

CENTRAL UNIVERSITY OF SOUTH BIHAR

SH-7, Gaya- Panchanpur Road, Village- Karhara, Post- Fatehpur, P.S- Tekari, District- Gaya (Bihar) PIN- 824 236

Notice Inviting Tender (NIT)

The Central University of South Bihar invites sealed tenders for the Supply & Installation of **"Laboratory Equipments" for Deptt. of Pharmacy** at CUSB Panchanpur, Gaya from original manufactures/ authorized dealers/ distributors. The last date and time of submission of tender document is **08/01/2021 by 4:00 PM.** The detailed tender document is available on the University website **www.cusb.ac.in**. The cost of tender form is Rs. 500/- and can be purchased by payment in the form of Demand Draft, from Central University of South Bihar. The tender forms can also be downloaded from University website and be accompanied by DD of Rs. 500/- in favour of 'Central University of South Bihar', payable at Gaya. Duly filled in tender is to be sent by Speed Post/ Registered Post/ By Hand (to be dropped in Tender Box) on following Address: -

To, The Registrar (Tender Document) Central University of South Bihar SH-7, Gaya- Panchanpur Road, Village- Karhara, Post- Fatehpur P.S- Tekari, District- Gaya (Bihar), PIN- 824 236 Email- registrar@cub.ac.in Website- www.cusb.ac.in Contact – 0631-2229519 CPP Portal web site: www.eprocure.gov.in/epublish/app/epublish/app

Index for Tender Form

SI. No.	Items	:	Details
1.	Tender Notice No. and date	:	CUSB/PSD/PHARMA/TENDER/12/2020-21, Dated: 17/12/2020.
2.	Name of work	:	Tender Bid Document for the Supply & Installation of "Laboratory Equipments" for Deptt. of Pharmacy at Central University of South Bihar.
3.	Tender Fee	:	Rs. 500/- in form of Demand Draft
4.	Earnest Money Deposit	:	Earnest money as mentioned in NIT in shape of Demand Draft drawn in favour of Central University of South Bihar, payable at Gaya from any scheduled Bank of amount as per Annexure ' A '.
5.	Start of submission of Bids	:	17/12/2020
6.	Last date and time for Receipt of Bids	:	08/01/2021 by 4:00 PM
7.	Date and Time of opening of Technical Bids	:	11/01/2021 by 14:00 PM.
8.	Place of opening of Bids	:	CUSB Gaya.



SH-7, Gaya- Panchanpur Road, Village- Karhara, Post- Fatehpur, P.S- Tekari, District- Gaya (Bihar) PIN- 824 236

Name of the work:	Tender Bid Document fo Deptt. of Pharmacy at Ce		tion of " Laboratory Equipments" f n Bihar, Gaya (Bihar).	or
Sold to Sri/Smt./M/s.				
On payment of Rs. 500/-	(Rupees Five Hundred only)		
Vide D.D. No	Bank & Branch	dt		
			Registr	ar
I undertake to al of contract.	bide by the terms and condi	tions as stipulated in the	e detail tender call notice and condition	ns
			Signature of the contract	tor

For Office Use only1. Total Nos. Corrections2. Total Nos. of Overwriting3. Total Nos. of Pages4. Earnest Money Deposit in shape of5. Copy of S.T.C.C6. Copy of I.T.C.C./PAN7. Any other enclosure

Registrar Central University of South Bihar



Supply & Installation of **"Laboratory Equipments" for Deptt. of Pharmacy** at Central University of South Bihar, Gaya.

Technical Bid

Note: This is to be kept in Envelope "B" sealed and it should be written on envelope that Technical Bid for Tender for the Supply & Installation of "Laboratory Equipments" for Deptt. of Pharmacy at Central University of South Bihar Gaya.



NOTICE INVITING BIDS

The Central University of South Bihar (CUSB), invites sealed tender in two bid system for the Supply & Installation of **"Laboratory Equipments" for Deptt. of Pharmacy** at Central University of South Bihar, Gaya (Bihar) from the original manufactures/authorized dealers/ distributors. Details are as follows:

SI. No	Description of Goods	Earnest Money to be Deposited	Last date & time of submission of Tender document	Time & date of opening of Tender	Time allowed for completion of delivery and installation
1.	Supply & Installation of "Laboratory Equipments" for Deptt. of Pharmacy for Physics Lab at Central University of South Bihar, Gaya.	As per Annexure 'A'	08/01/2021 by 4:00 PM	Shall be intimated on University website.	6 weeks after issue of Purchase Order/Work Order

2. The tender must be accompanied by a Demand Draft for the amount mentioned in **Annexure "A"** in Indian Rupees only (alongwith list of quoted items with EMD details), on a schedule bank drawn in favour of Central University of South Bihar, payable at Gaya as Earnest Money for the above tender.

3. Eligibility Criteria (details to be submitted in Annexure "B")

3.a. Financial

The Firm should have average annual financial turnover equal to 400% of quoted value during the preceding last 03 consecutive financial years starting from F.Y. 2018-19 to know the financial capability of the firm and supply credentials.

3.b. Physical

Three similar supplies in Central Government/ State Government/ PSU/ Universities/ Reputed Higher Educational Institutions costing not less than 40% of the cost or two similar supplies costing not less than 60% of the cost or one similar supplies costing not less than 80% of the cost in the last 3 years ending on the last day of the month previous to the one in which the tenders are invited.

- 4. Sealed tender documents duly signed on all pages are required to be delivered at Central University of South Bihar, by Registered Post/ Speed Post/By Hand (to be submitted in Tender Box) to reach on or before 08/01/2021 by 4:00 PM. The Technical Bids will be opened at CUSB, Gaya in presence of the Tenderers or their authorized representatives who wish to attend.
- 5. The tenderer shall quote for the materials to be supplied as per detailed specifications as given in the tender document, at Gaya.
- 6. For any clarification and doubt related with the Tender, Tenderers should email their queries to registrar@cub.ac.in.
- 7 The tender shall be submitted in three separately sealed envelopes marked as "A", "B", & "C". The language used shall be English. In case any information is given in foreign language, then translated (in English) copies of those pages must be enclosed, failing which the tender will be disqualified.

8. ENVELOPE 'A' (Earnest Money & Tender Cost)

The tender shall be accompanied by the cost of the tender document for Rs. 500/- (Indian Rupees five hundred only) in the form of Demand Draft failing which the tender will not be accepted. Tender must also be accompanied by earnest money as mentioned in **Annexure 'A'** in the form of Demand Draft in favour of Central University of South Bihar, payable at Gaya executed by any Scheduled Bank. The Demand Draft towards Earnest Money & cost of tender document will be placed in sealed **Envelope 'A'**.

8.a. EMD is not required to be submitted by bidders who are exempted in terms of MSME, Govt. of India guidelines. However, they are required to furnish requisite certificate in this regard issued by the Competent Authority. If they are newly Start-up, exemption will be provided as per Gol notifications. This should be strictly certified by the vendors of requisite authorized valid documents.

9. ENVELOPE 'B' (Technical Bid Document)

9.i. Those Tenderers, who are not the manufacturer but are authorized by the original manufacturer to supply the goods, should establish their credentials by giving valid documentary evidences of similar supplies to have been executed in India.

9.ii. Checklist for Envelope 'B'

- **9.ii.a.** Copy of registration of GST.
- 9.ii.b. Copy of Income Tax Permanent Account Number.
- 9.ii.c. Copy of Trade License, Factory License/Excise Registration.
- **9.ii.d.** Copy of Memorandum and Article of Association, Certificate of Incorporation, Partnership Deed, Registration Certificate issued by the Registrar of Firms etc.
- 9.ii.e. Copy of Authorization for Participation in subject bid (not required in case of Proprietorship firm).
- 9.ii.f. Copy of Dealership/ Distributorship Authorization Certificate.
- 9.ii.g. Copy of Small Scale Unit/ MSME/ NSIC Registration under relevant items (if registered).
- **9.ii.h.** All pages of tender document including various sections and Annexure 'A', except priced bid duly signed / sealed by the Tenderer.
- 9.ii.i. Any product manual, credentials etc.
- 9.ii.j. Audited copy of Annual Accounts for last 3 years.
- **9.ii.k.** Copy of order of similar equipments as para 3.b.

10. Envelope 'C' (Financial Bid Document)

- 10.1. The Envelope 'C' shall contain the tender documents and information related to the schedule of quantities quoting the rates per Unit/Price etc. of the item pertaining to the Financial Bid on the Financial Bid document, issued by CUSB, along with the tender document. The Financial Bid should be submitted separately in separate envelope clearly mentioning the Financial Bid is submitted on top of the Envelope.
- **10.2.** All columns shall be duly filled in with specific information on the cost involved.
- **10.3.** The rates for the items shall be quoted in Indian Rupees only.
- ***NOTE** The Tenderer should clearly mention in all the three envelopes (i.e. A, B and C) clear description of the items for which the offer is being quoted. If any discrepancy is observed the offer would be treated as non-responsive and would be rejected out rightly.

- 11. Envelope 'A' (Earnest Money & Tender Cost),
 - Envelope 'B' (Technical Bid Document), and
 - Envelope 'C' (Financial Bid Document), shall be in separate sealed envelopes, each marked as "Envelope 'A', Envelope 'B' and 'Envelope 'C', respectively.
 - All the three envelopes shall be submitted together in another big envelope sealed and superscribing thereon **Tender for Supply & Installation of "Laboratory Equipments" for Deptt. of Pharmacy** alongwith **Tender Number**.
 - The envelope should be addressed to, The Registrar, (Tender Document) Central University of South, SH-7, Gaya Panchanpur Road, Village Karhara, Post- Fatehpur, P.S. Tekari, District Gaya (Bihar) PIN 824236.
 - The envelope marked **Envelope** 'B' of only those Tenderers shall be opened, whose earnest money & tender cost are placed in the **Envelope** 'A' and found to be in order. In case of waiver of the charges, relevant documents shall be submitted in **Envelope** 'A'.
- 12. The Tender Evaluation Committee will evaluate the Technical Bids and is fully authorized to reject any incomplete tender or on its satisfaction that the requirements are not met for the complete need of the CUSB with regard to the Committee. The decision of the Tender Evaluation Committee shall be final. Only those Technical Bids cleared by the Tender Evaluation Committee shall be eligible for consideration of Price Bid. Those successful Tenderers for whom the Envelope 'C' (Price Bid) is to be opened shall be duly intimated.

13. Clarification on Tender Documents

- **13.1.** During evaluation of tenders, the University authorities/ committee may at its discretion ask the Tenderer for any clarification(s) if so deemed fit. The request for clarification and the response shall be in writing. However, the Tenderer is not permitted to alter the price(s) furnished in the Price Bid (Envelope 'C').
- **13.2.** Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price (i.e. obtained by multiplying the unit price and quantity), the unit price shall prevail and the total price shall be corrected. If the supplier does not accept the correction of errors, its tender will be rejected. If there is a discrepancy between words and figures, the amount in words will prevail.
- **14.** The amount of Earnest Money Deposit (EMD), in case of successful Tenderer, shall be refunded on successful completion of delivery/installation. However, EMD of unsuccessful Tenderers will be refunded after the award of the contract to the successful Tenderer.
- **15.** The CUSB, does not bind itself to accept the lowest or any other tender, and reserves the authority to reject any or all the tenders received without assigning any reason. Tenders not in compliance with any of the prescribed conditions or incomplete in any respect or in presence of any correction not duly dated, initialed by the Tenderer will be liable to be rejected. However, the final decision for accepting or rejecting any or all tenders will be in the sole discretion of Vice Chancellor, CUSB.
- **16.** Tender shall remain open for acceptance for a period of **90 days** from the date of opening of the tenders. If any Tenderer withdraws his tender before the said period or makes any modifications in the terms and conditions of the tender which are not acceptable to CUSB, then CUSB, shall without any prejudice to any other right or remedy, be at liberty to forfeit full earnest money, absolutely. The decision of Vice Chancellor, CUSB in this behalf shall be final and binding on the Tenderer.
- **17.** The notice Inviting tender shall form a part of the contract document.
- **18.** No additional conditions from the Tenderer shall be acceptable. The tenders having any additional conditions will be summarily rejected without assigning any reason.

