rs:8000/-
<u>55</u>	RNAse A	1x10 mg	Rs:4600/-
<u>56</u>	Marcepto ethanol	1x100 ml	Rs:3000/-
<u>57</u>	Methanol	1x2.5L	Rs:1700/-
<u>58</u>	Casein	1x500 g	Rs:6500/-
<u>59</u>	Chloroform	1x2.5 L	Rs:2000/-
<u>60</u>	HCL	1x2.5 L	Rs:6500/-
<u>61</u>	Glacial Acetic acid	1x2.5 ml	Rs:2100/-
<u>62</u>	CaC12	1x1 Kg	Rs:2500/-
<u>63</u>	MgC12	1x1 Kg	Rs:2500/-
<u>64</u>	Glycerol	1x2.5 L	Rs:4700/-
<u>65</u>	SDS	1x500 g	Rs:5000/-
<u>66</u>	CTAB	1x500 g	Rs:6700/-
<u>67</u>	Acetone	1x2.5 L	Rs:6600/-
<u>68</u>	HC1	1x2.5 L	Rs:5500/-
<u>69</u>	Sulphuric acid	1x2.5 L	Rs:6900/-
<u>70</u>	Bromophenol blue	1x25 g	Rs:3700/-
<u>71</u>	Acrylamide	1x500g	Rs:5400/-
<u>72</u>	Bis acrylamide	1x100 g	Rs:3800/-
<u>73</u>	Ammonium per sulphate	1x1kg	Rs:3300/-
<u>74</u>	Acetosyringone	1x100 g	Rs. 8000/-
<u>75</u>	Glufosinate/Basta	1x5 lites	Rs. 8000/-
<u>76</u>	TEMED	1x100ml	Rs:3500/-
<u>77</u>	PMSF	1x5g	Rs:6500/-
<u>78</u>	Beta Mercepto Ethanol	1x100 ml	Rs:3500/-
<u>79</u>	Formamide (De-ionized)	1x5 L	Rs:4700/-
<u>80</u>	Syringe filters (0.2 u)	1x100	Rs. 25000/-
<u>81</u>	PVP	1x1 Kg	Rs:11500/-
<u>82</u>	Danhaurdant's solution	1x500 ml	Rs. 15000/-
<u>83</u>	Nitrocellulose membrane	One Roll	Rs:20,000/-
<u>84</u>	Gene gun accessories (gold particles, rupture	01 kit	Rs. 100,000/-
	disk, stoping screen and macrocarrier)		

PLASTICWARE/GLASSWARE

Sr.	Name of Plasticware/Glassware	Quantity	Price
No			
<u>1</u>	Eppendorf	1x1000 Nos	Rs:1600/-
<u>2</u>	Pipett tips 1000 ul	1x1000/Pack	Rs:1000/-
<u>3</u>	Pipett tips 200 ul	1x1000/Pack	Rs:500/-
4	Pipett tips 10 ul	1x1000/Pack	Rs:745/-
<u>5</u>	Falcons 50 ml	1x500/Case	Rs:4700/-
<u>6</u>	Falcons 15 ml	1x500/Case	Rs:2700/-
<u>7</u>	Glass test tubes (small and large)	1x100/case	Rs. 2500/-
8	Glass test tube racks	1x12/case	Rs. 4000/-
9	Petri plates plastic	1x500/Case	Rs:3500/-
<u>10</u>	Petri plates glass	1x100/case	Rs. 25000/-
<u>11</u>	Glass bottles (100+250+500+1000+2000 ml)	1 each	Rs:450/- for 100ml
_			Rs: 482/- for 250ml
			Rs: 634/- for500ml
			Rs:900/- for 1000ml
			Rs: 1500/- for

			2000ml
<u>12</u>	Measuring cylinders	1 each	Rs:720/- for100ml
	(100ml+250ml+500ml+100ml)		Rs:1073/-for 250ml
			Rs:1538/-for 500ml
			Rs:2253/-for 1000ml
<u>13</u>	Conical flasks	1each	Rs:192/-for 100ml
	(100ml+250ml+500ml+1000ml)		Rs:292/-for 250ml
			Rs:425/-for 500ml
			Rs:656/-for 1000ml
<u>14</u>	PCR tubes	500pcs	Rs: 3500/-
<u>15</u>	Glass beakers	1 each	Rs:93/- for 100ml
	(100ml+250ml+500ml+1LTR)		Rs:125/-for 250ml
			Rs:206/- for 500ml
			Rs:393/-for 1000ml

KITS

Sr.	Name of Kit	Quantity	Price
No			
<u>1</u>	RNA isolation Kit	1x50 Prep's	Rs:20,000/-
2	Plasmid DNA extraction mini kit	1x250 prep's	Rs:20500/-
3	Plasmid DNA extraction midi kit	1x25 Preps	Rs:22000/-
4	PCR Cleanup Mini Kit	1x50 Preps	Rs:11000/-
<u>5</u>	Gel Purification kit	1x50 Prep's	Rs:9000/-
<u>6</u>	cDNA synthesis kit	1x100 rxns	Rs:22000/-
<u>7</u>	T/A cloning kit	1x30 rxns	Rs:19500/-
8	DNA labeling kit	1x30 rxns	Rs:26000/-
<u>9</u>	Chromogenic detection kit for Southern Blot analysis	1x30 rxns	Rs:26000/-

