



रयत शिक्षण संस्थेचे,
कला व वाणिज्य महाविद्यालय, माढा
टेंडर नोटीस



रयत शिक्षण संस्थेचे कला व वाणिज्य महाविद्यालय, माढा ता.माढा जि.सोलापूर हे PM-USHA योजनेंतर्गत Science Lab Equipment's खरेदीसाठी निविदा मागवत आहेत. सदर निविदासंदर्भातील अटी व शर्ती <https://mahatenders.gov.in> व www.accmadha.in या वेबसाईटवर प्रसिद्ध केलेल्या आहेत.

सही

प्राचार्य

कला व वाणिज्य महाविद्यालय, माढा

Tender Notice No: 5/2024-25



Rayat Shikshan Sanstha's

Arts & Commerce College, Madha.

E-TENDER

For

**“SUPPLY INSTALLATION AND COMMISSIONING
SCIENCE LAB EQUIPMENTS”**

(Under PM-USHA Scheme Component III)

(Tender No: 05/2024-25 Date: 21/02/2025)

The Principal

**Arts & Commerce College, Madha.
Tal-Man, Dist-Satara, State-Maharashtra, India**

E-TENDER

For

SUPPLY INSTALLATION AND COMMISSIONING OF SCIENCE LAB EQUIPMENTS

(Under PM-USHA Scheme Component 3)

The Principal Arts & Commerce College, Madha

Tal-Madha, Dist. Solapur, State-Maharashtra, India

Tender No.	05/2024-25
Tender Publish date:	As per online Schedule
Pre-Bid Meeting Date & Time:	As per online Schedule
Document download start date:	As per online Schedule
Bid submission start date:	As per online Schedule
Bid submission end date:	As per online Schedule
Date & Time for opening of the Tender:	As per online Schedule
Tender validity period:	Six Months from date of Acceptance of tender

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I. INTRODUCTION

Rayat Shikshan Sanstha's, Arts and Commerce College Madha, was established in Jun, 1970. It is located in Madha Tehsil of Solapur District, Maharashtra. Madha is drought prone rural place famous for the Madheshwari and Vitthal temple, ancient fort, and river Mankarna. The generous people of Madha, donated the land for college building and boys hostel. The college started with a well-defined motive of 'Empowering The college provides quality higher education in Arts, Commerce and Science streams at graduate level. The institution has an adequate infrastructure including ICT enabled classrooms, library, and staff room, common room for girls and boys, Women's hostel, indoor and outdoor games facility, canteen, RO drinking water, Two wheeler and Four wheeler parking facility, internet broadband leased line connection with 100 mbps etc. It is our great pleasure to announce that the quality graph of the college is consistently increasing as we have achieved A+ grade with CGPA 3.26 in the fourth NAAC accreditation cycle.

Online tenders are invited from competent and eligible agencies / contractors / firms for the Equipment Purchase of Science Lab Equipment's UNDER PM-USHA – COMPONENT III for Rayat Shikshan Sanstha's, **Arts and Commerce College of Madha in Gat No. 447 at new campus, Tal.Madha, Dist. Solapur.**

E -TENDER NOTICE

Ref. No.:05/2024-25

Date: 21/02/2025

The Principal, Arts & Commerce College, Madha invites e-Tenders from reputed Manufacturers, Authorized distributors/Authorized dealers from India or abroad and their Indian reputed agents for supply of following at Arts & Commerce College, Madha, Tal-Madha, Dist- Solapur, State-Maharashtra, India under PM-USHA scheme component III.

Sr.	Particulars	Last submission Date & Time
1	SUPPLY, INSTALLATION AND COMMISSIONING EQUIPMENTS	As per online Schedule

1. Complete Tendering process will be **online** in two envelopes system viz. Technical & Commercial Bid. All the notification and detailed terms & conditions regarding this e- tender notice here after available on the website www.mahatenders.gov.in. The guidelines to download the tender documents and online submission of bids and the procedure of tender opening can be downloaded from the above website.
2. Bidding documents can be seen and downloaded from the www.mahatenders.gov.in from As per online Schedule.
3. The Bid can be submitted in electronic format only on the portal. from As per online Schedule. The last date for submission for bid is upto As per online Schedule.
4. Tenderers have to submit the Tender form fee and Earnest Money Deposit (EMD) using online banking option on <https://mahatenders.gov.in> as shown below:

Sr. No	Tender No.	Particulars	Quantity	Tender Form Fees INR	EMD INR
1	2	3	4	5	6
1	05/2024-25	SUPPLY, INSTALLATION AND COMMISSIONING OF EQUIPMENTS	1	3000	19000/-

- a) The downloading cost of tender documents is free.
- b) Tenderer / Bidder shall be required to submit Tender fee of Rs. 3000/- and Earnest Money Deposit of Rs. 19000/- separately by Online banking options only on <https://mahatenders.gov.in> for tender No. **05/2024-25**

(SUPPLY, INSTALLATION AND COMMISSIONING OF SCIENCE LAB EQUIPMENTS)

- c) Bid shall be treated as invalid if
- Scanned copies signed digitally are not submitted online along with the bid.
5. Tender Fee and EMD amount is submitted by using the online banking option on <https://mahatenders.gov.in>
 6. Online Technical bid will be opened on As per online Schedule in Arts & Commerce College, Madha.
 7. Tenderer should submit originals of scanned copies for verification during Technical bids opening.
 8. Tenderer should submit information & scanned copies in **pdf format** only while submit online in Technical Envelope as mentioned in technical offer as per terms and conditions of the tender.
 9. Tenderer should upload **Bill of Quantity (BOQ)** after filling quotes in it online only.
 10. Tenderer should have valid class-II Digital Signature Certificate (DSC) obtained from any certifying Authorities as prescribed.
 11. All the information regarding this tender is published on e-tendering portal www.mahatenders.gov.in For Help support, Toll Free No. 1800 233 7315.
 12. Interpretation of the tender document is the responsibility of the bidder. It is the sole responsibility of the bidder to get all the terms cleared before submitting the bid.
 13. **The Principal, Arts & Commerce College, Madha** reserves the right to accept or reject any or all the tenders without assigning any reason.

Date: 21/02/2025

Place: Madha

III (A) TERMS AND CONDITIONS – GENERAL

1. e-Tender documents available on www.mahatenders.gov.in which is issued by the office of the Principal, Arts & Commerce College, Madha, to manufacturers/distributors/authorized dealers/registered firms from India and abroad and/or their Indian reputed agents for the upgradation of Facility of **SUPPLY, INSTALLATION AND COMMISSIONING OF EQUIPMENTS**, to the Arts & Commerce College, Madha, Tal- Madha, Dist- Solapur, India.
2. Modifications, if any, made in the above documents will be done by addenda/ corrigendum, copies of which will be available on www.mahatenders.gov.in. The bidder shall not make any additions/deletions to or amend the text of the documents except in so far as may be necessary to comply with any addenda/ corrigendum issued. The bidders shall use only tender documents as issued for submitting their bid and shall comply with various terms and conditions.
3. All pages of tender document shall be signed by the authorized person and submit the same in scanned copy of **PDF format** only.
4. The full name of the person authorized to file the tender with designation, present and registered office address, Phone No., Fax No. & e-mail address shall be indicated in the tender.
5. Additional documents if required regarding the tender may be submitted in the physical form (post/courier/personally) only. E-mail, fax and Telex will **not be considered for Technical bid evaluation**.
6. The tender should be filled and submitted in **English only**. All accompanying literature and correspondence also in English or Hindi.
7. Claim for costs, charges, expenses incurred by the bidder in connection with preparation of tender submission and for subsequent clarifications of their tender will not be entertained.
8. Tender Committee will not be responsible for any typographical errors/ambiguity/additions/omissions committed by the bidder while filling up of the tender.
9. Submission of a bid by a tenderer implies that he has read all terms & conditions, and has made himself aware of the scope and specifications of the items to be supplied, availability of materials, local conditions and other factors bearing on the execution of the supply.
10. The bidder shall be deemed to have full knowledge of documents. No extra charges consequent on any misunderstanding.

