

E TENDER DOCUMENT

FOR

**Supply, installation, commissioning &
maintenance of
UV-VISIBLE SPECTROPHOTOMETER for
Department of Chemistry**

TECHNICAL BID

PART - I

Year-2025

**I.K. GUJRAL PUNJAB TECHNICAL UNIVERSITY
JALANDHAR-KAPURTHALA HIGHWAY,
KAPURTHALA (PIN 144603), PUNJAB.**

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PART – II:

FINANCIAL BID



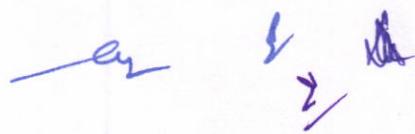
**I.K. GUJRAL PUNJAB TECHNICAL UNIVERSITY JALANDHAR-
KAPURTHALA HIGHWAY, KAPURTHALA**

NOTICE INVITING TENDER

(E-Tendering mode)

I.K. Gujral Punjab Technical University, Kapurthala (Punjab) intends to float open e - tender for Supply, installation, commissioning & maintenance of UV-VISIBLE SPECTROPHOTOMETER for Department of Chemistry, as per the details given below:

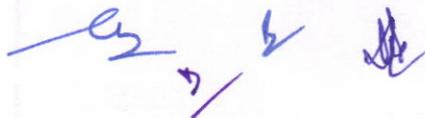
Name of work	Supply, installation, commissioning & maintenance of UV-VISIBLE SPECTROPHOTOMETER for Department of Chemistry
The Currency in which payment shall be made	Indian Rupees (INR)
Last Date for uploading of Bids	<u>23/06</u> /2025 at 05.00 P.M.
Date of Opening of Technical Bids	<u>25/06</u> /2025 at 02.00 P.M
Date of Opening of Financial Bids	To be intimated later to the bidders, who will qualify technical bid.
Processing Fee	Processing Fee (as mentioned on the web portal) shall be paid through online mode only on Punjab Government e-procurement portal
Bid document Fee	Rs.1180/- (Inclusive of GST(applicable)) Mode of payment: online (https://eproc.punjab.gov.in)
EMD	Rs. 75,000/- (Mode of payment: online(https://eproc.punjab.gov.in))
Bid Validity	90 days
Period of Supply	45 days From issuance of Supply Order
Delivery	Delivery Local at IKGPTU



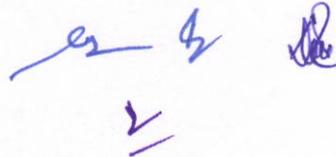
I.K. GUJRAL PUNJAB TECHNICAL UNIVERSITY

Indicators to Bidders

1. For participating in the above e-tendering process, the bidders shall have to get them registered at <https://eproc.punjab.gov.in> and get user ID and password digital signatures is mandatory to participate in the e-tender process. For any clarification/difficulty regarding e-tendering process, please contact Help Desk Number 0172-2970263, 0172-2970284 (on Government working days from 09:00 AM to 05:00 PM) or call at 24 X 7 Help Desk Number 0120-4200462, 0120-4001002, 0120-4001005, 0120-6277787. International bidders are requested to prefix 91 as the country code. The tender document can be downloaded from Punjab Government e-procurement website: - <https://eproc.punjab.gov.in> and www.ptu.ac.in.
2. Both bids Technical (in pdf format) and Financial (in .xls format)) should be uploaded on the E-procurement portal (<https://eproc.punjab.gov.in>). No manual bids will be accepted.
3. Corrigendum and addendum (if any) will be uploaded only on E-procurement portal (<https://eproc.punjab.gov.in>) and/or IKGPTU website (www.ptu.ac.in). Bidders are advised to visit web page from time to time and update themselves.
4. The Tender Document fee, Tender Processing fee and E.M.D. should be deposited/paid through online mode as per <https://eproc.punjab.gov.in> system No other mode(s) will be accepted.
5. Bids must be submitted online through <https://eproc.punjab.gov.in> before the time specified in the table (as per system clock). Department/Service provider does not take any responsibility for the delay caused due to non-availability of internet connection or network traffic for online bids.
6. Bidders shall upload scanned copy of all the papers i.e. proof of PAN Card, GST No. and other documents mentioned in the subsequent pages of tender document.
7. Uploaded documents of valid successful bidders may be verified with the original documents. The valid successful bidder has to provide the original documents to the concerned authority on receipt of Information/ Communication from The IKG PTU, which may be sent though registered post/E-mail.
8. Bidders are advised to start the uploading process well in time and not leave it to the last minute as the same may take time because of the data involved.



