GOVERNMENT OF ARUNACHAL PRADESH DIRECTORATE OF HIGHER AND TECHNICAL EDUCATION ITANAGAR

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TENDER DOCUMENT FOR SUPPLY, INSTALLATION AND COMMISSIONING OF LABORATORY, WORKSHOP, CLASSROOM AND LIBRARY ITEMS (OPEN TENDER IN TWO BIDS System)

No. DHTE/NIT/01/2013-14

To be submitted

to

THE DIRECTOR
HIGHER AND TECHNICAL EDUCATION
GOVERNMENT OF ARUNACHAL PRADESH
ITANAGAR

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GOVERNMENT OF ARUNACHAL PRADESH DIRECTORATE OF HIGHER AND TECHNICAL EDUCATION ITANAGAR

NOTICE INVITING TENDER

REF NO. DHTE/NIT/01/2013-14 Dated: Itanagar the 19th June'2014

Sealed tenders in two bids system are invited from reputed manufacturers or their authorized dealers for supply, installation and commissioning of laboratory, workshop, classroom and library items in the various Polytechnics of the State. The detailed tender document can be downloaded from the website www.apdhte.nic.in. Filled in tenders are to be submitted in the office of the undersigned within **03rd July'2014**.

The undersigned reserves the right to accept or reject any or all of the tenders without assigning any reason whatsoever.

(Dr. Joram Begi) Director

INVITATION FOR BIDS

1. The Government of Arunachal Pradesh has approved setting up of Polytechnics in the following places under the Prime Minister's Mission on Skill Development with the programmes and annual intake as detailed below:

Sl.	Location of Polytechnics	Diploma Engineering	Annual
No.		Programmes	intake
1.	Dirang in West Kameng District	Civil, Mechanical and Electrical	
2.	Laying in Kurung Kumey	Civil, Mechanical and Electrical	90 in each
	District		Polytechnic
3.	Pasighat in East Siang District	Civil, Mechanical and Computer	(30 in each
		Science & Engineering	programme)
4.	Namsai in Lohit District	Civil, Mechanical and Electrical	
5.	Roing in Dibang Valley District	Civil, Mechanical and Computer	
		Science & Engineering	

The academic session in these Polytechnics are likely to start from July'2014.

- 2. Accordingly the Directorate of Higher and Technical Education, Government of Arunachal Pradesh (hereafter referred to as the Directorate) has decided to procure new items for establishing some of the laboratories and workshop in these 5 (five) Polytechnics through the current tender. It may later on be extended to other Polytechnics also.
- **3.** The tender is divided into five packages as detailed below:

Sl.	Particulars	Quantity	Earnest Money Deposit
No.			(Rs.)
01.	Chemistry Laboratory	One Package	a) 2.00 (Two)lakhs
02.	Physics Laboratory	One Package	b) 2.00 (Two)lakhs
03.	Furniture & Fixtures	One Package	c) 2.00 (Two) lakhs
04.	Computer Laboratory	One Package	d) 4.00 (Four)lakhs
05.	Workshop	One Package	e) 4.00 (Four)lakhs

- **4.** The bids are required to be submitted in **two parts for each of the package(s)**. One part is the Technical Bid and the other part is the Financial Bid. A bidder can bid for any one of the package or some or all of the packages. Accordingly the Earnest Money is to be deposited packagewise.
- **5.** Evaluation of the bid will be made packagewise. A bidder has to quote for all the items in a package. **Bidders who do not quote for all the items are liable to be disqualified.**
- **6.** The schedule of events and other details of the tender are as follows:

Sl. No.	Particulars	Details
i.	Last Date and time of	1430 hrs of 3 rd July' 2014
	submission of Bids	
ii.	Venue, Date and time of	1500 hrs of 3 rd July' 2014
	opening of Bids	Director's Chamber, Directorate of Higher &
		Technical Education, Itanagar
iii.	Last Date for seeking	1 st July'2014
	clarifications, if any	

iv.	Bid validity	180 days from the date of opening of the Bid	
v.	Earnest Money Deposit	As at Sl. No. 3	
vi.	Contact Details	Dr. Joram Begi,	
		Director (Higher and Technical Education),	
		Government of Arunachal Pradesh, Itanagar	
		Ph No. 0360-2214416	

7. Minimum Eligibility Criteria

- **A.** The bidder should be Original Manufacturer having valid ISO/ISI certification or their authorized dealers having sufficient expertise and experience in the subject matter of the tender, having sound financial background and reliable warranty / service support capability to take total responsibility in execution of the contract in the Polytechnics located in various places of Arunachal Pradesh.
- **B.** The average annual turnover of the bidder during the last three financial years should not be less than Rs. 1.00 crores for Packages at Sl. No. 01, 02 and 03 and Rs. 2.00 Crores for Packages at Sl. No. 04 and 05. The bidder should have earned profit for at least 2 years out of the last three financial years as evidenced from the Balance-Sheet of the Company.
- C. The bidder should have experience of executing at least 1(One) Single Work Order for supply, installation and commissioning of similar instruments/apparatus/equipments of value not below Rs. 50.00 (Fifty) Lakhs for Packages at Sl. No. 01, 02 and 03 and Rs. 1.0 (One) Crore for Packages at Sl. No. 04 and 05 successfully during the last 3(Three) Financial Years. Self attested copy of the Purchase Order and/or Performance Report issued by the organization should be attached invariably along with the Technical Bid.
- **D.** Bidders who do not meet the criteria or who have made untrue or false representation in the forms, statements and attachments submitted in proof of the qualification requirements or have a record of poor performance of not properly completing earlier contracts, inordinate delays in completion or financial failure, etc. are subject to be disqualified.
- **E.** Any additional bid participation criteria / eligibility conditions etc. mentioned in the Technical Specifications sheet will also form part of the Qualification Requirements along with those mentioned above.

8. Queries and Amendment to the Bidding Document:

Any query regarding the tender document and discrepancies, if any, shall be directed to the Director in writing, minimum 3 days prior to the due date of submission of the tender. The Tender Issuing Authority will issue all clarifications, interpretations, meanings and specific directions, if any, in duplicate in writing to all the bidders. One copy of these shall be duly signed (with seal) and submitted by the bidders alongwith the bids.

Further, at any time prior to the deadline for submission of Bids, the Directorate, for any reason may modify the bidding document, by amendment which shall be posted in the web-site of the Directorate.

INSTRUCTIONS TO BIDDERS

The Bidder is expected to examine all instructions, forms, terms and specifications in the bidding documents. Failure to furnish all required information and documents may result in the rejection of a bid and will be at the bidder's risk.

A. PREPARATION OF BIDS

1. Language of Bid

The Bid and all correspondence and documents relating to the bid exchanged by the bidder and the Directorate shall be written in English language, provided that any printed literature furnished by the bidder may be written in another language but it is to be accompanied by an English translation of its pertinent page(s) duly signed and verified as true English translation. The responsibility for the correctness of the translation will be solely and completely on the bidder and the Directorate shall not be responsible for any loss/likely loss due to error in translation whatsoever. In such cases, for the purpose of interpretation of the bid, the English translation shall only prevail.

2. Documents Comprising the Bid

The bid is required to be submitted in **two parts**. One part is the Technical Bid and the other part is the Financial Bid.

2.1 The Technical Bid prepared by the Bidder shall include the following without indicating the price in the Bid Form:

- (i) Documents to establish Bidder's eligibility and qualification (As per ANNEXURE-I)
- (ii)Declaration in the letter head of the bidder (As per ANNEXURE II)
- (ii) Bid Security/Earnest Money Deposit as specified in the Invitation For Bids (IFB).
- (iii) Authorization from all major manufacturers (As per ANNEXURE III)
- (iv) Bidder's Performance Statement Form (As per ANNEXURE IV)
- (v) Service Support Details Form (As per ANNEXURE V)
- (vi) Technical Compliance Statement Form (As per ANNEXURE VI)

The Technical Compliance Statement Form should be filled in point by point by the bidder in compliance of the technical specifications. Any deviations should be clearly brought out in the bid.

2.2 The Financial Bid shall be submitted in the Format at Annexure-VII.

3. Bid Prices

The Bidder shall indicate the item wise unit prices and total bid prices of the goods in the Financial bid.

3.1 Prices indicated shall be entered separately in the following manner:

- i) **Rate:** The rate should be quoted on **FOR** basis inclusive of all like packing, forwarding, insurance, freight, installation and commissioning charges, training of staff etc.
- (ii) **Taxes:** The applicable taxes viz. VAT, CST, Service tax, Entry tax etc. should be mentioned separately.
- (iii) No 'Form C' or 'Form D' shall be issued.
- (iv) No other charges except those mentioned clearly in the bid will be paid.

3.2 Prices quoted by the bidder shall remain fixed during the entire period of contract and shall not be subject to variation on any account. A bid submitted with an adjustable price quotation will be treated as non - responsive and rejected.

4. Bid Currency

Prices shall be quoted in Indian Rupees only

5. Documents Establishing Bidder's Eligibility and Qualifications

The bidder shall furnish, as part of its technical bid, documents, establishing the bidders' eligibility to bid as per the minimum eligibility criteria and its qualifications to perform the contract if its bid is accepted.

6. Documents Establishing Goods' Conformity to Bid Document.

6.1 It must be ensured that the offers are strictly as per the given specifications. The documentary evidence of conformity of the goods and services to the Bid Document in the form of manual, leaflet, literature, drawings and data, should be submitted alongwith the Technical Bid.

The literature thus submitted should give a detailed description of the essential technical and performance characteristics of the goods.

6.2 The Bidder shall note that the standards for workmanship, material and equipment, and references to brand names or Catalogue numbers designated by the Directorate in its Technical Specifications are intended to be descriptive only and not restrictive. The Bidder may substitute alternative standards, brand names and/or catalogue numbers in its bid, provided that it demonstrates to the Directorate's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications. Technically unsuitable offers, offers not confirming to tender schedule shall be rejected.

7 Bid Security/Earnest Money Deposit:

- 7.1 The Bidder shall furnish, as part of its bid, a bid Security/Earnest Money for an amount as specified in the Invitation For Bids. The bid security is required to protect the Directorate against the risk of Bidder's conduct, which would warrant the security's forfeiture.
- 7.2 The bid security shall be in Indian Rupees and shall be in the following forms:
 - (i) A Banker's Cheque or (ii) Demand Draft drawn in favour of "the Director, Higher and Technical Education, Government of Arunachal Pradesh" payable at Itanagar.
- 7.3 Any bid not secured in accordance with Clause 7.2 above will be rejected as non-responsive.
- 7.4 Unsuccessful bidder's bid security will be discharged/returned as promptly as possible.
- 7.5 The successful bidder's bid security will be discharged upon the Bidder furnishing the performance security.
- 7.6 The bid security may be forfeited:
 - (i) If a bidder withdraws its bid during the period of bid validity or
 - (ii) If the successful bidder fails to furnish Order Acceptance and Performance Security in the prescribed format (Annexure VIII) within 15 days of issue of the supply order.

8. Period of Validity of Bids.

- 8.1Bids shall remain valid for a period of 180 days after the date of bid opening prescribed. A bid offered for a shorter period may be rejected as non- responsive.
- 8.2 In exceptional circumstances, the Directorate may solicit the Bidder's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing by cable, telex, fax or e mail.

9. Format and Signing of Bid

- 9.1 The Bidder shall submit the bids in two separate envelopes. One envelope shall contain **Technical Bid** and the other shall contain the **Financial Bid**.
- 9.2 The original and all copies of the bid shall be typed or written in indelible ink and all the pages shall be signed by the Bidder or a person or persons duly authorized to bind the Bidder to the Contract, except for un-amended printed literature.
- 9.3 Any interlineations, erasures or overwriting shall be valid only if the persons or persons signing the bid authenticate them.

B. SUBMISSION OF BIDS

10. Sealing and Marking of Bids

10.1	The bidder shall	seal the Technical Bid an	d the Financial Bid in ty	wo separate envelops
	duly marked as	"Technical Bid for	(Package Sl No)" and "Financial
	Bid for	(Package Sl No)" respectively. Both	the envelopes shall
	then be sealed in	one outer (main) envelop	e. One outer envelope	should contain bids
	for one package	e only.	_	

10.2 The inner and outer envelopes shall:

- (i) Be addressed to "The Director, Higher and Technical Education, Government of Arunachal Pradesh, Itanagar."
- (ii) Bear the Particulars, Reference No., Last Date For Submission of Tender, Date of Opening of Tender, Firm's Name & Address and a statement "Do not open before _____(time) hrs on _____(Date)." as per the IFB details.
- 10.3 If the outer envelope is not sealed and marked as required in Clause 10.2, the Directorate will assume no responsibility for the bid's misplacement or premature opening.
- 10.4 Bids sent by Telex, Cable, Fax or e-mail will be rejected outright.

11. Deadline for Submission of Bids

- 11.1 Bids must be received at the address specified under Clause 10.2 no later than the time and date specified in the Invitation For Bids. In the event of the specified date for the submission of Bids being declared a holiday for the Directorate, the Bids will be received upto the appointed time on the next working day.
- 11.2 The Directorate may, at its discretion, extend this deadline for submission of bids by amending the bid documents, in which case all rights and obligations of the Directorate and Bidders previously subject to the deadline will thereafter be subject to the deadline as extended.

12. Late Bids

Any bid received by the Directorate after the deadline for submission of bids prescribed by it, pursuant to Clause 11, will be rejected outright.

