GOVERNMENT OF MEGHALAYA SUPPORTING HUMAN CAPITAL DEVELOPMENTIN MEGHALAYA (ADB LOAN NO. 3033-IND)

BIDDING DOCUMENT FOR

PROCUREMENT OF GOODS under Package-2 for

Procurement of Equipment and other items for Science Laboratory in Schools of Meghalaya(Khasi Jaintia Region)

SINGLE STAGE – TWO ENVELOPE BIDDING PROCEDURE (National Competitive Bidding)

Issued on:05th-May- 2018 Invitation for Bids No.:SHCDM/NCB/SE/01 NCB No:SHCDM/Goods/SE/02 Employer: Department of Education, Govt. of Meghalaya Country: India

Preface

This Bidding Document for Procurement of Goods has been prepared by Department of Education (DoE), Government of Meghalaya and is based on the Standard Bidding Document for the Procurement of Goods issued by the Asian Development Bank, dated December 2015

This document reflects the structure and the provisions of the Master Procurement Document for the Procurement of Goods, Package 2, except where specific considerations within the Asian Development Bank have required a change.

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PART I – Bidding Procedures

Section 1- Instructions to Bidders

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Single-Stage: Two-Envelope

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A. General

- Scope of Bid
 1.1 In connection with the Invitation for Bids (IFB) indicated in the Bid Data Sheet (BDS), the Purchaser, as indicated in the BDS, issues this Bidding Document for the supply of Goods and Related Services incidental thereto as specified in Section 6(Schedule of Supply). The name, identification, and number of lots of the international competitive bidding (NCB) are provided in the BDS.
 - 1.2 Throughout this Bidding Document,
 - (a) the term "in writing" means communicated in written form and delivered against receipt;
 - (b) except where the context requires otherwise, words indicating the singular also include the plural and words indicating the plural also include the singular; and
 - (c) "day" means calendar day.
- 2. Source of Funds 2.1 The Borrower or Recipient (hereinafter called "Borrower") indicated in the BDS has applied for or received financing (hereinafter called "funds") from the Asian Development Bank (hereinafter called "ADB") toward the cost of the project named in the BDS. The Borrower intends to apply a portion of the funds to eligible payments under the contract(s) for which this Bidding Document is issued.
 - 2.2 Payments by ADB will be made only at the request of the Borrower and upon approval by ADB in accordance with the terms and conditions of the Financing Agreement between the Borrower and ADB (hereinafter called the Financing Agreement), and will be subject in all respects to the terms and conditions of that Financing Agreement. No party other than the Borrower shall derive any rights from the Financing Agreement or have any claim to the funds.
- **3. Fraud** andCorruption **3.1** ADB's Anticorruption Policy requires Borrowers (including beneficiaries of ADB-financed activity), as well as Bidders, Suppliers, and Contractors under ADB-financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, ADB
 - (a) defines, for the purposes of this provision, the terms set forth below as follows:
 - "Corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party;
 - (ii) "fraudulent practice" means any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
 - (iii) "Coercive practice" means impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly

the actions of a party;

- (iv) "Collusive practice" means an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party;
- (v) "obstructive practice" means (a) deliberately destroying, falsifying, altering, or concealing of evidence material to an ADB investigation; (b) making false statements to investigators in order to materially impede an ADB investigation; (c) failing to comply with requests to provide information, documents or records in connection with an Office of Anticorruption and Integrity (OAI) investigation; (d) threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or (e) materially impeding ADB's contractual rights of audit or access to information; and
- (vi) "integrity violation" is any act which violates ADB's Anticorruption Policy, including (i) to (v) above and the following: abuse, conflict of interest, violations of ADB sanctions, retaliation against whistleblowers or witnesses, and other violations of ADB's Anticorruption Policy, including failure to adhere to the highest ethical standard.
- (b) will reject a proposal for award if it determines that the Bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices or other integrity violations in competing for the Contract;
- (c) will cancel the portion of the financing allocated to a contract if it determines at any time that representatives of the borrower or of a beneficiary of ADB-financing engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices or other integrity violations during the procurement or the execution of that contract, without the borrower having taken timely and appropriate action satisfactory to ADB to remedy the situation;
- (d) will impose remedial actions on a firm or an individual, at any time, in accordance with ADB's Anticorruption Policy and Integrity Principles and Guidelines (both as amended from time to time), including declaring ineligible, either indefinitely or for a stated period of time, to participate¹ in ADB-financed, administered, or supported activities or to benefit from an ADBfinanced, administered, or supported contract, financially or otherwise, if it at any time determines that the firm or individual has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices or other integrity violations; and
- (e) will have the right to require that a provision be included in bidding documents and in contracts financed by ADB, requiring Bidders, suppliers and contractors to permit ADB or its

¹ Whether as a Contractor, Subcontractor, Consultant, Manufacturer or Supplier, or Service Provider; or in any other capacity (different names are used depending on the particular Bidding Document).

representative to inspect their accounts and records and other documents relating to the bid submission and contractperformance and to have them audited by auditors appointed by ADB.

- 3.2 Furthermore, Bidders shall be aware of the provision stated in Subclause 3.2 and Sub-clause 35.1 (c) of the General Conditions of Contract.
- 4. Eligible Bidders 4.1 A Bidder may be a natural person, private entity, or governmentowned enterprise subject to ITB Sub-Clause 4.5-or any combination of them with a formal intent to enter into an agreement or under an existing agreement in the form of a joint venture. In the case of a joint venture, allparties to the Joint Venture shall be jointly and severally liable; and the Joint Venture shall nominate a representative who shall have the authority to conduct all businesses for and on behalf of any and all the parties of the Joint Venture during the bidding process and, in the event the Joint Venture is awarded the Contract, during contract execution.
 - 4.2 A Bidder, and all parties constituting the Bidder, shall have the nationality of an eligible country, in accordance with Section 5 (Eligible Countries). A Bidder shall be deemed to have the nationality of a country if the Bidder is a citizen or is constituted, or incorporated, and operates in conformity with the provisions of the laws of that country. This criterion shall also apply to the determination of the nationality of proposed subcontractors or suppliers for any part of the Contract, including related services.
 - 4.3 A Bidder shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be disqualified. A Bidder may be considered to be in a conflict of interest with one or more parties in this bidding process if any of, including but not limited to, the following apply:
 - (a) they have controlling shareholders in common; or
 - (b) they receive or have received any direct or indirect subsidy from any of them; or
 - (c) they have the same legal representative for purposes of this Bid; or
 - (d) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to material information about or improperly influence the Bid of another Bidder, or influence the decisions of the Purchaser regarding this bidding process; or
 - (e) a Bidder participates in more than one bid in this bidding process, either individually or as a partner in a joint venture, except for alternative offers permitted under ITB 13. This will result in the disqualification of all Bids in which it is involved. However, subject to any finding of a conflict of interest in terms of ITB 4.3(a)-(d) above, this does not limit the participation of a Bidder as a subcontractor in

another bid or of a firm as a subcontractor in more than one Bid; or

- (f) a Bidder or any affiliated entity, participated as a consultant in the preparation of the design or technical specifications of the goods and services that are the subject of the Bid; or
- (g) a Bidder was affiliated with a firm or entity that has been hired (or is proposed to be hired) by the Purchaser or Borrower as Project Manager for the contract.
- 4.4 A firm shall not be eligible to participate in any procurement activities under an ADB-financed, administered, or supported project while under temporary suspension or debarment by ADB pursuant to its Anticorruption Policy (see ITB 3), whether such debarment was directly imposed by ADB, or enforced by ADB pursuant to the Agreement for Mutual Enforcement of Debarment Decisions. A bid from a temporary suspended or debarred firm will be rejected.
- 4.5 Government-owned enterprises in the Purchaser's country shall be eligible only if they can establish that they (i) are legally and financially autonomous, (ii) operate under commercial law, and (iii) are not a dependent agency of the Purchaser.
- 4.6 Bidders shall provide such evidence of their continued eligibility satisfactory to the Purchaser, as the Purchaser shall reasonably request.
- 4.7 Firms shall be excluded if by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, the Borrower's country prohibits any import of goods or contracting of works or services from that country or any payments to persons or entities in that country.
- Eligible Goods and Related Services
 All Goods and Related Services to be supplied under the Contract and financed by ADB, shall have their country of origin in eligible source countriesas defined in ITB 4.2, and all expenditures under the Contract will be limited to such Goods and Related Services.
 - 5.2 For purposes of this clause, the term "goods" includes commodities, raw material, machinery, equipment, and industrial plants; and "related services" includes services such as insurance, transportation, installation, and commissioning, training, and initial maintenance.
 - 5.3 The term "country of origin" means the country where the goods have been mined, grown, cultivated, produced, manufactured, or processed; or through manufacture, processing, or assembly, another commercially recognized article results that differs substantially in its basic characteristics from its imported components.
 - 5.4 The nationality of the firm that produces, assembles, distributes, or sells the goods shall not determine their origin.

B. Contents of Bidding Document

6. Sections of the 6.1 The Bidding Document consist of Parts I, II, and III, which include all the sections indicated below, and should be read in conjunction with any addenda issued in accordance with ITB Clause 8.

PART I Bidding Procedures

- Section 1 Instructions to Bidders (ITB)
- Section 2 Bid Data Sheet (BDS)
- Section 3 Evaluation and Qualification Criteria (EQC)
- Section 4 Bidding Forms (BDF)
- Section 5 Eligible Countries (ELC)

PART II Supply Requirements

• Section 6 Schedule of Supply (SS)

PART III Contract

- Section 7 General Conditions of Contract (GCC)
- Section 8 Special Conditions of Contract (SCC)
- Section 9 Contract Forms (COF)
- 6.2 The Invitation for Bids (IFB) issued by the Purchaser is not part of the Bidding Document.
- 6.3 The Purchaser is not responsible for the completeness of the Bidding Document and its addenda, if they were not obtained directly from the source stated by the Purchaser in the IFB.
- 6.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Document. Failure to furnish all information or documentation required by the Bidding Document, may result in the rejection of the Bid.
- 7. **Clarification of** 7.1 A prospective Bidder requiring any clarification on the Bidding Bidding Document shall contact the Purchaser in writing at the Purchaser's Document address indicated in the BDS. The Purchaser will respond in writing to any request for clarification, provided that such request is received no later than 21 days prior to the deadline for submission of Bids. The Purchaser shall forward copies of its response to all Bidders who have acquired the Bidding Document in accordance with ITB 6.3, including a description of the inquiry but without identifying its source. Should the Purchaser deem it necessary to amend the Bidding Document as a result of a clarification, it shall do so following the procedure under ITB 8 and ITB 24.2.
- Amendment of 8.1 At any time prior to the deadline for submission of the Bids, the Bidding
 Bidding
 At any time prior to the deadline for submission of the Bids, the Purchaser may amend the Bidding Document by issuing addenda.

Document

- 8.2 Any addendum issued shall be part of the Bidding Document and shall be communicated in writing to all who have obtained the Bidding Document directly from the Purchaserin accordance with ITB 6.3.
- 8.3 To give prospective Bidders reasonable time in which to take an addendum into account in preparing their Bids, the Purchaser may, at its discretion, extend the deadline for the submission of the Bids, pursuant to ITB 24.2

C. Preparation of Bids

- 9. Cost of Bidding 9.1 The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Purchaser shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.
- **10. Language of Bid** 10.1 The Bid, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and the Purchaser, shall be written in the language specified in the BDS. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages in the language specified in the BDS, in which case, for purposes of interpretation of the Bid, such translation shall govern.
- 11.Documents
Comprising the
Bid11.1The Bid shall comprise two envelopes submitted simultaneously,
one containing the Technical Bid and the other the Price Bid, both
envelopes enclosed together in an outer single envelope.
 - 11.2 The Technical Bid submitted by the Bidder shall comprise the following:
 - (a) Technical Bid Submission Sheet;
 - (b) Bid Security or Bid-Securing Declaration, in accordance with ITB 21;
 - (c) alternative Technical Bid, if permissible, in accordance with ITB 13;
 - (d) written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 22;
 - (e) documentary evidence in accordance with ITB 16, establishing the Bidder's eligibility to bid;
 - (f) documentary evidence in accordance with ITB 17, that the Goods and Related Services to be supplied by the Bidder are of eligible origin;
 - (g) documentary evidence in accordance with ITB 18 and ITB 32, that the Goods and Related Services conform to the Bidding Document;

- (h) documentary evidence in accordance with ITB 19, establishing the Bidder's qualifications to perform the contract if its Bid is accepted; and
- (i) any other document required in the BDS.
- 11.3 The Price Bid submitted by the Bidder shall comprise the following:
 - (a) Price Bid Submission Sheet and the applicable Price Schedules, in accordance with ITB 12, ITB 14, and ITB 15;
 - (b) alternative Price Bid corresponding to the alternative Technical Bid, if permissible, in accordance with ITB 13; and
 - (c) any other document required in the BDS.
- 12. Bid Submission Sheets and Price Schedules
 12.1 The Bidder shall submit the Technical Bid Submission Sheet and the Price Bid Submission Sheet using the form furnished in Section 4(Bidding Forms). These forms must be completed without any alterations to their format, and no substitutes shall be accepted. All blank spaces shall be filled in with the information requested.
 - 12.2 The Bidder shall submit, as part of the Price Bid, the Price Schedules for Goods and Related Services, according to their origin as appropriate, using the forms furnished in Section 4(Bidding Forms) and as required in the BDS.
- **13.** Alternative Bids 13.1 Unless otherwise indicated in the BDS, alternative Bids shall not be considered.
- 14. Bid Prices and
Discounts14.1The prices and discounts quoted by the Bidder in the Price Bid
Submission Sheet and in the Price Schedules shall conform to the
requirements specified below.
 - 14.2 All items in the Schedule of Supply must be listed and priced separately in the Price Schedules. If a Price Schedule shows items listed but not priced, their prices shall be assumed to be included in the prices of other items. Items not listed in the Price Schedule shall be assumed not to be included in the Bid, and provided that the Bid is substantially responsive, the corresponding adjustment shall be applied in accordance with ITB 33.3.
 - 14.3 The price to be quoted in the Price Bid Submission Sheet shall be the total price of the Bid excluding any discounts offered. Absence of the total bid price in the Price Bid Submission Sheet may result in the rejection of the Bid.
 - 14.4 The Bidder shall quote discounts and the methodology for their application in the Price Bid Submission Sheet.
 - 14.5 The terms EXW, CIF, CIP, and other similar terms shall be governed by the rules prescribed in the current edition of Incoterms, published by the International Chamber of Commerce, at the date of the Invitation for Bids or as specified in the BDS.

- 14.6 Prices proposed in the Price Schedule Forms for Goods and Related Services, shall be disaggregated, when appropriate, as indicated in this sub-clause. This disaggregation shall be solely for the purpose of facilitating the comparison of Bids by the Purchaser. This shall not in any way limit the Purchaser's right to contract on any of the terms offered
 - (a) for Goods offered from within the Purchaser's country:
 - (i) the price of the goods quoted EXW (ex-works, exfactory, ex warehouse, ex showroom, or off-the-shelf, as applicable), including all customs duties and sales and other taxes already paid or payable on the components and raw material used in the manufacture or assembly of goods quoted ex works or ex-factory, or on the previously imported goods of foreign origin quoted ex warehouse, ex showroom, or off-the-shelf;
 - (ii) sales tax and all other taxes applicable in the Purchaser's country and payable on the Goods if the Contract is awarded to the Bidder; and
 - (iii) the total price for the item.
 - (b) for Goods offered from outside the Purchaser's country:
 - the price of the goods quoted CIF (named port of destination), or CIP (border point), or CIP (named place of destination), in the Purchaser's country, as specified in the BDS;
 - (ii) the price of the goods quoted FOB port of shipment (or FCA, as the case may be), if specified in the BDS; and
 - (iii) the total price for the item.
 - (c) for Related Services whenever such are specified in the Schedule of Supply:
 - (i) the local currency cost component of each item comprising the Related Services; and
 - (ii) the foreign currency cost component of each item comprising the Related Services, inclusive of all customs duties, sales and other similar taxes applicable in the Purchaser's country, payable on the Related Services, if the Contract is awarded to the Bidder.
- 14.7 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 BDS. A Bid submitted with an adjustable price quotation shall be treated as nonresponsive and shall be rejected, pursuant to ITB 32. However, if in accordance with the BDS, prices quoted by the Bidder shall be subject to adjustment during the performance of the Contract, but a Bid submitted with no indexes identified in the Tables of Adjustment

Data, price adjustment shall be treated as zero for the purpose of price adjustment during the performance of the contract.

14.8 If so indicated in ITB 1.1, Bids are being invited for individual (lots) or for any combination contracts of contracts (packages). Unless otherwise indicated in the BDS, prices quoted shall correspond to 100% of the items specified for each lot and to 100% of the quantities specified for each item of a lot.Bidders wishing to offer any price discount for the award of more than one Contract shall specify in their Price Bids the price discount applicable to each package, or alternatively, to individual Contracts within the package. Price discounts shall be submitted in accordance with ITB 14.4, provided the Price Bids for all lots are submitted and opened at the same time.

15. Currencies of 15.1 Bid prices shall be quoted in the following currencies: Bid

Bidders may express their bid price in any fully convertible currency. If a Bidder wishes to be paid in a combination of amounts in different currencies, it may quote its price accordingly but shall use no more than three currencies in addition to the currency of the Purchaser's country.

If some of the expenditures for the Related Services are to be incurred in the borrowing country, such expenditures should be expressed in the Bid and will be payable in the Purchaser's currency.

- 16. Documents Establishing the Eligibility of the Bidder
 16.1 To establish their eligibility in accordance with ITB 4, Bidders shall complete the eligibility declarations in the Bid Submission Sheet, included in Section 4(Bidding Forms); andif the Bidder is an existing or intended Joint Venture in accordance with ITB 4.1, submit a copy of the Joint Venture Agreement, or a letter of intent to enter into such an Agreement. The respective document shall be signed by all legally authorized signatories of all the parties to the existing or intended Joint Venture, as appropriate.
- 17. Documents
 Establishing the Eligibility of Goods and Related Services
 In the stablish the eligibility of the Goods and Related Services, in accordance with ITB 5, Bidders shall complete the country of origin declarations in the Price Schedule Forms included in Section 4(Bidding Forms).
- 18.Documents18.Establishing the
Conformity of
the Goods and
Related Services
to the Bidding
Document18.
- 18.1 To establish the conformity of the Goods and Related Services to the Bidding Document, the Bidder shall furnish as part of its Technical Bid documentary evidence that the Goods and Related Services conform to the requirements specified in Section 6(Schedule of Supply).
 - 18.2 The documentary evidence may be in the form of literature, drawings or data, and shall consist of a detailed item-by-item

description of the essential technical and performance characteristics of the Goods and Related Services, demonstrating substantial responsiveness of the Goods and Related Services to those requirements, and if applicable, a statement of deviations and exceptions to the provisions of Section 6(Schedule of Supply).

- 18.3 Standards for workmanship, process, material, and equipment, as well as references to brand names or catalogue numbers specified by the Purchaser in Section 6(Schedule of Supply), are intended to be descriptive only and not restrictive. The Bidder may offer other standards of quality, brand names, and/or catalogue numbers, provided that it demonstrates, to the Purchaser's satisfaction, that the substitutions ensure substantial equivalence or are superior to those specified in Section 6(Schedule of Supply).
- Documents
 Establishing the Qualifications of the Bidder
 To establish its qualifications to perform the Contract, the Bidder shall submit as part of its Technical Proposal the evidence indicated for each qualification criteria specified in Section 3(Evaluation and Qualification Criteria).
 - 19.2 If so required in the BDS, a Bidder that does not manufacture or produce the Goods it offers to supply shall submit the Manufacturer's Authorization using the form included in Section 4(Bidding Forms) to demonstrate that it has been duly authorized by the manufacturer or producer of the Goods to supply these Goods in the Purchaser's country.
 - 19.3 If so required in the BDS, a Bidder that does not conduct business within the Purchaser's country shall submit evidence that it will be represented by an agent in the 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.
- 20. Period of Validity of Bids
 20.1 Bids shall remain valid for the period specified in the BDS after the bid submission deadline date prescribed by the Purchaser. A Bid valid for a shorter period shall be rejected by the Purchaser as nonresponsive.
 - 20.2 In exceptional circumstances, prior to the expiration of the bid validity period, the Purchaser may request Bidders to extend the period of validity of their Bids. The request and the responses shall be made in writing. If a Bid Security is requested in accordance with ITB 21, it shall also be extended 28 days beyond the deadline of the extended bid validity period. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not be required or permitted to modify its Bid.
- 21. Bid Security/
Bid-Securing
Declaration21.1Unless otherwise specified in the BDS, the Bidder shall furnish as
part of its Bid, in original form, either a Bid-Securing Declaration or
a bid security as specified in the BDS. In the case of a bid security,
the amount and currency shall be as specified in the BDS.
 - 21.2 If a Bid-Securing Declaration is required pursuant to ITB 21.1, it shall use the form included in Section 4 (Bidding Forms). The Purchaser will declare a Bidder ineligible to be awarded a Contract

for a specified period of time, as indicated in the BDS, if a Bid-Securing Declaration is executed.

- 21.3 If abid security is specified pursuant to ITB 21.1, the bid security shall be, at the Bidder's option, in any of the following forms: an unconditional bank guarantee, an irrevocable letter of credit, ora cashier's or certified check, all from a reputable source from an eligible country as described in Section 5 (Eligible Countries). In the case of a bank guarantee, the bid security shall be submitted either using the Bid Security Form included in Section 4(Bidding Forms), or another form acceptable to the Purchaser. The form must include the complete name of the Bidder. The bid security shall be valid for 28 days beyond the original validity period of the bid, or beyond any period of extension if requested under ITB 20.2.
- 21.4 Unless otherwise specified in the BDS, any bid not accompanied by a substantially compliant bidsecurityor Bid-Securing Declaration, if one is required in accordance with ITB 21.1, shall be rejected by the Purchaser as nonresponsive.
- 21.5 If a bid security is specified pursuant to ITB 21.1, the bid security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's furnishing of the performance security pursuant to ITB 46.
- 21.6 If a bid security is specified pursuant to ITB 21.1, the bid security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the Contract Agreement and furnished the required performance security.
- 21.7 The bid security may be forfeited or the Bid-Securing Declaration executed,

if a Bidder withdraws its bid during the period of bid validity as specified by the Bidder on the Technical Bid Submission Sheet, except as provided in ITB 20.2; orif the successful Bidder fails to

- (i) sign the Contract Agreement in accordance with ITB 45;
- (ii) furnish a performance security in accordance with ITB 46; or
- (iii) accept the arithmetical corrections of its bid in accordance with ITB 36.
- 21.8 The bid security or the Bid-Securing Declaration of a Joint Ventureshall be in the name of the Joint Venture that submits the bid. If the Joint Venture has not been legally constituted at the time of bidding, the bid security or the Bid-Securing Declaration shall be in the names of all future partners as named in the letter of intent mentioned in ITB 4.1.
- 22. Format and Signing of Bid
 22.1 The Bidder shall prepare one original set of the Technical Bid and one original set of the Price Bid as described in ITB 11 and clearly mark each "ORIGINAL - TECHNICAL BID" and "ORIGINAL -PRICE BID". In addition, the Bidder shall submit copies of the

Technical Bid and the Price Bid, in the number specified in the BDS and clearly mark them "COPY NO... - TECHNICAL BID" and "COPY NO.... - PRICE BID". In the event of any discrepancy between the original and the copies, the original shall prevail.

- 22.2 The original and all copies of the Bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as specified in the BDS and shall be attached to the Bid. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the Bid, except for unamended printed literature, shall be signed or initialled by the person signing the Bid.If a Bidder submits a deficient authorization, the Bid shall not be rejected in the first instance. The Purchaser shall request the Bidder to submit an acceptable authorization within the number of days as specified in the BDS. Failure to provide an acceptable authorization within the prescribed period of receiving such a request shall cause the rejection of the Bid.
- 22.3 Any amendments such as interlineations, erasures, or overwriting shall be valid only if they are signed or initialled by the person signing the bid.

D. Submission and Opening of Bids

23. Sealing and Marking of Bids
23.1 Bidders may submit their bids by mail or by hand. When so specified in the BDS, Bidders shall have the option of submitting their bids electronically. Procedures for submission, sealing and marking are as follows:

Bidders submitting Bids by mail or by hand shall enclose the original of the Technical Bid, the original of the Price Bid, and each copy of the Technical Bid and each copy of the Price Bid, including alternative Bids, if permitted in accordance with ITB 13, in separate sealed envelopes, duly marking the envelopes as "ORIGINAL – TECHNICAL BID", "ORIGINAL - PRICE BID" and "COPY NO... - TECHNICAL BID" and "COPY NO... - PRICE BID", as appropriate. These envelopes containing the original and the copies shall thenbe enclosed in one single envelope. The rest of the procedure shallbe in accordance with ITB 23.2to ITB 23.6. Bidders submitting Bids electronically shall follow the electronic Bidsubmission procedures specified in the BDS.

- 23.2 The inner and outer envelopes shall bear the name and address of the Bidder; be addressed to the Purchaser in accordance with ITB 24.1; and bear the specific identification of this bidding process indicated in the BDS.
- 23.3 The outer envelopes and the inner envelopes containing the Technical Bids shall bear a warning not to open before the time and date for the opening of Technical Bids, in accordance with ITB 27.1.
- 23.4 The inner envelopes containing the Price Bids shall bear a warning not to open until advised by the Purchaser in accordance with ITB

27.2.

- 23.5 If all envelopes are not sealed and marked as required, the Purchaser will assume no responsibility for the misplacement or premature opening of the Bid.
- 23.6 Alternative Bids, if permissible in accordance with ITB 13, shall be prepared, sealed, marked, and delivered in accordance with the provisions of ITB 22 and ITB 23, with the inner envelopes marked in addition "ALTERNATIVE NO...." as appropriate
- 24. Deadline for Submission of Bids24.1 Bids must be received by the Purchaser at the address and no later than the date and time indicated in the BDS.
 - 24.2 The Purchaser may, at its discretion, extend the deadline for the submission of Bids by amending the Bidding Document in accordance with ITB 8, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.
- **25. Late Bids** 25.1 The Purchaser shall not consider any Bid that arrives after the deadline for submission of Bids, in accordance with ITB 24. Any Bid received by the Purchaser after the deadline for submission of Bids shall be declared late, rejected, and returned unopened to the Bidder.
- 26. Withdrawal, 26.1 A Bidder may withdraw, substitute, or modify its Bid after it has Substitution. been submitted by sending a written notice, duly signed by an and Modification authorized representative, and shall include a copy of the of Bids authorization in accordance with ITB 22.2 (except that withdrawal notices do not require copies). The corresponding substitution or modification of the bid must accompany the respective written notice. All notices must beprepared and submitted in accordance with ITB 22 and ITB 23 (except that withdrawal notices do not require copies), and in addition, the respective inner and outer envelopes shall be clearly marked "Withdrawal," "Substitution," "Modification;" and received by the Purchaser prior to the deadline prescribed for submission of bids, in accordance with ITB 24.
 - 26.2 Bids requested to be withdrawn in accordance with ITB 26.1 shall be returned unopened to the Bidders.
 - 26.3 No Bid may be withdrawn, substituted, or modified 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 Technical Bid Submission Sheet or any extension thereof.
- 27. Bid Opening 27.1 The Purchaser shall open the Technical Bids in public at the address, on the date, and time specified in the BDS in the presence of Bidder's designated representatives and anyone who choose to attend. Any specific electronic bid opening procedures required if electronic bidding is permitted in accordance with ITB 23.1, shall be as specified in the BDS.

- 27.2 The Price Bids will remain unopened and will be held in custody of the Purchaser until the time of opening of the Price Bids. The date, time, and location of the opening of Price Bids will be advised in writing by the Purchaser. If the Technical Bid and the Price Bid are submitted together in one envelope, the Purchaser may reject the Bid. Alternatively, the Price Bid may be immediately resealed for later evaluation.
- 27.3 First, envelopes marked "WITHDRAWAL" shall be opened, read out, and recorded, and the envelope containing the corresponding bid shall not be opened, but returned to the Bidder. No bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out and recorded at bid opening.
- 27.4 Next, outer envelopes marked "SUBSTITUTION" shall be opened. The inner envelopes containing the Substitution Technical Bid and/or Substitution Price Bid shall be exchanged for the corresponding envelopes being substituted, which are to be returned to the Bidder unopened. Only the Substitution Technical Bid, if any, shall be opened, read out, and recorded. Substitution Price Bid will remain unopened in accordance with ITB 27.2. No envelope shall be substituted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out and recorded at bid opening.
- 27.5 Next, outer envelopes marked "MODIFICATION" shall be opened. No Technical Bid and/or Price Bid shall be modified unless the corresponding modification notice contains a valid authorization to request the modification and is read out and recorded at the opening of Technical Bids. Only the Technical Bids, both Original as well as Modification, are to be opened, read out, and recorded at the opening. Price Bids, both Original as well as Modification, will remain unopened in accordance with ITB 27.2.
- 27.6 All other envelopes holding the Technical Bids shall be opened one at a time, and the following read out and recorded the name of the Bidder; whether there is a modification or substitution; the presence of a bid security or a Bid-Securing Declaration, if required; and any other details as the Purchaser may consider appropriate.

Only Technical Bids and alternative Technical Bids read out and recorded at bid opening shall be considered for evaluation. Unless otherwise specified in the BDS, all pages of the Technical Bid Submission Sheet are to be initialed by at least three representatives of the Purchaser attending the bid opening.No Bid shall be rejected at the opening of Technical Bids except for late bids, in accordance with ITB 25.1.

27.7 The Purchaser shall prepare a record of the opening of Technical Bids that shall include, as a minimum: the name of the Bidder and whether there is a withdrawal, substitution, modification, or alternative offer; and the presence or absence of a bid securityor a Bid-Securing Declaration, if one was required. The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders.

- 27.8 At the end of the evaluation of the Technical Bids, the Purchaser will invite bidders who have submitted substantially responsive Technical Bids and who have been determined as being qualified for award to attend the opening of the Price Bids. The date, time, and location of the opening of Price Bids will be advised in writing by the Purchaser. Bidders shall be given reasonable notice of the opening of Price Bids.
- 27.9 The Purchaser will notify Bidders in writing who have been rejected on the grounds of being substantially nonresponsive to the requirements of the Bidding Document and return their Price Bids unopened.
- 27.10 The Purchaser shall conduct the opening of Price Bids of all Bidders who submitted substantially responsive Technical Bids, in the presence of Bidders` representatives who choose to attend at the address, on the date, and time specified by the Purchaser. The Bidder's representatives who are present shall be requested to sign a register evidencing their attendance.
- 27.11 All envelopes containing Price Bids shall be opened one at a time and the following read out and recorded the name of the Bidder; whether there is a modification or substitution; the Bid Prices, including any discounts and alternative offers; and any other details as the Purchaser may consider appropriate.

Only Price Bids, discounts, and alternative offers read out and recorded during the opening of Price Bids shall be considered for evaluation. Unless otherwise specified in the BDS, all pages of the Price Bid Submission Sheet and Price Schedules are to be initialed by at least three representatives of the Employer attending bid the opening. No Bid shall be rejected at the opening of Price Bids.

27.12 The Purchaser shall prepare a record of the opening of Price Bids that shall include, as a minimum: the name of the Bidder, the Bid Price (per lot if applicable), any discounts, and alternative offers. The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidderswho submitted bids on time, and posted online when electronic bidding is permitted.

E. Evaluation and Comparison of Bids

28. Confidentiality 28

28.1 Information relating to the examination, evaluation, comparison, and qualification of Bids, and recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with such process until information on the Contract award is communicated to all Bidders.

- 28.2 Any attempt by a Bidder to influence the Purchaser in the examination, evaluation, comparison, and post qualification of the Bids or Contract award decisions may result in the rejection of its Bid.
- 28.3 Notwithstanding ITB 28.2, from the time of opening the Technical Bids to the time of Contract award, if any Bidder wishes to contact the Purchaser on any matter related to the bidding process, it should do so in writing.
- **29. Clarification of Bids 29.1** To assist in the examination, evaluation, comparison and postqualification of the Bids, the Purchaser may, at its discretion, ask any Bidder for a clarification of its Bid. Any clarification submitted by a Bidder with regard to its Bid and that is not in response to a request by the Purchaser shall not be considered. The Purchaser's request for clarification and the response shall be in writing. No change in the prices or substance of the Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Purchaser in the evaluation of the Price Bids, in accordance with ITB 36.
 - 29.2 If a Bidder does not provide clarifications on its Bid by the date and time set in the Purchaser's request for clarification, its bid may be rejected.
 - **Dns,** 30.1 During the evaluation of Bids, the following definitions apply:
 - (a) "Deviation" is a departure from the requirements specified in the Bidding Document;
 - (b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Document; and
 - (c) "Omission" is the failure to submit part or all of the information or documentation required in the Bidding Document.
- 31. Examination of Technical Bids
 31.1 The Purchaser shall examine the Technical Bid to confirm that all documents and technical documentation requested in ITB 11.4 have been provided, and to determine the completeness of each document submitted.
 - 31.2 The Purchaser shall confirm that the following documents and information have been provided in the Technical Bid. If any of these documents or information is missing, the offer shall be rejected:Technical Bid Submission Sheet in accordance with ITB 12.1;written confirmation of authorization to commit the Bidder;bid security or Bid-Securing Declaration, if applicable; andManufacturer's Authorization, if applicable.

32. Responsiveness 32.1 The Purchaser's determination of a Technical Bid's responsiveness is to be based on the contents of the Technical Bid itself, as defined in ITB 11.

32.2 A substantially responsive Technical Bid is one that meets the requirements of the Bidding Document without material deviation,

30. Deviations, Reservations, and Omissions reservation, or omission. A material deviation, reservation, or omission is one that,

If accepted, would

- affect in any substantial way the scope, quality, or performance of the Goods and Related Services specified in Section 6(Schedule of Supply); or
- (ii) limits in any substantial way, inconsistent with the Bidding Document, the Purchaser's rights or the Bidder's obligations under the Contract; orif rectified, would unfairly affect the competitive position of otherBidders presenting substantially responsive Technical Bids.
- 32.3 The Purchaser shall examine the technical aspects of the Bid in particular, to confirm that all requirements of Section 6(Schedule of Supply) have been met without any material deviation, reservation, or omission.
- 32.4 If a Technical Bid is not substantially responsive to the Bidding Document, it shall be rejected by the Purchaser and may not subsequently be made responsive by the Bidder by correction of the material deviation, reservation, or omission.
- **33.** Nonmaterial 33.1 Provided that a Technical Bid is substantially responsive, the Purchaser may waive nonconformities in the Bid that does not constitute a material deviation, reservation, or omission.
 - 33.2 Provided that a Technical Bid is substantially responsive, the Purchaser may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the Technical Bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the Price Bid of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.
 - 33.3 Provided that a Technical Bid is substantially responsive, the Purchaser shall rectify quantifiable nonmaterial nonconformities or omissions. To this effect, the Bid Price shall be adjusted during evaluation of Price Bids, for comparison purposes only, to reflect the price of the missing or non-conforming item or component. The adjustment shall be made using the method indicated in Section 3(Evaluation and Qualification Criteria).
- **34.** Qualification of 34.1 The Purchaser shall determine to its satisfaction during the evaluation of Technical Bids whether Bidders meets the qualifying criteria specified in Section 3 (Evaluation and Qualification Criteria).
 - 34.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 19.
 - 34.3 An affirmative determination shall be a prerequisite for the opening and evaluation of a Bidder's Price Bid. A negative determination shall result into the disqualification of the Bid, in which event the

Purchaser shall return the unopened Price Bid to the Bidder.

35. Examination of Price Bids 35.1 Following the opening of Price Bids, the Purchaser shall examine the Price Bids to confirm that all documents and financial documentation requested in ITB 11.5 have been provided, and to determine the completeness of each document submitted.

arithmetical errors on the following basis:

35.2 The Purchaser shall confirm that the following documents and information have been provided in the Price Bid. If any of these documents or information is missing, the offer shall be rejected:

Price Bid Submission Sheet in accordance with ITB 12.1; and

Price Schedules, in accordance with ITB 12, ITB 14, and ITB 15.

During the evaluation of Price Bids, the Purchaser shall correct

36. Correction of 36.1 Arithmetical Errors

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, unless in the opinion of the Purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the total price as quoted shall govern and the unit price shall be corrected. If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shallbe corrected. If there is a discrepancy between words and figures, the amount inwords shall prevail, unless the amount expressed inwords is related to an arithmetic error, in which case the amount in figures shallprevail subject to (a) and (b) above.

- 36.2 If the Bidder that submitted the lowest evaluated Bid does not accept the correction of errors, its Bid shall be disqualified and its bid security may be forfeited, or its Bid-Securing Declaration executed.
- 37. Conversion to Single Currency
 37.1 For evaluation and comparison of Price Bids, the Purchaser shall convert all bid prices expressed in the amounts in various currencies into a single currency, using the selling exchange rates established by the source and on the date specified in the BDS.
- **38.** Margin of
Preference38.1Unless otherwise specified in the BDS, a margin of preference shall
not apply.
- **39.** Evaluation of
Price Bids39.1The Purchaser shall use the criteria and methodologies indicated in
this clause. No other criteria or methodology shall be permitted.
 - 39.2 To evaluate a Price Bid, the Purchaser shall consider the following:the bid priceas quoted in accordance with ITB 14; price adjustment for correction of arithmetic errors in accordance with ITB 36.1;price adjustment due to discounts offered in accordance with ITB 14.4;price adjustment due to application of the evaluation criteria specified in Section 3 (Evaluation and Qualification Criteria). These criteria may include factors related to the characteristics, performance, and terms and conditions of purchase of the Goods

and Related Services which shall be expressed to the extent practicable in monetary terms to facilitate comparison of bids unless otherwise specified in Section 3; and converting the amount resulting from applying (a) to (c) above, if relevant, to a single currency in accordance with ITB 37.

- 39.3 The Purchaser's evaluation of a bid will exclude and not take into account in the case of Goods offered from within the Purchaser's country, all sales tax and all other taxes, applicable in the Purchaser's country and payable on the Goods if the Contract is awarded to the Bidder; in the case of Goods offered from outside the Purchaser's country, all customs duties, sales tax, and other taxes, applicable in the Purchaser's country and payable on the Bidder; and other taxes, applicable in the Purchaser's country and payable on the Goods if the Contract is awarded to the Bidder; and any allowance for price adjustment during the period of performance of the Contract, if provided in the Bid.
- 39.4 If this Bidding Document allows Bidders to quote separate prices for different lots (contracts), and the award to a single Bidder of multiple lots (contracts), the methodology to determine the lowest evaluated price of the lot (contract) combinations, including any discounts offered in the Price Bid Submission Sheet, is as specified in Section 3(Evaluation and Qualification Criteria).
- 40. Comparison of
Bids40.1The Purchaser shall compare all substantially responsive Bids to
determine the lowest evaluated bid, in accordance with ITB 39.
- 41. Purchaser's Right to Accept Any Bid, and to Reject Any or All Bids
 41.1 The Purchaser reserves the right to accept or reject any 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 Bidders. In case of annulment, all Bids submitted and specifically, bid securities, shall be promptly returned to the Bidders.

