

OFFICE OF THE PRINCIPAL
TINSUKIA COMMERCE COLLEGE

Tinsukia, PO: Sripuria, Tinsukia, Assam, Pin-786145

Mobile No: 9864237133,

website: www.tinsukiacommercecollege.edu.in

Email: tccprincipal@yahoo.co.uk

Tender No-

Dated:...../...../.....

TENDER DOCUMENT

(Includes both Technical & Financial bid documents)

Name of Works:

NIQ No A: Supply of Science Laboratory Equipments

Issued To:

M/s.....

.....

.....

.....

Contract No.....

Signature of the issuing authority with seal

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PART-A (Technical Bid)

PART-B (Financial Bid)

Ref. No:

Dated:...../...../.....

NOTICE INVITING TENDER

Sealed quotation are invited from reputed manufacturer/ authorized dealers/ registered suppliers affixing on refundable court fee of Rs. 8.25 in 2 bids (Technical bid & Financial/ price bid) for supply and installation of Science Laboratory for Tinsukia Commerce College, Tinsukia to be funded by The Director, Higher Education, Govt. of Assam. Quotation must be submitted on or before 08/09/2020. No quotation will be accepted after the due date. The undersigned has the right of placing order depending on the quality of items and accepting subsequent negotiated rate. Concerned tender paper will be available in college website www.tinsukiacommercecollege.edu.in from 27/08/2020 to 08/09/2020 up to 04:00 p. m.

For further details contact: 9864237133, 7002800049 or the office of the undersigned during office hours.

Principal
Tinsukia Commerce College
Tinsukia

Tender Notification

TINSUKIA COMMERCE COLLEGE

Tinsukia, PO: Sripuria, Tinsukia, Assam, Pin-786145

Mobile No: 9864237133,

website: www.tinsukiacommercecollege.edu.in

Email: tccprincipal@yahoo.co.uk

NOTICE INVITING QUOTATIONS (NIQ)

Particulars	Details
Nature of work	Supply of Laboratory Equipments for Science Stream.
Details of Contact Persons for Clarification/quarries	
Value of Tender	9,00,000.00/-
Mode of Tendering	<ol style="list-style-type: none"> 1. Details Terms and Conditions can be obtained /downloaded from the college website, www.tinsukiacommercecollege.edu.in Hard copy can be obtained from College Office during the office hours 2. Tenders have to be submitted in the College during the office hours 3. The bidders have to submit the sealed tenders by affixing non-refundable Court fee stamps of Rs. 8.25 (Eight rupees and twenty five paisa only)
Cost of Tender documents	Rs.1000/-
No. of Covers	<ol style="list-style-type: none"> 1. Technical Bid Annexure I 2. Financial Bid Annexure II
Estimated Tender (Approx)	9,00,000.00/-
Items included in Price Schedule (Annexure-II)	Supply of Laboratory Equipments for Science Stream.
Token Earnest Money Deposited (EMD) (Refundable) Items included in Price Schedule (Annexure-II)	Token Earnest Money Deposited (EMD) (Refundable) 2% for Supply of Laboratory Equipments for Science Stream.
Date of Publishing Tender	28 th , August 2020.
Website for obtaining / Downloading Tender Documents etc.	www.tinsukiacommercecollege.edu.in
Last date of Pre Bid quarries	30 th August 2020 before 4:00 pm
Starting date and time of Bid submission	28 th August 2020 from 10:00 A.M.
Closing date and time of Bid submission	08 th September 2020 before 4:00 pm
Opening date and time of Technical Bid and Financial Bid	09 th September 2020, 11:00 AM
Address where Tenders are to be Submitted	Principal, Tinsukia Commerce College, Tinsukia, Assam 786 145.
Venue for opening Technical and Financial Bid	Principal, Tinsukia Commerce College, Tinsukia, Assam 786 145.

Notice Inviting Quotations

Sealed Quotations are hereby invited from Govt. Registered Company/ Firm/authorized dealer/ Suppliers for supplying and installation of the following items.

Sl. No	Name of the Work	Detail	Tentative Amount with GST (In Lakh)	Token Earnest Money Deposit (Refundable)	Cost of Tender Paper (Non Refundable)	Date of Completion
1	Supply of Laboratory Equipments for Science Stream.	List enclosed in Annexure II	9,00,000.00/- (Nine Lakh)	2 %	Rs.1000.00/-	15 days from the date of issue of the work order.

