



Guru Gobind Singh Indraprastha University

Sector 16C, Dwarka, New Delhi -110078

Website: <http://ipu.ac.in>

F.13.5(4)/IPU/PUR/Lab Equipments/USBAS/2013-14/1225

dated:10.01.2014

NOTICE INVITING TENDER

On behalf of Registrar, Guru Gobind Singh Indraprastha University, sealed items rate tenders are invited from reputed and eligible contractors/firms in two bid system (Technical & Financial) for the supply and Installation of High resolution FTIR system (fully controlled by PC/software), NMR SPECTROMETER, LOW VACCUM /HIGH VACCUM SCANNING ELECTRON MICROSCOPE and Thermo Gravimetric Analyzer (TGA) for TRC laboratory, Sector 16C, Dwarka, New Delhi-110078. Tender Document containing detailed terms & conditions can be obtained from 10.00 a.m. to 04.00 p.m. upto 21.02.2014 from the office of Dy. Registrar (Purchase), Ground Floor, Library Block, GGSIP University, Sector 16C, Dwarka, New Delhi-110078 on payment of Rs.1000/- only through Demand Draft in favour of 'Registrar, GGSIP University, Dwarka, New Delhi'. Tender document can also be downloaded from University website i.e. www.ipu.ac.in. The downloaded tender document can be used by paying Rs.1000/- in the form of Demand Draft/pay order drawn in favour of 'Registrar, GGSIP University, Dwarka, New Delhi' to be enclosed with the filled in tender document (Technical Bid).

Duly completed tender document are to be dropped in the tender box at Purchase Branch, Ground Floor, Library Block, GGSIP University, Sector 16C, Dwarka, New Delhi-110078 latest by 01.00 p.m. on 25.02.2014. The tenders (Technical Bids) shall be opened at 03.00 p.m. same day i.e. on 25.02.2014 in the presence of tenderers or their representatives, if any.

Registrar

Cost of Tender document: `1000/- (INR)



**GURU GOBIND SINGH
INDRAPRASTHA
UNIVERSITY**

TENDER DOCUMENT

FOR

Supply & installation of Lab Equipments in TRC Laboratory

1. High resolution FTIR system (fully controlled by PC/software) as per specifications and complete accessories listed below the item in the financial bid document in the NIT.
2. NMR Spectrometer with Latest technology based stable and actively shielded superconducting magnet (with a minimum of 9.3 Tesla) with an operational frequency of 400 MHz for ^1H with or without operator for the period specified in the NIT/ financial bid document therein.
3. Low Vacuum & High Vacuum Scanning Electron Microscope with resolution 3.0 nm or better in high & low vacuum mode at 30 KV as per specifications and complete accessories listed below the item in the financial bid document in the NIT.
4. Thermo Gravimetric Analyzer (TGA)

AT

Guru Gobind Singh Indraprastha University
[A state University under Govt. of NCT of Delhi]
Sector 16 C, Dwarka, New Delhi 110 078

Dy. Registrar (Purchase)
Room No. L 010, Ground Floor, Library Block,
GGSIU, Sector 16C, Dwarka, New Delhi 110078
Contact Nos.011 25302149-150
Email :purchaseipu@gmail.com.

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PREAMBLE

- ❖ Guru Gobind Singh Indraprastha University established by Government of NCT of Delhi under the provisions of Guru Gobind Singh Indraprastha University Act, 1998 read with its Amendment in 1999.
- ❖ The University is recognized by University Grants Commission (UGC), India under section 12B of UGC Act.
- ❖ The University has been awarded the ISO 9001:2000 Certification by Standardization, Testing and Quality Certification Directorate, Department of Information Technology, Ministry of Communication and Information Technology, Government of India, for a period of three years.
- ❖ It has been accredited "A Grade" by NAAC during Feb - March 2007.
- ❖ It is an affiliating and teaching University that aims to facilitate and promote studies, research and extension work in emerging areas of higher education with focus on professional education in the disciplines of engineering, technology, architecture, management, medicine, pharmacy, physiotherapy, nursing, education, law, journalism and mass communication, etc. and also to achieve excellence in these and related fields and other matters connected therewith or incidental thereto.
- ❖ It awards various degrees like: B.Tech, M.Tech, MCA, M.Sc. (Environment Management), M.Sc.(Forensic Science), M.Sc.(Criminology), B.Arch., BCA, BBA, MBA, BMC, B.Sc.(MLT), B.Sc.(Hons) Nursing, BJ(MC), BASLP, BRT, B.Pharma, BPT, MPT, BHMCT, B.Ed., LLB, LLM, MAHM, MCPHM, MHRPD, BHMS, MBBS and Ph.D etc. The admission to these programmes are done yearly through Common Entrance Test.

NOTICE INVITING TENDER

NIT NO.- /GGSIPU/2012-13/DRC/PUR/_____

Registrar, Guru Gobind Singh Indraprastha University (GGSIPU) invites sealed item rated tender (in two bid system – Part I & II) from reputed and experienced contractors/suppliers for the following stores on Supply & installation basis:

1.0 Particulars of Items: (Separate bid is required to be quoted for each item)

- A. High resolution FTIR system (fully controlled by PC/software) as per specifications and complete accessories listed below the item in the financial bid document in the GNIT.
- B. NMR Spectrometer with Latest technology based stable and actively shielded superconducting magnet (with a minimum of 9.3 Tesla) with an operational frequency of 400 MHz for 1H with or without operator for the period specified in the GNIT/ financial bid document therein.
- C. Low vacuum & High Vacuum Scanning Electron Microscope with resolution 3.0 nm or better in high 7 low vacuum mode at 30 KV as per specifications and complete accessories listed below the item in the financial bid document in the GNIT.
- D. **Thermo gravimetric Analyzer**

2. **Quantity:** One (1) complete unit each (as per 1.A, B, C & D)

3. **Tender Document cost in DD:** Rs. 1000/- (One thousand only) (**Separate document cost is to be paid for each bid**)

4. **Earnest Money Deposit (EMD) in DD/FDR**

For item at A - (High resolution FTIR system)	Rs.1.00 lakh (Rupees one lakh only)
For item at B – (NMR spectrometer)	Rs.5.00 lakh (Rupees five lakh only)
For item at C – (Electron Microscope)	Rs.3.00 lakh (Rupees three lakh only)
For item at D – (TGA)	Rs.1.00 lakh (Rupees one lakh only)

5. **Completion period:**

Supply within 120 days from the date of issue of award of the tender/issue of Letter of Credit, whichever is later and installation within 45 days' after the receipt of material at University.