Enzymes

Sr.	Name of Enzymes	Quantity	Price
No			
<u>1</u>	ClaI	01 vial	Rs:6600/-
<u>2</u>	SphI	01 vial	Rs:6300/-
<u>3</u>	T4 DNA ligase	1x1000 U	Rs:6400/-
4	EcoRI	1x800 rxns	Rs:4400/-
<u>5</u>	HindIII	1x800 rxns	Rs:4400/-
<u>6</u>	PVUII	1x400 rxns	Rs:3500/-
<u>7</u>	PstI	1x800 rxns	Rs:4900/-
8	XbaI	1x300 rxns	Rs:7600/-
9	XhoI	1x400 rxns	Rs:6800/-
<u>10</u>	SpeI	1x400 rxns	Rs. 6500/-
<u>11</u>	SacI	1x500 rxns	Rs. 6500/-
<u>12</u>	NdeI	1x500 rxns	Rs. 6500/-
<u>13</u>	MluI	1x100 rxns	Rs:5400/-
<u>14</u>	NdeI	1x100 rxns	Rs:4600/-
<u>15</u>	NheI	1x50 rxns	Rs:4500/-
<u>16</u>	BamHI	1x800 rxns	Rs:4500/-
<u>17</u>	Not 1	1x20 rxns	Rs:4700/-
<u>18</u>	EcoRV	1x200 rxns	Rs:4800/-
<u>19</u>	KpnI	1x300 rxns	Rs:4500/-
<u>20</u>	HincII	1x100 rxns	Rs:4500/-
<u>21</u>	SmaI	1x200 rxns	Rs:4800/-
<u>22</u>	BglII	1x100 rxns	Rs:4900/-
23	Alkaline phosphatase	Rs:8500/-	Rs:6500/-
<u>24</u>	Vectors		
<u>25</u>	pBlueScript vector	01 vial	Rs:10,000/-
<u>26</u>	pUC19 vector	01 vial	Rs:10,000/-

<u>27</u>	Binary vectors	Rs. 20000/-
<u>28</u>	E.coli strains for competent cells	Rs. 5000/-
<u>29</u>	Agrobacterium strains	Rs. 5000/-

Sr · N o	Name of Chemical/Glassware / Plasticware	Analytical/ Commerci al etc.	Cat. No.	Estimate d Quantity to be procured in F/Y 2018-	Estimate d Amount
<u>1</u>	Nigrosin stain (water soluble)	Analytical	N4763-25G	25 gm	4190
2	Dulbecco's modified	Allarytical	114703-230	23 gm	4170
=	Eagles Medium				
	(DMEM)	Analytical	51435C-500ML	500 ml	4936
3	Immersion oil	Analytical	56822-250ML	250	8381
4	Zinc Sulphate	Analytical	Z0251-500G	500gm	10500
<u>5</u>	Titanium dioxide	Analytical	798495-25G	25 gm	12716
6	Eosin Bluish	Analytical	861006-10G	10 gm	5144
<u>7</u>	Methyl orange	Analytical	114510	100 gm	7300
8	Methylene blue	Analytical	M9140	5 gm	9630
9	Silicon Dioxide	Analytical	637238	50 gm	16287
<u>10</u>	Calcium chloride	Analytical	C1016-100G	100gm	4219
11	Iron Oxide			100 gm	64000
<u>12</u>	Benzoic acid	Analytical	242381-100G	100 gm	4473
<u>13</u>	Ethyl acetate	Analytical	270989-100ML	100 ml	4826
<u>14</u>	Chromium nitrate	Analytical	239259-100G	100gm	6242
<u>15</u>	Alkaline Phosphatase	Analytical		10 ml	31885
	BCIP/NBT alikaline phosphatase (5- Bromo-4-Chlro Phosphatase)/ Nitro Blue Tetrazolium)	Analytical	840W-1KT	1KT	54764
<u>17</u>	Horse radish peroxidase DAB Peroxidase	Analytical	GERPN4401	1 pack	124733
<u>18</u>		Analytical	271004-100ML	100 ml	7167
<u>19</u>	Methanole	Analytical	34680-1L-R	1000 ml	4815
<u>20</u>	Activated charcoal	Analytical		250 gm	9913
<u>21</u>	formic acid	Analytical	F0507-100ML	100 ml	4000
<u>22</u>	methyl tert-butylether (MTBE)	Analytical	718750-5G	5G	19646
	Hexane	Analytical	296090-100ML	100 ml	6358
<u>24</u>	HPLC Water	Analytical	34877-1L	1000 ml	6126
<u>25</u>	Hydroxylamine	Analytical	159417-100G	100 gm	4000
<u>26</u>	ascorbic acid	Analytical	BP461	2 gm	19998
<u>27</u>	ß-glucuronidase	Analytical	1041140002	100 ku	13756
<u>28</u>	M)	Analytical	D65100-1L	1000ml	8092
<u>29</u>	Oxytetracycline hydrochloride	Analytical	PHR1325-500MG	500mg	7629
<u>30</u>	Cyprofloxacine	Analytical	17850	5 gm	3399
<u>31</u>	Enrofloxacine	Analytical	17849	5g	15000
<u>32</u>	Neomycine				
	Trisulphate hydrate	Analytical	N1876	25 gm	7789
<u>33</u>	Colistine Sulphate	Analytical	Y000277	1 gm	4673
34	Standards of	Analytical	AN441,	2 ml each	188648

	Aflatoxin B1, B2,		AF10,32754,A6428,CRM46		
	G1, G2, T2, and		300		
	Zeralenone				
<u>35</u>	pregnenolone (P5)				
	[5-pregnen-3ß-ol-20-				
	one]	Analytical	P0543-100MG	100MG	12947
<u>36</u>	dehydroepiandrostero				
	ne (DHEA)	Analytical	D-063-1ML	1ML	
<u>37</u>	[5-androsten-3\beta-ol-				
	17-one]	Analytical	709549-10MG	10MG	56990
<u>38</u>	androstenedione	Analytical	A-075-1ML	1ML	4161
<u>39</u>	(A) [4-androsten-				
	3,17-dione]	Analytical	779717-100MG	100MG	9479
40	testosterone (T) [4-				
	androsten-17ß-ol-3-				
	one]	Analytical	T9890-25MG	25MG	21848
41	estrone				
	(E1)[1,3,5(10)-				
	estratien-3-ol-17-one]	Analytical	E9750-25G	25G	48205
42	DHEA-d2	Analytical	260630-5G	5G	13756
43		Analytical	E9750	500MG	5912
44	17b-estradiol (E2)	Analytical	E060	1ML	15204
45	Estriol (E3)	Analytical	E1253-100MG	100MG	6900
<u>46</u>	J J				
	5"	Analytical	SSI/248		
<u>47</u>	Haematoxylline	Analytical	H3136	25GM	20695
<u>48</u>	Eosin	Analytical	45260-25G-F	25 GM	10277
49	Lactophnol blue	Analytical	61335-100ML	100 ml	2618