A. ELIGIBILITY:

1. The Vendors should have the experience of supply of laboratory related equipments/ Lab Furniture, etc. to colleges/universities, and should have the experience of supply of any one of the above item to any institutions at least last three years.
2. Application for tender must include attested certificate copies of valid GST, Income Tax, Professional Tax, Trade License, Pan Card and credential for works done.
3. No quoted price above the cost of work mentioned will be accepted.
4. No extra cost will be borne by the college.
5. The rate should be quoted both in figures as well as in words.
6. No extension of time will be allowed.
7. Payment will be made in favour of the selected bidder as per the Director of Higher Education, Assam or Govt. of Assam guidelines on successful completion of the works and observation of necessary formalities as the authority deems fit.
8. Since the entire work will be financed from the Director of Higher Education, Govt. of Assam Science Laboratory Grant, payment will be made as per the Director of Higher Education, Assam or Govt. of Assam guidelines.
9. The successful bidder has to start of work within five days from the date of issue of work order.
10. Acceptance of the lowest tender is not obligatory and the undersigned reserves the right to accept or reject any or all the tenders without assigning any reason.
11. The eligible Bidders have to face the Laboratory Development committee of Tinsukia Commerce College in order to negotiate and know the details of the proposed supply work.
12. Tender papers have to be collected from office of the undersigned/downloaded from website within stipulated dates as mentioned below on showing necessary documents as mentioned and payment of non-refundable tender paper fees in the form of DD in favour of The Principal, Tinsukia Commerce College payable at Tinsukia, Assam. Token earnest money at the rate of 2% percentage of total amount has to be deposited in the form of DD in favour of payable at the Principal, Tinsukia Commerce College payable at Tinsukia, Assam.
13. Eligible bidders may be present at the time of opening of financial bid.
14. The firms/suppliers are requested to submit copies of the following documents along with the Technical Bid, failing which their Bids shall be rejected and shall not be further considered:
 - a) Copy of Earnest Money Deposit (EMD)
 - b) Copy of PAN/GIR card, GST registration certificate
 - c) Copy of work experience of similar work during last three years
 - d) Original Tender document duly signed with seal of the firm on each page in token of acceptance of the terms and conditions of the tender.
15. Important Dates and Timings:
 - a. Schedule Date of issuing tender: 28th August 2020 from 10:00 A.M.
 - b. Last date of submission of sealed tender: 08th September, 2020, 4:00 PM.
 - c. Tentative Date & time of opening tender:
 - i. Technical bid: 09th September 2020, 11:00 AM.
 - ii. Financial bid: 09th September 2020, 11:00 AM.
 - d. Issue of Work Order: 11th September 2020, 01:00 PM.

Note: In case the said date /s happen to be a holiday for any reason, the activity will be held on the immediate next working day at the same time & place unless otherwise notified through suitable media to all concerned. Selection of the agency will be at the sole discretion of the competent authority of the Tinsukia Commerce College who reserves its right to accept or reject any or all the proposals without assigning any reasons. The tender documents for the above work can be obtained from the Office of the Principal, Tinsukia Commerce College, District - Tinsukia, or can also be downloaded from www.tinsukiacommercecollege.edu.in

Sd / Dr. Chaytanya Bora
Principal,
Tinsukia Commerce College,
Tinsukia, Assam.