C. OPENING AND EVALUATION OF BIDS

13. Opening of Bids

- 13.1The Directorate will open all Technical Bids, in the presence of Bidders' representative(s) who choose to attend, as per the schedule given in Invitation For Bids.
- 13.2 The Bidders' representatives who are present shall sign the bid-opening sheet evidencing their attendance. In the event of the specified date of Bid opening being declared a holiday for the Directorate, the Bids shall be opened at the appointed time and location on the next working day.
- 13.3 The bidders' names, bid modifications or withdrawals, specifications, and the presence or absence of requisite bid security and such other details as the Directorate, at its discretion, may consider appropriate, will be announced at the time of opening. No bid shall be rejected at bid opening, except for late bid.
- 13.4 If in response to TWO BID enquiry, a single combined bid is submitted, it will be rejected outright. Similarly if 'FINANCIAL BID' has been found enclosed in the envelope marked 'TECHNICAL BID' the same shall also be rejected summarily.

14. Clarification of Bids

To assist in the examination, evaluation and comparison of bids, the Directorate may, at its discretion ask the bidder for any clarification(s) of its bid. The request for clarification and the response shall be in writing and no change in the price substance of the bid shall be sought, offered or permitted. However no post Bid clarifications at the initiative of the Bidder shall be entertained.

15. Evaluation & Comparison of Bids

- 15.1 The bids shall first be evaluated for their "Technical Responsiveness" which shall inter-alia include:
 - (i) Proof that the bidder is either manufacturer or an authorized dealer for items for which the bid is submitted and meets the minimum eligibility criteria
 - (ii) Compliance to technical specifications of the machinery/equipment for which the bid is submitted.
 - (iii)Details regarding the service support
 - (iv)Bidder's performance during the last 3 Financial Years
 - (v) Compliance to all other relevant terms and conditions of the tender.

If any of the above mentioned parameters are not fulfilled, the bid shall be considered as Technically non-Responsive and accordingly rejected.

- 15.2 All those Bidders whose Technical Bid has been found in order would be shortlisted. The Financial Bid of only such shortlisted bidders would be opened.
- 15.3 The evaluation & comparison shall be made PACKAGEWISE on the basis of the final total landing cost of purchase after all discounts, freight, forwarding, insurance, taxes, commissioning, installation and training of staff etc.
- 15.4 Conditional tenders/discounts etc. shall not be accepted.
- 15.5 Arithmetical errors in the priced bids will be rectified on the following basis:

If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected. If the supplier does not accept the correction of errors, its bid will be rejected.

16. Contacting the Directorate

- 16.1 No Bidder shall contact or attempt to contact the Directorate or anyone related to it on any matter relating to its bid, from the time of the bid opening to the time the Contract is awarded. If the bidder wishes to bring additional information to the notice of the Directorate, the same should be done in writing.
- 16.2 Any effort by a Bidder to influence the Directorate in its decisions on bid evaluation, bid comparison or contract award may result in rejection of the Bidder's bid.

17. Post Qualification

- 17.1 In the absence of pre-qualification, the Directorate will determine to its satisfaction that the Bidder who is selected as having submitted the lowest evaluated responsive bid is qualified to perform the contract satisfactorily, in accordance with the criteria listed in **Invitation For Bid.**
- 17.2 The determination will take into account the Bidder's financial, technical, supply and support service capabilities. It will be based upon examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder as well as such other information as the Directorate deems necessary and appropriate.
- 17.3 An affirmative determination will be a prerequisite for award of the contract to the Bidder. A negative determination will result in rejection of the Bidder's bid.

18. Award Criteria

The Directorate will award the contract to the successful Bidder whose bid has been determined to be substantially responsive and has been determined to be the lowest evaluated bid, provided further that the Bidder has been determined to be qualified to perform the contract satisfactorily.

19. Directorate's Right to Vary Quantities at the Time of Award

The Directorate reserves the right, at the time of award of contract, to order only some of the items of a package, increase or decrease the quantity of goods or services within the budgetary limit or change in location where goods are to be supplied from what was originally specified while floating the tender without any change in unit price or any other Terms and Conditions.

20. Directorate's Right To Accept Any Bid and To Reject Any or All Bids

The Directorate reserves the right to accept or reject any bid either in full or part, and to annul the bidding process at any time prior to award of Contract, without thereby incurring any liability to the affected bidder or bidders or any obligation to inform the affected bidder or bidders of the grounds for the action.

21. Notification of Award

- 21.1 During the period of bid validity, the Directorate will notify the successful bidder in writing by registered letter or by cable or telex or fax or e mail that the bid has been accepted by way of a Purchase Order.
- 21.2 Upon the successful Bidder's furnishing of performance security, the Directorate will discharge its bid security to the unsuccessful bidders.

22. Performance Security

- 22.1 Within 15 days of the receipt of notification of award/purchase order from the Directorate, the successful Bidder shall furnish the performance security, in the Performance Security Form provided in the Invitation For Bid (Annexure VIII) amounting to 10% of the Order value.
- 22.2 Failure of the successful bidder to accept the order shall constitute sufficient grounds for the annulment of the award and forfeiture of the bid security and call for new bids.

23. Warranty

- 23.1 The Supplier warrants that the Goods supplied under this Bid are new, unused, of the most recent or current models and that, they incorporates all recent improvements in design and materials. The Supplier further warrants that all Goods supplied under this Bid shall have no defect arising from design, materials or workmanship or from any act or omission of the Supplier that may develop under normal use of the supplied Goods in the conditions prevailing in the final destination.
- 23.2 This warranty shall be **comprehensive** and **on site** for **3** (**three**) **years** from the date of successful installation, commissioning, training and acceptance of the package to the satisfaction of the Directorate.

24. Payment

- 24.1 The method and conditions of payment to be made to the Supplier under this Contract shall be as per following:
 - 80% payment shall be made against delivery in good condition at site and balance 20% after successful installation, commissioning, training of staff and acceptance of the package to the entire satisfaction of the Directorate.
- 24.2 The Supplier's request(s) for payment shall be made to the Directorate in writing, accompanied by an invoice describing the Goods delivered and the Services performed. The same has to be duly certified by designated Officer of the Directorate.

25. Prices

Prices charged by the Supplier for Goods delivered and Services performed under the contract shall not vary from the prices quoted by the Supplier in its bid.

GENERAL TERMS AND CONDITIONS

- 1. The Bidder should deliver the goods within stipulated time in the premises of the institution. The details of the delivery like location, contact person, designation shall be mentioned in the Purchase Order.
- 2. The Bidder will assume total responsibility in supply, installation and for the fault-free operation and maintenance of the goods during warranty period.
- 3. The Bidder shall be responsible for acquiring full insurance of the goods under contract to cover all risks (fire, burglary, act of terrorist, natural calamities etc.) valid till the commissioning of the goods. Should any loss or damage occur during this period, it shall be at Suppliers' risk and responsibility.
- 4. On successful installation, commissioning of the goods and training of the technical personnel, the acceptance certificate signed by the Bidder and the representative of the Directorate shall be issued. The date of such certificate will be deemed to be the date of acceptance of the supply and the WARRANTY of the goods shall start from that date.
- 5. Intellectual Property Rights:
 - In the event of any claim asserted by a third party of infringement of copyright, patent, trademark, industrial design rights, etc arising from the use of these Goods or any part thereof in India, the vendor shall act expeditiously to extinguish such claims. If the vendor fails to comply and the Directorate is required to pay compensation to a third party resulting from such infringement, the vendor shall be responsible for the compensation including all expenses, courts costs, lawyer fees etc.
- 6. The bidder shall bear all the costs associated with the preparation and submission of its Bid and the Directorate will in no case be responsible or liable for these costs, regardless of the conduct or outcome of the Bidding process.
- 7. The successful bidder shall not assign to others, in whole or in part, their obligation to perform under the contract, except with the prior written consent of the Directorate.

8. Applicable Laws:

- 8.1 The contract shall be interpreted in accordance with the laws prevalent in India.
- 8.2 Compliance with all applicable laws: The Bidder shall undertake to observe, adhere to, abide by, comply with and notify the Directorate about all laws in force or as made applicable in future, pertaining to or applicable to them, their business, their employees or their obligations towards them and all purposes of this Tender and shall indemnify, keep indemnified, hold harmless, defend and protect the Directorate and its employees/officers/staff/personnel/representatives/agents from any failure or omission on its part to do so and against all claims or demands of liability and all consequences that may occur or arise for any default or failure on its part to conform or comply with the above and all other statutory obligations arising from them.
- 8.3 Compliance in obtaining approvals/ permissions/ licenses: The Bidder shall promptly and timely obtain all such consents, permissions, approvals, licenses, etc., as may be necessary or required for any of the purposes of this bid or for the conduct of their own business under any applicable Law, Government Regulation/Guidelines and shall keep the same valid and in force during the term of the bid, and in the event of any failure or omission to do so, shall indemnify, keep indemnified, hold harmless, defend, protect and fully compensate the Directorate and its employees/ officers/ staff/ personnel/ representatives/agents from and against all claims or demands of liability and all consequences that may occur or arise for any default or failure on its part to conform or comply with the above and all other statutory obligations arising there from and the Directorate will give notice of any such claim or demand of liability within reasonable time to the bidder.

9. Force majeure:

If the performance as specified in this order is prevented, restricted, delayed or interfered by reason of fire, explosion, cyclone, floods, war, revolution, acts of public enemies, blockage or embargo, any law, order, proclamation, ordinance, demand or requirements of any Government or authority or representative of any such Government including restrict trade practices or regulations, strikes, shutdowns or labour disputes which are not instigated for the purpose of avoiding obligations herein, or any other circumstances beyond the control of the party affected, then notwithstanding anything here before contained, the party affected shall be excused from its performance to the extent such performance relates to prevention, restriction, delay or interference and provided the party so affected uses its best efforts to remove such cause of non-performance and when removed the party shall continue its sincere performance.

If a Force Majeure situation arises, the Bidder shall promptly notify the Directorate in writing of such condition, the causes thereof and the change that is necessitated due to the conditions. Until and unless otherwise directed by the Directorate in writing, the Bidder 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.

10. Penalty for Default Delivery

If the vendor fails to deliver the items within the stipulated period, the Directorate will impose a penalty of 5% of the order value for the items late delivered for a delay upto 15 days and after that 1% penalty for each day delay by the bidders.

In case the delay exceeds five weeks, Directorate reserves the right to cancel the order. In such an event vendor will not be entitled to or recover from the Directorate any amount by ways of damages, loss or otherwise. If orders are cancelled due to non delivery, the vendor and/or its agents/distributors will be debarred by the Directorate from participating in any future tenders.

11. Termination

The Directorate may at any time terminate the contract by giving written notice to the Bidder if the Bidder becomes bankrupt or otherwise insolvent. In this event, termination will not prejudice or affect any right of action or remedy, which has accrued or will accrue thereafter to the Directorate.

The Directorate reserves the right to cancel the contract in the event of happening one or more of the following conditions:

- ➤ Failure of the successful bidder to accept the contract and furnish the Performance Guarantee within specific period as stated in the Purchase order;
- ➤ Delay in offering equipments for pre-delivery Inspection; Delay in delivery beyond the specified period;
- ➤ Delay in completing installation / implementation and acceptance tests / checks beyond the specified periods;
- > Serious discrepancy in hardware noticed during the pre-dispatch acceptance test.

In addition to the cancellation of purchase contract, the Directorate reserves the right to appropriate the damages through encashment of Performance Guarantee given by the Bidder.

12. Resolution of Disputes

It will be the Directorate's endeavor to resolve amicably any disputes or differences that may arise between the Directorate and the vendor from misconstruing the meaning and operation of the Tender and the breach that may result.

In case of Dispute or difference arising between the Directorate and the vendor relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Arbitration and Conciliation Act, 1996. The Arbitrators shall be chosen by mutual discussion between the Directorate and the vendor OR in case of disagreement each party may appoint an arbitrator and such arbitrators may appoint an Umpire before entering on the reference. The decision of the Umpire shall be final and binding.

The Bidder shall continue to work under the Contract during the arbitration proceedings unless otherwise directed in writing by the Directorate or unless the matter is such that the work cannot possibly be continued until the decision of the Arbitrator or the umpire, as the case may be, is obtained.

Arbitration proceedings shall be held at Itanagar, Arunachal Pradesh, India and the language of the arbitration proceedings and that of all documents and communications between the parties shall be English;

Notwithstanding anything contained above, in case of dispute, claim & legal action arising out of the contract, the parties shall be subject to the jurisdiction of courts at Itanagar, India only.

Any notice given by one party to the other pursuant to this Contract shall be sent to the other party in writing or by fax and confirmed in writing to the other party's specified address. The same has to be acknowledged by the receiver in writing.

A notice shall be effective when delivered or on the notice's effective date, whichever is later.

SPECIAL TERMS & CONDITIONS

- 01. Rates: Rates quoted should be FOR THE POLYTECHNICS as mentioned in the Invitation For Bids with the taxes shown separately.
- 02. **Validity of Rates:** Quoted rates must be valid for **180 days** from the date of opening of tender.
- 03. **Literature a must**: All the tenders must be supported by the printed technical leaflet/literature and the specifications mentioned in the bid must be reflected/ supported by such printed technical leaflet/literature. The model and specifications quoted should **invariably be highlighted** in the leaflet/literature for easy reference.
- 04. Training of the technical personnel on operation of the equipments/machineries should be invariably conducted to the satisfaction of the Directorate.
- 05. **Dealership Certificate:** Dealers or Agents quoting on behalf of Manufacturer must enclose valid dealership certificate.
- 06. **Quality Certificates**: Valid certificate, as mentioned below, must be enclosed.
 - (a) Manufacturer's certificate.
 - (b) Manufacturer's ISO/ISI certificate.
- 07. **Delivery Time Limit:** Maximum within 45(forty-five) days from the date of issue of purchase order.