Sr. No	Name of Chemical/Glassware/ Plasticware	Analytical/ Commercial etc.	Cat. No.	Estimated Quantity to be procured in F/Y 2018-	Estimated Amount
				19	
<u>50</u>	Aluminum foil rool			30	
<u>51</u>	Bacterial Culture Tubes (5ml) Glass			10	
<u>52</u>	Beaker, 100 ml			30	
<u>53</u>	Beaker, 600 ml			20	
<u>54</u>	Beaker, 1000 ml			25	
<u>55</u>	BioReba sample bags			1000	
<u>56</u>	Bunsen burner			34	
<u>57</u>	Burette, 50 ml			15	
<u>58</u>	Centrifuge tubes (1.5 ml)			15	
<u>59</u>	Centrifuge tubes 10 ml			500	
<u>60</u>	Centrifuge tubes (15 ml)			100	
<u>61</u>	Centrifuge tubes (50 ml)			100	
<u>62</u>	Centrifuge tubes racks (for 10 ml)			10	
<u>63</u>	Centrifuge tubes racks (for 5 ml)			10	
<u>64</u>	Centrifuge tubes racks (for 50 ml)			10	
<u>65</u>	Concentration Tubes			300	
<u>66</u>	Cover slips (packets)			4	
<u>67</u>	Coverslips			20 boxes	
<u>68</u>	Culture media bottle 250 ml			20	
<u>69</u>	Culture media bottle 500ml			20	
<u>70</u>	Culture media bottle 1000ml			20	
<u>71</u>	Desiccator			3	
<u>72</u>	Disposablenitrile exam gloves			10	
<u>73</u>	DNA Extraction kits			10	

74	DNA Purification Kits	10
75	DNA Testing kits	10
<u>76</u>	DURAN Laboratory bottle	30
<u> </u>	100ml	30
<u>77</u>	DURAN Laboratory bottle	30
	250ml	30
78	DURAN Laboratory bottle	20
<u> </u>	500ml	20
70		30
<u>79</u>	DURAN Laboratory bottle 1000	30
80	ml ELISA Extraction Kits	10
81	ELISA Strips	10
82	ELISA TESTING Kits	10
83	Eppendorf Tubes 1.5 ml	3000
84	Eppendorf Tubes 2 ml	3000
<u>85</u>	Erlenmeyer flask 50ml	10
86	Erlenmeyer flask 100ml	75
<u>87</u>	Erlenmeyer flask 200 ml	610
88	Erlenmeyer flask 250ml	15
<u>89</u>	Erlenmeyer flask 500 ml	215
90	Falcon tubes 15 ml	400
<u>91</u>	Falcon tubes 50 ml	400
<u>92</u>	Funnel	60
<u>93</u>	Glass beakers (500ml)	10
94	Glass beakers (1000ml)	10
<u>95</u>	Glass centrifuges tubes	15
<u>96</u>	Glass Microscope Slides	22 boxes
<u>97</u>	Glass stirrer 4''	2
<u>98</u>	Glass stirrer 8"	15
<u>99</u>	Glass test tubes (20 x 20 mm)	100
<u>100</u>	Glass test tubes (25 x 200 mm)	100
<u>101</u>	Glass test tubes racks (20 x 200	20
	mm steel	
<u>102</u>	Glass test tubes racks (25 x 200	20
	mm steel	
<u>103</u>	Glass thermometer	6
<u>104</u>	Gloves 9small, medium, large)	8 sets
<u>105</u>	Haemocytometer	4
<u>106</u>	Hot plates (Supporting magnetic	2
	stirrer)	
<u>107</u>	Ice bags	10
<u>108</u>	Immuno Strips (Virus Detection)	4
<u>109</u>	Inoculation loop with needle	6
<u>110</u>	Inoculating Loops holders	15
<u>111</u>	Laboratory china dishes	12
<u>112</u>	Measuring cylinder, 10ml	26
<u>113</u>	Measuring cylinder, 25ml	11
<u>114</u>	Measuring cylinder, 50ml	11
<u>115</u>	Measuring cylinder, 100 ml	26
<u>116</u>	Measuring cylinder, 250ml	11
<u>117</u>	Measuring cylinder, 500ml	21
118	Measuring cylinder, 1000ml	33
119	Measuring cylinder, 2000ml	3
120	Micropipette P10	5
121	Micropipette P 100	5
122	Micropipette P200	4
123	MicropipetteP1000	6
124	Micropipette P5000	1
125	Micropipette Tips (0.5ul)	2000
126	Micropipette Tips (0.3ul)	3000
	2.21010p1p0000 11p0 (10 u1)	5000

127	Micropipette Tips (20 ul)	3 bags
128	Micropipette Tips (20 ul)	8000
129	Micropipette Tips (1000 ul)	5000
130	Micropipette tips (200 ul)	3000
131	Milles-GS Syringe Filter	3000
132	Parafilm (4 in. 125 ft)	3 boxes of
132	Faramin (4 in. 123 it)	100 pes
133	Parafilm roll	9 9
134	Pestle & mortar	14
135	Peteri dish disposable	2000
136	Petri dishes (55 x 14 mm)	200
137	Petri dishes (90x14mm)	300
138	Pipette sucker	15
139	*	7
140	Pipette Tips Box (0.5 ul) Pipette Tip Box (10 ul)	13
141	Pipette Tip Box (10 ul) Pipette Tip Box (100 ul)	13
142	Pipette Tip Box (100 ul) Pipette Tip Box (1000 ul)	13
143	Pipette Tip Box (1000 ul) Pipette Tip Box (200 ul)	7
144	Plain Magentic strirrer Bars	2 sets
145	Plastic beaker (2000ml)	10
146	Round bottom flask	100
147	Rubber bands	15
		1500
<u>148</u> <u>149</u>	Sample bags	10
	Spirti lamp Sterile membrane filter	2
150 151		5
152	Surgical Cotton Syringe disposable	40
153	Test Tube	50
154	Test Tube 10ml	500
<u>154</u>	Test tube 25ml	100
156	Test tube 25x150mm	30
157	Test tube 23x130mm Test tube stand plastic	4
157 158	Test tube stand plastic long	2
159	Test tube stand plastic long Test tube stand plastic small	4
160	Volumetric flask 200ml	10
161	Volumetric flask 200ml Volumetric flask 250 ml	10
		5
<u>162</u>	Volumetric flask 500 ml	15
<u>163</u>	Volumetric flask 1000ml	
164 165	Volumetric Flasks	10 30
<u>165</u>	Volumetric pipette, 5 ml	
<u>166</u>	Volumetric pipette, 10 ml	30
<u>167</u>	Volumetric pipette, 25 ml	30
<u>168</u>	Whatman filter paper	20
<u>169</u>	Zip lock Sample bags (1 Gallon)	500
<u>170</u>	Zip lock Smaple bags (1/2	500
	Gallon)	