B. TERMS AND CONDITIONS:

1. The list of equipmentare to be submitted in hard and soft copies (in excel format) mentioning Sl.No, Name, Prices and offered discounts against eachitem. Bidders must submit on prescribed Annexures only.
2. The contract is to commence from the date of award of contract to the firm and shall continue for the period of six months, unless it is curtailed or terminated by Tinsukia owing to deficiency of service or supply of substandard quality of materials.
3. **Submission of OEM authorization is must for every product of Science Laboratory equipments/ Furniture.**
4. The contract shall automatically expire after six months from commencements of the contract unless extended further by the mutual consent of contracting firm and Tinsukia Commerce College.
5. The contract may be extended on the same terms and conditions or with some additions/ deletions/ modifications and on satisfactory performance, for a further period of three months with mutual consent.
6. The contracting firm shall not be allowed to transfer, assign, pledge or sub-contracts rights and liabilities under this contract to any other company/ firm/ agency etc.
7. The contracting firm will be bound by the details furnished by the firm to, while submitting the tender or at subsequent stage. In case, any of such documents furnished by the firm is found to be false at any stage, it would be deemed to be a breach of terms of contract making the firm liable for legal action besides termination of contract.
8. Financial bids of only those firms that are technically qualified shall be evaluated. Tinsukia Commerce College reserves the right to terminate the contract during initial period after giving a week's notice to the firm.
9. All expenses for sending the items supplied to Tinsukia Commerce College, District - Tinsukia, Pin 786145, Assam should be borne by the firm.
10. The rates quoted shall remain same during the rate contract period and no request for any increase in the rates shall be entertained during the period of the contract.
11. The owner / supplier/ firm should be available on his/ her own direct telephone (office as well as residence) and also on mobile phone so that he/ she may be contacted immediatelyin emergency cases.
12. Before award of contract, all original documents will be checked by the authority of Tinsukia Commerce College and at that time attested photo copies are required to be furnished.
13. Tinsukia Commerce College shall not be responsible for any financial loss or other injuries to any person deployed by the contracting firm in the course of their performing the duties to Tinsukia Commerce College in connection with the supply of items.
14. In case of breach of contract by the vendor, Tinsukia Commerce College shall have the authority to cancel/ terminate the contract, besides forfeiting the Security Deposits.
15. It may specifically be mentioned whether quotation is strictly as per tender specifications/ conditions. Deviation in any form will not be accepted.
16. Tinsukia Commerce College reserves the right to accept or reject any bid or cancel the tender proceeding without assigning any reason whatsoever. Further Tinsukia Commerce College reserve the right to purchase or not to purchase any item listed in the price schedules.
17. The contract shall be subject to TinsukiaJurisdiction. This document and the contract or job award letter issued as a result of the tender process shall be interpreted in terms of Indian loss.
18. All disputes arising out of this contract shall be settled amicably by Tinsukia Commerce College and the contractor. In the event of failure to reach amicable settlement, the change shall be settled by an Arbitrator appointed by Tinsukia Commerce College as per the provisions contained in Arbitration and Conciliations Act 1956.
19. The successful Bidder(s) must sign an agreement with the Authority of the Tinsukia Commerce College regarding the contract and supply of materials as well.
20. The Contractor will be responsible for supply/installation/refilling/maintenance of all such items/equipment/machineries, etc., used in various facilities of the College.

C. INSTRUCTIONS FOR SUBMISSION OF TENDERS:

1. The Contractors are required to submit two separate Bids i.e. Technical and Financial as per prescribed proforma. The two bids should be submitted in two separately sealed envelopes superscripted "TECHNICAL BID FOR SUPPLYING LABORATORY EQUIPMENTS IN Tinsukia Commerce College" and "FINANCIAL BID FOR SUPPLYING LABORATORY EQUIPMENTS TINSUKIA COMMERCE COLLEGE". Both sealed envelopes should be put in a third sealed envelope superscripted "TENDER FOR SUPPLYING LABORATORY EQUIPMENTS TO TINSUKIA COMMERCE COLLEGE", TINSUKIA,PIN786185ASSAM."
2. The financial bid of only those Firms who qualify in technical bid evaluation by the concerned committee shall be opened. The financial bids of all those Contractors who have failed to qualify in the technical bid will not be opened under any circumstances.
3. The declaration in the prescribed proforma should be enclosed with the Technical Bid.

4. The Technical Bid should be accompanied by an Earnest Money Deposit (EMD) as notified elsewhere in the document in the form of DD/Bankers Cheque for Earnest Money Deposit drawn on/ issued by any nationalized Bank drawn in favour of Principal, Tinsukia Commerce College, payable at Tinsukia, Assam.
5. The Bidders can submit the tender either by post or by submitting in the box provided in the college in the following address-

To

The Principal,
Tinsukia Commerce College,
P.O.: Sripuria, Tinsukia,
Assam – 786 145