6. **Availability of Tender Document:** Tender document including terms and conditions can be obtained from the Purchase Branch, Room No. L-010, Ground Floor, Library Building, GGSIPU, Sector 16 C, Dwarka, New Delhi 110 078 on written request on payment of the non-refundable and non-transferable tender document cost as stated above in the form of cross Demand Draft issued by a scheduled bank drawn in favour of Registrar, GGSIPU payable at Delhi from 10.01.2014 to 21.02.2014 between 10.00 a.m. to 4.00 p.m. on all working days. GGSIPU will not be responsible for non-receipt of the Tender Documents due to postal delay/loss in transit. Tender Documents with detail terms & conditions can also be downloaded from our website: <http://www.ipu.ac.in/> Tender document cost will be submitted in a separate envelop along with the downloaded tender document.

7. **Qualification of the Tenderer:** To qualify for award of the work, the intending tenderer must have in its name as a supplier/prime contractor experience of having successfully completed at least three similar nature of works in government sector/ University in India during last 3 (three) years. "Similar nature of work" means execution of supply and Installation of Lab Equipments – mentioned at A, B, C and D as the case may be as per specification given in this tender document. Issuance of tender document does not mean that the parties are considered qualified. After opening of part-I of the offer, the same will be scrutinized for eligibility / qualification.

8. **Validity Period of Offer:** The rates offered in Part II (Financial bid) should be valid for one hundred and eighty (180) days from the date of opening of Part I (Technical bid) of the Tender.

9. **Receipt and opening of Tenders:** The tender complete in all respect along with EMD should reach to this office on or before 25.02.2014 before 1.00 PM (IST). Part – I of the tender will be opened on the same day at 3.00 pm onwards in the office of Director, Research & Consultancy, Room No.121, Ground Floor, Administrative Block, GGSIPU.
10. The required EMD (**separate for each bid**) as stated above in the form of DD or FDR must be enclosed with the technical bid failing which the offer will be treated as non-responsive.
11. GGSIPU reserve the right to accept or reject any or all the tenders wholly or partially without assigning any reason thereof.

INSTRUCTIONS TO BIDDERS

12.0 Scope

The work consists of:

- 12.1 **Supply & Installation of Lab Equipments mentioned at 1.A, B, C and D for TRC Laboratory at University Campus at Sector-16C, Dwarka, New Delhi as per specification in Section-III.**
- 12.2 Comprehensive on-site **warranty** for a period of **60 months** from the last date of completion/ installation for all the items supplied as certified by the University.

13.0 Definitions:

- 13.1 **GGSIPU** means Guru Gobind Singh Indraprastha University, Delhi
- 13.2 **University** means Guru Gobind Singh Indraprastha University, Delhi
- 13.3 **Employer** means the Registrar, GGSIPU and his successor
- 13.4 **Bidder** means the Manufacturer or his direct authorized distributor (dealing at first point), proprietary firm, partnership firm, limited company private or public or corporation
- 13.5 **“Year”** means “Financial year” unless stated otherwise.

14.0 Who can apply:

- 14.1 If the bidder is a proprietary firm, the application shall be signed by the proprietor with his full typewritten name and the full name of his firm with its current address, Contact details etc.
- 14.2 If the bidder is a firm in partnership, the application shall be signed by all partners of the firm with their full typewritten names and current addresses, or alternatively, by a partner holding power of attorney for the firm. In the latter case a certified copy of the power of attorney should accompany the application. In both cases, a certified copy of partnership deed and current address of all the partners of the firm should accompany the application.
- 14.3 If the bidder is a limited company or a corporation, the application shall be signed by a duly authorized person holding power of attorney for signing the application accompanied by a certified copy of the power of attorney. The bidder should also furnish a certified copy of the Memorandum and Articles of Association duly attested by a Public Notary.

14.4 Joint Venture/ Consortiums are not accepted.

15.0 Sealing and Marking of Bids

- 15.1 Separate bids (Technical Bid as well as Financial Bid) shall be submitted for each item.
- 15.2 The bidder shall place the three separate envelopes (called inner envelopes) marked **“Technical Bid”**, **“Financial Bid”** and **“Earnest Money Deposit”** in one outer envelope. The inner envelopes will have marking as follows:-

- a) Earnest Money Deposit (EMD)
b) Technical Bid
c) Financial Bid
- 15.3 The sealed inner and outer envelopes containing the EMD, technical bid and financial bid shall be addressed to Registrar, Guru Gobind Singh Indraprastha University, Sector 16C, Dwarka, New Delhi – 110078.
- 15.4 The sealed tender shall bear the name and identification number of the Tender on the cover of the Envelope(s).
- 15.5 In addition to the identification required as above, **each** of the envelopes shall indicate the name and address of the bidder to enable the bid to be returned unopened in case it is declared late or is declared non-responsive.
- 16.0 **Bid Submission:**
- 16.1 The envelop named “**Technical Bid**” shall comprise of all documents as per **Clause-17. (Separate bid for each item)**
- 16.2 The envelope named “**Financial Bid**” and shall comprise of the price bids of the items included in **Section IV. (Separate bid for each item)**
- 16.3 Each page of the Technical Bid, Tender Document & Financial Bid must be sealed and signed by the authorized signatory of the bidder.
- 16.4 Duly signed tender document along with all corrigenda, addendum issued, if any, should also be sealed as part of technical bid.
- 16.5 Conditions other than those laid down in the Tender document will not be entertained.

17.0 Eligibility Criteria for Technical Bid

The formats/Annexure for the documents to be submitted, with Technical bids are placed at **Section –II (Annexure – A, A1, A2 to Annexure E):**

17.1	Letter of Transmittal	Annexure – A
	Declaration by Bidder	Annexure – A1
	Compliance to Bid Requirement	Annexure – A2
17.2	Organizational Structure: - Legal status of the company/ organization with legal proof along with certified copies.	Annexure - B
17.3*	Income Tax Registration (PAN No.),	Attach certified copies
	Service Tax Registration,	
	VAT Registration/ TIN Number	
17.4	Average financial turnover of Rs.5 Crore (five crore) during the immediate last three consecutive financial years, duly audited, signed & stamped by a Chartered Accountant.	Annexure C
	The bidder should not have incurred losses in more than two years in the last 3 consecutive financial years, duly certified by Chartered Accountant, along with copies of audited profit and loss account of last three years	
17.5	Firm should have a authorized service centre in India , preferably in Delhi and should have executed at least 03 nos. of similar work in India in the last 03 years. Explanation: “Similar nature of work’ means execution of supply and Installation of Lab Equipments – mentioned at 1. A, B, C and D as the case may be as per specification given in Section III of this document This should be certified by an officer of the client organization on their letter-head.	Annexure D
17.6	An affidavit on Rs. 10/- (non-judicial stamp paper) declaring that the bidder/ organization has not been blacklisted/debarred by any of the government/ public sector agencies in India in the last 3 years. A declaration of fair business practice by the Bidder.	Annexure – E

17.7	All items of the Tender must be quoted by the Manufacturer or his direct authorized distributor (dealing at first point), proprietary firm, partnership firm, limited company, private or public or corporation. Incomplete quote shall be summarily rejected.	
17.8	The intending bidder must submit compliance report of the each item of the bid.	
17.9	A declaration by the manufacturer as to the probable date of manufacture of the item for which financial bid has been made.	Annexure – A 3

* Wherever applicable.