Date: Place:



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NIT No. : CUSB/PSD/PHARMA/TENDER/12/2020-21 Dated: 17/12/2020 Sub.: Supply & Installation of "Laboratory Equipments" for Pharmacy Name of the Organization 1. 2. Head Office / Registered Office Telephone No/mobile No. Fax No. Email Web site (if any) Date of Establishment Branch Office in Gaya, if any (Provide Complete Address) Telephone No. Fax No./Email Name of Chief Executive/ Proprietor / 3. Partners with Designation Telephone No./Mobile No. Fax No./ Email 4. Name of Contact Person Telephone No./Mobile No Fax No./Email Certified Documents to be enclosed Type of Organization 5. Trade License a. Proprietary Partnership Deed, Trade License b. Partnership C. **Private Limited Company** Memorandum of Article d. **Public Limited Company** Certificate of Registration Public Sector Trade License e. Nature of Business (tick the relevant) 6. Manufacturing Service Dealership

TECHNICAL BID PROFORMA

Stockiest			Indian Agent		ndian Branch Office	
Others Pl. Specify						
7.	Class / Type of	Product / Ma	terials Manufacture	d / Sold / Servi	ced/ Fabricated	
Scientific Equipment		Ele	Electronics		ab Consumables Chemicals	
Electrical Items			mputer ipherals	С	Computers	
Laboratory Equipments			ice Automation duct	E	lectrical Works	
Sport Materials		Wa	Water Coolers		Air-conditioners	
AV E	quipments	Воа	ards O		ther, please specify	
	ted Annual Turne come Tax Return		ast 3 years (Rs. In L	akhs) (enclose	Chartered Accountant's certification	n
Year			Rupees (in Lakhs)		Annexure (Number)	
2018-19						
2017-18						
2016-17						

Commercial Information (enclose Attested	Copy where	ever Applicable)		
Information	Details		Annexure (Number)	
GST Registration Number				
Excise Registration Number Trade / Factory License Number				
PAN No.				
Details of Registration Certificate with DGS&D/NCCF				
SSI/NSIC/MSME Certificate				
Current dealership agreement with Principal Letter No. / Date / Valid upto				
Relevant IISI/ SO Certificate, if any				
Bank Details : Account No.				
Name of Bank & Branch				
IFSC Code				
Details of Tender Fee	Amount:	DD No. & Date	Name of the issuing Bank & Branch	
	InformationGST Registration NumberExcise Registration NumberTrade / Factory License NumberPAN No.Details of Registration Certificate with DGS&D/NCCFSSI/NSIC/MSME CertificateCurrent dealership agreement with Principal Letter No. / Date / Valid uptoRelevant IISI/ SO Certificate, if anyBank Details : Account No.Name of Bank & BranchIFSC Code	InformationGST Registration NumberExcise Registration NumberTrade / Factory License NumberPAN No.Details of Registration Certificate with DGS&D/NCCFSSI/NSIC/MSME CertificateCurrent dealership agreement with Principal Letter No. / Date / Valid uptoRelevant IISI/ SO Certificate, if anyBank Details : Account No.Name of Bank & BranchIFSC Code	GST Registration Number Excise Registration Number Trade / Factory License Number PAN No. Details of Registration Certificate with DGS&D/NCCF SSI/NSIC/MSME Certificate Current dealership agreement with Principal Letter No. / Date / Valid upto Relevant IISI/ SO Certificate, if any Bank Details : Account No. Name of Bank & Branch IFSC Code	

I.	Details of EMD	Amount:	DD No	. & Date		ame of the issuing ank & Branch
m.	Details of Previous Supply in Govt. Organisations/ Govt. Educational Institutions (Enclose Supply order & Performance report. If required enclose separate sheets) Enclosures -	Name of the organiza tion	Item S	Item Supplied / Qty.		Total Value (Rs in lakhs)
9.	MSME Entrepreneur			Com	ment	
9.1.	Is the bidder MSME Entrepreneur			Y/	′N	
9.2.	If yes, the category (GEN/OBC/SC/ST/Women)	GEN	OBC	SC	ST	WOMEN
anything	ereby give an undertaking that the information p g found to be false at any stage my tender will b ure of authorized representative:	e liable to b				
D (
Date:						
Date: 10.		Note				
			(s) in case	e space pr	ovided is	s not adequate.



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Check List

Document to be submitted with Tender

6. No.	Particular	Yes / No	Annexure No
	Envelope - A		
1.	Tender Fee (DD)		
2.	EMD Cost (DD)		
3.	Exemption of EMD (Requisite Certificates)		
	Envelope - B		
4.	ITR of last 3 Years		
5.	Audit Copy of Last Three Years		
6.	Experience of same work (Work / Supply Order etc.)		
7.	GST Registration		
8.	PAN Card		
9.	Duly Filled Tender Document (All the pages should be signed & stamped)		
10.	Dealership / Distributor / Authorization Certificate		
11.	Trade/Factory License		
12.	ISI/ISO Certificate		
13.	Non – Blacklisting Affidavit / Undertaking		
14.	Any product manuals/ credentials etc.		
	Envelope - C		
15.	Price Bid / Financial Bid		

N.B.

1. The Bidder ensure that all the documents/confirmations required as per the tender document are enclosed in the tender and no column is left blank. It is the responsibility of bidder to ensure furnish all required documents, as per the tender document.



GENERAL CONDITIONS OF PURCHASE

1. Definitions

- **1.1.** In this Purchase, the following terms shall be interpreted as indicated.
- (a) "The Order" means the agreement entered into between the Purchaser and the Supplier including all the attachments and appendices and all documents incorporated as per notification of award.
- (b) "The Purchase Price" means the price payable to the Supplier under the Contract for the full and proper performance of its contractual obligations;
- (c) "The Goods" means all the items, which the Supplier is required to supply to the Purchaser under the Contract;
- (d) "Services" means services ancillary to the supply of the Goods, such as transportation and insurance, and any other incidental services training and other obligations of the Supplier covered under the Contract;
- (e) "GCP" means the General Conditions of Purchase contained in this section.
- (f) "The Purchaser" means the organization purchasing the Goods i.e CENTRAL UNIVERSITY OF SOUTH BIHAR, GAYA.
- (g) "The Purchaser's country" is India.
- (h) "The Supplier" means the individual or firm supplying the Goods and Services.
- (i) "Day" means calendar day.

2. Application

2.1. These General Conditions shall apply to the extent that they are not superseded by provisions in other parts of the tender.

3. Standards

3.1. The Goods supplied under this Purchase shall conform to the standards mentioned in the Technical Specifications, and, when no applicable standard is mentioned, to the authoritative standard appropriate to the Goods' country of origin and such standards shall be the latest issued by the concerned Institution.

4. Use of Purchase Documents and Information

- **4.1.** The Supplier shall not, without the Purchaser's prior written consent, disclose the Purchase, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the Purchaser in connection therewith, to any person other than a person employed by the Supplier in performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.
- **4.2.** The Supplier shall not, without the Purchaser's prior written consent, make use of any document or information except for purposes of performing the Contract.
- **4.3.** Any document, other than the Contract itself, shall remain the property of the Purchaser and shall be returned (in all copies) to the Purchaser on completion of the Supplier's performance under the Contract if so required by the Purchaser.

5. Patent Rights

5.1. The Supplier shall indemnify the Purchaser against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of the Goods or any part thereof in India.

6. Submission of the bids

6.1. All bids completed in all respect must reach the purchaser within the last date and time of receipt

of bid. No extension shall be allowed for any reason what so ever. Late tenders/delayed bids and tenders received without earnest money etc. shall be rejected.

7. Inspections and Tests

- **7.1.** The Purchaser or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract specifications at no extra cost to the Purchaser.
- **7.2.** The inspections and tests may be conducted on the premises of the Supplier or its subcontractor(s), at point of delivery and/or at the Goods final destination. If conducted on the premises of the Supplier or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data shall be furnished to the inspectors at no charge to the Purchaser.
- **7.3.** Should any inspected or tested Goods fail to conform to the specifications, the Purchaser may reject the goods and the Supplier shall either replace the rejected Goods or make alterations necessary to meet specification requirements free of cost to the Purchaser.
- **7.4.** The Purchaser's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival at Project Site shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by the Purchaser or its representative prior to the Goods shipment.
- **7.5.** Nothing in GCP Clause 7 shall in any way release the Supplier from any warranty or other obligations under this Contract.

8. Consequences of rejection

- **8.1.** If in the event the stores are rejected by the purchaser at the destination and the supplier fails to make satisfactory supplies within the stipulated period of delivery, the purchaser will be at liberty to:
- (a). Allow the supplier to resubmit the stores in replacement of those rejected, within a specified time without any extra cost to the purchaser or
- (b). Reject the material, which shall be final and binding on the contractor.
- (c). Procure the rejected materials of comparable quality from the open market/Govt. stores and the supplier shall be liable to pay the difference in price over get the amount adjusted from the outstanding bills of the supplier, if any or EMD.

9. Packing

- **9.1.** The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.
- **9.2.** The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be provided for in the Contract including additional requirements, in any subsequent instructions ordered by the Purchaser.

10. Delivery and Documents

- **10.1.** The Supplier shall make delivery of the Goods within specified period from the placement of purchase order in pursuance of the notification of award. The purchase order would be placed after assessing the requirements on quarterly basis. However, the supplier shall also arrange to execute all orders on priority basis which would be placed to meet any emergent requirements
- **10.2.** In case the purchaser decides to conclude parallel rate contracts, then the requirements would be split on different firms on equitable basis as per the discretion of the purchaser.
- **10.3.** The delivery of Stores shall be affected at the premises of the University free of all delivery charges and within the stipulated time and as may be elucidated in the confirmed order, accompanied by a delivery challan. No extension of time for delivery of Stores shall normally be accorded.

10.4 Time and date of delivery – the essence of the contract: The time for and the date of delivery of the stores stipulated shall be deemed to be of the essence of the contract and delivery must be completed not later than the date(s) specified.

11. Insurance

11.1. The Goods supplied under the Contract shall be fully insured in Indian Rupees against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery. The insurance shall be obtained by the suppliers in an amount equal to 110% of the value of the goods from "warehouse to warehouse" (final destinations) on "all risks" basis including war risk and strike.

12. Transportation

12.1. Where the Supplier is required under the Contract to transport the Goods within India defined as Project site, transport to such place of destination in India including insurance, as shall be specified in the Contract, shall be arranged by the Supplier, and the related cost shall be included in the contract Price.