F. Award of Contract

- **42. Award Criteria** 42.1 The Purchaser shall award the Contract to the Bidder whose offer has been determined to be the lowest evaluated Bid and is substantially responsive to the Bidding Document, provided further that the Bidder has remained qualified to perform the Contract satisfactorily.
 - 42.2 A Bid shall be rejected if the qualification criteria as specified in Section 3(Evaluation and Qualification Criteria) are no longer met by the Bidder whose offer has been determined to be the lowest evaluated Bid. In this event the Purchaser shall proceed to the next lowest evaluated Bid to make a similar reassessment of that Bidder's capabilities to perform satisfactorily.
- **43.** Purchaser's **Right to Vary Quantities at Time of Award 43.1** At the time the Contract is awarded, the Purchaser reserves the right to increase or decrease the quantity of Goods and Related Services originally specified in Section 6(Schedule of Supply), provided this does not exceed the percentages indicated in the BDS, and without any change in the unit prices or other terms and

conditions of the Bid and the Bidding Document.

- **44.** Notification of 44.1 Prior to the expiration of the period of bid validity, the Purchaser shall notify the successful Bidder, in writing, that its Bid has been accepted.
 - 44.2 At the same time, the Purchaser shall also notify all other Bidders of the results of the bidding. The Purchaser will publish in an English language newspaper or well-known freely accessible website the results identifying the Bid and lot numbers and the following information: (i) name of each Bidder who submitted a Bid; (ii) bid prices as read out at bid opening; (iii) name and evaluated prices of each Bid that was evaluated; (iv) name of Bidders whose Bids were rejected and the reasons for their rejection; and (v) name of the winning Bidder, and the price it offered, as well as the duration and summary scope of the contract awarded. After publication of the award, unsuccessful Bidders may request in writing to the Purchaser for a debriefing seeking explanations on the grounds on which their Bids were not selected. The Purchaser shall promptly respond in writing to any unsuccessful Bidder who, after publication of contract award, requests a debriefing.
 - 44.3 Until a formal Contract is prepared and executed, the notification of award shall constitute a binding Contract.
- 45. Signing of
Contract45.1Promptly after notification, the Purchaser shall send to the
successful Bidder the Agreement.
 - 45.2 Within 28 days of receipt of the Agreement, the successful Bidder shall sign, date, and return it to the Purchaser.
- 46. Performance Security
 46.1 Within 28 days of the receipt of notification of award from the Purchaser, the successful Bidder shall furnish the Performance Security in accordance with the GCC, using for that purpose the Performance Security Form included in Section 9(Contract Forms), or another form acceptable to the Purchaser.
 - 46.2 Failure of the successful Bidder to submit the above-mentioned Performance Security or sign the Contract Agreement shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security or execution of the Bid-Securing Declaration. In that event the Purchaser may award the Contract to the next lowest evaluated Bidder whose offer is substantially responsive and is determined by the Purchaser to be qualified to perform the Contract satisfactorily.

Section 2- Bid Data Sheet

| ITB 1.1 The ITB 1.1 The Equ The The ITB 2.1 The | e number of the Invitation for Bids (IFB) is :SHCDM/NCB/SE/01 e Purchaser is: Department of Education, Government of Meghalaya e name of the National Competitive Bidding (NCB) is: Procurement of uipment and other items for Science Laboratory in Schools. e identification number of the NCB is: SHCDM/Goods/SE/02 e number and identification of lots comprising this NCB is: One e Borrower is: India |
|---|--|
| ITB 1.1 The Equ The The The Item The It | e name of the National Competitive Bidding (NCB) is: Procurement of uipment and other items for Science Laboratory in Schools. e identification number of the NCB is: SHCDM/Goods/SE/02 e number and identification of lots comprising this NCB is: One |
| Equ The The ITB 2.1 The | uipment and other items for Science Laboratory in Schools. e identification number of the NCB is: SHCDM/Goods/SE/02 e number and identification of lots comprising this NCB is: One |
| | e Borrower is: <u>India</u> |
| ITB 2.1 The | |
| Me | e name of the Project is: <u>Supporting Human Capital Development in</u> ghalaya (ADB Loan No. 3033-IND <u>)</u> |
| | B. Contents of Bidding Document |
| Atte Dire Ker Me Tel Fax Em fina <u>All</u> in t | r <u>clarification purposes</u> only, the Purchaser's address is: ention: ector, Directorate of School Education and Literacy nnilworth Road, Laitumkhrah eghalaya, Shillong – 793003, India lephone: 0364-2225356 x: 0364-2505525 nail: <u>achmarak@gmail.com</u> or <u>piu1shcdm@gmail.com</u> or <u>ance_affairs@yahoo.com</u> the request for clarification in writing should reach before or on 15 th June 2018 <u>ore-bid conference shall be held on 01st June 2018 at 03:00 PM</u> the following location: nference Room, ectorate of School Education and Literacy (DSEL), Laitumkhrah eghalaya, Shillong – 793001, India |

| C. Preparation of Bids | | | |
|--|--|--|--|
| ITB 10.1 | The language of the Bid is: <u>English</u> | | |
| ITB 11.2 (i) | The Bidder shall submit with its Technical Bidthe following additional documents: 1) <u>Printed catalogues, if any, with detail technical information of the offered goods/equipment.</u> 2) <u>Samples wherever indicated</u> | | |
| ITB 11.3 (c) | The Bidder shall submit with its Price Bidthe following additional documents: <u>NIL</u> | | |
| ITB 12.2 | The units and rates in figures entered into the Price Schedules should be typewritten, must be in print form. Price Schedules not presented accordingly may be considered nonresponsive. | | |
| ITB 13.1 | Alternative Bids shall not be permitted | | |
| ITB 14.5 | The Incoterms edition is: Incoterms 2010 | | |
| ITB 14.6 (b) (i) | For Goods offered from the Purchaser's country, the Bidder shall quote prices using the following Incoterms: <u>CIP</u> | | |
| ITB 14.6 (b) (ii) | In addition to the above, the Bidder shall quote prices for Goods offered from outside the Purchaser's country using the following Incoterms: <u>FCA</u> | | |
| ITB 14.7 The prices quoted by the Bidder shall be: Fixed | | | |
| ITB 14.8 | Not Applicable | | |
| ITB 14.9 | Add the following Clause ITB 14.9 The bidders are informed that certain tax and duty exemptions are available as per the following GOI notifications: a) In accordance with Notification No. 108/95–CE dated 28.8.1995 (Goods Supplied to UN or an International Organization) and subsequent amendments, the Central Government has granted exemptions for all goods falling under the Schedule to the Central Excise Tariff Act 1985 when supplied to projects financed by an international organization (ADB included) and approved by the Government of India from the whole of (1) the duty of excise leviable thereon under Section 3 of the Central Excise Act, 1944 (1 of 1944), and (2) the additional duty of excise leviable thereon under Sub-Section (1) of Section 3 of the Additional Duties of Excise (Goods of Special Importance) Act, 1957 (58 of 1957), provided that the need for such goods are properly certified by the appropriate authorities. b) In addition, as per Notification No. 84/97-Cus. dated 11.11.1997 and subsequent amendments, and under General Exemption No. 1A, Exemptions to Imports by United Nations or International Organization for Execution of Projects in India, the Central Government has granted exemptions for all | | |

| | goods imported into India for execution of projects financed by an International Organization (ADB included) and approved by the Government of India, from (1) the whole of the duty of customs leviable thereon under First Schedule to the Customs Tariff Act, 1975 (51 of 1975), (2) the whole of the additional duty of customs leviable thereon under Section 3 of the said Act, and (3) the whole of the special duty of customs leviable under Section 68 of the Finance (No. 2) Act 1996 (33 of 1996), provided that the need for such goods is properly certified by the appropriate authorities. |
|--|---|
| The Employer will assist the Contractor to obtain any lawful exerp payment of Excise Duty or Import Duty or any other admissible exemp kind of Tax or Duty on Plant, Equipment and Materials that are to be as a part of the Permanent Works by issue of a "Certificate Under GC No. 108/95 & 84/97", duly signed by the Project Authorities and cour the Secretary Finance, Govt. of Meghalaya, in the format indicated which indicates the estimated quantities of the Plant, Equipment and are to be incorporated into the Permanent Works. The Employer will certificates for plants, materials or equipment that may be required to Works, but which are not to be incorporated into and form a part of th Works. The responsibility for obtaining any such exemptions from th Authority will remain with the Contractor and the Employer shall not in responsible for admissibility of the claims or eligibility of the Contractor | |
| ITB 19.2 | The Bidder is required to submit documentation to substantiate that it is an authorized dealer, distributor or reseller of the goods being procured. |
| ITB 19.3 | The Bidder is required to include with its bid, evidence that it will be represented by an Agent in the Purchaser's country. |
| ITB 20.1 | The bid validity period shall be 120days. |
| ITB 21.1 | The Bidder shall furnish a Bid Security in the amount of INR 4,00,000.00 |
| ITB 21.2 | Not applicable |
| ITB 21.4 | Any bid not accompanied by an irrevocable and callable bid security shall be rejected by the Purchaser as nonresponsive. However, if a bidder submits a bid security that deviates in form, amount and/or period of validity, the Purchaser shall request the Bidder to submit a compliant bid security within 14 days of receiving such a request. Failure to provide a compliant bid security within the prescribed period of receiving such a request shall cause the rejection of the bid. |
| ITB 22.1 | In addition to the original Bid, the number of copies is 1 (one) printed copy |
| ITB 22.2 | An organizational document, board resolution or its equivalent, or power of attorney specifying the representative's authority to sign the Bid on behalf of, and to legally bind, the Bidder. If the Bidder is an intended or an existing joint venture, the power of attorney should be signed by all partners and specify the authority of the named representative of the joint venture to sign on behalf of, and legally bind, the intended or existing joint venture. If the joint venture has not yet been formed, also include evidence from all proposed joint venture partners of their intent to enter into a joint venture in the event of a contract award in accordance with ITB 16.1 (b)" |

| ITB 22.2 | The Bidder shall submit an acceptable authorization within 14 days. | | | | |
|--------------|---|--|--|--|--|
| | D. Submission and Opening of Bids | | | | |
| ITB 23.1 | Bidders shall nothave the option of submitting their bids electronically. | | | | |
| ITB 23.1 (b) | Not applicable | | | | |
| ITB 23.2 (c) | The identification of this bidding process is: As mentioned in ITB 1.1 | | | | |
| ITB 24.1 | For <u>bid submission purposes</u> only, the Purchaser's address is : <u>Attention:</u> Director, Directorate of School Education and Literacy Kennelworth Road, Laitumkhrah Meghalaya, Shillong – 793003, India Telephone: 0364-2225356 Fax: 0364-2505525 | | | | |
| ITB 24.1 | The deadline for bid submission is: Date: 06 th July 2018 Time: 12:00 hrs. | | | | |
| ITB 27.1 | The technical bid opening shall take place at: Director, Directorate of School Education and Literacy Kennelworth Road, Laitumkhrah Meghalaya, Shillong – 793003, India Date: <u>06th July 2018</u> Time: Immediately after the deadline for bid submission | | | | |
| ITB 27.1 | Electronic bid opening procedure shall be as follows:Not Applicable | | | | |
| ITB 27.6 | The Technical Bid Submission Sheet shall be initialed by at least three representatives of the Purchaser attending Technical Bid opening. | | | | |
| ITB 27.11 | The Price Bid Submission Sheet and Price Schedules shallbe initialed by at least three representatives of the Purchaser attending Price Bid opening. | | | | |
| | E. Evaluation and Comparison of Bids | | | | |
| ITB 37.1 | The currency that shall be used for bid evaluation and comparison purposes to convert all bid prices expressed in various currencies into a single currency is: Indian Rupees (INR) | | | | |
| ITB 38.1 | A margin of preference shall not apply. | | | | |
| | F. Award of Contract | | | | |
| ITB 43.1 | The maximum percentage by which quantities may be increased is: 10% The maximum percentage by which quantities may be decreased is: 10% | | | | |

Section 3- Evaluation and Qualification Criteria

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1. Technical Evaluation

1.1 Technical Criteria

These criteria should specify the minimum technical level that the Goods and Related Services shall have to comply with Section 6 (Schedule of Supply). Whenever possible, these criteria should be evaluated on a pass-fail system, with a minimum acceptable level for each criterion enumerated.

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|-----|-----------|-------------------------------|---|---------------------|----------------|
| A.1 | Equipment | Air Condenser | Liebig Tip Interchangeable joint and inter changeable outer joint300mm cone 24/29 socket 19/26 | No | |
| A.2 | Equipment | Ammeter (0 - 3 amp) | Plastic body with terminal, Square type grade A DC moving coil panel meter with stand | No | |
| A.3 | Equipment | Audio frequency oscillator | Frequency Range: 20 Hz to 20 KHz in 4 decades range square wave upto 20 KHz. Accuracy: ± 2%, ± 1 Hz. Wave Form: Sine and Square – Selectable. Output Voltage: 0 – 10, Volts continuously variable. Coarse and Fine Controls. Stability: 0.5% after warm – up time of 10, minutes. | No | |
| A.4 | Equipment | B.P and M.P Apparatus | Aluminum. 63 mm diameter x 55 mm height, 02 holes and split fitted with handle: mild steel rod 06 mm diameter x 130 mm length | No | |
| A.5 | Equipment | Balance Electronic digital | Capacity 600gm, L.C. 0.1gm (100mg) Imported High precision, Different Capacities and sensitivities, Comes with Guard / Box, Runs on electricity and battery | No | |
| A.6 | Equipment | Battery eliminator | Input 220 volt A.C., output 0-12 v at 1 AMP D.C.300 MA 'CSI' Extra Superior quality fitted with heavy duty transformer & long life Selenium Metal Bridge Rectifier (Guaranteed for one year for any Mechanical defects). | No | |
| A.7 | Equipment | Bell Jar | Borosilicate like 3.5 mm thick glass, neck inside diameter 18 mm x 20 mm height. Overall length 90 mm x inside diameter 55 mm with rim diameter 64 mm | No | |

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|------|-----------|-----------------------------------|---|---------------------|----------------|
| A.8 | Equipment | Boyle's Law apparatus | Two glass tubes 220 mm long, one is closed at the top and other one is open and connected by 1 Meter pressure rubber tubing. Both the tubes are mounted on the brackets which can be locked in any portion on the metal supporting rods. Stand carries a graduated scale 0 to 100 cm. Mercury required for this 3 apparatus is approx.30 cm. | No | |
| A.9 | Equipment | Burette stand with clamp. | Burette Stand: - Complete with oxidized clamp fitted with knob/screw, hard wood base polished nicely for single Burette | No | |
| A.10 | Equipment | Calorimeter (Copper) | Set of Copper Calorimeter 75 x 50 mm with felt insulation, the outer vessel of 100×65 mm size with a plastic lid having holes for thermometer & stirrer. A thermometer holder is fixed to the outer vessel. Complete with stirrer. Same size one painted black and other highly polished | No | |
| A.11 | Equipment | Calorimeter (plastic) | Borosilicate like glass, 50 ml capacity, beaker fitted in Low Density Poly Ethylene (LDPE) foam sheet in wooden box. | No | |
| A.12 | Equipment | Cathode ray oscilloscope (CRO) | 220+/- 10 V, bandwidth 10MHz, Y deflection 10 mV/div- 5V/div Display Type CRT / 6" with additional 5 digit LCD display No of channels 2. Assembled in ABS plastic cabinet with cover with Set of Patch Chords & Experimental manual | No | |
| A.13 | Equipment | Cell holder | For two R-6 cells, brass-copper terminals [plated], plastic body, 130 mm X 70 mm x 40 mm height with cover | No | |
| A.14 | Equipment | Centrifuge | Hand operated can be fitted on table four tube extra superior heavy pattern with borosilicate or equivalent glass. | Yes | |
| A.15 | Equipment | Chromatographic Jar with Cork | Soda glass, height 175 mm, diameter 30 mm. | No | |
| A.16 | Equipment | Circuit Board | Complete with plastic base,190 mm x 120 mm x15 mm. battery holder, bulb holder with bulb 3.2 V, switch, banana sockets | No | |

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|------|-----------|--|---|---------------------|----------------|
| A.17 | Equipment | Compound Microscope | ISI Marked Microscope: Metal Body, triple revolving nose pieces' inclination 90 degree with coarse and fine movements. Overall height approx. 320 mm, base 125 mm x 200 mm. Achromatic good quality lenses Two Objectives: 10x & 45x. Two Eyepieces: 10 x & 15 x having coarse fine motion & fixed condenser Magnification 600x/675x. In thermocolpacking | Yes | |
| A.18 | Equipment | Connecting Wires in P.N. Junction &Zener Diode | Good quality, in a set | No | |
| A.19 | Equipment | Daniel cell | Complete with joint less thick copper vessel (Coper vessel of 150 ×100mm (± 510mm) with perforated shelf, thick zinc rod of size, 150 × 10mm (With brass terminal, porous spot of size 140×50mm diameter) Superior quality | Yes | |
| A.20 | Equipment | Dispensing Bottle | Low Density Poly Ethylene (LDPE), Capacity 15 ml, with screw type cap and nozzle | No | |
| A.21 | Equipment | Dissecting Microscope | ISI marked Plastic body 70 mm X 95 mm 90 mm height Top fitted glass sheet, two lenses, fitted with plastic frame in the backside. Eye pieces magnification 10X and 20X, rack and pinion arrangement eye pieces in wooden box, heavy round base | No | |
| A.22 | Equipment | Dissecting Needle | Standard, length 120 mm, with plastic handle. | No | |
| A.23 | Equipment | Dissecting set | Set of 15 instruments stainless steel good quality standard brand | Yes | |
| A.24 | Equipment | Double Inclined Plane | (Galileo's Experiment): 'CSI' Superior <i>teak wood</i> . Well- polished. Complete with two wooden blocks & one spherical steel ball 2.5cm/dia. Fitted with two graduated arc to adjust at any angle. | No | |
| A.25 | Equipment | Drawing board (35 x 25 cm) | soft wood 300x450±10mmx18mm±2mm | No | |

Category

Equipment

Equipment

SL

A.26

A.27

| Items | Description/Minimum Specification | Samples Required |
|-------------------|--|---------------------|
| Dry cells | 1.5 V chargeable AA with charger | No |
| Electrodes Copper | Copper strip, length 80 mm, width 5 mm. x thickness 1mm with terminals | No |
| Electrodes Zinc | Zinc strip, length 80 mm width 5 mm x thickness 1 mm with terminals | No |
| Forcep | Good Quality 6" with fine tip (Stainless steel) | No |

| A.28 | Equipment | Electrodes Zinc | Zinc strip, length 80 mm width 5 mm x thickness 1 mm with terminals | No | |
|------|-----------|---|---|-----|--|
| A.29 | Equipment | Forcep | Good Quality 6" with fine tip (Stainless steel) | No | |
| A.30 | Equipment | Fortin's Barometer | Has a dual scale of 640-810mm and 25-32 inches with least count of 0.05mm and 0.002 inches respectively. It is suitable for altitudes upto 600 m. The mercury cistern has an adjusting screw and fluvial setting point. Supplied w/o mercury. Aluminum parts & tube | Yes | |
| A.31 | Equipment | Full Protector | Transparent plastic diameter 120 mm, thickness 2 mm double angle marking 0- 360 degree | No | |
| A.32 | Equipment | Funnel Stand | Polished hard wood with cork lined jaws and molded plastic screws. Base fitted with non-skid feet for stability. Overall height 490 mm, base size 330×110 mm. | No | |
| A.33 | Equipment | Galvanometer | 30-0-30 plastic body with terminal, Grade A Square type DC moving coil panel meter with stand | Yes | |
| A.34 | Equipment | Hooks law apparatus | Consisting of 30cm long mirror scale, spring, slotted weights with hanger and pointer, complete on heavy tripod stand with weight superior quality large size about 45 cm high | No | |
| A.35 | Equipment | Inclined plane with protect meter and pulley, | protect meter and pulley With facility to alter angle of inclination with iron N.P roller, pan and pulley base | No | |

Pass /

Fail

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|------|-----------|--|---|---------------------|----------------|
| A.36 | Equipment | Iron Brass Bimetallic strip with wooden handle | Length of bi metal strip (iron and brass) 150x15mm mounted in a wooden handle. The strip is only 1mm thick so that very little heat is required to produce considerable bending. Length overall 270mm approx. | No | |
| A.37 | Equipment | Kipps apparatus | Plastic Cap 250ml(approx.) material: High Density Polyethylene with stop clock | No | |
| A.38 | Equipment | Laboratory Stand with 1) Boss head 2) Clamp 3) G clamp | MS rod diameter 10 mm x 375 mm long, MS base, CI Boss head, G clamp and aluminum clamp | No | |
| A.39 | Equipment | Lead accumulator | For steady discharge of currents not exceeding 0.75 A in polystyrene container with negative and positive marked terminals | No | |
| A.40 | Equipment | Leclanche cell | Glass or plastic container 95x95x150mm (length x width x height). For cathode a zinc rod with terminal and for anode a filled porous pot is supplied. Requires approx. 500ml ammonium chloride electrolyte supplied without electrolyte | No | |
| A.41 | Equipment | Magnet Bar type | Size 75 mm x 12 mm x 8 mm, red Colour N and S pole mentioned. Alnico type | No | |
| A.42 | Equipment | Magnet Cylindrical | Diameter 16 mm and length 25 mm. ferrite | No | |
| A.43 | Equipment | Magnet Disc Type | Diameter 36 mm and 8 mm thick. ferrite | Yes | |
| A.44 | Equipment | Magnet Horse shoe type | U shaped, Arm length 50 mm, N and S poles to be marked. | No | |
| A.45 | Equipment | Magnet Ring type | Outer diameter 18 mm and thickness 3 mm. ferrite | No | |
| A.46 | Equipment | Magnetic Compass | Metal case, polystyrene transparent top, magnetized needle with north marked red and south marked blue, 50 mm size. Both side glass | No | |

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|------|-----------|-----------------------------------|---|---------------------|----------------|
| A.47 | Equipment | Measuring cylinder | Plastic, transparent with built in base, 100 ml graduation (min 1 ml) | No | |
| A.48 | Equipment | meter bridge | The four-gap bridge has a large and heavy copper strip of (SWG No. 18) mounted on a heavy 3/4" thick laminated base of size 45" x 4" x 3/4". Nine heavy Brass terminals lock type are provided to reduce the resistance to a minimum. The ends gaps are closed by removable Copper Binding pieces which are held in position by the terminals. The 24 SWG constantan wire is stretched along the top of wooden meter scale and securely clamped to the Brass end strips so that end errors are negligible. Supplied complete with pencil jockey along with lead for connections. Includes detail working manual. Overall dimensions: 1.12m × 100mm × 50mm, including terminals. | No | |
| A.49 | Equipment | Micro Test Tube Holder | Wooden handle for hold the 10-mm test tube. | No | |
| A.50 | Equipment | Milliammeter (0- 500mA) | Pocket size, digital, high impedance with DC moving coil and stand | No | |
| A.51 | Equipment | Mirror/Lens stand | Wooden / plastic lens / mirror stand 120 mm X 30 mm X 75 mm. Height with slot. | No | |
| A.52 | Equipment | Multimeter | Digital (Imported) Economical, good quality | Yes | |
| A.53 | Equipment | Newton's law of cooling apparatus | copper calorimeter with a wooden lid having two holes for inserting a thermometer and a stirrer and an open double – walled vessel, University Pattern | No | |
| A.54 | Equipment | n-p-n or p-n-p transistor | Fitted on board with terminals and circuit diagram | No | |
| A.55 | Equipment | Ohm's Law Apparatus | Built in Rheostat with DC meters Superior Quality & operational manual fitted on a ABS plastic box | No | |
| A.56 | Equipment | One way key | with brass block on plastic base with brass terminals | No | |

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|------|-----------|---------------------------------------|--|---------------------|----------------|
| A.57 | Equipment | Optical bench (1 1/2 meters) | one meter long, double MS chrome platted rods, four uprights (two having slow transfers motions), two lenses holders, two optical pins & two caste iron heavy metallic feet with levelling screws superior quality with Shappered rides | No | |
| A.58 | Equipment | P.N. Junction | Built in Power Supply, with one rectangular voltmeter and one mili ammeter (both meters are dual range) to monitor voltage and current. Two p n junction diode one in forward and other in reverse bias and one Zener diode. Special interconnection lead -5 Nos. p-n junction and diodes are mounted panel so that they are visible from outside to students as well as easy to replace in case another diode required to be replaced. | No | |
| A.59 | Equipment | Pair of Tongs | Diameter 05 mm, overall length 160 mm, chrome plated. | No | |
| A.60 | Equipment | Parallelogram law of forces apparatus | Comprises of a board 65x50cm, with two aluminum pulleys 50mm. dia., on clamp, for mounting in any position. Complete with three hangers iron nickel plated 50gm. and 12 slotted weights of 50gms each. | No | |
| A.61 | Equipment | Pencil Knife Edge Jockey | With insulated handle, plated brass contact, and a plated brass terminal with 4 mm. Socket. Overall length 100 mm | No | |
| A.62 | Equipment | Pendulum bob | Brass bob of 2.5 cm diameter with hook attached | No | |
| A.63 | Equipment | pH meter (digital) | Very clear slides, superior quality, Digital (table model), manual with pH Electrode El/RI Make | Yes | |
| A.64 | Equipment | Plug Key | One way plug key (Brass), base 80 mm x 55 mm. superior quality | No | |
| A.65 | Equipment | Plumb line | Brass with hole for thread Superior heavy | No | |

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|------|-----------|--|---|---------------------|----------------|
| A.66 | Equipment | Potentiometer with jockey | Potentiometer 4 wired Brass Connection with 1 meter rule with pencil jockey & brass terminal fitted on a both side laminated base with plastic feet | No | |
| A.67 | Equipment | Resistance box | Rc-112 Fitted With 7/16" Square Blocks Double Silk Covered Non-Inductive Windings. Accuracy - 0.1 % Educational Quality. Plug type 0- 5000 Ohms fitted with brass plugs of plastic heads, contact blocks made of brass which are fitted on Bakelite/ plastic base. The whole assembly fitted on an appropriate polished wooden box or plastic box Constantan Coil, 9mm Thick Brass Block (0.1 - 500 ohms) plug type Plug type, plug key commutator, Pencil jockey, Reversing Switch, Tapping Key, Raleigh's key | No | |
| A.68 | Equipment | Resonance Tube | a 100-cm long plastic tube, A movable aluminum reservoir attached by rubber tubing to the bottom of the resonance tube, A triangular support and two tube clamps 40 x 10 x 10" with metal base | No | |
| A.69 | Equipment | Rheostat | Oxidized Eureka Wires and mounted on painted metal feet provided with laminated brush contacts of phosphor bronze strips, Brass C.p. Guide rod and lock type terminals. 10 ohms, 20 ohms, 30 ohms 40 ohms with PVC feet (Aluminum). Length 15 cm | No | |
| A.70 | Equipment | Rubber Pad | Anti-Vibration Pad made from a combination of high quality rubber polymers and cork, this ideal combination ends up to make up a product that has excellent resistance to ageing, compression set, water & oil. | No | |
| A.71 | Equipment | Screw gauge | 15mm with ratchet stop, stainless steel and brass body | Yes | |
| A.72 | Equipment | Set of four resistors 10 ohm (1 no), 20 ohm (2 nos.), 30 ohm | 15 mm x 15 mm x 125 mm with nichrome wire resistance, embedded in plastic case with terminal. | No | |
| A.73 | Equipment | Slinky | Steel Wire Spiral roll, outer diameter 52 mm and close size 68 mm to 70 mm | No | |

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|------|-----------|-------------------------------------|---|---------------------|----------------|
| A.74 | Equipment | Slotted weight | Set of 5 in each weight category including hanger. Chrome plated iron weight. weight of 10gm (5x10gm), weight of 20 gm (5x20gm), weight of 50gms (5x50gm), weight of 100gms (5x100gm) | No | |
| A.75 | Equipment | Soil sieve | GI Sieve, Height 4 cm mesh size- 0.1mm 0.2mm, .3mm, 0.4 mm 0.5 mm 1, 0.6mm 0.8mm 1 mm, 1.5mm 2 mm. | No | |
| A.76 | Equipment | Soil Testing Kit(Chemical) K054 | Max Make, Four Parameter Testing Kits used for testing pH, Conductivity, Temperature, DO, TDS & salinity of the soil. All major nutrients of soil like, Nitrogen, Phosphorous, Potassium and in addition pH, Organic carbon, Calcium, Magnesium and Sulphur can be tested | No | |
| A.77 | Equipment | Solid, preferably metallic cylinder | Length 100 mm diameter 25 mm Made of brass/copper/steel/aluminum which is insoluble in given liquid and water. | No | |
| A.78 | Equipment | Sonometer | Superior Quality, well-polished wooden base, comprising a wooden resonance box of 114 cm length, 12.5 cm width and 10 cm height, with two rules 1 meter long sub-divided into Millimeter. Two wire of brass and 2 sliding bridges steel attached to | Yes | |
| A.79 | Equipment | Speaker | 8Ohz | No | |
| A.80 | Equipment | Spherical body (Marbles) | 4 cm diameter | No | |
| A.81 | Equipment | Spherometer | brass dial head 40mm diameter, stainless steel, head divided in 100 divisions reading upto 0.005 mm, vertical scale 10-0-10 single disk | No | |
| A.82 | Equipment | Spirit lamp | Made of Aluminum, full size heavy pattern leak proof. Capacity 125 ml. Uses the spirit for its functioning. Gives bright illumination with cap | Yes | |
| A.83 | Equipment | Spring Balance | A.B.S, open type, capacity 250 g graduation in steps of 10 g on one side and Newton's on the other side | Yes | |
| A.84 | Equipment | Sprit level | Plastic body. Strong build. Shear strength. Fine quality. Size- 300mm | No | |

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|------|-----------|-------------------------------------|---|---------------------|----------------|
| A.85 | Equipment | Stainless steel electrode with cork | Diameter 2 mm. x 80 mm stainless steel electrode fitted with cork to separate. Cork size top diameter 25 mm. x diameter 17 taper x 25 mm. length, (to fit with item No. 81 bell jar) | No | |
| A.86 | Equipment | Stop clock | metal body with start stop & fly back action, dial size approx. 100mm, divided in 0-60 x 1 sec with start, stop and resent arrangement | Yes | |
| A.87 | Equipment | Telescope fixed on stand | The telescope is mounted on a specially designed carriage with support ring to stop abrupt falling. The carriage is fitted with two adjustable screws for precise vertical and horizontal positioning. This arrangement is mounted on a 25mm diameter, 450mm long steel pillar, fitted on a cast iron base with leveling screws. A scale holder is provided with scale | No | |
| A.88 | Equipment | Test Tube Holder Wooden Handle | With wooden Handle, chrome plated size 175mm +/- 15mm | No | |
| A.89 | Equipment | Test Tube Rack | Perspex sheet size 100 mm X 27 mm X 12 mm 04 blind holes to hold Micro Test Tubes. | No | |
| A.90 | Equipment | Test Tube stand | To hold test tubes of different diameter. Made of plastic (Polythene superior quality) with multiple holes | No | |
| A.91 | Equipment | Thermometer Alcohol | Glass, alcohol filled, -10° C to 110° C, graduation 1° C with card board/plastic cover and cotton at both ends. | Yes | |
| A.92 | Equipment | Thermometer Mercury | Glass, mercury filled, graduation 0 - 250° C, sub division 1.0° C. | No | |
| A.93 | Equipment | Ticker Timer | Apparatus fitted on wooden board with sun-mica base / with plastic body, easily to work on 3-6 volts (even with battery). Fitted with speed regulator, complete with one roll of ticker tape fitted on clamp with paper Tape | No | |
| A.94 | Equipment | Transformers | Step Down 220-volt AC output 2-12-volt AC transformers 1 Amp | No | |
| A.95 | Equipment | Transistor | apparatus mounted on ABS plastic box with circuit diagram fitted with terminals & two meters | No | |

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|-------|-----------|--|---|---------------------|----------------|
| A.96 | Equipment | Transparent PVC plastic tube with stoppers | Diameter 20 mm, thickness 02 mm, 50 Cm long, with stoppers at both ends. | No | |
| A.97 | Equipment | Transparent stiff plastic tube | Diameter. 6 mm X 500 mm length | No | |
| A.98 | Equipment | Triangular File | With wooden / plastic handle length of file 20 cm | No | |
| A.99 | Equipment | Tripod stand, | Aluminum top 63 mm diameter x 15 mm thick three blind hole diameter 10 x 10 mm depth to hold test tube. Attach with three legs 4 mm diameter x 165 mm and total length 180 mm. | No | |
| A.100 | Equipment | Tuning Fork Set | Set of eight steel N.P. in velvet box. 256 to 512 Hz | No | |
| A.101 | Equipment | Two- Way Burette clamp and stand | For Base: Mild Steel Sheet 140 mm X 160 mm X 16mm SWG. For Stand: Mild Steel Rod 06 mm diameter, 280 mm length. Mild Steel Nut 06 mm, Fly Nut 06 mm, 06 mm Washer. Spring Steel Strip 80 mm X 08 mm X 20 SWG to hold 02 burettes. | No | |
| A.102 | Equipment | Two-way key | brass block on plastic base with brass terminals | No | |
| A.103 | Equipment | Uprights (with clamps) Index needles | Stainless steel needle - length 7.7 cm diameter 4-5 mm pointed on the top fitted in a wooden / plastic base with plain and polished surface | No | |
| A.104 | Equipment | Vernier Calipers | Stainless steel, length 125mm approx. extra superior quality Chrome plated, clearly graduated | No | |
| A.105 | Equipment | Voltmeter | Plastic body with terminal, Square type grade DC moving coil Range 1.5 V, 3V, 5V. (0- 5 amp) with stand | No | |
| A.106 | Equipment | Wash Bottle | LDPE, Superior quality capacity 250 ml. | No | |
| A.107 | Equipment | Water bath | Diameter4"(copper) Developed \with high quality material with concentric rings. Size 8 with concentric rings made of | No | |

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|-------|-------------------|---------------------------------------|--|---------------------|----------------|
| | | | copper | | |
| A.108 | Equipment | Water testing Kit (Chemical)WT 023 | Suitable for testing various features of water like hardness, salinity, turbidity, diffused oxygen ingredients etc. | No | |
| A.109 | Equipment | Weight box | Material- Brass weights/Nickel plated/chrome plated Analytical 10g 20g 50g 100g 200g 500g Two each with forceps | No | |
| A.110 | Equipment | Wide Bore Tube | transparent glass/ acrylic 1.25 m long 4 cm diameter | No | |
| A.111 | Equipment | Wire gauge, | Sheet metal thickness gauge, measuring range (in.) 0.007to 0.3125, probe depth (in.) 0.80 to 1.60, graduations0.289 in., number of leaves 0, length (in.) 3, width (in.) 3, thickness (in.) 0.125, measuring range (in./mm) 0 to 36, material steel, finish brushed, features display metal gauge size on one side and decimals on other side. | No | |
| A.112 | Equipment | Үоуо | X shape plastic wheel Diameter. 120 mm X 40 mm fitted with 1.5 meter nylon thread | No | |
| A.113 | Equipment | Young's modulus apparatus | sealers pattern having self-centering chucks, graduated micro meter screw to read upto 0.1 mn, cast iron frame duly powder coated with spirit level, tension weight, ceiling bracker | No | |
| | | | | | |
| B.1 | Charts and Models | Atomic model set | 23mm diameter +/- 1mm set of 120 molded balls with 100 locking plugs of different colors & sizes. Along with connectors of different sizes. This sizes & shapes of the balls & connecting lugs have been designed in accordance with internationally acceptable standards | Yes | |

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|------|-------------------|--|---|---------------------|----------------|
| B.2 | Charts and Models | Chart showing Skelton system | Size $100x70 \text{ cm} \pm 2\text{cm}$ both side laminated with plastic rollers | No | |
| B.3 | Charts and Models | Charts of animal like horned toad, Kangaroo rat, camel | Size $100x70 \text{ cm} \pm 2\text{cm}$ both side laminated with plastic rollers | No | |
| B.4 | Charts and Models | Charts of Starfish, Rohu fish, Frog, Freshwater Fish, Marine bony fish (Lophius) | Size 100x70 cm \pm 2cm both side laminated with plastic rollers | No | |
| B.5 | Charts and Models | Charts showing respiratory & circulatory system | Size $100x70 \text{ cm} \pm 2\text{cm}$ both side laminated with plastic rollers | Yes | |
| B.6 | Charts and Models | Charts showing digestive system | Size $100x70 \text{ cm} \pm 2\text{cm}$ both side laminated with plastic rollers | No | |
| B.7 | Charts and Models | Charts showing Reproductive system male & female | Size $100x70 \text{ cm} \pm 2\text{cm}$ both side laminated with plastic rollers | No | |
| B.8 | Charts and Models | Charts showing analogous & Homologous organs in animals | Size 100x70 cm \pm 2cm both side laminated with plastic rollers | No | |
| B.9 | Charts and Models | Charts showing analogous & Homologous organs in various plants | Size 100x70 cm \pm 2cm both side laminated with plastic rollers | No | |
| B.10 | Charts and Models | Color PH Chart | Multicolor printing on 80 GSM map litho paper Size 70x100cm+/-2cm Thermally Laminated with 30-micron thick best quality polyester film on both sides. Fitted with best quality plastic rollers at the top and at the bottom with hanging arrangement. | No | |

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|------|-------------------|--------------------------|---|---------------------|----------------|
| B.11 | Charts and Models | Human Skelton Model | Human Skelton made of plastic on stand, articulated, stand size 5 feet good quality, bones in natural shape & color. | No | |
| B.12 | Charts and Models | Micromodel of DNA | An Articulated Model with labels to show the double helix of DNA structure. Includes 15 base pairs to show one and half helix. All component is identified by different colors. The connection between the base pairs are also clearly shown. Mounted on base | No | |
| B.13 | Charts and Models | Periodic Table | Multicolor printing on 80 GSM map litho paper Size 70x100cm+/-2cm Thermally Laminated with 30-micron thick best quality polyester film on both sides. Fitted with best quality plastic rollers at the top and at the bottom with hanging arrangement. | No | |
| | | | | | |
| C.1 | Chemical | Acetic acid, | In a glass bottle of 250 ml standard make | No | |
| C.2 | Chemical | Acetic acid, | In a glass bottle 250 ml standard make | No | |
| C.3 | Chemical | Acetocarmine | In a glass bottle 250 ml standard make | No | |
| C.4 | Chemical | Acetone | Acetone 500ml standard make | No | |
| C.5 | Chemical | Barium chloride solution | In a glass bottle 250 ml standard make | No | |
| C.6 | Chemical | Benedict Solution | Benedict Solution 250ml standard make | No | |
| C.7 | Chemical | Biuret Reagent | Biuret Reagent 125 ml standard make | No | |