Sr. No	Name of Chemical/Glassware/ Plasticware	Analytical/ Commercial etc.	Cat. No.	Estimated Quantity to be procured in F/Y 2018- 19	Estimated Amount
1	2,3,5-Triphenyltetrazolium chloride	Analytical		50 g	
<u>2</u>	2-Methyl-1-Propanol for HPLC, 99.5%	Analytical		1 Liter	
3	4-Methyl-2-pentanone for HPLC, ≥99.5%	Analytical		1 Liter	
4	Acetic acid	Analytical		2 Liter	
<u>5</u>	Acetone	Analytical		10 Liter	

6	Acetonitrile	Analytical	5 liter
7	Acrylamide	Analytical	1 kg
8	Actinomycete Isolation Agar for	Analytical	500 g
=	microbiology		
9	Agar	Analytical	5 kg
10	Agar microbiology tested, plant	Analytical	500 g
	cell culture tested, cell culture		
	tested, powder		
<u>11</u>	Agarose (Fine type for	Analytical	2.5 kg
	electrophoresis)		
<u>12</u>	Alcohol 100%	Analytical	2 Liter
<u>13</u>	Ammonium acetate	Analytical	1 kg
<u>14</u>	Ammonium chloride	Analytical	1 kg
<u>15</u>	Ammonium dihydrogen	Analytical	1 liter
	phosphate for HPLC LiChropur®		
<u>16</u>	Ammonium heptamolybdate	Analytical	1 kg
	tetrahydrate	A 1 . 1	1.1
17	Ammonium molybodate	Analytical	1 kg
<u>18</u>	Ammonium monovandate	Analytical	1 kg
<u>19</u>	Ammonium nitrate	Analytical	2 kg
<u>20</u>	Ammonium Persulfate	Analytical	2.5 kg
<u>21</u> <u>22</u>	Ammonium solution 32% Ammonium thiocyanate	Analytical Analytical	500 ml 500 g
23	Anthrone Anthrone	Analytical	500 g
24	Ascorbic acid	Analytical	1 kg
<u>24</u> <u>25</u>	Beef extract	Analytical	1 Kg 1000 g
<u>25</u> 26	Benzonitrile for HPLC, 99.9%	Analytical	1 liter
<u>20</u>	Beta-mercapetoethnol	Analytical	500 ml
28	BG11Broth for microbiology,	Analytical	500 ml
==	100x concentrate, sterile filtered	1 11111 / 110111	
<u>29</u>	Bisacrylamide	Analytical	1 kg
30	Boric acid	Analytical	1 kg
31	Bovine serum albumin BSA	Analytical	100 g
32	Bradford reagent	Analytical	500 ml
33	Bromophenol blue	Analytical	100 g
34	Buffer solution (pH4)	Analytical	500 ml
<u>35</u>	Buffer solution (pH7)	Analytical	500 ml
<u>36</u>	Buffer Solution (pH9)	Analytical	500 ml
<u>37</u>	Calcium chloride	Analytical	2 kg
<u>38</u>	Calcium oxide	Analytical	1 kg
<u>39</u>	Calcium sulfate dehydrate	Analytical	2 kg
<u>40</u>	Carbon disulfide for HPLC,	Analytical	1 liter
	≥99.9%		
41	Casein	Analytical	500 g
42	Chloroform	Analytical	4 litre
43	Chloroform	Analytical	2.5 liter
44	CTAP	Analytical	50 g
45	CTAB	Analytical	1 kg
46	Cupric sulphate	Analytical	1 litan
47	Cyclohexan for HPLC, ≥99.7%	Analytical	1 liter
<u>48</u> <u>49</u>	Diatomaceous earth Dichloromethane	Analytical Analytical	3 kg 10 liter
<u>49</u> <u>50</u>	Diethyl ether	Analytical Analytical	2.5 liter
<u>50</u> <u>51</u>	Diethylene glycol diethyl ether	Analytical	1 liter
21	for HPLC, \geq 99%	Anarytical	1 IIIei
_			200
<u>52</u>	Diethylene triamine pentaacetic	Analytical	200 g
	acid (DTPA)	A 4	100
<u>53</u>	Dinitrosalicylic acid (DNS)	Analytical	100 g
<u>54</u>	Di-Potassium hydrogen	Analytical	1 liters
	phosphate anhydrous for HPLC		