13. Warranty

- **13.1.** The Supplier warrants that the Goods supplied under this Contract are **new**, **unused**, of the **most recent** or **current models** and that they incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The Supplier further warrants that all Goods supplied under this Contract shall have no defect arising from design, materials or workmanship or from any act or omission of the Supplier that may develop under normal use of the supplied Goods in the conditions prevailing in India.
- **13.2.** This **warranty** shall remain valid for **minimum 03 (three) years** after the Goods or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the Contract, unless specified and Warranty / Warranty card in this regard shall be submitted by the supplier in writing.
- **13.3.** The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty.
- **13.4.** Upon receipt of such notice, the Supplier shall with all reasonable speed, repair or replace the defective Goods or parts thereof, without any extra cost to the Purchaser.
- **13.5.** If the Supplier, having been notified, fails to remedy the defect(s) within a reasonable period, the Purchaser may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.

14. Payment

- **14.1.** Indigenous Purchase: 100% payment shall be made only after supply and installation of the materials and satisfactory performance.
 - Foreign Purchase: 90% payment at sight through LC will be made and 10% after successful testing/ commissioning. Payment shall be made only on submission of insurance equivalent to 110% of invoice value. 10% PBG (in form of DD/Bank Guarantee/ Fixed Deposit) of invoice value with validity beyond 60 days of warranty period shall also be retained before final payment.
- **14.2.** The Supplier's request(s) for payment shall be made to the Purchaser in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and the Services performed, and by documents, submitted pursuant to GCC Clause 10, and upon fulfilment of other obligations stipulated in the contract.
- **14.3.** In case foreign purchase, payment through Letter of Credit (LC), 100% payment only after supply and successful installation of equipment as delivered F.O.R. Central University of South Bihar, Gaya.
- 15. Prices
- **15.1.** Prices charged by the Supplier for Goods delivered and Services performed under this Purchase shall not vary from the prices quoted by the Supplier in his bid.

16. Change Orders

- **16.1.** The Purchaser may at any time, by written order given to the Supplier, make changes within the general scope of the Contract in any one or more of the following:
- (a) Drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;
- (b) The method of shipping or packing;
- (c) The place of delivery; and/or
- (d) The services to be provided by the Supplier.
- **16.2.** If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or delivery schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this clause must be asserted within thirty (30) days from the date of the Supplier's receipt of the Purchaser's change order.

17. Contract Amendments

17.1. Subject to GCP Clause 16, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

18. Assignment

18.1. The Supplier shall not assign, in whole or in part, its obligations to perform under the Contract, except with the Purchaser's prior written consent

19. Subcontracts

19.1. The Supplier shall notify the Purchaser in writing of all subcontracts awarded under this Contract if not already specified in the bid. Such notification, in his original bid or later, shall not relieve the Supplier from any liability or obligation under the Contract.

20. Delays in the Supplier's Performance

- **20.1.** Delivery of the Goods and performance of the Services shall be made by the Supplier in accordance with the time schedule specified by the Purchaser as per GCP clause 10.
- **20.2.** If at any time during performance of the Contract, the Supplier or its sub-contractor(s) should encounter conditions impeding timely delivery of the Goods and performance of Services, the Supplier shall promptly notify the Purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may, at its discretion, extend the Supplier's time for performance with or without liquidated damages, in which case the extension shall be ratified by the parties by amendment of the Contract
- **20.3.** Except as provided under GCP Clause 23, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of penalty pursuant to GCP Clause 21, unless an extension of time is agreed upon pursuant to GCC Clause 20.2 without the application of liquidated damages.

21. Penalty

21.1. Subject to GCP Clause 23, if the Supplier fails to deliver any or all of the Goods or to perform the Services within the period(s) specified in the Contract, the Purchaser shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as penalty, a sum equivalent to 1% per week and the maximum deduction is 10% of the contract price of the delivered price of the delayed Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance. Once the maximum is reached, the Purchaser may consider termination of the Contract pursuant to GCC Clause 22.

22. Termination for Default

- **22.1.** The Purchaser may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Supplier, terminate the Contract in whole or part
- (a) If the Supplier fails to deliver any or all of the Goods within the period(s) specified in the purchase

order, or within any extension thereof granted by the Purchaser pursuant to GCP Clause 20; or

- (b) If the Supplier fails to perform any other obligation(s) under the Contract.
- (c) If the Supplier, in the judgment of the Purchaser has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

'For the purpose of this Clause:

"**Corrupt practice**" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution.

"Fraudulent practice": a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition;"

22.2. In the event the Purchaser terminates the Contract in whole or in part, pursuant to GCC Clause 22.1, the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or Services similar to those undelivered, and the Supplier shall be liable to the Purchaser for any excess costs for such similar Goods or Services. However, the Supplier shall continue the performance of the Contract to the extent not terminated.

23. Force Majeure

- **23.1.** Notwithstanding the provisions of GCP Clauses 20 & 21, the Supplier shall not be liable for imposition of liquidated damages or termination for default, if and to the extent that, its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
- **23.2.** For purposes of this Clause, "Force Majeure" means an event beyond the control of the Supplier and not involving the Supplier's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the Purchaser either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
- **23.3** If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such conditions and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

24. Termination for Insolvency

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

25. Termination for Convenience

- **25.1.** The Purchaser, by written notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.
- **25.2.** The Goods that are complete and ready for shipment within 30 days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices.

26. Resolution of Disputes

- **26.1.** The Purchaser and the supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.
- **26.2.** If, after thirty (30) days from the commencement of such informal negotiations, the Purchaser and the Supplier have been unable to resolve amicably a Contract dispute, either party may require that the dispute be referred for resolution to the formal mechanisms as specified below. These mechanisms may include, but are not limited to, conciliation mediated by a third party, adjudication

in an agreed national or international forum, and national or international arbitration.

26.3. In case of Dispute or difference arising between the Purchaser and a supplier relating to any matter arising out of or connected with this agreement, such disputes or difference shall be settled in accordance with the Arbitration and Conciliation Act, 1996.

27. Governing Language

27.1. The contract shall be written in English language. Subject to GCC Clause 28, English language version of the Contract shall govern its interpretation. All correspondence and other documents pertaining to the Contract which are exchanged by the parties shall be written in the same language.

28. Applicable Law

- **28.1.** The contract shall be governed by the Law of Contract for the time being in force.
- **28.2** Irrespective of the place of delivery, the place of performance or place of payment under the contract, the contract shall be deemed to have been made at the place from which the acceptance of tender has been issued.
- **28.3.** Jurisdiction of Courts: The courts of the place from where the acceptance of tender has been issued shall alone have jurisdiction to decide any dispute arising out of or in respect of this contract.
- **28.4.** One month notice will be given by either party for termination of Contract during the tenure of Contract for breach of Clause or otherwise.

29. Taxes and Duties

- **29.1.** Suppliers shall be entirely responsible for all taxes, duties, license fees, octroi, road permits, etc., incurred until delivery of the contracted Goods to the Purchaser.
- **30.** All legal disputes arising out of this contract /bid shall be subject to competent court and forum under judicature of Gaya only.
- 31. Submission of Performance Bank Guarantee as per GFR Rules 2017 (if applicable).



SH-7, Gaya- Panchanpur Road, Village- Karhara, Post- Fatehpur, P.S- Tekari, District- Gaya (Bihar) PIN- 824 236

List of Equipments with Specification

Annexure 'A'

SI No	Name of Instrument	Qty.	EMD Amount (INR)
1	Inverted phase contrast Microscopes	1	25500
2	Centrifuge refrigerated	1	7500
3	Autoclave	1	3000
4	Digital pH meter	3	2880
5	Digital balance	2	8400
6	Brookfield viscometer	1	9000
7	BOD Incubator	1	3000
8	Tray dryer	1	4500
9	Tablet Disintegration apparatus	1	3300
10	Hot Air Oven	2	3000
11	Micropipette single Channelled set of 4 pitette with stand	6	6500
12	Refrigerator (-20ºC deep freezer) vertical	1	3600
13	Refrigerator (-20ºC deep freezer) horizontal	1	1200
14	Magnetic stirrer 500 ml & 1 Ltr capacity	7	8400
15	Rotarod Apparatus	1	3000
16	Laminar Air Flow	1	4500
17	Cell analyzer	1	9000
18	Tablet coating machine	1	9000
19	Aspatic Cabinat	1	900
20	Tablet Dissolution test apparatus	1	7500
21	Mechancial Stirrer	5	3000
22	Ultra Bath Sonicator	1	2400
23	Friability test apparatus	1	1800
24	Bio assay Imvitro assembly (Sherrington"s Kymograph Machine/ Polyrite withSherrington rotating drum, Perspex Organ bath Assembly ,Aerators and levers)	5	18000
25	Analgesiometer (eddy's hot plate and radiant heat methods)	1	9000
26	Convulsiometer	1	3000
27	Digital glucometer	1	100
28	Homoginizer	3	1800
29	UV Cabinet	1	1500
30	Double Distillation Unit	1	6000
31	Pole climbing apparatus	1	3000
32	Water bath	2	3000
33	Hot plate	5	800
34	Stethoscope	1	3600
35	Gel Electrophoresis Horizontal with power pack System	1	9000
36	Moisture Balance	1	1200
37	Clarity test apparatus	1	300