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|------|----------|----------------------|--|---------------------|----------------|
| C.8 | Chemical | Boric acid | In a glass bottle 250 ml standard make | No | |
| C.9 | Chemical | Calcium nitrate | Granules in poly bottle 250 ml standard make | No | |
| C.10 | Chemical | Cobalt Chloride | Cobalt Chloride 200gm standard make | No | |
| C.11 | Chemical | CuSO₄ Solution | In a glass bottle 250 ml standard make | No | |
| C.12 | Chemical | Distilled water | in plastic bottle 1 Li standard make | No | |
| C.13 | Chemical | Ethanol | In a glass bottle 250 ml standard make | No | |
| C.14 | Chemical | Fehling Solution No1 | Fehling Solution No1 500ml standard make | No | |
| C.15 | Chemical | Fehling Solution No2 | Fehling Solution No2 500ml standard make | No | |
| C.16 | Chemical | Formalin solution | In a glass bottle 250 ml standard make | No | |
| C.17 | Chemical | Fouchet reagent | Solution in poly bottle 250 ml standard make | No | |
| C.18 | Chemical | Glycerin | Glycerin 500 gm standard make | No | |
| C.19 | Chemical | НСІ | In a glass bottle 250 ml standard make | No | |
| C.20 | Chemical | lodine | lodine 500 ml Solution standard make | No | |

3-15

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|------|----------|--------------------------------------|---|---------------------|----------------|
| C.21 | Chemical | KH ₂ PO ₄ | In poly bottle 200 gm standard make | No | |
| C.22 | Chemical | KMnO ₄ | In poly bottle 200 gm standard make | No | |
| C.23 | Chemical | Leishman's/ Geimsa/Wright's stain | Air tight closeable dropper amber bottle 100 ml standard make | No | |
| C.24 | Chemical | Lens cleaning tissue paper | 10 cm X 15 cm packet of 50 standard make | No | |
| C.25 | Chemical | Millions Reagent I | Millions Reagent 125ml standard make | No | |
| C.26 | Chemical | Molten Wax | Tin Pack 200 gm standard make | No | |
| C.27 | Chemical | Na ₂ CO ₃ | In poly bottle 200 gm standard make | No | |
| C.28 | Chemical | Na2HPO4, | In Poly bottle 200 gm standard make | No | |
| C.29 | Chemical | NaOH | Powder in Poly Bottle 250 ml standard make | No | |
| C.30 | Chemical | Nitric acid | In a glass bottle 250 ml standard make | No | |
| C.31 | Chemical | Petroleum Ether | Petroleum Ether 60-80 deg C 500ml standard make | No | |
| C.32 | Chemical | Phenol Red | In a glass bottle 250 ml standard make | No | |
| C.33 | Chemical | Potassium Chloride | 250gm standard make | No | |
| C.34 | Chemical | potassium iodide | Powder in Poly Bottle 250 ml standard make | No | |

Category

Chemical

Items

Robert's Soln

SL

C.35

| Description/Minimum Specification | Samples Required |
|---|---------------------|
| In poly bottle 250 ml standard make | No |
| Safranin 100 gm standard make | No |
| Crustel in poly bettle 250 ml standard make | No |

| C.36 | Chemical | Safranin | Safranin 100 gm standard make | No | |
|------|-----------|--------------------------------|--|----|--|
| C.37 | Chemical | Salicylic acid | Crystal in poly bottle 250 ml standard make | No | |
| C.38 | Chemical | Sodium Chloride | Sodium Chloride 500 gm standard make | No | |
| C.39 | Chemical | Sodium Hydroxide pellets | Sodium Hydroxide pellets 250gm standard make | No | |
| C.40 | Chemical | Sodium Hypobromite Solution | Powder in Poly Bottle 200 gm standard make | No | |
| C.41 | Chemical | Sudan III | Sudan III 200gm standard make | No | |
| C.42 | Chemical | Sulphur Acid | In a glass bottle 200 gm standard make | No | |
| C.43 | Chemical | Sulphur powder | Powder in Poly Bottle 200 gm standard make | No | |
| | | | | | |
| D.1 | Glassware | Beaker with spout | Borosilicate like glass, capacity 250 ml with rim | No | |
| D.2 | Glassware | Beaker with spout | Borosilicate like glass, capacity 50 ml, with rim, | No | |
| D.3 | Glassware | Beaker with spout | Borosilicate like glass, capacity 500 ml, with rim | No | |

Pass /

Fail

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|------|-----------|------------------------|---|---------------------|----------------|
| D.4 | Glassware | Boiling Tube with cork | Borosilicate like glass 90 mm x 20 mm diameter with cork, capacity 100 ml | No | |
| D.5 | Glassware | Burette | 50 X 1/10 ml fitted with glass stop cock Neutral Glass Superior Quality | No | |
| D.6 | Glassware | Capillary Tube | Soda glass. Diameter 1.5 mm x 100 mm. Both side open (Box of 50) | No | |
| D.7 | Glassware | China Dish | Superior quality size 4" | No | |
| D.8 | Glassware | China Dish | 5" porcelain | No | |
| D.9 | Glassware | Concave lens | Plate Glass, with carefully ground and polished optical surfaces, optically true and cleanly ground edges. diameter 2" focal length 15 cm | No | |
| D.10 | Glassware | Concave Mirror | Glass, Focal Length 20 cm, diameter 5 cm, optically true | No | |
| D.11 | Glassware | Conical flask | Capacity 25 ml Borosilicate like glass | No | |
| D.12 | Glassware | Conical Flask | 250ml (Borosilicate like glass) | No | |
| D.13 | Glassware | Conical flask | Borosilicate like glass 100 ml | No | |
| D.14 | Glassware | Conical flask | Borosilicate like glass 500ml | No | |
| D.15 | Glassware | Convex lens | Diameter 2 inch optically true. Set of three lenses (Focal length 10 cm, 15 cm, 20 cm) | No | |
| D.16 | Glassware | Convex Mirror | Glass, Focal Length 20 cm, diameter 2.5" optically true | No | |

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|------|-----------|---------------------------------|---|---------------------|----------------|
| D.17 | Glassware | Culture tubes (50ml) | Borosilicate length 9 cm 2.5 cm diameter | No | |
| D.18 | Glassware | Double Concave Lenses | Glass, Set of two lens Focal length 20 cm and diameter 50 mm. | No | |
| D.19 | Glassware | Double Convex lens | Glass, Set of two lens Focal length 20 cm and diameter 50 mm. | Yes | |
| D.20 | Glassware | Double mouthed flask | Borosilicate like. Thickness 1.5 mm with one mouth diameter 25 mm x 25 mm height (with rim) and other diameter 06 mm x 28 mm length. Bulb outer diameter 48 mm with overall length 110 mm | No | |
| D.21 | Glassware | Dropper Glass | Glass 4" with rubber teat graduated superior quality | No | |
| D.22 | Glassware | Droppers | Borosilicate like glass, length 100 mm, capillary length 50 mm diameter 06 mm with teats | No | |
| D.23 | Glassware | Droppers fitted with 02 syringe | Borosilicate like glass, length 100 mm, capillary length 50 mm, diameter 06 mm, with teats | No | |
| D.24 | Glassware | Flask for titration | Borosilicate like glass, height 50 mm, capacity 25 ml. | No | |
| D.25 | Glassware | Funnel | Glass Chromatography columns plain, With PTFE key stopcock. Length 15 cm disk diameter 10 mm | No | |
| D.26 | Glassware | Fusion Tube | 2.5" (Ignition) glass tube pack of 144pc fine finish leak proof | No | |
| D.27 | Glassware | Glass Rod | Soda glass, length 150 mm, diameter 7 mm. | No | |
| D.28 | Glassware | Glass Sheet | 1 cm square Pack of 24 | No | |
| D.29 | Glassware | Glass Slab Square | Square glass slab, size 50 mm x 50 mm x 12 mm thick. | No | |

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|------|-----------|-----------------------------|--|---------------------|----------------|
| D.30 | Glassware | Glass slides, | Size: 75mm*25mm, Thickness: 1.45mm, 1.10mm, 1mm (packet of 50) | No | |
| D.31 | Glassware | Glass tube holder | Wooden handle, Length 200 mm, to hold the test tubes upto 10 mm diameter, plated. | No | |
| D.32 | Glassware | Glazed Glass plate | Glass plate size 100 mm x 100 mm x 2.5 mm. | No | |
| D.33 | Glassware | Hand Lens | Size Diameter approx. 7.5 cm magnifying power 2.5 with a plastic handle attached to it | No | |
| D.34 | Glassware | Ignition Tube | Heat Resistant, dimensional accuracy, light weight and durable | No | |
| D.35 | Glassware | Measuring cylinder | 500 ml (Borosilicate like glass) | No | |
| D.36 | Glassware | Measuring Flask | Borosilicate like 50 ml | No | |
| D.37 | Glassware | Micro Burettes | Borosilicate like glass, capacity 05 ml, rotating screw type flow stop cock with Poly Tetra Fluoro Ethylene (PTFE) key and cup, sub division 0.02 mm, fitted with micro tip (capacity 2-200 micro liter). | No | |
| D.38 | Glassware | Micro Measuring Cylinder | High Density Poly Ethylene (HDPE), capacity 10 ml. | No | |
| D.39 | Glassware | Mortar and Pestle | Porcelain good quality, unglazed inside, glazed outside. Size 75 mm | No | |
| D.40 | Glassware | Narrow glass tube | 20 cm long and of internal diameter 2mm | No | |
| D.41 | Glassware | Pasteur Pipette | Low Density Poly Ethylene (LDPE), capacity 03 ml. | No | |
| D.42 | Glassware | Permanent Slide Phloem | Superior quality, very clear slides, for using under microscope | No | |

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|------|-----------|---|---|---------------------|----------------|
| D.43 | Glassware | Permanent Slide Adipose Tissue | Superior quality, very clear slides, for using under microscope | No | |
| D.44 | Glassware | Permanent Slide Agarics | Superior quality, very clear slides, for using under microscope | No | |
| D.45 | Glassware | Permanent Slide Amoeba | Superior quality, very clear slides, for using under microscope | No | |
| D.46 | Glassware | Permanent Slide Areolar Tissue | Superior quality, very clear slides, for using under microscope | No | |
| D.47 | Glassware | Permanent Slide Blastula Entamoeba | Superior quality, very clear slides, for using under microscope | No | |
| D.48 | Glassware | Permanent Slide Cardiac Striated Muscle | Superior quality, very clear slides, for using under microscope | Yes | |
| D.49 | Glassware | Permanent Slide Cardiac Unstrained Muscle | Superior quality, very clear slides, for using under microscope | No | |
| D.50 | Glassware | Permanent Slide Chlorella | Superior quality, very clear slides, for using under microscope | No | |
| D.51 | Glassware | Permanent Slide Chlorella Animal Cell | Superior quality, very clear slides, for using under microscope | No | |
| D.52 | Glassware | Permanent Slide Chlormadinones | Superior quality, very clear slides, for using under microscope | No | |
| D.53 | Glassware | Permanent Slide Collenchyma | Superior quality, very clear slides, for using under microscope | No | |

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|------|-----------|--|---|---------------------|----------------|
| D.54 | Glassware | Permanent Slide Columnar Epithelium | Superior quality, very clear slides, for using under microscope | No | |
| D.55 | Glassware | Permanent Slide Cuboidal Epithelium | Superior quality, very clear slides, for using under microscope | No | |
| D.56 | Glassware | Permanent Slide Diatom | Superior quality, very clear slides, for using under microscope | No | |
| D.57 | Glassware | Permanent Slide Dicot Leaf | Superior quality, very clear slides, for using under microscope | No | |
| D.58 | Glassware | Permanent Slide Dicot Root | Superior quality, very clear slides, for using under microscope | No | |
| D.59 | Glassware | Permanent Slide Dicot Stem | Superior quality, very clear slides, for using under microscope | No | |
| D.60 | Glassware | Permanent Slide Fern | Superior quality, very clear slides, for using under microscope | No | |
| D.61 | Glassware | Permanent Slide Human Blood R.C. B | Superior quality, very clear slides, for using under microscope | No | |
| D.62 | Glassware | Permanent Slide Human Blood W.B.C. | Superior quality, very clear slides, for using under microscope | No | |
| D.63 | Glassware | Permanent Slide Hydra | Superior quality, very clear slides, for using under microscope | No | |
| D.64 | Glassware | Permanent Slide Lichen | Superior quality, very clear slides, for using under microscope | No | |
| D.65 | Glassware | Permanent Slide Marchantiid | Superior quality, very clear slides, for using under microscope | No | |
| D.66 | Glassware | Permanent Slide Medullated Nerve | Superior quality, very clear slides, for using under microscope | No | |

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|------|-----------|--|---|---------------------|----------------|
| D.67 | Glassware | Permanent Slide Mitosis | Superior quality, very clear slides, for using under microscope | No | |
| D.68 | Glassware | Permanent Slide Mitosis | Superior quality, very clear slides, for using under microscope | No | |
| D.69 | Glassware | Permanent Slide Monocot Leaf | Superior quality, very clear slides, for using under microscope | No | |
| D.70 | Glassware | Permanent Slide Monocot Root | Superior quality, very clear slides, for using under microscope | No | |
| D.71 | Glassware | Permanent Slide Monocot Stem | Superior quality, very clear slides, for using under microscope | No | |
| D.72 | Glassware | Permanent Slide Mosquito Slide | Superior quality, very clear slides, for using under microscope | No | |
| D.73 | Glassware | Permanent Slide Nerve Cell Muscle | Superior quality, very clear slides, for using under microscope | No | |
| D.74 | Glassware | Permanent Slide Non- Medullated Nerve | Superior quality, very clear slides, for using under microscope | No | |
| D.75 | Glassware | Permanent Slide Nostos | Superior quality, very clear slides, for using under microscope | No | |
| D.76 | Glassware | Permanent Slide Onion Root Tip | Superior quality, very clear slides, for using under microscope | No | |
| D.77 | Glassware | Permanent Slide Oscillatory | Superior quality, very clear slides, for using under microscope | No | |
| D.78 | Glassware | Permanent Slide Paramecium | Superior quality, very clear slides, for using under microscope | No | |
| D.79 | Glassware | Permanent Slide Parenchyma | Superior quality, very clear slides, for using under microscope | No | |

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|------|-----------|---|---|---------------------|----------------|
| D.80 | Glassware | Permanent Slide Pinus Cone Female | Superior quality, very clear slides, for using under microscope | No | |
| D.81 | Glassware | Permanent Slide Pinus Cone Male | Superior quality, very clear slides, for using under microscope | No | |
| D.82 | Glassware | Permanent Slide Plant Cell, Onion Peel | Superior quality, very clear slides, for using under microscope | No | |
| D.83 | Glassware | Permanent Slide Rhizopods | Superior quality, very clear slides, for using under microscope | No | |
| D.84 | Glassware | Permanent Slide Rician | Superior quality, very clear slides, for using under microscope | No | |
| D.85 | Glassware | Permanent Slide Ringworm | Superior quality, very clear slides, for using under microscope | No | |
| D.86 | Glassware | Permanent Slide Safaris Female, Bacteria | Superior quality, very clear slides, for using under microscope | No | |
| D.87 | Glassware | Permanent Slide Safaris Male | Superior quality, very clear slides, for using under microscope | No | |
| D.88 | Glassware | Permanent Slide Sclerenchyma | Superior quality, very clear slides, for using under microscope | No | |
| D.89 | Glassware | Permanent Slide Smooth Muscle Mammal: Artery | Superior quality, very clear slides, for using under microscope | No | |
| D.90 | Glassware | Permanent Slide Smooth Muscle Mammal: Blood | Superior quality, very clear slides, for using under microscope | No | |
| D.91 | Glassware | Permanent Slide Smooth Muscle Mammal: Bone | Superior quality, very clear slides, for using under microscope | No | |
| D.92 | Glassware | Permanent Slide Smooth Muscle Mammal: Elastic | Superior quality, very clear slides, for using under microscope | No | |

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|-------|-----------|--|---|---------------------|----------------|
| | | Cartilage | | | |
| D.93 | Glassware | Permanent Slide Smooth Muscle Mammal: Heart | Superior quality, very clear slides, for using under microscope | No | |
| D.94 | Glassware | Permanent Slide Smooth Muscle Mammal: Hyaline Cartilage | Superior quality, very clear slides, for using under microscope | No | |
| D.95 | Glassware | Permanent Slide Smooth Muscle Mammal: Kidney | Superior quality, very clear slides, for using under microscope | No | |
| D.96 | Glassware | Permanent Slide Smooth Muscle Mammal: Liver | Superior quality, very clear slides, for using under microscope | No | |
| D.97 | Glassware | Permanent Slide Smooth Muscle Mammal: Ovary | Superior quality, very clear slides, for using under microscope | No | |
| D.98 | Glassware | Permanent Slide Smooth Muscle Mammal: Pancreases | Superior quality, very clear slides, for using under microscope | No | |
| D.99 | Glassware | Permanent Slide Smooth Muscle Mammal: Skin | Superior quality, very clear slides, for using under microscope | No | |
| D.100 | Glassware | Permanent Slide Smooth Muscle Mammal: Spinal Cord | Superior quality, very clear slides, for using under microscope | No | |
| D.101 | Glassware | Permanent Slide Smooth Muscle Mammal: Spleen | Superior quality, very clear slides, for using under microscope | No | |
| D.102 | Glassware | Permanent Slide Smooth Muscle Mammal: Stomach | Superior quality, very clear slides, for using under microscope | No | |

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|-------|-----------|--|---|---------------------|----------------|
| D.103 | Glassware | Permanent Slide Smooth Muscle Mammal: Testis | Superior quality, very clear slides, for using under microscope | No | |
| D.104 | Glassware | Permanent Slide Smooth Muscle Mammal: Vein | Superior quality, very clear slides, for using under microscope | No | |
| D.105 | Glassware | Permanent Slide Spirogyra | Superior quality, very clear slides, for using under microscope | No | |
| D.106 | Glassware | Permanent Slide Squamous Epithelium | Superior quality, very clear slides, for using under microscope | No | |
| D.107 | Glassware | Permanent Slide Stomata | Superior quality, very clear slides, for using under microscope | No | |
| D.108 | Glassware | Permanent Slide Volvox | Superior quality, very clear slides, for using under microscope | No | |
| D.109 | Glassware | Permanent Slide Xylem | Superior quality, very clear slides, for using under microscope | No | |
| D.110 | Glassware | Permanent Slide Yeast | Superior quality, very clear slides, for using under microscope | No | |
| D.111 | Glassware | Permanent Slide Yeast | Superior quality, very clear slides, for using under microscope | No | |
| D.112 | Glassware | Permanent Slide Yeast Budding | Superior quality, very clear slides, for using under microscope | No | |
| D.113 | Glassware | Petri Dish Glass | Soda glass, without cover, diameter 96 mm. | No | |
| D.114 | Glassware | Petri dish Plastic | Plastic dish outer diameter. 120 mm X 30 mm depth | No | |
| D.115 | Glassware | Pipette Signal mark | 5ml (Borosilicate like Glass) | No | |

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|-------|-----------|--|--|---------------------|----------------|
| D.116 | Glassware | Pipette Signal mark | 20ml and 25 ml (Borosilicate like Glass) pack of 30 | No | |
| D.68 | Glassware | Plain mirror | 2 mm X 50 mm Diameter. Round edges. | No | |
| D.118 | Glassware | Plane mirror strip | Good quality, 150 X 30 X 2 mm. | No | |
| D.119 | Glassware | Preserved material of Fern | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | No | |
| D.120 | Glassware | Preserved material of Fumaria | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | No | |
| D.121 | Glassware | Preserved material of Marchantia (liver wort) | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | No | |
| D.122 | Glassware | Preserved Specimen bladder wort | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | No | |
| D.123 | Glassware | Preserved Specimen Cockroach | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | No | |
| D.124 | Glassware | Preserved Specimen hydrilla | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | Yes | |
| D.125 | Glassware | Preserved Specimen lichen | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | No | |
| D.126 | Glassware | Preserved Specimen ascaris Male | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | No | |
| D.127 | Glassware | Preserved Specimen certophyllum | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | No | |

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|-------|-----------|--------------------------------------|---|---------------------|----------------|
| D.128 | Glassware | Preserved Specimen Earthworm | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | No | |
| D.129 | Glassware | Preserved Specimen eichhornia | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | No | |
| D.130 | Glassware | Preserved Specimen epiphytic root | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | No | |
| D.131 | Glassware | Preserved Specimen Liver Fluke | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | No | |
| D.132 | Glassware | Preserved Specimen Safaris Female | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | No | |
| D.133 | Glassware | Preserved Specimen salvinia | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | No | |
| D.134 | Glassware | Preserved Specimen Silk Moth | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | No | |
| D.135 | Glassware | Preserved Specimen Tape Worm | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | No | |
| D.136 | Glassware | Prism | 38 mm ± 5mm Equilateral BK7 Grade A optical glass Diameter Tolerance +0.0, -0.20mm clear aperture >90% Flatness N2 @ 632.8 nm Surface Quality 60-40 scratch and dig Bevel <0.25mm× 45° | No | |
| D.137 | Glassware | Reagent Bottle | Narrow Mouth with interchangeable stopper 500 ml (Borosilicate like Glass) | No | |
| D.138 | Glassware | Round Bottom flask | Pack of Borosilicate or equivalent glass, capacity 35 ml, 50 ml 100 ml 250 ml and 500 ml short neck with rubber cork | No | |
| D.139 | Glassware | Short inlet tube | Made of glass, length 10 cm diameter 1 cm | No | |

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|-------|---------------|--------------------|--|---------------------|----------------|
| D.140 | Glassware | Stirrer | Soda glass with circular flat end, length 100 mm. Glass rod diameter 4 mm. | No | |
| D.141 | Glassware | Test tube | 15x 125mm±2mm (Borosilicate like glass) with rim duly packed in a grooved plastic tray of capacity 10 pieces and packed in a 50 pcs. Box | No | |
| D.142 | Glassware | Test tube | 12x75mm±1mm (Borosilicate like glass) with rim | Yes | |
| D.143 | Glassware | Test Tube | Borosilicate like glass 15 mm 0.5 cm diameter with rim duly packed in a grooved plastic tray of capacity 10 pieces and packed in a 50 pcs. Box | No | |
| D.144 | Glassware | Volumetric Flask | Borosilicate like glass, with inter changeable stopper Capacity 250 ml | No | |
| D.145 | Glassware | W –Tube | Borosilicate like glass, 2 mm thick x 8 mm diameter having length of arms 70-75 mm, with wide mouth in one arm. | No | |
| D.146 | Glassware | Watch Glass | Routine quality glass 3" | No | |
| | Glassware (D) | | | | |
| E.1 | Consumables | Aluminum foil roll | 9 meter 300mm Water proof, optimum finish non-stick corrosion resistant. Thickness 18 micron | No | |
| E.2 | Consumables | Blades | Stainless Steel (pack of good quality 5 blades) | No | |
| E.3 | Consumables | Blotting paper | 100 mm x 100 mm. | No | |
| E.4 | Consumables | Blow Pipe | Nickel-plated copper length 200 mm approx. | No | |
| E.5 | Consumables | Brush for burrete | Material - Nylon good quality, Thick hair | No | |

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|------|-------------|---|--|---------------------|----------------|
| E.6 | Consumables | Brush for test tube | Material - Nylon good quality, Thick hair | No | |
| E.7 | Consumables | Brush Pippette | Material - Nylon good quality, Thick hair | No | |
| E.8 | Consumables | Capacitor | Assorted (Pack of 25) | No | |
| E.9 | Consumables | Cardboard Sheets of different thickness | pack of 12 standard cardboard sheets of different thickness | No | |
| E.10 | Consumables | Castor oil / Glycerin | half liter pack | No | |
| E.11 | Consumables | cello tape | Rubber adhesive 19mm length 50 m thickness 36-60 mic | No | |
| E.12 | Consumables | Cellophane sheet | 1 roll 15-meter width 30 cm | No | |
| E.13 | Consumables | Charcoal Block | 4"x1" pack of 12 pc | No | |
| E.14 | Consumables | Claw hammer with handle | Forged, approximate weight 225 gm with wooden handle | No | |
| E.15 | Consumables | Connecting wire with Banana plug | Soft electric wire 200 mm. Length double cloth covered both end fitted with banana plug. Two red and two black | No | |
| E.16 | Consumables | Constantan wire | 26 SWG 50 cm Approx. length | No | |
| E.17 | Consumables | Copper strip | 80 mm. X 5 mm. x 1 mm. | No | |
| E.18 | Consumables | Copper wire | 100 cm long, thickness 24 SWG | No | |

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|------|-------------|----------------------------|---|---------------------|----------------|
| E.19 | Consumables | Copper wire bent in u form | Diameter. 1 mm. copper wire U band 30 mm. x 35 mm height and both corner band 6 mm. in 90°. | No | |
| E.20 | Consumables | Cork | Assorted size in a pack of 25 | No | |
| E.21 | Consumables | Cork Screw | Wooden / plastic handle with stainless steel opener. | No | |
| E.22 | Consumables | Cotton roll | good quality medicated (Large packet) | No | |
| E.23 | Consumables | Cotton thread | Thread roles, strong | No | |
| E.24 | Consumables | Cover Slips | Thickness 0.2 mm – 0.3 mm approx. square glass pieces. Packet of 100 | No | |
| E.25 | Consumables | Cover slips | 18x18mm pack of 10gm | No | |
| E.26 | Consumables | Crocodile Clips | Set of Clips 50 mm, Plated, standard flexible wire 76, 50 cm long Each set two wire five Color | No | |
| E.27 | Consumables | Detergent powder | 200 gm | No | |
| E.28 | Consumables | Diode | Assorted pack | No | |
| E.29 | Consumables | Distilled water | in plastic bottle 1 Li | No | |
| E.30 | Consumables | drawing pins | With plastic head (pack of 50) | No | |
| E.31 | Consumables | dropping bottle | Blown in Low Density Polyethylene, Polylab Dropping Bottles dispense small uniform drops of liquids when pressed lightly. Material: Low Density Polyethylene. 60 ml (pack of 25) | No | |

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|------|-------------|--|--|---------------------|----------------|
| E.32 | Consumables | Electric wire | Copper wire, plastic coated copper wire 10 meter | No | |
| E.33 | Consumables | Electrical Fuse | Seamless finish, Rust Resistance, 16 amps 240 volt | No | |
| E.34 | Consumables | Filter paper | No. 1 Diameter 12.5 cm superior pack of 100 circles | No | |
| E.35 | Consumables | Flexible wire with red and black insulation - 1 roll | Double cloth covered 10 meter | No | |
| E.36 | Consumables | Funnel | Plastic, transparent top diameter,90 mm. x overall length140 mm | No | |
| E.37 | Consumables | Fuse wire | 1 roll | No | |
| E.38 | Consumables | Graduated Syringe | Standard, plastic, capacity 10 ml Pipettes - Graduated/ Serological/ Volumetric Comes in various sizes as mentioned | No | |
| E.39 | Consumables | Graph Paper | A4 size book of 48 pages | No | |
| E.40 | Consumables | Hair pins | Length - 7cm in (pack of a dozen) | No | |
| E.41 | Consumables | Half Meter scale | Made of plastic graduation in mm, cm and inch | No | |
| E.42 | Consumables | Heating Block | Aluminum, 63 mm diameter X 55 mm height, 02 holes' diameter 6 mm x 30 mm deep, and split fitted with handle: Mild Steel Rod 06 mm diameter X 130 mm length. One 0.5 mm deep cut on face for capillary tube. | No | |
| E.43 | Consumables | Ice Cream Spoon | Good quality Wooden (packet of 25) | No | |

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|------|-------------|------------------------------------|---|---------------------|----------------|
| E.44 | Consumables | Iron Filings | Grease free filing in plastic bottles 50 grams' packets | No | |
| E.45 | Consumables | Iron Nails | Length 38 mm, 15 SWG | No | |
| E.46 | Consumables | Iron strip | 80 mm. X 5 mm. x 1 mm. with terminals | No | |
| E.47 | Consumables | L.E.D. | Assorted pack 25 LED 5 mm different colors | No | |
| E.48 | Consumables | Lab Safety glasses | One piece polycarbonate molded visor with adjustable arm. Transparent Scratch Resistance, light weight 30 grams approx. | No | |
| E.49 | Consumables | Lycopodium Powder | 1 packet 200 grams | No | |
| E.50 | Consumables | Marker pen | Permanent marker used writing on glass | No | |
| E.51 | Consumables | Measuring scale | Wooden / plastic 12 ' Graduation in cm, mm, feet and inch length 1, meter | No | |
| E.52 | Consumables | Measuring Tape | Made of plastic. Graduation in cm, mm, feet and inch length 1, meter | No | |
| E.53 | Consumables | Metal Strips | Aluminum Strips, dimension 80 mm x 5 mm, x1 mm. | No | |
| E.54 | Consumables | Meter scale wooden | I meter scale wooden Graduation in cm, mm, feet and inch length 1, meter | No | |
| E.55 | Consumables | Muslin/cheese cloths | Threads per inch grams per M2+5% C-1, 24x18-100cms bleached 5 meter | No | |
| E.56 | Consumables | Nichrome wire / Resistance wire | 26 SWG 50 m Approx. length | No | |

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|------|-------------|----------------------|--|---------------------|----------------|
| E.57 | Consumables | on / off switches | Simple on off switches made of plastic with copper fittings inside | No | |
| E.58 | Consumables | paper pin | stainless steel (packet) | No | |
| E.59 | Consumables | Pestal and Mortar | Porcelain superior quality size 6" | No | |
| E.60 | Consumables | pH Paper | pH 1-14, paper box containing, packet of 5 (100 Strips each) | No | |
| E.61 | Consumables | Pith / Plastic Ball | Diameter 12 mm. solid center throughout hole 1.5 mm. | No | |
| E.62 | Consumables | Protector small | Made of Plastic, degrees marked in semicircular 0-180 with 5 w | No | |
| E.63 | Consumables | Pulley | Aluminum, 50 mm diameter fitted with hook Frictionless with smooth edge, capacity 1 kg | No | |
| E.64 | Consumables | Roller (lead shots), | Rc-112 Fitted With 7/16" Square Blocks Double Silk Covered Non-Inductive Windings. Accuracy - 0.1 % Educational Quality. In 100 gm packets | No | |
| E.65 | Consumables | Rubber Balloons | 2 packet bigger size and 2 packet smaller size. Assorted size | No | |
| E.66 | Consumables | Rubber Bands | As per sample. Assorted size | No | |
| E.67 | Consumables | Rubber cork | Standard, armed, Assorted pack of 20 each of size nos. 2, 3, 4, 5 and 6. | No | |
| E.68 | Consumables | Rubber Tube | 10 cm 0.5 cm dia Good quality | No | |
| E.69 | Consumables | Sand paper | Standard, 60 and 120 number. 5 each | No | |

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|------|-------------|---|--|---------------------|----------------|
| E.70 | Consumables | Scale with holes at regular interval (Grooved scale Meter) | Wood/ plastic Wook distance marked in cm mm ft. and inch. | No | |
| E.71 | Consumables | Scalpel | Stainless steel | No | |
| E.72 | Consumables | Screw | 1 inch | No | |
| E.73 | Consumables | Screw driver | 150 mm long, hardened, with plastic handle. | No | |
| E.74 | Consumables | Sharp edged knife, | Stainless steel length of cutting edge 6 cm with Plastic handle | No | |
| E.75 | Consumables | Small Plastic beads | 5 different colors One packet each color (1 set) | No | |
| E.76 | Consumables | Solid steel balls 1mm to 3 mm diameter | 1 mm diameter packet of 50 | No | |
| E.77 | Consumables | Solid steel balls 1mm to 3 mm diameter | 3 mm diameter packet of 50 | No | |
| E.78 | Consumables | Spatula | Stainless Steel one end spoon 8" | No | |
| E.79 | Consumables | Surgical Scissor | Material - Stainless steel, 125 mm, one prong blunt and other pointed, standard. | No | |
| E.80 | Consumables | Syringe Pump | Poly carbonate syringe pump overall size with piston 200 mm. length and outer Diameter. 30 mm. | No | |
| E.81 | Consumables | Test Plate/Well plate | Polystyrene (PS), with 96 wells Polylab micro test plates are made of optically clear, non-toxic Polystyrene. These plates with 96 U Bottom or flat bottom wells bear alpha-numeric index | No | |

| SL | Category | Items | Description/Minimum Specification | Samples Required | Pass / Fail |
|------|-------------|------------------------------|--|---------------------|----------------|
| E.82 | Consumables | Thread | 1 Roll. Good quality | No | |
| E.83 | Consumables | Three bulbs | Pack of four bulbs 25w, 60w, 100w, 40w | No | |
| E.84 | Consumables | Tissue paper | Good quality (packet of 50) | No | |
| E.85 | Consumables | Toothpick, | wooden (1 pkt) | No | |
| E.86 | Consumables | Tracing paper | 1 packet | No | |
| E.87 | Consumables | Two pin plug | good quality 5 amperes steel pins | No | |
| E.88 | Consumables | Vials | High Density Poly Ethylene (HDPE), height 55 mm, diameter 15 mm. | No | |
| E.89 | Consumables | Wash Bottle | 250ml. Good quality plastic | No | |
| E.90 | Consumables | White paper sheet Thick | Photocopier paper in Packet | No | |
| E.91 | Consumables | White Tiles | 6"x6" | No | |
| E.92 | Consumables | wicks for spirit burner | 1 meter | No | |
| E.93 | Consumables | Wooden Block (known Mass) | Wooden Block with hook. Teak wood, Superior thick 2 cm x 5 cm x 5cm | No | |
| E.94 | Consumables | Zinc strip | 80 mm. X 5 mm. x 1 mm. superior quality with terminals | No | |

2. Qualification Criteria

Bidders shall meet the qualification criteria set by the Purchaser on a pass-fail basis. Unless, specifically indicated otherwise, it is the legal entity or entities comprising the Bidder and not the Bidder's parent companies, subsidiaries or affiliates that must satisfy these criteria

2.1 Eligibility

Eligibility for participation by Bidders in terms of nationality, conflict of interest, status as government-owned enterprise and sanctions either by ADB or other international development institutions.

2.2 Experience and Technical Capacity

2.2.1 Contractual Experience

Number of contracts successfully completed as main supplier within the last three (3) years. Value, nature, and complexity of these contracts should be comparable to the contract to be let.

2.3 Financial Situation (May be used individually or in combination based on the specific scope of supply, the terms of payment, and the supplier market.)

2.3.1 Historical Financial Performance

Soundness of the Bidder's financial position showing long-term profitability demonstrated through audited annual financial statements (balance sheet, income statement) for the last three (3) years.

2.3.2 Size of Operation (Average Annual Turnover)

Average annual turnover (converted into United States [US] dollars) defined as the total payments received by the Bidder for contracts completed or under execution over the last three (3) years.

The specific requirements for each of these criteria are provided in Part 2.

Part 2: Specific Requirements for the Criteria

The legal entity or entities comprising the Bidder, and not the Bidder's parent companies, subsidiaries, or affiliates, must satisfy the qualification criteria described below.All are Pass/Fail Criteria

2.1 Eligibility and Pending Litigation

2.1.1 Eligibility

| Criteria | Compliance Requirements | | | | Documents |
|-------------|-------------------------|-------------------------------|--------------------------------|---------------------|----------------------------|
| Requirement | Single Entity | J All Partners Combined | oint Ventur Each Partner | e One Partner | Submission Requirements |

2.1.1.1 Nationality

| Nationality in accordance with ITB Sub-clause 4.2. | must meet requirement | must meet requirement | must meet requirement | not applicable | Technical Bid Submission Sheet; Forms ELI – 1 and ELI - 2 |
|--|--------------------------|--------------------------|--------------------------|-------------------|--|
|--|--------------------------|--------------------------|--------------------------|-------------------|--|

2.1.1.2 Conflict of Interest

| No conflicts of interest in accordance with ITB Sub-clause 4.3. | must meet | must meet | must meet | not | Technical Bid |
|---|-------------|-------------|-------------|------------|------------------|
| | requirement | requirement | requirement | applicable | Submission Sheet |

2.1.1.3 ADB Eligibility

| Not having been declared ineligible by ADB, as described in ITB Sub-clause 4.4. | must meet requirement | must meet requirement | must meet requirement | not applicable | Technical Bid Submission Sheet |
|---|--------------------------|--------------------------|--------------------------|-------------------|-----------------------------------|
|---|--------------------------|--------------------------|--------------------------|-------------------|-----------------------------------|

2.1.1.4 Government-Owned Enterprise

| Bidder required to meet conditions of ITB Sub-clause 4.5. | must meet requirement | must meet requirement | must meet requirement | not applicable | Technical Bid Submission Sheet; Forms ELI – 1 and ELI - 2 |
|---|--------------------------|--------------------------|--------------------------|-------------------|--|
|---|--------------------------|--------------------------|--------------------------|-------------------|--|

2.1.1.5 United Nations Eligibility

| Not having been excluded by an act of compliance with a United Nations Security Council resolution in accordance with ITB Sub-clause 4.7. | must meet requirement | must meet requirement | must meet requirement | not applicable | Technical Bid Submission Sheet |
|---|--------------------------|--------------------------|--------------------------|-------------------|-----------------------------------|
|---|--------------------------|--------------------------|--------------------------|-------------------|-----------------------------------|

2.1.2 Pending Litigation

Pending litigation and arbitration criterion shall apply.

2.1.2.1 Pending Litigation and Arbitration

| Criteria | С | Documents | | | |
|---|---|---|---|-------------------|--------------|
| Bandana | Single | J | oint Venture | Submission | |
| Requirement | Entity | All Partners Each One Combined Partner Partner | Requirements | | |
| All pending litigation and arbitration, if any, shall be treated as resolved against the Bidder and so shall in total not represent more than Fifty (50) percent of the Bidder's net worth calculated as the difference between total assets and total liabilities. | must meet requirement by itself or as partner to past or existing Joint Venture | not applicable | must meet requirement by itself or as partner to past or existing Joint Venture | not applicable | Form LIT – 1 |

2.2 Experience and Technical Capacity

2.2.1 Contractual Experience

| Criteria | C | Documents | | | |
|---|--------------------------|--------------------------|-------------------|-------------------|--------------|
| | Single | Joint Venture | | | Submission |
| Requirement | Entity | All Partners Combined | Each Partner | One Partner | Requirements |
| Successful completion as main supplier within the last Three (3) years, of at least Two (2) contracts each valued at INR 1,40,00,000.00(or equivalent US\$) with nature, and complexity similar to the scope of supply described in Section 6 (Schedule of Supply). | must meet requirement | must meet requirement | not applicable | not applicable | Form EXP - 1 |

2.2.2 Technical Experience

| Criteria | C | Compliance Requirements | | | | |
|--|--------------------------|--------------------------|-------------------|-------------------|--------------|--|
| Dequirement | Single | J | e | Submission | | |
| Requirement | Entity | All Partners Combined | Each Partner | One Partner | Requirements | |
| The Bidder shall demonstrate that the goods offered have (i) been in production/ selling for at least 3 years, and (ii) been supplying similartype of items and complexity at schools as mentioned in section 6 schedule of supply in the last three (3) years | must meet requirement | must meet requirement | not applicable | not applicable | Form EXP - 2 | |
| (iii) been in use for a minimum of 3 years.; | | | | | | |

** (ii) with documentary evidence: Pictures, Client certificates

2.2.3 Production Capacity

| Criteria | C | Documents | | | |
|---|--------------------------|--------------------------|-------------------|-------------------|--------------|
| | Joint Venture Single | | | | Submission |
| Requirement | Entity | All Partners Combined | | Requirements | |
| The Bidder shall demonstrate that it can supply the type, size, and quantity of the goods as required by Purchaser in accordance with the Delivery and Completion Schedule in Section 6 (Schedule of Supply). | must meet requirement | must meet requirement | not applicable | not applicable | Form EXP - 3 |

- Note -

а

Bidder or Manufacturer shall provide evidence of production output.