11. The bidder shall be deemed to have satisfied himself before tendering as to the correctness and sufficiency of his tender and about the rates quoted by him and cover all his obligations under the tender.
12. Bids submitted by manufacturers, Authorized distributors/ authorized dealers/ registered firms from India and abroad and/or their Indian reputed agents only will be considered.
13. **Tender Fees and Earnest Money Deposit:** Bidders have to submit the Tender Fee and Earnest Money Deposit using online Banking option on <https://mahatenders.gov.in> as indicated in Annexure-I for all items in tender being supplied in the form of Indian rupees currency (INR). The EMD amount of the unsuccessful bidder will be returned immediately after opening of the bids by online banking system only. **Bidder has to check his eligibility for exemption of Tender Fee and EMD amount, if applicable for NSIC/Micro & Small Enterprises (Manufacturer & for suppliers registered with Respective Registering Authorities/NSIC) as per Govt. directives.**
14. **Performance Security:** On confirmation/demand from the Joint Director of Industries, the successful bidder shall have to deposit 5 % amount of the total value of the contract towards interest free security deposit in the form of Demand Draft or Bank guarantee along with the relevant required documents if any. This Demand draft or bank guarantee shall be submitted along with the acceptance of the purchase order. As a Security Deposit submission of the Bank Guarantee in the name of **The Principal, Arts & Commerce College, Madha**. The security deposit will be released without any interest only after satisfactory installation, commissioning & Functioning of the **SUPPLY, INSTALLATION AND COMMISSIONING OF SCIENCE LAB EQUIPMENTS** in full functioning condition.
15. **Authority of Signing:** If the tender is submitted by an individual, it shall be signed by him. If the tender is submitted by a proprietary firm, it shall be signed by the proprietor. If the tender is submitted by a partnership firm, it shall be signed by all the partners of the firm or by authorized partner. If the tender is submitted by a Pvt. Ltd. /Ltd company or a corporation, it shall be signed by a legally authorized person. In the latter two cases there has to be an authorization letter for filling the bids.
16. **Price/ Commercial Bid:**
 - **In case of Item wise tender, the Bidder should offer the prices for each and every items mentioned in the bid, otherwise liable to reject after opening of bids.**
 - The Tender shall be filled in English with a neat hand/type and all the figures and

words shall be legible.

- The rates shall be written both in words and figures. The bidder shall also show the amount of each item, the total of each section and the grand total of the whole tender as specified.
- The tenders shall be verified by the bidder for accuracy in the arithmetical calculations, prior to submission.
- The price should be offered all inclusive in Indian rupees (INR)

17. Technical details/documents shall contain following:

- a) Compliance to technical specifications of the machinery/equipment/items for which bids are submitted as given in Annexure I. Compliance should be in same sequence as of specifications mentioned in documents. The range specified in the technical specifications should have min. or max. as the case may be.
- b) Compliance to the terms and conditions of the tender document, Authorized person to specify, “all the terms and conditions given above will be complied with” and Digital Signature in respective pages of the tender documents, where “terms and conditions “are given.
- c) Adherence to the stipulated delivery schedule of the item– Authorized person to specify, “Delivery schedule given above will be complied with” and Digital Signature in respective pages of the tender documents, where “delivery schedule of each of the items” as is given in Annexure II.
 - i) Covering letter on the letter head of the bidder stating:
 - ii) That the minimum warranty period of **STANDERED WARRANTY** after successful installation and commissioning of **SUPPLY, INSTALLATION AND COMMISSIONING OF SCIENCE LAB EQUIPMENTS.**
 - iii) That the bid confirms to the terms and conditions of the tender.
 - iv) Confirmation that the quoted rates are valid till validity of the tender or a period of **Six Months** from the date of the tender whichever is later.
 - v) The details regarding the service centers, stocking of spares etc.
 - vi) The probable life expectancy of the machines as specified in the tender Under Normal conditions of operation should be minimum **15 years.**
 - vii) Safety devices & mechanisms from various mechanical, fire, chemical & Electrical hazards must be incorporated in the machine and should be separately mentioned.
 - viii) We will not pledge the ordered Equipment / Item with any financial institute or Bankers.

- d) Addenda/Corrigendum/Clarification issued by Tender Committee before due date of tender, duly signed by the authorized person.
- e) A letter indicating assumptions, criterion, technical alternative etc., if any. However, the alternatives suggested by the bidder would not be taken as the basis for technical/commercial evaluation of the bids.
- f) All the details of pre-installation requirements including space, power supply, environmental conditions, special structures if any.

17.2 Commercial details shall contain:

Total cost of the equipment / item and accessories (quoted in INR), duly filled and Digital Signature in the format prescribed commercial envelope.

SUPPLY INSTALLATION AND COMMISIONING OF SCIENCE LAB EQUIPMENTS		
Sr. No.	Cost details for Equipment's Quoted in INR	Cost inINR
1	Total cost INCLUDING SUPPLY, INSTALLATION AND COMMISSIONING OF EQUIPMENTS at Arts & Commerce College, Madha, Tal-Madha, Dist- Solapur, State-Maharashtra, India, including GST, All applicable taxes, Clearing, Transportation, Insurance, warranty, Unloading, Installation & On-site Commissioning, agency commission, packing, forwarding, technological training 4 persons.	18,33,441/-

- 18. **Validity of the Tender:** Rates quoted by the bidder shall be valid till the period of the tender or a minimum of *Six Months* from the acceptance of the tender, whichever is later. The bidder shall not withdraw or revise or alter any conditions, rate(s) quoted within this stated period.
- 19. **Opening of tender:** The tender shall be opened by the Tender Committee, constituted by the Competent authority, at the office of The Principal, Arts & Commerce College, Madha, at the time, date and venue as given in the "Tender Notice". Bid will be opened before the representatives who remain present at the same time. The Tender Committee shall not be liable for any representatives being absent.
- 20. **Agreement:** The successful bidder shall sign an Undertaking on Judicial paper worth **Rs. 500.00** in the format prescribed in Annexure IV before releasing of the purchase order by the office of The Principal, Arts & commerce College, Madha. A copy of the purchase order once received should be returned with a stamp and Signature of the authorized person as a token of acceptance of the terms and conditions of the purchase order.

21. Criterion for rejection:

- a) The Principal, Arts & Commerce College, Madha reserves the right to accept or reject any tender or reject all tenders without giving any reasons whatsoever for their decision.
- b) Tenders are liable to be rejected in which any of the prescribed particulars / information is either missing or incomplete in any respect and/or if the prescribed conditions are not fulfilled.
- c) Tenders which are found to be technically non-responsive shall be rejected and their commercial details shall not be considered.
- d) Canvassing in connection with tender is strictly prohibited and tender submitted by bidder will not be considered.
- e) Tenders containing specific conditions of the bidder other than the terms and conditions given in the tender document and not acceptable to the Tender Committee are liable to be reject.
- f) If the tender document is not digitally signed online by the authorized person and photocopies validated by stamp and signature of the authorized person.
- g) The bidder should quote for all the equipment specified in annexure I otherwise the tender will be rejected. However the commercial bid will be evaluated on the total cost.
- h) The Special Purpose Vehicle will be catering to wide range of customers/stakeholders including the manufacturers/exporters. Hence, preference will be given to more popular brands which are widely accepted nationally & internationally.