38Hardness tester2210039Histamine Chamber1300040Plethysmograph1300041Spygmomanometer530042Standard sieves no. 8,10,12,22,44,66,80260043Stereotaxic apparatus190044Sterility tester160045Vacuum pump3180046Colony Counter130047Desiccators340048Digital thermometer1020049Dissection tray & boards1045050Franz Diffusion cell590051Haemocytometer with micropipettes520052Hemostatic artery forceps2030053Levers, cannula2048054Lucas moist chamber110055Metabolic cage175056Mortar and Pestle2030057muscle electrodes220058Myographic lever110059Sahli's haemocytometer520060Humidity Chamber520061Stimulator1200				
40 Plethysmograph 1 3000 41 Spygmomanometer 5 300 42 Standard sieves no. 2 600 43 Stereotaxic apparatus 1 900 44 Sterility tester 1 600 45 Vacuum pump 3 1800 46 Colony Counter 1 300 47 Desiccators 3 400 48 Digital thermometer 10 200 49 Dissection tray & boards 10 450 50 Franz Diffusion cell 5 900 51 Haemocytometer with micropipettes 5 200 52 Hemostatic artery forceps 20 300 53 Levers, cannula 20 480 54 Lucas moist chamber 1 100 55 Metabolic cage 1 750 56 Mortar and Pestle 20 300 57 muscle electrodes 2 200 58 Myographic lever 1 100 </td <td>38</td> <td>Hardness tester</td> <td>2</td> <td>2100</td>	38	Hardness tester	2	2100
41 Spygmomanometer 5 300 42 Standard sieves no. 8,10,12,22,44,66,80 2 600 43 Stereotaxic apparatus 1 900 44 Sterility tester 1 600 45 Vacuum pump 3 1800 46 Colony Counter 1 300 47 Desiccators 3 400 48 Digital thermometer 10 200 49 Dissection tray & boards 10 450 50 Franz Diffusion cell 5 900 51 Haemocytometer with micropipettes 5 200 52 Hemostatic artery forceps 20 300 53 Levers, cannula 20 480 54 Lucas moist chamber 1 100 55 Metabolic cage 1 750 56 Mortar and Pestle 20 300 57 muscle electrodes 2 200 58 Myographic lever </td <td>39</td> <td>Histamine Chamber</td> <td>1</td> <td>3000</td>	39	Histamine Chamber	1	3000
41 Standard sieves no. 8,10,12,22,44,66,80 2 600 43 Stereotaxic apparatus 1 900 44 Sterility tester 1 600 45 Vacuum pump 3 1800 46 Colony Counter 1 300 47 Desiccators 3 400 48 Digital thermometer 10 200 49 Dissection tray & boards 10 450 50 Franz Diffusion cell 5 900 51 Haemocytometer with micropipettes 5 200 52 Hemostatic artery forceps 20 300 53 Levers, cannula 20 480 54 Lucas moist chamber 1 100 55 Metabolic cage 1 750 56 Mortar and Pestle 20 300 57 muscle electrodes 2 200 58 Myographic lever 1 100 59 Sahli's haemocytometer 5 200 60 Humidity Chamber 5 <td>40</td> <td>Plethysmograph</td> <td>1</td> <td>3000</td>	40	Plethysmograph	1	3000
42 8,10,12,22,44,66,80 2 43 Stereotaxic apparatus 1 900 44 Sterility tester 1 600 45 Vacuum pump 3 1800 46 Colony Counter 1 300 47 Desiccators 3 400 48 Digital thermometer 10 200 49 Dissection tray & boards 10 450 50 Franz Diffusion cell 5 900 51 Haemocytometer with micropipettes 5 200 52 Hemostatic artery forceps 20 300 53 Levers, cannula 20 480 54 Lucas moist chamber 1 100 55 Motar and Pestle 20 300 57 muscle electrodes 2 200 58 Myographic lever 1 100 59 Sahli's haemocytometer 5 200 60 Humidity Chamber 5 200	41	Spygmomanometer	5	300
44 Sterility tester 1 600 44 Sterility tester 1 600 45 Vacuum pump 3 1800 46 Colony Counter 1 300 47 Desiccators 3 400 48 Digital thermometer 10 200 49 Dissection tray & boards 10 450 50 Franz Diffusion cell 5 900 51 Haemocytometer with micropipettes 5 200 52 Hemostatic artery forceps 20 300 53 Levers, cannula 20 480 54 Lucas moist chamber 1 100 55 Metabolic cage 1 750 56 Mortar and Pestle 20 300 57 muscle electrodes 2 200 58 Myographic lever 1 100 59 Sahli's haemocytometer 5 200 60 Humidity Chamber 5 200	42		2	600
45Vacuum pump3180046Colony Counter130047Desiccators340048Digital thermometer1020049Dissection tray & boards1045050Franz Diffusion cell590051Haemocytometer with micropipettes520052Hemostatic artery forceps2030053Levers, cannula2048054Lucas moist chamber110055Metabolic cage175056Mortar and Pestle2030057muscle electrodes220058Myographic lever110059Sahli's haemocytometer520060Humidity Chamber5200	43	Stereotaxic apparatus	1	900
46Colony Counter130047Desiccators340048Digital thermometer1020049Dissection tray & boards1045050Franz Diffusion cell590051Haemocytometer with micropipettes520052Hemostatic artery forceps2030053Levers, cannula2048054Lucas moist chamber110055Metabolic cage175056Mortar and Pestle2030057muscle electrodes220058Myographic lever110059Sahli's haemocytometer520060Humidity Chamber5200	44	Sterility tester	1	600
47Desiccators340048Digital thermometer1020049Dissection tray & boards1045050Franz Diffusion cell590051Haemocytometer with micropipettes520052Hemostatic artery forceps2030053Levers, cannula2048054Lucas moist chamber110055Metabolic cage175056Mortar and Pestle2030057muscle electrodes220058Myographic lever110059Sahli's haemocytometer520060Humidity Chamber5200	45	Vacuum pump	3	1800
48Digital thermometer1020049Dissection tray & boards1045050Franz Diffusion cell590051Haemocytometer with micropipettes520052Hemostatic artery forceps2030053Levers, cannula2048054Lucas moist chamber110055Metabolic cage175056Mortar and Pestle2030057muscle electrodes220058Myographic lever110059Sahli's haemocytometer520060Humidity Chamber5200	46	Colony Counter	1	300
49Dissection tray & boards1045050Franz Diffusion cell590051Haemocytometer with micropipettes520052Hemostatic artery forceps2030053Levers, cannula2048054Lucas moist chamber110055Metabolic cage175056Mortar and Pestle2030057muscle electrodes220058Myographic lever110059Sahli's haemocytometer520060Humidity Chamber5200	47	Desiccators	3	400
50Franz Diffusion cell590051Haemocytometer with micropipettes520052Hemostatic artery forceps2030053Levers, cannula2048054Lucas moist chamber110055Metabolic cage175056Mortar and Pestle2030057muscle electrodes220058Myographic lever110059Sahli's haemocytometer520060Humidity Chamber5200	48	Digital thermometer	10	200
5011151Haemocytometer with micropipettes520052Hemostatic artery forceps2030053Levers, cannula2048054Lucas moist chamber110055Metabolic cage175056Mortar and Pestle2030057muscle electrodes220058Myographic lever110059Sahli's haemocytometer520060Humidity Chamber5200	49	Dissection tray & boards	10	450
52Hemostatic artery forceps2030053Levers, cannula2048054Lucas moist chamber110055Metabolic cage175056Mortar and Pestle2030057muscle electrodes220058Myographic lever110059Sahli's haemocytometer520060Humidity Chamber5200	50	Franz Diffusion cell	5	900
53Levers, cannula2048054Lucas moist chamber110055Metabolic cage175056Mortar and Pestle2030057muscle electrodes220058Myographic lever110059Sahli's haemocytometer520060Humidity Chamber5200	51	Haemocytometer with micropipettes	5	200
54Lucas moist chamber110055Metabolic cage175056Mortar and Pestle2030057muscle electrodes220058Myographic lever110059Sahli's haemocytometer520060Humidity Chamber5200	52	Hemostatic artery forceps	20	300
55Metabolic cage175056Mortar and Pestle2030057muscle electrodes220058Myographic lever110059Sahli's haemocytometer520060Humidity Chamber5200	53	Levers, cannula	20	480
56Mortar and Pestle2030057muscle electrodes220058Myographic lever110059Sahli's haemocytometer520060Humidity Chamber5200	54	Lucas moist chamber	1	100
501057muscle electrodes220058Myographic lever110059Sahli's haemocytometer520060Humidity Chamber5200	55	Metabolic cage	1	750
58Myographic lever110059Sahli's haemocytometer520060Humidity Chamber5200	56	Mortar and Pestle	20	300
59Sahli's haemocytometer520060Humidity Chamber5200	57	muscle electrodes	2	200
60Humidity Chamber5200	58	Myographic lever	1	100
	59	Sahli's haemocytometer	5	200
61 Stimulator 1 200	60	Humidity Chamber	5	200
	61	Stimulator	1	200

1. Technical Specification for Inverted Phase Contrast Microscopes

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

Phase contrast inverted Fluorescence microscope with high end camera attachment.

- 1. Inverted Microscope stand with quintuple revolving nosepiece
- 2. Transmitted high contrast long life LED illumination with constant colour temperature of 4000K or better
- 3. Suitable for bright field and phase contrast microscopy.
- 4. Optical system must be infinity corrected for maximum and best optical performance from UV to near-infrared.
- 5. Dedicated user friendly front operation for Light Intensity, On/off switch, Coarse & Fine adjustment knob, vertical nosepiece movement, stage should fixed, Stroke per rotation should be 38 mm (coarse) or better, 0.2 mm (fine) or better.
- Frame should have filter holder position for Neutral Density and green filter for phase contrast. Frame must be compatible to view multilayer Tissue flask with high adjustment of 170-200 mm or better.
- 7. Microscope Frame should be compatible with cell culture hood under UV light.
- 8. System should have provision to upgrade to 3D Image view with 10X objective and full colony count by using low power objective 2X or better. System should capable of doing 3D imaging.
- 9. **Observation Tube**: Trinocular observation tube with butter Interpupilary distance adjustment of 48-75 mm, (Wide Field, Field of View 22 or better). Inclined angle 45 degree or better. Light division 100: 0 and 0: 100% for Eyepiece and camera path.
- 10. **Mechanical Stage**: Universal Holder for multi sample holder and X & Y Mechanical Stage with right hand drive control along with acrylic transparent scratch proof plate holder. Stage movement should have X=100mm,Y=70 mm or better.
- 11. **Condenser:** Slider Long Working Distance Condenser with BF/Ph, N.A. 0.3 and W.D. 70 mm or better.
- 12. Eyepieces: Wide field paired eyepieces 10X (F. N. 22) or better.
- 13. **Objective:** Semi apochromate/flaurex phase objective 10X/0.25, W.D.10 mm,Long working distance 40X.NA 0.60 with correction ring Semi apochromate/flaurex phase objective, Semi apochromate/ flaurex 60X or 100X phase objective, NA 1.30,spring, Oil
- 14. Interference Green Contrast Filter, dust cover, ND filter daylight filter.
- 15. **Fluorescence illuminator:** Reflected light fluorescence illuminator equipped with field stop, 3position fluorescence slider with Blue excitation filter set, Green excitation filter set and UV filter set and red filter for FITC, TRITC DAPI and TEXAS RED fluorescence Dyes respectively with 100 watt mercury illumination.

Specification of Camera

- 16. Sensor High Resolution CCD 2/3 inch with 2580 x 1944 pixels, 5 MP, Peltier cooled
- 17. Suitable for fluorescence microscopy
- 18. Pixel size 3.4 μm x 3.4 μm and with RGB filter
- 19. C-mount thread. Delivered without objective
- 20. Max fps 3 frames per second (2580 x 1944 pixels)
- 21. 12 frames per second (1280 x 932)
- 22. greyscale conversion 16 bits, color rendering 36 bits
- 23. Exposure Automatic or manual from 0.1 ms to 20 min
- 24. White balance Automatic/manual
- 25. Dynamic range 74 dB
- 26. Sensitivity 500 mV/lux-sec
- 27. Interface USB-2 at 480 Mb/s
- 28. Peltier cooling -30° C below ambient temperature
- 29. Dimensions 130 x 111 x 54 mm (hxbxt), Weight 920 gram
- 30. Operation 0 60° C, 10-85 % humidity
- 31. Supplied with USB 2.0 cable, 100-240 Vac to 5Vdc/4A power adapter for Peltier cooling, 76 x
- 32. 24 mm calibration slide (1mm/100), CD-ROM with software, aluminium carry case.

- 33. Supplied with 0.75x objective for 23.2 mm trinocular tube.
- 34. Camera and instrument must be from same manufacturer.
- 35. Software Windows 7, Windows 8, Windows 10 (32 and 64 bit configurations)

36. Branded Computer with pre-loaded software should be supplied with system. Warranty at least Four year from the date of successful installation in the lab. The Bidder shall prepare a similar table to justify compliance with the requirements

2. Technical Specification for Centrifuge Refrigerated

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

- Should have max. capacity of around 48 x 1.5/2.0 ml.
- Should have max, speed of 15,000 rpm or more with RCF of 25,000 g or more.
- Should have ability to spin for a time of 1 sec min : 59 sec, short and continuous run.
- The size should not be more than H x W x D: 31.3 x 33.0 x 65.0 cm.
- Should provide Temperature control from -10°C or lower to -20°C
- Should be certified with MED CERT (DIN EN ISO 13485:2003) and GLC & (ISO 9001) certified, which ensures the extreme care and responsibility for the manufacturing of centrifuges.
- Should have international standards such as IEC 61010 or the CE conformity. •
- Centrifuging chamber should be made of stainless steel.
- Should have powered lid locking.
- Should have quick and easy operation with the knob.
- The rotors should be changed easily. •
- Should be able to store at least 10 programs.
- Should be equipped with a pre-cooling function (Fast Cool) and stand-by cooling.
- Should have Lid locking and holding function.
- Should have Emergency lid lock release function.
- Should provide Lid dropping protection.
- Should have Automatic rotor recognition function.
- Should have Imbalance switch-off function.
- Should provide Motor and chamber overheating protection.
- Should have a 24 place Fixed angle Rotor for 1.5/2.0 ml tubes with speed: 18,000 rpm.
- Extraordinarily silent

Warranty at least Two year from the date of successful installation in the lab. The Bidder shall prepare a similar table to justify compliance with the requirements

3. Technical Specification for Autoclave

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

Vertical Autoclave- heat up exhaust, sterilize, pressure Chamber made of SUS304 for resistance to decomposition

User Temp.	121 Deg C
Max volume	60 ltr
Temp Accuracy	+-0.5Deg C at 121*C
Operating Pressure	0.1-0.21MPa
Temp. Control	Digital PID Controller
Timer	Electronic Type0-99h 59min
Pressure Gauge	Mechanical Gauge 0-0.3 Mpa
Air Exhaust	Adjustable Valve
Safety Device	Over temp. Limit by Controller
	Over Heat Limit by Safety S/W
	Over Pressure Limit by protector Valve
	Water level Sensor Protector
Monitor Unit	Audible and Visible device
Basket	Mesh Type Standard/2ea

Capacity	Minimum 70 L or better
Heater	Minimum 1-1.5KW
Power	220V 50/60 HZ

• Warranty at least Two year from the date of successful installation in the lab.