18.0 Opening of Technical Bids & Evaluation:-

- 18.1 The details submitted by the bidders will be evaluated in the following manner:
- 18.2 The “initial eligibility criteria” prescribed in para 17.1 to 17.9 above in respect of experience in similar class of works completed, financial turnover, profitability and valid registrations will first be scrutinized.
- 18.3 Examination of the specification of all the items will be done by specialized specification evaluation committee.
- 18.4 Even though any bidder may satisfy the above requirements, he/she would be liable to disqualification if he/she has:-
- 18.5 Made misleading or false representation or deliberately suppressed the information in the forms, statements and enclosures required in the eligibility criteria document.
- 18.6 Record of poor performance such as abandoning work, not properly completing the contract, or financial failures/weaknesses etc.

18.3 Opening of Financial bid and evaluation:

After the Technical evaluation of the bids, the University will open the ‘Financial Bids’ of all the bidders who have qualified in the Technical Eligibility Criteria as per Clause 17, at notified time, date and place in the presence of the qualified bidders or their representatives, if any. The lowest financial bidder shall only be considered for award of work.

19.0 Earnest Money Deposit:

- 19.1 The Earnest Money Deposit (EMD) must be attached (see Clause 4). The Earnest money shall be accepted in the following forms and shall be in favour of “Registrar, GGSIPU”, payable at Delhi:-
1. Fixed deposit receipt (FDR)
 2. Bank Draft /Demand Draft
- 19.2 Tenders with no earnest money deposit will summarily be rejected. In case of successful bidder of the financial bids, the earnest money will be returned after obtaining the required 10% Performance Security in the form of FDR/BG (FDR/BG should be valid for a period of 66 months) along with the agreement on non-judiciary stamp paper of Rs. 100/-. However, the successful bidder shall be required to enter into an agreement with the University for providing the Comprehensive Irrecoverable Warrantee of 60 months from the date of final installation of the product, within 30 days of receipt of work order/Purchase order.
- 19.3 In the case of unsuccessful bidders, the Earnest Money Deposit will be refunded without any interest.

20.0 Financial Bid:

20.1 The bidder shall quote unit item rates in INR/USD/British Pound/Euro etc., as the case may be, both in words and figures in the Financial Bid only. Exchange Rate on the date of opening of financial bid will be taken into account for evaluation purpose only. No alterations in the form of tender, in the schedule of quantities or additions (Financial Bid) etc. shall be permitted. In case of difference between the rates of items written in figures and in words, the rates of items written in words shall be taken as correct. No changes in unit rates shall be allowed. The rates quoted in schedule of quantity (Financial Bid) are for finished and completed items and no extra amount for cartage or transporting material, labour etc. shall be paid. The rates should be inclusive of all loads and lifts for all materials for the completed items and also include all taxes, insurance, royalties etc. as applicable. Indian Supplier has to quote the all inclusive of rate product i.e. freight, insurance, packing, handling, assembling, installation, commissioning upto the University or as given in the work order.

In case of foreign manufacture, supplying the equipment through its authorized agent in India CIP Delhi Airport will be considered in financial bids. However, custom duties as applicable against production of custom duty exemption certificate will be borne by the University including the transportation and insurance charges, if any. However, the handling of the equipment will be strictly in the supervision of authorized agent in India. No liability in case of any damage, miss handling will be accepted by the University if any.

21.0 General:

21.1 All information called for in the enclosed forms should be furnished against the relevant places in the forms. If for any reason, information is furnished on a separate sheet, this fact should be mentioned against at the relevant place. Even if no information is to be provided in a column, a "Nil" or "No Such Case" entry should be made in that column. If any particular/query is not applicable in case of the bidder, it should be stated as "not applicable". The bidders are cautioned that incomplete information called for in the tender document or deliberate suppression of any information may result in the bid being summarily disqualified. Bids received after the expiry of the stipulated date and time mentioned in the tender document will not be entertained.

21.2 The bid document should be legibly written and serially numbered with proper tagging and binding. The bidder should sign each page of the bid.

21.3 Overwriting should be avoided. Correction, if any, should be made by neatly crossing out, initialing with date and rewriting. Pages of the eligibility criteria document are to be numbered. Additional sheets, if any added by the bidder, should also be numbered. Bid should be submitted as a package with signed letter of transmittal.

21.4 References, information and certificates from the respective clients certifying suitability, technical knowledge or capability of the bidder should be signed by officer of the client organization with name & designation.

21.5 The bidder may furnish any additional information which he thinks is necessary to establish his capabilities to successfully complete the envisaged work. He is, however, advised not to furnish superfluous information. No information shall be entertained after submission of tender document unless it is called for by the University.

21.6 Any information furnished by the bidder found to be incorrect either immediately or at a later date, would render him liable to be debarred from tendering/taking up of any work in GGSIPU **which may also result in forfeiture of EMD/performance security.**

21.7 The successful bidder shall have to work in co-ordination and co-operation with any other agencies appointed by the University to work simultaneously in the same or adjoining area. The decision of the University in case of any dispute between the different agencies appointed by the University shall be final and a binding.

- 21.8 Income tax, Works Contract Tax and any other tax at the rates in force during the progress of contract / **award of work** that will be in force from time to time shall be recovered / deducted from the released payment amount.
- 21.9 Sales Tax, purchase Tax, turnover tax or any other tax on material applicable on the date of submission of bid in respect of this contract shall be payable by the contractor and University will not entertain any claim whatsoever in respect of the same.
- 21.10 The bidder shall have to make his own arrangement at no extra cost to the University for water Supply & Installation, sanitation and electric Supply & Installation etc. at the site of work.
- 21.11 On acceptance of the tender, the name of the accredited representative(s) of the contractor who would be responsible for taking instructions from the University shall be communicated in writing to the Registrar.
- 21.12 The contractor shall furnish a list of University employees related to him, if any in the “Technical Bid”.
- 21.13 If the bidder shall obtain a contract with GGSIPU as a result of wrong tendering or other non-bonafide methods of competitive tendering, the University reserves the right to terminate the contract without any liability to the contractor, which may also result to forfeiture of EMD/performance security.
- 21.14 Without prejudice to any of the rights or remedies under this contract if the contractor dies, the University shall have the option of terminating the contract **without** compensation to the legal heir of the contractor.
- 21.15 Escalation: Increase in rates of material / Labour shall not be payable on any account. Price quoted shall be firm and no escalation will be allowed on any account.
- 21.16 The successful bidder will have to sign an agreement within stipulated time period as mentioned in the letter of intent. The necessary fees, stamp paper, etc. required for completing the agreement have to be borne by the bidder.