Sd/-Director Higher and Technical Education, Govt. of Arunachal Pradesh Itanagar

BIDDER'S DETAILS

FORMAT TO BE FILLED BY THE BIDDER

1.	Name of the Bidder	AT TO BE FILLER	:	
2.	Status of the Bidder (Attach documents to Manufacturer/Regist Partnership/Proprieto	ered company/	:	
3.	Whether dealer?	r)	:	
	(Attach copy of certi	ficate/authorization)		
4.	Trading licence No. (end	close photocopy)	:	
5.	Name, Designation and	Contact Details of the	Bidder :	
6.	Permanent Account No.	(PAN) (attach copy)	:	
7.	Income Tax and/or Serv	ice Tax returns of pre	vious	
	three assessment year	rs (attach photocopy)) :	
8.	Turnover of last three ye		:	
	(Pl attach Annual Repor			
	Accounts of past three y	· · · · · · · · · · · · · · · · · · ·	•	1
	2011-12	2012-13	2013-14	Average
9.	Name and address of bio	lder's bankers	:	
10.	TAN No.		:	
11.	Sales Tax Registration	No.	:	
12.	VAT Registration No.		:	
13.	Latest VAT clearance ce	ertificate	:	
14.	Details of Earnest Mone (B.C./D.D. No., Dat	y Deposit e and issuing Branch)	:	
kno	Certified that all about the control of the control	ove information are c	correct to the best of	my/our information,
			Dated signature Authorized Persor	& seal of the

(To be submitted on letterhead of the Bidder)

DECLARATION

1.	I, ShriProprieto	r/Partner/CEO/MD/Director/Authorized
	Signatory of M/S	am competent to
	sign this declaration and execute the bid doc	ument.
2.	I have carefully read and understood all the	terms and conditions and other details
	and hereby convey my acceptance of the san	
3.	The information/documents furnished along	with the above application are true and
	authentic to the best of my knowledge and b	
4.	·	ct that furnishing of any false
	information/fabricated document would lead	-
	besides liabilities towards prosecution under	•
5.	Each page of the tender document and paper	
	signed, and I take full responsibility for the	
6.	I also undertake that until a formal contra	
	alongwith the Directorate's written acceptan	1 1
	shall constitute a binding contract between u	
7.	I/We understand that the Directorate is not	
	may receive and reserves the right to conside	-
	assigning any reason what-so-ever.	3
8.	I declare that the language of standard	clauses etc. mentioned in this 'Bid
	Document' have not been tampered with	
	whatsoever after downloading. If any such	
	stage, the bid shall be rejected immediately a	-
	singe, one ore similar of rejected minimum and re-	
		Cianatana afaha Andhania 1 Danasa
		Signature of the Authorized Person
Date: .		Full Name:
		Ph No.
		Fax No.
		E-mail address:

Company Seal:

MANUFACTURERS' AUTHORIZATION FORM (to be enclosed in the Technical Bid)

No.	Dated
The Director, Higher and Technical Education, Govt. of Arunachal Pradesh Itanagar	
Dear Sir:	who are established and
	manufacturers of
	having factories at address of factory) do hereby certify that
M/s(Na	ame and address of Agent) is our authorized nit bids and to sign the contract with you for the
•	d warranty as per Clauses as mentioned in the IFB ontract for the goods and services offered by the
Yours faithfully, (Name) (Name of manufacturers)	

Note: This letter of authority should be on the **letterhead of the manufacturer** and should be signed by a person competent and having the power of attorney to bind the manufacturer.

BIDDER'S PERFORMANCE STATEMENT FORM (Major orders executed during the last three years)

N.B.: Self attested copies of Supply Order against supply of similar type of equipments from institutions or Performance Report issued by the Institution(s) against supply and installation be enclosed.

Order	Order No.	Description	Amount	Date of	Remarks	Has the
placed	and Date	and quantity of	(in Rs.)	Completio	indicating	equipment
by(Full		ordered	(111 1101)	n of	reasons for	
address of		equipment		delivery	late delivery,	installed
Purchaser		o quipinoni		as per	if any	satisfactor
including				contract		ily?
Contact				/Actual		5 '
No. and e-				,		
mail						
address)						
,						

Signature	and S	seal of	the	Manı	ıfacture	er/	Bidde	er

Place: Date:

SERVICE SUPPORT DETAILS (to be enclosed in the Technical bid)

Sl.	Complete address of the	Туре	of Servic	e Supp	ort	Details of the technical manpower		
No	location from which	(Whether	Own	or	through	in Service Support Centre		
	Service support will be	franchisee)				including designation		
	extended including the							
	telephone no., fax no.							
	and e-mail address							

Ρl	ace:
1 1	acc.

Date:

Signature and Seal of the Manufacturer/Bidder

ANNEXURE – VI

01 CHEMISTRY LAB TECHNICAL COMPLIANCE STATEMENT FORM

An item-by-item commentary on the Technical Specifications demonstrating substantial responsiveness of the goods and services to those specifications or deviations and exceptions to the provisions of the Technical Specifications should be given.

Compliance/Deviation statement should also give the page number(s) of the technical literature where the relevant specification is mentioned and the relevant portion should be highlighted / underlined.

(Technical literature/brochures/manuals should be attached along with this format)

Sl. No.	ITEM	Specifications	Vendors response towards compliance	Deviations (if any)	Page No of the
	Parameter				literature
1.	Digital Programmable Rate Melting Point & Boiling Apparatus- Oil Less Display: Temperature Range: Resolution: Rate of Heating: Sensor: Hold: Dimension:	 Digital 12mm LED Upto 320 degree C 1 degree C 0.5, 1,2, & 5 degree C selectable after reaching preset temperature RTD (PT- 100)Temp. Sensor. Facility to hold Temp. 190 W x 215 D x 240mm H 			
2.	 Bomb Calorimeter Digital 0.01 degree C Readout One no. S.S. Bomb with Crucible, 3000cc jacketed vessel Motorized stirrer Briquette press Firing Unit Pressure guage with copper pipe fitting Digital thermometer 				
3.	Quartz two Stage Distiller with Safety control Unit & Quartz Boiler, Quartz				

	Condensor			
	• Conductivity:			
	Output capacity:	• 0.1 to 0.5 μS/cm		
	Heater Power:	• 1.0 ltr/hr.		
	Cooling Water	• 2 KW		
	Consumption:	• 40 ltr/hr.		
	Safety control Unit			
	for above unit,			
4.	Micro Controller Based			
	Digital pH/Temperature/mv			
	Meter			
	• Width 16x2 alpha			
	Numeric LCD			
	Display having auto			
	Temp Compensation			
	along with			
	Accessories pH			
	Electrode			
	Temp Probe			
	Electrode StandDust Cover			
5.	Suction Pump (Motorized)	0.5 HP motor		
6.	Hot Air Oven	• 0.5 HF Illotol		
0.	• Capacity:	• 95 ltrs.		
7.	Muffle Furnace	75 III5.		
	Rectangular (Laboratory			
	Model)			
8.	Digital Weighing Balance			
	Readability:	• 0.01gm		
	• Capacity :	• 400gm		
9.	Redwood Viscometer			
	Voltage Variac for			
	better regulating the			
	temp. for determination of			
	Viscosity of			
	Lubricating Oils and			
	fuels			
	 stainless steel jet 			
	electrically heated			
	model with energy			
	Regulator (Viscosity			
	Below 2000secs.)			
	Accessories to be included:			
	 Thermometer with Calibration 			
	Cambration Certificate IP 8c			
	• Thermometer with			
	Calibration			
	Certificate IP 9c			
	• Thermometer with			
	Calibration			
L	Certificate IP 10c		_	

	- A STEM D 1222				
	• as per ASTM D 1322				
11.	Pensky Martenes Flash				
	Point Tester				
	 digital indicator 				
	 Oil jet or gas jet test 				
	flame as per ASTM				
	D 9310.				
	Accessories to be included:				
	 Spare Cup with lid 				
	for above				
	Thermometer ASTM				
	9c with Calibration				
	Certificate • Thermometer ASTM				
	• Thermometer ASTM 10 c with Calibration				
	Certificate				
12	Aniline point apparatus				
	• motorized stirrer &				
	digital temp.				
	indicator as per IP 2				
	& IS 1448 (P-3),				
	ASTM D 611				
	Accessories :				
	Outer Jacket with				
	Cork				
	Tube with CorkBrass stirrer inner				
13	Micro Processor				
13	Conductivity/TDS/Tempera				
	ture Meter				
14.	Physical Balance				
	Capacity	• 25	0gm		
	Resolution		2mg		
	 Weight box 				
1.7	_				
15.	Hot Plate		0 1		
16	Conical flask		0ml		
17	Conical flask		0 ml		
18 19	Beaker		0 ml		
	Beaker		0 ml		
20	Beaker		0ml		
22	Beaker		00 ml ml		
23	Pipette Pipette		ml		
24	Pipette		ml		
25	Pipette stand		pacity 28 nos. x		
23	1 ipone stand		ml		
26	Pyknometer with				
	thermometer	• 10	ml		
27	Pyknometer with				
	thermometer		ml		
28	Reagent bottle	• 25	0 ml		