• The Bidder shall prepare a similar table to justify compliance with the requirements

4. <u>Technical Specification for Digital pH Meter</u>

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

Standards:

Bench top pH Meter with backlit graphic LCD display with simultaneous display of pH/mV/RmV and temperature along with electrode status, time, date, sample ID, user ID and calibration points , stability and averaging choices It shall be electrically operated and of direct reading type.

Features :

- Up to 5 point pH calibration with automatic recognition for USA/NIST and DIN buffers.
- Should have auto read facility which locks the stable reading on screen
- Fix calibration errors without a complete recalibration with calibration editing
- Non-volatile memory holds up to 2000 data points with time and date stamp
- Easily transfer data and keep meter software up-to-date with the USB and RS232 ports and complimentary data analysis software
- Mix samples without a stir plate with direct control of the stirrer probe
- Electrode arm and probe holder for easier to maintain and place probes into samples
- To work with AC power source with the included universal power adapter, or use four AA batteries to run the meter on DC power .
- IP 54 international rating.

Major parameters of the equipment

Deedaut	sheeldit graphic LCD diaplay
Temperature Resolution :	: 0.1
Temperature compensation, manual & Automatic	: -5 - 105 [°] C
Resolution	: 0.1, 0.01& 0.001 pH
Relative Accuracy	: $\pm 0.002 \text{ pH} \pm 1 \text{ digit}$, 1 mV $\pm 1 \text{ digit}$
pH range	: 0-14

Readout

:backlit graphic LCD display

The equipment should be supplied with main meter , pH/ATC probe , buffer soln. Of 4 , 7 , 10 , storage soln., cleaning soln., & pH electrode storage bottle , electrode arm with holder & power adapter. Warranty at least Two year from the date of successful installation in the lab. The Bidder shall prepare a similar table to justify compliance with the requirements

5. Technical Specification for Digital Balance

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

SI.No.	Specification Required						
01	Capacity	220 gm					
02	Readability	0.1mg					
03	Repeatability (+/-)	0.2 mg					
04	Linearity(+/-)	0.2 mg					
05	Construction	ABS plastic housing, 304 stainless steel pan					
06	Operation	AC adapter or internal rechargeable batte (included)					
07	Application modes:	 Percent weighing Check weighing Parts counting Accumulation/tantalization Display hold 					
08	Pan Size	80 mm					
09	Rugged design for high scale Laboratory	/ applications.					
10	Multiple weighing units.						
11	Standard bi-directional RS-232 interface						
12	Polyfunction : % weighing, counting, fill mode, GSM etc						
13	Bright fluorescent display or LCD						
14	Weigh below hook for density determination of large samples						
15	Should have auto calibration mode.						

Warranty at least Two year from the date of successful installation in the lab. The Bidder shall prepare a similar table to justify compliance with the requirements

6. Technical Specification for Brookfild Viscometer

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

Temperature Range	9°—260°C (40°—500°F)		
Display	5.7in touch screen		
Viscosity Range	100cP-40 million cP		
Revolutions per Minute	0.01-200RPM		
Electrical	: 220-230V / 50Hz / 0.7Amps		
Product Dimensions	10 x 10 x 6in (254 x 254 x 152mm) W x D x H		
Meets Standard(s):	AASHTO T 316		
	ASTM D4402/4402M		

- Built-in temperature probe
- Temperature range: 9°—260°C (40°—500°F)
- Viscosity range: 100cP to 40 million cP
- Accuracy: ±1% of range and reproducible to ±0.2%
- Front-facing bubble level
- 5-inch (145mm) colour display
- Auto-range displays viscosity limits
- Data averaging and QC limit alarms
- Test data sent to printer or PC
- Multiple language support
- Customizable user levels & password access
- Continuous display: Viscosity (cP or mPa•s), Temperature (°C & °F), Shear Rate / Shear Stress, % Torque, Spindle.
- Suitable PC with pre-loaded software (Winggather) to be offered with required hardware.

Warranty at least Two year from the date of successful installation in the lab. The Bidder shall prepare a similar table to justify compliance with the requirements.

7. <u>Technical Specification for B.O.D Incubator</u>

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

- Material & finishing : Inside S.S. 304 with mirror polish & outside mild steel powder coated
- Temperature Range : 5 °C to 90 °C
- Temperature Accuracy : ± 0.2 °C or better
- Temp Uniformity : ± 2.0 °C or better.
- Capacity: 325 Ltr.
- Number of Sieves: 06
- Instrument should have Double walled modular structure with 3" thick PUF insulation.
- Inside Stainless Steel and Outside Mild Steel Powder Coated OR Stainless Steel
- Interior illumination.
- There should be full length observation glass door with secure gasket Inside chamber.
- Heavy-duty door hinges and latches to maintain a secure and uniform seal
- Racks & trays should be of Stainless Steel with adjustable height.
- There should be 65 mm Port Hole with rubber seal to insert sensors for validation purpose
- Built with U shaped S.S. Nichrome wire air heaters
- Compressor with CFC Free R 134 A / R 404 (Eco Friendly) refrigerant should be used to having state of art by-pass system for continuous run of compressor.
- Plc control system with touch screen display coloured screen.
- Safety controller sensor to cut off the supply in case of overshoot and undershoot of temperature giving audio visual alarm
- Complete with IQ, OQ, PQ, Documents, Operations and Maintenance manuals
- Works on 230V AC single phase 50Hz.

Warranty at least Two year from the date of successful installation in the lab. The Bidder shall prepare a similar table to justify compliance with the requirements

8. <u>Technical Specification for Tray-Dryer</u>

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

- Instrument should have robust construction.
- Instrument should satisfy international standard.
- It should be Built on formed angles of 3 mm thick sheet and suitably reinforced with angles and sections.
- External walls are manufactured from 1.6mm thick stainless steel sheets of 304 qualities.

- The internal of the dryer is built of 1.6 mm thick S.S 304 quality sheets insulated with minimum 50 mm thick glass wool insulation and caddied with S.S, polished sheets.
- Fresh air inlet through 20-micron pp cloth filters and an adjustable air outlet flap and a door at the front.
- Explosion proof door is locked with the help of spring loaded ball latches with suitable pressure.
- To prevent leakages door lips are having neoprene rubber gasket Finishing.
- Designed and manufactured as per GMP standard.
- Should have Aesthetic look.
- Buffed externally to 150 grit matt finish.
- Internally buffed to 220 grit mirror finish Electrical heating.
- The Air inside the Tray Dryer is heated by "U" tube S.S.304 air heaters each of 1 KW.
- The heaters are fitted on the sides of the dryer to facilitate uniform heating.
- Maximum temperature attained inside the dryer is 100" C.
- The temperature is indicated and controlled by a Digital Temperature indicator cum controller over the full range of heating load.
- The total heating load for it should be 06-08 Trays Dryer 3 KW or more.
- Heaters should be inserted inside the Tubular pipe to prevent the heater to become red hot.
- The terminals of the heaters are brought outside the dryer to make it safer for operations for solvent based products.

Warranty at least Two year from the date of successful installation in the lab. The Bidder shall prepare a similar table to justify compliance with the requirements

9. <u>Technical Specification for Tablet Disintegration Apparatus</u>

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

- Micro-Controller based,8 station Disso Test Apparatus (6+2) having Splash waterproof keyboard, Alphanumeric , Back lighted 40 characters 2 line LCD display. The system to be offered with
- Water Bath: Transparent, Moulded Acrylic water bath, capacity 17 liters, with built-in water level sensor with bath circulation with external heater unit and circulation pump / centrally located immersion pump.
- Vessels as per USP/IP/BP made up of Polycarbonate.
- 6 nos. of paddle and 6 nos. basket to be offered with the system.
- Temperature range: 30-40° C with Bowl temp. Readout and printout having Readability 0.1° C and accuracy ± 0.1 ° C with sensor made up of Pt 100 [RTD].
- Speed control by stepper driven motor with range of 20-200rpm in steps of 1 rpm having accuracy ± 1%. Dissolution process time from 1 minute to 720 hours selectable in steps of 1minute. Total process time is automatically calculated.
- Maximum number of intervals: 30 having method storage of 15 programs with parameters and with GLP compliant report format.
- To be offered with tablet dispensing facility, 6 vessels individual temperature monitoring and having up gradation capability to Micro-controller based sample collector with 72 [6 X 12 rows] position sample collector tray and Piston pump with inert ceramic rotor and high flow rate of 25 L/min with accuracy of 1%.
- Operation capabilities: Temperature: Ambient to 45⁰ Relative Humidity : 5 to 90% noncondensing, Power Supply: 230 V AC ± 10% , 50 Hz

Warranty at least Two year from the date of successful installation in the lab. The Bidder shall prepare a similar table to justify compliance with the requirements

10. Technical Specification for Hot Air Oven

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

PHYSIC	CAL SPECIFICATION				
SI.No.	Specification Required				
01	Chamber size(LxBxH)IN ³	26x16 inches			
02	Capacity in cubic feet(litres)	>2.5			
03	Overall Size (LxBxH)	29x18x15.5 inch			
04	Power Supply	50/60Hz,220 V			
05	Number of shelves	At list 2			
06	Number of door	Single door			
07	Approximate weight	Not more than 40 kg			
08	Ventilator	Adjustable type(Aluminiun)			
09	Door fitting	Silicon rubber gasket fitted on front			
		door to prevent heat loss			
10	Inner Chamber	SS-304/Aluminium make			
11	Outer Chamber	SS-304/Aluminium make			
10	Heating Element	Made of SS 'U' types tubular nicrome			
		wire with SS sheathing			
11	Shelves	G.I,SS-304 steel wire mesh			
12	Time to temperature with load (40°C to 100°C)	4 Minute			
13	Time to temperature with load (40°C to 200°C)	18 Minute			
14	Time to temperature with load (40°C to 260°C)	30 Minute			
15	Recovery time after door open for 1 minute (100°C)	1 Minute			
16	Recovery time after door open for 1 minute (200°C)	4 Minute			
17	Recovery time after door open for 1 minute (260°C)	8 Minute			
18	Temperature Uniformity	+/-1 °C at 100°C,+/-2°C at 200°C,+/-2.5°C at 260°C			
19	Operating range for 35°C ambient	Room ambient to 300°C			
20	Control stability	+/-0.5-5°C maximum			
21	Repeatability	+/-0.5°C			
22	Maximum load capacity	20 kg			
23	Maximum shelf capacity	12 kg			
24	Exhaust capacity	Adj. to 12 CFM(5.6 lps) with back side fitted fan for circulating air			
25	Dial type timer	24 hr			
26	Indicator	3 No.			