	llcHROPUR®		
<u>55</u>	Di-potassium phosphate	Commercial	2500 g
<u> </u>	(K2HPO4)	Commerciai	2500 g
56	Di-Sodium hydrogen phosphate	Commercial	1 kg
<u>57</u>	Di-Sodium hydrogen phosphate	Analytical	1 liters
37	anhydrous for HPLC LiChropur®	Miaryticar	1 Inters
58	DNA ladder	Analytical	3 pack
<u>59</u>	E-coli ChromoSelect Agar B for	Analytical	500 g
33	microbiology	Miaryticar	300 g
60	Erichrome black T	Commercial	500 g
61	Ethanol	Analytical	4 litre
62	Ethanol	Commercial	20 litre
63	Ethidium bromide	Analytical	250 g
64	Ethyl acetate for HPLC, ≥99.8%	Analytical	1 liter
65	Ethylenediamineterraacetic acid	Analytical	2500 g
	(EDTA)	7 mary trear	2500 g
66	Ethylenediamineterraacetic acid	Analytical	100 g
	disodium-salt dehydrate EDTA-	7 11141 7 11041	
	Na2		
<u>67</u>	Fast Blue BB salt	Analytical	10 g
68	FC Reagent (folin & Ciocalteu's	Analytical	500 ml
	phenol reagent)		
<u>69</u>	Ferous ammonium sulphate	Analytical	500 g
70	Formaline	Commercial	5 litre
71	Glacial acetic acid	Analytical	2 litre
72	Glacial acetic acid	Commercial	2 litre
73	Glucose	Commercial	5 kg
74	Glutamate	Analytical	500 g
<u>75</u>	Glycerine	Analytical	1000 ml
<u>76</u>	Glycerol	Analytical	11
<u>77</u>	Glycine	Commercial	1 kg
<u>78</u>	Guaiacol	Analytical	250 g
<u>79</u>	Guaiacol (2-methoxyphenol)	Analytical	100 g
<u>80</u>	Guanidine thiocyanate	Analytical	500 g
<u>81</u>	HCIO4	Analytical	20 g
<u>82</u>	Heptane for HPLC,≥96%	Analytical	1 liter
<u>83</u>	Hexane for HPLC, ≥97.0% (GC)	Analytical	1 liter
<u>84</u>	Hydrochloric acid	Commercial	10 liters
<u>85</u>	Hydrochloric acid, 37%	Analytical	5 litre
<u>86</u>	Hydrogen peroxide (H2O2)	Analytical	1000 ml
<u>87</u>	Hydrogen peroxide 30%	Commercial	5 liters
88	Iodine	Analytical	1 kg
<u>89</u>	Isoamyl alcohol	Analytical	2 litre
90	Isopropanol	Analytical	10 litre
<u>91</u>	LB Medium	Analytical	5 kg
<u>92</u>	L-Methane	Analytical	12
93	L-Methionine	Analytical	10 g
94	L-proline solution	Analytical	5 ml
<u>95</u>	Methanesulfonic acid for HPLC,	Analytical	1 liter
0.6	≥99.5% (T)	Commoraial	5 litan
96	Methanol Methyl Orongo	Commercial	5 liter 200 ml
97	Methyl orange	Commercial	
98	Methyl red Monopotossim phosphoto	Analytical	1 pack
<u>99</u>	Monopotassim phosphate (KH2Po4)	Analytical	1 kg
100	MSM medium	Analytical	2 kg
101	Na ₂ HPO ₄	Commercial	100 g
102	NaH ₂ PO ₄	Commercial	500 g
103	NHCIO ₄	Commercial	500 g
104	Ninhydrin	Analytical	500 III
	1,11111,141111	1 may acar	50

105	Nitric acid 65%	Commercial	10 liters
106	Nitromethane for HPLC, ≥96%	Analytical	1 liter
107	Nitrotetrazolum blue chloride	Analytical	100 g
108	Nonselective & Differential	Analytical	500 g
	Media for Salmonella		
109	Nonselective media for	Analytical	1 kg
	Escherichia coli & coliforms	Ĵ	
110	Nutrient Agar	Commercial	1 kg
<u>111</u>	Nutrient Broth	Analytical	1 kg
<u>112</u>	o-Dianisidine	Analytical	10 g
<u>113</u>	Ortho-Phosphoric acid 85% for HPLC LiChropur®	Analytical	1 liters
<u>114</u>	PCR Kit (Taq Polymerase, dNTPs, dd water)	Analytical	3
115	Pentane for HPLC, ≥99.0%	Analytical	1 liter
116	Peptone	Commercial	1000 g
117	Phenol	Analytical	500 ml
118	Phenol	Commercial	5 litre
119	Phenolphthalein indicator	Commercial	250 ml
120	pH-indicator solution	Commercial	500 ml
121	Phosphoric acid (H3PO4)	Analytical	500 ml
122	Phosphorus	Commercial	1 kg
123	Polyvinylpolypyrrolidone (PVPP)	Analytical	100 g
124	Polyvinylpyrrolidone PVP-40	Commercial	500 g
125	Potassium chloride	Commercial	4 kg
126	Potassium chloride	Analytical	1 kg
127	Potassium chromate	Commercial	2 kg
128	Potassium dichromate	Commercial	
		Commercial	1 kg
129	Potassium dihydrogen phosphate		2 kg
130	Potassium dihydrogen phosphate	Analytical	1000 g
<u>131</u>	Potassium dihydrogen phosphate	Analytical	1 liters
132	anhydrous for HPLC LiCHro Potassium hydrogen phthalate	Commercial	1 kg
133	Potassium hydro-oxide	Commercial	1 kg
134	Potassium Iodide		
135	Potassium iodide Potassium iodide	Analytical Commercial	100 g
			1 kg
136	Potassium permanganate	Analyticals	10 g
137	Potassium Permanganate	Commercial	1 kg
<u>138</u>	Propylene carbonate for HPLC, 99.7%	Analytical	1 liter
<u>139</u>	Protein Ladder	Analytical	2 pack
<u>140</u>	Proteinase K	Analytical	1 pack
<u>141</u>	p-Xylene for HPLC, ≥99%	Analytical	1 liters
<u>142</u>	Resorcineol	Analytical	10 g
<u>143</u>	Ribofiavin	Analytical	10 g
<u>144</u>	Riboflavin	Analytical	25 g
<u>145</u>	RNase	Analytical	1 g
<u>146</u>	Sarcosyl	Analytical	500 g
<u>147</u>	Silver nitrate	Commercial	2 kg
<u>148</u>	Sodium acetate	Commercial	3 kg
<u>149</u>	Sodium acetate trigydrate for HPLC LiChropur®	Analytical	2 liters
150	Sodium bicarbonate	Commercial	1 kg
<u>151</u>	Sodium carbonate	Commercial	500 g
152	Sodium carboxyl methyl starch	Commercial	5 kg
153	Sodium chloride (NaCl)	Analytical	7 kg
154	Sodium citrate Sodium citrate	Commercial	1 kg
155	Sodium citrate dehydrate	Analytical	1000 g
156	Sodium dihydrogen phosphate	Commercial	
157	Sodium dihydrogen phosphate	Analytical	1 liter
	Sociali aniyarozen phosphate	i mai y ticai	1 11101