Before submission of the tender, the prospective bidders are expected to examine technical specifications required, terms and conditions etc., given in this tender document. Failure to furnish all information required in the tender document may result in the rejection of the bid. The Principal reserves the right to cancel items, from the list of the requirement of equipments without assigning any reason there of.

Date : 21/02/2025
Place : Madha.

The Principal,
Arts & Commerce College, Madha.

III (B) TERMS AND CONDITIONS – SPECIAL

1. Cost Details:

Cost details are to be filled up in the prescribed format for items as given at BOQ for all the machinery as applicable to indicating therein total **free delivery up to destination at Arts & Commerce College, Madha, Tal- Madha, Dist-Solapur, State-Maharashtra, India** including all types of national & international taxes, GST, freight, insurance, packing and forwarding, transport charges, loading/unloading, installation, erection and commissioning charges, any other taxes/charges/Local taxes as applicable etc.

2. All accessories & startup kit required for installation & commissioning the main equipment's are to be specified if any.
3. SPV and/or college will not be responsible in any way for any loss of or damage to life of a person/s appointed by bidder during supply, installation & commissioning as stated in Annexure I and for the purpose of training of technical personnel at the premises of **Arts & Commerce College, Madha, Tal- Madha, Dist-Solapur, State- Maharashtra, India** and SPV and/or Tender Committee will not pay any amount in whatsoever manner towards any such loss or damage.

4. The terms of Payment for equipment / item shall be:

A. No advance on Work order after submission of the Bank Guarantee in the name of **The Principal, Arts & Commerce College, Madha** and DD in the name **The Principal, Arts & Commerce College, Madha** as a security deposit.

B. The payment will be released after successful commissioning of the equipment at site and imparting training to the technical personnel of the concern department.

5. The bidder for **SUPPLY INSTALLATION AND COMMISSIONING OF SCIENCE LAB EQUIPMENTS** provide adequate training **free of cost** for at least 4 technical personnel of the **CENCERN DEPARTEMNTS** per equipment including trouble shooting etc. and making them confident of operating the equipment independently.
6. The bidder shall adhere to the delivery period (30 DAYS OF AWARD OF PURCHASE ORDER) of the **SUPPLY INSTALLATION AND COMMISSIONING OF SCIENCE LAB EQUIPMENTS** as committed by him as indicated in Annexure II of the tender document. Penalty for non-execution of the order within the delivery period shall be 1% of the cost of the **SUPPLY INSTALLATION AND COMMISSIONING OF SCIENCE LAB EQUIPMENTS** for every week of delay and maximum 5% of the total value of the

tender.

7. The delivery, installation & commissioning period of the **SUPPLY INSTALLATION AND COMMISSIONING OF SCIENCE LAB EQUIPMENTS** as agreed should not be extended under normal conditions. Suitable penalty for non-execution of the order may be enforced to the extent of 1% of the cost of **SUPPLY INSTALLATION AND COMMISSIONING OF SCIENCE LAB EQUIPMENTS** for every week extended and maximum 5% of the total value of the tender. In case of the delay beyond scheduled period due to some unforeseen reason, written permission is required from the Chairman, Tender Committee with proper justification to avoid penalty.
8. The bidder shall give warranty for at least **STANDARD WARRANTY** in respect of items quoted after successful commissioning of the **SUPPLY INSTALLATION AND COMMISSIONING OF SCIENCE LAB EQUIPMENTS**.
9. During the warranty period, regular servicing/maintenance should be undertaken free of charge, including replacement of defective parts/travel cost, etc. Subsequently, servicing/maintenance should be undertaken **every 3 months** by the authorized agency of the manufacturer/supplier.
10. If tender inviting authority call demo of equipment's, then tenderer should arrange the demo of equipment in a Arts & Commerce College, Madha campus with their own cost.
11. Operation manuals and other instruction manuals should be provided in English **ONLY**.
12. The bidder shall also mention the probable life expectancy of the instrument/ accessory under normal condition of operation wherever applicable.
13. In case of short supply or wrong **EQUIPMENTS**, its parts of accessories or supply of items in damaged conditions; it is the responsibility of the bidder to arrange for the supply of the required items in working condition as per the purchase order, within a reasonable time. Any additional expenditure, whatsoever, for the above will be borne by the bidder only.
14. Orders for the supply of items, once placed with a successful bidder is nontransferable and sub-contracting is not permitted. The Principal, Arts & Commerce College, Madha reserves the right to cancel the order in such an event.
15. Any non-fulfillment of the stipulation given above will make the bid invalid.
16. The bids shall first be evaluated on the "Technical parameters" which shall inter-alia

included, otherwise will be considered as a technically disqualified.

Proof that the bidder is

- i. Technical Envelope T (Technical Bid)
- ii. Either manufacturer or an Authorized Distributor/ Authorized Dealer or reputed Supplier for the **SUPPLY INSTALLATION AND COMMISSIONING OF SCIENCE LAB EQUIPMENTS** for which the bid is submitted.
- iii. Compliance to technical specifications of the **SUPPLY INSTALLATION AND COMMISSIONING OF SCIENCE LAB EQUIPMENTS** for which the bid is submitted.
- iv. Constitution documents of Manufacturer / Supplier (Proprietor / Partnership / Pvt. LtdCo. / HUF / Co-Operative, etc.)
- v. Copy of GST/CST Registration Certificate of the manufacturing /Dealer/Distributor unit, with registration number valid on the date of filing the tender.
- vi. The bidder must have successfully completed at least 5 institutional supply contracts for the government institutes or recognized universities for scientific instruments in the last 5 years.
- vii. The bidder must provide a minimum **warranty of 3 years, AMC for 5 years,** and onsite support within 48 hours of a service request.
- viii. PAN allotment Certificate/PAN CARD issued by Income Tax Department.
- ix. After sales service center details with supporting documents.
- x. Copy of e-Banking Receipt of payment made for Tender fee and EMD.
- xi. The Tenderer should submit catalogues giving full details of machinery and make of all the quoted tender items.
- xii. Warranty details of the quoted products.
- xiii. Income Tax Returns for last 05 years and last 05 years turnover statement 85 L.
- xiv. A covering letter duly signed by the authorized person as per the specimen given at **Annexure III** of the tender document.
- xv. Technical documents Uploaded In Technical Envelope T except the financial bid to

be submitted at office of The Principal, Arts & Commerce College, Madha, Tal-Madha, Dist- Solapur before 17.00 P.M. on 28/02/2025 (All the documents and certificates shall be either in original or true copy of the same duly notarized or attested by Government Gazetted officer.)

xvi. Assumptions and Pre-Installation Conditions.

xvii. **Annexure II** of the tender document.

xviii. Compliance to all other relevant and critical terms & conditions of the tender.

xix. Original copies of Documents submitted for technical qualification should be produced for verification, if required.

If any of the above mentioned parameters are not fulfilled, the bid will be considered as technically disqualified.

17. Submission of Bids: The Documents have to be uploaded by the bidder as per the below sequence only and as per the naming sequence given below only. In case the bidder wishes to add any other documents then he may do so only in Pre-installation requirements.

- i. All pages of the tender document are to be signed and uploaded.
- ii. Letter from OEM in case of Authorized distributor/ dealer.
- iii. Board Resolution / Proof of Authorization for signing.
- iv. A covering letter duly signed by the authorized person as per the specimen given at
Annexure III of the tender document.
- v. Descriptive leaflet/brochure of the equipment/item quoted to be closed along with the technical details.
- vi. Pre-Installation conditions if any.
- vii. GST Certificate.
- viii. Copy of PAN allotment Certificate/PANCARD issued by Income Tax Department
- ix. Income Tax Returns for last 05 years and last 05 years turnover statement 85 L.
- x. Constitution documents of Manufacturer / Supplier (Proprietor / Partnership / Pvt. Ltd Co. / HUF / Co-Operative, etc).
- xi. Annexure I (List of machine to be procured and EMD value and technical specifications along with the Compliance statement).
- xii. Delivery and commissioning schedule of machine / equipment as per Annexure II of the tender document (on the letter head).
- xiii. Documents / PO (on customer/buyer letter head) regarding **SUPPLY**

INSTALLATION AND COMMISSIONING OF SCIENCE LAB EQUIPMENTS

for the cost of 75% or more of the estimated cost during each of the previous three financial years.