2.3 Financial Situation

2.3.1 Historical Financial Performance

| Criteria | C | Compliance Requirements | | | | |
|--|--------------------------|--------------------------|--------------------------|-------------------|--------------|--|
| Dominent | Single | Joint Venture | | | Submission | |
| Requirement | Entity | All Partners Combined | Each Partner | One Partner | Requirements | |
| Submission of audited financialstatements or, if not required by thelaw of the Bidder's country, otherfinancial statementsacceptable to the Purchaser, for the lastthree (3) years(FY 2017-16, 2016-15, 2015-14) to demonstrate the currentsoundness of the Bidder's financialposition. As aminimum, theBidder's net worth for the last yearcalculatedasthe difference between total assets and total liabilities should be positive | must meet requirement | not applicable | must meet requirement | not applicable | Form FIN - 1 | |

2.3.2 Size of Operation (Average Annual Turnover)

| Criteria | C | Documents | | | |
|---|--------------------------|--------------------------|---|---|--------------|
| | Single | Joint Venture | | | Submission |
| Requirement | Entity | All Partners Combined | Each Partner | One Partner | Requirements |
| Minimum average annual turnover of INR 3,60,00,000 (or equivalent US\$) calculated as total payments received by the Bidder for contracts completed or under execution over the last Three (3) years. | must meet requirement | must meet requirement | must meet 25% of the requirement | must meet 40% of the requirement | Form FIN - 2 |

3. Economic Evaluation

Economic criteria are applied when evaluating a Bid to determine the lowest evaluated Bid. These criteria are the bid price and other factors expressed in monetary terms such as those related to characteristics, performance, and terms and conditions of the purchase of the goods. The monetary values of the factors provide the adjustment of the bid price for comparison purposes.

3.1 Adjustment for Scope

3.1.1 Local Handling and Inland Transportation

Costs for inland transportation, insurance, and other incidental costs for delivery of the goods from the EXW premises, or port of entry, or border point to Project Site as defined in Section 6 (Schedule of Supply), shall be quoted in the Price Schedule for Related Services to Be Offered from Outside and Within the Purchaser's Country provided in Section 4 (Bidding Forms). These costs will be taken into account during bid evaluation. If a Bidder fails to include such costs in its Bid, then these costs will be estimated by the Purchaser on the basis of published tariffs by the rail or road transport agencies, insurance companies, or other appropriate sources, and added to EXW or CIF or CIP price

3.1.2 Minor Omissions or Missing Items

Pursuant to ITB 32.3, the cost of all quantifiable nonmaterial nonconformities or omissions from the contractual and commercial conditions shall be evaluated. The Purchaser will make its own assessment of the cost of any nonmaterial nonconformities and omissions for the purpose of ensuring fair comparison of Bids.

3.2 Adjustment for Deviations from the Terms of Payment

Deviations from the Terms of Payment as specified in SCC 16.1, are not permitted

3.3 Adjustment for Deviations in the Delivery and Completion Schedule

Bidders are required to base their prices on the Delivery and Completion Schedule specified in Section 6 (Schedule of Supply).

Deviations from the Delivery and Completion Schedule specified in Section 6(Schedule of Supply) are not permitted

3.4 Operating and Maintenance Costs

Not applicable

3.5 Spare Parts

Not applicable

3.6 Performance and Productivity of the Goods

Not Applicable

3.7 Multiple Lots (Contracts)

Not Applicable

3.8 Margin of Preference: Not Applicable.

Section 4- Bidding Forms

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Technical Bid Submission Sheet

-- Note -

The Bidder must accomplish the Technical Bid Submission Sheet on its letterhead clearly showing the bidder's complete name and address.

Date: _____

NCB No.:

Invitation for Bid No.:

Alternative No.:

To:

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Document, including the Addenda issued in accordance with Instructions to Bidders (ITB) Clause 8._____
- (b) We offer to supply in conformity with the Bidding Document and in accordance with the delivery schedule specified in Section 6(Schedule of Supply), the following Goods and Related Services.
- (c) Our Bid consisting of the Technical Bid and the Price Bid shall be valid for a period of ______ days from the date fixed for the bid submission deadline in accordance with the Bidding Document, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
- (d) Our firm, including any subcontractors or suppliers for any part of the Contract, have nationalities from eligible countries in accordance with ITB 4.2.
- (e) We, including any subcontractors or suppliers for any part of the contract, do not have any conflict of interest in accordance with ITB 4.3.
- (f) We are not participating, as a Bidder in more than one Bid in this bidding process in accordance with ITB 4.3(e), other than alternative offers in accordance with the Bidding Document.
- (g) Our firm, its affiliates or subsidiaries, including any subcontractors or suppliers for any part of the Contract, has not been declared ineligible by the ADB, under the Purchaser's country laws or official regulations or by an act of compliance with a decision of the United Nations Security Council.
- (h) [We are not a government-owned enterprise] / [We are a government-owned enterprise but meet the requirements of ITB 4.5].²

² Use one of the two options as appropriate.

(i) We agree to permit ADB or its representative to inspect our accounts and records and other documents relating to the bid submission and to have them audited by auditors appointed by ADB.

| Name | |
|--|--|
| In the capacity of | |
| Signed | |
| Duly authorized to sign the Bid for and on behalf of _ | |
| Date | |

Price Bid Submission Sheet

-- Note –

The Bidder must accomplish the Price Bid Submission Sheet on its letterhead clearly showing the bidder's complete name and address.

Date: _____

NCB No.:

Invitation for Bid No.:

Alternative No.:

То: _____

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Document, including the Addenda issued in accordance with Instructions to Bidders (ITB) Clause 8.
- (b) We offer to supply in conformity with the Bidding Document and in accordance with the delivery schedule specified in Section 6(Schedule of Supply), the following Goods and Related Services.
- (c) The total Bid price, excluding any discounts offered in item (d) below is

(d) The discounts offered and the methodology for their application are as follows: Discounts: If our Bid is accepted, the following discounts shall apply: _____

Methodology of Application of the Discounts: The discounts shall be applied using the following method:

- (e) Our bid shall be valid for a period of ______ days from the date fixed for the submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.
- (f) If our Bid is accepted, we commit to obtain a Performance Security in the amount of ____10 percent of the Contract Price for the due performance of the Contract.

(g) The following commissions, gratuities, or fees have been paid or are to be paid with respect to the bidding process or execution of the Contract:

| Name of Recipient | Address | Reason | Amount | | |
|-------------------|---------|--------|--------|--|--|
| | | | | | |
| | | | | | |

(If none has been paid or is to be paid, indicate "none.")

- (h) We understand that this Bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal Contract is prepared and executed.
- (i) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.
- (j) We agree to permit ADB or its representative to inspect our accounts and records and other documents relating to the bid submission and to have them audited by auditors appointed by ADB.

| Name | |
|--|--|
| In the capacity of | |
| Signed | |
| Duly authorized to sign the Bid for and on behalf of | |
| Date | |

Price Schedulefor Goods

to be offered from Within the Purchaser's Country

Name of Bidder _____ Page ___ of ____

| SL | Category | Items | Description/Minimum Specification | Country of Origin | Domestic Value Added in Percent | Quantity | Unit of measurement | Unit price | Total EXW Price per item | Sales and other Taxes per Item | Total Price per item including tax |
|-----|-----------|----------------------------|---|-------------------|------------------------------------|----------|---------------------|------------|-----------------------------|-----------------------------------|------------------------------------|
| | | 1 | 2 | 3 | 4 | 5 | | 6 | 7=5X6 | 8 | 9 |
| A.1 | Equipment | Air Condenser | Liebig Tip Interchangeable joint and inter changeable outer joint300mm cone 24/ 29 socket 19/26 | | | 68 | Number | | | | |
| A.2 | Equipment | Ammeter (0 - 3 amp) | Plastic body with terminal, Square type grade A DC moving coil panel meter with stand | | | 1,360 | Number | | | | |
| A.3 | Equipment | Audio frequency oscillator | Frequency Range: 20 Hz to 20 KHz in 4 decades range square wave upto 20 KHz. Accuracy: ± 2%, ± 1 Hz. Wave Form: Sine and Square – Selectable. Output Voltage: 0 – 10, Volts continuously variable. Coarse and Fine Controls. Stability: 0.5% after warm – up time of 10, minutes. | | | 68 | Number | | | | |
| A.4 | Equipment | B.P and M.P Apparatus | Aluminum. 63 mm diameter x 55 mm height, 02 holes and split fitted with handle: mild steel rod 06 mm diameter x 130 mm length | | | 68 | Number | | | | |

| A.5 | Equipment | Balance Electronic digital | Capacity 600gm, L.C. 0.1gm (100mg) Imported High precision, Different Capacities and sensitivities, Comes with Guard / Box, Runs on electricity and battery | 68 | Number | | |
|------|-----------|-------------------------------|---|-------|--------|--|--|
| A.6 | Equipment | Battery eliminator | Input 220 volt A.C., output 0-12 v at 1 AMP D.C.300 MA 'CSI' Extra Superior quality fitted with heavy duty transformer & long life Selenium Metal Bridge Rectifier (Guaranteed for one year for any Mechanical defects). | 68 | Number | | |
| A.7 | Equipment | Bell Jar | Borosilicate like 3.5 mm thick glass, neck inside diameter 18 mm x 20 mm height. Overall length 90 mm x inside diameter 55 mm with rim diameter 64 mm | 1,360 | Number | | |
| A.8 | Equipment | Boyle's Law apparatus | Two glass tubes 220 mm long, one is closed at the top and other one is open and connected by 1 Meter pressure rubber tubing. Both the tubes are mounted on the brackets which can be locked in any portion on the metal supporting rods. Stand carries a graduated scale 0 to 100 cm. Mercury required for this 3 apparatus is approx.30 cm. | 68 | Number | | |
| A.9 | Equipment | Burette stand with clamp. | Burette Stand: - Complete with oxidized clamp fitted with knob/screw, hard wood base polished nicely for single Burette | 1,360 | Number | | |
| A.10 | Equipment | Calorimeter (Copper) | Set of Copper Calorimeter 75 x 50 mm with felt insulation, the outer vessel of 100 x 65 mm size with a plastic lid having holes for thermometer & stirrer. A thermometer holder is fixed to the | 68 | Number | | |

| | | | outer vessel. Complete with stirrer. Same size one painted black and other highly polished | | | | |
|------|-----------|--------------------------------------|--|-------|--------|--|--|
| A.11 | Equipment | Calorimeter (plastic) | Borosilicate like glass, 50 ml capacity, beaker fitted in Low Density Poly Ethylene (LDPE) foam sheet in wooden box. | 68 | Number | | |
| A.12 | Equipment | Cathode ray oscilloscope (CRO) | 220+/- 10 V, bandwidth 10MHz, Y deflection 10 mV/div- 5V/div Display Type CRT / 6" with additional 5 digit LCD display No of channels 2. Assembled in ABS plastic cabinet with cover with Set of Patch Chords & Experimental manual | 68 | Number | | |
| A.13 | Equipment | Cell holder | For two R-6 cells, brass-copper terminals [plated], plastic body, 130 mm X 70 mm x 40 mm height with cover | 1,360 | Number | | |
| A.14 | Equipment | Centrifuge | Hand operated can be fitted on table four tube extra superior heavy pattern with borosilicate or equivalent glass. | 68 | Number | | |
| A.15 | Equipment | Chromatographic Jar with Cork | Soda glass, height 175 mm, diameter 30 mm. | 1,360 | Number | | |
| A.16 | Equipment | Circuit Board | Complete with plastic base,190 mm x 120 mm x15 mm. battery holder, bulb holder with bulb 3.2 V, switch, banana sockets | 1,360 | Number | | |
| A.17 | Equipment | Compound Microscope | ISI Marked Microscope: Metal Body, triple revolving nose pieces' inclination 90 degree with coarse and fine movements. Overall height approx. 320 mm, base 125 mm x 200 mm. Achromatic good | 136 | Number | | |

| | | | quality lenses Two Objectives: 10x & 45x. Two Eyepieces: 10 x & 15 x having coarse fine motion & fixed condenser Magnification 600x/675x. In thermocolpacking | | | | |
|------|-----------|---|--|-------|--------|--|--|
| A.18 | Equipment | Connecting Wires in P.N. Junction &Zener Diode | Good quality, in a set | 136 | Number | | |
| A.19 | Equipment | Daniel cell | Complete with joint less thick copper vessel (Coper vessel of 150×100 mm (± 510 mm) with perforated shelf, thick zinc rod of size, 150×10 mm (With brass terminal, porous spot of size 140×50 mm diameter) Superior quality | 1,360 | Number | | |
| A.20 | Equipment | Dispensing Bottle | Low Density Poly Ethylene (LDPE), Capacity 15 ml, with screw type cap and nozzle | 1,360 | Number | | |
| A.21 | Equipment | Dissecting Microscope | ISI marked Plastic body 70 mm X 95 mm 90 mm height Top fitted glass sheet, two lenses, fitted with plastic frame in the backside. Eye pieces magnification 10X and 20X, rack and pinion arrangementeye pieces in wooden box, heavy round base | 680 | Number | | |
| A.22 | Equipment | Dissecting Needle | Standard, length 120 mm, with plastic handle. | 1,360 | Number | | |
| A.23 | Equipment | Dissecting set | Set of 15 instruments stainless steel good quality standard brand | 1,020 | Number | | |
| A.24 | Equipment | Double Inclined Plane | (Galileo's Experiment): 'CSI' Superior <i>teak wood</i> . Well- polished. Complete with two | 68 | Number | | |

4-4

| | | | wooden blocks & one spherical steel ball 2.5cm/dia. Fitted with two graduated arc to adjust at any angle. | | | | |
|------|-----------|-------------------------------|--|------|----------|--|--|
| A.25 | Equipment | Drawing board (35 x 25 cm) | soft wood 300x450±10mmx18mm±2mm | 1,36 | 0 Number | | |
| A.26 | Equipment | Dry cells | 1.5 V chargeable AA with charger | 680 | Number | | |
| A.27 | Equipment | Electrodes Copper | Copper strip, length 80 mm, width 5 mm. x thickness 1mm with terminals | 1,36 | 0 Number | | |
| A.28 | Equipment | Electrodes Zinc | Zinc strip, length 80 mm width 5 mm x thickness 1 mm with terminals | 1,36 | 0 Number | | |
| A.29 | Equipment | Forcep | Good Quality 6" with fine tip (Stainless steel) | 1,36 | 0 Number | | |
| A.30 | Equipment | Fortin's Barometer | Has a dual scale of 640-810mm and 25-32 inches with least count of 0.05mm and 0.002 inches respectively. It is suitable for altitudes upto 600 m. The mercury cistern has an adjusting screw and fluvial setting point. Supplied w/o mercury. Aluminum parts & tube | 68 | Number | | |
| A.31 | Equipment | Full Protector | Transparent plastic diameter 120 mm, thickness 2 mm double angle marking 0- 360 degree | 1,36 | 0 Number | | |
| A.32 | Equipment | Funnel Stand | Polished hard wood with cork lined jaws and molded plastic screws. Base fitted with non-skid feet for stability. Overall height 490 mm, base size 330×110 mm. | 136 | Number | | |
| A.33 | Equipment | Galvanometer | 30-0-30 plastic body with terminal, Grade A Square type DC moving coil panel meter with stand | 1,36 | 0 Number | | |

| A.34 | Equipment | Hooks law apparatus | Consisting of 30cm long mirror scale, spring, slotted weights with hanger and pointer, complete on heavy tripod stand with weight superior quality large size about 45 cm high | 68 | Number | | |
|------|-----------|---|--|-------|--------|--|--|
| A.35 | Equipment | Inclined plane with protect meter and pulley, | protect meter and pulley With facility to alter angle of inclination with iron N.P roller, pan and pulley base | 68 | Number | | |
| A.36 | Equipment | Iron Brass Bimetallic strip with wooden handle | Length of bi metal strip (iron and brass) 150x15mm mounted in a wooden handle. The strip is only 1mm thick so that very little heat is required to produce considerable bending. Length overall 270mm approx. | 1,360 | Number | | |
| A.37 | Equipment | Kipps apparatus | Plastic Cap 250ml(approx.) material: High Density Polyethylene with stop clock | 136 | Number | | |
| A.38 | Equipment | Laboratory Stand with 1) Boss head 2) Clamp 3) G clamp | MS rod diameter 10 mm x 375 mm long, MS base, CI Boss head, G clamp and aluminum clamp | 1,360 | Number | | |
| A.39 | Equipment | Lead accumulator | For steady discharge of currents not exceeding 0.75 A in polystyrene container with negative and positive marked terminals | 68 | Number | | |
| A.40 | Equipment | Leclanche cell | Glass or plastic container 95x95x150mm (length x width x height). For cathode a zinc rod with terminal and for anode a filled porous pot is supplied. Requires approx. 500ml ammonium chloride electrolyte supplied without electrolyte | 68 | Number | | |

| A.41 | Equipment | Magnet Bar type | Size 75 mm x 12 mm x 8 mm, red Color N and S pole mentioned. Alnico type | 1,360 | Number | | |
|------|-----------|---------------------------|---|-------|--------|--|--|
| A.42 | Equipment | Magnet Cylindrical | diameter 16 mm and length 25 mm. ferrite | 1,360 | Number | | |
| A.43 | Equipment | Magnet Disc Type | Diameter 36 mm and 8 mm thick. ferrite | 1,360 | Number | | |
| A.44 | Equipment | Magnet Horse shoe type | U shaped, Arm length 50 mm, N and S poles to be marked. | 1,360 | Number | | |
| A.45 | Equipment | Magnet Ring type | Outer diameter 18 mm and thickness 3 mm. ferrite | 1,360 | Number | | |
| A.46 | Equipment | Magnetic Compass | Metal case, polystyrene transparent top, magnetized needle with north marked red and south marked blue, 50 mm size. Both side glass | 1,360 | Number | | |
| A.47 | Equipment | Measuring cylinder | Plastic, transparent with built in base, 100 ml graduation (min 1 ml) | 1,360 | Number | | |
| A.48 | Equipment | meter bridge | The four-gap bridge has a large and heavy copper strip of (SWG No. 18) mounted on a heavy 3/4" thick laminated base of size 45" x 4" x 3/4". Nine heavy Brass terminals lock type are provided to reduce the resistance to a minimum. The ends gaps are closed by removable Copper Binding pieces which are held in position by the terminals. The 24 SWG constantan wire is stretched along the top of wooden meter scale and securely clamped to the Brass end strips so that end errors are negligible. Supplied complete | 68 | Number | | |

| | | | with pencil jockey along with lead for connections. Includes detail working manual. Overall dimensions: 1.12m × 100mm × 50mm, including terminals. | | | | |
|------|-----------|---|--|------|----------------------|--|--|
| A.49 | Equipment | Micro Test Tube Holder | Wooden handle for hold the 10- mm test tube. | 1,30 | ⁶⁰ Number | | |
| A.50 | Equipment | Milliammeter (0- 500mA) | Pocket size, digital, high impedance with DC moving coil and stand | 1,30 | ⁶⁰ Number | | |
| A.51 | Equipment | Mirror/Lens stand | Wooden / plastic lens / mirror stand 120 mm X 30 mm X 75 mm. Height with slot. | 1,30 | ⁶⁰ Number | | |
| A.52 | Equipment | Multimeter | Digital (Imported) Economical, good quality | 1,30 | ⁶⁰ Number | | |
| A.53 | Equipment | Newton's law of cooling apparatus | copper calorimeter with a wooden lid having two holes for inserting a thermometer and a stirrer and an open double – walled vessel, University Pattern | 68 | ³ Number | | |
| A.54 | Equipment | n-p-n or p-n-p transistor | Fitted on board with terminals and circuit diagram | 13 | 6 Number | | |
| A.55 | Equipment | Ohm's Law Apparatus | Built in Rheostat with DC meters Superior Quality & operational manual fitted on a ABS plastic box | 68 | ³ Number | | |
| A.56 | Equipment | One way key | with brass block on plastic base with brass terminals | 1,30 | ⁶⁰ Number | | |

| A.57 | Equipment | Optical bench (1 1/2 meters) | one meter long, double MS chrome platted rods, four uprights (two having slow transfers motions), two lenses holders, two optical pins & two caste iron heavy metallic feet with levelling screws superior quality with Shappered rides | 68 | Number | | |
|------|-----------|---|---|-------|--------|--|--|
| A.58 | Equipment | P.N. Junction | Built in Power Supply, with one rectangular voltmeter and one mili ammeter (both meters are dual range) to monitor voltage and current. Two p n junction diode one in forward and other in reverse bias and one Zener diode. Special interconnection lead -5 Nos. p-n junction and diodes are mounted panel so that they are visible from outside to students as well as easy to replace in case another diode required to be replaced. | 68 | Number | | |
| A.59 | Equipment | Pair of Tongs | Diameter 05 mm, overall length 160 mm, chrome plated. | 1,360 | Number | | |
| A.60 | Equipment | Parallelogram law of forces apparatus | Comprises of a board 65x50cm, with two aluminum pulleys 50mm. dia., on clamp, for mounting in any position. Complete with three hangers iron nickel plated 50gm. and 12 slotted weights of 50 grams each. | 68 | Number | | |
| A.61 | Equipment | Pencil Knife Edge Jockey | With insulated handle, plated brass contact, and a plated brass terminal with 4 mm. Socket. Overall length 100 mm | 1,360 | Number | | |
| A.62 | Equipment | Pendulum bob | Brass bob of 2.5 cm diameter with hook attached | 1,360 | Number | | |

| A.63 | Equipment | pH meter (digital) | Very clear slides, superior quality, Digital (table model), manual with pH Electrode El/RI Make | | 68 | Number | | |
|------|-----------|------------------------------|---|--|-------|--------|--|--|
| A.64 | Equipment | Plug Key | One way plug key (Brass), base 80 mm x 55 mm. superior quality | | 68 | Number | | |
| A.65 | Equipment | Plumbline | Brass with hole for thread Superior heavy | | 1,360 | Number | | |
| A.66 | Equipment | Potentiometer with jockey | Potentiometer 4 wired Brass Connection with 1 meter rule with pencil jockey & brass terminal fitted on a both side laminated base with plastic feet | | 68 | Number | | |
| A.67 | Equipment | Resistance box | Rc-112 Fitted With 7/16" Square Blocks Double Silk Covered Non- Inductive Windings. Accuracy - 0.1 % Educational Quality. Plug type 0- 5000 Ohms fitted with brass plugs of plastic heads, contact blocks made of brass which are fitted on Bakelite/ plastic base. The whole assembly fitted on an appropriate polished wooden box or plastic box Constantan Coil, 9mm Thick Brass Block (0.1 - 500 ohms) plug type Plug type, plug key commutator, Pencil jockey, Reversing Switch, Tapping Key, Raleigh's key | | 68 | Number | | |
| A.68 | Equipment | Resonance Tube | a 100-cm long plastic tube, A movable aluminum reservoir attached by rubber tubing to the bottom of the resonance tube, A triangular support and two tube clamps 40 x 10 x 10" with metal base | | 136 | Number | | |

| A.69 | Equipment | Rheostat | Oxidized Eureka Wires and mounted on Duco painted metal feet provided with laminated brush contacts of phosphor bronze strips, Brass C.p. Guide rod and lock type terminals. 10 ohms, 20 ohms, 30 ohms 40 ohms with PVC feet (Aluminum). Length 15 cm | 68 | Number | | |
|------|-----------|---|--|-------|--------|--|--|
| A.70 | Equipment | Rubber Pad | Anti-Vibration Pad made from a combination of high quality rubber polymers and cork, this ideal combination ends up to make up a product that has excellent resistance to ageing, compression set, water & oil. | 1,360 | Number | | |
| A.71 | Equipment | Screw gauge | 15mm with ratchet stop, stainless steel and brass body | 1,360 | Number | | |
| A.72 | Equipment | Set of four resistors 10 ohm (1 no), 20 ohm (2 nos.), 30 ohm | 15 mm x 15 mm x 125 mm with nichrome wire resistance, embedded in plastic case with terminal. | 68 | Number | | |
| A.73 | Equipment | Slinky | Steel Wire Spiral roll, outer diameter 52 mm and close size 68 mm to 70 mm | 1,360 | Number | | |
| A.74 | Equipment | Slotted weight | Set of 5 in each weight category including hanger. Chrome plated iron weight. weight of 10gm (5x10gm), weight of 20 gm (5x20gm), weight of 50gms (5x50gm), weight of 100gms (5x100gm) | 136 | Number | | |
| A.75 | Equipment | Soil sieve | GI Sieve, Height 4 cm mesh size- 0.1mm 0.2mm, .3mm, 0.4 mm 0.5 mm 1, 0.6mm 0.8mm 1 mm, 1.5mm 2 mm. | 136 | Number | | |

| A.76 | Equipment | Soil Testing Kit(Chemical) K054 | Max Make, Four Parameter Testing Kits used for testing pH, Conductivity, Temperature, DO, TDS & salinity of the soil. All major nutrients of soil like, Nitrogen, Phosphorous, Potassium and in addition pH, Organic carbon, Calcium, Magnesium and Sulphur can be tested | 68 | Number | | |
|------|-----------|---------------------------------------|---|-------|--------|--|--|
| A.77 | Equipment | Solid, preferably metallic cylinder | Length 100 mm diameter 25 mm Made of brass/copper/steel/aluminumwhich is insoluble in given liquid and water. | 1,360 | Number | | |
| A.78 | Equipment | Sonometer | Superior Quality, well-polished wooden base, comprising a wooden resonance box of 114 cm length, 12.5 cm width and 10 cm height, with two rules 1 meter. long sub-divided into Millimeter. Two wire of brass and 2 sliding bridges steel attached to | 68 | Number | | |
| A.79 | Equipment | Speaker | 8Ohz | 136 | Number | | |
| A.80 | Equipment | Spherical body (Marbles) | 4 cm diameter | 1,360 | Number | | |
| A.81 | Equipment | Spherometer | brass dial head 40mm diameter, stainless steel, head divided in 100 divisions reading upto 0.005 mm, vertical scale 10-0-10 single disk | 1,360 | Number | | |
| A.82 | Equipment | Spirit lamp | Made of Aluminum, full size heavy pattern leak proof. Capacity 125 ml. Uses the spirit for its functioning. Gives bright illumination with cap | 1,360 | Number | | |
| A.83 | Equipment | Spring Balance | A.B.S, open type, capacity 250 g graduation in steps of 10 g on one | 1,360 | Number | | |

| | | | side and Newton's on the other side | | | | |
|------|-----------|---|---|-------|--------|--|--|
| A.84 | Equipment | Sprit level | Plastic body. Strong build. Shear strength. Fine quality. Size- 300mm | 680 | Number | | |
| A.85 | Equipment | Stainless steel electrode with cork | Diameter 2 mm. x 80 mm stainless steel electrode fitted with cork to separate. Cork size top diameter 25 mm. x diameter 17 taper x 25 mm. length, (to fit with item No. 81 bell jar) | 1,360 | Number | | |
| A.86 | Equipment | Stop clock | metal body with start stop & fly back action, dial size approx. 100mm, divided in 0-60 x 1 sec with start, stop and resent arrangement | 680 | Number | | |
| A.87 | Equipment | Telescope fixed on stand | The telescope is mounted on a specially designed carriage with support ring to stop abrupt falling. The carriage is fitted with two adjustable screws for precise vertical and horizontal positioning. This arrangement is mounted on a 25mm dia, 450mm long steel pillar, fitted on a cast iron base with leveling screws. A scale holder is provided with scale | 68 | Number | | |
| A.88 | Equipment | Test Tube Holder Wooden Handle | With wooden Handle, chrome plated size 175mm +/- 15mm | 1,360 | Number | | |
| A.89 | Equipment | Test Tube Rack | Perspex sheet size 100 mm X 27 mm X 12 mm 04 blind holes to hold Micro Test Tubes. | 1,360 | Number | | |
| A.90 | Equipment | Test Tube stand | To hold test tubes of different diameter. Made of plastic (Polythene superior quality) with multiple holes | 1,360 | Number | | |

| A.91 | Equipment | Thermometer Alcohol | Glass, alcohol filled, -10° C to 110° C, graduation 1° C with card board/plastic cover and cotton at both ends. | 68 | Number | | |
|-------|-----------|--|--|-------|--------|--|--|
| A.92 | Equipment | Thermometer Mercury | Glass, mercury filled, graduation 0 - 250° C, sub division 1.0° C. | 68 | Number | | |
| A.93 | Equipment | Ticker Timer | Apparatus fitted on wooden board with sun-mica base / with plastic body, easily to work on 3-6 volts (even with battery). Fitted with speed regulator, complete with one roll of ticker tape fitted on clamp with paper Tape | 68 | Number | | |
| A.94 | Equipment | Transformers | Step Down 220-volt AC output 2- 12-volt AC transformers 1 Amp | 1,360 | Number | | |
| A.95 | Equipment | Transistor | apparatus mounted on ABS plastic box with circuit diagram fitted with terminals & two meters | 1,360 | Number | | |
| A.96 | Equipment | Transparent PVC plastic tube with stoppers | Diameter 20 mm, thickness 02 mm, 50 Cm long, with stoppers at both ends. | 1,360 | Number | | |
| A.97 | Equipment | Transparent stiff plastic tube | Diameter. 6 mm X 500 mm length | 1,360 | Number | | |
| A.98 | Equipment | Triangular File | With wooden / plastic handle length of file 20 cm | 136 | Number | | |
| A.99 | Equipment | Tripod stand, | Aluminum top 63 mm diameter x 15 mm thick three blind hole diameter 10 x 10 mm depth to hold test tube. Attach with three legs 4 mm diameter x 165 mm and total length 180 mm. | 1,360 | Number | | |
| A.100 | Equipment | Tuning Fork Set | Set of eight steel N.P. in velvet box. 256 to 512 Hz | 1,360 | Number | | |

| A.101 | Equipment | Two- Way Burette clamp and stand | For Base: Mild Steel Sheet 140 mm X 160 mm X 16mm SWG. For Stand: Mild Steel Rod 06 mm diameter, 280 mm length. Mild Steel Nut 06 mm, Fly Nut 06 mm, 06 mm Washer. Spring Steel Strip 80 mm X 08 mm X 20 SWG to hold 02 burettes. | 1,360 | Number | | |
|-------|-----------|--|--|-------|--------|--|--|
| A.102 | Equipment | Two-way key | brass block on plastic base with brass terminals | 1,360 | Number | | |
| A.103 | Equipment | Uprights (with clamps) Index needles | Stainless steel needle - length 7.7 cm diameter 4-5 mm pointed on the top fitted in a wooden / plastic base with plain and polished surface | 1,360 | Number | | |
| A.104 | Equipment | Vernier Calipers | Stainless steel, length 125mm approx. extra superior quality Chrome plated, clearly graduated | 1,360 | Number | | |
| A.105 | Equipment | Voltmeter | Plastic body with terminal, Square type grade DC moving coil Range 1.5 V, 3V, 5V. (0- 5 amp) with stand | 1,360 | Number | | |
| A.106 | Equipment | Wash Bottle | LDPE, Superior quality capacity 250 ml. | 1,360 | Number | | |
| A.107 | Equipment | Water bath | Diameter,4"(copper) Developed \with high quality material with concentric rings. Size 8 with concentric rings made of copper | 136 | Number | | |
| A.108 | Equipment | Water testing Kit (Chemical)WT 023 | Suitable for testing various features of water like hardness, salinity, turbidity, diffused oxygen ingredients etc. | 68 | Number | | |
| A.109 | Equipment | Weight box | Material- Brass weights/Nickel plated/chrome plated Analytical 10g 20g 50g 100g 200g 500g Two each with forceps | 340 | Number | | |

| A.110 | Equipment | Wide Bore Tube | transparent glass/ acrylic 1.25 m long 4 cm diameter | 1,360 | Number | | |
|-------|----------------------|------------------------------|--|-------|--------|--|--|
| A.111 | Equipment | Wire gauge, | Sheet metal thickness gauge, measuring range (in.) 0.007to 0.3125, probe depth (in.) 0.80 to 1.60, graduations0.289 in., number of leaves 0, length (in.) 3, width (in.) 3, thickness (in.) 0.125, measuring range (in./mm) 0 to 36, material steel, finish brushed, features display metal gauge size on one side and decimals on other side. | 1,360 | Number | | |
| A.112 | Equipment | ΥοΥο | X shape plastic wheel Diameter. 120 mm X 40 mm fitted with 1.5 meter nylon thread | 1,360 | Number | | |
| A.113 | Equipment | Young's modulus apparatus | sealers pattern having self- centering chucks, graduated micro meter screw to read upto 0.1 mm, cast iron frame duly powder coated with spirit level, tension weight, ceilingbacker | 68 | Number | | |
| | | | | | | | |
| B.1 | Charts and Models | Atomic model set | 23mm diameter +/- 1mm set of 120 molded balls with 100 locking plugs of different colors & sizes. Along with connectors of different sizes. This sizes & shapes of the balls & connecting lugs have been designed in accordance with internationally acceptable standards | 68 | Number | | |

| B.2 | Charts and Models | Chart showing Skelton system | Size 100x70 cm ± 2cm both side laminated with plastic rollers | 68 | Number | | |
|------|----------------------|---|---|----|--------|--|--|
| B.3 | Charts and Models | Charts of animal like horned toad, Kangaroo rat, camel | Size 100x70 cm ± 2cm both side laminated with plastic rollers | 68 | Number | | |
| B.4 | Charts and Models | Charts of Starfish, Rohu fish, Frog, Freshwater Fish, Marine bony fish (Lophius) | Size 100x70 cm ± 2cm both side laminated with plastic rollers | 68 | Number | | |
| B.5 | Charts and Models | Charts showing respiratory & circulatory system | Size 100x70 cm \pm 2cm both side laminated with plastic rollers | 68 | Number | | |
| B.6 | Charts and Models | Charts showing digestive system | Size 100x70 cm ± 2cm both side laminated with plastic rollers | 68 | Number | | |
| B.7 | Charts and Models | Charts showing Reproductive system male & female | Size $100x70$ cm ± 2 cm both side laminated with plastic rollers | 68 | Number | | |
| B.8 | Charts and Models | Charts showing analogous & Homologous organs in animals | Size 100x70 cm ± 2cm both side laminated with plastic rollers | 68 | Number | | |
| B.9 | Charts and Models | Charts showing analogous & Homologous organs in various plants | Size 100x70 cm ± 2cm both side laminated with plastic rollers | 68 | Number | | |
| B.10 | Charts and Models | Colour PH Chart | Multicolor printing on 80 GSM map litho paper Size 70x100cm+/-2cm Thermally Laminated with 30- micron thick best quality polyester film on both sides. Fitted with best | 68 | Number | | |

| | | | quality plastic rollers at the top and at the bottom with hanging arrangement. | | | | | |
|------|----------------------|------------------------|--|--|----|--------|--|--|
| B.11 | Charts and Models | Human Skelton Model | Human Skelton made of plastic on stand, articulated, stand size 5 feet good quality, bones in natural shape & color. | | 68 | Number | | |
| B.12 | Charts and Models | Micromodel of DNA | An Articulated Model with labels to show the double helix of DNA structure. Includes 15 base pairs to show one and half helix. All component is identified by different colors. The connection between the base pairs are also clearly shown. Mounted on base | | 68 | Number | | |
| B.13 | Charts and Models | Periodic Table | Multicolor printing on 80 GSM map litho paper Size 70x100cm+/-2cm Thermally Laminated with 30- micron thick best quality polyester film on both sides. Fitted with best quality plastic rollers at the top and at the bottom with hanging arrangement. | | 68 | Number | | |
| | | | | | | | | |
| C.1 | Chemical | Acetic acid, | In a glass bottle of 250 ml standard make | | 68 | Number | | |
| C.2 | Chemical | Acetic acid, | In a glass bottle 250 ml standard make | | 68 | Number | | |
| C.3 | Chemical | Acetocarmine | In a glass bottle 250 ml standard make | | 68 | Number | | |
| C.4 | Chemical | Acetone | Acetone 500ml standard make | | 68 | Number | | |

| C.5 | Chemical | Barium chloride solution | In a glass bottle 250 ml standard make | 68 | Number | | |
|------|----------|--------------------------|--|----|--------|--|--|
| C.6 | Chemical | Benedict Solution | Benedict Solution 250ml standard make | 68 | Number | | |
| C.7 | Chemical | Biuret Reagent | Biuret Reagent 125 ml standard make | 68 | Number | | |
| C.8 | Chemical | Boric acid | In a glass bottle 250 ml standard make | 68 | Number | | |
| C.9 | Chemical | Calcium nitrate | Granules in poly bottle 250 ml standard make | 68 | Number | | |
| C.10 | Chemical | Cobalt Chloride | Cobalt Chloride 200gm standard make | 68 | Number | | |
| C.11 | Chemical | CuSO4 Solution | In a glass bottle 250 ml standard make | 68 | Number | | |
| C.12 | Chemical | Distilled water | in plastic bottle 1 Li standard make | 68 | Number | | |
| C.13 | Chemical | Ethanol | In a glass bottle 250 ml standard make | 68 | Number | | |
| C.14 | Chemical | Fehling Solution No1 | Fehling Solution No1 500ml standard make | 68 | Number | | |
| C.15 | Chemical | Fehling Solution No2 | Fehling Solution No2 500ml standard make | 68 | Number | | |
| C.16 | Chemical | Formalin solution | In a glass bottle 250 ml standard make | 68 | Number | | |
| C.17 | Chemical | Fouchet reagent | Solution in poly bottle 250 ml standard make | 68 | Number | | |
| C.18 | Chemical | Glycerin | Glycerin 500 gm standard make | 68 | Number | | |

| | | | | 1 | | 1 | |
|------|----------|---|---|----|--------|---|--|
| C.19 | Chemical | HCI | In a glass bottle 250 ml standard make | 68 | Number | | |
| C.20 | Chemical | lodine | lodine 500 ml Solution standard make | 68 | Number | | |
| C.21 | Chemical | KH2PO4 | In poly bottle 200 gm standard make | 68 | Number | | |
| C.22 | Chemical | KMnO₄ | In poly bottle 200 gm standard make | 68 | Number | | |
| C.23 | Chemical | Leishman's/ Geimsa/Wright's stain | Air tight closeable dropper amber bottle 100 ml standard make | 68 | Number | | |
| C.24 | Chemical | Lens cleaning tissue paper | 10 cm X 15 cm packet of 50 standard make | 68 | Number | | |
| C.25 | Chemical | Millions Reagent | Millions Reagent 125ml standard make | 68 | Number | | |
| C.26 | Chemical | Molten Wax | Tin Pack 200 gm standard make | 68 | Number | | |
| C.27 | Chemical | Na ₂ CO ₃ | In poly bottle 200 gm standard make | 68 | Number | | |
| C.28 | Chemical | Na2HPO4, | In Poly bottle 200 gm standard make | 68 | Number | | |
| C.29 | Chemical | NaOH | Powder in Poly Bottle 250 ml standard make | 68 | Number | | |
| C.30 | Chemical | Nitric acid | In a glass bottle 250 ml standard make | 68 | Number | | |
| C.31 | Chemical | Petroleum Ether | Petroleum Ether 60-80 deg C 500ml standard make | 68 | Number | | |
| C.32 | Chemical | Phenol Red | In a glass bottle 250 ml standard make | 68 | Number | | |