22.0 Scope of Works

The Scope of work shall consist, Supply & Installation, erection and placing in position at site, complete in all respects, and its maintenance during warranty period for items mentioned at clause 1.A, B, C and D as per specification given under Section III

22.1 Specification for Work and Quality

The procurement of various materials shall be either from the manufacturers or their main authorized dealers to ensure that no duplicate/spurious makes are used in the works. The entire work shall be warranted for a period of **60 months** (except batteries of UPS) against defective material with liability of replacement or to the satisfaction of the University.

22.2 Safety and Security

Safety and Security of workers/staff, material, equipments, etc. will be the responsibility of the contractor. The university will not be held responsible on this account

22.3 The University reserves the right, without being liable for any damages or obligation to inform the bidder, to:

- (a) Amend the scope and value of contract to the bidder.
- (b) Reject any or all the applications without assigning any reason.

22.4 Any effort on the part of the bidder or his agent to exercise influence or to pressurize the University would result in rejection of his bid. Canvassing to any kind is prohibited.

23.0 Final decision making authority

The University reserves the right to accept or reject any bid and to annul the process and reject all bids at any time, without assigning any reason or incurring any liability to the bidders. No claim whatsoever will be entertained / paid by the university to the bidder (s).

24.0 Summary Rejection of tender:

24.1 The tenders not accompanied with Tender Fees and Earnest Money Deposit shall be summarily rejected. Similarly, if the bidder proposes any alternation in or additions to the prescribed form of tender or decline to carry out any work of the tender document; or any conditions mentioned, etc., his tender is liable to be rejected.

25.0 Particular provisions

25.1 The University reserves the right to execute the work or reject the tender without assigning any reason or incurring any liability to the bidder.

25.2 The University has the power to make alteration in, omission from, addition of or substitution for the original specifications, drawings, designs.

26.0 Site visit

The bidder is requested to visit the work site and get acquainted with site conditions regarding layout and all other matters, affecting the work before filling in the item rates. Submission of a tender by a bidder, implies that they have read these instructions and have made themselves aware of the scope of the work, conditions of contract and University will not, therefore, bear any extra charges on any account, in case the bidder finds later on to have misjudged the site conditions or specification.

27.0 Amendment of tender document:

27.1 Before the deadline for submission of tender, the University may modify the tender document by issuing addenda.

27.2 Any addendum thus issued shall be a part of the tender document and shall be uploaded on the University website (www.ipu.ac.in). Prospective bidders must visit the website before filling and submission of Tender Document for such information.

28.0 Validity of Tender:

One hundred and Eighty days from the date of opening of **Financial Bid** of the tender. During this period no bidder shall be allowed to modify/withdraw his tender. In case of withdrawal, the EMD submitted by the bidder shall be forfeited and no claim shall be entertained on this regard.

29.0 Performance Guarantee:

29.1 The successful bidder shall be required to furnish a Performance Guarantee of 10% of the total tendered value after successfully installation of the product at site. The Performance Guarantee should be valid up to 66 months. The Performance Guarantee shall be accepted in the following form and shall be in favour of "Registrar, GGSIPU", payable at Delhi with a validity of months as under:-

- i. Fixed deposit receipt (FDR) of a nationalized bank (66 months validity)
- ii. Bank Guarantee (As per Annexure-H) (66 months validity)

29.2 Performance Guarantee will be refunded after completion of the warrantee period as per clause 30.

29.3 In case of non submission of Performance Guarantee within specified time, the earnest money will be forfeited and the University may consider to black list/de-bar the contractor.

29.4 In case a fixed deposit receipt/ Bank Guarantee of any bank is furnished by the contractor to the University as part of the Performance Guarantee and the Bank is unable to make payment against the said instrument. The loss caused thereby shall fall on the supplier and the supplier shall forthwith on demand furnish additional security to the University to make good the deficit.

30.0 Warranty

The bidder shall provide 60 months Warranty (on site and comprehensive) on all items from the last date of installation and shall be responsible for any defects that develop in the Lab item. They shall also replace any defective part of the product supplied and other accessories, without any exception and recourse, free of cost.

The bidder is responsible for all packing, unpacking, assembly, installation of units. The bidder will test the products and accomplish the adjustments necessary for successful and continuous operation of the products supplied at all installation sites and shall ensure maintenance of the supplied products during the warranty period. All the repairing / replacing of defects shall be done by the bidder totally free of cost. The period of warranty will automatically be treated as extended beyond 60 months if the instrument remains non-functional more than 7 days after reporting non-functional.

31.0 Duration

The items covered under this tender are required to be delivered and installed at University Campus at Sector 16C, Dwarka, New Delhi within 150 days, as specified in the delivery schedule submitted by the bidder. The Supply & Installation and installation is to commence 60th day after the issue of letter of Intent/letter of credit, whichever is later. The 150 days will start after 10 days from the date of issue of letter of Intent/letter of credit by the University.

32.0 Payment Terms

32.1 100% irrevocable & confirmed Letter of Credit will be opened in the bank, 90% payment shall be released to the supplier against shipment and balance 10% will be released after successful installation of products on site and training and submission of Performance Guarantee as per clause 29. LC will be issued only in case of foreign suppliers. However, in case of material manufactured indigenously in India, 90% payment will be released on delivery of product at University site and 10% payment will be released after complete installation, training and performance guarantee of the product. Payment of supplier of liquid gases shall be made on year to year basis at the market prevailing rate.

32.2 Each invoice should be submitted in duplicate clearly specifying contract no, goods description, quantity, unit price, total amount along with warranty certificate, etc.

32.3 No advance payment will be made under any circumstances.

33.0 Delay and Non Conformance

33.1 If the bidder fails to install the equipment within the period specified in the Purchase Order, University shall, without prejudice to its other remedies under the Purchase Order, deduct from the contract price, as liquidated damages, a sum equivalent to 1% (one percent) of the contract price of the delayed goods weekly or part thereof of delay until actual delivery. The penalties will be maximum of 10% of the contract amount / awarded value.

33.2 In case of extraordinary delay or beyond 60 days of stipulated delivery period, University reserves the right to terminate the contract, without any liability to cancellation charges, forfeit/en-cash the submitted Performance Guarantee and blacklist/debar the defaulting firm.

34.0 Services during warranty period

34.1 The maximum response time for maintenance complaint during warranty period (i.e. time required for bidder's maintenance engineer to report at the installation after a request call/telegram is made or letter is written) shall not exceed 07 days.

34.2 The period for correction of defects in warranty period is 90 days.

34.3 In case an item is not useable beyond the stipulated maximum downtime the contractor will be required to arrange for an immediate replacement.

34.4 In case the rectification of defects is not carried out within 90 days and replacement of defective items are not provided, a penalty of sum equivalent to 5% per week of the delivered price of that defective item(s) shall be levied. This penalty is applicable up to a maximum of 4 weeks (maximum 10%)

35.0 Packing and Marking

35.1 All packing should be strong enough to withstand rough handling during loading/ unloading and transporting. Fragile articles should be packed with special precaution and should bear the marking like Fragile, handle with care, This side up etc.