- xiv. Satisfactory performance reports from customers on their letter head regarding successful installation, commissioning & operation of **SUPPLY INSTALLATION AND COMMISSIONING OF SCIENCE LAB EQUIPMENTS** previous three financial years.
18. **Settlement of dispute:** All the disputes and differences of any kind, what so ever, arising out of or in connection with the contract, whether during the progress of the work or after the completion shall be referred by the bidder to the competent authority of Directorate of Industries, Mumbai Govt. of Maharashtra.
19. The venue of the arbitration shall be Madha. The laws of India shall govern this agreement. Both parties irrevocably submit to the exclusive jurisdiction of the Courts in MADHA only, for any action or proceeding regarding this.
20. Delayed payment claim pertaining to this contract will not be applicable in any industrial facilitation council or any other court.
21. The specifications given above are to be used for guidance. The bidder will have to ensure compliance with the details set out in **Annexure 1**. The bidder is at liberty to include extra features in lieu of the required features; however this will not ensure that the bid will be accepted.

Date :21 /02/ 2025
Place : Madha

Principal,
Arts & Commerce College, Madha. .

Disclaimer: The Tender Committee under the chairmanship of The Principal, Arts & Commerce College, Madha as an administrative arrangement. All the procurement for establishment of **SUPPLY INSTALLATION AND COMMISSIONING OF SCIENCE LAB EQUIPMENTS** is done on behalf of the Tender Committee. Work order / Purchase order under this tender will be issued to the selected bidder under the signature of The Principal, Arts & Commerce College, Madha. However, the tax invoices are to be raised by the supplier/bidder in the name of **The Principal, Arts & Commerce College, Madha** and payment will be done by SPV only. The bidder/ supplier should mention the GST No. of Arts and Commerce College, Madha in the invoice. For legal purpose, **The Principal, Arts & Commerce College, Madha** is the buyer/ purchaser in this procurement process.

DETAILS OF ANNEXURES

ANNEXURE I: LIST TO BE PROCURED AND EMD VALUE

Name : SUPPLY INSTALLATION AND COMMISIONING OF EQUIPMENTS

Qty: As prescribed in Technical Specification

Sr. No.	Name of equipment	Place of installation	Total EMD to be paid (Amount in INR)
01	SUPPLY INSTALLATION AND COMMISIONING OF SCIENCE LAB EQUIPMENTS	Arts & Commerce College, Madha, Tal- Madha, Dist- Solapur, 413209, State- Maharashtra, India	19,000/-

ANNEXURE II- SUPPLY INSTALLATION AND COMMISIONING OF SCIENCE LAB EQUIPMENTS

Item No.	Delivery, installation & successful commissioning of Particular of	
1	SUPPLY INSTALLATION AND COMMISIONING OF SCIENCE LAB EQUIPMENTS	Within 30 Days from the date of issue of work order.

ANNEXURE III

(FORMAT TO BE FILLED UP AND SUBMITTED ON THE LETTER HEAD OF THE BIDDER)

To,
The Principal,
Arts & Commerce College,
Madha.

Sub: **Supply of the SUPPLY INSTALLATION AND COMMISSIONING OF SCIENCE LAB EQUIPMENTS, Arts & Commerce College, Madha, Tal-Madha, Dist- Solapur, State- Maharashtra, India as per the specification and quantities mentioned in the tender No.**

Sir,

Having examined the conditions of Tender and Specifications of the **“SUPPLY INSTALLATION AND COMMISSIONING OF SCIENCE LAB EQUIPMENTS**

We, the undersigned, offer to **SUPPLY INSTALLATION AND COMMISSIONING OF SCIENCE LAB EQUIPMENTS** as mentioned in the **Annexure I** as per the quantity and specifications given in the tender along with standard spares/accessories as specified.

We are quoting for the above mentioned equipment/item in BOQ. Our bid would be valid for the period specified in the tender document and confirms to the terms and conditions of the tender document.

Earnest Money Deposit of INR_____(Rupees:____) as given in **Annexure-I** has submitted using online Banking option on <https://mahatenders.gov.in>.

The original e-tender document duly digital signature on all pages is enclosed.

If our offer is accepted, we undertake to **SUPPLY INSTALLATION AND COMMISSIONING OF SCIENCE LAB EQUIPMENTS**, and install the same in the CONCERN DEPARTMENT as mentioned in the tender within the specified periods mentioned in **Annexure II** from the date of receipt of the order from THE PRINCIPAL ARTS AND COMMERCE COLLEGE, MADHA , in writing.

We agree to supply consumable spare parts and replacement of the broken/damaged/ non-compatible parts during the guarantee/warranty period, free of charge, as per the terms and conditions. The warranty period for the from the date of commissioning of the machine at the SPV premises.

The details of our Service centers and offices are as per the annexure attached.

We confirm that the stable and equipped with all necessary safety devices and signage.

We confirm that the minimum probable life expectancy of the machine is __ yrs under normal usage and circumstances. We agree to train the personnel of CONCERN DEPARTMENT free of charge, as per the terms and conditions.

If our offer is accepted we will, obtain and arrange:

1. To sign an Undertaking on Judicial paper worth Rs. 500.00 in the format prescribed in Annexure IV before releasing of the Purchase order.
2. Any other statutory obligation, if any, to commencement of supply of equipments.

We shall use only tender documents as issued for submitting our bid and shall comply with various terms and conditions.

Unless and until a formal Agreement/order is prepared and issued, this tender together with your written acceptance thereof, shall constitute a binding contract between us and The Principal Arts and Commerce College, Madha.

We understand that you are not bound to accept the lowest or any tender you may receive.

We agree to make a presentation of the products to be supplied by us, before the Tender Committee if need be on a mutually convenient date.

Authorized Signatory to Tenderer :

Name :

Designation/ Capacity :

Date :

ANNEXURE IV

(TO BE SUBMITTED BY THE BIDDER ON RS. 500/- STAMP PAPER)

Tender Reference No.: _____ Dated _____

UNDERTAKING / DECLARATION

To,
The Principal,
Arts & Commerce College, Madha.

Dear Sir.

I/We, _____ (Bidder's Name & Address) undertake to supply the item - **“SUPPLY INSTALLATION AND COMMISIONING OF SCIENCE LAB EQUIPMENTS”** as per the detailed specification of e-Tender and honors the terms and conditions of the tender document.

I/We undertake to supply the **SUPPLY INSTALLATION AND COMMISIONING OF SCIENCE LAB EQUIPMENTS** within the stipulated period of time and accept the penalty clause imposed by Tender Committee as per the terms and conditions of the Tender.

I/We undertake that during the warranty period, regular servicing/maintenance will be carried out as per the Warranty Clause.

I/We undertake to provide adequate training (normal operation, trouble shooting) to Four technical personnel of the Arts and Commerce College, Madha on the supplied **SUPPLY INSTALLATION AND COMMISIONING OF SCIENCE LAB EQUIPMENTS** and making them confident of operating it independently.

I/We agree that the full payment will be released to us only after completion of satisfactory installation and training on the said instrument/ equipment/ etc.