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| C.33 | Chemical | Potassium Chloride | 250gm standard make | | 68 | Number | | |
|------|-----------|-----------------------------------|--|--|-------|--------|--|--|
| C.34 | Chemical | potassium iodide | Powder in Poly Bottle 250 ml standard make | | 68 | Number | | |
| C.35 | Chemical | Robert's Soln | In poly bottle 250 ml standard make | | 68 | Number | | |
| C.36 | Chemical | Safranin | Safranin 100 gm standard make | | 68 | Number | | |
| C.37 | Chemical | Salicylic acid | Crystal in poly bottle 250 ml standard make | | 68 | Number | | |
| C.38 | Chemical | Sodium Chloride | Sodium Chloride 500 gm standard make | | 68 | Number | | |
| C.39 | Chemical | Sodium Hydroxide pellets | Sodium Hydroxide pellets 250gm standard make | | 68 | Number | | |
| C.40 | Chemical | Sodium Hypobromite Solution | Powder in Poly Bottle 200 gm standard make | | 68 | Number | | |
| C.41 | Chemical | Sudan III | Sudan III 200gm standard make | | 68 | Number | | |
| C.42 | Chemical | Sulphur Acid | In a glass bottle 200 gm standard make | | 68 | Number | | |
| C.43 | Chemical | Sulphur powder | Powder in Poly Bottle 200 gm standard make | | 68 | Number | | |
| | | | | | | | | |
| D.1 | Glassware | Beaker with spout | Borosilicate like glass, capacity 250 ml with rim | | 1,360 | Number | | |
| D.2 | Glassware | Beaker with spout | Borosilicate like glass, capacity 50 ml, with rim, | | 1,360 | Number | | |

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| D.3 | Glassware | Beaker with spout | Borosilicate like glass, capacity 500 ml, with rim | 1,360 | Number | | |
|------|-----------|------------------------|---|-------|--------|--|--|
| D.4 | Glassware | Boiling Tube with cork | Borosilicate like glass 90 mm x 20 mm diameter with cork, capacity 100 ml | 1,360 | Number | | |
| D.5 | Glassware | Burette | 50 X 1/10 ml fitted with glass stop cock Neutral Glass Superior Quality | 1,360 | Number | | |
| D.6 | Glassware | Capillary Tube | Soda glass. Diameter 1.5 mm x 100 mm. Both side open (Box of 50) | 136 | Number | | |
| D.7 | Glassware | China Dish | Superior quality size 4" | 1,360 | Number | | |
| D.8 | Glassware | China Dish | 5" porcelain | 1,360 | Number | | |
| D.9 | Glassware | Concave lens | Plate Glass, with carefully ground and polished optical surfaces, optically true and cleanly ground edges. Día 2" focal length 15 cm | 1,360 | Number | | |
| D.10 | Glassware | Concave Mirror | Glass, Focal Length 20 cm, diameter 5 cm, optically true | 1,360 | Number | | |
| D.11 | Glassware | Conical flask | Capacity 25 ml Borosilicate like glass | 1,360 | Number | | |
| D.12 | Glassware | Conical Flask | 250ml (Borosilicate like glass) | 1,360 | Number | | |
| D.13 | Glassware | Conical flask | Borosilicate like glass 100 ml | 1,360 | Number | | |
| D.14 | Glassware | Conical flask | Borosilicate like glass 500ml | 272 | Number | | |
| D.15 | Glassware | Convex lens | Diameter 2 inch optically true. Set of three lenses (Focal length 10 cm, 15 cm, 20 cm) | 1,020 | Number | | |

D.16

D.17

D.18

D.19

D.20

| Glassware | Convex Mirror | Glass, Focal Length 20 cm, diameter 2.5" optically true | 1,360 | Number | | |
|-----------|--------------------------|---|-------|--------|--|--|
| Glassware | Culture tubes (50ml) | Borosilicate length 9 cm 2.5 cm diameter | 1,360 | Number | | |
| Glassware | Double Concave Lenses | Glass, Set of two lens Focal length 20 cm and diameter 50 mm. | 1,360 | Number | | |
| Glassware | Double Convex lens | Glass, Set of two lens Focal length 20 cm and diameter 50 mm. | 1,360 | Number | | |
| Glassware | Double mouthed flask | Borosilicate like . Thickness 1.5 mm with one mouth diameter 25 mm x 25 mm height (with rim) and other diameter 06 mm x 28 mm length. Bulb outer diameter 48 mm with overall length 110 mm | 1,360 | Number | | |
| Glassware | Dropper Glass | Glass 4" with rubber teat graduated superior quality | 136 | Dozen | | |
| Glassware | Droppers | Borosilicate like glass, length 100 mm, capillary length 50 mm | 1,360 | Number | | |

| D.21 | Glassware | Dropper Glass | graduated superior quality | 136 | Dozen | | |
|------|-----------|---------------------------------|--|-------|--------|--|--|
| D.22 | Glassware | Droppers | Borosilicate like glass, length 100 mm, capillary length 50 mm diameter 06 mm with teats | 1,360 | Number | | |
| D.23 | Glassware | Droppers fitted with 02 syringe | Borosilicate like glass, length 100 mm, capillary length 50 mm, diameter 06 mm, with teats | 1,360 | Number | | |
| D.24 | Glassware | Flask for titration | Borosilicate like glass, height 50 mm, capacity 25 ml. | 1,360 | Number | | |
| D.25 | Glassware | Funnel | Glass Chromatography columns plain, With PTFE key stopcock. Length 15 cm disk diameter 10 mm | 1,360 | Number | | |
| D.26 | Glassware | Fusion Tube | 2.5" (Ignition) glass tube pack of 144pc fine finish leak proof | 136 | Number | | |
| D.27 | Glassware | Glass Rod | Soda glass, length 150 mm, diameter 7 mm. | 1,360 | Number | | |
| D.28 | Glassware | Glass Sheet | 1 cm square Pack of 24 | 68 | Number | | |

| D.29 | Glassware | Glass Slab Square | Square glass slab, size 50 mm x 50 mm x 12 mm thick. | 1,360 | Number | | |
|------|-----------|-----------------------------|--|--------|--------|--|--|
| D.30 | Glassware | Glass slides, | Size: 75mm*25mm, Thickness: 1.45mm, 1.10mm, 1mm (packet of 50) | 340 | Number | | |
| D.31 | Glassware | Glass tube holder | Wooden handle, Length 200 mm, to hold the test tubes upto 10 mm diameter, plated. | 1,360 | Number | | |
| D.32 | Glassware | Glazed Glass plate | Glass plate size 100 mm x 100 mm x 2.5 mm. | 1,360 | Number | | |
| D.33 | Glassware | Hand Lens | Size Diameter approx. 7.5 cm magnifying power 2.5 with a plastic handle attached to it | 1,360 | Number | | |
| D.34 | Glassware | Ignition Tube | Heat Resistant, dimensional accuracy, light weight and durable | 1,360 | Number | | |
| D.35 | Glassware | Measuring cylinder | 500 ml (Borosilicate like glass) | 136 | Number | | |
| D.36 | Glassware | Measuring Flask | Borosilicate like 50 ml | 1,360 | Number | | |
| D.37 | Glassware | Micro Burettes | Borosilicate like glass, capacity 05 ml, rotating screw type flow stop cock with Poly Tetra Fluoro Ethylene (PTFE) key and cup, sub division 0.02 mm, fitted with micro tip (capacity 2-200 micro liter). | 1,360 | Number | | |
| D.38 | Glassware | Micro Measuring Cylinder | High Density Poly Ethylene (HDPE), capacity 10 ml. | 1,360 | Number | | |
| D.39 | Glassware | Mortar and Pestle | Porcelain good quality, unglazed inside, glazed outside. Size 75 mm | 272 | Number | | |
| D.40 | Glassware | Narrow glass tube | 20 cm long and of internal diameter 2mm | 10,200 | Number | | |

D.41

D.42

D.43

| Glassware | Pasteur Pipette | Low Density Poly Ethylene (LDPE), capacity 03 ml. | 1,360 | Number | | |
|-----------|-----------------------------------|---|-------|--------|--|--|
| Glassware | Permanent Slide Phloem | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| Glassware | Permanent Slide Adipose Tissue | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| Glassware | Permanent Slide Agarics | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| Glassware | Permanent Slide Amoeba | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| Glassware | Permanent Slide Areolar Tissue | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| | Permanent Slide | Superior quality, very clear slides. | 68 | | | |

| D.44 | Glassware | Agarics | for using under microscope | 68 | Number | | |
|------|-----------|--|--|----|--------|--|--|
| D.45 | Glassware | Permanent Slide Amoeba | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.46 | Glassware | Permanent Slide Areolar Tissue | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.47 | Glassware | Permanent Slide Blastula Entamoeba | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.48 | Glassware | Permanent Slide Cardiac Striated Muscle | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.49 | Glassware | Permanent Slide Cardiac Unstrained Muscle | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.50 | Glassware | Permanent Slide Chlorella | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.51 | Glassware | Permanent Slide Chlorella Animal Cell | Superior quality, very clear slides, for using under microscope | 68 | Number | | |

Glassware

Glassware

D.52

D.53

| Permanent Slide Chlormadinones | Superior quality, very clear slides, for using under microscope | 68 | Number | |
|---|---|----|--------|--|
| Permanent Slide Collenchyma | Superior quality, very clear slides, for using under microscope | 68 | Number | |
| Permanent Slide Columnar Epithelium | Superior quality, very clear slides, for using under microscope | 68 | Number | |
| Permanent Slide Cuboidal | Superior quality, very clear slides, for using under microscope | 68 | Number | |

| D.54 | Glassware | Permanent Slide Columnar Epithelium | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
|------|-----------|---|---|----|--------|--|--|
| D.55 | Glassware | Permanent Slide Cuboidal Epithelium | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.56 | Glassware | Permanent Slide Diatom | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.57 | Glassware | Permanent Slide Dicot Leaf | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.58 | Glassware | Permanent Slide Dicot Root | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.59 | Glassware | Permanent Slide Dicot Stem | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.60 | Glassware | Permanent Slide Fern | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.61 | Glassware | Permanent Slide Human Blood R.C. B | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.62 | Glassware | Permanent Slide Human Blood W.B.C. | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.63 | Glassware | Permanent Slide Hydra | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.64 | Glassware | Permanent Slide Lichen | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.65 | Glassware | Permanent Slide Marchantiid | Superior quality, very clear slides, for using under microscope | 68 | Number | | |

| D.66 | Glassware | Permanent Slide Medullated Nerve | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
|------|-----------|--|---|----|--------|--|--|
| D.67 | Glassware | Permanent Slide Mitosis | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.68 | Glassware | Permanent Slide Mitosis | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.69 | Glassware | Permanent Slide Monocot Leaf | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.70 | Glassware | Permanent Slide Monocot Root | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.71 | Glassware | Permanent Slide Monocot Stem | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.72 | Glassware | Permanent Slide Mosquito Slide | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.73 | Glassware | Permanent Slide Nerve Cell Muscle | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.74 | Glassware | Permanent Slide Non-Medullated Nerve | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.75 | Glassware | Permanent Slide Nostos | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.76 | Glassware | Permanent Slide Onion Root Tip | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.77 | Glassware | Permanent Slide Oscillatory | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.78 | Glassware | Permanent Slide Paramecium | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.79 | Glassware | Permanent Slide Parenchyma | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| | | | | | | | |

4-27

| D.80 | Glassware | Permanent Slide Pinus Cone Female | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
|------|-----------|--|---|----|--------|--|--|
| D.81 | Glassware | Permanent Slide Pinus Cone Male | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.82 | Glassware | Permanent Slide Plant Cell, Onion Peel | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.83 | Glassware | Permanent Slide Rhizopods | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.84 | Glassware | Permanent Slide Rician | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.85 | Glassware | Permanent Slide Ringworm | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.86 | Glassware | Permanent Slide Safaris Female, Bacteria | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.87 | Glassware | Permanent Slide Safaris Male | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.88 | Glassware | Permanent Slide Sclerenchyma | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.89 | Glassware | Permanent Slide Smooth Muscle Mammal: Artery | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.90 | Glassware | Permanent Slide Smooth Muscle Mammal: Blood | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.91 | Glassware | Permanent Slide Smooth Muscle Mammal: Bone | Superior quality, very clear slides, for using under microscope | 68 | Number | | |

Glassware

D.92

Mammal: Bone Permanent Slide Smooth Muscle

Mammal: Elastic

Cartilage

for using under microscope

Superior quality, very clear slides,

68

Number

| D.93 | Glassware | Permanent Slide Smooth Muscle Mammal: Heart | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
|-------|-----------|--|---|----|--------|--|--|
| D.94 | Glassware | Permanent Slide Smooth Muscle Mammal: Hyaline Cartilage | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.95 | Glassware | Permanent Slide Smooth Muscle Mammal: Kidney | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.96 | Glassware | Permanent Slide Smooth Muscle Mammal: Liver | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.97 | Glassware | Permanent Slide Smooth Muscle Mammal: Ovary | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.98 | Glassware | Permanent Slide Smooth Muscle Mammal: Pancreases | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.99 | Glassware | Permanent Slide Smooth Muscle Mammal: Skin | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.100 | Glassware | Permanent Slide Smooth Muscle Mammal: Spinal Cord | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.101 | Glassware | Permanent Slide Smooth Muscle Mammal: Spleen | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.102 | Glassware | Permanent Slide Smooth Muscle Mammal: Stomach | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.103 | Glassware | Permanent Slide Smooth Muscle Mammal: Testis | Superior quality, very clear slides, for using under microscope | 68 | Number | | |

| | | | | | | | |
|-------|-----------|--|---|-------|--------|------|--|
| D.104 | Glassware | Permanent Slide Smooth Muscle Mammal: Vein | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.105 | Glassware | Permanent Slide Spirogyra | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.106 | Glassware | Permanent Slide Squamous Epithelium | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.107 | Glassware | Permanent Slide Stomata | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.108 | Glassware | Permanent Slide Volvox | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.109 | Glassware | Permanent Slide Xylem | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.110 | Glassware | Permanent Slide Yeast | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.111 | Glassware | Permanent Slide Yeast | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.112 | Glassware | Permanent Slide Yeast Budding | Superior quality, very clear slides, for using under microscope | 68 | Number | | |
| D.113 | Glassware | Petri Dish Glass | Soda glass, without cover, diameter 96 mm. | 1,360 | Number | | |
| D.114 | Glassware | Petri dish Plastic | Plastic dish outer diameter. 120 mm X 30 mm depth | 1,360 | Number | | |
| D.115 | Glassware | Pipette Signal mark | 5ml (Borosilicate like Glass) | 1,360 | Number | | |
| D.116 | Glassware | Pipette Signal mark | 20ml and 25 ml (Borosilicate like Glass) pack of 30 | 340 | Number | | |
| D.117 | Glassware | Plain mirror | 2 mm X 50 mm Diameter. Round edges. | 1,360 | Number | | |

| D.118 | Glassware | Plane mirror strip | Good quality, 150 X 30 X 2 mm. | 1,360 | Number | | |
|-------|-----------|--|---|-------|--------|--|--|
| D.119 | Glassware | Preserved material of Fern | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 68 | Number | | |
| D.120 | Glassware | Preserved material of Fumaria | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 68 | Number | | |
| D.121 | Glassware | Preserved material of Marchantia (liver wort) | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 68 | Number | | |
| D.122 | Glassware | Preserved Specimen bladder wort | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 68 | Number | | |
| D.123 | Glassware | Preserved Specimen Cockroach | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 68 | Number | | |
| D.124 | Glassware | Preserved Specimen hydrilla | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 68 | Number | | |
| D.125 | Glassware | Preserved Specimen lichen | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 68 | Number | | |
| D.126 | Glassware | Preserved Specimen ascaris Male | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 68 | Number | | |
| D.127 | Glassware | Preserved Specimen certophyllum | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 68 | Number | | |

| D.128 | Glassware | Preserved Specimen Earthworm | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 68 | Number | | |
|-------|-----------|---|---|------|-----------|--|--|
| D.129 | Glassware | Preserved Specimen eichhornia | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 68 | Number | | |
| D.130 | Glassware | Preserved Specimen epiphytic root | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 68 | Number | | |
| D.131 | Glassware | Preserved Specimen Liver Fluke | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 68 | Number | | |
| D.132 | Glassware | Preserved Specimen Safaris Female | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 68 | Number | | |
| D.133 | Glassware | Preserved Specimen salvinia | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 68 | Number | | |
| D.134 | Glassware | Preserved Specimen Silk Moth | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 68 | Number | | |
| D.135 | Glassware | Preserved Specimen Tape Worm | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 68 | Number | | |
| D.136 | Glassware | Prism | 38 mm ± 5mm Equilateral BK7 Grade A optical glass Diameter Tolerance +0.0, -0.20mm clear aperture >90% Flatness N2 @ 632.8 nm Surface Quality 60-40 scratch and dig Bevel <0.25mmx | 1,36 | 30 Number | | |

| | | | 45° | | | | |
|-------|-----------|-----------------------|--|--------|--------|--|--|
| | | | | | | | |
| D.137 | Glassware | Reagent Bottle | Narrow Mouth with interchangble stopper 500 ml (Borosilicate like Glass) | 1,360 | Number | | |
| D.138 | Glassware | Round Bottom flask | Pack of Borosilicate or equivalent glass, capacity 35 ml, 50 ml 100 ml 250 ml and 500 ml short neck with rubber cork | 1,360 | Number | | |
| D.139 | Glassware | Short inlet tube | Made of glass, length 10 cm diameter 1 cm | 1,360 | Number | | |
| D.140 | Glassware | Stirrer | Soda glass with circular flat end, length 100 mm. Glass rod diameter 4 mm. | 1,360 | Number | | |
| D.141 | Glassware | Test tube | 15x 125mm±2mm (Borosilicate like glass) with rim duly packed in a grooved plastic tray of capacity 10 pieces and packed in a 50 pcs. Box | 20,400 | Number | | |
| D.142 | Glassware | Test tube | 12x75mm±1mm (Borosilicate like glass) with rim | 13,600 | Number | | |
| D.143 | Glassware | Test Tube | Borosilicate like glass 15 mm 0.5 cm diameter with rim duly packed in a grooved plastic tray of capacity 10 pieces and packed in a 50 pcs. Box | 3,400 | Number | | |
| D.144 | Glassware | Volumetric Flask | Borosilicate like glass, with inter changeable stopper Capacity 250 ml | 1,360 | Number | | |
| D.145 | Glassware | W –Tube | Borosilicate like glass, 2 mm thick x 8 mm diameter having length of arms 70-75 mm, with wide mouth in one arm. | 1,360 | Number | | |

| D.146 | Glassware | Watch Glass | Routine quality glass 3" | 136 | Dozen | | |
|-------|-------------|--|--|-------|--------|--|--|
| | | | | | | | |
| E.1 | Consumables | Aluminum foil roll | 9 meter 300mm Water proof, optimum finish non-stick corrosion resistant. Thickness 18 micron | 68 | Number | | |
| E.2 | Consumables | Blades | Stainless Steel (pack of good quality 5 blades) | 136 | Number | | |
| E.3 | Consumables | Blotting paper | 100 mm x 100 mm. | 680 | Number | | |
| E.4 | Consumables | Blow Pipe | Nickel-plated copper length 200 mm approx. | 1,360 | Number | | |
| E.5 | Consumables | Brush for burrete | Material - Nylon good quality, Thick hair | 1,360 | Number | | |
| E.6 | Consumables | Brush for test tube | Material - Nylon good quality, Thick hair | 1,360 | Number | | |
| E.7 | Consumables | Brush Pippette | Material - Nylon good quality, Thick hair | 1,360 | Number | | |
| E.8 | Consumables | Capacitor | Assorted (Pack of 25) | 680 | Number | | |
| E.9 | Consumables | Cardboard Sheets of different thickness | pack of 12 standard cardboard sheets of different thickness | 204 | Number | | |
| E.10 | Consumables | Castor oil / Glycerin | half liter pack | 68 | Number | | |
| E.11 | Consumables | cello tape | Rubber adhesive 19mm length 50 m thickness 36-60 mic | 68 | Number | | |

| E.12 | Consumables | Cellophane sheet | 1 roll 15-meter width 30 cm | 68 | Number | | |
|------|-------------|----------------------------------|---|-------|--------|--|--|
| E.13 | Consumables | Charcoal Block | 4"x1" pack of 12 pc | 680 | Number | | |
| E.14 | Consumables | Claw hammer with handle | Forged, approximate weight 225 gm with wooden handle | 68 | Number | | |
| E.15 | Consumables | Connecting wire with Banana plug | Soft electric wire 200 mm. Length double cloth covered both end fitted with banana plug. Two red and two black | 1,360 | Number | | |
| E.16 | Consumables | Constantan wire | 26 SWG 50 cm Approx. length | 1,360 | Number | | |
| E.17 | Consumables | Copper strip | 80 mm. X 5 mm. x 1 mm. | 1,360 | Number | | |
| E.18 | Consumables | Copper wire | 100 cm long, thickness 24 SWG | 1,360 | Number | | |
| E.19 | Consumables | Copper wire bent in u form | Diameter. 1 mm. copper wire U band 30 mm. x 35 mm height and both corner band 6 mm. in 90°. | 1,360 | Number | | |
| E.20 | Consumables | Cork | Assorted size in a pack of 25 | 136 | Number | | |
| E.21 | Consumables | Cork Screw | Wooden / plastic handle with stainless steel opener. | 136 | Number | | |
| E.22 | Consumables | Cotton roll | good quality medicated (Large packet) | 68 | Number | | |
| E.23 | Consumables | Cotton thread | Thread roles, strong | 68 | Number | | |
| E.24 | Consumables | Cover Slips | Thickness 0.2 mm – 0.3 mm approx. square glass pieces. Packet of 100 | 136 | Number | | |

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| E.25 | Consumables | Cover slips | 18x18mm pack of 10gm | 680 | Number | | |
|------|-------------|--|---|-------|--------|--|--|
| E.26 | Consumables | Crocodile Clips | Set of Clips 50 mm, Plated, standard flexible wire 76, 50 cm long Each set two wire five Color | 1,360 | Number | | |
| E.27 | Consumables | Detergent powder | 200 gm | 68 | Number | | |
| E.28 | Consumables | Diode | Assorted pack | 680 | Number | | |
| E.29 | Consumables | Distilled water | in plastic bottle 1 Li | 136 | Number | | |
| E.30 | Consumables | drawing pins | With plastic head (pack of 50) | 680 | Number | | |
| E.31 | Consumables | dropping bottle | Blown in Low Density Polyethylene, Polylab Dropping Bottles dispense small uniform drops of liquids when pressed lightly. Material: Low Density Polyethylene. 60 ml (pack of 25) | 136 | Number | | |
| E.32 | Consumables | Electric wire | Copper wire, plastic coated copper wire 10 meter | 68 | Number | | |
| E.33 | Consumables | Electrical Fuse | Seamless finish, Rust Resistance, 16 amps 240 volt | 272 | Number | | |
| E.34 | Consumables | Filter paper | No. 1 Diameter 12.5 cm superior pack of 100 circles | 1,360 | Number | | |
| E.35 | Consumables | Flexible wire with red and black insulation - 1 roll | Double cloth covered 10 meter | 68 | Number | | |
| E.36 | Consumables | Funnel | Plastic, transparent top diameter,90 mm. x overall length140 mm | 1,360 | Number | | |
| E.37 | Consumables | Fuse wire | 1 roll | 68 | Number | | |

E.47

E.48

E.49

| E.38 | Consumables | Graduated Syringe | Standard, plastic, capacity 10 ml Pipettes - Graduated/ Serological/ Volumetric Comes in various sizes as mentioned | 1,360 | Number | | |
|------|-------------|----------------------|---|-------|--------|--|--|
| E.39 | Consumables | Graph Paper | A4 size book of 48 pages | 136 | Number | | |
| E.40 | Consumables | Hair pins | Length - 7cm in (pack of a dozen) | 680 | Number | | |
| E.41 | Consumables | Half Meter scale | Made of plastic graduation in mm, cm and inch | 1,020 | Number | | |
| E.42 | Consumables | Heating Block | Aluminum, 63 mm diameter X 55 mm height, 02 holes' diameter 6 mm x 30 mm deep, and split fitted with handle: Mild Steel Rod 06 mm diameter X 130 mm length. One 0.5 mm deep cut on face for capillary tube. | 1,360 | Number | | |
| E.43 | Consumables | Ice Cream Spoon | Good quality Wooden (packet of 25) | 136 | Number | | |
| E.44 | Consumables | Iron Filings | Grease free filing in plastic bottles 50 grams' packets | 1,360 | Number | | |
| E.45 | Consumables | Iron Nails | Length 38 mm, 15 SWG | 3,400 | Number | | |
| E.46 | Consumables | Iron strip | 80 mm. X 5 mm. x 1 mm. with terminals | 1,360 | Number | | |

L.E.D.

Lab Safety

Lycopodium

glasses

Powder

Consumables

Consumables

Consumables

Assorted pack 25 LED 5 mm

visor with adjustable arm.

1 packet 200 grams

One piece polycarbonate molded

Transparent Scratch Resistance,

light weight 30 grams approx.

different colors

68

1,360

68

Number

Number

Number

Consumables

Consumables

E.50

E.51

| Marker pen | Permanent marker used writing on glass | 136 | Number | |
|-----------------|---|-------|--------|--|
| Measuring scale | Wooden / plastic 12 ' Graduation in cm, mm, feet and inch length 1, meter | 1,360 | Number | |
| Measuring Tape | Made of plastic. Graduation in cm, mm, feet and inch length 1, meter | 1,360 | Number | |
| Metal Strips | Aluminum Strips, dimension 80 mm x 5 mm, x1 mm. | 1,360 | Number | |

| | | | meter | | | | | |
|------|-------------|------------------------------------|--|-------|--------|--|---|--|
| E.52 | Consumables | Measuring Tape | Made of plastic. Graduation in cm, mm, feet and inch length 1, meter | 1,360 | Number | | | |
| E.53 | Consumables | Metal Strips | Aluminum Strips, dimension 80 mm x 5 mm, x1 mm. | 1,360 | Number | | | |
| E.54 | Consumables | Meter scale wooden | I meter scale wooden Graduation in cm, mm, feet and inch length 1, meter | 1,360 | Number | | | |
| E.55 | Consumables | Muslin/cheese cloths | Threads per inch grams per M2+5% C-1, 24x18-100cms bleached 5 meter | 68 | Number | | | |
| E.56 | Consumables | Nichrome wire / Resistance wire | 26 SWG 50 m Approx. length | 68 | Number | | | |
| E.57 | Consumables | on / off switches | Simple on off switches made of plastic with copper fittings inside | 1,360 | Number | | | |
| E.58 | Consumables | paper pin | stainless steel (packet) | 68 | Number | | | |
| E.59 | Consumables | Pestal and Mortar | Porcelain superior quality size 6" | 136 | Number | | | |
| E.60 | Consumables | pH Paper | pH 1-14, paper box containing, packet of 5 (100 Strips each) | 1,360 | Number | | | |
| E.61 | Consumables | Pith / Plastic Ball | Diameter 12 mm. solid center throughout hole 1.5 mm. | 1,360 | Number | | | |
| E.62 | Consumables | Protector small | Made of Plastic, degrees marked in semicircular 0-180 with 5 w | 1,360 | Number | | _ | |
| E.63 | Consumables | Pulley | Aluminum, 50 mm diameter fitted with hook Frictionless with smooth edge, capacity 1 kg | 1,360 | Number | | | |

| E.64 | Consumables | Roller (lead shots), | Rc-112 Fitted With 7/16" Square Blocks Double Silk Covered Non- Inductive Windings. Accuracy - 0.1 % Educational Quality. In 100 gm packets | 6 | 8 Number | | |
|------|-------------|---|---|-----|----------------------|--|--|
| E.65 | Consumables | Rubber Balloons | 2 packet bigger size and 2 packet smaller size. Assorted size | 13 | ³⁶ Number | | |
| E.66 | Consumables | Rubber Bands | As per sample. Assorted size | 13 | ³⁶ Number | | |
| E.67 | Consumables | Rubber cork | Standard, armed, Assorted pack of 20 each of size nos. 2, 3, 4, 5 and 6. | 6 | 8 Number | | |
| E.68 | Consumables | Rubber Tube | 10 cm 0.5 cm diameter Good quality | 1,3 | ⁶⁰ Number | | |
| E.69 | Consumables | Sand paper | Standard, 60 and 120 number. 5 each | 81 | 6 Number | | |
| E.70 | Consumables | Scale with holes at regular interval (Grooved scale Meter) | Wood/ plastic work distance marked in cm mm ft. and inch. | 1,3 | 60 Number | | |
| E.71 | Consumables | Scalpel | Stainless steel | 1,3 | 60 Number | | |
| E.72 | Consumables | Screw | 1 inch | 3,4 | .00 Number | | |
| E.73 | Consumables | Screw driver | 150 mm long, hardened, with plastic handle. | 13 | ³⁶ Number | | |
| E.74 | Consumables | Sharp edged knife, | Stainless steel length of cutting edge 6 cm with Plastic handle | 27 | ⁷² Number | | |
| E.75 | Consumables | Small Plastic beads | 5 different colors One packet each color (1 set) | 1,0 | 20 Number | | |
| E.76 | Consumables | Solid steel balls 1mm to 3mm diameter | 1 mm diameter packet of 50 | 1,0 | 20 Number | | |

| E.77 | Consumables | Solid steel balls 1mm to 3 mm diameter | 3 mm diameter packet of 50 | 1,020 | Number | | |
|------|-------------|--|--|-------|--------|--|--|
| E.78 | Consumables | Spatula | Stainless Steel one end spoon 8" | 1,360 | Number | | |
| E.79 | Consumables | Surgical Scissor | Material - Stainless steel, 125 mm, one prong blunt and other pointed, standard. | 1,360 | Number | | |
| E.80 | Consumables | Syringe Pump | Poly carbonate syringe pump overall size with piston 200 mm. length and outer Diameter. 30 mm. | 1,360 | Number | | |
| E.81 | Consumables | Test Plate/Well plate | Polystyrene (PS), with 96 wells Polylab micro test plates are made of optically clear, non-toxic Polystyrene. These plates with 96 U Bottom or flat bottom wells bear alpha-numeric index | 1,360 | Number | | |
| E.82 | Consumables | Thread | 1 Roll. Good quality | 68 | Number | | |
| E.83 | Consumables | Three bulbs | Pack of four bulbs 25w, 60w, 100w, 40w | 136 | Number | | |
| E.84 | Consumables | Tissue paper | Good quality (packet of 50) | 136 | Number | | |
| E.85 | Consumables | Toothpick, | wooden (1 packet) | 68 | Number | | |
| E.86 | Consumables | Tracing paper | 1 packet | 68 | Number | | |
| E.87 | Consumables | Two pin plug | good quality 5 amperes steel pins | 340 | Number | | |
| E.88 | Consumables | Vials | High Density Poly Ethylene (HDPE), height 55 mm, diameter 15 mm. | 1,360 | Number | | |

| E.89 | Consumables | Wash Bottle | 250ml. Good quality plastic | 1,360 | Number | | |
|------|-------------|------------------------------|---|-------|--------|--|--|
| E.90 | Consumables | White paper sheet Thick | Photocopier paper in Packet | 68 | Number | | |
| E.91 | Consumables | White Tiles | 6"x6" | 1,360 | Number | | |
| E.92 | Consumables | wicks for spirit burner | 1 meter | 68 | Number | | |
| E.93 | Consumables | Wooden Block (known Mass) | Wooden Block with hook. Teak wood, Superior thick 2 cm x 5 cm x 5cm | 1,360 | Number | | |
| E.94 | Consumables | Zinc strip | 80 mm. X 5 mm. x 1 mm. superior quality with terminals | 1,360 | Number | | |

| Notes: Column 4: | In accordance with margin of preference ITB 38, if applicable. |
|---------------------|---|
| | Domestic Value Added comprises domestic labor, the domestic content of materials, domestic overheads and profits from the stage of mining the raw material until final assembly. |
| Column 6: | Incoterm in accordance with ITB 14 |
| | Currency in accordance with ITB 15 |
| | Price shall include all customs duties and sales and other taxes already paid or payable on the components and raw materials used in the manufacture or assembly of the item or the customs duties and sales and other taxes already paid on previously imported items. |
| Column 8: | Payable in the Purchaser's country if Contract is awarded |

Name ______ In the capacity of ______ Signed______ Duly authorized to sign the Bid for and on behalf of ______ Date_____

Price Schedulefor Goods\ to be offeredfromOutsidethe Purchaser's Country

| Name of Bidder | IFB Number Page of |
|---------------------------|---|
| | |
| Notes: Column 5 and 6: | Incoterm in accordance with ITB 14 |
| | Currency in accordance with ITB 15 |
| Column 6: | Only to be used if the Purchaser wishes to reserve transportation and insurance to domestic companies or other designated sources. Identification of the lowest evaluated bid must be on the basis of the CIF or CIP price, but the Purchaser may sign the contract on FOB or FCA terms and make its own arrangement for transportation and/or insurance. |

| Name |
|--|
| In the capacity of |
| Signed |
| Duly authorized to sign the Bid for and on behalf of |
| Date |

Price Schedulefor Related Services to be offered from Outside and Within the Purchaser's Country

Name of Bidder _____ Page ____ IFB Number ______ Page ____ of ____

| | Description | Country of Qu Origin | Quantity | Unit of Measurement | Unit Price | | Total Price per Item | |
|-------------|---|----------------------------|----------|------------------------|---------------------|-------------------|----------------------|--------------------|
| ltem No. | | | | | (a) | (b) | (a) | (b) |
| | | | | | Foreign Currency | Local Currency | Foreign Currency | Local Currency |
| 1 | 2 | 3 | 4 | | 5(a) | 5(b) | 6(a) = 4 x 5(a) | 6(b) = 4 x 5(b) |
| 1. | Supply & Installation: Includes transportation, and other related activities for the supply & installation of the items as mentioned in section 6L list of goods and related services | | 68 | Schools | | | | |
| | • | · | • | • | • | Total Amount | | |

 Notes:

 Column 5 and 6:

 Currencies in accordance with ITB 15

Prices are to be quoted inclusive of all customs duties, sales and other similar taxes applicable in the Purchaser's country and payable on the Related Services, if the Contract is awarded to the Bidder

Name ______
In the capacity of ______

Signed______ Duly authorized to sign the Bid for and on behalf of ______

Date____

Tables of Adjustment Data

Table A - Local Currency

| Index Code | Index Description | Source of Index | Base Value and Date | Bidder's Local Currency Amount | Bidder's Proposed Weighting |
|---------------|-------------------|-----------------|------------------------|--------------------------------------|--|
| | Nonadjustable | - | | | a: <u>0.15</u> b: c: d: e: |
| | | | Total | | 1.00 |

Table B - Foreign Currency

Name of Currency: _____

| Index Code | Index Description | Source of Index | Base Value and Date | Bidder's Currency in Type/Amount | Equivalent in FC1 | Bidder's Proposed Weighting |
|------------|-------------------|--------------------|------------------------|--|----------------------|--|
| | Nonadjustable | | | | | a: <u>0.15</u> b: c: d: e: |
| | | | | Total | | 1.00 |

- Note -

The base date shall be the date 28 days prior to the deadline for submission of the bid.

Tables of Adjustment Data shall only be included if prices are to be quoted as adjustable prices in accordance with ITB 14.7.

Form of Bid Security

[insert bank's name, and address of issuing branch or office]³

Beneficiary: [insert name and address of purchaser]

Date:[insert date]

Bid Guarantee No.:[insert number]

We have been informed that [insert name of the bidder]..... (hereinafter called "the Bidder") has submitted to you its bid dated [insert date]..... (hereinafter called "the Bid") for the execution of [insert name of contract]..... under Invitation for Bids No...... [insert IFB number]..... ("the IFB").

Furthermore, we understand that, according to your conditions, bids must be supported by a bid guarantee.

At the request of the Bidder, we [insert name of bank].... hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of [insert amount in figures][insert amount in words].... upon receipt by us of your first demand in writing accompanied by a written statement stating that the Bidder is in breach of its obligation(s) under the bid conditions, because the Bidder

- (a) has withdrawn its Bid during the period of bid validity specified by the Bidder in the Technical Bid Submission Sheet and Price Bid Submission Sheet; or
- (b) does not accept the correction of errors in accordance with the Instructions to Bidders (hereinafter "the ITB"); or
- (c) having been notified of the acceptance of its Bid by the Purchaser during the period of bid validity, (i) fails or refuses to execute the Contract Agreement; or (ii) fails or refuses to furnish the Performance Security, in accordance with the ITB.

This guarantee will expire: (a) if the Bidder is the successful Bidder, upon our receipt of copies of the Contract Agreement signed by the Bidder and the Performance Security issued to you upon the instruction of the Bidder; or (b) if the Bidder is not the successful Bidder, upon the earlier of (i) our receipt of a copy of your notification to the Bidder of the name of the successful Bidder, or (ii) 28 days after the expiration of the Bidder's bid.

Consequently, any demand for payment under this guarantee must be received by us at the office on or before that date.

³ All italicized text is for use in preparing this form and shall be deleted from the final document. Input of information to be completed by the bidder.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458.⁴

| Name |
|---|
| In the capacity of |
| Signed |
| Duly authorized to sign the Bid Security for and on behalf of |
| Date |
| |

-- Note –

In case of a joint venture, the bidsecurity must be in thename of all partners to the joint venture that submits the bid.

⁴ Or 758 as applicable.

Manufacturer's Authorization

Date: [insert date (as day, month, and year) of bid submission]

NCB No.: [insert number of bidding process]

To:.....[insert complete name of purchaser]......

WHEREAS

We hereby extend our full guarantee and warranty in accordance with Clause 28 of the General Conditions, with respect to the goods offered by the above firm.

Signed: [insert signature(s) of authorized representative(s) of the manufacturer]

Name:[insert complete name(s) of authorized representative(s) of the manufacturer]

Title:[insert title]

Duly authorized to sign this Authorization on behalf of: [insert complete name of manufacturer]

Dated on ______ day of ______, ____[insert date of signing]

-- Note --

All italicized text is for use in preparing this form and shall be deleted from the final document. Input of information to be completed by the bidder.

The bidder shall require the manufacturer to fill out this form in accordance with the instructions indicated. This letter of authorization should be signed by a person with the proper authority to sign documents that are binding on the manufacturer. The bidder shall include it in its bid, if so indicated in the BDS.