•			
	anhydrous for HPLC LiChropur®		
<u>158</u>	Sodium dodecyl sulfate (SDS)	Analytical	1.5 kg
<u>159</u>	Sodium hydroxide (NaOH)	Commercial	7 kg
<u>160</u>	Starch	Commercial	205 g
<u>161</u>	Sulfuric acid 96%	Commercial	10 liter
<u>162</u>	Sulphosalicylic acid	Analytical	100 g
<u>163</u>	TBX Agar for microbiology	Analytical	
<u>164</u>	TEMED	Analytical	500 ml
<u>165</u>	Tert-Butanol for HPLC,≥99.5%	Analytical	1 liter
<u>166</u>	Thiobarbituric acid (TBA)	Analytical	500 g
<u>167</u>	Toluene for HPLC, 99.9%	Analytical	2 liter
<u>168</u>	Trichloroacetic acid (TCA)	Analytical	1 kg
<u>169</u>	Triethylammonium acetate buffer	Analytical	1 liters
	for HPLC, 0.98-1.02 M		
<u>170</u>	Tris-base	Analytical	1 kg
<u>171</u>	Tris-equilabrated Phenol	Analytical	500 ml
<u>172</u>	Tris-HCL	Analytical	1 kg
<u>173</u>	TRITON® X-100	Analytical	2.5 liter
<u>174</u>	Tryptone	Analytical	3 kg
<u>175</u>	Urea	Analytical	500 g
<u>176</u>	Water for HPLC	Analytical	1 liter
<u>177</u>	Xylencyanol	Analytical	10 g
<u>178</u>	Xylene Cynol	Analytical	1 pack
<u>179</u>	Xylene orange dye	Analytical	
<u>180</u>	Yeast extract	Commercial	5kg
<u>181</u>	Zinc sulphate	Commercial	1 kg
<u>182</u>	a-naphthyl actate	Analytical	5 g

Sr. No	Name of Chemical/Glassware/ Plasticware	Analytical/ Commercial etc. (Percentage	Cat. No.	Estimated Quantity to be procured in F/Y 2018-19	Estimated Amount
<u>1</u>	Burette Clamp	Holds 2 burettes, cast Alumium	MFR#: CLBURDD	24	1800
<u>2</u>	Wire Gauze	6x6 IN Iron	MFR #: WGCC66	24	150
<u>3</u>	Tripod stand Steel	Storage size width 4 inch height 2 inch	MFR #: T – 55	10	490
4	Conical Flask	Ground mouth 500 ml	MFR#: 5YHR6	24	480
<u>5</u>	Spatula	Putty Knife stiff 2 inch carbon steel	MFR#: 02300	24	350
<u>6</u>	Measuring cylinder	25 ml, 50ml	MFR#: P50502	24	170
<u>7</u>	Funnel	Polyethylene capacity ³ / ₄ to 10 oz	MFR#:32837	12	130
<u>8</u>	Sucker	Solder sucker 12.5 Inch	MFR#: 17538	6	170
<u>9</u>	Gas Burner	Natural gas general purpose	Z 270288	6	800
<u>10</u>	Capillary tube	1-5 Micro liter pack	Z 114952	6 pack	140
11	China dish	Material ceramic size 9 OZ	MFR#: AL96	12	300
<u>12</u>	Scissor	7 – 3/4 IN-L	MFR#: 1110	6	190
13	Platinum wire	Width 36 inch	MFR#: 29TM80	25FT	3200
<u>14</u>	Copper wire	Bare copper solid	MFR#: 10638525	25FT	2000
<u>15</u>	Rubber cock	L 50mm	Z165344	6	700
<u>16</u>	Test tube holders	With 5 inch	MFR#: SR-B	20	1800
<u>17</u>	Hydrogen sulphide production apparatus	1000 ml capacity	6550029	1	10000

Appendix 2: List of Chemicals

Sr. No	Name of Chemical/Glassware/ Plasticware	Analytical/ Commercial etc. (Percentage	Cat. No.	Estimated Quantity to be procured in F/Y 2018-19	Estimated Amount
1	Phenyl Hydrazine (C ₆ H ₅ NHNH ₂)	97%	100-63-0	500 G	11364 PKR
2	Suplhuric acid (H ₂ SO ₄)	95-98%	7664-93-9	1 L	12478 PKR
3	Ethanol (C ₂ H ₅ OH)	> 99.8%	64-17-5	1 L	21996 PKR
4	Acetyle Chloride (CH ₃ COCI)	> 98%	75-36-5	500 G	10081 PKR
<u>5</u>	Aluminum Chloride (AIcI ₃)	> 98%	7446-70-0	1 KG	6133 PKR
<u>6</u>	Zinc Nitrate Hexahydrate Zn (NO ₃) _{2.} 6H ₂ O	> 98%	10196-18-6	500 G	7400 PKR
<u>7</u>	Uranyl Acetate (C ₄ H ₆ O ₆ U.2H ₂ O)	> 98%	6159-44-0	25 G	16000 PKR
8	Potassium Permagnate (KMnO ₄)	> 99%	7722-64-7	500 G	8400 PKR
9	Ammonium Sulphate (NH ₄)	> 99%	7783-20-2	500 G	13400 PKR