Warranty at least Two year from the date of successful installation in the lab. The Bidder shall prepare a similar table to justify compliance with the requirements

11. Technical Specification for Micro-Pipette (Single Channel)

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

VolumesQuantity

1.	0.1-10 μI (Accuracy ±5%) :	01
2.	10-100 µl (Accuracy ±2%) :	01

- 3. 100-1000 µl (Accuracy ±3.0%) : 01
- 4. 0.2-20 μl (Accuracy ±5%): 01

Total: 6 set

- Should be adjustable single channel.
- Pipette set should supply with pipette stand.

- Thumb wheel for volume adjustment
- Dual position tip ejector for lower volumes.
- Strong body built of PVDF and Stainless steel for long life & thermal stability
- Pipette should be of dry-seal technology, where piston should not use grease
- Tip ejector and Tip cone removable without any tools
- Tip cone should be easy to open for cleaning
- Opening of tip cone for cleaning should not require mandatory recalibration or disturb
- Should be chemical resistant
- Lower point should be autoclavable
- Colour identification labels and two Tip box with tips should be provided
- Should have 4 digit displays (for variable volume pipettes).
- Should be compatible with tips of other makes available in the market.
- Should have two years warranty.
- Kits offer along with 4-5 (combo pack) of basic capacity of micropipettes shall be preferred.
- Original technical literature should be supplied.
- Calibration certificate should be enclosed with each pipette.

Warranty at least Two year from the date of successful installation in the lab. The Bidder shall prepare a similar table to justify compliance with the requirements.

12. <u>Technical Specification for Refrigerator (-20 C) Freezer vertical type</u>

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

Upright Vertical Deep Freezer

- Temperature range 0°C to -20°C
- Direct Cooling Type
- Microprocessor controlled system.
- Capacity 400 500 Lit or better
- LED Display
- Minimum 7 drawers required
- CFC- free refrigerant.
- Noise level less than 45 dB.
- Alarms for systems malfunction over and under temperature & sensor error
- Equipment should CE Certified.
- Warranty period to be mentioned

Warranty at least Two year from the date of successful installation in the lab. The Bidder shall prepare a similar table to justify compliance with the requirements.

13. Technical Specification for Refrigerator (-20 C) Freezer Horizontal type

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

Horizontal Deep Freezer

- Temperature range 0°C to -20°C
- Direct Cooling Type
- Microprocessor controlled system.
- Capacity 500 600 Lit or better
- Minimum 7 drawers required
- CFC- free refrigerant.
- Noise level less than 45 dB.

• Equipment should CE Certified.

Warranty at least Two year from the date of successful installation in the lab. The Bidder shall prepare a similar table to justify compliance with the requirements.

14. Technical Specification for Magnetic Stirrer 500 ml & 01 Ltr Capacity

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

Speed	1500 or better
Display	Digital
Incremental speed	10
Max capacity in Ltr	1000ml
Temp. range from ambient	550°C
Plate temperature	450°C
Liquid Temperature	280°C
Stirring Position	01
Set up plate	Ceramic

Warranty at least Two year from the date of successful installation in the lab. The Bidder shall prepare a similar table to justify compliance with the requirements.

15. <u>Technical Specification for Rotarod Apparatus</u>

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

Number of lanes :- Five Speed :- 05-60 RPM Timer; - 0-9999.9s (resolution-0.1s) Rotor types:- Mice rotor -30 mm diameter Rat rotor -60 mm diameter Lane width:- 75 mm Height to fall :- For mice -285mm For Rat -300mm display :-LCD Material of composition: - Methacrylate, aluminium Certification:- CE compliant Power requirement :- 220-230 V, 50 Hz The instrument should be designed in a such a way that the same system may be used for Rat as well as mice just by changing the rotor. System should equipped to detect mechanical fall. • System should have individual lane timer of 0-9999.9s with resolution of 0.1s.

- System should have electronic rod speed adjustment for constant speed of 5-60 rpm.
- replacement of rotor should be very easy and convenient.

Warranty at least Two year from the date of successful installation in the lab.

The Bidder shall prepare a similar table to justify compliance with the requirements.

16. Technical Specification for Laminar Air flow

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

- 1. Main filter : HEPA filter (99.97% efficient at 0.2 micron particle)
- 2. Should have horizontal air flow system
- 3. Pre-filter : High efficiency pre-filter.
- 4. Illumination : Fluorescent Lamp 40W and normal working light
- 5. Sterilizing : UV Germicidal Tube best in grade .

- 6. Front door : Made of plexi Glass
- 7. Utility : Gas/Air cock and multipoint 15/5 Amp. Electric socket.
- 8. Supply Voltage & Frequency : AC 230V, 50/60 Hz
- 9. MOC (CABINET) : Stainless Steel (SS-304)
- 10. Work Table : Stainless Steel (SS-304 grade)
- 11. Internal working space (mm) : 1200x600x600 or better
- 12. Size of HEPA Filter (mm): 1200x600x150 or better
- 13. Number of HEPA filter: 1 (One)
- 14. Silent Vibration-Free Blower that ensures noiseless operation and anti-vibration construction which provides efficient working environment.
- 15. Microprocessor LCD Controller with Auto Switch off mode for motor blower when door is closed. Digital buzzer timer sounds an audio alarm in completion of sterilizing time of the chamber and the switches off U.V. germicidal tune and automatically switches ON the fluorescent light, alerting the user that the bench is ready for use.
- 16. Should have in-built connection point for gas burner.
- 17. Should be provided with height adjustable laminar working stool
- 18. Warranty: 3 years for the filter
- 19. Unit should be wheeled for easy movement
- 20. The unit body, working desk should be made up of high gauge anticorrosive stainless steel.
- 21. Should have high quality transparent front and side cover.
- 22. Rates inclusive of taxes and installation
- 23. Warranty of at least two year from the date of successful installation in the lab
- **24.** Polycarbonate front door in place of plexi glass
- 25. Magnehelic Gauge (To track filter pressure) in lieu of static pressure manometer
- 26. Electronic Filter choke alarm

Interlocking of U.V. Germicidal Tube & fluorescent light with auto switch off/on mode for blower when the

door is closed/open

Warranty at least Two year from the date of successful installation in the lab. The Bidder shall prepare a similar table to justify compliance with the requirements

17. <u>Technical Specification for Cell Analyser</u>

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

1. The system should be able to automate cell counting and viability of cells to give fast cell counts, viability assessment, and GFP transfection efficiency measurements across wide range of cell density, cell type and cell culture application.

2. The system should be of dual fluorescence and bright-field optics, variable height sample chamber, and easy-to-use analysis software.

3. The system should eliminate plastic slides with Dynamic Range for counting is $7 \times 102 - 2.5 \times 107$ cells/ml (No requirement of slides).

4. The system should be able to count cell size range of $4 - 400 \ \mu m$.

5. The system should use sample volume of 10 μL @100 μm chamber height and 40 μL @400 μm chamber heights.

6. Fast rate of measurement speed bright field in less than 4 seconds and dual Fluorescence in less than 9 seconds.

7. The system should use bright field illumination of LED 530 nm and Fluorescence Illumination LED 470 nm with emission filters of 530 nm +/- 25 nm and 645nm +/- 37 nm respectively.

8. The system should use gesture recognition and multipoint touch, swipe, pinch with display 7"inch touch, resolution of 1280 x 800 and colour display.

9. The system should be glove compatibility with all common laboratory gloves.

10. The system should be capable to generate Images 2048 x 800 px (3.15 MB) with overlay capabilities Focus and user-controlled onscreen coarse and fine adjustment.

11. The system should have detectors of FL mode and BF mode.

12. The system should have multi-connectivity with wiFi, Ethernet, HDMi, USB options.

14. The system should have Internal Storage 120 GB solid state drive – upgradable to 1 TB. 15.

Warranty at least Two year from the date of successful installation in the lab.

The Bidder shall prepare a similar table to justify compliance with the requirements

18. Technical Specification for Tablet Coating Machine

The "Equipment and Related Services" shall comply with following Technical Specifications and

Standards:

- All contact parts Design should be as per cGMP Current Good Manufacturing Practices • compliance.
- Fully automatic film & sugar coating process by PLC Controls with HMI Touch screen.
- Extremely user friendly software and operation.
- The machine structure made from S.S.304 quality fitted with Closed Drive, Perforated Pan, Washing sink, Inlet air plenum, Exhaust air plenum with Air tight door.
- Perforated pan with 50% opening for better quality finish.
- Excellent mixing and tumbling by special design of removable on each sloping face of the pan and anti sliding baffles provided on perforated diagonal face.
- Perforated Pan having variable speed through AC frequency Drive.
- Pan mouth closed with Stainless steel door with a glass for process visualization.
- A stainless steel 316 sinks at bottom of pan for collection of powder with necessary stainless • steel piping with tri-clover joints for ease of cleaning during the changeover.
- FLP Fluorescent Light is provided for illumination inside the pan.
- All doors, safety guards and covers are provided with a silicon food grade seals.
- Automatic Spraying systems provided with Atomized spray Gun, Adjustable spray gun arms, High precise flow peristaltic pump, solution holding tank with pneumatic stirrer.
- Front Entry stainless steel arm, with facility to adjust the angle of spray guns is provided.
- Inlet air and Exhaust air plenum provided with silicon seal with easy removable for cleaning.
- Inlet air and outlet air will be controlled by pneumatic operated damper which is provided on top of the machine and at inlet and outlet duck.
- Inlet air and Exhaust air flow controls through AC Frequency drive of both blower. •
- Inlet Air handling unit made from double screen insulated with puff with inside stainless steel 304 quality and outside powder coated. The Inlet air handling units fitted with Pre filter- 10 micron, Inlet air blower with motor, Dehumiditifier- child water circulation coil, Stainless steel 304 quality Steam/ Electric heat exchanger with fins, Final filter with 5 micron, HEPA filter -0.3 micron.
- Exhaust Air handling unit provided with dust collection system with 5 micron filter or wet scrubber • and exhaust blower. The Exhaust air dust collector unit is made from .S.S.304 Quality.
- Tablet discharging facility will be through the special diverter assembly
- All motor are flam proof/ Explosion proof provided.
- The machine instruction manual and Validation document provided for DQ, FAT, IQ, SAT and • OQ with test and calibration certificate.

Warranty at least Two year from the date of successful installation in the lab. The Bidder shall prepare a similar table to justify compliance with the requirements.

19. Technical Specification for Aseptic cabinet

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

System should have distinctive two-chamber design to provides safe, sanitary environment for animals and permits acquisition of untainted urine and feces for study. Upper and lower chambers should be constructed of smooth, transparent polycarbonate to prevent gnawing and noise.