Dated at _____ this _____ day of _____ 2025

Authorized Signatory to Tenderer :

Name :

Designation/ Capacity :

Date :

CHECK LIST TO THE BIDDERS

1. Get all clarifications regarding terms and conditions, specification etc. during the pre-bid meeting or by writing to The Principal, Arts & Commerce College, Madha prior to submission of bid.
2. The Original tender document in full, along with the technical details/supporting documents/enclosures should be duly signed on all the pages.
3. Fill up the relevant compliance columns in the specifications given for the instrument/equipment/etc. quoted by stating, in case of any deviation in the specifications, the details may be given separately as Annexure.
4. A covering letter duly signed by the authorized person as per the specimen given at Annexure IV of the tender document (Annexure-III).
5. Descriptive leaflet/brochure of the equipment quoted to be enclosed along with the technical details.
6. The Technical and commercial details are to be submitted separately super scribing “Cover-A” – Technical Bid/details for “**SUPPLY INSTALLATION AND COMMISIONING OF SCIENCE LAB EQUIPMENTS**” and “Cover-B” – Commercial Bid/details for “**SUPPLY INSTALLATION AND COMMISIONING OF SCIENCE LAB EQUIPMENTS**”.
7. Proof regarding manufacturer/authorized agent/supplier, as the case may be, is enclosed.
8. Prior to submission of bids, bidders have to ensure that the equipment quoted bythem is manufactured as per the international standard mentioned in the specification.
9. Cost details are to be given in the prescribed format only.

Note: If the bidder fails to furnish all the relevant document/information as mentioned in the Tender Document, the Tender will be rejected.

Sr.No	Name of Equipment	Specification	Quantity
1	Magnetic Stirrer with hot plate	<ul style="list-style-type: none"> • With Digital Speed Indicator • External Dimensions: 200 x 225 x 185 mm • Heating Capacity: 150 Watts 	1
2	Physical Weight Boxes	<ul style="list-style-type: none"> • Brass CP 100 gm 	1
3	pH Meter	<ul style="list-style-type: none"> • Display Type :LED • Calibration: 2 POINT • Ph Range: 0-14 • Type Of Ph Meter: Table-Top 	1
4	Water Bath	<ul style="list-style-type: none"> • Inner working size: 35 x 25 x 10 cm • Rating watts: 1000 	1
5	Colony Counter Digital	<ul style="list-style-type: none"> • 4 Digit Counter with illumination, audio beep & marking pen <p>Good Quality</p>	1
6	Binocular Stereo Zoom Microscope Imported	<ul style="list-style-type: none"> • Eye- Pieces : 10x (Paired) W.F. 22 mm • Zooming Ratio : Zoom 0.7x to 4.5x with & Range magnification ratio 1:6.4 • Magnification Range : 7x to 45 x 	1
7	Digital Balance	<ul style="list-style-type: none"> • Capacity: 220g • Readability: 0.001g (1 mg) • Repeatability: 0.001g • Linearity (±): 0.003g • Pan Size: 90 mm Ø • Response Time: 3-4 Sec • Calibration: Automatic External • Display: LCD with back light • Tare Range: Full • Operating Temperature: 10 C to o 40 C • Power supply: Adaptor, Using AC 220V / 50Hz • Dimension (LxWxH): 360 x 260 x 355 mm 	1
8	Projection Microscope	<ul style="list-style-type: none"> • With 6" dia. Screen, built in variable HL Light with special rack & pinion. • Eye- Pieces : 10x • Objectives : 10x & 20x 	1
9	Camera Lucida Mirror Type	<ul style="list-style-type: none"> • Camera Lucida Mirror Type in Velvet Case 	1
10	Vacuum Dessicator 100 mm	<ul style="list-style-type: none"> • With Cover & Porcelain Plate • Complies with IS 6128 • Supplied with with cover having stopcock with PTFE spindle, porcelain plate and plastic knob • Simple design for drying under atmospheric pressure • Ground glass flanges • Plates are positioned on an internal ledge within the base 	1

11	Kohlrausch Conductivity Bridge	<ul style="list-style-type: none"> • A circular slide wire is calibrated from 0.01 to 10 ohms A rotary dial furnishes six multipliers of 0.1, 1, 10, 100 & 1000 & 10000. • Range of measurements 0.01 to 100 KOhm • Terminals for supply and head phone/detectors are provided on the panel. A detector key is also provided. The position of slider is adjusted to the position of minimum sound or position of minimum A.C. signals. • Accuracy of coils $\pm 0.1\%$ • Accuracy of measurement $\pm 1\%$ at mid scale & $\pm 2\%$ overall. 	1
12	Hot Plate Round 8"	<ul style="list-style-type: none"> • Size in inches: 8" • Rating in watts: 1200 • Maximum Surface temperature up to 300°C. 	1
13	Incubator Bacteriological	<ul style="list-style-type: none"> • Construction: Double walled construction outer body made of Mild Steel powder coated, & Inner Body made of Stainless Steel grade S.S 304. • Insulation: Glass wool insulation between two walled . • Temp range: 5 °C above room temperature to 60°C. • Accuracy: +/- 2 °C. • Temp controlled by: thermostatic • With G.I. wire Mesh selves • Door: 2 door inner acrylic door to view sample & outer metal door. • Heater: special Nicrome heater designed for long life & saving of power consumption. • Inner working size of Incubator (Inches): 12"x12"x12" • Rating Watts: 250 	1
14	Trinocular Microscope	<ul style="list-style-type: none"> • Objectives (Achromatic) : 4x , 10x, 40x (S/L) & 100x (S/L) Oil Immersion, Anti-Fungus Coating • Eye-Pieces : W.F 10x Paired Anti-Fungus Coating • iLLumination : Built - in LED Light source 	1
15	Microtome Rotary (Spencer Type)	<ul style="list-style-type: none"> • Feed adjustments : 1-50 microns • overall Dimensions : 40 x 38 x 23 cms. 	1
16	Compact Laboratory Centrifuge	<ul style="list-style-type: none"> • Max Speed : 4400 rpm • Max. RCF: 2350'g' • Max. Capacity: 200ml • W x D x H mm: 330 x 370 x 295 • with speed regulator, safety lid lock, gital speed meter & timer • with 8x15 ml. angle head with polypropylene tubes 	1
17	Auto Digital Conductivity Meter	<ul style="list-style-type: none"> • Display Type: 3 and Half Digit LED Display • Accuracy: 1+/-% Reading • Power Supply: 230V plus minus 10 percent , 50 Hz • Cell Constant: 0.1,1 (Adjustable) • Resolution: Ms uS/cm • Dimension: L7.6xW27.5xH17.5 cm • Measurable Conductivity Range: Auto Ranging • Measuring Range For Conductivity: 0-200mS/cm 	1