				T	1
	₂ SO ₄				
<u>10</u>	Mereuric Chloride (HgCI ₂)	99%	7487-94-7	500 G	24700 PKR
<u>11</u>	Sodium Nitrate (NaNO ₃)	> 99%	7631-99-4	500 G	12800 PKR
<u>12</u>	Potassium Iodide (KI)	> 99%	7681-11-	500 G	17300 PKR
			11-0		
<u>13</u>	Antimony Chloride (SBCI ₃₎	.99.95%	10025-91-9	10 G	21600 PKR
<u>14</u>	Silver Nitrate (AgNO ₃)	> 99%	7761-88-8	25 G	34200 PKR
<u>15</u>	Sodium Bromide (NaBr)	> 99%	7647-15-6	500 G	9800 PKR
<u>16</u>	Lead Acetate Pb(CH ₃ CO ₂) ₄	> 95%	546-67-8	500 G	22400 PKR
<u>17</u>	Copper Sulfate (CuSO ₄)	> 95%	7758-98-7	500 G	11800 PKR
<u>18</u>	Arsenic (AS)	99.9%	7440-38-2	10 G	29000 PKR
<u>19</u>	Antimony (Sb)	> 99.5%	7440-36-0	250 G	8800 PKR
<u>20</u>	Cadmium (Cd)	> 99%	7440-43-9	100 G x 2	10800 PKR
<u>21</u>	Ferrous Sulphate	> 99%	7782-63-0	1 KG	7900 PKR
	(FeSO _{4.} 7H ₂ O)				
<u>22</u>	Dimethyl Glyoxime	> 97%	95-45-4	500 G	27300 PKR
<u>23</u>	Amyl Alcohol CH ₃ (CH ₂) ₄ OH	> 99%	71-41-0	1 Kg	6500 PKR
<u>24</u>	Ammonium thiocyanate	> 97.5%	1762-95-4	500 G	6500 PKR
	(NH ₄ SCN)				
<u>25</u>	Sodium metal (Na)	> 85%	7440-23-5	100 G	15700 PKR
<u>26</u>	Ammonium Carbonate	> 30% NH ₃	506-87-6	500 G	8000 PKR
	(NH4) _{2co} 3	basis			
<u>27</u>	Ferric chloride (FeCl3)	> 97%	7705-08-0	1 KG	7000 PKR
<u>28</u>	Picric acid	> 98%	88-89-1	500 G	20000 PKR

Sr. No	Name of Chemical/Glassware/ Plasticware	Analytical/ Commercial etc. (Percentage	Cat. No.	Estimated Quantity to be procured in F/Y 2018-	Estimated Amount
				19	
<u>1</u>	Out Door Unit (1.5 ton)			4 No.	1,33,000/-
<u>2</u>	Cooling Coils (Copper) 5"/8,			4 No.	33,516/-
3	Gass R-22 Genitron			1 Cylinder	17,550/-
	(Germany) Net 13.5 Kg				
4	Rotary compressor (1.5 Ton)			2 No.	34048/-
<u>5</u>	Capacitor 50uf			6 No.	3,591/-
<u>6</u>	Thermostat			6 No.	1,800/-
7	Motor for Fan's Unit			3 No.	7,182/-
8	Water Taps (Faisal)			6 No.	5,187/-
9	Welding Rod (Copper)			30 No.	998/-
<u>10</u>	Electric Breaker 20 AMP			6 No.	1,995/-
<u>11</u>	Electric Wire (76-110)			30 Meters	2,795/-
<u>12</u>	Floating Valve ½" x3/4"			6 No.	2,234/-
<u>13</u>	Pipe for waste Water			18 Feet	1,365/-
	(Schedule 4-T/1*1/2)				
<u>14</u>	Plastic Strips 10-A			6 Packets	600/-
<u>15</u>	Rotary Wire			6 No.	1,197/-

LIST OF EXPENDABLE SUPPLIES

Sr. No	Items	Catalog #	Packing
<u>1</u>	Top vision LEGQ agarose	R0491	1x100g
<u>2</u>	RiboRular RNA Ladder	SM1823	5x40 uL
<u>3</u>	2X RNA loading dye solutuion	R0641	1 mL
4	RevertAid First Strand cDNA synthesis kit	K1621	1x100 reac
<u>5</u>	2 mM dNTPmix	R0242	5x1 mL
<u>6</u>	TBE buffer	B52	1x1 L
<u>7</u>	Rapid DNA Ligation & Transformation Kit	K1432	30 react
<u>8</u>	RiboLock™ RNase Inhibitor	EO0382	4x2500 U
<u>9</u>	RNase A/T1 Mix	EN0551	1x1ml
<u>10</u>	GeneJET™ Plasmid Miniprep Kit	K0503	1x250 prep

11	GeneJET™ Gel Extraction Kit	K0692	1x250 prep
12	PageSilver™ Silver Staining Kit	K0692	1x250 prep
13	IPTG Solution	R1171	10x1.5mL
14	X-Gal Solution	R0941	1x10 mL
<u>15</u>	Alkaline Phosphatase	EF0511	1x500 U
16		EP0511	1x300 U
17	Klenow Fragment		5x500 U
18	Taq DNA Polymerase	EP0402	
	CloneJet PCR cloning kit	K1232	1x40 react
<u>19</u>	Bacterial Transformation kit	K2711	40 transfor
20	PageRuler™ Prestained Protein Ladder	SM0671	2x250 uL
21	RNeasy plant minikit		50 prep
22	pET expression system with competent cells		
<u>23</u>	Primers		per base
24	DNA sequencing		per run
<u>25</u>	Sodium acetate	T-6066	1 kg
<u>26</u>	Glacial acetic acid	S-150501	2.5 L
<u>27</u>	NaH ₂ PO ₄	S-281100	1 kg
<u>28</u>	Na ₂ HPO ₄	2402394	1 kg
<u>29</u>	EDTA	E-5134	250 g
<u>30</u>	NaOH pellets	1.06462	1 kg
<u>31</u>	KCI	A 1364	1 kg
<u>32</u>	Polyvinylpolypyrrolidone	PVP10-100G	100 g
<u>33</u>	Isoprapanol	I-9516	500 mL
<u>34</u>	Ethanol molecular biology grade	K26225745	1 L
<u>35</u>	Bradford reagent	B-6916	500 mL
<u>36</u>	Streptomycine sulfate	S-9137	25 g
<u>37</u>	Chloramphenicol	190321	5 g
38	Antimicrobial discs		pkt
<u>39</u>	Nutrient agar	CM0003	500 g
40	Sabroud liquid medium	CM0147	500 g
41	Potato dextrose agar	CM0139	500 g
42	(NH ₄) ₂ SO ₄	A 4418	1 kg
43	Sodium sulfide	350328-31	500 g
44	H ₂ SO ₄		2.5 L
45	Acrylamide	A-3553	100 g
46	N,N,-bis-methylene-acrylamide	M-2022	100 g
47	Conc. HCL		2.5 L
48	Tris base	T-6066	1 kg
49	Ammonium persulfate	A-9164	100 g
50	TEMED	T- 7024	100 g
51	Sodium dodecyl sulfate	102918	1 kg
52	Sample buffer, Laemmli Electrophoresis reagent	S-3401	1 vial
53	Methanol (HPLC grade)	M/4056/17	2.5 L
<u>55</u>	Glycine	DR0235	2.5 kg
<u>55</u>	Glycerol	DIVOZOO	∠.5 kg 1 L
<u>56</u>		62700	
<u>50</u>	2-mercaptoethanol	63700	250 mL
<u>57</u> <u>58</u>	Brilliant Blue R	D0404	100 g
	water RNase free	D0121	500 mL
<u>59</u>	Formamide	151160	100 mL
60	Restriction enzymes (various)		1 vial
<u>61</u>	Ampicillin		5 g
<u>62</u>	Pestal mortor		
63	Liquid nitrogen		1 L
<u>64</u>	Eppendorf tubes RNase/DNase free 1.5 mL	3445	1x1000
<u>65</u>	Gloves disposable latex		1 pkt
<u>66</u>	Tips, blue DNase/RNase free	2160	1x1000
<u>67</u>	Tips, yellow DNase/RNase free	2100.C	1x1000
<u>68</u>	Tips, white DNase/RNase free	2040	1x1000
<u>69</u>	Plastic (Saran) wrap		1 pkt
<u>70</u>	Aluninium foil		1 roll
<u>71</u>	Beakers pyrex 100 mL		1 pc