9. If the date of opening of tenders happens to be a public holiday/holiday declared by the University, then the tenders will be opened on next working day at the same time and place.
10. Award of Work: Each vendor will submit rate for required item in the Financial Bid. IKGPTU will award the work to the bidder quoting lowest rate, among the technical bid qualified bidders.
11. IKGPTU reserves the right to cancel the tenders or postpone the tender and to accept/reject any or all tenders without assigning any reason(s) thereof.
12. Bidders may note that they are liable to be disqualified at any time during the tendering process in case any of the information furnished by them is not found to be true. EMD/Performance Security of such tenderer shall be forfeited. The decision of IKGPTU in this regard shall be final and binding.
13. The validity of the offer shall be 120 days after the date of opening of the tender. If any bidder withdraws tender within the validity period or does not start the work within stipulated period from the date of issue of letter of acceptance, then IKGPTU shall without prejudice to any other right or remedy, be at liberty to forfeit the EMD deposited/Performance Security by the bidder. In case of forfeiture of EMD/Performance Security, the bidder shall be debarred from bidding in case of re-invitation of the tenders.



GENERAL TERMS AND CONDITIONS

- 1. Parties:** The parties to the Contract are the contractor (the bidder to whom the work has been awarded) and I.K. GUJRAL PUNJAB TECHNICAL UNIVERSITY
- 2. Addresses:** For all purposes of the contract including arbitration there under, the address of the contractor mentioned in the tender shall be final unless the contractor notifies a change of address by a separate letter sent by registered post with acknowledgement due to the Registrar I.K. GUJRAL PUNJAB TECHNICAL UNIVERSITY, Jalandhar-Kapurthala Highway, Kapurthala (PIN-144603), Punjab. The contractor shall be solely responsible for the consequences of any omission or error to notify change of address in the aforesaid manner.

3. Earnest Money:

- 3.1** Earnest money submit as per Punjab Government e-procurement online (<https://eproc.punjab.gov.in>). The earnest money so deposited shall not earn any interest. Tenders without earnest money will be outrightly rejected. The details of Earnest money is given as under:-

Tender	Items	Earnest money (in Rs.)
Open Tender	Supply, installation, commissioning & maintenance of UV-VISIBLE SPECTROPHOTOMETER for Department of Chemistry	75,000/-

- 3.2** No request for transfer of any previous deposit of earnest money or security deposit or payment of any pending bill held by the University in respect of any previous work will be entertained.
- 3.3** Bidders shall not be permitted to withdraw the offer or modify the terms and conditions thereof. In case the tenderer fails to observe and comply with the stipulations made herein or backs out after quoting the rates, the aforesaid EMD/Performance Security will be forfeited. In case the tenderer is offered to supply a single item then it is mandatory to supply the single item, failing which the EMD/performance security will be forfeited.
- 3.4** The bidders without Earnest Money will be summarily rejected.
- 3.5** A party who does not qualify technical bid, its EMD will be returned after completion of tender process.



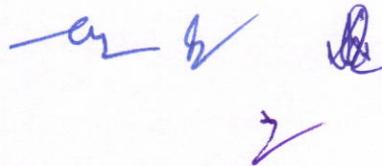
4. Signing of Tender:

Individual signing the tender or other documents connected with contract must specify whether he signs as:

- (a) A "sole proprietor" of the concern or constituted attorney of such sole proprietor.
- (b) A partner of the firm, if it be a partnership firm, in which case he must have authority to execute contracts on behalf of the firm and to refer to arbitration disputes concerning the business of the Partnership either by virtue of the partnership agreement or by a power of attorney duly executed by the partners of the firm.

N.B.

- (1) In case of partnership firms, a copy of the partnership agreement, or general power of attorney duly attested by a Notary Public should be furnished on stamped paper duly sworn of affirmed by all the partners admitting execution of the partnership agreement or the general power of attorney. A Self attested copy of the certificate of registration of firm should also be enclosed along with the tender.
- (2) In the case of partnership firms, where no authority to refer disputes concerning the business of partnership firm has been conferred on any parties, the tender and all other related documents must be signed by all partners of the firm.
- (3) A person signing the tender form or any documents forming part of the tender on behalf of another person should have an authority to submit bid, and if, on enquiry it appears that the persons so signing had no authority to do so, the University may without prejudice cancel the contract and hold the signatory liable for all costs, consequences and damages under the civil and criminal remedies available.
- (4) The tenderer should sign and affix his/his firm's stamp at each page of the tender and all its Annexure as the acceptance of the offer by the tenderer will be deemed as a contract and no separate formal contract will be drawn. **NO PAGE SHOULD BE REMOVED/DETACHED FROM THIS TENDER DOCUMENT.**

Handwritten signatures in blue ink, consisting of three distinct marks: a long horizontal stroke with a small loop at the end, a checkmark-like symbol, and a more complex, stylized signature.