6. The earnest money shall be refunded to all the unsuccessful Contractors, without any interest after finalization of the contract. EMD shall be refunded to the successful Contractor on receipt of performance security deposit. No interest is payable on the EMD to either the successful Contractor or the unsuccessful Contractor. Exemption from payment of EMD is applicable as per the existing law if accompanied by the relevant orders/instructions issued by the appropriate authorities.
7. All entries in the tender from should be legible and filled clearly. Any overwriting or cutting which is unavoidable shall be signed by the authorized signatory. Any alterations without authentication will be treated as a “NIL” entry.
8. The Contractor may quote for all or any facilities. However, tender in respect of each facility should be complete in all respects failing which the bid shall be considered non-responsive.
9. Tender incomplete in any form will be rejected outright. Conditional tenders will also be rejected outright.
10. The closing date and time for receipt of tenders will be as detailed elsewhere in this tender document.
11. The technical bid shall be opened at a date & time as specified elsewhere in this tender document in presence of the authorized representatives of the Contractor, who wish to be present at that time. All the technical bids will be scrutinized, relevant documents checked for their authenticity and the Contractor whose technical tenders are accepted will participate in the financial bids on date & time as stipulated elsewhere in this tender document.
12. In case the successful bidder declines the offer of contract, for whatsoever reasons(s), his EMD will be forfeited.
13. The Contractor shall enter into a formal contract with the College within three days from the date of receipt of intimation of their selection. They shall further get prior approval of the draft copy of the agreement from the college.
14. Each page of the tender document should be signed and stamped by authorized representative of the contractor as a token of acceptance of the terms and conditions laid down by the college.
15. The competent authority of college reserves the right to withdraw/relax any of the terms and conditions mentioned above, under such circumstances the Contractor will be given adequate time to take the changes into account.
16. The competent authority of the college reserves its right to reject all or any tender in whole, or in part or cancel the entire tender process, without assigning any reason thereof.

D. EARNEST MONEY DEPOSITED:

Technical Bid must be accompanied by DD/Bankers” Cheque for Earnest Money Deposit drawn on any Nationalized Bank in favour of The Principal, Tinsukia Commerce College. EMD shall be valid for a maximum period of 90 days from the closing date (original) of the tender. Quotation submitted without EMD shall be summarily rejected. The DD/Bankers” Cheque in physical form duly sealed in envelop superscripted with “DD towards EMD and Tender Document cost for the tender No.1 for supplying LABORATORY EQUIPMENTS IN Tinsukia Commerce College” shall be dispatched/ submitted at the OFFICE OF THE PRINCIPAL, Tinsukia commerce college at the address mentioned below so as to reach on or before the stipulated date.

To

The Principal
Tinsukia Commerce College
P.O:Sripuria, Tinsukia,
Assam – 786145.

E. BID EVALUATION CRITERIA:

1. In the first instance the Technical Bids shall be opened by the Authority of Tinsukia Commerce College in the presence of representative of Bidders, if available.
2. The date and time of the Technical Bids and Financial Bids is given for all.
3. The Bidders may depute their representatives for the opening of the Bids.
4. The Technical Bids will then be evaluated by the Tinsukia Commerce College internally.

5. Once the Technical Bids are accepted, the Financial Bids of the vendors (whose Technical Bids have been accepted) shall be opened.
6. If any vendors so desires, it may depute its representative for Financial Bid opening event.
7. The decision of the Principal Tinsukia Commerce Collegeshall be final and binding.
8. The terms and conditions of State Government will be followed and implemented.

ANNEXURE-I

TENDER DOCUMENT Name of Work: Supply of Laboratory Equipment to Tinsukia Commerce College

PART-A: TECHNICAL BID

Issued to:

M/S.....
.....
Ph/Mb No.....

Signature of the issuing authority with seal

Brief description of the firm

1. Sl. No. :
 2. Name of the Firms :
 3. Name of owner/Partner/Directors :
 4. Full particulars of office :Address :
Telephone No: Fax. No: email ID:
 5. Full particulars of the bankers of the firm
 - (a) Name of the Bank and Branch :
 - (b) Account type :
 - (c) Account No. :
 - (d) IFSC :
 6. Registration details: (Self attested copies of all Certificates/Licenses/Permits/Registrations etc. should be enclosed failing which the application is liable to be rejected outright).
 - (a) PAN/GIR No. :
 - (b) GST Registration No. :
 - (c) Service tax registration No. :
 - (d) EPF registration No. :
 - (e) ESI registration No. :
 - (f) Labour License issued under the Contract Labour Act., 1970 :
 7. Details of Earnest Money Deposited
 - (a) Amount :
 - (b) DD No. and Date :
 - (c) Drawn on bank :
 - (d) Valid up :
- The above format may be used to provide requisite details.
8. Additional information, if any:

Date:
Place:

Signature of the authorized person
Full Name:
(Company's Seal)

DECLARATION

I..... Son/daughter of
Shri.....Proprietor/Partner/Director/Authorized Signatory
of..... A Competent to sign the declaration and execute these tender documents.