Bidder's Qualification

To establish its qualifications to perform the contract in accordance with Section 3 (Evaluation and Qualification Criteria), the Bidder shall provide the information requested in the corresponding Information Sheets included hereunder.

Form ELI - 1: Bidder's Information Sheet

| | Bidder's Information | | | | |
|--|---|--|--|--|--|
| Bidder's legal name | | | | | |
| In case of Joint Venture, legal name of each partner | | | | | |
| Bidder's country of constitution | | | | | |
| Bidder's year of constitution | | | | | |
| Bidder's legal address in country of constitution | | | | | |
| Bidder's authorized representative | | | | | |
| (name, address, telephone numbers, fax numbers and e-mail address) | | | | | |
| Attached are copies of the foll | owing documents: | | | | |
| 1. In case of single entity, articles of incorporation or constitution of the legal entity named above, in accordance with ITB 4.1 and ITB 4.2 | | | | | |
| 2. Authorization to represent the firm or Joint Venture named above, in accordance with ITB 22.2 | | | | | |
| 3. In case of Joint Ventu | re, letter of intent to form Joint Venture or Joint Venture agreement, in accordance with ITB 4.1 | | | | |
| 4. In case of a government-owned enterprise, any additional documents not covered under 1 above required to comply with ITB 4.5 | | | | | |

Form ELI - 2: Joint Venture Information Sheet

Each member of the Joint Venture must fill out this form separately.

| Joint Venture Information | | | | |
|---|-------------------|--|--|--|
| Bidder's legal name | | | | |
| Joint VenturePartner's legal name | | | | |
| Joint VenturePartner's country of constitution | | | | |
| Joint VenturePartner's year of constitution | | | | |
| Joint VenturePartner's legal address in country of constitution | | | | |
| Joint VenturePartner's authorized representative information | | | | |
| (name, address, telephone numbers, fax numbers ande- mail address) | | | | |
| Attached are copies of the fol | lowing documents: | | | |
| 1. Articles of incorporation or constitution of the legal entity named above, in accordance with ITB 4.1 and ITB 4.2 | | | | |
| 2. Authorization to represent the firm named above, in accordance with ITB 22.2 | | | | |
| 3. In the case of government-owned enterprise, documents establishing legal and financial autonomy and compliance with commercial law, in accordance with ITB 4.5 | | | | |

Form LIT – 1: Pending Litigation and Arbitration

Each Bidder must fill out this form if so required under Criterion 2.1.2 of Section 3 (Evaluation and Qualification Criteria) to describe any pending litigation or arbitration formally commenced against it.

In case of joint ventures, each Joint Venture Partner must fill out this form separately, and provide the Joint Venture Partner name below:

Joint Venture Partner:

| | e one of the following: | | |
|------|--|--|--|
| | o pending litigation and arbitration. | | |
| Be a | elow is a description of all pending litigation and arbitration against the Bidder (or Joint Venture). | each Joint Venture me | ember if Bidder i |
| Year | Matter in Dispute | Value of Pending Claim in INR or US\$ Equivalent | Value of Pending Claim as a Percentage o Net Worth |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

- Note -

This form shall only be included if Criterion 2.1.2 of Section 3 (Evaluation and Qualification Criteria) is applicable.

Form EXP - 1: Contractual Experience

Fill out one (1) form per contract.

| | Contractual | Experience | |
|--|-----------------------------|---------------------------|----------------|
| Contract No of | Contract Identification | | |
| Award Date | | Completion Date | |
| Role in Contract | Manufacturer | Supplier | Subcontractor |
| Total Contract Amount | | | \$ |
| If partner in a joint venture or subcontractor, specify participation of total contract amount | Percent of Total | Amount | |
| Purchaser's name Address Telephone/Fax Number E-mail | | | |
| Description of Successful completion as main supplier within the last Three (3) years, of at least Two (2) contracts each valued at INR 1,40,00,000(or equivalent US\$) with nature, and complexity similar to the scope of supply described in Section 6 (Schedule of Supply). | of the similarity in accord | lance with Criterion 2.2. | 1 of Section 3 |

- Note -

This form shall only be included if Criterion 2.2.1 of Section 3 (Evaluation and Qualification Criteria) is applicable.

Form EXP - 2: Technical Experience

Fill out one (1) form per contract.

| Technical Experience | | | | |
|---|---------------------------|----------------------------------|--|--|
| Name of Product | | | | |
| Manufacturer: | | Address and Nationality: | | |
| Requ | uirements in accordance w | ith Criterion 2.2.2 of Section 3 | | |
| (i) goods offered has been in production for at least Three (3) years. | | | | |
| (ii) Supplying similar type of items and complexity at schools as mentioned in section 6 schedule of supply in the last three (3) years; | | | | |
| (iii) Product has been in operation for a minimum of 3 years. | | | | |

** (ii) with documentary evidence: Pictures, Client certificates

- Note -

This form shall only be included if Criterion 2.2.2 of Section 3 (Evaluation and Qualification Criteria) is applicable. Add pages as necessary. Purchaser reserves the right to verify authenticity of bidder submissions.

Form EXP - 3: Production Capacity

Fill out one (1) form per product and manufacturer.

| | Production Capacity | | | |
|---|--------------------------|-----------------------------------|--|--|
| Name of Product | | | | |
| Manufacturer: | | Address and Nationality: | | |
| Requi | irements in accordance v | vith Criterion 2.2.3 of Section 3 | | |
| Production facility 1 (include location): | | | | |
| Production facility 2 (include location): | | | | |
| Production facility 3 (include location): | | | | |

- Note -

This form shall only be included if Criterion 2.2.3 of Section 3 (Evaluation and Qualification Criteria) is applicable. Purchaser reserves the right to verify authenticity of bidder submissions.

Form FIN - 1: Historical Financial Performance

Each Bidder must fill out this form.

In case of joint ventures, each Joint Venture Partner must fill out this form separately, and provide the Joint Venture Partner name below:

Joint Venture Partner: __

| Financial Data for Previous Years [I | | or US\$ Equivalent] |
|--------------------------------------|---------|---------------------|
| Year 1: | Year 2: | Year: |

Information from Balance Sheet

| Total Assets (TA) | | |
|---------------------------|--|--|
| Total Liabilities (TL) | | |
| Net Worth = TA-TL | | |
| Current Assets (CA) | | |
| Current Liabilities (CL) | | |
| Working Capital = CA - CL | | |

Information from Income Statement

| Total Revenues | | |
|----------------------|--|--|
| Profits Before Taxes | | |
| Profits After Taxes | | |

Attached are copies of financial statements (balance sheets including all related notes, and income statements) for the last _____ years, as indicated above, complying with the following conditions:

• Unless otherwise required by Section 3 of the Bidding Documents, all such documents reflect the financial situation of the legal entity or entities comprising the Bidder and not the Bidder's parent companies, subsidiaries, or affiliates.

- Historical financial statements must be audited by a certified accountant.
- Historical financial statements must be complete, including all notes to the financial statements.
- Historical financial statements must correspond to accounting periods already completed and audited (no statements for partial periods shall be requested or accepted).

- Note -

This form shall only be included if Criterion 2.3.1 of Section 3 (Evaluation and Qualification Criteria) is applicable.

Form FIN - 2: Size of Operation (Average Annual Turnover)

Each Bidder must fill out this form.

The information supplied should be the Annual Turnover of the Bidder or each member of a Joint Venture in terms of the amounts billed to clients for each year for work in progress or completed, converted to US Dollars at the specified exchange rate.

In case of joint ventures, each Joint VenturePartner must fill out this form separately, and provide the Joint VenturePartner name below:

JointVenturePartner: _____

| | Annual Turnover Data for | r the Last three (3) | fears |
|------|--------------------------|----------------------|------------------------|
| Vaar | Amount | Exchange | INR or US\$ Equivalent |
| Year | Currency | Rate | |
| | | | |
| ĺ | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | Average Annu | | |

- Note -

This form shall only be included if Criterion 2.3.2 of Section 3 (Evaluation and Qualification Criteria) is applicable.

Section 5- Eligible Countries

This Section contains the list of eligible countries.

- 1. Afghanistan
- 2. Armenia
- 3. Australia
- 4. Austria
- 5. Azerbaijan
- 6. Bangladesh
- 7. Belgium
- 8. Bhutan
- 9. Brunei Darussalam
- 10. Cambodia
- 11. Canada
- 12. China, People's Republic of
- 13. Cook Islands
- 14. Denmark
- 15. Fiji
- 16. Finland
- 17. France
- 18. Georgia
- 19. Germany
- 20. Hong Kong, China
- 21. India
- 22. Indonesia
- 23. Ireland
- 24. Italy
- 25. Japan
- 26. Kazakhstan
- 27. Kiribati
- 28. Korea, Republic of
- 29. Kyrgyz Republic
- 30. Lao PDR
- 31. Luxembourg
- 32. Malaysia
- 33. Maldives
- 34. Marshall Islands

- 35. Micronesia, Federal States of
- 36. Mongolia
- 37. Myanmar
- 38. Nauru
- 39. Nepal
- 40. The Netherlands
- 41. New Zealand
- 42. Norway
- 43. Pakistan
- 44. Palau
- 45. Papua New Guinea
- 46. Philippines
- 47. Portugal
- 48. Samoa
- 49. Singapore
- 50. Solomon Islands
- 51. Spain
- 52. Sri Lanka
- 53. Sweden
- 54. Switzerland
- 55. Tajikistan
- 56. Taipei, China
- 57. Thailand
- 58. Timor-Leste
- 59. Tonga
- 60. Turkey
- 61. Turkmenistan
- 62. Tuvalu
- 63. United Kingdom
- 64. United States
- 65. Uzbekistan
- 66. Vanuatu
- 67. Viet Nam

Section 6 - Schedule of Supply

Contents

| 4. | Drawings | 6-Error! Bookmark not defined. |
|----|------------------------------------|--------------------------------|
| 3. | Technical Specifications | |
| 2. | Delivery and Completion Schedule | 6-1 |
| 1. | List of Goods and Related Services | 6-1 |

1. List of Goods and Related Services

The Supplier is required to supply the laboratory equipment and other itemsas mentioned in the below table in the schools spread across Meghalaya. The indicative spread of schools across Meghalaya is provided in the Delivery and Completion Schedule of this section.

| SL | Category | Items | Description/Minimum Specification | Quantity / School | Unit of measurement | Total Quantity |
|-----|-----------|----------------------------|--|----------------------|------------------------|-------------------|
| A.1 | Equipment | Air Condenser | Liebig Tip Interchangeable joint and inter changeable outer joint300mm cone 24/ 29 socket 19/26 | 1 | Number | 68 |
| A.2 | Equipment | Ammeter (0 - 3 amp) | Plastic body with terminal,Square type grade A DC moving coil panel meter with stand | 20 | Number | 1,360 |
| A.3 | Equipment | Audio frequency oscillator | Frequency Range: 20 Hz to 20 KHz in 4 decades range square wave upto 20 KHz. Accuracy: ± 2%, ± 1 Hz. Wave Form: Sine and Square – Selectable. Output Voltage: 0 – 10, Volts continuously variable. Coarse and Fine Controls. Stability: 0.5% after warm – up time of 10, minutes. | 1 | Number | 68 |
| A.4 | Equipment | B.P and M.P Apparatus | Aluminum. 63 mm diameter x 55 mm height, 02 holes and split fitted with handle: mild steel rod 06 mm diameter x 130 mm length | 1 | Number | 68 |
| A.5 | Equipment | Balance Electronic digital | Capacity 600gm, L.C. 0.1gm (100mg) Imported High precision, Different Capacities and sensitivities, Comes with Guard / Box, Runs on electricity and battery | 1 | Number | 68 |
| A.6 | Equipment | Battery eliminator | Input 220 volt A.C., output 0-12 v at 1 AMP D.C.300 MA 'CSI' Extra Superior quality fitted with heavy duty transformer & long life Selenium Metal Bridge Rectifier (Guaranteed for one year for any Mechanical defects). | 1 | Number | 68 |
| A.7 | Equipment | Bell Jar | Borosilicate like 3.5 mm thick glass, neck inside diameter 18 mm x 20 mm height. Overall length 90 mm x inside diameter 55 mm with rim diameter 64 mm | 20 | Number | 1,360 |

| A.8 | Equipment | Boyle's Law apparatus | Two glass tubes 220 mm long, one is closed at the top and other one is open and connected by 1 Meter pressure rubber tubing. Both the tubes are mounted on the brackets which can be locked in any portion on the metal supporting rods. Stand carries a graduated scale 0 to 100 cm. Mercury required for this 3 apparatus is approx.30 cm. | 1 | Number | 68 |
|------|-----------|-----------------------------------|--|----|--------|-------|
| A.9 | Equipment | Burette stand with clamp. | Burette Stand: - Complete with oxidized clamp fitted with knob/screw, hard wood base polished nicely for single Burette | 20 | Number | 1,360 |
| A.10 | Equipment | Calorimeter (Copper) | Set of Copper Calorimeter 75 x 50 mm with felt insulation, the outer vessel of 100 x 65 mm size with a plastic lid having holes for thermometer & stirrer. A thermometer holder is fixed to the outer vessel. Complete with stirrer. Same size one painted black and other highly polished | 1 | Number | 68 |
| A.11 | Equipment | Calorimeter (plastic) | Borosilicate like glass, 50 ml capacity, beaker fitted in Low Density Poly Ethylene (LDPE) foam sheet in wooden box. | 1 | Number | 68 |
| A.12 | Equipment | Cathode ray oscilloscope (CRO) | 220+/- 10 V, bandwidth 10MHz, Y deflection 10 mV/div- 5V/div Display Type CRT / 6" with additional 5 digit LCD display No of channels 2. Assembled in ABS plastic cabinet with cover with Set of Patch Chords & Experimental manual | 1 | Number | 68 |
| A.13 | Equipment | Cell holder | For two R-6 cells, brass-copper terminals [plated], plastic body, 130 mm X 70 mm x 40 mm height with cover | 20 | Number | 1,360 |
| A.14 | Equipment | Centrifuge | Hand operated can be fitted on table four tube extra superior heavy pattern with borosilicate or equivalent glass. | 1 | Number | 68 |
| A.15 | Equipment | Chromatographic Jar with Cork | Soda glass, height 175 mm, diameter 30 mm. | 20 | Number | 1,360 |
| A.16 | Equipment | Circuit Board | Complete with plastic base,190 mm x 120 mm x15 mm. battery holder, bulb holder with bulb 3.2 V, switch, banana sockets | 20 | Number | 1,360 |

| A.17 | Equipment | Compound Microscope | ISI Marked Microscope: Metal Body, triple revolving nose pieces' inclination 90 degree with coarse and fine movements. Overall height approx. 320 mm, base 125 mm x 200 mm. Achromatic good quality lenses Two Objectives: 10x & 45x. Two Eyepieces: 10 x & 15 x having coarse fine motion & fixed condenser Magnification 600x/675x. In thermocol packing | 2 | Number | 136 |
|------|-----------|---|--|----|--------|-------|
| A.18 | Equipment | Connecting Wires in P.N. Junction & Zener Diode | Good quality, in a set | 2 | Number | 136 |
| A.19 | Equipment | Daniel cell | Complete with joint less thick copper vessel (Coper vessel of 150 \times 100mm (\pm 510mm) with perforated shelf, thick zinc rod of size, 150 \times 10mm (With brass terminal, porous spot of size 140 \times 50mm diameter) Superior quality | 20 | Number | 1,360 |
| A.20 | Equipment | Dispensing Bottle | Low Density Poly Ethylene (LDPE), Capacity 15 ml, with screw type cap and nozzle | 20 | Number | 1,360 |
| A.21 | Equipment | Dissecting Microscope | ISI marked Plastic body 70 mm X 95 mm 90 mm height Top fitted glass sheet, two lenses, fitted with plastic frame in the backside. Eye pieces magnification 10X and 20X, rack and pinion arrangementeye pieces in wooden box, heavy round base | 10 | Number | 680 |
| A.22 | Equipment | Dissecting Needle | Standard, length 120 mm, with plastic handle. | 20 | Number | 1,360 |
| A.23 | Equipment | Dissecting set | Set of 15 instruments stainless steel good quality standard brand | 15 | Number | 1,020 |
| A.24 | Equipment | Double Inclined Plane | (Galileo's Experiment): 'CSI' Superior <i>teak wood</i> . Well- polished. Complete with two wooden blocks & one spherical steel ball 2.5cm/dia. Fitted with two graduated arc to adjust at any angle. | 1 | Number | 68 |
| A.25 | Equipment | Drawing board (35 x 25 cm) | soft wood 300x450±10mmx18mm±2mm | 20 | Number | 1,360 |

| A.26 | Equipment | Dry cells | 1.5 V chargeable AA with charger | 10 | Number | 680 |
|------|-----------|--|--|----|--------|-------|
| A.27 | Equipment | Electrodes Copper | Copper strip, length 80 mm, width 5 mm. x thickness 1mm with terminals | 20 | Number | 1,360 |
| A.28 | Equipment | Electrodes Zinc | Zinc strip, length 80 mm width 5 mm x thickness 1 mm with terminals | 20 | Number | 1,360 |
| A.29 | Equipment | Forcep | Good Quality 6" with fine tip (Stainless steel) | 20 | Number | 1,360 |
| A.30 | Equipment | Fortin's Barometer | Has a dual scale of 640-810mm and 25-32 inches with least count of 0.05mm and 0.002 inches respectively. It is suitable for altitudes upto 600 m. The mercury cistern has an adjusting screw and fluvial setting point. Supplied w/o mercury. Alumumium parts & tube | 1 | Number | 68 |
| A.31 | Equipment | Full Protector | Transparent plastic diameter 120 mm, thickness 2 mm double angle marking 0- 360 degree | 20 | Number | 1,360 |
| A.32 | Equipment | Funnel Stand | Polished hard wood with cork lined jaws and molded plastic screws. Base fitted with non-skid feet for stability. Overall height 490 mm, base size 330×110 mm. | 2 | Number | 136 |
| A.33 | Equipment | Galvanometer | 30-0-30 plastic body with terminal, Grade A Square type DC moving coil panel meter with stand | 20 | Number | 1,360 |
| A.34 | Equipment | Hooks law apparatus | Consisting of 30cm long mirror scale, spring, slotted weights with hanger and pointer, complete on heavy tripod stand with weight superior quality large size about 45 cm high | 1 | Number | 68 |
| A.35 | Equipment | Inclined plane with protect meter and pulley, | protect meter and pully With facility to alter angle of inclination with iron N.P roller, pan and pulley base | 1 | Number | 68 |
| A.36 | Equipment | Iron Brass Bimetallic strip with wooden handle | length of bi metal strip (iron and brass) 150x15mm mounted in a wooden handle. The strip is only 1mm thick so that very little heat is required to produce considerable bending. Length overall 270mm approx. | 20 | Number | 1,360 |

| A.37 | Equipment | Kipps apparatus | Plastic Cap 250ml(approx.) material: High Density Polyethylene with stop clock | 2 | Number | 136 |
|------|-----------|---|--|----|--------|-------|
| A.38 | Equipment | Laboratory Stand with 1) Boss head 2) Clamp 3) G clamp | MS rod diameter 10 mm x 375 mm long, MS base, Cl Boss head, G clamp and aluminum clamp | 20 | Number | 1,360 |
| A.39 | Equipment | Lead accumulator | For steady discharge of currents not exceeding 0.75 A in polystyrene container with negative and positive marked terminals | 1 | Number | 68 |
| A.40 | Equipment | Leclanche cell | Glass or plastic container 95x95x150mm (length x width x height). For cathod a zinc rod with terminal and for anode a filled porous pot is supplied. Requires approx. 500ml ammonium chloride electrolyte supplied without electrolyte | 1 | Number | 68 |
| A.41 | Equipment | Magnet Bar type | Size 75 mm x 12 mm x 8 mm, red Colour N and S pole mentioned. Alnico type | 20 | Number | 1,360 |
| A.42 | Equipment | Magnet Cylindrical | diameter 16 mm and length 25 mm. ferrite | 20 | Number | 1,360 |
| A.43 | Equipment | Magnet Disc Type | diameter 36 mm and 8 mm thick. ferrite | 20 | Number | 1,360 |
| A.44 | Equipment | Magnet Horse shoe type | U shaped, Arm length 50 mm, N and S poles to be marked. | 20 | Number | 1,360 |
| A.45 | Equipment | Magnet Ring type | Outer diameter 18 mm and thickness 3 mm. ferrite | 20 | Number | 1,360 |
| A.46 | Equipment | Magnetic Compass | Metal case, polystyrene transparent top, magnetized needle with north marked red and south marked blue, 50 mm size. Both side glass | 20 | Number | 1,360 |
| A.47 | Equipment | Measuring cylinder | Plastic, transparent with built in base, 100 ml graduation (min 1 ml) | 20 | Number | 1,360 |

| A.48 | Equipment | meter bridge | The four-gap bridge has a large and heavy copper strip of (SWG No. 18) mounted on a heavy 3/4" thick laminated base of size 45" x 4" x 3/4". Nine heavy Brass terminals lock type are provided to reduce the resistance to a minimum. The ends gaps are closed by removable Copper Binding pieces which are held in position by the terminals. The 24 SWG constantan wire is stretched along the top of wooden meter scale and securely clamped to the Brass end strips so that end errors are negligible. Supplied complete with pencil jockey along with lead for connections. Includes detail working manual. Overall dimensions: 1.12m × 100mm × 50mm, including terminals. | 1 | Number | 68 |
|------|-----------|-----------------------------------|---|----|--------|-------|
| A.49 | Equipment | Micro Test Tube Holder | Wooden handle for hold the 10-mm test tube. | 20 | Number | 1,360 |
| A.50 | Equipment | Milliammeter (0- 500mA) | Pocket size, digital, high impedance with DC moving coil and stand | 20 | Number | 1,360 |
| A.51 | Equipment | Mirror/Lens stand | Wooden / plastic lens / mirror stand 120 mm X 30 mm X 75 mm. Height with slot. | 20 | Number | 1,360 |
| A.52 | Equipment | Multimeter | Digital (Imported) Economical, good quality | 20 | Number | 1,360 |
| A.53 | Equipment | Newton's law of cooling apparatus | copper calorimeter with a wooden lid having two holes for inserting a thermometer and a stirrer and an open double – walled vessel, University Pattern | 1 | Number | 68 |
| A.54 | Equipment | n-p-n or p-n-p transistor | Fitted on board with terminals and circuit diagram | 2 | Number | 136 |
| A.55 | Equipment | Ohm's Law Apparatus | Built in Rheostat with DC meters Superior Quality & operational manual fitted on a ABS plastic box | 1 | Number | 68 |
| A.56 | Equipment | One way key | with brass block on plastic base with brass terminals | 20 | Number | 1,360 |
| A.57 | Equipment | Optical bench (1 1/2 mtrs) | one meter long, double MS chrome platted rods, four uprights (two having slow transfers motions), two lenses holders, two optical pins & two caste iron heavy metallic feet with levelling screws superior quality with Shappered rides | 1 | Number | 68 |

| A.58 | Equipment | P.N. Junction | Built in Power Supply, with one rectangular voltmeter and one mili ammeter (both meters are dual range) to monitor voltage and current. Two p n junction diode one in forward and other in reverse bias and one Zener diode. Special interconnection lead -5 Nos. p-n junction and diodes are mounted panel so that they are visible from outside to students as well as easy to replace in case another diode required to be replaced. | 1 | Number | 68 |
|------|-----------|--|--|----|--------|-------|
| A.59 | Equipment | Pair of Tongs | Diameter 05 mm, overall length 160 mm, chrome plated. | 20 | Number | 1,360 |
| A.60 | Equipment | Parallelogram law of forces apparatus | Comprises of a board 65x50cm, with two aluminum pulleys 50mm. dia., on clamp, for mounting in any position. Complete with three hangers iron nickel plated 50gm. and 12 slotted weights of 50gms. each. | 1 | Number | 68 |
| A.61 | Equipment | Pencil Knife Edge Jockey | With insulated handle, plated brass contact, and a plated brass terminal with 4 mm. Socket. Overall length 100 mm | 20 | Number | 1,360 |
| A.62 | Equipment | Pendulum bob | Brass bob of 2.5 cm diameter with hook attached | 20 | Number | 1,360 |
| A.63 | Equipment | pH meter (digital) | Very clear slides, superior quality, Digital (table model), manual with pH Electrode EI/RI Make | 1 | Number | 68 |
| A.64 | Equipment | Plug Key | One way plug key (Brass), base 80 mm x 55 mm. superior quality | 1 | Number | 68 |
| A.65 | Equipment | Plumbline | Brass with hole for thread Superior heavy | 20 | Number | 1,360 |
| A.66 | Equipment | Potentiometer with jockey | Potentiometer 4 wired Brass Connection with 1 meter rule with pencil jockey & brass terminal fitted on a both side laminated base with plastic feet | 1 | Number | 68 |

| A.67 | Equipment | Resistance box | Rc-112 Fitted With 7/16" Square Blocks Double Silk Covered Non-Inductive Windings. Accuracy - 0.1 % Educational Quality. Plug type 0- 5000 Ohms fitted with brass plugs of plastic heads, contact blocks made of brass which are fitted on Bakelite/ hylem/ plastic base. The whole assembly fitted on an appropriate polished wooden box or plastic box Constantan Coil, 9mm Thick Brass Block (0.1 - 500 ohms) plug type Plug type, plug key commutator, Pencil jockey, Reversing Switch, Tapping Key, Raleigh's key | 1 | Number | 68 |
|------|-----------|---|---|----|--------|-------|
| A.68 | Equipment | Resonance Tube | a 100-cm long plastic tube, A movable aluminum reservoir attached by rubber tubing to the bottom of the resonance tube, A triangular support and two tube clamps 40 x 10 x 10" with metal base | 2 | Number | 136 |
| A.69 | Equipment | Rheostat | oxidized Eureka Wires and mounted on Duco painted metal feet provided with laminated brush contacts of phosphor bronze strips, Brass C.p. Guide rod and lock type terminals. 10 ohms, 20 ohms, 30 ohms 40 ohms with PVC feet (Aluminum). Length 15 cm | 1 | Number | 68 |
| A.70 | Equipment | Rubber Pad | Anti-Vibration Pad made from a combination of high quality rubber polymers and cork, this ideal combination ends up to make up a product that has excellent resistance to ageing, compression set, water & oil. | 20 | Number | 1,360 |
| A.71 | Equipment | Screw gauge | 15mm with ratchet stop, stainless steel and brass body | 20 | Number | 1,360 |
| A.72 | Equipment | Set of four resistors 10 ohm (1 no), 20 ohm (2 nos.), 30 ohm | 15 mm x 15 mm x 125 mm with nichrome wire resistance, embedded in plastic case with terminal. | 1 | Number | 68 |
| A.73 | Equipment | Slinky | Steel Wire Spiral roll, outer diameter 52 mm and close size 68 mm to 70 mm | 20 | Number | 1,360 |
| A.74 | Equipment | Slotted weight | Set of 5 in each weight category including hanger. Chrome plated iron weight. weight of 10gm (5x10gm), weight of 20 gm (5x20gm), weight of 50gms (5x50gm), weight of 100gms (5x100gm) | 2 | Number | 136 |

| A.75 | Equipment | Soil sieve | GI Sieve, Height 4 cm mesh size- 0.1mm 0.2mm, .3mm, 0.4 mm 0.5 mm 1, 0.6mm 0.8mm 1 mm, 1.5mm 2 mm. | 2 | Number | 136 |
|------|-----------|-------------------------------------|--|----|--------|-------|
| A.76 | Equipment | Soil Testing Kit(Chemical) K054 | Max Make, Four Parameter Testing Kits used for testing pH, Conductivity, Temperature, DO, TDS & salinity of the soil. All major nutrients of soil like, Nitrogen, Phosphorous, Potassium and in addition pH, Organic carbon, Calcium, Magnesium and Sulphur can be tested | 1 | Number | 68 |
| A.77 | Equipment | Solid, preferably metallic cylinder | length 100 mm dia 25 mm Made of brass/copper/steel/aluminum. which is insoluble in given liquid and water. | 20 | Number | 1,360 |
| A.78 | Equipment | Sonometer | Superior Quality, well-polished wooden base, comprising a wooden resonance box of 114 cm length, 12.5 cm width and 10 cm height, with two rules 1 mt. long sub-divided into Millimeter. Two wire of brass and 2 sliding bridges steel attached to | 1 | Number | 68 |
| A.79 | Equipment | Speaker | 8Ohz | 2 | Number | 136 |
| A.80 | Equipment | Spherical body (Marbles) | 4 cm diameter | 20 | Number | 1,360 |
| A.81 | Equipment | Spherometer | brass dial head 40mm dia, stainless steel, head divided in 100 divisions reading upto 0.005 mm, vertical scale 10-0-10 single disk | 20 | Number | 1,360 |
| A.82 | Equipment | Spirit lamp | Made of Aluminium, full size heavy pattern leak proof. Capacity 125 ml. Uses the spirit for its functioning. Gives bright illumination with cap | 20 | Number | 1,360 |
| A.83 | Equipment | Spring Balance | A.B.S, open type, capacity 250 g graduation in steps of 10 g on one side and Newton's on the other side | 20 | Number | 1,360 |
| A.84 | Equipment | Sprit level | Plastic body. Strong build. Shear strength. Fine quality. Size- 300mm | 10 | Number | 680 |
| A.85 | Equipment | Stainless steel electrode with cork | Diameter 2 mm. x 80 mm stainless steel electrode fitted with cork to separate. Cork size top diameter 25 mm. x diameter 17 taper x 25 mm. length, (to fit with item No. 81 bell jar) | 20 | Number | 1,360 |

6-92

A.95

A.96

Equipment

Equipment

| A.86 | Equipment | Stop clock | metal body with start stop & fly back action, dial size approx. 100mm, divided in 0-60 x 1 sec with start, stop and resent arrangement | 10 | Number | 680 |
|------|-----------|-----------------------------------|---|----|--------|-------|
| A.87 | Equipment | Telescope fixed on stand | The telescope is mounted on a specially designed carriage with support ring to stop abrupt falling. The carriage is fitted with two adjustable screws for precise vertical and horizontal positioning. This arrangement is mounted on a 25mm dia, 450mm long steel pillar, fitted on a cast iron base with leveling screws. A scale holder is provided with scale | 1 | Number | 68 |
| A.88 | Equipment | Test Tube Holder Wooden Handle | With wooden Handle, chrome plated size 175mm +/- 15mm | 20 | Number | 1,360 |
| A.89 | Equipment | Test Tube Rack | Perspex sheet size 100 mm X 27 mm X 12 mm 04 blind holes to hold Micro Test Tubes. | 20 | Number | 1,360 |
| A.90 | Equipment | Test Tube stand | To hold test tubes of different diameter. Made of plastic (Polythene superior quality) with multiple holes | 20 | Number | 1,360 |
| A.91 | Equipment | Thermometer Alcohol | Glass, alcohol filled, -10° C to 110° C, graduation 1° C with card board/plastic cover and cotton at both ends. | 1 | Number | 68 |
| A.92 | Equipment | Thermometer Mercury | Glass, mercury filled, graduation 0 - 250° C, sub division 1.0° C. | 1 | Number | 68 |
| A.93 | Equipment | Ticker Timer | fitted on wooden board with sun-mica base / with plastic body, easily to work on 3-6 volts (even with battery). Fitted with speed regulator, complete with one roll of ticker tape fitted on clamp with paper Tape | 1 | Number | 68 |
| A.94 | Equipment | Transformers | Step Down 220-volt AC output 2-12-volt AC transformers 1 Amp | 20 | Number | 1,360 |
| A.95 | Equipment | Transistor | apparatus mounted on ABS plastic box with circuit | 20 | Number | 1,360 |

diagram fitted with terminals & two meters

Diameter 20 mm, thickness 02 mm, 50 Cm long, with

Transistor

stoppers

Transparent PVC

plastic tube with

stoppers at both ends.

20

Number

Number

1,360

1,360

| A.97 | Equipment | Transparent stiff plastic tube | Diameter. 6 mm X 500 mm length | 20 | Number | 1,360 |
|-------|-----------|--|---|----|--------|-------|
| A.98 | Equipment | Triangular File | With wooden / plastic handle length of file 20 cm | 2 | Number | 136 |
| A.99 | Equipment | Tripod stand, | Aluminum top 63 mm diameter x 15 mm thick three blind hole diameter 10 x 10 mm depth to hold test tube. Attach with three legs 4 mm diameter x 165 mm and total length 180 mm. | 20 | Number | 1,360 |
| A.100 | Equipment | Tuning Fork Set | set of eight steel N.P. in velvet box. 256 to 512 Hz | 20 | Number | 1,360 |
| A.101 | Equipment | Two- Way Burette clamp and stand | For Base: Mild Steel Sheet 140 mm X 160 mm X 16mm SWG. For Stand: Mild Steel Rod 06 mm diameter, 280 mm length. Mild Steel Nut 06 mm, Fly Nut 06 mm, 06 mm Washer. Spring Steel Strip 80 mm X 08 mm X 20 SWG to hold 02 burettes. | 20 | Number | 1,360 |
| A.102 | Equipment | Two-way key | brass block on plastic base with brass terminals | 20 | Number | 1,360 |
| A.103 | Equipment | Uprights (with clamps) Index needles | Stainless steel needle - length 7.7 cm diameter 4-5 mm pointed on the top fitted in a wooden / plastic base with plain and polished surface | 20 | Number | 1,360 |
| A.104 | Equipment | Vernier Calipers | Stainless steel, length 125mm approx. extra superior quality Chrome plated, clearly graduated | 20 | Number | 1,360 |
| A.105 | Equipment | Voltmeter | Plastic body with terminal, Square type grade DC moving coil Range 1.5 V, 3V, 5V. (0- 5 amp) with stand | 20 | Number | 1,360 |
| A.106 | Equipment | Wash Bottle | LDPE, Superior quality capacity 250 ml. | 20 | Number | 1,360 |
| A.107 | Equipment | Water bath | Dia,4"(copper) Developed \with high quality material with concentric rings. Size 8 with concentric rings made of copper | 2 | Number | 136 |
| A.108 | Equipment | Water testing Kit (Chemical)WT 023 | Suitable for testing various features of water like hardness, salinity, turbidity, diffused oxygen ingredients etc | 1 | Number | 68 |

| A.109 | Equipment | Weight box | Material- Brass weights/Nickel plated/chrome plated Analytical 10g 20g 50g 100g 200g 500g Two each with forceps | 5 | Number | 340 |
|-------|----------------------|---|--|----|--------|-------|
| A.110 | Equipment | Wide Bore Tube | transparent glass/ acrylic 1.25 m long 4 cm diameter | 20 | Number | 1,360 |
| A.111 | Equipment | Wire gauge, | Sheet metal thickness gauge, measuring range (in.) 0.007to 0.3125, probe depth (in.) 0.80 to 1.60, graduations0.289 in., number of leaves 0, length (in.) 3, width (in.) 3, thickness (in.) 0.125, measuring range (in./mm) 0 to 36, material steel, finish brushed, features display metal gauge size on one side and decimals on other side. | 20 | Number | 1,360 |
| A.112 | Equipment | Yo Yo | X shape plastic wheel Diameter. 120 mm X 40 mm fitted with 1.5 meter nylon thread | 20 | Number | 1,360 |
| A.113 | Equipment | Young's modulus apparatus | sealers pattern having self-centering chucks, graduated micro meter screw to read upto 0.1 mn, cast iron frame duly powder coated with spirit level, tension weight, cieling bracker | 1 | Number | 68 |
| | Equipment (A) | | | | | |
| B.1 | Charts and Models | Atomic model set | 23mm diameter +/- 1mm set of 120 molded balls with 100 locking plugs of different colors & sizes. Along with connectors of different sizes. This sizes & shapes of the balls & connecting lugs have been designed in accordance with internationally acceptable standards | 1 | Number | 68 |
| B.2 | Charts and Models | Chart showing Skelton system | Size 100x70 cm \pm 2cm both side laminated with plastic rollers | 1 | Number | 68 |
| B.3 | Charts and Models | Charts of animal like horned toad, Kangaroo rat, camel | Size 100x70 cm \pm 2cm both side laminated with plastic rollers | 1 | Number | 68 |

| B.4 | Charts and Models | Charts of Starfish, Rohu fish, Frog, Freshwater Fish, Marine bony fish (Lophius) | Size 100x70 cm \pm 2cm both side laminated with plastic rollers | 1 | Number | 68 |
|------|----------------------|--|---|---|--------|----|
| B.5 | Charts and Models | Charts showing respiratory & circulatory system | Size 100x70 cm \pm 2cm both side laminated with plastic rollers | 1 | Number | 68 |
| B.6 | Charts and Models | Charts showing digestive system | Size 100x70 cm \pm 2cm both side laminated with plastic rollers | 1 | Number | 68 |
| B.7 | Charts and Models | Charts showing Reproductive system male & female | Size 100x70 cm \pm 2cm both side laminated with plastic rollers | 1 | Number | 68 |
| B.8 | Charts and Models | Charts showing analogous & Homologous organs in animals | Size 100x70 cm \pm 2cm both side laminated with plastic rollers | 1 | Number | 68 |
| B.9 | Charts and Models | Charts showing analogous & Homologous organs in various plants | Size 100x70 cm \pm 2cm both side laminated with plastic rollers | 1 | Number | 68 |
| B.10 | Charts and Models | Colour PH Chart | Multicolor printing on 80 GSM map litho paper Size 70x100cm+/-2cm Thermally Laminated with 30-micron thick best quality polyester film on both sides. Fitted with best quality plastic rollers at the top and at the bottom with hanging arrangement. | 1 | Number | 68 |
| B.11 | Charts and Models | Human Skelton Model | Human Skelton made of plastic on stand, articulated, stand size 5 feet good quality, bones in natural shape & color. | 1 | Number | 68 |
| B.12 | Charts and Models | Micromodel of DNA | An Articulated Model with labels to show the double helix of DNA structure. Includes 15 base pairs to show one and half helix. All component is identified by different colors. The connection between the base pairs are also clearly shown. Mounted on base | 1 | Number | 68 |

| B.13 | Charts and Models | Periodic Table | Multicolor printing on 80 GSM map litho paper Size 70x100cm+/-2cm Thermally Laminated with 30-micron thick best quality polyester film on both sides. Fitted with best quality plastic rollers at the top and at the bottom with hanging arrangement. | 1 | Number | 68 |
|------|--------------------------|--------------------------|---|---|--------|----|
| | Charts and Models (B) | | | | | |
| C.1 | Chemical | Acetic acid, | In a glass bottle of 250 ml standard make | 1 | Number | 68 |
| C.2 | Chemical | Acetic acid, | In a glass bottle 250 ml standard make | 1 | Number | 68 |
| C.3 | Chemical | Acetocarmine | In a glass bottle 250 ml standard make | 1 | Number | 68 |
| C.4 | Chemical | Acetone | Acetone 500ml standard make | 1 | Number | 68 |
| C.5 | Chemical | Barium chloride solution | In a glass bottle 250 ml standard make | 1 | Number | 68 |
| C.6 | Chemical | Benedict Solution | Benedict Solution 250ml standard make | 1 | Number | 68 |
| C.7 | Chemical | Biuret Reagent | Biuret Reagent 125 ml standard make | 1 | Number | 68 |
| C.8 | Chemical | Boric acid | In a glass bottle 250 ml standard make | 1 | Number | 68 |
| C.9 | Chemical | Calcium nitrate | Granules in poly bottle 250 ml standard make | 1 | Number | 68 |
| C.10 | Chemical | Cobalt Chloride | Cobalt Chloride 200gm standard make | 1 | Number | 68 |
| C.11 | Chemical | CuSO4 Solution | In a glass bottle 250 ml standard make | 1 | Number | 68 |