5. Technical Bid:

- 5.1 The Technical bid should be submitted online on (<https://eproc.punjab.gov.in>) in form given in **Technical Information, along with all other supporting documents in pdf format.**

6. Financial Bid:

- 6.1 The Financial Bid should be submitted online for the as per tender document in xlsx format as per Punjab Government e-procurement online (<https://eproc.punjab.gov.in>). **Please note financial bid not to be uploaded with** technical bid documents.

7. Validity of the Bids:

The bids shall be valid for a period of 120 days as indicated in Notice inviting e tender from the date of opening of the tender.

8. Criterion for Evaluation of Tender:

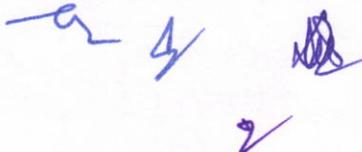
The evaluation of the tenders will be made first based on technical information furnished in form given in **Technical Bid** and then on the basis of commercial information furnished in format given in **Financial Bid**. The Financial bid of such firms found valid based on technical parameters (as per **Technical Information and Undertaking**) will be opened online as per (<https://eproc.punjab.gov.in>) system. The supply order will be issued to the firm quoting lowest rate.

9. Right of Acceptance:

The Registrar, I.K. GUJRAL PUNJAB TECHNICAL UNIVERSITY reserve all rights to reject any tender including of those tenders who fail to comply with the instructions without assigning any reason whatsoever and does not bind itself to accept the lowest or any specific tender. The decision of Registrar, I.K. GUJRAL PUNJAB TECHNICAL UNIVERSITY in this regard shall be final and binding.

10. Communication of Acceptance:

The Bidder will be informed about the acceptance of his tender.



11. EMD/Performance security deposit:

11.1 The Earnest money (EMD) deposit of the successful contractors shall remain with IKGPTU as a performance security and shall be released on satisfactory completion of the procurement process (Supply, Installation and commissioning). However, the EMDs of Unsuccessful bidders will be released after completion of the tender process, as per rules. It is mandatory to supply the items even the party is offered for the supply of a single item.

11.2 EMD/Performance Security can be forfeited by order of the Registrar, in the event of any breach or negligence or non-observance of any terms/condition of contract or for unsatisfactory performance or for non-acceptance of the work order. On expiry of the contract, such portion of the said performance security as may be considered by the Registrar, I.K. GUJRAL PUNJAB TECHNICAL UNIVERSITY sufficient to cover any incorrect or excess payments made on the bills to the firm, shall be retained until the final audit report on the account of firm's bill has been received and examined.

12. Penalty:

After the issuance of supply order for the required item, if the vendor refused to supply the required item, EMD/Performance Security shall be forfeited

13. Breach of Terms and Conditions:

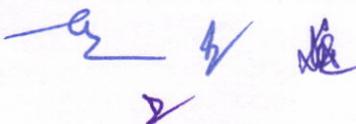
In case of breach of any of terms and conditions mentioned above, the Competent Authority will have the right to cancel the supply order without assigning any reason thereof, and nothing will be payable by the University in that event and the performance security shall be encashed. In the event of the vendor/contractor becoming insolvent or going into liquidation, IKGPTU shall be entitled to treat such insolvency/liquidation as a breach of contract from the moment it occurs.

14. The tender is non-transferable.

15. Terms of payment:

15.1 No payment shall be made in advance nor any loan from any bank or financial institution shall be recommended on the basis of the order of award of work.

15.2 The tenderer shall submit the bills immediately after **Supply, installation, commissioning & maintenance of UV-VISIBLE SPECTROPHOTOMETER for Department of Chemistry**



- 15.3** All the payments shall be released after receiving the bills from the tenderer and the satisfactory report from the concerned department.
- 15.4** Registrar, IKGPTU shall be at liberty to withhold any of the payments in full or in part subject to recovery of penalties mentioned in preceding para.
- 15.5** The term "payment" mentioned in this para includes all types of payment due to the contractor arising on account of this contract excluding Earnest Money/performance security/governed by the separate clauses of the contract.