I have carefully read and understood all the terms and conditions of the tender and hereby convey my acceptance of the same.

The information/documents furnished along with the above application are true and authentic to the best of my knowledge and belief. I/We/am/are well aware of the fact that furnishing of any false information/fabricated document would lead to rejection of my tender at any stage, besides liabilities towards prosecution under appropriate law.

Date:
Place:

Signature of the authorized person
Full Name:
(Company's Seal)

N.B.: The above declaration, duly signed and sealed by the authorized signatory of the company should be enclosed with Technical tender.

ANNEXURE-II

Deptt. Zoology:		
SL. NO.	Products	Units
1	Binocular Microscope Vision 2000	1
2	Compound Microscope	1
3	Specimen sycon, Spongilla, Obella, Auredia, pennatula, Tubipora	10
4	Slide permanent Slide	10
5	Pipette 10ml	2
6	Pipette 5ml	2
7	Pipette 2ml	2
8	Pipette 1ml	2
9	Beaker 500ml	2
10	Beaker 250ml	2
	Beaker 100ml	2
	Paraffin Water Bath	1
	Slide (Blue star)	10 Pkt.
	Cover slide (Blue Star)	10 Pkt
	BOD Bottle 300ml	2
11	Conical Flask 250ml	10
12	Cavity Block	10
13	Test Tube	1pkt
14	Museum Specimen	10
15	Haemocytometer	1
16	Dissecting Box (Big Size)	1
17	Dissecting Tray size 10x12	10
18	BINOCULAR MICROSCOPE	2
19*	<u>ROTARY MICROTOME:-</u> Erma type	1
20	<u>ALL GLASS DOUBLE DISTILLATION UNIT:-</u> Capacity: 3 liter (With automatic cut off device with electrodes)	1
21	<u>DOUBLE BEAM UV-VIS SPECTROPHOTOMETER</u> Double beam with software	1
22	<u>HOT AIR OVEN:-</u> Size: 18x18x18inch LABGEAR INTERNATIONAL Hot Air Oven offered comprise inner chambers that are made in stainless steel finish with outer structure made using mild steel in power coated finish so as to provide for longer service life standards. These hot air ovens also feature gaps between walls that come fitted with glass wool insulation so as to ensure avoiding heat loses in given applications. Further, the heating elements are constructed using high grade chrome plated micro-me wire with temperature controlled through thermostat usage. Technical Specification: <ul style="list-style-type: none"> • Inner chamber made of S.S. and outer made of Mild Steel with Power coating. • Gap between the walls fitted with glass wool insulation to avoid heat loses. • Heating elements are made of high grade chrome plated micro-me wire. • Temp. is controlled by Digital temp. Controller. • Temp. range 50°C TO 250°C and Accuracy : +- 1°C. • Air Ventilation's are placed on top of both sides to remove hot gases / fumes. • All the control switches & pilot lamps are fitted on the front panel. • Air Circulation Fan for Temp. Uniformity. 	1
23	<u>BOD INCUBATOR:-</u> Size: 4cu.ft. LABGEAR'S B.O.D. Incubator are designed for incubation of Biochemical Oxygen Demand on water and sewage, which can be used as a environmental study and growth chamber by incorporating lighting and humidification system. LABGEAR'S B.O.D. Incubator is used within the different application of microbiology, cell cultivation of animal, plant and food studies. Where experiment requiring low temperature conditions. Features <ul style="list-style-type: none"> • Outer chamber made of Mild Steel, finished with powder coated paint. • Inner chamber made of STAINLESS STEEL. • Fitted with coaxial blower for forced air circulation at triple walled back to maintain temperature inside the chamber. • Outer front double walled is insulated and fitted with magnetic tape for no temperature 	1