| C.12 | Chemical | Distilled water | in plastic bottle 1 Li standard make | 1 | Number | 68 |
|------|----------|---|---|---|--------|----|
| C.13 | Chemical | Ethanol | In a glass bottle 250 ml standard make | 1 | Number | 68 |
| C.14 | Chemical | Fehling Solution No1 | Fehling Solution No1 500ml standard make | 1 | Number | 68 |
| C.15 | Chemical | Fehling Solution No2 | Fehling Solution No2 500ml standard make | 1 | Number | 68 |
| C.16 | Chemical | Formalin solution | In a glass bottle 250 ml standard make | 1 | Number | 68 |
| C.17 | Chemical | Fouchet reagent | Solution in poly bottle 250 ml standard make | 1 | Number | 68 |
| C.18 | Chemical | Glycerin | Glycerin 500 gm standard make | 1 | Number | 68 |
| C.19 | Chemical | HCI | In a glass bottle 250 ml standard make | 1 | Number | 68 |
| C.20 | Chemical | lodine | lodine 500 ml Solution standard make | 1 | Number | 68 |
| C.21 | Chemical | KH2PO4 | In poly bottle 200 gm standard make | 1 | Number | 68 |
| C.22 | Chemical | KMnO₄ | In poly bottle 200 gm standard make | 1 | Number | 68 |
| C.23 | Chemical | Leishman's/ Geimsa/Wright's stain | Air tight closeable dropper amber bottle 100 ml standard make | 1 | Number | 68 |
| C.24 | Chemical | Lens cleaning tissue paper | 10 cm X 15 cm packet of 50 standard make | 1 | Number | 68 |
| C.25 | Chemical | Millions Reagent I | Millions Reagent 125ml standard make | 1 | Number | 68 |

| C.26 | Chemical | Molten Wax | Tin Pack 200 gm standard make | 1 | Number | 68 |
|------|----------|---------------------------------|---|---|--------|----|
| C.27 | Chemical | Na ₂ CO ₃ | In poly bottle 200 gm standard make | 1 | Number | 68 |
| C.28 | Chemical | Na2HPO4, | In Poly bottle 200 gm standard make | 1 | Number | 68 |
| C.29 | Chemical | NaOH | Powder in Poly Bottle 250 ml standard make | 1 | Number | 68 |
| C.30 | Chemical | Nitric acid | In a glass bottle 250 ml standard make | 1 | Number | 68 |
| C.31 | Chemical | Petroleum Ether | Petroleum Ether 60-80 deg C 500ml standard make | 1 | Number | 68 |
| C.32 | Chemical | Phenol Red | In a glass bottle 250 ml standard make | 1 | Number | 68 |
| C.33 | Chemical | Potassium Chloride | 250gm standard make | 1 | Number | 68 |
| C.34 | Chemical | potassium iodide | Powder in Poly Bottle 250 ml standard make | 1 | Number | 68 |
| C.35 | Chemical | Robert's Soln | In poly bottle 250 ml standard make | 1 | Number | 68 |
| C.36 | Chemical | Safranin | Safranin 100 gm standard make | 1 | Number | 68 |
| C.37 | Chemical | Salicylic acid | Crystal in poly bottle 250 ml standard make | 1 | Number | 68 |
| C.38 | Chemical | Sodium Chloride | Sodium Chloride 500 gm standard make | 1 | Number | 68 |
| C.39 | Chemical | Sodium Hydroxide pellets | Sodium Hydroxide pellets 250gm standard make | 1 | Number | 68 |

| C.40 | Chemical | Sodium Hypobromite Solution | Powder in Poly Bottle 200 gm standard make | 1 | Number | 68 |
|------|--------------|-----------------------------------|--|----|--------|-------|
| C.41 | Chemical | Sudan III | Sudan III 200gm standard make | 1 | Number | 68 |
| C.42 | Chemical | Sulphur Acid | In a glass bottle 200 gm standard make | 1 | Number | 68 |
| C.43 | Chemical | Sulphur powder | Powder in Poly Bottle 200 gm standard make | 1 | Number | 68 |
| | Chemical (C) | | | | | |
| D.1 | Glassware | Beaker with spout | Borosilicate like glass, capacity 250 ml with rim | 20 | Number | 1,360 |
| D.2 | Glassware | Beaker with spout | Borosilicate like glass, capacity 50 ml, with rim, | 20 | Number | 1,360 |
| D.3 | Glassware | Beaker with spout | Borosilicate like glass, capacity 500 ml, with rim | 20 | Number | 1,360 |
| D.4 | Glassware | Boiling Tube with cork | Borosilicate like glass 90 mm x 20 mm diameter with cork, capacity 100 ml | 20 | Number | 1,360 |
| D.5 | Glassware | Burette | 50 X 1/10 ml fitted with glass stop cock Neutral Glass Superior Quality | 20 | Number | 1,360 |
| D.6 | Glassware | Capillary Tube | Soda glass. Diameter 1.5 mm x 100 mm. Both side open (Box of 50) | 2 | Number | 136 |
| D.7 | Glassware | China Dish | Superior quality size 4" | 20 | Number | 1,360 |
| D.8 | Glassware | China Dish | 5" porcelain | 20 | Number | 1,360 |
| D.9 | Glassware | Concave lens | Plate Glass, with carefully ground and polished optical surfaces, optically true and cleanly ground edges. Día 2" focal length 15 cm | 20 | Number | 1,360 |

| D.10 | Glassware | Concave Mirror | Glass, Focal Length 20 cm, diameter 5 cm, optically true | 20 | Number | 1,360 |
|------|-----------|---------------------------------|---|----|--------|-------|
| D.11 | Glassware | Conical flask | Capacity 25 ml Borosilicate like glass | 20 | Number | 1,360 |
| D.12 | Glassware | Conical Flask | 250ml (Borosilicate like glass) | 20 | Number | 1,360 |
| D.13 | Glassware | Conical flask | Borosilicate like glass 100 ml | 20 | Number | 1,360 |
| D.14 | Glassware | Conical flask | Borosilicate like glass 500ml | 4 | Number | 272 |
| D.15 | Glassware | Convex lens | diameter 2 inch optically true. Set of three lenses (Focal length 10 cm, 15 cm, 20 cm) | 15 | Number | 1,020 |
| D.16 | Glassware | Convex Mirror | Glass, Focal Length 20 cm, diameter 2.5" optically true | 20 | Number | 1,360 |
| D.17 | Glassware | Culture tubes (50ml) | Borosilicate length 9 cm 2.5 cm diameter | 20 | Number | 1,360 |
| D.18 | Glassware | Double Concave Lenses | Glass, Set of two lens Focal length 20 cm and diameter 50 mm. | 20 | Number | 1,360 |
| D.19 | Glassware | Double Convex lens | Glass, Set of two lens Focal length 20 cm and diameter 50 mm. | 20 | Number | 1,360 |
| D.20 | Glassware | Double mouthed flask | Borosilicate like . Thickness 1.5 mm with one mouth diameter 25 mm x 25 mm height (with rim) and other diameter 06 mm x 28 mm length. Bulb outer diameter 48 mm with overall length 110 mm | 20 | Number | 1,360 |
| D.21 | Glassware | Dropper Glass | Glass 4" with rubber teat graduated superior quality | 2 | Dozen | 136 |
| D.22 | Glassware | Droppers | Borosilicate like glass, length 100 mm, capillary length 50 mm diameter 06 mm with teats | 20 | Number | 1,360 |
| D.23 | Glassware | Droppers fitted with 02 syringe | Borosilicate like glass, length 100 mm, capillary length 50 mm, diameter 06 mm, with teats | 20 | Number | 1,360 |

| D.24 | Glassware | Flask for titration | Borosilicate like glass, height 50 mm, capacity 25 ml. | 20 | Number | 1,360 |
|------|-----------|---------------------|--|----|--------|-------|
| D.25 | Glassware | Funnel | Glass Chromatography columns plain, With PTFE key stopcock. Length 15 cm disk dia 10 mm | 20 | Number | 1,360 |
| D.26 | Glassware | Fusion Tube | 2.5" (Ignition) glass tube pack of 144pc fine finish leak proof | 2 | Number | 136 |
| D.27 | Glassware | Glass Rod | Soda glass, length 150 mm, diameter 7 mm. | 20 | Number | 1,360 |
| D.28 | Glassware | Glass Sheet | 1 cm square Pack of 24 | 1 | Number | 68 |
| D.29 | Glassware | Glass Slab Square | Square glass slab, size 50 mm x 50 mm x 12 mm thick. | 20 | Number | 1,360 |
| D.30 | Glassware | Glass slides, | Size: 75mm*25mm, Thickness: 1.45mm, 1.10mm, 1mm (pkt of 50) | 5 | Number | 340 |
| D.31 | Glassware | Glass tube holder | Wooden handle, Length 200 mm, to hold the test tubes upto 10 mm diameter, plated. | 20 | Number | 1,360 |
| D.32 | Glassware | Glazed Glass plate | Glass plate size 100 mm x 100 mm x 2.5 mm. | 20 | Number | 1,360 |
| D.33 | Glassware | Hand Lens | Size Diameter approx. 7.5 cm magnifying power 2.5 with a plastic handle attached to it | 20 | Number | 1,360 |
| D.34 | Glassware | Ignition Tube | Heat Resistant, dimensional accuracy, light weight and durable | 20 | Number | 1,360 |
| D.35 | Glassware | Measuring cylinder | 500 ml (Borosilicate like glass) | 2 | Number | 136 |
| D.36 | Glassware | Measuring Flask | Borosilicate like 50 ml | 20 | Number | 1,360 |
| D.37 | Glassware | Micro Burettes | Borosilicate like glass, capacity 05 ml, rotating screw type flow stop cock with Poly Tetra Fluoro Ethylene (PTFE) key and cup, sub division 0.02 mm, fitted with micro tip (capacity 2-200 micro litre). | 20 | Number | 1,360 |

| D.38 | Glassware | Micro Measuring Cylinder | High Density Poly Ethylene (HDPE), capacity 10 ml. | 20 | Number | 1,360 |
|------|-----------|---|---|-----|--------|--------|
| D.39 | Glassware | Mortar and Pestle | Porcelain good quality, unglazed inside, glazed outside. Size 75 mm | 4 | Number | 272 |
| D.40 | Glassware | Narrow glass tube | 20 cm long and of internal diameter 2mm | 150 | Number | 10,200 |
| D.41 | Glassware | Pasteur Pipette | Low Density Poly Ethylene (LDPE), capacity 03 ml. | 20 | Number | 1,360 |
| D.42 | Glassware | Permanent Slide Phloem | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.43 | Glassware | Permanent Slide Adipose Tissue | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.44 | Glassware | Permanent Slide Agarics | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.45 | Glassware | Permanent Slide Amoeba | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.46 | Glassware | Permanent Slide Areolar Tissue | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.47 | Glassware | Permanent Slide Blastula Entamoeba | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.48 | Glassware | Permanent Slide Cardiac Striated Muscle | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.49 | Glassware | Permanent Slide Cardiac Unstrained Muscle | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |

| D.50 | Glassware | Permanent Slide Chlorella | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
|------|-----------|---|---|---|--------|----|
| D.51 | Glassware | Permanent Slide Chlorella Animal Cell | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.52 | Glassware | Permanent Slide Chlormadinones | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.53 | Glassware | Permanent Slide Collenchyma | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.54 | Glassware | Permanent Slide Columnar Epithelium | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.55 | Glassware | Permanent Slide Cuboidal Epithelium | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.56 | Glassware | Permanent Slide Diatom | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.57 | Glassware | Permanent Slide Dicot Leaf | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.58 | Glassware | Permanent Slide Dicot Root | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.59 | Glassware | Permanent Slide Dicot Stem | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.60 | Glassware | Permanent Slide Fern | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.61 | Glassware | Permanent Slide Human Blood R.C. B | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.62 | Glassware | Permanent Slide Human Blood W.B.C. | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.63 | Glassware | Permanent Slide Hydra | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |

| D.64 | Glassware | Permanent Slide Lichen | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
|------|-----------|--|---|---|--------|----|
| D.65 | Glassware | Permanent Slide Marchantiid | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.66 | Glassware | Permanent Slide Medullated Nerve | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.67 | Glassware | Permanent Slide Mitosis | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.68 | Glassware | Permanent Slide Mitosis | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.69 | Glassware | Permanent Slide Monocot Leaf | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.70 | Glassware | Permanent Slide Monocot Root | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.71 | Glassware | Permanent Slide Monocot Stem | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.72 | Glassware | Permanent Slide Mosquito Slide | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.73 | Glassware | Permanent Slide Nerve Cell Muscle | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.74 | Glassware | Permanent Slide Non-Medullated Nerve | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.75 | Glassware | Permanent Slide Nostos | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.76 | Glassware | Permanent Slide Onion Root Tip | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.77 | Glassware | Permanent Slide Oscillatory | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |

| D.78 | Glassware | Permanent Slide Paramecium | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
|------|-----------|--|---|---|--------|----|
| D.79 | Glassware | Permanent Slide Parenchyma | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.80 | Glassware | Permanent Slide Pinus Cone Female | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.81 | Glassware | Permanent Slide Pinus Cone Male | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.82 | Glassware | Permanent Slide Plant Cell, Onion Peel | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.83 | Glassware | Permanent Slide Rhizopods | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.84 | Glassware | Permanent Slide Rician | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.85 | Glassware | Permanent Slide Ringworm | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.86 | Glassware | Permanent Slide Safaris Female, Bacteria | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.87 | Glassware | Permanent Slide Safaris Male | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.88 | Glassware | Permanent Slide Sclerenchyma | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.89 | Glassware | Permanent Slide Smooth Muscle Mammal: Artery | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.90 | Glassware | Permanent Slide Smooth Muscle Mammal: Blood | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.91 | Glassware | Permanent Slide Smooth Muscle | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |

| | | Mammal: Bone | | | | |
|-------|-----------|--|---|---|--------|----|
| D.92 | Glassware | Permanent Slide Smooth Muscle Mammal: Elastic Cartilage | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.93 | Glassware | Permanent Slide Smooth Muscle Mammal: Heart | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.94 | Glassware | Permanent Slide Smooth Muscle Mammal: Hyaline Cartilage | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.95 | Glassware | Permanent Slide Smooth Muscle Mammal: Kidney | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.96 | Glassware | Permanent Slide Smooth Muscle Mammal: Liver | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.97 | Glassware | Permanent Slide Smooth Muscle Mammal: Ovary | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.98 | Glassware | Permanent Slide Smooth Muscle Mammal: Pancreases | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.99 | Glassware | Permanent Slide Smooth Muscle Mammal: Skin | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.100 | Glassware | Permanent Slide Smooth Muscle Mammal: Spinal Cord | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.101 | Glassware | Permanent Slide Smooth Muscle Mammal: Spleen | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |

| D.102 | Glassware | Permanent Slide Smooth Muscle Mammal: Stomach | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
|-------|-----------|---|---|----|--------|-------|
| D.103 | Glassware | Permanent Slide Smooth Muscle Mammal: Testis | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.104 | Glassware | Permanent Slide Smooth Muscle Mammal: Vein | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.105 | Glassware | Permanent Slide Spirogyra | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.106 | Glassware | Permanent Slide Squamous Epithelium | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.107 | Glassware | Permanent Slide Stomata | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.108 | Glassware | Permanent Slide Volvox | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.109 | Glassware | Permanent Slide Xylem | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.110 | Glassware | Permanent Slide Yeast | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.111 | Glassware | Permanent Slide Yeast | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.112 | Glassware | Permanent Slide Yeast Budding | Superior quality, very clear slides, for using under microscope | 1 | Number | 68 |
| D.113 | Glassware | Petri Dish Glass | Soda glass, without cover, diameter 96 mm. | 20 | Number | 1,360 |
| D.114 | Glassware | Petri dish Plastic | Plastic dish outer diameter. 120 mm X 30 mm depth | 20 | Number | 1,360 |
| D.115 | Glassware | Pipette Signal mark | 5ml (Borosilicate like Glass) | 20 | Number | 1,360 |

| D.116 | Glassware | Pipette Signal mark | 20ml and 25 ml (Borosilicate like Glass) pack of 30 | 5 | Number | 340 |
|-------|-----------|---|--|----|--------|-------|
| D.117 | Glassware | Plain mirror | 2 mm X 50 mm Diameter. Round edges. | 20 | Number | 1,360 |
| D.118 | Glassware | Plane mirror strip | Good quality, 150 X 30 X 2 mm. | 20 | Number | 1,360 |
| D.119 | Glassware | Preserved material of Fern | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 1 | Number | 68 |
| D.120 | Glassware | Preserved material of Fumaria | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 1 | Number | 68 |
| D.121 | Glassware | Preserved material of Marchantia (liver wort) | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 1 | Number | 68 |
| D.122 | Glassware | Preserved Specimen bladder wort | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 1 | Number | 68 |
| D.123 | Glassware | Preserved Specimen Cockroach | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 1 | Number | 68 |
| D.124 | Glassware | Preserved Specimen hydrilla | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 1 | Number | 68 |
| D.125 | Glassware | Preserved Specimen lichen | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 1 | Number | 68 |
| D.126 | Glassware | Preserved Specimen ascaris Male | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 1 | Number | 68 |
| D.127 | Glassware | Preserved Specimen certophyllum | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 1 | Number | 68 |
| D.128 | Glassware | Preserved Specimen Earthworm | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 1 | Number | 68 |

| D.129 | Glassware | Preserved Specimen eichhornia | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 1 | Number | 68 |
|-------|-----------|---|---|----|--------|-------|
| D.130 | Glassware | Preserved Specimen epiphytic root | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 1 | Number | 68 |
| D.131 | Glassware | Preserved Specimen Liver Fluke | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 1 | Number | 68 |
| D.132 | Glassware | Preserved Specimen Safaris Female | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 1 | Number | 68 |
| D.133 | Glassware | Preserved Specimen salvinia | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 1 | Number | 68 |
| D.134 | Glassware | Preserved Specimen Silk Moth | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 1 | Number | 68 |
| D.135 | Glassware | Preserved Specimen Tape Worm | In glass Jar size 15cm+/-1cm height x 5cms +/- 1cm. diameter mounted on plastic transparent white and black plates | 1 | Number | 68 |
| D.136 | Glassware | Prism | 38 mm ± 5mm Equilateral BK7 Grade A optical glass Diameter Tolerance +0.0, -0.20mm clear aperture >90% Flatness N2 @ 632.8 nm Surface Quality 60-40 scratch and dig Bevel <0.25mm× 45° | 20 | Number | 1,360 |
| D.137 | Glassware | Reagent Bottle | Narrow Mouth with interchangble stopper 500 ml (Borosilicate like Glass) | 20 | Number | 1,360 |
| D.138 | Glassware | Round Bottom flask | Pack of Borosilicate or equivalent glass, capacity 35 ml, 50 ml 100 ml 250 ml and 500 ml short neck with rubber cork | 20 | Number | 1,360 |
| D.139 | Glassware | Short inlet tube | Made of glass, length 10 cm diameter 1 cm | 20 | Number | 1,360 |
| D.140 | Glassware | Stirrer | Soda glass with circular flat end, length 100 mm. Glass rod diameter 4 mm. | 20 | Number | 1,360 |

| D.141 | Glassware | Test tube | 15x 125mm±2mm (Borosilicate like glass) with rim duly packed in a grooved plastic tray of capacity 10 pieces and packed in a 50 pcs. Box | 300 | Number | 20,400 |
|-------|---------------|---------------------|--|-----|--------|--------|
| D.142 | Glassware | Test tube | 12x75mm±1mm (Borosilicate like glass) with rim | 200 | Number | 13,600 |
| D.143 | Glassware | Test Tube | Borosilicate like glass 15 mm 0.5 cm dia with rim duly packed in a grooved plastic tray of capacity 10 pieces and packed in a 50 pcs. Box | 50 | Number | 3,400 |
| D.144 | Glassware | Volumetric Flask | Borosilicate like glass, with inter changeable stopper Capacity 250 ml | 20 | Number | 1,360 |
| D.145 | Glassware | W –Tube | Borosilicate like glass, 2 mm thick x 8 mm diameter having length of arms 70-75 mm, with wide mouth in one arm. | 20 | Number | 1,360 |
| D.146 | Glassware | Watch Glass | Routine quality glass 3" | 2 | Dozen | 136 |
| | Glassware (D) | | | | | |
| E.1 | Consumables | Aluminium foil roll | 9 meter 300mm Water proof, optimum finish non-stick corrosion resistant. Thickness 18 micron | 1 | Number | 68 |
| E.2 | Consumables | Blades | Stainless Steel (pack of good quality 5 blades) | 2 | Number | 136 |
| E.3 | Consumables | Blotting paper | 100 mm x 100 mm. | 10 | Number | 680 |
| E.4 | Consumables | Blow Pipe | Nickel-plated copper length 200 mm approx. | 20 | Number | 1,360 |
| E.5 | Consumables | Brush for burrete | Material - Nylon good quality, Thick hair | 20 | Number | 1,360 |
| E.6 | Consumables | Brush for test tube | Material - Nylon good quality, Thick hair | 20 | Number | 1,360 |

| E.7 | Consumables | Brush Pippette | Material - Nylon good quality, Thick hair | 20 | Number | 1,360 |
|------|-------------|---|--|----|--------|-------|
| E.8 | Consumables | Capacitor | Assorted (Pack of 25) | 10 | Number | 680 |
| E.9 | Consumables | Cardboard Sheets of different thickness | pack of 12 standard cardboard sheets of different thickness | 3 | Number | 204 |
| E.10 | Consumables | Castor oil / Glycerin | half litre pack | 1 | Number | 68 |
| E.11 | Consumables | cello tape | Rubber adhesive 19mm length 50 m thickness 36-60 mic | 1 | Number | 68 |
| E.12 | Consumables | Cellophane sheet | 1 roll 15-meter width 30 cm | 1 | Number | 68 |
| E.13 | Consumables | Charcoal Block | 4"x1" pk of 12 pc | 10 | Number | 680 |
| E.14 | Consumables | Claw hammer with handle | Forged, approximate weight 225 gm with wooden handle | 1 | Number | 68 |
| E.15 | Consumables | Connecting wire with Banana plug | Soft electric wire 200 mm. Length double cloth covered both end fitted with banana plug. Two red and two black | 20 | Number | 1,360 |
| E.16 | Consumables | Constantan wire | 26 SWG 50 cm Approx. length | 20 | Number | 1,360 |
| E.17 | Consumables | Copper strip | 80 mm. X 5 mm. x 1 mm. | 20 | Number | 1,360 |
| E.18 | Consumables | Copper wire | 100 cm long, thickness 24 SWG | 20 | Number | 1,360 |
| E.19 | Consumables | Copper wire bent in u form | Diameter. 1 mm. copper wire U band 30 mm. x 35 mm height and both corner band 6 mm. in 90°. | 20 | Number | 1,360 |
| E.20 | Consumables | Cork | Assorted size in a pack of 25 | 2 | Number | 136 |

| E.21 | Consumables | Cork Screw | Wooden / plastic handle with stainless steel opener. | 2 | Number | 136 |
|------|-------------|------------------|---|----|--------|-------|
| E.22 | Consumables | Cotton roll | good quality medicated (Large pkt) | 1 | Number | 68 |
| E.23 | Consumables | Cotton thread | Thread roles, strong | 1 | Number | 68 |
| E.24 | Consumables | Cover Slips | Thickness 0.2 mm – 0.3 mm approx. square glass pieces. Packet of 100 | 2 | Number | 136 |
| E.25 | Consumables | Cover slips | 18x18mm pack of 10gm | 10 | Number | 680 |
| E.26 | Consumables | Crocodile Clips | Set of Clips 50 mm, Plated, standard flexible wire 76, 50 cm long Each set two wire five Colour | 20 | Number | 1,360 |
| E.27 | Consumables | Detergent powder | 200 gm | 1 | Number | 68 |
| E.28 | Consumables | Diode | Assorted pack | 10 | Number | 680 |
| E.29 | Consumables | Distilled water | in plastic bottle 1 Li | 2 | Number | 136 |
| E.30 | Consumables | drawing pins | With plastic head (pack of 50) | 10 | Number | 680 |
| E.31 | Consumables | dropping bottle | Blown in Low Density Polyethylene, Polylab Dropping Bottles dispense small uniform drops of liquids when pressed lightly. Material: Low Density Polyethylene. 60 ml (pack of 25) | 2 | Number | 136 |
| E.32 | Consumables | Electric wire | Copper wire, plastic coated copper wire 10 meter | 1 | Number | 68 |
| E.33 | Consumables | Electrical Fuse | Seamless finish, Rust Resistance, 16 amps 240 volt | 4 | Number | 272 |
| E.34 | Consumables | Filter paper | No. 1 Dia 12.5 cm superior pack of 100 circles | 20 | Number | 1,360 |

| E.35 | Consumables | Flexible wire with red and black insulation - 1 roll | Double cloth covered 10 meter | 1 | Number | 68 |
|------|-------------|--|--|----|--------|-------|
| E.36 | Consumables | Funnel | Plastic, transparent top diameter,90 mm. x overall length140 mm | 20 | Number | 1,360 |
| E.37 | Consumables | Fuse wire | 1 roll | 1 | Number | 68 |
| E.38 | Consumables | Graduated Syringe | Standard, plastic, capacity 10 ml Pipettes - Graduated/ Serological/ Volumetric Comes in various sizes as mentioned | 20 | Number | 1,360 |
| E.39 | Consumables | Graph Paper | A4 size book of 48 pages | 2 | Number | 136 |
| E.40 | Consumables | Hair pins | Length - 7cm in (pack of a dozen) | 10 | Number | 680 |
| E.41 | Consumables | Half Meter scale | Made of plastic graduation in mm, cm and inch | 15 | Number | 1,020 |
| E.42 | Consumables | Heating Block | Aluminum, 63 mm diameter X 55 mm height, 02 holes' diameter 6 mm x 30 mm deep, and split fitted with handle: Mild Steel Rod 06 mm diameter X 130 mm length. One 0.5 mm deep cut on face for capillary tube. | 20 | Number | 1,360 |
| E.43 | Consumables | Ice Cream Spoon | Good quality Wooden (packet of 25) | 2 | Number | 136 |
| E.44 | Consumables | Iron Filings | Grease free filing in plastic bottles 50 grams' packets | 20 | Number | 1,360 |
| E.45 | Consumables | Iron Nails | Length 38 mm, 15 SWG | 50 | Number | 3,400 |
| E.46 | Consumables | Iron strip | 80 mm. X 5 mm. x 1 mm. with terminals | 20 | Number | 1,360 |
| E.47 | Consumables | L.E.D. | Assorted pack 25 LED 5 mm different colors | 1 | Number | 68 |

| E.48 | Consumables | Lab Safety glasses | One piece polycarbonate molded visor with adjustable arm. Transparent Scratch Resistance, light weight 30 grams approx. | 20 | Number | 1,360 |
|------|-------------|------------------------------------|---|----|--------|-------|
| E.49 | Consumables | Lycopodium Powder | 1 packet 200 grams | 1 | Number | 68 |
| E.50 | Consumables | Marker pen | Permanent marker used writing on glass | 2 | Number | 136 |
| E.51 | Consumables | Measuring scale | Wooden / plastic 12 ' Graduation in cm, mm, feet and inch length 1, meter | 20 | Number | 1,360 |
| E.52 | Consumables | Measuring Tape | Made of plastic. Graduation in cm, mm, feet and inch length 1, meter | 20 | Number | 1,360 |
| E.53 | Consumables | Metal Strips | Aluminum Strips, dimension 80 mm x 5 mm, x1 mm. | 20 | Number | 1,360 |
| E.54 | Consumables | Meter scale wooden | I meter scale wooden Graduation in cm, mm, feet and inch length 1, meter | 20 | Number | 1,360 |
| E.55 | Consumables | Muslin/cheese cloths | Threads per inch grams per M2+5% C-1, 24x18- 100cms bleached 5 meter | 1 | Number | 68 |
| E.56 | Consumables | Nichrome wire / Resistance wire | 26 SWG 50 m Approx. length | 1 | Number | 68 |
| E.57 | Consumables | on / off switches | Simple on off switches made of plastic with copper fittings inside | 20 | Number | 1,360 |
| E.58 | Consumables | paper pin | stainless steel (packet) | 1 | Number | 68 |
| E.59 | Consumables | Pestal and Mortar | Porcelain superior quality size 6" | 2 | Number | 136 |
| E.60 | Consumables | pH Paper | pH 1-14, paper box containing, packet of 5 (100 Strips each) | 20 | Number | 1,360 |
| E.61 | Consumables | Pith / Plastic Ball | Diameter 12 mm. solid center throughout hole 1.5 mm. | 20 | Number | 1,360 |

| E.62 | Consumables | Protector small | Made of Plastic, degrees marked in semicircular 0-180 with 5 w | 20 | Number | 1,360 |
|------|-------------|---|--|----|--------|-------|
| E.63 | Consumables | Pulley | Aluminum, 50 mm diameter fitted with hook Frictionless with smooth edge, capacity 1 kg | 20 | Number | 1,360 |
| E.64 | Consumables | Roller (lead shots), | Rc-112 Fitted With 7/16" Square Blocks Double Silk Covered Non-Inductive Windings. Accuracy - 0.1 % Educational Quality. In 100 gm packets | 1 | Number | 68 |
| E.65 | Consumables | Rubber Balloons | 2 packet bigger size and 2 packet smaller size. Assorted size | 2 | Number | 136 |
| E.66 | Consumables | Rubber Bands | As per sample. Assorted size | 2 | Number | 136 |
| E.67 | Consumables | Rubber cork | Standard, armed, Assorted pack of 20 each of size nos. 2, 3, 4, 5 and 6. | 1 | Number | 68 |
| E.68 | Consumables | Rubber Tube | 10 cm 0.5 cm dia Good quality | 20 | Number | 1,360 |
| E.69 | Consumables | Sand paper | Standard, 60 and 120 number. 5 each | 12 | Number | 816 |
| E.70 | Consumables | Scale with holes at regular interval (Grooved scale Meter) | Wood/ plastic Wook distance marked in cm mm ft. and inch. | 20 | Number | 1,360 |
| E.71 | Consumables | Scalpel | Stainless steel | 20 | Number | 1,360 |
| E.72 | Consumables | Screw | 1 inch | 50 | Number | 3,400 |
| E.73 | Consumables | Screw driver | 150 mm long, hardened, with plastic handle. | 2 | Number | 136 |
| E.74 | Consumables | Sharp edged knife, | Stainless steel length of cutting edge 6 cm with Plastic handle | 4 | Number | 272 |

| E.75 | Consumables | Small Plastic beads | 5 different colors One packet each color (1 set) | 15 | Number | 1,020 |
|------|-------------|--|--|----|--------|-------|
| E.76 | Consumables | Solid steel balls 1mm to 3 mm diameter | 1 mm diameter packet of 50 | 15 | Number | 1,020 |
| E.77 | Consumables | Solid steel balls 1mm to 3 mm diameter | 3 mm diameter packet of 50 | 15 | Number | 1,020 |
| E.78 | Consumables | Spatula | Stainless Steel one end spoon 8" | 20 | Number | 1,360 |
| E.79 | Consumables | Surgical Scissor | Material - Stainless steel, 125 mm, one prong blunt and other pointed, standard. | 20 | Number | 1,360 |
| E.80 | Consumables | Syringe Pump | Poly carbonate syringe pump overall size with piston 200 mm. length and outer Diameter. 30 mm. | 20 | Number | 1,360 |
| E.81 | Consumables | Test Plate/Well plate | Polystyrene (PS), with 96 wells Polylab micro test plates are made of optically clear, non-toxic Polystyrene. These plates with 96 U Bottom or flat bottom wells bear alpha-numeric index | 20 | Number | 1,360 |
| E.82 | Consumables | Thread | 1 Roll. Good quality | 1 | Number | 68 |
| E.83 | Consumables | Three bulbs | Pack of four bulbs 25w, 60w, 100w, 40w | 2 | Number | 136 |
| E.84 | Consumables | Tissue paper | Good quality (packet of 50) | 2 | Number | 136 |
| E.85 | Consumables | Toothpick, | wooden (1 pkt) | 1 | Number | 68 |
| E.86 | Consumables | Tracing paper | 1 packet | 1 | Number | 68 |
| E.87 | Consumables | Two pin plug | good quality 5 amperes steel pins | 5 | Number | 340 |

| E.88 | Consumables | Vials | High Density Poly Ethylene (HDPE), height 55 mm, diameter 15 mm. | 20 | Number | 1,360 |
|------|-------------|------------------------------|---|----|--------|-------|
| E.89 | Consumables | Wash Bottle | 250ml. Good quality plastic | 20 | Number | 1,360 |
| E.90 | Consumables | White paper sheet Thick | Photocopier paper in Packet | 1 | Number | 68 |
| E.91 | Consumables | White Tiles | 6"x6" | 20 | Number | 1,360 |
| E.92 | Consumables | wicks for spirit burner | 1 meter | 1 | Number | 68 |
| E.93 | Consumables | Wooden Block (known Mass) | Wooden Block with hook. Teak wood, Superior thick 2 cm x 5 cm x 5cm | 20 | Number | 1,360 |
| E.94 | Consumables | Zinc strip | 80 mm. X 5 mm. x 1 mm. superior quality with terminals | 20 | Number | 1,360 |

2. Delivery and Completion Schedule

The table below is the indicative delivery milestone for schools in tranches of 10 is provided in table below. Milestones for rest of the schools will be mutually decided between the Department of Education and the successful supplier. The vendor will be provided with the exact details of schools (in package of 10) from Department of Education.

The bidder may conduct site visit before the submission of bid at its own cost in order to ascertain the site condition, internet connectivity, etc.

| # | Milestones | Timeline |
|----|---|------------|
| 1. | Supply science laboratory equipment and other items in first 10 schools | T+1 months |
| 2. | Supply science laboratory equipment and other items in first 10 schools | T+2 months |
| 3. | Supply science laboratory equipment and other items in first 10 schools | T+3 months |
| 4. | Supply science laboratory equipment and other items in first 10 schools | T+4 months |
| 5. | Supply science laboratory equipment and other items in first 10 schools | T+5 months |
| 6. | Supply science laboratory equipment and other items in first 10 schools | T+6 months |
| 7. | Supply science laboratory equipment and other items in 8 schools | T+7 months |

T is the date of commencement of work. This would be tentatively July2018.

| DISTRICT | BLOCK | NO OF SCHOOLS |
|--------------------|-------------------------------|---------------|
| EAST JAINTIA HILLS | KHLIEHRIAT | 5 |
| | KHADARSHNONG - LAITKROH | 2 |
| | MAWKYNREW | 1 |
| | MAWPHLANG | 3 |
| | MAWRYNGKNENG | 4 |
| EAST KHASI HILLS | MAWSYNRAM | 4 |
| | MYLLIEM | 4 |
| | PYNURSLA | 4 |
| | SHELLA BHOLAGANJ | 2 |
| | SHILLONG MUNICIPAL AND CANTT. | 9 |
| | AMLAREM | 2 |
| WEST JAINTIA HILLS | LASKEIN | 4 |
| | THADLASKEIN | 5 |
| RI BHOI | UMLING | 3 |
| | UMSNING | 5 |
| SOUTH WEST KHASI | MAWKYRWAT | 3 |
| HILLS | RANIKOR | 1 |
| | MAIRANG | 2 |
| | MAWSHYNRUT | 2 |
| | MAWTHADRAISHAN | 2 |
| WEST KHASI HILLS | NONGSTOIN | 1 |
| Grand Total | Grand Total | 68 |

A. Indicative list of District/Block wise spread of schools in Meghalaya

3. Technical Specifications

As mentioned in the List of Goods and Related Service above

Section 7- General Conditions of Contract

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- **1. Definitions** 1.1 The following words and expressions shall have the meanings hereby assigned to them:
 - (a) "Contract" means the Agreement entered into between the Purchaser and the Supplier, together with the Contract Documents referred to therein, including all attachments, appendixes, and all documents incorporated by reference therein.
 - (b) "Contract Documents" means the documents listed in the Agreement, including any amendments thereto.
 - (c) "Contract Price" means the price payable to the Supplier as specified in the Agreement, subject to such additions and adjustments thereto or deductions therefrom, as may be made pursuant to the Contract.
 - (d) "Day" means calendar day.
 - (e) "Delivery" means the transfer of the Goods from the Supplier to the Purchaser in accordance with the terms and conditions set forth in the Contract.
 - (f) "Completion" means the fulfillment of the Related Services by the Supplier in accordance with the terms and conditions set forth in the Contract.
 - (g) "Eligible Countries" means the countries and territories eligible as listed in Section 5.
 - (h) "GCC" mean the General Conditions of Contract.
 - (i) "Goods" means all of the commodities, raw material, machinery and equipment, and/or other materials that the Supplier is required to supply to the Purchaser under the Contract.
 - (j) "Purchaser's Country" is the country specified in the Special Conditions of Contract (SCC).
 - (k) "Purchaser" means the entity purchasing the Goods and Related Services, as specified in the SCC.
 - (I) "Related Services" means the services incidental to the supply of the goods, such as insurance, installation, training and initial maintenance and other similar obligations of the Supplier under the Contract.
 - (m) "SCC" means the Special Conditions of Contract.
 - (n) "Subcontractor" means any natural person, private or government entity, or a combination of the above, including its legal successors or permitted assigns, to whom any part of the Goods to be supplied or execution of any part of the Related Services is subcontracted by the Supplier.
 - (o) "Supplier" means the natural person, private or government entity, or a combination of the above, whose bid to perform the Contract has been accepted by the Purchaser and is named

as such in the Agreement, and includes the legal successors or permitted assigns of the Supplier.

- (p) "ADB" is the Asian Development Bank.
- (q) "The Site," where applicable, means the place named in the SCC.
- Contract 2.1 Subject to the order of precedence set forth in the Agreement, all documents forming the Contract (and all parts thereof) are intended to be correlative, complementary, and mutually explanatory.
- 3. Fraud and Corruption 3.1 ADB's Anticorruption Policy requires Borrowers (including beneficiaries of ADB-financed activity), as well as Bidders, Suppliers, and Contractors under ADB-financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts. In pursuance of this policy, ADB
 - (a) defines, for the purposes of this provision, the terms set forth below as follows:
 - (i) "corrupt practice" means the offering, giving, receiving, or soliciting, directly or indirectly, anything of value to influence improperly the actions of another party;
 - (ii) "fraudulent practice" means any act or omission, including a misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain a financial or other benefit or to avoid an obligation;
 - (iii) "coercive practice" means impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
 - (iv) "collusive practice" means an arrangement between two or more parties designed to achieve an improper purpose, including influencing improperly the actions of another party;
 - (v) "obstructive practice" means (a) deliberately destroying, falsifying, altering, or concealing of evidence material to an ADB investigation; (b) making false statements to investigators in order to materially impede an ADB investigation; (c) failing to comply with requests to provide information, documents or records in connection with an Office of Anticorruption and Integrity (OAI) investigation; (d) threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or (e) materially impeding ADB's contractual rights of audit or access to information; and
 - (vi) "integrity violation" is any act which violates ADB's Anticorruption Policy, including (i) to (v) above and the following: abuse, conflict of interest, violations of ADB sanctions, retaliation against whistleblowers or witnesses,andother violations of ADB's Anticorruption Policy, including failure to adhere to the highest ethical

standard.