36.0 Substitution and Wrong Supplies

Unauthorized substitution or materials delivered in error of wrong description or quality or supplied in excess quantity or rejected goods shall be returned to the contractor at contractor's cost and risk.

37.0 Insurance, Freight and Deliveries

37.1 The supplier shall make his own arrangements towards safe and complete delivery including insurance, freight, state level permits etc. as applicable at the designated locations indicated by University in the Purchase Order. However additional actual cost toward applicable custom duty against exemption certificate, local freight, transportation from Airport to GGSIP University shall be borne by the University but the handling the product under the guidance/supervision by the manufacturer.

37.2 The contractor will keep University informed about changes, if any, in various stages of deliveries, installation.

38.0 Arbitration and Settlement of Disputes:

38.1 University and the contractor shall make every effort to resolve amicably by direct information negotiation by difference or dispute arising between them under or in connection with the University order.

38.2 If after thirty (30) days from the commencement of such informal negotiations, University and the supplier are unable to resolve amicably the dispute, either party may require that the dispute be referred for resolution to the formal mechanisms as specified hereunder:

38.2.1 Any dispute or differences whatsoever arising between the parties out of or relating to the manufacturing, meaning, scope, operation or effect of this contract or the validity or the breach thereof shall be settled by arbitration in accordance with the provisions of the Arbitration & Conciliation Act, 1996 and the award made in pursuance thereof shall be binding on the parties. The sole arbitrator shall be appointed by the Vice Chancellor, GGS Indraprastha University.

38.2.2 The performance under this contract shall not stop for any reason whatsoever during the said dispute/proceedings, unless the contractor is specifically directed by University to desist from working in this behalf.

38.2.3 The venue of arbitration shall be Delhi/ New Delhi. The language of proceedings shall be English. The Law governing the substantive issues between the parties shall be the Laws of India. All disputes are subject to the jurisdiction of the Delhi Courts only

38.2.4 It is also a term of that if any fees are payable to the arbitrator, these shall be paid equally by both the parties. It is also a term of the contract that the arbitrator shall be deemed to have entered on the reference on the date he issues notice to both the parties calling them to submit their statement of claims and counter statement of claims.

39.0 Force Majeure For purpose of this Clause, Force Majeure shall mean fires, floods, natural disasters or other acts, that are unanticipated or unforeseeable, and not brought about at the instance of the party claiming to be affected by such event, or which, if anticipated or foreseeable, could not be avoided or provided for, and which has caused the non-performance or delay in performance, such as war, turmoil, strikes, sabotage, explosions, quarantine restriction beyond the control of either party. A party claiming

Force Majeure shall exercise reasonable diligence to seek to overcome the Force Majeure event and to mitigate the effects thereof on the performance of its obligations under this Supply Order.

If a Force Majeure situation arises, the supplier shall promptly notify the University in writing of such conditions and the cause thereof. Unless otherwise directed by the University in writing, the Supplier shall continue to perform its obligations under the Purchase Order as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

SECTION II

INFORMATION REGARDING TECHNICAL ELIGIBILITY
(Annexure A to E)

(Separate information for each items of tender is be given)

LETTER OF TRANSMITTAL
(separate for each bid)

From:

To

The Registrar
GGS IPU
Sector 16C, Dwarka,
Delhi

Sub: Submission of Tender Document for the work of “**Supply & Installation of**” at **GGSIPU Campus, Sector 16C, Dwarka, New Delhi**”.

Sir,

Having examined the details given in Tender document for the above work, I/we hereby submit the relevant information:-

1. I/we hereby certify that all the statement made and information supplied in the enclosed annexure / forms accompanying statement are true and correct.
2. I/we have furnished all information and details necessary for eligibility and have no further pertinent information to Supply & Installation.
3. I/we submit the requisite certified solvency certificate and authorize the Registrar, GGSIPU to approach Bank issuing the solvency certificate to confirm the correctness thereof. I/we also authorize the GGSIPU to approach individuals, employers, firms and corporation to verify our competence and general reputation.

Name & Signature(s) of Bidder(s) with seal

DECLARATION BY THE BIDDER
(separate for each bid)

We _____ (Name of the Bidder) hereby represent that we have gone through and understood the Bidding Document (which in two parts) in Part-I (Commercial Section & Technical Section) and Part-II (Schedule of Quantities) and that our Bid has been prepared accordingly in compliance with the requirement stipulated in the said documents.

We are submitting a copy of Bidding Document marked “Original” as part of our Bid duly signed and stamped on each page in token of our acceptance. We undertake that Part-I and Part-II of the Bidding Document shall be deemed to form part of our bid and in the event of award of work to us, the same shall be considered for constitution of Contract Agreement. Further, we shall sign and stamp each page of this Part-I and Part-II as a token of Acceptance and as a part of the Contract in the event of award of Contract to us.

We further confirm that we have indicated prices in Schedule of Quantities and submitted in Price Bid in separately sealed envelope. We confirm that rate quoted by us includes price for all works/activities/supply etc. as mentioned in item description of the items in Schedule of Quantities.

SIGNATURE OF BIDDER : _____

NAME OF BIDDER : _____

COMPANY SEAL : _____

Note : This declaration should be signed by the Bidder’s representative who is signing the Bid.

COMPLIANCE TO BID REQUIREMENT
(separate for each bid)

We hereby agree to fully comply with, abide by and accept without variation, deviation or reservation all technical, commercial and other conditions whatsoever of the Bidding Documents and Addendum to the Bidding Documents, if any, for subject work issued by GGSIPU.

We hereby further confirm that any terms and conditions if mentioned in our bid (Un-priced as well as Priced Part) shall not be recognized and shall be treated as null and void.

SIGNATURE OF BIDDER : _____

NAME OF BIDDER : _____

COMPANY SEAL : _____

DECLARATION BY THE BIDDER
(separate for each bid)

We _____ (Name of the Bidder) hereby declare that the lab item for which we have quoted our price in the Financial Bid would not be an item used so far for demo/any other purposes and will be unused (brand new).

SIGNATURE OF BIDDER : _____

NAME OF BIDDER : _____

COMPANY SEAL : _____

Note: This declaration should be signed by the Bidder's representative who is signing the Bid.