	loss. This is provided with the lock arrangement. <ul style="list-style-type: none"> • Temperature up to 5°C to 60°C • Full view inner glass made of Malaysian acrylic sheet. • Cooling is done by the ISI marked compressor. • Caster wheels for easy mobility. • Supplied with the 220 V AC50 Hz. 	
24	DIGITAL pH METER	1
Deptt. Of Botany:		
Sl.No.	Item	Unit
1	Haemocytometer	1
2	Burette	5
3	Burette Stand	5
4	Beaker 100ml	10
5	Beaker 250ml	10
6	M. Cylinder 100ml, 50ml, 250ml	6
7	Micro Pipette	2
8	Nostoc, Odogonium, Vaucheria, Focus, Anabeana, pezia, pucciniafunaria, Helmintnosporiem, Ectocarpus (Specement)	11
9	Test Tube	1Pkt
10	Test Tube Holder	12
11	Simple Microscope	5
12	Compound Microscope	1
13	Slide	10pkt
14	Cover Slide	20
15	Digital Balance 0.001gm	1
16	Microtome Machine(MANUAL)	1
17	Petrididh	10
18	Funnel 3''	12
19	Autoclave(Portable)	1
20	Hot Air Oven	1
21	Morter&Peste 5''	1
22	Conical Flask 250ml	10
23	Centrifuge Machine, 6 tube	1
24	Permanet Slide	10
25	Sprit Lamp	12
26	Manual Chemical Balance	1
27	Manual Pen Balance	1
Deptt.of Chemistry:		
Sl.No.	Item	Unit
1	Ostwalds Viscometer	5
2	Stalgonometer	5
3	Burette	10
4	Burette Stand	10
5	Funnel	10
6	Funnel Stand	10
7	Digital Balance 0.001 gm	1
8	Digital PH meter	1
9	Digital Conductivity Meter	1
10	Digital Potentionmeter	1
11	Glass Rod	10
12	Conical Flask 250ml	10
13	Judge Colorimeter	4
14	Test Tube (15x125mm)	10pkt
15	Test Tube Holder	24
16	Wire Gauge with frame	24
17	Beaker- 500ml	12
18	Beaker 250ml	10
19	Pipette-25ml	5
20	Pipette-10ml	2
21	Nickel spatula	10
22	Fusion Tube	1
23	Reagent Bottle 250ml	30
24	Reagent Bottle 500ml	10
25	Volumetric flask 250ml	12

26	Volumetric flask 100ml	12
27	Thermometer	4
28	Measuring cylinder 100ml	2
39	Measuring Cylinder 50ml	2
30	Water Bath (copper)	4
31	<u>DIGITAL WEIGHING BALANCE:-</u> Make: ACZET Model: CY224 Max: 220gm D: 0.1mg Pan size: Ø90mm Automatic External calibration	1
32	<u>DIGITAL WEIGHING BALANCE:-</u> MAKE: ACZET Model: CY223 Max: 220gm D: 0.001gm Pan size: Ø110mm Automatic External calibration	1
33	<u>DIGITAL WEIGHING BALANCE:-</u> Make: ACZET Model: CY2202 Max: 2200gm D: 0.01gm Pan size: 198x205mm Automatic External Calibration	1
34	<u>HOT AIR OVEN:-</u> ze: 12x12x12inches LABGEAR INTERNATIONAL Hot Air Oven offered comprise inner chambers that are made in stainless steel finish with outer structure made using mild steel in power coated finish so as to provide for longer service life standards. These hot air ovens also feature gaps between walls that come fitted with glass wool insulation so as to ensure avoiding heat loses in given applications. Further, the heating elements are constructed using high grade chrome plated micro-me wire with temperature controlled through thermostat usage. Technical Specification: <ul style="list-style-type: none"> • Inner chamber made of S.S. and outer made of Mild Steel with Power coating. • Gap between the walls fitted with glass wool insulation to avoid heat loses. • Heating elements are made of high grade chrome plated micro-me wire. • Temp. is controlled by Digital temp. Controller • Temp. range 50°C TO 250°C and Accuracy : +- 1°C. • Air Ventilation's are placed on top of both sides to remove hot gases / fumes. • All the control switches & pilot lamps are fitted on the front panel. 	1
35	<u>SINGLE BEAM UV - VIS SPECTROPHOTOMETER:-</u> UV-VIS single beam with Software	1
Deptt. Of Physics:		
Sl.No.	Item	Unit
1	Copper Voltmeter	1
2	Magnet	5pair
3	Screw gauge	6
4	Vernier Caliper(chrome plate)	6
5	Moment of Inertia Table	1
6	Meter Bridge	1
7	Potentiometer	2
8	Deflection Magnetometer	1
9	Vibration Magnetometer	1
10	Young's Modulus	1
11	Optical Bench	1
12	Rheostat	2
13	Power Supply 0 – 30 volt.	1
14	Kater's Pendulum(S.S)	2
15	Bar Pendulum	2
16	Thermometer (Double Disc)	6
17	Convex Lens	20
18	Copper Wire	1
19	Stop watch (Digital)	2