18	Digital Balance	<ul style="list-style-type: none"> • Capacity: 220g • Readability: 0.001g (1 mg) • Repeatability: 0.001g • Linearity (±): 0.003g • Pan Size: 90 mm Ø • Response Time: 3-4 Sec • Calibration: Automatic External • Display: LCD with back light • Tare Range: Full • Operating Temperature: 10 C to o 40 C • Power supply: Adaptor, Using AC 220V / 50Hz • Dimension (LxWxH): 360 x 260 x 355 mm 	1
19	Water Bath	<ul style="list-style-type: none"> • Inner working size: 35 x 25 x 10 cm • Rating watts: 1000 	1
20	Digital Flame Photometer (Dual Channel)	<ul style="list-style-type: none"> • Flame System: LPG and dry oil free air • Power: 230V + 10% AC 50 Hz • Size (LxBxH) 355 x 250 x 210 mm • Warmup time: 10 minutes • Single aspirations, with filters (Na & K). • Final result in ppm • 2 1/2 digit dual LED display for simultaneous result along with compressor & Accessories • Auto Ignition 	1
21	Refrigerator	Single Door 220 Ltr	1
22	Magnetic Stirrer with hot plate	<ul style="list-style-type: none"> • With Digital Speed Indicator • External Dlmensions: 200 x 225 x 185 mm • Healing Capacity: 150 Watts 	1
23	Digital Melting Point / boiling point apparatus	<ul style="list-style-type: none"> • Heating Range: Room temperature to 300°C • Readout: 4 Digit for temperature • Resolution: ± 0.1 °C Heating Rate: 1°min to 20°min • Power: 230V AC Mains@50Hz,500VA • Temp.Sensor: Unbreakable Teflon Probe • Dimensions: 360mm X 200mm X 150mm • Body: Nano Crystalline ABS • Stirrer: Shock & Rust Proof Body 	1
24	Digital Fully Automatic Colorimeter	<ul style="list-style-type: none"> • Wavelength Range: 400-700 nm • Minimum Volume: 1 ml • Std Glass Filters Built in 9 Digital filters 30,000 hours Life • Display: Dual Digital Display • Accuracy: + 0.01 O.D. • Detector: Silicon Photodiode • Filter Range: 400 nm, 430 nm, 500 nm, 520 nm, 540 nm, 580 nm, 600 nm, 620 nm, 680 nm • Light Source: Highly Accurate Laser Source • Stability: + 0.02 O.D. Per Hour • Dimension: L 210 X B 160 X H 80 mm (approx.) • Display Model: Absorbance & Wavelength • Battery Backup: 6V Ni CD Re-chargeable Battery 	1

25	Abbe Refractometer	<ul style="list-style-type: none"> • Measurable range from 1.300 to 1.700 • Accuracy 0.001 by direct reading and 0.0001 by estimation. • Only a drop or two of the sample is sufficient for analysis. • Sugar percentage range 0-95% with an accuracy of 1% on scale and 0.1% by estimation. 	1
26	Rotary Evaporator Analog Speed Control and Thermostatic Bath	<ul style="list-style-type: none"> • Glassware • Condenser type: Diagonal • Cooling surface: 1500 cm² • Evaporating Flask: 100 ml to 1000 ml • Receiving Flask: Max 1000 ml • GENERAL • Motor principle: DC • Speed range: 20-200 rpm • Lift: Manual • Stroke: 100 mm • Voltage: 220-240 V • Frequency: 50 Hz • WATER BATH • Temperature Controller: Thermostat • Heating temperature range: Ambient + 5°C - 95 °C • Heat output: 1250 W • Temperature Uniformity: ±1 °C • Filling volume: max. 3.5 L • Inner Body: Stainless Steel 304 Grade • Outer Body: Aluminum Powder Coated 	1
27	Vacuum Pump Oil Free Diaphragm Type	<ul style="list-style-type: none"> • Max Flow (Ltrs/Min): 45 • Max Vacuum (inches Hg): 27" • Max Press (PSIg): 55 • Motor HO: 1/4 	1
28	Mini Rotary Shaker	<ul style="list-style-type: none"> • with digital speed indicator and timer, max. speed 400rpm, with universal platform of size 12" x 12" • Speed Range: 50 to 400 • Overall Dimensions: 320 x 415 x 130 W x D x H (mm) 	1
29	Clamp	Clamp For Holding Conical Flask 100 / 50 ml	1
30	Clamp	Clamp For Holding Conical Flask 250 / 150 ml	1
31	Platinum Electrode	<ul style="list-style-type: none"> • Poly Propylene Body with platinised platinum • Nickel plated banana pin for long life • Protective PVC Sleeve 	1
32	Silver Electrode	<ul style="list-style-type: none"> • Poly Propylene Body • Nickel plated banana pin for long life • Protective PVC Sleeve 	1
33	Calomel electrode	<ul style="list-style-type: none"> • Poly Propylene Body • Nickel plated banana pin for long life • Protective PVC Sleeve 	1

34	Student Polarimeter (Laurent's Half Shade)	<ul style="list-style-type: none"> • A corning glass tube is enclosed in a circular aluminum tube with top door for access and exclusion of external light. The circular scale is attached near the analyzer and the range of measurement is 0 to 360°. • A movable Vernier on the scale enables reading of optical rotation to 60 seconds. • Worm and gears combine rough and fine adjustment, provided with , giving three parts field for easy setting, adjustable half shadow angles. 	1
35	Vacuum Dessicator 100 mm	<ul style="list-style-type: none"> • With Cover & Porcelain Plate • Complies with IS 6128 • Supplied with with cover having stopcock with PTFE spindle, porcelain plate and plastic knob • Simple design for drying under atmospheric pressure • Ground glass flanges • Plates are positioned on an internal ledge within the base 	1
36	Vacuum Dessicator 150 mm Plastic	<ul style="list-style-type: none"> • Made of Polypropylene and Polycarbonate. • vacuum desiccators can hold vacuum upto 740 mm of Hg for 24 hrs. without any greasing. • The top dome, moulded in rigid and transparent Polycarbonate, gives a crystal clear view of the desiccant placed inside. 	1
37	Dissecting Microscope	<ul style="list-style-type: none"> • With Brass parts, two eye pieces 10x, 20x. 	5
38	Trinocular Microscope	<ul style="list-style-type: none"> • Objectives (Achromatic) : 4x , 10x, 40x (S/L) & 100x (S/L) Oil Immersion, Anti-Fungus Coating • Eye-Pieces : W.F 10x Paired Anti-Fungus Coating • iLLumination : Built - in LED Light source 	1
39	Digital Balance	<ul style="list-style-type: none"> • Capacity: 220g • Readability: 0.001g (1 mg) • Repeatability: 0.001g • Linearity (±): 0.003g • Pan Size: 90 mm Ø • Response Time: 3-4 Sec • Calibration: Automatic External • Display: LCD with back light • Tare Range: Full • Operating Temperature: 10 C to o 40 C • Power supply: Adaptor, Using AC 220V / 50Hz • Dimension (LxWxH): 360 x 260 x 355 mm 	1
40	Compact Laboratory Centrifuge	<ul style="list-style-type: none"> • Max Speed : 4400 rpm • Max. RCF: 2350'g' • Max. Capacity: 200ml • W x D x H mm: 330 x 370 x 295 • with speed regulator, safety lid lock, gital speed meter & timer • with 8x15 ml. angle head with polypropylene tubes 	1

41	Intermediated Traveling Microscope	<ul style="list-style-type: none"> • Consists of a cast iron base with machined vee-top surface and is fitted with 3 levelling screws, one being fixed. • Travel horizontally 18cm and vertically 15cm with the help of slides. • The slow motion knobs are provided for taking accurate readings. • Vernier readings 0.01mm. • The Microscope tube consists of an eyepiece 10X with 50mm or 75mm objective. 	1
42	Student Polarimeter ((Laurent's Half Shade)	<ul style="list-style-type: none"> • A corning glass tube is enclosed in a circular aluminum tube with top door for access and exclusion of external light. The circular scale is attached near the analyzer and the range of measurement is 0 to 360°. • A movable Vernier on the scale enables reading of optical rotation to 60 seconds. • Worm and gears combine rough and fine adjustment, provided with , giving three parts field for easy setting, adjustable half shadow angles. 	1
43	Slotted Weight 100 x 5 gm	<ul style="list-style-type: none"> • Slotted weights are chrome plated 	1
44	Viscosity of a Liquid by the Coaxial Cylinder (Viscometer Searle's Pattern)	<ul style="list-style-type: none"> • The value of the coefficient of viscosity for a liquid such as glycerine may be obtained at any desired height. • The inner cylinder is graduated in mm and slot is covered by a transparent cover, complete with scale pans and releasing Pins. 	1
45	Planck's Constant Apparatus	<ul style="list-style-type: none"> • DC variable regulated Power Supply of 0-1V DC. • Vacuum type Photocell mounted in wooden box having window for injecting light & also to fit the different types of filters. • One wooden plank 30cm long. • Light source with 100W lamp & set of 3 filters. (Blue, green & Yellow) 	1
46	LED Characteristics Apparatus	<ul style="list-style-type: none"> • Instrument comprises of DC Regulated Power Supply 0-2.5 VDC/10mA, two round MO-65 meters for voltage & current measurement, LED's mounted on the front panel, connections of Supplies & LED brought out at 4mm Sockets/Terminals. • High quality bakelite panel is used for longer durability. High accuracy MO-65 Round Meters are used. <p>Supplied with leads.</p>	1
47	Micrometer Screw Gauge 25x1 mm	<ul style="list-style-type: none"> • Superior quality, semi circular Welch pattern, dull nickel finish, oxidized threaded rod. 	1
48	Ballistic Galvanometer 100 ohm (Improved Pattern)	<ul style="list-style-type: none"> • Zero adjusting and locking devices are provided. The Phosphor-bronze suspension strip prevent shifting of zero. • The moving coil carries a specially polished front silvering concave mirror of 10cm. focal length. • Galvanometer Resistance 100 Ohms and Time period Approximate 10-12 Seconds 	1