- (b) will reject a proposal for award if it determines that the Bidder recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices or other integrity violations in competing for the Contract;
- (c) will cancel the portion of the financing allocated to a contract if it determines at any time that representatives of the borrower or of a beneficiary of ADB-financing engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices or other integrity violations during the procurement or the execution of that contract, without the borrower having taken timely and appropriate action satisfactory to ADB to remedy the situation; and
- will impose remedial actions on a firm or an individual, at any (d) time, in accordance with ADB's Anticorruption Policy and Integrity Principles and Guidelines (both as amended from time to time), including declaring ineligible, either indefinitely or for a stated period of time, to participate⁵ in ADB-financed, administered, or supported activities or to benefit from an ADB-financed. administered. or supported contract. financially or otherwise, if it at any time determines that the firm or individual has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices or other integrity violations.
- 3.2 The Supplier shall permit ADB to inspect the Supplier's accounts and records relating to the performance of the Supplier and to have them audited by auditors appointed by ADB, if so required by ADB.
- **4.** Interpretation 4.1 If the context so requires it, singular means plural and vice versa.
 - 4.2 Incoterms
 - (a) The meaning of any trade term and the rights and obligations of parties thereunder shall be as prescribed by Incoterms.
 - (b) EXW, CIF, CIP, and other similar terms, shall be governed by the rules prescribed in the current edition of Incoterms, published by the International Chamber of Commerce at the date of the Invitation for Bids or as specified in the SCC.
 - 4.3 Entire Agreement

The Contract constitutes the entire agreement between the Purchaser and the Supplier and supersedes all communications, negotiations, and agreements (whether written or oral) of parties with respect thereto made prior to the date of Contract.

⁵ Whether as a Contractor, Subcontractor, Consultant, Manufacturer or Supplier, or Service Provider; or in any other capacity (different names are used depending on the particular Bidding Document).

No amendment or other variation of the Contract shall be valid unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorized representative of each party thereto.

- 4.5 Non-waiver
 - (a) Subject to GCC Sub-clause 4.5(b) below, no relaxation, forbearance, delay, or indulgence by either party in enforcing any of the terms and conditions of the Contract or the granting of time by either party to the other shall prejudice, affect, or restrict the rights of that party under the Contract, neither shall any waiver by either party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.
 - (b) Any waiver of a party's rights, powers, or remedies under the Contract must be in writing, dated, and signed by an authorized representative of the party granting such waiver, and must specify the right and the extent to which it is being waived.
- 4.6 Severability

If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.

- 5. Language 5.1 The Contract as well as all correspondence and documents relating to the Contract exchanged by the Supplier and the Purchaser, shall be written in the language specified in the SCC. Supporting documents and printed literature that are part of the Contract may be in another language provided they are accompanied by an accurate translation of the relevant passages in the language specified in the SCC, in which case, for purposes of interpretation of the Contract, this translation shall govern.
 - 5.2 The Supplier shall bear all costs of translation to the governing language and all risks of the accuracy of such translation.
- 6. Joint Venture 6.1 If the Supplier is a Joint Venture all of the parties shall be jointly and severally liable to the Purchaser for the fulfillment of the provisions of the Contract and shall designate one party to act as a leader with authority to bind the Joint Venture. The composition or the constitution of the Joint Venture shall not be altered without the prior consent of the Purchaser.
- 7. Eligibility 7.1 The Supplier and its Subcontractors shall have the nationality of an eligible country. A Supplier or Subcontractor shall be deemed to have the nationality of a country if it is a citizen or constituted or incorporated, and operates in conformity with the provisions of the

- 7.2 All Goods and Related Services to be supplied under the Contract and financed by ADB shall have their origin in Eligible Countries. For the purpose of this clause, origin means the country where the goods have been grown, mined, cultivated, produced, manufactured, or processed; or through manufacture, processing, or assembly, another commercially recognized article results that differs substantially in its basic characteristics from its imported components.
- 8. Notices 8.1 Any Notice given by one party to the other pursuant to the Contract shall be in writing to the address specified in the SCC. The term "in writing" means communicated in written form with proof of receipt.
 - 8.2 A Notice shall be effective when delivered or on the Notice's effective date, whichever is later.
- **9. Governing Law** 9.1 The Contract shall be governed by and interpreted in accordance with the laws of the Purchaser's country, unless otherwise specified in the SCC.
- 10. Settlement of Disputes
 10.1 The Purchaser and the Supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.
 - 10.2 If the parties fail to resolve such a dispute or difference by mutual consultation within 28 days from the commencement of such consultation, either party may require that the dispute be referred for resolution to the formal mechanisms specified in the SCC.
- **11.** Scope of
Supply11.1Subject to the SCC, the Goods and Related Services to be supplied
shall be as specified in Section 6(Schedule of Supply).
 - 11.2 Unless otherwise stipulated in the Contract, the Scope of Supply shall include all such items not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining Delivery and Completion of the Goods and Related Services as if such items were expressly mentioned in the Contract.
- 12. Delivery
 12.1 Subject to GCC Sub-clause 33.1, the Delivery of the Goods and Completion of the Related Services shall be in accordance with the Delivery and Completion Schedule specified in the Section 6(Schedule of Supply). The details of shipping and other documents to be furnished by the Supplier are specified in the SCC.
- **13. Supplier's Responsibilities** 13.1 The Supplier shall supply all the Goods and Related Services included in the Scope of Supply in accordance with GCC Clause 11, and the Delivery and Completion Schedule, as per GCC Clause 12.
- 14. Purchaser's Responsibilities
 14.1 Whenever the supply of Goods and Related Services requires that the Supplier obtain permits, approvals, and import and other licenses from local public authorities, the Purchaser shall, if so required by the Supplier, make its best effort to assist the Supplier in complying

with such requirements in a timely and expeditious manner.

- 14.2 The Purchaser shall pay all costs involved in the performance of its responsibilities, in accordance with GCC Sub-clause 14.1.
- **15. Contract Price** 15.1 The Contract Price shall be as specified in the Agreement subject to any additions and adjustments thereto, or deductions therefrom, as may be made pursuant to the Contract.
 - 15.2 Prices charged by the Supplier for the Goods delivered and the Related 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 the SCC.
- **16. Terms of** 16.1 The Contract Price shall be paid as specified in the SCC. **Payment**
 - 16.2 The Supplier's request for payment shall be made to the Purchaser in writing, accompanied by invoices describing, as appropriate, the Goods delivered and Related Services performed, and by the documents submitted pursuant to GCC Clause 12 and upon fulfillment of all the obligations stipulated in the Contract.
 - 16.3 Payments shall be made promptly by the Purchaser, no later than 60 days after submission of an invoice or request for payment by the Supplier, and the Purchaser has accepted it.
 - 16.4 The currency or currencies in which payments shall be made to the Supplier under this Contract shall be specified in the SCC.
- 17. Taxes and Duties
 17.1 For goods supplied from outside the Purchaser's country, the Supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the Purchaser's country.
 - 17.2 For goods supplied from within the Purchaser's country, the Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted Goods to the Purchaser.
 - 17.3 If any tax exemptions, reductions, allowances or privileges may be available to the Supplier in the Purchaser's Country, the Purchaser shall use its best efforts to enable the Supplier to benefit from any such tax savings to the maximum allowable extent.
- 18. Performance Security
 18.1 The Supplier shall, within 28 days of the notification of Contract award, provide a Performance Security for the due performance of the Contract in the amounts and currencies specified in the SCC.
 - 18.2 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.
 - 18.3 The Performance Security shall be denominated in the currencies of the Contract, or in a freely convertible currency acceptable to the Purchaser, and shall be in one of the forms stipulated by the Purchaser in the SCC, or in another form acceptable to the

Purchaser.

- 18.4 The Performance Security shall be discharged by the Purchaser and returned to the Supplier not later than 28 days following the date of completion of the Supplier's performance obligations under the Contract, including any warranty obligations, unless specified otherwise in the SCC.
- **19. Copyright** 19.1 The copyright in all drawings, documents, and other materials containing data and information furnished to the Purchaser by the Supplier herein shall remain vested in the Supplier, or, if they are furnished to the Purchaser directly or through the Supplier by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party.
- 20. Confidential 20.1 The Purchaser and the Supplier shall keep confidential and shall not, without the written consent of the other party hereto, divulge to any Information third party any documents, data, or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following completion or termination of the Contract. Notwithstanding the above, the Supplier may furnish to its Subcontractor such documents, data, and other information it receives from the Purchaser to the extent required for the Subcontractor to perform its work under the Contract, in which event the Supplier shall obtain from such Subcontractor an undertaking of confidentiality similar to that imposed on the Supplier under GCC Clause 20.
 - 20.2 The Purchaser shall not use such documents, data, and other information received from the Supplier for any purposes unrelated to the Contract. Similarly, the Supplier shall not use such documents, data, and other information received from the Purchaser for any purpose other than the design, procurement, or other work and services required for the performance of the Contract.
 - 20.3 The obligation of a party under GCC Sub-clauses 20.1 and 20.2 above, however, shall not apply to information that
 - (a) the Purchaser or Supplier need to share with ADB or other institutions participating in the financing of the Contract;
 - (b) now or hereafter enters the public domain through no fault of that party;
 - (c) can be proven to have been possessed by that party at the time of disclosure and which was not previously obtained, directly or indirectly, from the other party; or
 - (d) otherwise lawfully becomes available to that party from a third party that has no obligation of confidentiality.
 - 20.4 The above provisions of GCC Clause 20 shall not in any way modify any undertaking of confidentiality given by either of the parties hereto prior to the date of the Contract in respect of the Supply or

any part thereof.

- 20.5 The provisions of GCC Clause 20 shall survive completion or termination, for whatever reason, of the Contract.
- **21. Subcontracting** 21.1 The Supplier shall notify the Purchaser in writing of all subcontracts awarded under the Contract if not already specified in the Bid. Subcontracting shall in no event relieve the Supplier from any of its obligations, duties, responsibilities, or liability under the Contract.
 - 21.2 Subcontracts shall comply with the provisions of GCC Clauses 3 and 7.

22. Specifications 22.1 Technical Specifications and Drawings and Standards

- (a) The Supplier shall ensure that the Goods and Related Services comply with the technical specifications and other provisions of the Contract.
- (b) The Supplier shall be entitled to disclaim responsibility for any design, data, drawing, specification or other document, or any modification thereof provided or designed by or on behalf of the Purchaser, by giving a notice of such disclaimer to the Purchaser.
- (c) The Goods and Related Services supplied under this Contract shall conform to the standards mentioned in Section 6(Schedule of Supply) and, when no applicable standard is mentioned, the standard shall be equivalent or superior to the official standards whose application is appropriate to the country of origin of the Goods.
- 22.2 Wherever references are made in the Contract to codes and standards in accordance with which it shall be executed, the edition or the revised version of such codes and standards shall be those specified in the Section 6(Schedule of Supply). During Contract execution, any changes in any such codes and standards shall be applied only after approval by the Purchaser and shall be treated in accordance with GCC Clause 33.
- **23. Packing and Documents** 23.1 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. During transit, the packing shall be sufficient to withstand, without limitation, rough handling and exposure to extreme temperatures, salt and precipitation, and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the final destination of the Goods and the absence of heavy handling facilities at all points in transit.
 - 23.2 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 the SCC, and in any other instructions ordered by the Purchaser.

- 24. Insurance 24.1 Unless otherwise specified in the SCC, the Goods supplied under the Contract shall be fully insured, in a freely convertible currency from an eligible country, against loss or damage incidental to manufacture or acquisition, transportation, storage, and delivery, in accordance with the applicable Incoterms or in the manner specified in the SCC.
- **25. Transportation** 25.1 Unless otherwise specified in the SCC, obligations for transportation of the Goods shall be in accordance with the Incoterms specified in Sections 6(Schedule of Supply).
- 26. Inspections and Tests
 26.1 The Supplier shall at its own expense and at no cost to the Purchaser carry out all such tests and/or inspections of the Goods and Related Services as are specified in Sections 6(Schedule of Supply).
 - 26.2 The inspections and tests may be conducted on the premises of the Supplier or its Subcontractor, at point of delivery, and/or at the final destination of the Goods, or in another place in the Purchaser's country as specified in the SCC. Subject to GCC Sub-clause 26.3, if conducted on the premises of the Supplier or its Subcontractor, all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Purchaser.
 - 26.3 The Purchaser or its designated representative shall be entitled to attend the tests and/or inspections referred to in GCC Sub-clause 26.2, provided that the Purchaser bear all of its own costs and expenses incurred in connection with such attendance including, but not limited to, all traveling and board and lodging expenses.
 - 26.4 Whenever the Supplier is ready to carry out any such test and inspection, it shall give a reasonable advance notice, including the place and time, to the Purchaser. The Supplier shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable the Purchaser or its designated representative to attend the test and/or inspection.
 - 26.5 The Purchaser may require the Supplier to carry out any test and/or inspection not required by the Contract but deemed necessary to verify that the characteristics and performance of the Goods comply with the technical specifications, codes, and standards under the Contract, provided that the Supplier's reasonable costs and expenses incurred in the carrying out of such test and/or inspection shall be added to the Contract Price. Further, if such test and/or the Supplier's performance of its other obligations under the Contract, due allowance will be made in respect of the Delivery Dates and Completion Dates and the other obligations so affected.
 - 26.6 The Supplier shall provide the Purchaser with a report of the results of any such test and/or inspection.
 - 26.7 The Purchaser may reject any Goods or any part thereof that fail to pass any test and/or inspection or do not conform to the

specifications. The Supplier shall either rectify or replace such rejected Goods or parts thereof or make alterations necessary to meet the specifications at no cost to the Purchaser, and shall repeat the test and/or inspection, at no cost to the Purchaser, upon giving a notice pursuant to GCC Sub-clause 26.4.

- 26.8 The Supplier agrees that neither the execution of a test and/or inspection of the Goods or any part thereof, nor the attendance by the Purchaser or its representative, nor the issue of any report pursuant to GCC Sub-clause 26.6, shall release the Supplier from any warranties or other obligations under the Contract.
- 27. Liquidated Damages 27.1 Except as provided under GCC Clause 32, if the Supplier fails to deliver any or all of the Goods or perform the Related Services within the period specified in the Contract, the Purchaser may without prejudice to all its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in the SCC of the Contract Price for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the percentage specified in the SCC. Once the maximum is reached, the Purchaser may terminate the Contract pursuant to GCC Clause 35.
- **28. Warranty** 28.1 The Supplier warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.
 - 28.2 Subject to GCC Sub-clause 22.1, the Supplier further warrants that the Goods shall be free from defects arising from any act or omission of the Supplier or arising from design, materials, and workmanship, under normal use in the conditions prevailing in the country of final destination.
 - 28.3 Unless otherwise specified in the SCC, the warranty shall remain valid for 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 SCC, or for 18 months after the date of shipment or loading in the country of origin, whichever period concludes earlier.
 - 28.4 The Purchaser shall give Notice to the Supplier, stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof. The Purchaser shall afford all reasonable opportunity for the Supplier to inspect such defects.
 - 28.5 Upon receipt of such Notice, the Supplier shall, within the period specified in the SCC, expeditiously repair or replace the defective Goods or parts thereof, at no cost to the Purchaser.
 - 28.6 If having been notified, the Supplier fails to remedy the defect within the period specified in the SCC, the Purchaser may proceed to take within a reasonable period 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

- 29. Patent Indemnity
 29.1 The Supplier shall, subject to the Purchaser's compliance with GCC Sub-clause 29.2, indemnify and hold harmless the Purchaser and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Purchaser may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract by reason of
 - (a) the installation of the Goods by the Supplier or the use of the Goods in the country where the Site is located; and
 - (b) The sale in any country of the products produced by the Goods.

Such indemnity shall not cover any use of the Goods or any part thereof other than for the purpose indicated by or to be reasonably inferred from the Contract, neither any infringement resulting from the use of the Goods or any part thereof, or any products produced thereby in association or combination with any other equipment, plant, or materials not supplied by the Supplier, pursuant to the Contract.

- 29.2 If any proceedings are brought or any claim is made against the Purchaser arising out of the matters referred to in GCC Sub-clause 29.1, the Purchaser shall promptly give the Supplier a notice thereof, and the Supplier may at its own expense and in the Purchaser's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.
- 29.3 If the Supplier fails to notify the Purchaser within 28 days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Purchaser shall be free to conduct the same on its own behalf.
- 29.4 The Purchaser shall, at the Supplier's request, afford all available assistance to the Supplier in conducting such proceedings or claim, and shall be reimbursed by the Supplier for all reasonable expenses incurred in so doing.
- 29.5 The Purchaser shall indemnify and hold harmless the Supplier and its employees, officers, and Subcontractors from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Supplier may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract arising out of or in connection with any design, data, drawing, specification, or other documents or materials

provided or designed by or on behalf of the Purchaser.

- **30. Limitation of** 30.1 Except in cases of gross negligence or willful misconduct, **Liability**
 - (a) neither party shall be liable to the other party 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 amount specified in the SCC, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the Supplier to indemnify the Purchaser with respect to patent infringement.
- 31. Change in Unless otherwise specified in the Contract, if after the date of the 31.1 Laws and Invitation for Bids, any law, regulation, ordinance, order or bylaw having the force of law is enacted, promulgated, abrogated, or Regulations changed in the place of the Purchaser's country where the Site is located (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the Delivery Date and/or the Contract Price, then such Delivery Date and/or Contract Price shall be correspondingly increased or decreased, to the extent that the Supplier has thereby been affected in the performance of any of its obligations under the Contract. Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited if the same has already been accounted for in the price adjustment provisions where applicable, in accordance with GCC Clause 15.
- **32. Force Majeure** 32.1 The Supplier shall not be liable for forfeiture of its Performance Security, liquidated damages, or termination for default if and to the extent that it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
 - 32.2 For purposes of this clause, "Force Majeure" means an event or situation beyond the control of the Supplier that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Supplier. Such events may include, but not be limited to, acts of the Purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.
 - 32.3 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.
- **33. Change Orders** 33.1 The Purchaser may at any time order the Supplier through Notice in accordance GCC Clause 8, to make changes within the general

| | Amendments | | scope of the Contract in any one or more of the following: |
|-----|-----------------------|------|---|
| | | | 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 |
| | | | (d) the Related Services to be provided by the Supplier. |
| | | 33.2 | 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 in the Delivery and Completion Schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this Clause must be asserted within 28 days from the date of the Supplier's receipt of the Purchaser's change order. |
| | | 33.3 | Prices to be charged by the Supplier for any Related Services that might be needed but which were not included in the Contract 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. |
| 34. | Extensions of Time | 34.1 | If at any time during performance of the Contract, the Supplier or its Subcontractors should encounter conditions impeding timely delivery of the Goods or completion of Related Services pursuant to GCC Clause 12, the Supplier shall promptly notify the Purchaser in writing of the delay, its likely duration, and its cause. As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may at its discretion extend the Supplier's time for performance, in which case the extension shall be ratified by the parties by amendment of the Contract. |
| | | 34.2 | Except in case of Force Majeure, as provided under GCC Clause 32, a delay by the Supplier in the performance of its Delivery and Completion obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to GCC Clause 27, unless an extension of time is agreed upon, pursuant to GCC Sub- clause 34.1. |
| 35. | Termination | 35.1 | Termination for Default |
| | | | (a) The Purchaser, without prejudice to any other remedy for breach of Contract, by Notice of default sent to the Supplier, may terminate the Contract in whole or in part, |
| | | | (i) if the Supplier fails to deliver any or all of the Goods |

- (i) if the Supplier fails to deliver any or all of the Goods within the period specified in the Contract, or within any extension thereof granted by the Purchaser pursuant to GCC Clause 34; or
- (ii) if the Supplier fails to perform any other obligation under

- (b) In the event the Purchaser terminates the Contract in whole or in part, pursuant to GCC Clause 35.1(a), the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or Related Services similar to those undelivered or not performed, and the Supplier shall be liable to the Purchaser for any additional costs for such similar Goods or Related Services. However, the Supplier shall continue performance of the Contract to the extent not terminated.
- (c) if the Supplier, in the judgment of the Purchaser has engaged in fraud and corruption, as defined in GCC Clause 3, in competing for or in executing the Contract.
- 35.2 Termination for Insolvency

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

- 35.3 Termination for Convenience
 - (a) The Purchaser, by 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.
 - (b) The Goods that are complete and ready for shipment within 28 days after the Supplier's receipt of the Notice of termination shall be accepted by the Purchaser at the Contract terms and prices. For the remaining Goods, the Purchaser may elect
 - (i) to have any portion completed and delivered at the Contract terms and prices; and/or
 - to cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and Related Services and for materials and parts previously procured by the Supplier.
- **36. Assignment** 36.1 Neither the Purchaser nor the Supplier shall assign, in whole or in part, their obligations under this Contract, except with prior written consent of the other party.

Section 8- Special Conditions of Contract

The following Special Conditions of Contract (SCC) shall supplement the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC.

| GCC 1.1(j) | The Purchaser's country is: India |
|-------------|--|
| GCC 1.1(k) | The Purchaser is: Department of Education, Government of Meghalaya |
| GCC 1.1 (q) | The Site is: Meghalaya |
| GCC 4.2 (b) | The version of Incoterms shall be: Incoterms 2010 |
| GCC 5.1 | The language shall be: English Language for translation of supporting documents and printed literature is: English |
| GCC 8.1 | For <u>notices</u> , the Purchaser's address shall be: Attention: Director, Directorate of School Education and Literacy |
| | Kennilworth Road, Laitumkhrah Meghalaya, Shillong – 793003, India Date: 06th July 2018 |
| | Time: Immediately after the deadline for bid submission |
| | E-mail address: <u>finance_affairs@yahoo.com</u> or <u>finea-meg@nic.in</u> , or <u>achmarak@gmail.com</u> |
| GCC 9.1 | The governing law shall be: Laws of India |
| GCC 10.2 | The formal mechanism for the resolution of disputes shall be: <u>For a contract with a Local Supplier:</u> In the case of a dispute between the Purchaser and the Supplier, the dispute shall be settled by arbitration in accordance with the provisions of the local arbitration |
| | procedures in the Purchaser's country. Place of arbitration: Purchaser's Country |
| GCC 11.1 | The Scope of Supply is defined in: <u>Section-6</u> : <u>Delivery & Completion Schedule</u> . At the time of awarding the Contract, the Purchaser shall specify any change in the Scope of Supply with respect to Section VI, Schedule of Supply included in the Bidding Document. Such changes may be due, for instance, if the quantities of |

GCC 12.1

| Goods and Related Services are increased or decreased at the time of award. |
|---|
| Details of shipping and documents to be furnished by the Supplier shall be: |
| "For Goods supplied from abroad as per Incoterms CIF or CIP: |
| Upon shipment, the Supplier shall notify the Purchaser and the Insurance Company by telexor fax the full details of the shipment, including Contract number, description of Goods,quantity, the vessel, the bill of lading number and date, port of loading, date of shipment, portof discharge, etc. The Supplier shall send the following documents to the Purchaser, with copy to the Insurance Company: |
| (a) Two copies of the Supplier's invoice showing the description of the Goods, quantity, unit price, and total amount; |
| (b) original and two copies of the negotiable, clean, on-board bill of lading marked "freight prepaid" and three copies of non-negotiable bill of lading and in case of air transportation full set of airway bill marked freight prepaid; |
| (c) Three copies of the packing list identifying contents of each package; |
| (d) insurance certificate/policies; |

(e) Manufacturer's or Supplier's warranty certificate including extended warranty period;

(f) inspection certificate, issued by the nominated inspection agency, and the Supplier's factory inspection report; and

(g) certificate of origin (one original and three copies).

The Purchaser shall receive the above documents at least one (1) week before arrival of the Goods at the port or place of arrival and, if not received, the Supplier will be responsible for any consequent expenses.

For Goods from within the Purchaser's country as per Incoterm EXW:

Upon delivery of the Goods to the transporter, the Supplier shall notify the Purchaser and send the following documents to the Purchaser:

(a) copies of the Supplier's invoice showing the description of the Goods, quantity, unit price, and total amount;

(b) delivery note, railway receipt, or truck receipt or airway bill in case of air transportation;

(c) Manufacturer's or Supplier's warranty certificate;

(d) inspection certificate issued by the nominated inspection agency, and the Supplier's factory inspection report; and

(e) certificate of origin.

The Purchaser shall receive the above documents before the arrival of the Goods and, if not received, the Supplier will be responsible for any consequent expenses.

| GCC 15.2 | The pr | ice adjustment shall be: Not Applicable | | | |
|----------|---|---|---|--|--|
| GCC 16.1 | Payment of the Contract Price shall be made in the following manner: The pro-rata claims shall be considered as under:- | | | | |
| | # Payment Milestone Payment | | | | |
| | 1 | Supply of Laboratory Equipment and other item in first 10 schools | Pro-rata payment equivalent to the cost of 10 schools | | |
| | 2 | Supply of Laboratory Equipment and other items in next 10 schools | Pro-rata payment equivalent to the cost of 10 schools | | |
| | 3 | Supply of Laboratory Equipment and other items in next 10 schools | Pro-rata payment equivalent to the cost of 10 schools | | |
| | 4 | Supply of Laboratory Equipment and other items in next 10 schools | Pro-rata payment equivalent to the cost of 10 schools | | |
| | 5 | Supply of Laboratory Equipment and other items in next 10 schools | Pro-rata payment equivalent to the cost of 10 schools | | |
| | 6 | Supply of Laboratory Equipment and other items in next 10 schools | Pro-rata payment equivalent to the cost of 10 schools | | |
| | 7 | 7 Supply of Laboratory Equipment and other items in balance 8 schools Pro-rata payment equivalent to the cost of 8 schools | | | |
| | The payment each milestone shall be done after the successful supply &installation, of the laboratory items in every school and signing of the acceptance report by the Chairman/Head of the school SMC and DSEO. | | | | |
| GCC 16.4 | The cu | urrencies for payments shall be: Indian Rupees | ; (INR) | | |
| GCC 18.1 | The Supplier shall provide a Performance Security of ten (10) percent of the Total Contract Value. The Performance Security shall be denominated in the following amounts and currencies: Indian Rupees (INR) | | | | |
| GCC 18.3 | The forms of acceptable Performance Security are: A bank guarantee issued by a reputable bank located in the Purchaser's country, acceptable to the Purchaser, in the format included in Section 9 (Contract Forms), or a cashier's or certified check, or cash | | | | |
| | If the institution issuing the security is located outside the country of the Purchaser, it shall have a correspondent financial institution located in the country of the Purchaser to make it enforceable. | | | | |
| GCC 18.4 | Discha | arge of the Performance Security shall take plac | ce: | | |
| | | ant to GCC Sub clause 18.4, the performance s ne year of the completion of the contract in acco | - | | |

| GCC 23.2 | |
|----------|---|
| GUU 23.2 | The packing, marking, and documentation within and outside the packages shall be: |
| | Packing: (1) The supplied Goods shall be packed by standard protective measures. Such packing shall be suitable for long distance transportation and well protected against dampness, moisture, shock, rust and rough handling so as to ensure that the Goods will safely arrive at the designated site without any damage due to the above mentioned reasons, and |
| | (2) In each package there shall be one copy each of the detailed packing list and the quality certificate. |
| | Marking :(1) The Supplier shall mark the following on the four adjacent sides of each package with indelible paint in conspicuous English printed words: |
| | A. CONSIGNEE |
| | B. CONTRACT NO. |
| | C. SHIPPING MARK |
| | D. CONSIGNEE CODE |
| | E. DESTINATION |
| | F. NAME OF GOODS AND ITEM NO., CASE NO. |
| | G. GROSS/NET WEIGHT (Kg) |
| | H. MEASUREMENT (LENGTH x WIDTH x HEIGHT IN CM) |
| | (2) If any package weighs two (2) tons or more, the Supplier shall mark on two sides of each package in English and with appropriate transportation marks to show the "center of gravity" and "points of slinging" in order to facilitate loading, discharging and handling. According to the characteristics of the Goods and the different requirements in transportation, packages shall be marked legibly by the Supplier with words "Handle with Care", "Right Side Up", "Keep Dry", etc., and with other appropriate marks. |
| GCC 24.1 | The insurance coverage shall be in accordance with: |
| | Pursuant to GCC, Sub clause 24.1, the Supplier must insure the Goods in an amount equal to 110% of the CIF, CIP or EXW price of the Goods from "Warehouse" to "Warehouse" on "All Risks" basis, including War Risks and Strikes. |

GCC 25.1

GCC 26.2

| Obligations for transportation of the Goods shall be in accordance with: |
|---|
| Incoterms 2010. |
| The Supplier, under the Contract, is required to transport the Goods to a specified place of destination as mentioned in the section 6: Delivery Schedule, in good condition, transport to such place of destination, including storage, as shall be specified in the Contract, shall be arranged by the Supplier, and related costs shall be included in the Contract Price. |
| The supplier shall prepare school-wise kit as per the Quantity / School of each items as mentioned in the section-6: List of Goods and related services. The supplier shall deliver these kits in all the 68 schools as per the delivery and completion schedulementioned in section-6 |
| Tests and Inspections specified in Section 6(Schedule of Supply), shall be carried out at the following times or milestones, and places :As mentioned in GCC 16.1 of SCC |
| The third party inspecting agency authorized by Purchaser shall carry out third party test and inspections for all Good to be supplied under the Contract. It shall include but not limited to the Physical inspections of Goods, Conformation/Compliance of approved Technical Specifications and Prescribed Standards, Codes, and Performance Test for Guaranteed /Agreed parameters. In case of fabricated items all dimensions as per approved drawings and data sheets shall be checked by inspecting authority. |
| (a) The Supplier, Purchaser or his representative(s), Consignee or his representative(s) and Third Party as appointed by Purchaser shall jointly conduct inspections and testing of the Goods at Supplier's/Manufacturer's |

- (a) The Sup represent conduct Place before delivery to the Place of Delivery specified in Section VI prior to issuance of the authorization for delivery by the Purchaser. All costs involved in arranging and performing of such inspections and tests shall be borne by the Supplier. The fee of Third Party Inspecting Agency as fixed by Purchaser shall be initially paid by the Supplier from the provisional sum, which shall be reimbursed along with the payments for subsequent claims. However, Purchaser has the right to waive of pre-dispatch inspection as per the special requirement.
- (b) The Supplier, Purchaser or his representative(s), Consignee or his representative(s) and Third Party as appointed by Purchaser shall jointly conduct final inspections after delivery to the Place of Delivery specified in Section VI prior to acceptance of the Goods. All costs involved in arranging and performing of such inspections except third party fee shall be borne by the Supplier. GCC 27.1 The applicable rate for liquidated damages for delay shall be: 0.5 % per week or part

| | thereof |
|----------|--|
| GCC 27.1 | The maximum amount of liquidated damages shall be: 10% of the contract value |

| GCC 28.3 | The period of validity of the Warranty shall be: Standard warranty for Equipments only, from the date of the acceptance of the installation report of items supplied in each tranche. |
|-----------------|---|
| GCC 28.5 | The Supplier shall correct any defects covered by the Warranty within 7 days of being notified by the Purchaser of the occurrence of such defects. |
| GCC 30.1 (b) | The amount of aggregate liability shall be: 100% of the contract value |

Section 9 - Contract Forms

Table of Forms

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Letter of Acceptance

---- on letterhead of the purchaser ----

. date.

This is to notify you that your Bid dated date for execution of the name of the contract and identification number, as given in the Bid Data Sheet for the Accepted Contract Amount of the equivalent of amount in figures and words and name of currency, as corrected and modified in accordance with the Instructions to Bidders is hereby accepted by our Agency.

You are requested to furnish the Performance Security within 28 days in accordance with the Conditions of Contract, using for that purpose the Performance Security Form included in Section 9 (Contract Forms) of the Bidding Document.

| Authorized Signature: |
|------------------------------|
| Name and Title of Signatory: |
| Name of Agency: |

Attachment: Contract Agreement

Contract Agreement

THIS AGREEMENT made on the [insert number]day of [insert month], [insert year], between [insert complete name of Purchaser] of [insert complete address of purchaser] (hereinafter "the Purchaser"), of the one part, and [insert complete name of supplier] of [insert complete address of supplier] (hereinafter "the Supplier"), of the other part:

WHEREAS the Purchaser invited Bids for certain Goods and Related Services, viz., [insert brief description of the goods and related services] and has accepted a Bid by the Supplier for the supply of those Goods and Related Services in the sum of [insert currency or currencies and amount of contract price in words and figures] (hereinafter "the Contract Price").

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

- 1. In this Agreement, words and expressions shall have the same meanings as are respectively assigned to them in the Contract referred to.
- 2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:
 - (a) the Letter of Acceptance;
 - (b) the Price Bid Submission Sheet and the Price Schedules submitted by the Supplier;
 - (c) the Technical Bid Submission Sheet submitted by the Supplier;
 - (d) the Special Conditions of Contract;
 - (e) theList of Eligible Countries that was specified in Section 5 of the Bidding Document;
 - (f) the General Conditions of Contract;
 - (g) the Schedule of Supply; and
 - (h) Table of Adjustment.⁶

This Contract shall prevail over all other Contract documents. In the event of any discrepancy or inconsistency within the Contract documents, then the documents shall prevail in the order listed above.

- 3. In consideration of the payments to be made by the Purchaser to the Supplier as indicated in this Agreement, the Supplier hereby covenants with the Purchaser to provide the Goods and Related Services and to remedy defects therein in conformity in all respects with the provisions of the Contract.
- 4. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the Goods and Related Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of *[indicated name of country]* on the day, month and year indicated above.

Signed by [insert authorized signature for the purchaser] (for the Purchaser)

Signed by [insert authorized signature for the supplier] (for the Supplier)

⁶ Tables of Adjustment Data may be added if the contract provides for price adjustment (see GCC 15).

Performance Security

Bank's name, and address of issuing branch or office

| Beneficiary: | Name and address of purchaser |
|--------------|-------------------------------|
| Date: | |
| Performance | Guarantee No.: |

We have been informed that *name of the supplier*. . . . (hereinafter called "the Supplier") has entered into Contract No. *reference number of the contract*. dated with you, for the execution of *name of contract and brief description of goods and related services*. (hereinafter called "the Contract").

Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

At the request of the Supplier, we name of the bank..... hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of name of the currency and amount in figures⁸.... (.... amount in words....) such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of your first demand in writing accompanied by a written statement stating that the Supplier is in breach of its obligation(s) under the Contract, without your needing to prove or to show grounds for your demand or the sum specified therein.

This guarantee shall expire, no later than the day of, ⁹ and any demand for payment under it must be received by us at this office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No. 458, except that subparagraph (ii) of Sub-article 20(a) is hereby excluded.¹⁰

Seal of bank and signature(s)

If the institution issuing the performance security is located outside the country of the purchaser, it shall have a correspondent financial institution located in the country of the purchaser to make it enforceable.

All italicized text is for guidance on how to prepare this demand guarantee and shall be deleted from the final document.
 The guarantor shall insert an amount representing the percentage of the contract price specified in the contract and

denominated either in the currency(ies) of the contract or a freely convertible currency acceptable to the purchaser.

Insert the date 28 days after the expected completion date. The purchaser should note that in the event of an extension of the time for completion of the contract, the purchaser would need to request an extension of this guarantee from the guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the purchaser might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months][one year], in response to the Purchaser's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

¹⁰ Or the same or similar to this clause specified in the Uniform Rules for Demand Guarantees, ICC Publication No. 758 where applicable.

Advance Payment Security

Bank's name, and address of issuing branch or office¹¹

| Beneficiary: | . Name and address of purchaser |
|--------------|---------------------------------|
| | |
| | |

We have been informed that name of the supplier..... (hereinafter called "the Supplier") has entered into Contract No. reference number of the contract..... dated with you, for the execution of name of contract and brief description of goods and related services..... (hereinafter called "the Contract").

Furthermore, we understand that, according to the Conditions of the Contract, an advance payment in the sum of *name of the currency and amount in figures*¹².... (.... *amount in words.*...) is to be made against an advance payment guarantee.

At the request of the Supplier, we *name of the bank*.... hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of *name of the currency and amount in figures*¹³.... (.... *amount in words*....) upon receipt by us of your first demand in writing accompanied by a written statement stating that the Supplier is in breach of its obligation under the Contract because the Supplier used the advance payment for purposes other than the costs of mobilization in respect of the Goods and Related Services.

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Supplier as indicated in copies of interim statements or payment certificates that shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate indicating that ninety percent (90%) of the Contract Price has been certified for payment, or on the ... day of, ¹⁴ whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees, ICC Publication No.

458 (or ICC Publication No. 758 as applicable).

All italicized text is for guidance on how to prepare this demand guarantee and shall be deleted from the final document.
 The guarantor shall insert an amount representing the amount of the advance payment denominated either in the currency(ies) of the advance payment as specified in the contract, or in a freely convertible currency acceptable to the purchaser.

¹³ Footnote 2.

⁴ Insert the expected expiration date of the time for completion. The purchaser should note that in the event of an extension of the time for completion of the contract, the purchaser would need to request an extension of this guarantee from the guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee. In preparing this guarantee, the purchaser might consider adding the following text to the form, at the end of the penultimate paragraph: "The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months][one year], in response to the Purchaser's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

-- Note to Bidder --

If the institution issuing the advance payment security is located outside the country of the purchaser, it shall have a correspondent financial institution located in the country of the purchaser to make it enforceable.

Draft Format for Excise/Customs Duty Exemption

TO WHOMSOEVER IT MAY CONCERN

ESSENTIALITY CERTIFICATE

UNDER GOI NOTIFICATION 108/95 or 84/97

| This is to certify that the work for | (Package No. & Name of work) has |
|---|--|
| been awarded to M/s(Name | of Contractor)amounting to |
| INR(Amount of Contract Agree | ment)only by the Department of |
| Education, Government of Meghalaya under Su | pporting Human Capital Development in Meghalaya |
| (SHCDM) and that this project has duly been app | roved by Government of India. The Project (SHCDM) |
| is funded by Asian Development Bank (ADE | B) under loan agreement No. 3033-IND between |
| Government of India and Asian Development Bar | k and being executed by the Department of Finance, |
| Government of Meghalaya. | |

| It is certified that M/S_ | | _ (Name of Contractor) | for the above |
|---------------------------|-------------|-----------------------------------|---------------|
| project requires to pur | chase | (Quantity of material and name of | |
| material) | _under work | (Package No. & Name of work) | · |

It is further certified that the aforesaid material is required for the execution of the said project.

Countersigned

Principal&Secretary, Education

Government of Meghalaya

Secretary, Finance

Government of Meghalaya