29	Reagent bottle	• 500 ml	
30	Regent bottle	• 1000 ml	
31	Reagent bottle	• 2000 ml	
32			
33	Burette	• 50 ml	
33	Burette Stand with clamp		
34	Test Tube (normal)	55 ml capacity	
35	Test Tube Stand	Capacity 20 nos.	
36	Measuring Cylinder	• 100 ml	
37	Measuring Cylinder	• 250 ml	
38	Measuring Cylinder Measuring Cylinder	• 500 ml	
39		• 1000 ml	
40	Measuring Cylinder Funnel, Diameter	• 1000 mm	
41	Bunsen Burner for LPG	▼ 100 mm	
41	Connection		
42	Silica Crucible with lid	• 25 ml	
43	Tong	• 6"	
44	Vacuum Desiccators	• 150 mm	
45	Distilled Water Bottle	Capacity 10 Ltrs.	
46	Distilled Water Bottle Distilled Water Bottle	Capacity 10 Ltrs. Capacity 1Ltrs.	
47	Dropper with rubber teat	• Capacity 1Lus.	
48	Tripod Stand		
49	Stirring Rod		
50	Test Tube Holder		
51	Spirit Lamp		
52.	Chemlab Simulation	The ChemLab Pro	
J 2.	Chemias Simulation	The Chemical 110	
	Software (1+10)Users	software should include	
	Software (1+10)Users license	software should include the Lab Wizard tool	
	license	the Lab Wizard tool	
	, ,		
	license The following Lab	the Lab Wizard tool which enables	
	Iicense The following Lab Experiment should be done by the Software: 1. Compare the pH of a	the Lab Wizard tool which enables instructors to run, edit,	
	Iicense The following Lab Experiment should be done by the Software: 1. Compare the pH of a buffer solution to a weak acid	the Lab Wizard tool which enables instructors to run, edit, and create lab simulations while the Standard edition	
	Iicense The following Lab Experiment should be done by the Software: 1. Compare the pH of a buffer solution to a weak acid solution.	the Lab Wizard tool which enables instructors to run, edit, and create lab simulations while the Standard edition enables students only to	
	Iicense The following Lab Experiment should be done by the Software: 1. Compare the pH of a buffer solution to a weak acid solution. 2. Perform strong acid base	the Lab Wizard tool which enables instructors to run, edit, and create lab simulations while the Standard edition enables students only to run lab simulations.	
	Iicense The following Lab Experiment should be done by the Software: 1. Compare the pH of a buffer solution to a weak acid solution. 2. Perform strong acid base titration and plot titration	the Lab Wizard tool which enables instructors to run, edit, and create lab simulations while the Standard edition enables students only to run lab simulations. There should be two	
	Iicense The following Lab Experiment should be done by the Software: 1. Compare the pH of a buffer solution to a weak acid solution. 2. Perform strong acid base titration and plot titration curve.	the Lab Wizard tool which enables instructors to run, edit, and create lab simulations while the Standard edition enables students only to run lab simulations. There should be two types of lab simulation	
	Iicense The following Lab Experiment should be done by the Software: 1. Compare the pH of a buffer solution to a weak acid solution. 2. Perform strong acid base titration and plot titration curve. 3. Determine the atomic	the Lab Wizard tool which enables instructors to run, edit, and create lab simulations while the Standard edition enables students only to run lab simulations. There should be two types of lab simulation files:-	
	Iicense The following Lab Experiment should be done by the Software: 1. Compare the pH of a buffer solution to a weak acid solution. 2. Perform strong acid base titration and plot titration curve. 3. Determine the atomic weight of magnesium by the	the Lab Wizard tool which enables instructors to run, edit, and create lab simulations while the Standard edition enables students only to run lab simulations. There should be two types of lab simulation files:- a) User-Defined Lab	
	Iicense The following Lab Experiment should be done by the Software: 1. Compare the pH of a buffer solution to a weak acid solution. 2. Perform strong acid base titration and plot titration curve. 3. Determine the atomic weight of magnesium by the amount of hydrogen gas	the Lab Wizard tool which enables instructors to run, edit, and create lab simulations while the Standard edition enables students only to run lab simulations. There should be two types of lab simulation files:- a) User-Defined Lab (UDL) files with a	
	Iicense The following Lab Experiment should be done by the Software: 1. Compare the pH of a buffer solution to a weak acid solution. 2. Perform strong acid base titration and plot titration curve. 3. Determine the atomic weight of magnesium by the amount of hydrogen gas evolved.	the Lab Wizard tool which enables instructors to run, edit, and create lab simulations while the Standard edition enables students only to run lab simulations. There should be two types of lab simulation files:- a) User-Defined Lab (UDL) files with a *.udl extension	
	Iicense The following Lab Experiment should be done by the Software: 1. Compare the pH of a buffer solution to a weak acid solution. 2. Perform strong acid base titration and plot titration curve. 3. Determine the atomic weight of magnesium by the amount of hydrogen gas	the Lab Wizard tool which enables instructors to run, edit, and create lab simulations while the Standard edition enables students only to run lab simulations. There should be two types of lab simulation files:- a) User-Defined Lab (UDL) files with a *.udl extension which can be created	
	Iicense The following Lab Experiment should be done by the Software: 1. Compare the pH of a buffer solution to a weak acid solution. 2. Perform strong acid base titration and plot titration curve. 3. Determine the atomic weight of magnesium by the amount of hydrogen gas evolved. 4. Examine the precision of	the Lab Wizard tool which enables instructors to run, edit, and create lab simulations while the Standard edition enables students only to run lab simulations. There should be two types of lab simulation files:- a) User-Defined Lab (UDL) files with a *.udl extension	
	Iicense The following Lab Experiment should be done by the Software: 1. Compare the pH of a buffer solution to a weak acid solution. 2. Perform strong acid base titration and plot titration curve. 3. Determine the atomic weight of magnesium by the amount of hydrogen gas evolved. 4. Examine the precision of three types of balances. 5. Examine the chemical behavior of ionic and	the Lab Wizard tool which enables instructors to run, edit, and create lab simulations while the Standard edition enables students only to run lab simulations. There should be two types of lab simulation files:- a) User-Defined Lab (UDL) files with a *.udl extension which can be created and edited by users	
	Iicense The following Lab Experiment should be done by the Software: 1. Compare the pH of a buffer solution to a weak acid solution. 2. Perform strong acid base titration and plot titration curve. 3. Determine the atomic weight of magnesium by the amount of hydrogen gas evolved. 4. Examine the precision of three types of balances. 5. Examine the chemical behavior of ionic and covalent bonds.	the Lab Wizard tool which enables instructors to run, edit, and create lab simulations while the Standard edition enables students only to run lab simulations. There should be two types of lab simulation files:- a) User-Defined Lab (UDL) files with a *.udl extension which can be created and edited by users with a Lab Wizard	
	Iicense The following Lab Experiment should be done by the Software: 1. Compare the pH of a buffer solution to a weak acid solution. 2. Perform strong acid base titration and plot titration curve. 3. Determine the atomic weight of magnesium by the amount of hydrogen gas evolved. 4. Examine the precision of three types of balances. 5. Examine the chemical behavior of ionic and covalent bonds. 6. Examine the reaction	the Lab Wizard tool which enables instructors to run, edit, and create lab simulations while the Standard edition enables students only to run lab simulations. There should be two types of lab simulation files:- a) User-Defined Lab (UDL) files with a *.udl extension which can be created and edited by users with a Lab Wizard tool (available with Pro edition only)., b) pre-programmed	
	Iicense The following Lab Experiment should be done by the Software: 1. Compare the pH of a buffer solution to a weak acid solution. 2. Perform strong acid base titration and plot titration curve. 3. Determine the atomic weight of magnesium by the amount of hydrogen gas evolved. 4. Examine the precision of three types of balances. 5. Examine the chemical behavior of ionic and covalent bonds. 6. Examine the reaction between cations and anions.	the Lab Wizard tool which enables instructors to run, edit, and create lab simulations while the Standard edition enables students only to run lab simulations. There should be two types of lab simulation files:- a) User-Defined Lab (UDL) files with a *.udl extension which can be created and edited by users with a Lab Wizard tool (available with Pro edition only)., b) pre-programmed simulation plug-ins	
	Iicense The following Lab Experiment should be done by the Software: 1. Compare the pH of a buffer solution to a weak acid solution. 2. Perform strong acid base titration and plot titration curve. 3. Determine the atomic weight of magnesium by the amount of hydrogen gas evolved. 4. Examine the precision of three types of balances. 5. Examine the chemical behavior of ionic and covalent bonds. 6. Examine the reaction between cations and anions. 7. Examine the relationship	the Lab Wizard tool which enables instructors to run, edit, and create lab simulations while the Standard edition enables students only to run lab simulations. There should be two types of lab simulation files:- a) User-Defined Lab (UDL) files with a *.udl extension which can be created and edited by users with a Lab Wizard tool (available with Pro edition only)., b) pre-programmed simulation plug-ins with a *.dll	
	Iicense The following Lab Experiment should be done by the Software: 1. Compare the pH of a buffer solution to a weak acid solution. 2. Perform strong acid base titration and plot titration curve. 3. Determine the atomic weight of magnesium by the amount of hydrogen gas evolved. 4. Examine the precision of three types of balances. 5. Examine the chemical behavior of ionic and covalent bonds. 6. Examine the reaction between cations and anions. 7. Examine the relationship between volume and	the Lab Wizard tool which enables instructors to run, edit, and create lab simulations while the Standard edition enables students only to run lab simulations. There should be two types of lab simulation files:- a) User-Defined Lab (UDL) files with a *.udl extension which can be created and edited by users with a Lab Wizard tool (available with Pro edition only)., b) pre-programmed simulation plug-ins with a *.dll extension that	
	Iicense The following Lab Experiment should be done by the Software: 1. Compare the pH of a buffer solution to a weak acid solution. 2. Perform strong acid base titration and plot titration curve. 3. Determine the atomic weight of magnesium by the amount of hydrogen gas evolved. 4. Examine the precision of three types of balances. 5. Examine the chemical behavior of ionic and covalent bonds. 6. Examine the reaction between cations and anions. 7. Examine the relationship between volume and temperature for gases at	the Lab Wizard tool which enables instructors to run, edit, and create lab simulations while the Standard edition enables students only to run lab simulations. There should be two types of lab simulation files:- a) User-Defined Lab (UDL) files with a *.udl extension which can be created and edited by users with a Lab Wizard tool (available with Pro edition only)., b) pre-programmed simulation plug-ins with a *.dll extension that cannot be created or	
	Iicense The following Lab Experiment should be done by the Software: 1. Compare the pH of a buffer solution to a weak acid solution. 2. Perform strong acid base titration and plot titration curve. 3. Determine the atomic weight of magnesium by the amount of hydrogen gas evolved. 4. Examine the precision of three types of balances. 5. Examine the chemical behavior of ionic and covalent bonds. 6. Examine the reaction between cations and anions. 7. Examine the relationship between volume and temperature for gases at constant pressure.	the Lab Wizard tool which enables instructors to run, edit, and create lab simulations while the Standard edition enables students only to run lab simulations. There should be two types of lab simulation files:- a) User-Defined Lab (UDL) files with a *.udl extension which can be created and edited by users with a Lab Wizard tool (available with Pro edition only)., b) pre-programmed simulation plug-ins with a *.dll extension that cannot be created or edited by users.	
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distillation. 9.Determine the specific heat of a metal. 10. Examine a simple double replace reaction. 11. Determine the molecular weight of a gas using the ideal gas law. 12. Create electrochemical cells and measure their voltages. 13. Examination of high temperature light emissions. 14. Determine the half life of a radioactive isotope. 15.Measure calcium and magnesium content in water by titration. 16. Determine the Heat of Neutralization for HCl with NaOH. 17. Determine the formula of a hydrate. 18.Determine the percentage of iron in an unknown iron (II) sulfate by redox titration. 19. Determine the salt content of water by titration. 20. Perform weak acid base titration and plot titration curve.	design chemistry lab simulations. It should be capable to translate experiments into ChemLab modules called User Defined Labs (UDL's) by asking one to supply it with documentation, chemical data and reaction formulas. The Model ChemLab software should come with a range of predesigned lab experiments for general chemistry at the high school and college level. The Chem lab Software should be available for Windows 8/7/Vista/XP/ME/98 /95, Windows 2000 & NT version 3.51 and higher, and Mac OSX operating systems. The chem. Lab Software should be capable to run on a Network environment.	

Signature with seal.....

02 PHYSICS LAB TECHNICAL COMPLIANCE STATEMENT FORM

An item-by-item commentary on the Technical Specifications demonstrating substantial responsiveness of the goods and services to those specifications or deviations and exceptions to the provisions of the Technical Specifications should be given.

Compliance/Deviation statement should also give the page number(s) of the technical literature where the relevant specification is mentioned and the relevant portion should be highlighted / underlined.

(Technical literature/brochures/manuals should be attached along with this format)

	(1 comment mer man e/or o	cnures/manuais snouia de aiic			mui)
Sl. No.	ITEM Parameter	Specifications	Vendors response towards compliance	Deviation s (if any)	Page No. of the Literature
1	Vernier Caliper (Precision)	0-50mm, least Count- 0.02mm			
	Micrometer	(0-50mm) Least Count 1/100mm			
3	Spherometer	Least count 1/100mm			
4	Specific Gravity Bottle	50ml			
	Physical Balance	Capacity 200gm, Sensitivity 1mg.			
6	Weight Box	Set of weights 1mg to 100 gms			
7	Simple Pendulum				
8	Measuring Tape	5m			
9	Stop Watch (Digital)	Digit Size 7 mm			
10	Boyles Law Apparatus & Gauge				
11	Resonance Apparatus Simple Brass	Set up for performing experiment on resonance			
12	Tunning Fork for resonance apparatus				
	Spirit Level	Length 150mm long, made of Plastic			
14	Glass Slab(with needles)	Size 125x65 mm			
15	Drawing Board	40 x 40 cm			
16	Optical Bench Hexagonal Section	Length 1.5m			
	Mirror Concave	Diameter 50 mm, FL 50, 75, 100 mm			
18	Mirror Convex	Diameter 50 mm, FL 50, 75, 100 mm			
19	Lens in Holder Double Concave	Dia- 50mm, FL-50mm			
20	Lens in Holder Double Convex	Dia-50 mm, FL-75mm			
	Bar Magnet	Size 100x11x6mm approx, Material Alnico			
	Magenetic Compass in Aluminium Case	Size 18 mm both side transparent			

	L	<u> </u>		
23	Millivoltmeter DC	Range 0-100 mVolts		
24	Galvanometer DC	Range 35-0-35 mV		
25	Voltmeter DC	Range- 0-10 V		
26	Ammeter DC	Range 0-10AMP		
27	Power Supply	0-12 V, AC/DC		
28	Rheostat, Porcelain Pipe Closed type	Length 25cm, Resistance 10 OHMS, Current 5.7 AMPS		
29	Plug Key	One way		
30	Resistance Box	No. of Coils 8, Range 0.1-5 OHMS, Total Resistance 11		
31	Decade Resistance Box	Range in Units, Tens, Hundreds & Thousand OHMS Total Resistance in 11110 OHMS, Dials 4		
32	Post Office Box with Copper Connection wires			
33	Digital Multimeter	3 ½ digits		
34	Prism Hollow	Size 38mm		
35	Extra Flint Glass Prism	Size 32x32mm		
36	Crown Glass Prism	Size 32x32 mm		
37	Plane Mirrors with base	Size 150x50mm		
38	Thermometer Plastic	0-50 degree C		
		10, 20, 40mm (Dia) of length 40		
39	Aluminium Cylinder	mm 10x20x30 cu mm , 15x25x35 cu		
40	Aluminium Rectangular Block	mm		
41.	motion of the object, elastic collision, Newton's law of motion and recording the path time diagram of linear motion using photo- gates. The runway should be used for all experiments and should be made of	Dimension: 119.5 x 10cm (L x W) excluding pulley.		
	The Following experiments should be done with this setup: 1 To find the velocity of an object. 2 To determine the average speed of an	2. Dynamic Trolley Dimensions: 155 x 77 x 55 mm (Lx W x H) approx. Material: Aluminium. Trigger: Pin press to release plunger. In-elastic collision: Via 2 nos. velcro pad. Stacking: Two or more trolleys		

5 To demonstrate the law of conservation	with 2 nos. guiding pins	
of energy.	Wheels: PVC, 4 nos. low frictions.	
6 To demonstrate the transfer of energy.	Weight mount: 4mm socket at	
7 To plot a graph between velocity and	center to mount slotted weights	
time using picket fence.	Clamping screw: To attach ticker	
81	tape or thread.	
	Suspension: Spring loaded.	
	Additional weights : Slotted, 2 nos.	
	100gm.	
	Weight: 600gm approx.	
	3. Digital Timer & Photogate	
	Display: 2 line LCD	
	Type: Micro controller based	
	Time resolution : 0.1 milli second	
	Mode: Time, Speed & Acceleration	
	Photogate: 2 Nos.	
	Interface : USB	
	Operating voltage : 5V DC	
	Photogate detector : Infra-Red	
	4. Microcontroller based and in-	
	built test functions.	
	Supplied with a pair of photogate	
	and photogate mounting rod.	
	5. Boss Head	
	Object type: Square & round shape	
	Object size: Up-to 13mm dia	
	Material : Aluminium alloy	
	Object can be hold both vertically	
	and horizontly.	
	6. Accessories Dynamics Trolley:	
	Item Name/Pulse Distance/ Socket	
	1b picket/Block 10mm /4mm	
	2b picket./Block 10mm,/2 times	
	4mm	
	3b picket. /Block 10mm, /3 times	
	4mm	
	10b picket./Block 10mm/10 times	
	4mm	
	7. Slotted Masses	
	Weights: Stainless steel	
	: 9nos. X 10gm	
	Hanger: 10gm, Plastic	
	Total weight: 100g	
	Total weight. 100g	

Signature with seal.....