ORGANISATION STRUCTURE*(Separate for each bid)*

1. Name & Address of the Bidder :
2. Telephone No./Fax No./ e-mail :
3. Legal status of the Bidder (attach copies of original document defining the legal status)
 - a) An Individual
 - b) A proprietary firm
 - c) A firm in partnership
 - d) A limited company or Corporation
 - e) A Public Sector Undertaking
4. Particulars of registration with various Government Bodies (Attach attested Photo Copy)

Organization /Place of registration	Registration No
-------------------------------------	-----------------
5. A. PAN No. -----
 B. DVAT No. -----
 C. Service T No. -----
6. Names and Titles of Directors & Officers with designation to be concerned with this work. :
7. Name & Designation of individuals authorized to act for the organization :
 (Pl attach power of attorney in favour of authorized representative duly signed by authorized signatory)
8. Has the Bidder ever required to suspend work for a period of more than six months continuously after you commenced the business? If so, give the name of the project and reasons of suspension of work. :
9. Has the Bidder, or any constituent partner in case of partnership firm, ever abandoned the awarded work before its completion? If so, give name of the project and reasons for abandonment. :
10. Has the Bidder, or any constituent partner in case of partnership firm, ever been debarred/ black listed for tendering in any organization at any time? If so, give details. :
11. Has the Bidder, or any constituent partner in case of partnership firm, ever been convicted by a court of law? If so, give details. :
13. Any other information considered necessary but not included above. :

(Stamp, Name & Signature of Bidder)

DETAILS OF ANNUAL TURNOVER

(separate for each bid)

A. FINANCIAL DETAILS

Financial Years	Gross Annual Turnover (In Lakhs)	Profit/Loss (In Lakhs)
2012-13		
2011-2012		
2010-2011		

B. Audited balance sheet and profit & loss account for above three years to be submitted. Must be attested by the Chartered Accountant.

(Stamp, Name & Signature of Bidder)

DETAILS OF SUPPLY OF LAB ITEMS (AS PER SPECIFICATION GIVEN IN SECTION III BELOW) IN LAST 03 (THREE) YEARS
(separate for each bid)

S. No.	POSTAL ADDRESS OF CLIENT WITH CONTACT NUMBERS	STARTING DATE	SCHEDULED COMPLETION DATE	ACTUAL COMPLETION DATE	REASONS FOR DELAY, IF, ANY

(Stamp & Signature of Bidder)

DECLARATION FOR FAIR BUSINESS BY THE BIDDER
(separate for each bid)

(Affidavit on Non-Judicial Stamp Paper of Rs.10/- duly attested by Notary / Magistrate)

This is to certify that We, M/s _____ in submission of this offer confirm that:-

- i) We have not made any misleading or false representation in the forms, statements and attachments in proof of the qualification requirements;
- ii) We do not have records of poor performance such as abandoning the work, not properly completing the contract, inordinate delays in completion, litigation history or financial failures etc.
- iii) Business has not been banned with us by any Central / State Government Department/ Public Sector Undertaking or Enterprise of Central / State Government.
- iv) We have submitted all the supporting documents and furnished the relevant details as per prescribed format.
- v) The information and documents submitted with the tender by us are correct and we are fully responsible for the correctness of the information and documents submitted by us.
- vi) We understood that in case of any statement/information/document furnished by us or to be furnished by us in connection with this offer is found to be incorrect or false, our EMD in full will be forfeited and business dealings will be banned.
- vii) We have not been punished / penalized by way of imprisonment in last three years.
- viii) We have not been blacklisted/debarred by any of the Government/Public Sector Agency in last three years.

SEAL, SIGNATURE & NAME OF THE BIDDER

Signing this document

CHECK LIST FOR SUBMISSION OF BID
(separate for each bid)

Bidder is requested to fill this check list and ensure that all details/documents have been furnished as called for in the Bidding Document along with duly filled in, signed & stamped checklist **with each copy of the "Un-priced bid (Part – I)"**.

Please tick the box and ensure compliance:

- 1 EMD
- 2 Bid Forwarding Letter
- 3 Power of Attorney in Favour of the person who has signed the bid on stamp paper of Appropriate value.
- 4 Partnership Deed in case of partnership firm and Article of Association in case of limited company.
- 5 Compliance to Bid Requirement
- 6 Declaration by the bidder
- 7 All pages of the bid have been page numbered in sequential manner.
- 8 Annexure(s) – A to E
- 9 Valid, PAN, D **lakh** VAT, Service Tax, Excise Registration

SIGNATURE OF BIDDER : _____

NAME OF BIDDER : _____

COMPANY SEAL : _____

**Form of Performance Guarantee
Bank Guarantee Bond**

1. In consideration of the GGSIPU (hereinafter called “The University”) having offered to accept the terms and conditions of the proposed agreement between ----- and ----- (hereinafter called “the said Contractor(s)”) for the work ----- (hereinafter called “the said agreement”) having agreed to production of a irrevocable Bank Guarantee for Rs.----- (Rupees ----- only) as a security/guarantee from the contractor(s) for compliance of his obligations in accordance with the terms and condition in the said agreement.

We, ----- (indicate the name of the Bank) ----- (hereinafter referred as “the Bank”) hereby undertake to pay to the University an amount not exceeding Rs.----- (Rupees ----- only) on demand by the University.

2. We, ----- (indicate the name of the Bank) do hereby undertake to pay the amounts due and payable under this guarantee without any demure, merely on a demand from the University stating that the amount claimed is required to meet the recoveries due or likely to be due from the said contractor(s). Any such demand made on the bank shall be conclusive as regards the amount due and payable by the bank under this Guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding Rs.----- (Rupees ----- only).
3. We, the said bank further undertake to pay the University any money so demanded notwithstanding any dispute or disputes raised by the contractor(s) in any suit or proceeding pending before any court or Tribunal relating thereto, our liability under this present being absolute and unequivocal. The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the Contractor(s) shall have no claim against us for making such payment.
4. We, ----- (indicate the name of the Bank) further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said agreement and that it shall continue to be enforceable till all the dues of the University under or by virtue of the said agreement have been fully paid and its claims satisfied or discharged or till Project-in-Charge on behalf of the University certified that the terms and conditions of the said agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges this guarantee.
5. We, ----- (indicate the name of the Bank) further agree with the University that the University shall have the fullest liberty without our consent and without affecting in any manner our obligation hereunder to vary any of the terms and conditions of the said agreement or to extend time of performance by the said Contractor(s) from time to time or to postpone for any time or from time to time any of the powers exercisable by the University against the said contractor(s) and to forbear or enforce any of the terms and conditions relating to the said agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor(s) or for any forbearance, act of omission on the part of the University or any indulgence by the University to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would, but for this provision, have effect of so relieving us.
6. This guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).
7. We, ----- (indicate the name of the Bank) lastly undertake not to revoke this guarantee except with the previous consent of the University in writing.
8. This guarantee shall be valid upto ----- unless extended on demand by the University. Notwithstanding anything mentioned above, our liability against this guarantee is restricted to Rs.----- (Rupees ----- only) and unless a claim in writing is lodged with us within six months of the date of expiry or the extended date of expiry of this guarantee all our liabilities under this guarantee shall stand discharged.