49	Transistor Characteristics Apparatus (Analog Version Combined Model)	<ul style="list-style-type: none"> • Two built in continuously variable regulated power supplies • Four MO-65 moving coil type meters are provided to monitor voltage & current with their separate terminals for each meter. • Rugged construction, compact unit provided with self explanatory USER'S Manual • Special design of sheet metal box, gives maximum visibility for scale of meters. 	1
50	Series & Parallel Resonance LCR Kit	<ul style="list-style-type: none"> • The apparatus consist of three resistances, one inductance and three capacitors with separate terminals for measurement of 'Q' Value, with two deluxe A.C. Moving coils meter for V & I. 	1
51	Jaeger's Surface Tension Appts	<ul style="list-style-type: none"> • Complete with manometer tube fitted on the stand, conical flask with side tube, dropping funnel, three different bore jets and beaker etc. 	1
52	Potentiometer 4-Wire with Pencil Jockey	<ul style="list-style-type: none"> • Comprising four constantan wires of 24 SWG, one meter long, clamped under heavy Brass strips of SWG 18 and fitted by screws in such a manner so that it is easily replaceable and has negligible 'END ERRORS'. • Each block is fitted with a heavy lock type brass terminal which is mounted on an 18mm thick plywood board with mica on top. • The four wires are stretched along the both ends of two full meter scales. • Overall dimension: 1.12m x 100mm x 50mm high including terminals • Supplied complete with Pencil Jockey along with lead for connections & detailed working manual. 	1
53	Semi Conductor Diode Characteristics Apparatus (with Two analog meters)	<ul style="list-style-type: none"> • One dual range voltmeter 1.5V/30V and another dual range meter of 50μA/10mA are used. 	1
54	Meter Bridge or Wheatstone Bridge With Pencil Jockey	<ul style="list-style-type: none"> • The four-gap bridge has a large and heavy copper strip of (SWG No. 18) mounted on a heavy 3/4" thick laminated base of size 45" x 4" x 3/4". • Nine heavy Brass terminals lock type are provided to reduce the resistance to a minimum. • The ends gaps are closed by removable Copper Binding pieces which are held in position by the terminals • Overall dimensions: 1.12m \times 100mm \times 50mm, including terminals. 	1
55	Determination of Energy Gap in PN Junction Diode in analog meter	<ul style="list-style-type: none"> • Provided with two meters, power supply, PN junction diode & mini heating oven with thermometer for temp. measurement. • Supplied with thermometer & leads 	1

56	Study of the energy band-gap and diffusion potential of P-N Junctions	<ul style="list-style-type: none"> The following studies can be carried out on any P-N Junction - Ge/Si rectifiers, LED's base emitter/collector - base Junction of transistors (i) Reverse Saturation current I_0 (ii) Temperature Coefficient of Junction Voltage dV/dt (iii) Energy Band Gap V_{GO} (iv) Junction Capacitance Complete in all respect, including power supplies, temperature controlled oven and digital meters for measurement of current, voltage and temperature. 	1
57	Zener Diode V-I Characteristics Apparatus (Forward & Reverse)	<ul style="list-style-type: none"> Instrument comprises of DC Regulated Power Supply 0-10 VDC 10mA, two dual range MO 65 meters are used for voltage & current measurement, Zener Diode is mounted on the panel, connections of Supplies, Meters & Zener Diode brought out at 4mm terminal. 	1
58	Sonometer (Teak Wood, Brass Fitting)	<ul style="list-style-type: none"> Comprising a teak wood resonance box 1140×125×100 mm length × width × height with meter scales one meter long subdivided in millimeters. One each brass and steel wires of S.W.G. 26 and 24 respectively, attached to a fixed bridge and tensioned by fine adjustment pegs:two moveable bridges, pulley and fixed screw to enable a third wire to be fixed for tensioning by weights. Wooden resonance box is made from superior quality teakwood and all metal parts are of brass. 	1
59	Vernier Caliper IME Type 6"	<ul style="list-style-type: none"> Steel chrome plated model. One side graduated in inches for 6 inch and other side graduated in millimeters for 15 cm and the 10-part Vernier read to 0.1mm. The moveable jaw can be held at any positions on the scale by means of a spring constant. Fine adjustment can be made by means of a convenient thumb operated strip which is allowed to disengage for fast adjustment. Packed in velvet case. Least Count 0.01 cm. 	1
60	PNP & NPN Transistor Characteristics App. (Digital version Combined Model)	<ul style="list-style-type: none"> Built-in two Digital Meters to read Voltage & Current (i.e 2V, 20V, 200mA & 200mA). Built-in variable stabilized power supplies 0-1V & 0-10V Banana sockets are provided for students to make connections themselves. 	1
61	Poiseuille's Viscosity Appts	<ul style="list-style-type: none"> A capillary tube of fine bore is fitted on a wooden board. Then two ends are joined by a rubber tubing which is joined to two upright L-shaped glass tubes forming the manometer with scale. With the help of a pinch cork, a steady flow of water is maintained. Complete with a three limbed constant level tank of brass, one stand with rubber tube and glass parts of corning glass. 	1
62	Half wave, Full Wave & Bridge Rectifier W/O meters	<ul style="list-style-type: none"> The training board consists of centre tapped transformer along with inductance, resistance & capacitance (to be used in filter circuits). 	1