ANNEXURE – VI

03 FURNITURE AND FIXTURES TECHNICAL COMPLIANCE STATEMENT FORM

An item-by-item commentary on the Technical Specifications demonstrating substantial responsiveness of the goods and services to those specifications or deviations and exceptions to the provisions of the Technical Specifications should be given.

Compliance/Deviation statement should also give the page number(s) of the technical literature where the relevant specification is mentioned and the relevant portion should be highlighted / underlined.

(Technical literature/brochures/manuals should be attached along with this format)

Sl. No.	ITEM Parameter	Specifications (all dimensions in mm)	Vendors response towards compliance	Deviations (if any)	Page No of the literature
1.	Two seater Student Desk and Chair	(i) Desk cum Bench with laminated tops with rounded edge (1100Wx915D x 744H) (ii) Provision for shelf storage (iii) Hooks for hanging bags			
2.	Office Table	Wooden Top, square tube understructure with three drawers (1199Wx590Dx 75H)			
3	Office Table	Wooden Top, square tube understructure with both three and two drawers (1365Wx680Dx 75H)			
4.	Computer Table	600Wx450Dx750H			
5.	Computer Chair with arm	Task Chair with no tilt mechanism, metal pedestal			
6.	Plain Almirah	1980Hx915Wx485D			
7.	Visitors Chair	Best quality			
8.	Book Rack with Glass Door	(i) 4 (four) doors (ii) 914Wx320Dx1742H			
9.	High Back Executive Chair				
10.	Mid Back Executive Chair				
11.	Armless slim chair for students				
12.	Library Reading Table	1220Bx2440L			

Signature	with	seal
Signature	WILLI	SC41

04 COMPUTER LAB TECHNICAL COMPLIANCE STATEMENT FORM

An item-by-item commentary on the Technical Specifications demonstrating substantial responsiveness of the goods and services to those specifications or deviations and exceptions to the provisions of the Technical Specifications should be given.

Compliance/Deviation statement should also give the page number(s) of the technical literature where the relevant specification is mentioned and the relevant portion should be highlighted / underlined.

(Technical literature/brochures/manuals should be attached along with this format)

Sl. No.	Items Parameter	Specifications	Vendors response towards	Deviations (if any)	Page No of the literature
			compliance		merature
1.	Desktop Computer				
	• Processor:	• Intel Corei3-3220 (third generation), 3.0 GHz, 6 MB Cache, 4 Cores or			
	Motherboard:	higher • Intel H61 chipset based motherboard express or			
	Memory slot	higher • 2 GB 1333MHz DDR3			
	Hard Drive:	• 500 GB 7200 rpm Serial ATA HDD or higher			
	DVD writer:	7177 TIBB of higher			
	• Audio:	Realtek High Definition integrated audio			
	Video Controller:	• Intel HD graphics on board			
	Keyboard:	 USB or PS/2 Standard Keyboard 104 keys USB or PS/2 Optical 			
	• Mouse:	mouse4 USB ports, 1 serial, 1			
	• Ports:	parallel • 10/100/1000 Mbps Ethernet Card integrated			
	LAN connection:	Mini- tower 18.5" wide screen flat			
	• Cabinet:	panel LCD/LED monitor			
	Monitor:	with Analog and DVI input			
	Warranty & Support:	 3 years onsite standard warranty with next business day support Microsoft Windows 8 			
	Operating System:	Professional (64 bit			

	• Antivirus:	version) (Preloaded) • Macfee/Norton Internet Security with upgrades/updates for 36 months.	
2.	Desktop Computer		
	• Processor:	• Intel Corei3-3220 (third generation), 3.0 GHz, 6 MB Cache, 4 Cores or	
	Motherboard:	higher Intel H61 chipset based motherboard express or higher	
	Memory slot	• 2 GB 1333MHz DDR3	
	Hard Drive:	• 500 GB 7200 rpm Serial ATA HDD or higher	
	• DVD writer:		
	Audio:	Realtek High Definition integrated audio	
		Head phone with micLogitech	
	Web CameraVideo Controller:	Nvidia GeForce Videocard with 2 GB RAM and VGA, DVI and HDMI interface	
	Keyboard:	 USB or PS/2 Standard Keyboard 104 keys USB or PS/2 Optical mouse 	
	• Mouse:	• 4 USB ports, 1 serial, 1 parallel	
	• Ports:	• 10/100/1000 Mbps Ethernet Card integrated	
	• LAN connection:	Mini- tower18.5" wide screen flat	
	Cabinet:Monitor:	panel LCD/LED monitor with Analog and DVI	
	Warranty & Support:	input • 3 years onsite standard warranty with next business day support	
		• Microsoft Windows 8 Professional (64 bit	
	Operating System:	version) (Preloaded) • Macfee/Norton Internet Security with	
	Antivirus:	upgrades/updates for 36 months.	

3.	LCD Projector with Screen:	3000 lums 500 hrs lamp life with LAN connectivity including ceiling mounting
4.	Server (alongwith racks): Processor family Number of Processors Processor core available Maximum memory Memory Slots Memory type Expansion slots Network controller Maximum Drive Bays Storage Controller Form Factor Management Warranty & Support: Operating System:	 Intel® Xeon® E5-2400 product family 2 or more 6 or higher 192 GB 12 DIMM slots DDR3 RDIMM OR UDIMM 6 IGB 361i Ethernet Adapter, 2 ports per controller 4, LFF SATA or 18 LFF SAS/SATA/SSD or 24 SFF SAS/SATA/SSD or 24 SFF SAS/SATA/SSD Dynamic Smart Array B120i or smart array P420i 5U, fully configured iLO management Engine, insight control 3 years onsite standard warranty with next business day support MS Windows 2008 Server Standard R2 64Bit single OLP NL (Academic). Windows Server 2008 SNGL OLP NL (Academic) Windows COUNIC OLD SERVER Enterprise 6.0 (20 User Enterprise 6.0 (20 User License) (Academic) SCO Unix Open Server Development System License (Academic) SCO Unix 6.0 media kit CD pack
5.	UPS	• 30 KVA (3Phase in, 3Phase out) IGBT based

	On-line UPS system with 3 hour backup using sealed maintenance free batteries including battery rack and interconnecting cables with OT STANDBY UNIT. • 3 years onsite standard warranty with next business day support		
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Signature with seal.....

05 WORKSHOP TECHNICAL COMPLIANCE STATEMENT FORM

An item-by-item commentary on the Technical Specifications demonstrating substantial responsiveness of the goods and services to those specifications or deviations and exceptions to the provisions of the Technical Specifications should be given.

Compliance/Deviation statement should also give the page number(s) of the technical literature where the relevant specification is mentioned and the relevant portion should be highlighted / underlined.

(Technical literature/brochures/manuals should be attached along with this format)

Sl. No.	Item Parameter	Specifications	Vendors response towards complianc e	Deviati ons (if any)	Page No of the literat ure
1.	DRILLING MACHINE,BENCH TYPE(PILLAR) Drilling Capacity (in Still) Column Diameter: Spindle Centre to back Distance: Spindle Nose to Table Distance: Spindle Nose to Base Distance: Table Travel: Taper in Spindle: Numbers of Speed: Range of Speed: Table Size: Base Size (Machined Area): Spindle Travel: Column Length: Overall Height with Pulley Guard: V-Belt Section: Motor	 25 mm. 87.5 mm 254 mm 685 mm 1080 mm 310 mm M.T3 8 Speed 73x1980 RPM 390 mm 360x370 mm 252 mm 1460 mm 1740 mm B- 52 1440 RPM 3 Phase 440 Volts: 1 H.P. 600x390 mm 			
2.	CENTER LATHE MACHINE 3JAW CHUCK (with all standard accesssories & tools) CAPACITY: Height of centre: Swing over slide: Swing over bed: Swing in gap: Admit Between: Width of bed: Length of bed: HEAD STOCK:	 165mm. 190mm. 315mm. 500mm. 725 mm. 240 mm. 1370 mm. 			

 Hole throughout the Spindle: 	
 Taper Bore In spindle: 	
• Spindle Nose & Size:	• 40mm.
Range of spindle speed:	• MT – 5.
Spindle speed:	• 6 T.P.I
Spiritio speed.	• 50 to 1200 RPM.
	• 8.
TREADS PITCHIES	• 17/0.5 to 15 mm pitch.
	<u> </u>
	• 40/2 to 6 tpi.
• Inches tread:	25.4
LEAD SCREW	• 25.4 mm.
• Diameter:	• 4 T.P.M.
• Treads:	
TAIL STOCKS	
 Tapper born in sleeve: 	• MT-3.
• Sleeve travel:	• 125mm.
Sleeve dia:	• 38mm.
CARRIAGE	
Compound slide swiveling degree:	• 45-0-45.
 Compound sinde swivering degree. Cross slide travel: 	• 175 mm.
	• 1/3 mm. • 150 mm X 350 mm
• Cross slide size	
Top slide travel	• 100 mm.
CYLLWYD Y A MYYD LEA CYLLYD AYAYY	
CENTER LATHE MACHINE 4JAW	
CHUCK (with all standard accesssories &	
tools)	
CAPACITY:	
• Height of centre:	• 165mm.
• Swing over slide:	• 190mm.
• Swing over bed:	• 315mm.
• Swing in gap:	• 500mm.
• Admit Between:	• 725 mm.
• Width of bed:	• 240 mm.
	• 1370 mm.
• Length of bed:	1370 IIIII.
HEAD STOCK:	
	• 40mm.
Hole throughout the Spindle: The Part of the Spindle:	
• Taper Bore In spindle:	• MT – 5.
 Spindle Nose & Size: 	• 6 T.P.I
 Range of spindle speed: 	• 50 to 1200 RPM.
• Spindle speed:	• 8.
TREADS PITCHES	
Metric Treads:	• 17/0.5 to 15 mm pitch.
• Inches tread:	• 40/2 to 6 tpi.
- mones wead.	10/2 to 0 tp.1
LEAD SCREW	• 25.4 mm.
	• 4 T.P.M.
• Diameter:	▼ 4 1.1°.1VI.
• Treads:	
The state of the s	
TAIL STOCKS • Tapper born in sleeve	

	• Sleeve travel:	• MT-3.
	• Sleeve dia:	• 125mm.
		• 38mm.
	CARRIAGE	
	 Compound slide swiveling degree: 	• 45-0-45.
	• Cross slide travel	• 175 mm.
	 Cross slide size 	• 150 MM x 350 MM.
	Top slide travel	• 100 mm.
	- Top since traver	- 100 mm.
4,	SHAPING MACHINE	
',	(with all standard accesssories & tools)	
	Machine Size:	• 18"
	Maximum Stroke:	• 20"
	Length of Ram:	• 36"
		• 15"
	• Min. Dist. of table to Ram:	• 2"
	Max. Vertical travel to tool slide:	• 4"
	 Length and width to table top: 	• 18"x12"
	• Length and width of table slide:	• 30"x11"
	Len of cross slide:	• 30"
	• Width of Ram:	• 10"
	No of Speeds:	• 3
	• HP Required (1440)	• 2
	-	
5	PLANNING MACHINE	
	(with all standard accesssories & tools)	
	• Planning size (ft):	• 4 Ft
	• Length of Table (mm):	• 1300 mm.
	• Max.Travel of Table (mm):	• 1200 mm.
	Max.Planning Width (mm):	• 900 mm.
	 Max.Height Under Cross Rail (mm): 	• 900 mm.
	 No. of Tool Post On Cross slide 	• 1.
	Motor H.P	• 3.
	• Length of Bed :	• 1900 mm.
6.	MILLING MACHINE	
	(with all standard accesssories & tools)	
	• Face of Body:	• 9"
	• Surface of Table:	• 42" x 9"
	• No. of Tee-Slots:	• 3
	• Size of Tee-Slots:	• 1/2"
	• Swivel either side of centre:	• 45"
	• Cross:	• 7"
	Vertical Traverse:	• 15"
	Longitudinal Traverse:	• 19"
	Standard Arbor:	• 19
	• Taper of Spindle:	• M.T.3
	• No. of Spindle Speed:	• 6
	• Range of Spindle Speed:	• 60 to 545
	Dia of Spindle:	• 2½"
	 No. of Longitudinal Feed: 	• 2
	• Electricals:	• 2 H.P.