Upper Chamber Features

- System should have large cover to keep animals securely in cage; allows easy access to interior Stainless-steel support grid separates chambers and allows waste products to pass through bars Handles on grid for easy cage transportation without stand.
- Feeder chamber on outside of upper chamber should be large enough for animals to access • food, yet small enough to prevent sleeping or nesting Polycarbonate feed drawer underneath feeder chamber slides out for easy filling.
- Rear chamber of feed drawer catches spilled slurry, liquid, or powder food-excess food should not contaminate excreta

- Calibrated polycarbonate water bottle with stainless-steel cap and sipper tube assembly, combined with water spillage collection tube, facilitates accurate collection of fluid intake data
- All parts of the instrument should be autoclavable

Lower Chamber Features

- Nonwetting polymethylpentene (PMP) funnel and separating cone should be installed to collect waste products in separate feces and urine collection tubes.
- Fecal matter rolls down the sides of funnel to collect in feces collection tube. Urine collection tube should be graduated in cubic centimetres and may be cooled in an ice bath
- Tubes should unlock from outside of cage with a single twist so as not to disturb animals
- All parts of the instrument should be autoclavable

Warranty at least Two year from the date of successful installation in the lab. The Bidder shall prepare a similar table to justify compliance with the requirements.

20. Technical Specification for Tablet dissolution test apparatus

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

tations	8				
Reaction	1000 ml (8 Nos.)				
Vessel					
Display	20 x 4 Line Alphanumeric LCD display with Backlit				
Keyboard	19 soft touch membrane keys				
Program	Routine, Sustain and Control mode. Facility for 20 different test setups				
Modes	available in Routine and Sustain mode.				
Printer	Provision for the attachment of dot-matrix printer				
Stirrer	25 - 200 RPM				
Temperature	30 - 50°C				
Heater	1 KW				
Power	230 V ± 10%, 50 Hz. AC				
Accessories	- Acrylic Tank & Rectangular Cover Plate				
	- Water Bath Temperature Sensor (T1)				
	- External Temperature Sensor (T2) for Vessel				
	- Round Acrylic Cover Plate w/ Hole & slit - (8 - 6 Nos.)				
	- S.S. Paddle, S.S Wire Mesh Basket - (8 - 6 Nos.)				
	 Glass pipettes with rubber bellows 				

Warranty at least Two year from the date of successful installation in the lab. The Bidder shall prepare a similar table to justify compliance with the requirements

21. Technical Specification for Mechanical stirrer

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

- Maximum stirring speed-40-2000 rpm with stepless speed control and good speed stability
- Display: LED
- accuracy: ±1rpm or 3% of reading
- Supply 220/240V,50Hz, A.C
- Speed range, rpm; 40 to 2,000
- Display: LED
- accuracy: ±1rpm or 3% of reading
- Maximum torque, Ncm: 70
- Electrical input: 100-240V, 50/60Hz
- Output power: 1/15hp
- full range, 50W
- Mass, kg: 3.6
- Maximum volume, L: 25
- Maximum viscosity, cps: 15,000

Following accessories should be supplied with instrument

Crossed blade impeller 400mm length x 50mm diameter

- Square blade impeller 400mm x 70mm square
- Shaft 300mm length x 8mm diameter
- Safety stand with base 711mm x 25mm diameter rod, Stirrer clamp, Chuck and key set

i) Necessary electrical cables should be provided.

Warranty at least Two year from the date of successful installation in the lab. The Bidder shall prepare a similar table to justify compliance with the requirements

22. Technical Specification for Ultra Bath Sonicator

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

Features:

S.S. Tank.

Digital Tuning of Transducers with Generators to avoid any frequency shift

Extensively protected electronic circuits for longer and safer Operations.

- 1. Operating frequency 35-40 KHZ, for all general purpose cleaning.
- 2. Tank capacity 10 Lits
- 3. Input Voltage range 170V -270V, 50 HZ.
- 4. Electronic timer range 0 to 99 minutes.
- 5. Thermostatic controlled temperature controller.
- 6. Maximum heater temperature 80®C
- 7. Heater on/off option
- 8. Water drainage valve

Warranty at least Two year from the date of successful installation in the lab.

The Bidder shall prepare a similar table to justify compliance with the requirements

23. Technical Specification for TABLET FRIABILITY TEST APPARATUS

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

No. of drums	2
Drum rotation	25 ± 1 rpm
Accuracy	± 1 revolution
Resolution	1 revolution
Range	0-999 revolutions
Operating Temp. Range	10°C to 50°C
Power	230 V ± 10%, 50 Hz.

Warranty at least Two year from the date of successful installation in the lab. The Bidder shall prepare a similar table to justify compliance with the requirements.

24. Technical Specification for Bio assay Invitro assembly

Sherrington's Kymograph Machine/ Polyrite with Sherrington drum

The "Equipment and Related Services" shall comply with following Technical Specifications and

Standards:

- Microprocessor controlled unit •
- 16*2 LCD display
- Digital speed selection
- High accuracy speed- 0.12,0.25,0.50,0.75,1.00,1.25,2.50 mm/sec
- Digital timer with audio and visual alarm •
- Low power consumption
- Easy height adjustment of drum
- Auto concentration response curve (CRC) mode & normal mode •
- Sturdy, corrosion resistant body
- Battery back up

- Should have fine thermostatic temperature controlled.
- The bath size 8"x5"x5" with leak proof dovetailed joints
- Rests on Stainless steel/metal supports.

• Upright, organ & oxygen tubes with platinum tip Frontal writing lever from SS capacity tubing. With all accessories like control panel, rod, Drum, knob for fixing drum, L key, main cord & fuse.

Aerator –10 pcs ,Simple lever: 05, Brondist heart lever: 05, Frontal writing lever: 20 pcs

Warranty at least Two year from the date of successful installation in the lab. The Bidder shall prepare a similar table to justify compliance with the requirements.

25. Technical Specification for Analgesiometer (eddy's hot plate and radiant heat methods)

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

Instrument should perform rapid & precise screening of analgesic drug properties on small laboratory animals.

- Plate temperature may be hold at a set point between 5°C above ambient to 60°C (±0.2°C)
- Should have Remote foot-switch to controls the test start / stop allowing rapid Hands-free experiments
- Should have PC Connectivity with software
- Instrument should have provision to add max sequence numbers, auto experiment number and animal sex.
- Instrument should have high temperature stability & Uniform surface heat distribution throughout.
- Instrument should have built-in timer which may be activated by an external foot switch that allows the precise measurement of the reaction time (0.1 Sec. Resolution or better)
- Should provide Precise and reproducible results.
- Should have Cut off timer to avoid damage to animal.

Top LID Sensor to indicate lid is open and thereof avoiding temperature fluctuations

Warranty at least Two year from the date of successful installation in the lab. The Bidder shall prepare a similar table to justify compliance with the requirements.

26. <u>Technical Specification for Convulsiometer</u>

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

Standards:

1. Description of Function

1.1 To the study of Anti-Convulsion and Anti-Epileptic drugs, whether for education, screening or manufacturing of drugs

2. Technical Specifications

2.1 Should provide 50Hz Stimulus Current variable from 0.25mA to 360 mA through three controls for producing minimal and Supra-maximal seizure in small animals

2.2 The duration of Stimulus current is variable from 0.1 second to 1 second in steps of 0.1 second 2.3 Power Supply 230V 50Hz

2.4 Should be supplied with corneal electrode pair (different cup size) and eye clip pair.

3. Standards, Safety and Training

3.1 Manufacturer should have ISO certification

3.2 Product should be CE/BIS approved

4. Documentation

User/Technical manual should be supplied

Warranty at least Two year from the date of successful installation in the lab.

The Bidder shall prepare a similar table to justify compliance with the requirements.

27. Technical Specification for Digital glucometer

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

- Should be a hand held meter
- No routine maintenance
- Reading range/linearity from 20 to 600 mg/dl •
- Maximum reading time of less than 10 seconds •
- Should use electrochemical technology
- Should use a minimum blood sample less than 1.5µl
- Should have a LCD display
- Should have measuring unit in mg/dl.
- Should have wide operating temperature
- Should have a minimum memory of 50
- Should have life time replacement offer
- Should have easy code entry technique
- Battery should be replaceable without using any tools.
- Should have facility to ensure accuracy of measurements.
- Should be supplied with three types of control solutions of each at least 20 ml

Should have safety certificate from a competent authority CE / FDA (US) / STQC CB certificate / STQC S certificate or valid detailed electrical and

functional safety test

Warranty at least Two year from the date of successful installation in the lab. The Bidder shall prepare a similar table to justify compliance with the requirements

28. Technical Specification for Homogenizer

The "Equipment and Related Services" shall comply with following Technical Specifications and

Standards:

A complete set consisting of rotor within stationary stator (fully digitally controlled system with LED display). Each homogenizer should be equipped with different (\$25N-18G or \$10N-10G or, \$25N-25G or S18N-19G) dispersing element and should be suitable for a volume range of 10-2000 ml, could be used without vacuum operation with max. Temperature of 180°C, having high circumferential speed at 11.9-22.3 m/s, for obtaining particle size of 1-20 µm) and should already be fitted with all mechanical/fixing accessories (such as

boss head clamp or strap clamp, plate stand), suitable for all solvents

Warranty at least Two year from the date of successful installation in the lab. The Bidder shall prepare a similar table to justify compliance with the requirements

29. Technical Specification for UV Cabinet

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

- Application: to observe developed TLC plates under proper UV Light to distinguish different developed spots precisely.
- Multiband Trans illuminator to accommodate two UV wavelengths (365nm &/ 254nm) in one single Trans illuminator.
- This system should be ideal for a wide range of applications requiring different • wavelengths & could be used for both visualization and documentation.
- 200 x 200 mm illumination area •
- Illumination type: UV lamp 8 W

Warranty at least Two year from the date of successful installation in the lab. The Bidder shall prepare a similar table to justify compliance with the requirements.

30. Technical Specification for Double Distillation Unit

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

Double Distillation Unit

- It should be All Quartz double distillation unit
- Demountable Boiler Panel Series
- Model Vertical
- Distilled Water Output Capacity 2.5 Litres / Hours

Distillate water quality specifications

- It should be free from pyrogen and organic matter
- Conductivity < 1×10^{-6} S/cm
- ✤ Total Organic Carbon <500ug/L</p>
- Total Solids <0.1mg/L</p>

Accessories for Double Distillation Unit

- Distillation Apparatus power supply (DAPS) for 2.5ltrs model
- Low temperature circulating water bath (Chiller)
- Working Temperature : -10°C to 100°C
- Temperature Accuracy: ±01°C
- Bath Volume : Minimum 5 litre capacity
- External water Circulation for continuous operation.
- User Manual should be provided along with the equipment

Warranty at least Two year from the date of successful installation in the lab. The Bidder shall prepare a similar table to justify compliance with the requirements

31. Technical Specification for Pole climbing apparatus

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

1. Description of Function

1.1 For studying cognitive function, mainly response to conditioned stimulus during learning & its retention

2. Technical Specifications

2.1 Digital Voltmeter: 16 - 200 V DC.

2.2 Digital Timer: 0.1 - 999 sec.

2.3 Digital Delay Timer: 0.1 - 999 sec (cyclic).

2.4 Complete Chamber and Tray made of thick imported Acrylic Sheets.

2.5 Climbing Pole of Bakelite.

2.6 The experimental chamber has a grid floor sliding door with a clear perplex front. Electric buzzer and chamber light. Stimulator with built in timer to provide shock of 440 v 0.2 mA at a frequency of 5 per second. The duration also controlled manually.

2.7 It should be a compact model

3. Standards, Safety and Training

3.1 Should be CE / BIS approved product

3.2 Calibration/Acceptance test certificate from the factory required.

3.3 Manufacturer/Supplier should have ISO certification for quality standards.

4. Documentation

4.1 User/Service Manual in English

4.2 Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/para number of original catalogue/data

sheet. Any point, if not substantiated with authenticated catalogue/manual, will not be considered

Warranty at least Two year from the date of successful installation in the lab.