Dated the ----- day of ----- for ----- (indicate the name of the Bank)

SECTION III

TECHNICAL SPECIFICATIONS

Specifications for item A, i.e. FTIR

S.No.	Items	Description
1	Basic System	High performance high resolution FTIR system should be fully PC/software controlled.
2	Spectral Range	1. 4000-350cm ⁻¹ [upgradeable to FIR & NIR.(Quote Separately)]
		2. Wave length accuracy at least +/- 0.02 cm ⁻¹
		3. Wave length precision at least 0.009 cm ⁻¹ at 2000cm ⁻¹ .
3	Resolution	0.1Cm ⁻¹ or better
4	Beam Splitter	KBr beam splitter
5	Signal to noise ratio	40,000:1 peak to peak 4 cm ⁻¹ resolution, 1 minute accumulation or more.
6	Interferometer	Improved Michelson interferometer with advanced dynamic alignment system for fast scanning, self compensating.
7	Spectrometer enclosure	Sealed and desiccated
8	Detector	High sensitive temperature stabilized DLATGS/DTGS detector.
9	Optics	Gold coated/Silver coated (quote separately)
10	Atmospheric Compensation	System should have minimized effect of atmospheric water and Carbon dioxide etc on the sample spectra without the need for reference or calibration spectra.
11	Accessories	1) Demountable cell with NaCl/KBr windows for liquid samples.
		2) Sealed/fixed thickness cell of 0.1 mm with NaCl/KBr windows.
		3) Diffuse reflectance accessory for direct powder sample analysis along with powder sample holder (quote separately).
		4) Multi reflection ATR accessory for aqueous based sample, polymer sample etc.(Quote separately)
		5)Hydraulic press
		6)Agate mortar and pestle
		7)KBr Die set(15 Tm)
		8)Pellet holder
		9)Polystyrene film with traceable certificate
12	Software	1) Software should have built in spectral search function with different algorithms and should support commercial FTIR database. Software should have to be supplied with inbuilt organic/inorganic compounds spectra .Quote separately for 4000 inorganic and 4000 organic samples spectra along with the system.
		2) Software should have built in validation program.
13	Automatic component recognition	System should have features like automatic accessory recognition once accessory like DRS/ATR is mounted in sample compartment and controlled via PC.
14	local accessories	Branded PC with printer and UPS(with 30 minutes backup) should be provided.(Quoted separately in Indian rupees)

SPECIFICATIONS for item B, i.e. (400MHZ) NMR SPECTROMETER

S.No.	Items	Description
1	Magnet	Latest technology based stable and actively shielded superconducting magnet (with a minimum 9.3 Tesla) with an operational frequency of 400MHz for ¹ H.
		The magnet must have the shortest 5G stray field along both axial and radial directions.
		The radial 5G stray field from centre of the magnet has to be approx 1meter.
		At least 300-days Helium refill interval or better.
		Built-in liquid Helium level sensor with alarm
		Field Drift less than 4Hz/hr.
		Anti vibration platform to damp the frequencies above 5.0 Hz.
		Pneumatic based platform
		Anti vibration platform to damp the frequencies above 5.0 Hz.
		Pneumatic based platform.
		Highest possible order of RT shims, minimum 20, line shapes resolution to be specified.
		Digital monitors and Level meters for Cryogenic liquids.
		Long hold dewar for liquid nitrogen: minimum 14 days.
		The cryo-shim specification was fixed at minimum three
		Standard test samples for multinuclear studies (in shield tubes)
		Bore diameter approximately 5 cm.
2	Console	No. of channels: 2 (upgradeable to more no. of channels.)
		High band (H1 / F19) amplifier; 50 watts.
		Low (or Broad) band(X) amplifier; 135 watts.
		Effective Spectral width of 5.0 MHz with wideband ADC (mention the value of ADC in MHz).
		Device to create shaped pulses for use in experiments such as NOESY 1D, ROESY 1D etc.
		Direct and over sampling with on the fly digital filters for flat baseline.
		No. of channels: 2(upgradeable to more no. of channels.)
		Automated Gradient Shimming for 1D and 2D.
		Automation of lock, Spin, Insert / Eject, and Shim.
		Digital 2H lock Channel. Lock system should have high precision phase and field correction for short term disturbances.
		Acquisition system with a control of up to a minimum of two RF channels, with possibility of expansion to third channel.
		Proton Preamplifier
		Multinuclear preamplifier
		2H preamplifier for lock and 2H experiments
		Built-in tune/match display
		Add-on filters for noise reduction
		Receiver (digital) with excellent detection capability with out any artifacts.(1)Band width:5MHZ(2) ADC Resolution: Minimum of 16 bits
		Gradient system for Z-shielded gradient with a gradient strength of 50 G/cm or more for gradient NMR experiments in solution.
PFG of any desired shape and gradient shimming capabilities.		

		Transmitter: A broad band linear amplifier for range 400 MHz with decoupling channel of 50 watts and observe channel of 150 watts.
3	Console Accessories	Variable temperature controller unit for both high (+ 150 Deg C) and low (-100 Deg C) range with accessories. Controller for long term temp stability for both high and low ranges with temperature resolution $\pm 0.1^{\circ}\text{C}$
4	Probe	Multi nuclear inverse probe with auto tuning and matching facility for observation of nuclei in the range ^{13}C to ^{15}N plus ^{19}F etc with ^1H decoupling. 5 mm Inverse (^1H / Broad Band) probe head with Z-shielded gradient ^1H / Broad Band ^1H detection Sample tube diameter: 5 mm Variable temperature operation: -100°C to $+150^{\circ}\text{C}$ Built in Z-Gradient coil for PFG ^2H lock
5	User Interface User Interface	A) A HIGH END WORK STATION and NMR SOFTWARE High performance state-of-the-art workstation (Window NT/2000/XP/latest Linux operating system) for controlling NMR data acquisition and processing that can be easily serviced in India in case of any fault 22"/24" LCD monitor, one terabyte Hard Disk, 3 GHz Processor, 4GB RAM, USB Ports (minimum of four ports) Acquisition, processing, plotting, structure verification and analysis 1D and 2D (HSQC, TOCSY, COSY, HETCOR, NOESY, HMBC, DOSY, DQF COSY, J resolve experiments), experiment simulation, spectra simulation, multiple analysis, teaching software, automation, projection, reconstruction spectroscopy. Software for multi-dimensional NMR data collection and processing. Licensed software for statistical chemo metric multiple component analysis (PCA) of the NMR data, multivariate analysis and spectroscopic analysis for body fluids, tissues High performance color laser printer. Suitable UPS with at least 1 hr backup. Scanner (resolution of 2400 dpi)
6	Auto sampler	Auto Sampler capable of handling minimum of 60 samples with all required hardware and software for control and automatic data transfer to server. Sample changer for minimum 60 samples. Sample spinner for all positions.
7	Accessories	Sample spinner/holder for 5 mm NMR tubes: 10 for routine experimental use and 2 for low temperature experiments 1000 standard sample tubes with caps(multiple of 100) 6 cryocans (50-55 lit each) with Helium and Nitrogen transfer lines. 02 nitrogen cylinders for filling. One trolley for transporting 55 liters cryocans. An ISO-9001 certified oil free/scroll air-compressor complete with dryer with rating and specification capable of catering all the needs, with sufficiently big buffer tank along with the system.
8	Maintenance kit	A standard kit of electronics, mechanical and electrical items and non magnetic tools required for the basic spectrometer .Maintenance of these items should be included in basic spectrometer.
9	Local Accessories	Branded PC with printer and UPS (with 30 minutes backup) should be provided.(Quoted separately in Indian rupees)