20	Resistance Box (0-5000 ohms)	2
22	Galvanometer	5
23	Analog Multimeter	1
24	Digital Multimeter	2
25	Solid Sphere 18mm (1box)	1
26	Weight for Young Modulus(5kg)	1

Sl. No.	Experiments Name	Instruments	Unit
1	Travelling Microscope, 3 motion		1
2	To determine the height of a building using a Sextant.	Sextant with Stand	
3	To determine the Young's Modulus of a Wire by Optical Lever Method.	Complete set-up	1
4	To study the characteristics of a series/Parallel RC Circuit	RC Circuit	1
5	To determine an unknown Low Resistance using Carey Foster Bridge.	Carey Foster's Bridge.	1
6	To compare capacitances using De'Sauty's Bridge	Complete set-up	1
7	To study response curve of a series LCR circuit and determine its (a) Quality factor Q, and (b) Impedance at resonance, (c) Quality factor Q, and (d) Band width	Complete set-up	1
8	To determine self-inductance of a coil by Rayleigh's method	Complete set-up	1
9	To determine the mutual inductance of two coils by Absolute method	Mutual inductance Kit	1
10	To determine the frequency of an electric tuning fork by Melde's experiment and verify λ^2 -T law	Complete set-up	1
11	To study Lissajous Figures CRO	CRO, colour	1
12	To determine the wavelength of sodium source using Michelson's interferometer	Michelson's interferometer	1
13	To determine wavelength of sodium light using Fresnel Biprism	Biprism with Complete set-up	1
14	To determine wavelength of sodium light using Newton's Rings	Complete set-up	1
15	To determine Mechanical Equivalent of Heat, J, by Callender and Barne's constant flow method	Complete set-up	1
16	Photo-electric effect: photo current versus intensity and wavelength of light; maximum energy of photoelectrons versus frequency of light	Complete set-up	1
17	To determine the Planck's constant using LEDs of at least 4 different colours	Complete set-up	1
18	To setup the Millikan oil drop apparatus and determine the charge of an electron	Complete set-up	1
19	To study the wavelength of laser source using diffraction of single slit/ Double slit	Complete set-up	1
20	To study V-I characteristics of PN junction diode, and Light emitting diode	Complete set-up	1
21	To study the characteristics of a Bipolar Junction Transistor in CE configuration	Complete set-up	1
22	To study the frequency response of voltage gain of a RC- coupled transistor amplifier	Complete set-up	1
23	Study of Electron spin resonance-determine magnetic field Junction of the resonance frequency		1
24	To measure the Dielectric Constant of dielectric Materials with frequency	Complete set-up	1
25	To measure the resistivity of a semiconductor (Ge) with temperature by four probe method (room temperature to 150° c) and to determine its band gap.		1
26	To determine the Hall coefficient of a semiconductor sample.	Complete set-up	1
27	To determine the band gap of semiconductor by P-N junction method	Complete set-up	1
28	To verify the law of Malus for plane polarized light	Complete set-up	1
29	V-I characteristics of LED (a) Study the Characteristic of solid state laser (b) Study the characteristics of LDR (c) Photovoltaic cell (d) Characteristic of IR sensor		1

Installations & compatibility Work:		
Sl.No.	Items	Qty
1	Laboratory gas connection, gas pipe, Burner, Freeze, Water Tap Water Pipe, lab Sink, Outlet Pipe, Dark Room with fittings	Package
2	Modular Laboratory Table With Granite Top& Basin	4
3	Chair with Arm	15
4	Steel Rack with Glass door and provision for lock	5
5	Mica Table	5

Annexure III

PART-B: FINANCIAL BIDS

Price Schedule: A (Supply of Laboratory Equipments)

Sl. No	Items Name/Description	Brand with Model	Quantity	Unit Rate	Total Cost	Discount	Others (if any)	Actual Cost
1	List enclosed in Annexure II							

Signature of the authorised signatory with seal of the tendering firm/company/agency

Date:
Place:
Address:

Signature
Full name
Designation & Seal