63	LDR Characteristics Apparatus	<ul style="list-style-type: none"> Instrument comprises of DC Regulated Power Supply 0-10V/10mA, two Mo65 meters for voltage & current measurement, LDR mounted on the panel, connections of Supplies & LDR brought out at 4mm Sockets/terminals. High quality white bakelite panel is used for longer durability. High accuracy Mo65 round meters are used in the kit 	1
64	Thermister Characteristics Apparatus	<ul style="list-style-type: none"> Instrument comprises of fixed DC Regulated Power Supply 5V One glass thermistor is kept in temperature controlled oven, Connections of Supply, Meter& Thermistor are brought out at 4mm Sockets/Terminals. One galvanometer of MO-65 meter is used. 	1
65	Digital Multimeter Economical Model	<ul style="list-style-type: none"> Pocket sized, multimeter with 3½ DPM Rugged, easy to read. 	1
66	Melde's Appts (inco pattern)	<ul style="list-style-type: none"> sturdy streamlined base with provision for horizontal or vertical experiments(Transverse as well as Longitudinal arrangements). An electromagnet is arranged between the prongs of the fork without touching it. A small spring type strip is attached to the one of the prongs. A screw just makes a contact with this strip. Supplied with scale pan, bench clamp with pulley but without weights. 	1
67	K Constant Spring App	<ul style="list-style-type: none"> The apparatus consists of a spiral spring about 25mm diameter and 10cm length. The upper end of the spring is suspended from a chucknut and the lower end is provided with a small pointer which moves over a vertical wooden meter scale. The lower end is also provided with hook for carrying weights. All this setup is provided on a heavy metal base, supplied with weights. 	1
68	Verification of KCL & KVL (Kirchoff's law)	<ul style="list-style-type: none"> Instrument consists of DC regulated Power supply, two MO65 moving coil meters for voltage & current measurement. Combination of resistances are mounted on front panel. 	1
69	Logic Gate 7 in 1	Logic Gate 7 in 1	1
70	Resonance Apparatus	<ul style="list-style-type: none"> A heavy Stainless steel tube (S.W.G. No. 16) 1.10 mm in length x 25 mm dia. is mounted next to a meter scale. The Stainless Steel pipe and meter scale is fitted on a superior quality polished wooden board. The lower end of the Stainless Steel pipe is sealed into a metal cup having a side tube connected by rubber tubing to a brass reservoir, also mounted on the support rod but with elevation adjustment. The length of the resonance column may easily be determined by measuring the distance between zero stop and the closed end of the tube with the meter rule 	1

71	Medical Microscope	<ul style="list-style-type: none"> • Total Magnification : 1500 X • Eye- Pieces : W.F 10x, H 15x • Objectives : Achromatic 10x, 45x (S/L) & 100x (S/L) • with Oil Immersion 100x & Mechanical Stage 	10
72	Dissecting Microscope	<ul style="list-style-type: none"> • With Brass parts, two eye pieces 10x, 20x. 	20
73	Projection Microscope	<ul style="list-style-type: none"> • With 6" dia. Screen, built in variable HL Light with special rack & pinion. • Eye- Pieces : 10x • Objectives : 10x & 20x 	1
74	Trinocular Microscope	<ul style="list-style-type: none"> • Objectives (Achromatic) : 4x , 10x, 40x (S/L) & 100x (S/L) Oil Immersion, Anti-Fungus Coating • Eye-Pieces : W.F 10x Paired Anti-Fungus Coating • iLLumination : Built - in LED Light source 	1
75	Microtome Rotary (Spencer Type)	<ul style="list-style-type: none"> • Feed adjustments : 1-50 microns • overall Dimensions : 40 x 38 x 23 cms. 	1
76	Binocular Microscope	<ul style="list-style-type: none"> • Achromatic Objectives of 4x, 10x, 40x & 100x, • Widefield paired eyepiece of 10x/18 mm 	1
77	Autoclave Vertical Fully Automatic	<ul style="list-style-type: none"> • Autoclave is double walled complete made of S.S.304, Inner & outer with Foot Lifting Arrangement & heavy gauge Dia press lid fitted with 2 safety valve, 1 Steam Release Valve & pressure gauge. • Working Pressure : UPTO 15 PSI • Working Temp : 121 °C to 125 °C • Temp.controlled By : PID Controller with timer & purging system PID controller • Solenoid Valve Systems : This Valve work for automatic Purging & Automatic Steam Release when cycleTime is Complete • Safety Protection for heater : Low water Level cut off systems to cut off Heater when water level is Not Proper. • Inner working size of autoclave: 16 Dia x 24 ht inches • Rating in watts: 4000 	1
78	Colony Counter Digital	<ul style="list-style-type: none"> • 4 Digit Counter with illumination, audio beep & marking pen • Good Quality 	1
79	Digital Balance	<ul style="list-style-type: none"> • Capacity: 220g • Readability: 0.001g (1 mg) • Repeatability: 0.001g • Linearity (±): 0.003g • Pan Size: 90 mm Ø • Response Time: 3-4 Sec • Calibration: Automatic External • Display: LCD with back light • Tare Range: Full • Operating Temperature: 10 C to o 40 C • Power supply: Adaptor, Using AC 220V / 50Hz • Dimension (LxWxH): 360 x 260 x 355 mm 	1
80	Camera Lucida Mirror Type	<ul style="list-style-type: none"> • Camera Lucida Mirror Type in Velvet Case 	1

81	Compact Laboratory Centrifuge	<ul style="list-style-type: none"> • Max Speed : 4400 rpm • Max. RCF: 2350'g' • Max. Capacity: 200ml • W x D x H mm: 330 x 370 x 295 • with speed regulator, safety lid lock, gital speed meter & timer • with 8x15 ml. angle head with polypropylene tubes 	1
82	Digital Fully Automatic Colorimeter	<ul style="list-style-type: none"> • Wavelength Range: 400-700 nm • Minimum Volume: 1 ml • Std Glass Filters Built in 9 Digital filters 30,000 hours Life • Display: Dual Digital Display • Accuracy: + 0.01 O.D. • Detector: Silicon Photodiode • Filter Range: 400 nm, 430 nm, 500 nm, 520 nm, 540 nm, 580 nm, 600 nm, 620 nm, 680 nm • Light Source: Highly Accurate Laser Source • Stability: + 0.02 O.D. Per Hour • Dimension: L 210 X B 160 X H 80 mm (approx.) • Display Model: Absorbance & Wavelength • Battery Backup: 6V Ni CD Re-chargable Battery 	1
83	Mini Spinix Vortex ShakerAnalog	<ul style="list-style-type: none"> • Compact, Heavy Construction • Heavy metal base & rubber fit prevents movement of the shaker during use. • Choice of continuous & touch mode • Variable speed control • Max. speed 3000 rpm 	1
84	Laminar Air Flow Horizontal	<ul style="list-style-type: none"> • Designed so as to meet the requirements of US Federal Standard 209 B (BS 5295) providing particle free air to meet (class 100 conditions). • The cabinets are used in tissue culture & microbiological application constructed with M.S. Powder coated. • Unit designed to provide a Laminar Flow Work space comprising as Standard Feature HEPA filter Efficiency > 99.97% at 0.3 microns, (factory DOP Tested). • Pre filter 95% efficient @ 5 Microns, suitable motor blowing assembly, working table top of Stainless Steel Stain Finish side Acrylic Panels; Fluorescent Tube Light; U.V. Light, Pressure differential Manometer, Gas Cock duly fitted and complete with front door. • Unit mounted on Castor Wheels for easy movability. 	1
85	Refrigerator	Single Door 220 Ltr	1
86	Magnetic Stirrer with hot plate	<ul style="list-style-type: none"> • With Digital Speed Indicator • External DImensions: 200 x 225 x 185 mm • Heating Capacity: 150 Watts 	1

87	Soxhlet Extraction 200 ml Extractor & 500 ml flask with Heating Mantle 250 ml	<ul style="list-style-type: none"> • Fiber glass hand knitted heating surface having knichrome heating elements. • Body made of M.S. sheet duly finished with powder coating with energy regulators. • Useful for quick heating which save extraction time. • Size: 250 ml • Ratings: 450 watts 	1
88	Digital Vernier Calliper	Digital Vernier Calliper 150 mm	1
89	Binocular Microscope with Camera 5 MP	<ul style="list-style-type: none"> • Achromatic Objectives of 4x, 10x, 40x & 100x, • Widefield paired eyepiece of 10x/18 mm • 5 MP Camera with eyepiece tube adapter, AND USB Cable, software CD 	1
90	Projection Microscope	<ul style="list-style-type: none"> • With 6" dia. Screen, built in variable HL Light with special rack & pinion. • Eye- Pieces : 10x • Objectives : 10x & 20x 	1
91	pH Meter	<ul style="list-style-type: none"> • Display Type :LED • Calibration: 2 POINT • Ph Range: 0-14 • Type Of Ph Meter: Table-Top 	1