The Bidder shall prepare a similar table to justify compliance with the requirements

32. Technical Specification for Water Bath

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

- Tank :High grade SS tank
- Capacity : 5 to 8 litres
- Temperature range : Ambient to 99° C
- Temperature accuracy: ± 0.2° C
- Temperature control : Digital PID control
- Timer : 0.1 Hour to 99.9 Hours & continuous
- Safety protection : User settable and fixed thermal cut-out
- Display : Digital display of temperature
- Alarm : Low level water alarm, safety shut down audible/visual alarm
- Operating voltage : 230 ±10VAC, 50 Hz.
- Tank design for easy cleaning and draining
- Steel holder for tubes (1.5/2 ml, 5ml, 15 ml) and Flasks (50, 100 & 250 ml)
- Comprehensive warranty for two years
- After Sale, Service should be available promptly.

Warranty at least Two year from the date of successful installation in the lab. The Bidder shall prepare a similar table to justify compliance with the requirements

33. <u>Technical Specification for Hot Plate</u>

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

- Display : Digital
- Heating power: 800 W.
- Hot plate temperature : 50-300 Deg C
- Temperature accuracy : +/- 5 K
- Load Max : 20-25 kg
- Plate diameter : 14-15 mm
- Plate material : Preferably Ceramic coating
- Voltage : 230V/50 Hz
- With Temperature Sensor
- Hot plate material should be chemically non-corrosive

Warranty at least Two year from the date of successful installation in the lab. The Bidder shall prepare a similar table to justify compliance with the requirements.

34. Technical Specification for Stethoscope

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

Standards:

Lightweight and Reliable quality

Dual Sided Brass Chest Piece
Diaphragm for Best Auscultation
Provided with Non Chill Retaining Ring and Bell Ring

Chrome Plated Internal Spring Binaural

• Warranty at least Two year from the date of successful installation in the lab. The Bidder shall prepare a similar table to justify compliance with the requirements

35. Technical Specification for Gel Electrophoresis Horizontal with power pack System

The "Equipment and Related Services" shall comply with following Technical Specifications and Standards:

1. Horizontal Electrophoresis System (Small):

• Small vertical electrophoresis unit, 10 well, 1.00 & 1.5 mm thickness, complete system should include 6 combs, 10sets of glass plates, casting clamp assembly, sample loading guide, electrophoresis module

Gel Size :8.3 x7.3cm (W x L) approx.

• Glass Plate Size: o -Inner - 10.1 x 7.3 cm approx. o -Outer - 10.1 x 8.2 cm approx.

· Same system should be able to perform also western blotting (along with wet transfer module for western blot module), 2D/tube gel electrophoresis& electro - elution with the help of different module.

2. Horizontal Electrophoresis System (Large):

• May run 1-2 gels of 18.5 X 20cm size to perform SDS-PAGE and the second dimension 2-D using IPG. • Should accommodate 17-20 cm IPG strips

Casting clamp assembly

• The central cooling core should be connected via recirculation ports to tap water or a cooled recirculating bath, or filled with coolant to act as a heat sink, providing smile-free patterns with as little as 1.5 L of buffer .

• Glass plates, spacers, and sandwich clamps should be quoted with the module.

3. DNA or Sub Marine Gel Electrophoresis a) Small:

• With 7 x 10 cm tray, mini gel caster, Cell Size (WxLxH): 12 X 26 X 6.5 cm approx., Base Buffer volume: ~270 ml. Suitable combs (5-20 well) should be provided. b) Large:

• With 15x10 m tray, gel caster. System should include sub-Cell unit, UV transparent tray, casting gates, and two 1.5 mm thick fixed height combs(15 and 20 well).

4. Trans Blot Semi Dry Unit:

• The system should allow fast, efficient and economical blotting without buffer tank or gel cassettes.

· Spring mounted platinum coated titanium anode and stainless steel cathode plate electrode will be preferred.

Maximum Gel Size should be 24 cm x 16 cm

- The system should be capable of transferring multiple gels simultaneously.
- Current requirement should be upto 3000mA.
- · Special agarose gel support frame for performing southern blotting in the same system as an add-on facility would be preferred.

5 Gel Drying System:

• Drying Frame: Molded polycarbonate bottom frame, stainless-steel top frame (Preferred). Drying Surface: 20 x 20 cm approx. Dryer capacity: multiple more than 2, each must accommodate 1 drying frame.

• Dimensions (W x D x H): 27 x 43 x 30 cm approx.

• The system should run at 220-240V, 50Hz.

6. Vacuum Blotter System:

 Should include compatible vacuum pump, vacuum regulator, base with vacuum stage, porous vacuum plate, reservoir seal O-ring, sealing frame, assorted window gaskets, lid, and should run at 220/240V, 50Hz.

7. Power Supply:

a) High voltage:

• Programmable high voltage power supply for 5000V / 500mA / 400W with constant Volt / Current /Power operating mode with automatic crossover

- Built-in timer range 0-999min
- At least Four output terminal
- Auto power recovery feature will be preferred.

• The system should have "No Load Detection" capability

B) High current:

- Should be a broadest range of power supply for broadest range of application.
- Programmable High Current Power Supply for 500V / 2.5 A / 500W

• Constant Voltage / Constant Current / Power Operating Mode with automatic crossover features will be preferred. • Should have built-in Timer Range: 0 – 99hr, 59min

- No. of output jacks: 04 (four) or more sets in parallel
- Auto power recovery will be preferred.
- Programmable methods should be stored.

8. Iso-Electric Focusing System:

- Integrated peltier cooling platform (~10 40°C) and programmable high voltage power supply.
- Voltage: 0 10,000 volts approx., Current: 0 3 milliamperes (approx.), Power: 24 watts

• Immobilized pH gradient (IPG) strip chamber accommodates 7 – 24 cm length strips, and 1 – 12 strips per tray.

• User Interface control panel may contain 12 key alpha-numeric keypad with 4 softkeys and 3 function keys, backlit graphics display, and 4 lines by 22 characters.

• Programmable parameters must contain: rehydration and focusing time, platform temperature, current limit per strip, voltage, and voltage ramping type for each step etc.

- Choice of three voltage ramping profiles: Rapid, Linear, Slow (Preferred)
- Should be equipped with programmable capacity.

Additional items should be quoted:

Sample enrichment / Pre-fractionation based on Iso-electric point in "liquid":Microrotofor Cell

- 2D Software for Image Analysis
- Warranty of at least Two year from the date of successful installation in the lab.

Technical Specification for minor instruments

SI No.	Name of Istruments	Technical Specification
36	Moisture Balance	
37	Clarity test apparatus	Instrument should be robust in design.
38	Hardness tester	Instruments should be from reputed make
39	Histamine Chamber	and shall comply guidelines of
40	Plethysmograph	pharmacopeia.
41	Spygmomanometer	Optimum Quality Material And Advance
42	Standard sieves no.	Technology
	8,10,12,22,44,66,80	Accurate Measuring Capacity
43	Stereotaxic apparatus	• Easy To Use or user friendly.
44	Sterility tester	Designed By Experts
45	Vacuum pump	Complies To International Quality Norms.
46	Colony Counter	
47	Desiccators	
48	Digital thermometer	
49	Dissection tray & boards	Instrument should be robust in design.
50	Franz Diffusion cell	 Instruments should be from reputed make
51	Haemocytometer with micropipettes	- and shall comply guidelines of
52	Hemostatic artery forceps	pharmacopeia.
53	Levers, cannula	Optimum Quality Material And Advance
54	Lucas moist chamber	 Technology
55	Metabolic cage	Accurate Measuring Capacity
56	Mortar and Pestle	 Easy To Use or user friendly.
57	muscle electrodes	 Designed By Experts
58	Myographic lever	 Complies To International Quality Norms.
59	Sahli's haemocytometer	
60	Humidity Chamber	
61	Stimulator	



CENTRAL UNIVERSITY OF SOUTH BIHAR

SH-7, Gaya- Panchanpur Road, Village- Karhara, Post- Fatehpur, P.S- Tekari, District- Gaya (Bihar) PIN- 824 236

CERTIFICATE

(to be provided on letter head of the firm)

I hereby certify that the above firm has not been ever blacklisted by any Central/State Government/Public Undertaking/Institute on any account.

I also certify that the above information is true and correct in all respect and in any case at a later date, if it is found that any details provided above are incorrect, then the contract given to the above firm may be summarily terminated and the firm may be blacklisted.

Date:

Place:

Authorized Signatory Name:

Seal

Designation:

Contact No.:



<u>AFFIDAVIT</u>

- 1. I/We the undersigned do hereby certify that all the statements made in the required attachments are true and correct.
- 3. The undersigned hereby authorize and request any bank, person, firm or Corporation to furnish pertinent information deemed necessary as requested by the Central University of South Bihar, to verify this statement or regarding my (our) competence and general reputation.
- 4. The undersigned understands and agrees that further qualifying information may be requested, and agrees to furnish any such information at the request of the Central University of South Bihar.

(Signed by an Authorized Officer of the Firm)

Title of Officer

Name of Firm

Date:



CENTRAL UNIVERSITY OF SOUTH BIHAR

SH-7, Gaya- Panchanpur Road, Village- Karhara, Post- Fatehpur, P.S- Tekari, District- Gaya (Bihar) PIN- 824 236

Undertaking

Name of the work :

:

Tender No.

We confirm that we have quoted the rates in the tender considering Inter-alia the

- 1. Tender Document(s) with all Annexures, Scope of Vendor
- 2. Additional Document(s), if any
- 3. BOQ Document (Price Bid Format)
- 4. Corrigendum, if any
- 5. Pre Bid Meeting Minutes, if any

We, ________ (Name of the Tenderer) hereby certify that we have fully read and thoroughly understood the tender requirements and accept all Terms and Conditions of the tender including all corrigendum/addendum issued, if any. Our offer is in confirmation to all the terms and conditions of the tender including all corrigendum/addendum, if any and minutes of the pre-bid meeting. In the event, our offer is found acceptable and contract is awarded to us, the complete tender document shall be considered for constitution of Contract Agreement.

Signed for and on behalf of Tenderer(s)

Name of Tenderer(s)

Date : _ _/_ _/_ _ _ _

Place :

Seal & Signature of Tenderer

Note :

This declaration should be signed by the Tenderer's authorized representative on COMPANY LETTERHEAD who is signing the Bid and to be submitted with tender.



SH-7, Gaya- Panchanpur Road, Village- Karhara, Post- Fatehpur, P.S- Tekari, District- Gaya (Bihar) PIN- 824 236

FINANCIAL BID PROFORMA

Tender Notice No.: CUSB/PSD/PHARMA/TENDER/12/2020-21, Date: 17/12/2020 Subject: Supply & Installation of "Laboratory Equipments" for Deptt. of Pharmacy. Name of the Bidder: _____

SI. No.	Item description with specification (Attach separate sheet, if required)	Qty. (Nos.)	Warranty (in Years)	GST* @	Unit price (Rs.) Inclusive GST, delivery, installation & Other charges	Total price (Rs.) GST, delivery and installation
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.	Please add column as per requirement					
	Total Basic Amount (Rs.)					
	Total Amount with GST (Rs.)					
Total A	Total Amount in words (Rs.) ())	

Note: No overwriting or use of whitener is permitted. If done then it will be summarily rejected.

*University provides DSIR Certificate for exemption of GST @ 5% .

Date:

Signature Name: Designation & seal