	Coolant Tank Capacity:	• 3 Gallons
	Height:	• 60"
	Floor Space:	• 35" x 20".
7.	SLOTTING MACHINE	
	(with all standard accesssories & tools)	
	• Stroke:	• S10 mm to 150 mm.
	Longitudinal Movement:	• 200 mm.
	Cross Movement:	• 110 mm.
	Speed Adjustment:	• 3 Speed.
	Ram Adjustment:	• 150 mm.
	• H.P.	• 1 H.P.
	• Size	• 250x150 mm
8.	TIG WELDING MACHINE	
	(with all standard accesssories & tools)	
	Open Circuit Voltage:	• 100 Volts DC
	Welding Current Range MMAW	• 10-400 Amps. DC
	TIG:	
	Maximum continuous hand welding	
	current at 60% duty cycle (rated	• 400 Amps. DC.
	output) MMAW/TIG:	
	Maximum continuous automatic	
	welding current at 100% duty cycle	• 310 Amps. DC.
	MMAW/TIG:	
	Type of welding current regulation:	• Stepless
	• Current selection range:	• Single
	Insulation Class:	• 'H'
	(Approx) Dimension LxHxW mm:	• 675 x 350 x 690
9.	MIG WELDING MACHINE	
)·	(with all standard accesssories & tools)	
	Mains supply, Ph x V, Hz:	• 3 x 415, 50
	• Open circuit voltage, V DC (Max):	• 55
	Welding current range, A:	• 60 – 400
	 Welding current at 60% duty cycle, 	• 400
	A:	400
	Welding current at 100% duty cycle,	• 310
	A:	510
	Insulation class:	• H
	Type of cooling:	• Forced Air
		• 675 x 350 x 690
	• Dimensions, I x w x h, mm:	• 0/3 x 330 x 090
10.	ELECTRIC ARC WELDING MACHINE	
10.	(with all standard accesssories & tools)	
	• Effective input current,:	• 21.4A
	• Fuse (slow),:	• 32A
	 Mains cable, Ø mm²: 	• 4C x 4
	manio caolo, y min .	
	Permitted load at (MMA)	
	• 60% duty cycle, A/V:	• 400 / 36.
	• 100% duty cycle, A/V:	• 310 / 32.4.
	100% daty 2500,12 ***	
	Permitted load at (TIG)	
	• 60% duty cycle, A/V:	• 400 / 26.
	• 100% duty cycle, A/V:	• 310 / 22.4.
	100/0 0001 0 010, 11/11	

11.	 Power factor at maximum current: Efficiency at maximum current, %: Setting range (TIG/MMA), A: Open circuit voltage (OCV), V: GAS WELDING MACHINE (with all standard accesssories & tools) Helmet. Goggle. 	• 0.93 • 85 • 20 - 400 • 68 (400i)78 (400i XC)		
	 Mask. Hand gloves. Safety shoes. MACHINE TOOLS			
	 Cutogen 5: IOX 13 B (OXY) Regulator: IDA 4B (ACETYLENE) Regulator: Nozzle A-Type 3/64: FR 18Pair for oxygen &Acetylene: LPG 18B Regulator: Protex RO for oxygen: Protex RA for Acetylene Holder Handicool: 			
12	PORTABLE DRILLING MACHINE (with all standard accessories & tools) • Drilling Dia. In wood: • Drilling Dia. In steel: • No- load speed:	25mm.10mm.0-2600rpm.		
13	GRINDING MACHINE (with all standard accesssories & tools) • Grinding Machine. • Portable Type. • Angle Grinder.			

14	RADIAL DRILLING MACHINE	
	(with all standard accesssories & tools)	
	Machine Capacity: 25 / 650	
	• Drilling (M.S):	• 25
	• Drilling (C.L):	• 32
	Bring (C.L.). Boring:	• 40
	_	
	• Tapping (M.S):	• 15
	• Tapping (C.L):	• 20
	Drilling Head	
	Spindle Nose	• M.T.3
	 Spindle Nose Outside Dia 	• 40
	 Spindle Silver Dia 	• 70
	 Travel of Spindle 	• 190
	Working Range	
	Column dia	• 130mm
	Dis. From spindle to base Min/Max	• 150 x 850mm
	Dis. From Column to Centre	• 380 x 650mm
	Min/Max	300 X 030mm
	Drilling head traverse	• 300mm
		• 715mm
	• Drilling Radius	
	• Travel Of arm	• 700mm
	Base Plate	
	Height of base plate	• 125mm
	 Working Surface 	• 500 x 710mm
	 Width of Cast Side 	• 15 mm
	• Overall Dim. (LxWxH)	• 1100 x 800 x 1600
15	Wood Turning Lathe	
13	• Length of bed	•6"
		•8"
	Height of Centre	
	• Width of bed	•8"
	• Admit b/w centres	•42"
	• No. of spindle speed	•3
	 Face chuck dia 	•10"
	• RPM	•740-350
	● Motor (HP)	●1.5 HP
16	Rip Saw	• 12"
		• 14"
17	Tenon Saw	• 12"
		• 18"
18	Dovetail Saw	• 12"
		• 18"
		• 24"
19	Firmer chisel with Handle	• 1/2"
	Timer ember with Hundre	• 3/4"
		• 44
		• 11/4"
		• 1½"
		• 2"
1		

20	Beveled Edge Firmer Chisel with Handle	• 1/2"	
20	Bevered Edge i inner emper with francie	• 3/4"	
		• 1"	
		• 11/4"	
		• 1½"	
		• 2"	
21	Mortise Chisel with Handle	• 8mm	
	Will Handle	• 10mm	
		• 12mm	
22	Triangular File	• 6"	
23	Rectangular File	• 10"	
23	Rectangular File	• 12"	
24	Hacksaw Blade 12x½x18TPI	• Carbon	
2.	Theread Blace 12X/2X10111	• HSS	
		Bi-Metal	
		Di-Wetai	
25	Mallet (Wooden Hammer)	• 21/2"	
		• 3"	
		• 3½"	
		• 4"	
26	Ball Pein Hammer	• 200gms	
		• 300gms	
		• 500gms	
		• 800gms	
27	Hacksaw frame Metal Handle	• 12"x1"	
28	Steel Rule	• 12"	
		• 24"	
29	Drill Bit HSS	• 6mm	
		• 8mm	
		• 10mm	
		• 12mm	
30	Jack Plane	• 7" length	
31	Carpentry bench vice	• 7" size	
32	Welding Rods	4mm (1pkt contains	
		60 rods)	
33	Knife File	• 6"	
		• 8"	
		• 10"	
34	Steel Tape	• 03meters	
35	Thread Cutter		
36	Claw Hammer		
27	D.		
37	Pincer		

Signature with seal.....

01 CHEMISTRY LAB FINANCIAL BID

Sl.	ITEM	Specifications	Quantity (A)	Basic Price (in Rs.) (both in figures &	Taxes (in Rs.)			Rate (in Rs.)	Amount (in Rs.)
No.				words) (B)	CST/Unit (C)	VAT/Unit (D)	OTHERS Pl. Specify (E)	(F)=(B+C+ D+E)	(A)x(F)
1.	Digital Programmable Rate Melting Point & Boiling Apparatus- Oil Less Display: Temperature Range: Resolution: Rate of Heating: Sensor: Hold: Dimension:	 Digital 12mm LED Upto 320 degree C 1 degree C 0.5, 1,2, & 5 degree C selectable after reaching preset temperature RTD (PT-100)Temp. Sensor. Facility to hold Temp. 190 W x 215 D x 240mm H 	05 nos.						
2.	 Bomb Calorimeter Digital 0.01 degree C Readout One no. S.S. Bomb with Crucible, 3000cc jacketed vessel Motorized stirrer Briquette press Firing Unit Pressure guage with copper pipe fitting Digital thermometer 		05 nos.						
3.	Quartz two Stage Distiller with Safety		05 nos.						

	control Unit & Quartz Boiler, Quartz			=	
	Condensor				
	• Conductivity:				
	• Output capacity:	to 0.5 μS/cm			
		ltr/hr.			
	cooling water combanipation.				
	Safety control clift for above				
4	dilit;				
4.	Micro Controller Based Digital	05 nos.			
	pH/Temperature/mv Meter				
	• Width 16x2 alpha Numeric LCD				
	Display having auto Temp				
	Compensation along with				
	Accessories pH Electrode				
	Temp Probe				
	Electrode Stand				
	Dust Cover				
5.		HP motor 05 nos.			
6.	Hot Air Oven	10 nos.			
	• Capacity: • 95 lt				
7.	Muffle Furnace Rectangular	10 nos.			
	(Laboratory Model)				
8.	Digital Weighing Balance	10 nos.			
	• Readability: • 0.01				
	• Capacity: • 400ş				
9.	Redwood Viscometer	05 nos.			
	Voltage Variac for better				
	regulating the temp. for				
	determination of Viscosity of				
	Lubricating Oils and fuels				
	 stainless steel jet electrically 				
	heated model with energy				
	Regulator (Viscosity Below				
	2000secs.)				
	Accessories to be included:				

	- m			1			
	Thermometer with Calibration Out of the Property of the Calibration Out of the Calibration of the Cal						
	Certificate IP 8c						
	Thermometer with Calibration						
	Certificate IP 9c						
	Thermometer with Calibration						
	Certificate IP 10c						
10.	Smoke Point Apparatus		10 nos.				
	 as per ASTM D 1322 						
11.	Pensky Martenes Flash Point Tester		10 nos.				
	 digital indicator 						
	Oil jet or gas jet test flame as per						
	ASTM D 9310.						
	Accessories to be included:						
	 Spare Cup with lid for above 						
	Thermometer ASTM 9c with						
	Calibration Certificate						
	• Thermometer ASTM 10 c with						
	Calibration Certificate						
12	Aniline point apparatus		10 nos.				
	• motorized stirrer & digital temp.						
	indicator as per IP 2 & IS 1448						
	(P-3), ASTM D 611 Accessories						
	•						
	Outer Jacket with Cork						
	Tue with Cork						
	Brass stirrer inner						
13	Micro Processor		10 nos.				
13	Conductivity/TDS/Temperature Meter		10 1108.				
14.	Physical Balance		05 nos.				
17.	• Capacity	• 250gm	OJ HOS.				
	Resolution	• 0.2mg					
		• 0.2mg					
	Weight box						
15.	Hot Plate		05 nos.				
16	Conical flask	• 250ml	250 nos.				
10	Comear mask	₹ ZSUIIII	230 HOS.				

1.7	G . 1 . 7 . 1	T00 1	1.50			I
17	Conical flask	• 500 ml	150 nos.			
18	Beaker	• 100 ml	200 nos.			
19	Beaker	• 250 ml	200 nos. 100 nos.			
20	Beaker	• 500ml				
21	Beaker	• 1000 ml	50 nos.			
22	Pipette	• 10 ml	100 nos.			
23	Pipette	• 20 ml	200 nos.			
24	Pipette	• 25 ml	200 nos.			
25	Pipette stand	• capacity 28 nos. x 25 ml	50 nos.			
26	Pyknometer with thermometer	• 10 ml	100 nos.			
27	Pyknometer with thermometer	• 25 ml	100 nos.			
28	Reagent bottle	• 250 ml	500 nos.			
29	Reagent bottle	• 500 ml	200 nos.			
30	Regent bottle	• 1000 ml	25 nos.			
31	Reagent bottle	• 2000 ml	25 nos.			
32	Burette	• 50 ml	250 nos.			
33			200 nos.			
	Burette Stand with clamp					
34	Test Tube (normal)	• 55 ml capacity	1000 nos.			
35	Test Tube Stand	 Capacity 20 nos. 	50 nos.			
36	Measuring Cylinder	• 100 ml	50 nos.			
37	Measuring Cylinder	• 250 ml	50 nos.			
38	Measuring Cylinder	• 500 ml	50 nos.			
39	Measuring Cylinder	• 1000 ml	25 nos.			
40	Funnel,	Diameter 100 mm	200 nos.			
41			25 nos.			
	Bunsen Burner for LPG Connection					
42	Silica Crucible with lid	• 25 ml	150 nos.			
43	Tong	• 6"	150 nos.			
44	Vacuum Desiccators	• 150 mm	25 nos.			
45	Distilled Water Bottle	• Capacity 10 Ltrs.	25 nos.			
46	Distilled Water Bottle	Capacity 1Ltrs.	150 nos.			
47	Dropper with rubber teat		150 nos.			
48	Tripod Stand		25 nos.			

49	Stirring Rod		200 nos.			
50	Test Tube Holder		150 nos.			
51	Spirit Lamp		75 nos.			
52.	Chemlab Simulation Software- (1+10)	The ChemLab Pro software should include the Lab Wizard tool which	05 Nos.			
	Users License	enables instructors to run, edit, and				
	The following Lab Experiment should	create lab simulations while the				
	be done by the Chem Lab:	Standard edition enables students				
	1. Compare the pH of a buffer solution to	only to run lab simulations.				
	a weak acid solution.	• There should be two types of lab				
	2. Perform strong acid base titration and	simulation files:-				
	plot titration curve.	a) User-Defined Lab (UDL) files				
	3. Determine the atomic weight of	with a *.udl extension which can				
	magnesium by the amount of hydrogen	be created and edited by users				
	gas evolved.	with a Lab Wizard tool (available with Pro edition				
	4.: Examine the precision of three types	(available with Pro edition only).,				
	of balances.	b) pre-programmed simulation				
	5. Examine the chemical behavior of ionic	plug-ins with a *.dll extension				
	and covalent bonds.	that cannot be created or edited				
	6.Examine the reaction between cations	by users.				
	and anions. 7.Examine the relationship between	 The Software should have a tool 				
	_	to design chemistry lab				
	volume and temperature for gases at constant pressure.	simulations. It should be capable				
	8. Separate crude oil into its components	to translate experiments into				
	using fractional distillation.	ChemLab modules called User				
	9.Determine the specific heat of a metal.	Defined Labs (UDL's) by asking				
	10. Examine a simple double replace	one to supply it with				
	reaction.	documentation, chemical data				
	11. Determine the molecular weight of a	and reaction formulas.				
	gas using the ideal gas law.	The Model ChemLab software				
	12. Create electrochemical cells and	should come with a range of pre-				
	measure their voltages.	designed lab experiments for				
	13. Examination of high temperature light	general chemistry at the high				
	emissions.	school and college level.				
	14. Determine the half life of a	The Chem lab Software should				

Note:			Signature of	the authorized signatory		
(Total amount in words Date: Place:) only		
plot titration curve.						
15.Measure calcium and magnesium content in water by titration. 16. Determine the Heat of Neutralization for HCl with NaOH. 17. Determine the formula of a hydrate. 18.Determine the percentage of iron in an unknown iron (II) sulfate by redox titration. 19. Determine the salt content of water by titration. 20. Perform weak acid base titration and	 8/7/Vista/XP/ME/98/95, Windows 2000 & NT version 3.51 and higher, and Mac OSX operating systems. The chem. Lab Software should be capable to run on a Network environment. The Software should be capable to download upgrades as & when required 					
radioactive isotope.	be available for Windows	,				

Bidder should go through the relevant instructions in tender documents before preparing the Financial Bid

02 PHYSICS LAB FINANCIAL BID

Sl. No.	ITEM	Specifications	Quantity (A)	Basic Price (in Rs.) (both in figures & words) (B)	CST/Unit	(C) PI. Specify		Rate (in Rs.) (F)=(B+C+D+E)	Amount (in Rs.) (A)x(F)
				,	(0)	(2)	(E)		
1	Veriner Caliper (Precision)	0-50mm, least Count- 0.02mm	75 nos.						
2	Micrometer	(0-50mm) Least Count 1/100mm	75 nos.						
3	Spherometer	Least count 1/100mm	75 nos.						
4	Specific Gravity Bottle	50ml	75 nos.						
5	Physical Balance	Capacity 200gm, Sensitivity 1mg.	25 nos.						
6	Weight Box	Set of weights 1mg to 100 gms	50 nos.						
7	Simple Pendulum		50 nos.						
8	Measuring Tape	5m	50 nos.						
9	Stop Watch Digital	Digit Size 7 mm	75 nos.						
10	Boyles Law Apparatus & Gauge		15 nos.						
11	Resonance Apparatus Simple Brass		25 nos.						
12	Tunning Fork for resonance apparatus		50 nos.						
13	Spirit Level	Length 150mm long, made of Plastic	25 nos.						
14	Glass Slab(with needles)	Size 125x65 mm	150 nos.						
15	Drawing Board	40 x 40 cm	150 nos.						