SPECIFICATIONS for item C, i.e. LOW VACUUM AND HIGH VACUUM SACNNING ELECTRON MICROSCOPE

S.No.	Item	Description
1	Resolution	3.0 nm or better in low vacuum & 3.0 nm or better in high vacuum mode at 30 KV.
2	Accelerating Voltage	Up to 30 KV
3	Probe Current	10 ⁻¹² Amp to 10 ⁻⁶ Amp or better .No shifting and defocusing while changing probe current
4	Magnification	Minimum 50 X to 3,00,000X or better continuous in both high and low vacuum.
5	Electron source	Tungsten hairpin filament
6	Vaccum system	1. Should give ultra clean dry fast vacuum using air cooled turbo molecular pump.
		2. Safety measures for electron column against any vacuum failure.
		3. Variable pressure range for chamber must be at least 270 pa. in low vacuum mode.
7	Stage specification	1. 5 axis motorized stage with movement facility for X=100 or higher mm, Y=100mm or higher, Z=50 mm or higher. Tilt=0to 90°, Rotation= 360°(continuous)
		2. Facility of stage coordinate and recall must be provided.
		3. Motors directly mounted on stage are preferable to avoid backlash.
8	Detectors	1. Secondary electron detector for use in high vacuum mode.
		2. Solid state back scattered electron detector in all mode for use in high and low vacuum mode.
		3. Secondary electron detector in low vacuum mode.
		4. IRCCD Camera.
9	Image display and Processing	1. 19 inch LCD.
		2. Image processing resolution of 2K X 2K pixel or more.
		3. Image from different detectors could be viewed simultaneously in a split up view area of the monitor.
		4. Noise reduction by average or integration method
10	User interface	1. Manual joystick control for stage X axis, y axis, z axis, R&T axis.
11	Electron Optics	The system should be capable of high resolution imaging of known conducting samples without coating.
12	Spares and Accessories	1. Commitment for supply of spares at least for a period 5 years after completion of guarantee period to be ensured.
		2. fast moving / critical spare including filament(10 packets per year)
		3. Tool kit containing essential tools required for repairs.
		4. System compatible latest software.
13		The quoted model of SEM should be latest and available on vender's website.
14	Local Accessories	Branded PC with printer and UPS(with 30 minutes backup) should be provided.(Quoted separately in Indian rupees)

SPECIFICATIONS for item D. i.e. Thermo Gravimetric Analyzer (TGA)

S. No.	Specifications
1	High sensitive balance and quick response furnace
2	The balance should be thermally isolated from furnace
3	Pan Al/quartz/ceramic (multiple of 100).The sample pans's position should be reproducible.
4	Temperature range ambient to 1000°C
5	Heating rate 0.1°C to 100°C
6	Balance sensitivity less than 0.05µg
7	Built in automatic gas switching of gases
8	Balance digital resolution 0.1µg
9	Atmosphere: Static or dynamic including Nitrogen ,Argon, Helium, Carbon dioxide, air, Oxygen
10	Cooling rate: 1100 to 35°C in less than 10 min
11	Vaccum: 1×10^{-3} torr
12	Software/Hardware: any other software hardware required for safe and auto operation of equipment
	1) Window based software with multitasking capability
	2) Hardware required for safe and auto operation equipment
	3) Software to be provided for thermal analysis e.g. reaction kinetics.
	Data files can be imported and exported in users friendly format like Excel/ASCII
13	Documents required: a operation manual, Circuit diagram warranty certificate.
14	Power supply: The entire system should be compatible and operatable at Indian condition (220-240V/50Hz power supply ,single phase)
15	Reliability and Performance Requirement
	The life of the major components of the system should be at least for 10 years. Product/service support along with the uninterrupted and timely supply of spare parts for at least 7 years for the quoted model must be specifically ensured by the bidders.
16	Branded PC with printer and UPS(with 30 minutes backup) should be provided.(Quoted separately in Indian rupees)

SECTION IV

FINANCIAL BID

(To be sealed separately)

FINANCIAL BID (for item A)

Name of work:- Supply & installation of Lab Equipments (TRC Laboratory) for University School of Basic & Applied Sciences (**item at 1.A of NIT**)

S. No.	Particulars	Qty.	Unit	Unit price in figures	Unit price in words
1.	High performance high resolution FTIR system (fully controlled by PC/software) as per specifications and complete accessories	1	each		

OFFICE SEAL, SIGNATURE & NAME OF THE BIDDER

Note: Bidders who are not bidding for the above item please strike out the table and sign with their office seal.

FINANCIAL BID (for item B)

Name of work:- Supply & installation of Lab Equipments (TRC Laboratory) for University School of Basic & Applied Sciences (item at 1.B of NIT)

S. No.	Particulars	Qty.	Unit	Unit price in figures	Unit price in words
1.	NMR Spectrometer with Latest technology based stable and actively shielded superconducting magnet (with a minimum of 9.3 Tesla) with an operational frequency of 400 MHz for ¹ H as per specifications.	1	each		

The bidder should quote the following consumable items:-

S.No.	Particulars	Qty.	Per litter rates for total gases required for one year
1.	Liquid Helium		
2.	Liquid Nitrogen		

However, the rates of liquid gases shall not be taken into account for evaluation a lowest bidder and the rates will be negotiable keeping in view the market rates.

OFFICE SEAL, SIGNATURE & NAME OF THE BIDDER

Note: Tender will be evaluated on the basis of S.No.1 only. S. No. 2 will only be considered if need arises.

Note: Bidders who are not bidding for the above item please strike out the table and sign with their office seal.

FINANCIAL BID (for item C)

Name of work:- Supply & installation of Lab Equipments (TRC Laboratory) for University School of Basic& Applied Sciences(**item at 1.C of NIT**)

S. No.	Particulars	Qty.	Unit	Unit price in figures	Unit price in words
1.	Low vacuum/High Vacuum scanning electron Microscope with resolution 3.0 nm or better in low & high vacuum mode at 30 KV as per specifications.	1	each		

OFFICE SEAL, SIGNATURE & NAME OF THE BIDDER

Note: Bidders who are not bidding for the above item please strike out the table and sign with their office seal.

FINANCIAL BID (for item D)

Name of work:- Supply & installation of Lab Equipments (TRC Laboratory) for University School of Basic & Applied Sciences(item at 1.D of NIT)

S. No.	Particulars	Qty.	Unit	Unit price in figures	Unit price in words
1.	Thermo Gravimetric Analyzer with temperature range ambient to 1000°C as per specifications.	1	each		

OFFICE SEAL, SIGNATURE & NAME OF THE BIDDER

Note: Bidders who are not bidding for the above item please strike out the table and sign with their office seal.