<u>72</u>	Bookers pursey 250 ml	1 22
	Beakers pyrex 250 mL	1 pc
<u>73</u>	Beakers pyrex 500 mL 1 pc	
<u>74</u>	Beakers pyrex 1000 mL	1 pc
<u>75</u>	Flasks volumetric pyrex 25 mL	1 pc
<u>76</u>	Flasks volumetric pyrex 50 mL	1 pc
<u>77</u>	Flasks volumetric pyrex 100 mL	1 pc
<u>78</u>	Flasks volumetric pyrex 250 mL	1 pc
<u>79</u>	Flasks volumetric pyrex 500 mL	1 pc
<u>80</u>	Flasks volumetric pyrex 1000 mL	1 pc
<u>81</u>	Flasks Erlenmeyer pyrex 250 mL	1 pc
<u>82</u>	Flasks Erlenmeyer pyrex 500 mL	1 pc
<u>83</u>	Flasks Erlenmeyer pyrex 1000 mL	1 pc
<u>84</u>	Storage bottles 50 mL autoclavable	1 pc
<u>85</u>	Storage bottles 100 mL autoclavable	1 pc
<u>86</u>	Storage bottles 250 mL autoclavable	1 pc
<u>87</u>	Storage bottles 500 mL autoclavable	1 pc
<u>88</u>	Storage bottles 1 L autoclavable	1 pc
<u>89</u>	Storage bottles 2 L autoclavable	1 pc
<u>90</u>	Petri plates disposable	1 pair
<u>91</u>	Perti plates (glass, large)	1 pair
<u>92</u>	Forceps	1 pc
<u>93</u>	Spatula	1 pc
94	Parafilm	1 roll
<u>95</u>	Beckman Paper wicks	1 pkt
<u>96</u>	Labelling tapes	1 pkt
<u>97</u>	Weighing boats	50 pcs
<u>98</u>	Labeling permanent marker	1 pc
<u>99</u>	Filter paper round Whatmann	1 pkt

Note: Following Brands are required for contract.

Sigma – Aldrich, Fluka, Merck, RdH, Biorod, Fermentas – Thermo Scintific, Applichem, BioBasic, Qiagen, ChemLab, Rci – Lab Scan Glentham, Life Sciences, Bio Life, Duksan, Penta OR Equivalent Section VIII.

Sample Forms

Sample Forms

1.	Bid Form and Price Schedules	123,124
2.	Manufacturer's/Distrbutor's/Dealer's Certificate Form	125

1. Bid Form and Price Schedules

		т	Date:	
To:		1	ender No.	
	Prof. Dr. Zahir Ahma Institute of Soil & En University of Agricul Faisalabad.	vironmental Science	es,	
Gentlemen an Having		g documents inclu	ding Tender No.95/20	19, the receipt of
which is here	by duly acknowledged	l, we, the undersign	ed, offer to supply and	deliver [description
of goods and sea	rvices]in conformity wi	th the said bidding	documents for the sum	of [total bid amount
in words and fig	gures]or such other sun	ns as may be ascert	ained in accordance wi	th the Schedule of
Prices attache	ed herewith and made	part of this Bid.	We understand that fai	ilure to furnish all
information re	equired by the bidding	documents or to su	bmit a bid not substant	tially responsive to
the bidding d	ocuments in every res	pect will be at our	risk and may result in	the rejection of its
bid.				
If our b	id is accepted, we und	lertake to provide a	performance security	in the form, in the
accordance w	ith the delivery scheo	dule specified in th	g documents and to de ne Schedule of Requir per provisions of the bid	ements. Failure to
We agree	ee to abide by this Bio	l for the Bid Validi	ty Period specified in	Clause 16.1 of the
Bid Data She	et and it shall remain	binding upon us and	d may be accepted at a	ny time before the
expiration of	that period.			
	ssions or gratuities, if a		aid by us to agents relate the listed below:	ing to this Bid, and
		Currency	Commission or gratuity	
	(if none, state "none'	")		<u> </u>
thereof and yo	our notification of awa	rd, shall constitute a	Bid, together with your a binding Contract betw est or any bid you may	een us.
We certify/co documents.	nfirm that we comply	with all requiremen	ts as per ITB Clause 2 o	of the bidding
Dated this	day o	of	20	
[signature]		[in the capac	city of]	

Duly authorized to sign Bid for and on behalf of _____

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

Name of Bidder _____. Tender Number ____. Page _ of ____.

1	2	3	4	5
Item	Description	Country of origin	Quantity	Price including all Taxes

Signature of Bidder	
---------------------	--

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.