16	Optical Bench Hexagonal Section	Length 1.5m	25 nos.		
17	Mirror Concave	Diameter 50 mm, FL 50, 75, 100 mm	100 nos.		
1.0	Mirror Convex	Diameter 50 mm, FL 50, 75, 100 mm	100		
18			100 nos.		
19	Lens in Holder Double Concave	Dia- 50mm, FL-50mm	100 nos.		
20	Lens in Holder Double Convex	Dia-50 mm, FL-75mm	100 nos.		
	Bar Magnet	Size 100x11x6mm approx, Material			
21		Alnico	75 nos.		
22	Magnetic Compass in Aluminium Case	Size 18 mm both side transparent	150 nos.		
23	Millivoltmeter DC	Range 0-100 mVolts	50 nos.		
24	Galvanometer DC	Range 35-0-35 mV	50 nos.		
25	Voltmeter DC	Range- 0-10 V	50 nos.		
26	Ammeter DC	Range 0-10AMP	50 nos.		
27	Power Supply	0-12 V, AC/DC	50 nos.		
28	Rheostat, Porcelain Pipe Closed type	Length 25cm, Resistance 10 OHMS, Current 5.7 AMPS	50 nos.		
29	Plug Key	One way	50 nos.		
30	Resistance Box	No. of Coils 8, Range 0.1-5 OHMS, Total Resistance 11	50 nos.		
31	Decade Resistance Box	Range in Units, Tens, Hundreds & Thousand OHMS Total Resistance in 11110 OHMS, Dials 4	50 nos.		
32	Post Office Box with Copper Connection wires		50 nos.		

33	Digital Multimeter	3 ½ digits	10 nos.			
34	Prism Hollow	Size 38mm	75 nos.			
35	Extra Flint Glass Prism	Size 32x32mm	75 nos.			
36	Crown Glass Prism	Size 32x32 mm	75 nos.			
37	Plane Mirrors with base	Size 150x50mm	75 nos.			
38	Thermometer Plastic	0-50 degree C	10 nos.			
39	Aluminium Cylinder	10, 20, 40mm (Dia) of length 40 mm	75 nos.			
40	Aluminium Rectangular Block	10x20x30 cu mm , 15x25x35 cu mm	75 nos.			
	Law of Motion Kit :	,				
41.	Kit should be designed to study the linear motion of the object, elastic collision, Newton's law of motion and recording the path time diagram of linear motion using photo- gates. The runway should be used for all experiments and should be made of	Material: Stainless steel Pulley: Plastic, 50mm dia Scale: 0 to 115cm, graduated in mm. Surface: Smooth surface with low friction. 2. Dynamic Trolley Dimensions: 155 x 77 x 55 mm (Lx W x H) approx. Material: Aluminium. Trigger: Pin press to release plunger. In-elastic collision: Via 2 nos. velcro pad.				
	 The Following experiments should be done with this setup: 1 To find the velocity of an object. 2 To determine the average speed of an object. 3. To determine the acceleration of a moving object. 4. To demonstrate the elastic collision 5 To demonstrate the law of conservation of energy. 	Stacking: Two or more trolleys with 2 nos. guiding pins Wheels: PVC, 4 nos. low frictions. Weight mount: 4mm socket at center to mount slotted weights Clamping screw: To attach ticker tape or thread.	05 Nos			

(T) 1	W. 11, 600	_
6 To demonstrate the transfer of	Weight: 600gm approx.	
energy.	3. Digital Timer & Photogate	
7 To plot a graph between velocity		
and time using picket fence.	Type: Micro controller based	
	Time resolution: 0.1 milli second	
	Mode: Time, Speed & Acceleration	
	Photogate: 2 Nos.	
	Interface: USB	
	Operating voltage: 5V DC	
	Photogate detector: Infra-Red	
	4. Microcontroller based and in-built	
	test functions.	
	Supplied with a pair of photogate and	
	photogate mounting rod.	
	5. Boss Head	
	Object type : Square & round shape	
	Object size: Up-to 13mm dia	
	Material : Aluminium alloy	
	Object can be hold both vertically and	
	horizontly.	
	6. Accessories Dynamics Trolley:	
	Item Name/Pulse Distance/ Socket	
	1b picket/Block 10mm /4mm	
	2b picket./Block 10mm,/2 times 4mm	
	3b picket. /Block 10mm, /3 times 4mm	
	10b picket./Block 10mm/10 times 4mm	
	7. Slotted Masses	
	Weights: Stainless steel	
	: 9nos. X 10gm	
	Hanger: 10gm, Plastic	
	Total weight: 100g	
	TOTAL AMOUNT for the Package:	
	TOTAL MINOUTH IN MICH MEMBER	

Tota	amount in word	ds) c	onl	y
------	----------------	-------	-----	---

Date : Place :

Signature of the authorized signatory		
	Name:	•••••
	Designation:	Note:
Bidder should go through the relevant instructions in ten	der documents before preparing th	ie Financial Bid

03 FURNITURE AND FIXTURES FINANCIAL BID

Sl.	ITEM	Specifications	Quantity (A)	Basic Price (in Rs.) (both in figures &		Taxes (in F	Rs.)	Rate (in Rs.) (F)=(B+C+D+E	Amount (in Rs.) (A)x(F)
No.				words) (B)	CST/Unit (C)	VAT/Unit (D)	OTHERS Pl. Specify (E)		
1.	Two seater Student Desk and Chair	(i) Desk cum Bench with laminated tops with rounded edge (1100Wx915D x 744H) (ii) Provision for shelf storage (iii) Hooks for hanging bags	425nos.						
2.	Office Table	Wooden Top, square tube understructure with three drawers (1199Wx590Dx 75H)	25 nos.						
3	Office Table	Wooden Top, square tube understructure with both three and two drawers (1365Wx680Dx 75H)	20 nos.						
4.	Computer Table	600Wx450Dx750H	250 nos						
5.	Computer Chair with arm	Task Chair with no tilt mechanism, metal pedestal	250 nos.						
6.	Plain Almirah	1980Hx915Wx485D	50 nos.						
7.	Visitors Chair	Best quality	70 nos.						
8.	Book Rack with Glass Door	(i) 4 (four) doors (ii) 914Wx320Dx1742H	75 nos.						
9.	High Back Executive Chair		05 nos.						

10.	Mid Back Executive Chair		50 nos.						
11.	Armless slim chair for		125 nos.						
	students		125 1103.						
12.	Library Reading Table	1220Bx2440L	10 nos.						
				TOTAL AMOUNT for the	he Package:				
(Гotal amount in words) only					
Ι	Pate:								
F	lace:								
				Signature o	of the authori	ized signator	y		
							Name:		•••••
							Designa	ıtion:	•••••

Note:
Bidder should go through the relevant instructions in tender documents before preparing the Financial Bid

04 COMPUTER LAB FINANCIAL BID

Sl.	ITEM		Quantity	Basic Price (in Rs.)		Taxes (in R	s.)	Rate	Amount (in Rs.)
No.		Specifications	(A)	(both in figures & words) (B)	CST/Unit (C)	VAT/Unit (D)	OTHERS Pl. Specify (E)	(in Rs.) (F)=(B+C+D+E)	(A)x(F)
1.	Desktop Computer		160 nos.				. ,		
	Processor:	• Intel Corei3-3220(third generation), 3.0 GHz, 6 MB Cache, 4 Cores or higher							
	Motherboard:	 Intel H61 chipset based motherboard express or higher 							
	Memory slot	• 2 GB 1333MHz DDR3							
	Hard Drive:	• 500 GB 7200 rpm Serial ATA HDD or higher							
	DVD writer:								
	Audio:	Realtek High Definition integrated audio							
	Video Controller:	Intel HD graphics on boardUSB or PS/2 Standard							
	Keyboard:	Keyboard 104 keysUSB or PS/2 Optical							
	Mouse:	mouse4 USB ports, 1 serial, 1 parallel							
	• Ports:	• 10/100/1000 Mbps							

		Ethomat Candintagnet 1				
	- 1 ANI	Ethernet Card integrated				
	• LAN connection:	Mini- tower				
		• 18.5" wide screen flat				
	• Cabinet:	panel LCD/LED				
	Monitor:	monitor with Analog				
		and DVI input				
		• 3 years onsite standard				
		warranty with next				
	Warranty & Support:	business day support				
	warranty & Support.	Microsoft Windows 8				
		Professional (64 bit				
	Operating System:	version) (Preloaded)				
	Operating System.	Macfee/Norton Internet				
		Security with				
	• Antivirus:	upgrades/updates for 36				
		months.				
2.	Desktop Computer		40 nos.			
	• Processor:	• Intel Corei3-3220 (third				
		generation), 3.0 GHz, 6				
		MB Cache, 4 Cores or				
		higher				
	Motherboard:	• Intel H61 chipset based				
		motherboard express or				
		higher				
	 Memory slot 	• 2 GB 1333MHz DDR3				
	Hard Drive:	• 500 GB 7200 rpm Serial				
	Time Dirve.	ATA HDD or higher				
	DVD writer:	7171 TIDD of Higher				
		• Dooltok High Definition				
	Audio:	Realtek High Definition				
		integrated audio				
		Headphone with mic				
		• Logitech				

• Web-c • Video	• Nvidia GeF Videocard with 2 RAM and VGA, Controller: and HDMI interface	GB DVI	
	 4 USB ports, 1 serial parallel 10/100/1000 M Ethernet Card integr Mini- tower 18.5" wide screen panel LCD/I monitor with An 	al, 1 Ibps ated flat LED	
Cabine Monite	or: • 3 years onsite stand warranty with business day support	next	
• Warra	nty & Support: • Microsoft Window Professional (64 version) (Preloaded)	bit	
Operat Antivi	ting System: • Macfee/Norton Intelligence Security upgrades/updates for	rnet with	
3. LCD Projector	with Screen: • 3000 lums	15 nos.	
J. Leb Hojectol	• 500 hrs lamp life LAN connecti	with	

4	Canyon (alan assith mastra).		11 nos				
4.	Server (alongwith racks):	1 10 W 0 F5 2400	11 nos.				
	 Processor family 	• Intel® Xeon® E5-2400					
		product family					
		• 2 or more					
	 Number of Processors 	• 6 or higher					
	 Processor core available 	• 192 GB					
	Maximum memory	• 12 DIMM slots					
	Memory Slots						
	•	DDR3 RDIMM OR					
	Memory type	UDIMM					
		• 6					
		• 1GB 361i Ethernet					
	 Expansion slots 	Adapter, 2 ports per					
	 Network controller 	controller					
		• 4, LFF SATA or					
		18 LFF					
	 Maximum Drive Bays 	SAS/SATA/SSD or					
	,	3A3/3A1A/33D 01					
		24 SFF					
		SAS/SATA/SSD					
	• Stange Controller						
	Storage Controller						
		 Dynamic Smart Array 					
		B120i or smart array					
		P420i					
		• 5U, fully configured					
	 Form Factor 	iLO management					
	 Management 	Engine, insight control					
		• 3 years onsite standard					
		warranty with next					
	 Warranty & Support: 	business day support					
		MS Windows 2008					
	Operating System:	Server Standard R2					
	5 F 8 2 J 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	64Bit single OLP NL					
		(Academic).					
L						l	

		 Windows Server 2008 SNGL OLP NL(Academic) UsrCAL SCO Unix Open Server Enterprise 6.0 (20 User License) (Academic) SCO Unix Open Server Development System License (Academic) SCO Unix 6.0 media kit CD pack 				
5.	UPS	 30 KVA (3Phase in, 3Phase out) IGBT based On-line UPS system with 3 hour backup using sealed maintenance free batteries including battery rack and interconnecting cables with OT STANDBY UNIT. 3 years onsite standard warranty with next business day support 	05 nos.			
		TOTAL AMOUNT for the Packag	e:		 ·	

(Total amount in words) only
Date:	
Place:	
	Signature of the authorized signatory

Name:	• • •	••	 • •	•	 • •	 •	 •	 •	•	 •	•	 •	•	 •	•	••
Designation			 		 						 					

Note:

Bidder should go through the relevant instructions in tender documents before preparing the Financial Bid

05 WORKSHOP FINANCIAL BID

Sl.	ITEM	Specifications Quantity (in R) (both in f		Basic Price (in Rs.) (both in figures		Taxes (in Rs.)	Rate (in Rs.)	Amount (in Rs.)	
No.			(A)	& words) (B)	CST/Unit (C)	VAT/Unit (D)	OTHERS Pl. Specify (E)	(F)=(B+C+D+E)	(A)x(F)
1.	DRILLING MACHINE,BENCH TYPE(PILLAR) Drilling Capacity (in Still) Column Diameter: Spindle Centre to back Distance: Spindle Nose to Table Distance: Spindle Nose to Base Distance: Table Travel: Taper in Spindle: Numbers of Speed: Range of Speed: Range of Speed: Spindle Travel: Spindle Travel: Column Length: Overall Height with Pulley Guard: V-Belt Section: Motor	 25 mm. 87.5 mm 254 mm 685 mm 1080 mm 310 mm M.T3 8 Speed 73x1980 RPM 390 mm 360x370 mm 252 mm 1460 mm 1740 mm B- 52 1440 RPM 3 Phase 440 Volts: 1 H.P. 600x390 mm 	05 nos.						

2. CENTER LATHE MACHINE 3JAW CHUCK (with all standard accesssories &		08 nos.			
tools)					
CAPACITY:					
Height of centre:	• 165mm.				
• Swing over slide:	• 190mm.				
• Swing over bed:	• 315mm.				
• Swing in gap:	• 500mm.				
• Admit Between:	• 725 mm.				
• Width of bed:	• 240 mm.				
• Length of bed:	• 1370 mm.				
Length of bed.	1370 mm.				
HEAD STOCK:					
• Hole throughout the Spindle:					
 Taper Bore In spindle: 	• 40mm.				
 Spindle Nose & Size: 	• MT – 5.				
Range of spindle speed:	• 6 T.P.I				
Spindle speed:	• 50 to 1200 RPM.				
Spinate speed.	• 8.				
TREADS PITCHIES	5 0.				
Metric Treads:					
• Inches tread:					
LEAD SCREW					
• Diameter:	• 17/0.5 to 15 mm pitch.				
• Treads:	• 40/2 to 6 tpi.				
TAIL STOCKS	•				
• Tapper born in sleeve:	• 25.4 mm.				
• Sleeve travel:	• 4 T.P.M.				
Sleeve dia:					
Sice ve dia.					
CARRIAGE	• MT-3.				
Compound slide swiveling degree:	• 125mm.				
 Cross slide travel: 	• 38mm.				
Cross slide travel.Cross slide size					
- Closs slide size					

Top slide travel	 45-0-45. 175 mm. 150 mm x 350 mm 100 mm. 				
3. CENTER LATHE MACHINE 4JAW CHUCK (with all standard accesssories & tools) CAPACITY: • Height of centre: • Swing over slide: • Swing over bed: • Swing in gap: • Admit Between:	• 165mm. • 190mm. • 315mm. • 500mm.	08 nos.			
 Width of bed: Length of bed: HEAD STOCK: Hole throughout the Spindle: 	• 725 mm. • 240 mm. • 1370 mm.				
 Taper Bore In spindle: Spindle Nose & Size: Range of spindle speed: Spindle speed: 	 40mm. MT – 5. 6 T.P.I 50 to 1200 RPM. 8. 				
TREADS PITCHESMetric Treads:Inches tread:LEAD SCREW	17/0.5 to 15 mm pitch.40/2 to 6 tpi.				
 Diameter: Treads: TAIL STOCKS Tapper born in sleeve 	25.4 mm.4 T.P.M.				

	 Sleeve travel: Sleeve dia: CARRIAGE Compound slide swiveling degree: Cross slide travel Cross slide size Top slide travel 	 MT-3. 125mm. 38mm. 45-0-45. 175 mm. 150 MM X 350 MM. 100 mm. 	
4,	SHAPING MACHINE (with all standard accesssories & tools) • Machine Size: • Maximum Stroke: • Length of Ram: • Max. Dist. of table to Ram: • Min. Dist. of table to Ram: • Max. Vertical travel to tool slide: • Length and width to table top: • Length and width of table slide: • Len of cross slide: • Width of Ram: • No of Speeds: • HP Required (1440)	 18" 20" 36" 15" 2" 4" 18"x12" 30"x11" 30" 10" 3 2 	05 nos.
5	PLANNING MACHINE (with all standard accesssories & tools) Planning size (ft): Length of Table (mm): Max.Travel of Table (mm): Max.Planning Width (mm): Max.Height Under Cross Rail (mm): No. of Tool Post On Cross slide Motor H.P	 4 Ft 1300 mm. 1200 mm. 900 mm. 900 mm. 1. 3. 	05 nos.

• Length of Bed :	• 1900 mm.				
		1			
6. MILLING MACHINE		05 nos.			
(with all standard accesssories & tools)	0.0				
• Face of Body:	• 9"				
• Surface of Table:	• 42" x 9"				
• No. of Tee-Slots:	• 3				
• Size of Tee-Slots:	• 1/2"				
Swivel either side of centre:	• 45"				
• Cross:	• 7"				
Vertical Traverse:	• 15"				
• Longitudinal Traverse:	• 19"				
Standard Arbor:	• 1"				
• Taper of Spindle:	• M.T.3				
No. of Spindle Speed:	• 6				
 Range of Spindle Speed: 	• 60 to 545				
Dia of Spindle:	• 2½"				
 No. of Longitudinal Feed: 	• 2				
Electricals:	• 2 H.P.				
 Coolant Tank Capacity: 	• 3 Gallons				
Height:	• 60"				
Floor Space:	• 35" x 20".				
7. SLOTTING MACHINE		05 nos.			
(with all standard accesssories & tools)					
Stroke:	• S10 mm to 150				
 Longitudinal Movement: 	mm.				
Cross Movement:	• 200 mm.				
Speed Adjustment:	• 110 mm.				
Ram Adjustment:	• 3 Speed.				
• H.P.	• 150 mm.				
• Size	• 1 H.P.				
	• 250x150 mm				
8. TIG WELDING MACHINE		05 nos.		 	
(with all standard accesssories & tools)					

 Open Circuit Voltage: Welding Current Range MMAW TIG: Maximum continuous hand welding current at 60% duty cycle (rated output) MMAW/TIG: Maximum continuous automatic welding current at 100% duty cycle MMAW/TIG: Type of welding current regulation: Current selection range: Insulation Class: (Approx) Dimension LxHxW mm: 	 100 Volts DC 10-400 Amps. DC 400 Amps. DC. 310 Amps. DC. Stepless Single 'H' 675 x 350 x 690 	05			
 9. MIG WELDING MACHINE (with all standard accesssories & tools) Mains supply, Ph x V, Hz: Open circuit voltage, V DC (Max): Welding current range, A: Welding current at 60% duty cycle, A: Welding current at 100% duty cycle, A: Type of Welding Voltage/Current Regulator: Insulation class: Type of cooling: Dimensions, l x w x h, mm: 	 3 x 415, 50 55 60 - 400 400 310 YES H Forced Air 675 x 350 x 690 	05 nos.			
10. ELECTRIC ARC WELDING MACHINE (with all standard accessories & tools) • Effective input current,: • Fuse (slow),: • Mains cable, Ø mm²:	21.4A32A4C x 4	08 nos.			

	 100% duty cycle, A/V: Power factor at maximum current: Efficiency at maximum current, %: Setting range (TIG/MMA), A: Open circuit voltage (OCV), V: 	• 400 / 36. • 310 / 32.4. • 400 / 26. • 310 / 22.4. • 0.93 • 85 • 20 - 400 • 68 (400i)78 (400i XC)			
11.	GAS WELDING MACHINE (with all standard accesssories & tools) • Helmet.		08 nos.		
	• Goggle.				
	Mask.Hand gloves.Safety shoes.				
	 MACHINE TOOLS Cutogen 5: IOX 13 B (OXY) Regulator: IDA 4B (ACETYLENE) Regulator: Nozzle A-Type 3/64: FR 18Pair for oxygen &Acetylene: LPG 18B Regulator: Protex RO for oxygen: Protex RA for Acetylene Holder Handicool: 				
12.	PORTABLE DRILLING MACHINE (with all standard accesssories & tools)		8 nos.		

	 Drilling Dia. In wood: Drilling Dia. In steel: No- load speed: 	25mm.10mm.0-2600rpm.				
13.	GRINDING MACHINE		10 nos.			
	(with all standard accesssories & tools)					
	 Grinding Machine. 					
	 Portable Type. 					
	Angle Grinder.					

14.	RADIAL DRILLING MACHINE		05 nos.			
17.	(with all standard accessories & tools)		05 1108.			
	Machine Capacity: 25 / 650					
	• Drilling (M.S):	• 25				
	• Drilling (C.L):	• 32				
	Boring:	• 40				
		• 15				
	• Tapping (M.S):	• 20				
	• Tapping (C.L):	• 20				
	Drilling Head					
	• Spindle Nose	• M.T.3				
	Spindle Nose Outside Dia Spindle Nose Outside Dia					
	Spindle Silver Dia	• 40				
	Travel of Spindle	• 70				
	Working Range	• 190				
	• Column dia	•				
	 Dis.From spindle to base Min/Max 	Working Range				
	 Dis.From Column to Centre 	• 130mm				
	Min/Max	• 150 x 850mm				
	 Drilling head traverse 	• 380 x 650mm				
	 Drilling Radius 	• 300mm				
	 Travel Of arm 	• 715mm				
	Base Plate	• 700mm				
	 Height of base plate 	Base Plate				
	 Working Surface 	• 125mm				
	 Width of Cast Side 	• 500 x 710mm				
	• Overall Dim. (LxWxH)	• 15 mm				
		• 1100 x 800 x 1600				
15	Wood Turning Lathe		05 nos.			
	Length of bed	•6"				
	Height of Centre	•8"				
	Width of bed	•8"				
	Admit b/w centres	•42"				
	• No. of spindle speed	•3				
	• Face chuck dia	•10"				
	• RPM	•740-350				

• Motor (H	(P) •1.5 HP				
16 Rip Saw	• 12"	75 nos.			
	• 14"				
		75 nos.			
17 Tenon Saw	• 12"	75 nos			
	• 18"	75 nos			
18 Dovetail Saw	• 12"	75 nos			
	• 18"	75 nos			
	• 24"	75 nos			
19 Firmer chisel with		75 nos			
	• 3/4"	75 nos			
	• 1"	75 nos			
	• 11/4"	75 nos			
	• 1½"	75 nos			
	• 2"	75 nos.			
20 Beveled Edge Fir	rmer Chisel with Handle • ½"	75 nos			
	• 3/4''	75 nos			
	• 1"	75 nos			
	• 11/4"	75 nos			
	• 1½"	75 nos			
	• 2"	75 nos.			
21 Mortise Chisel w	ith Handle • 8mm	75 nos			
	• 10mm	75 nos			
	• 12mm	75 nos			
22 Triangular File	• 6"	75 nos.			
23 Rectangular File	• 10"	75 nos.			
	• 12"	75 nos.			
24 Hacksaw Blade 1		50nos.			
	• HSS	50 nos.			
	Bi-Metal				

25	Mallet (Wooden Hammer)	• 2½"	50 nos.				
		• 3"	50 nos.				
		• 3½"	50 nos.				
		• 4"	50 nos.				
26	Ball Pein Hammer	• 200gms	150 nos.				
		• 300gms	150 nos.				
		• 500gms	150 nos.				
		• 800gms	150 nos.				
27	Hacksaw frame Metal Handle	• 12"x1"	50 nos.				
28	Steel Rule	• 12"	50 nos.				
		• 24"	50 nos.				
29	Drill Bit HSS	• 6mm	150 nos.				
		• 8mm	150 nos.				
		• 10mm	150 nos.				
		• 12mm	150 nos.				
30	Jack Plane	• 7" length	50 nos.				
31	Carpentry bench vice	• 7" size	25 nos.				
32	Welding Rods	 4mm (1pkt contains 	250 nos.				
		60 rods)					
33	Knife File	• 6"	50 nos.				
		• 8"	50 nos.				
		• 10"	50 nos.				
34	Steel Tape	• 03meters	100 nos.				
35	Thread Cutter		50 nos.				
36	Claw Hammer		150 nos.				
37	Pincer		100 nos.				
	TOTAL AMOUNT for the Package:						
	·						

(Total a	nmount in words) only		
Date : Place :			
	Signature of the authorized signatory	N	
		Name: Designation:	
Note:			
Bidder should go through the relevant instructions in tender documents before preparing the Financial Bid			
		Signature with seal	

ANNEXURE-VIII

(In the letterhead of the Bank)

PERFORMANCE BANK GUARANTEE

To,

The Director Higher & Technical Education, Govt. of Arunachal Pradesh Itanagar

	dertaken, in pursuance of Contract No (Description of
furnish you with a Bank Guarantee by a	by you in the said order that the Supplier shall recognized bank for the sum specified therein as 's performance obligations in accordance with the
of the Supplier, up to a total of	e are Guarantors and responsible to you, on behalf
This guarantee is valid until theday o	·I20
	Signature and Seal of Guarantors
	Date20
	Address:

All correspondence with reference to this guarantee shall be made at the following address:

The Director Higher and Technical Education ESS Sector, Near Civil Secretariat Itanagar 791 111 Arunachal Pradesh