16. Territorial Jurisdiction

All the disputes out of item of tender shall be subject to Kapurthala Jurisdiction courts.

- 17.** The rate quoted by bidders' firm for items mentioned in the tender document should be inclusive of all taxes.
- 18.** The selected firm(s) has to **Supply, installation, commissioning & maintenance of UV-VISIBLE SPECTROPHOTOMETER for Department of Chemistry** after successfully receiving the purchase order.
- 19.** The Equipment supplied by the firm should be as per specifications mentioned in the tender document, sub-standard item will not be accepted at all.

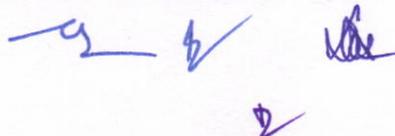
20. Packing Instructions

Each package will be marked on three sides with proper paint/ indelible ink, the following:

- a) Item Nomenclature
- b) Supply Order/Contract No
- c) Country of Origin of Goods
- d) Supplier's Name and Address
- e) Consignee/Purchaser details
- f) Packing list reference number

All packing should be strong enough to withstand rough handling during loading unloading and transporting. Fragile articles should be packed with special precaution and should bear the marking like Fragile, handle with care, This side up etc. All delicate surfaces of equipment/goods should be carefully protected and painted with protective paint/ compound and wrapped to prevent rusting and damage.

Attachments and spare parts and all small pieces should be packed with adequate protections and wherever possible should be sent along with the



major items. Each item should be tagged so as to identify it with the main equipment and part number and reference number should be indicated.

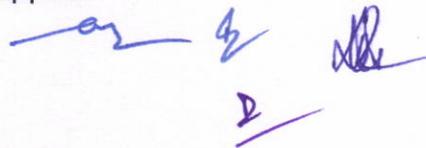
All protection and threaded fittings should be suitably protected and covers should block the openings.

21. Unloading and Unpacking

Unless specified otherwise in the purchase order, Unloading and storage of the same at the designated place should be undertaken by the supplier. The Unpacking of the materials should also be arranged by Supplier

22. Defective/Damaged Equipment

- a) If any of the equipment supplied by the Tenderer is found to be faulty or not in accordance with the description/specifications, If it is not replaced, the amount is to be refunded. If the replacement is not possible or the equipment is not operational/working the full equipment to be either replaced or returned. If returned, the amount to be refunded with interest @ 12% EMD to be forfeited.
- b) All damaged (during transportation) or unapproved goods should be returned at suppliers' cost and risk and the incidental expenses incurred thereon should be recovered from the supplier. Defective part in equipment, if found before installation and/or during warranty period, should be replaced within 15 days on receipt of the intimation from this office at the cost and risk of supplier including all other charges. In case supplier fails to replace above item as per above terms & conditions, I.K. Gujral Punjab Technical University Main Campus, Kapurthala (Punjab) should consider "Banning" the supplier.



Registrar

I.K.GUJRAL PUNJAB TECHNICAL UNIVERSITY

Supplying, Installation and Commissioning Of Applied Thermodynamics Lab Equipments

PRE QUALIFICATION CRITERIA

1. Bidders should have average annual financial turnover of at least (45 Lacs) for the three financial years 2022-23, 2023-24 and 2024-25 (Attach proof attested by CA).
2. Bidders should have PAN No. in his or in the name of firm, as applicable (Attach attested photocopy).
3. The bidder's firm must be registered under GST and submit the GST certificate.
4. The Bidder must have successfully executed at least one supply order of Rs. 12 Lacs or least two supply order of Rs.7.5 Lacs Laboratory equipment to Govt./PSU's/Autonomous bodies/ Govt. Institutions such as IIT's/NIT's/IIIT's/Central Universities/ State Universities during last three financial years for which necessary supporting documents have to be enclosed.
5. Only Original Equipment Manufacturer (OEM)/ agency of OEM/ authorized dealer having minimum 3 years of experience in execution of Laboratory Equipment/ Instrument supplies should apply against this invitation for bid. In the case of the bidder, offering to supply Equipment/Instrument under the bid, which the bidder does not manufacture or otherwise produce, the bidder has to provide *Manufacturer's Authorization Certificate as per format at Annexure I. Bids submitted without valid authorization certificate will be summarily rejected. Authorization certificate from OEM is essential for all the items of supply under scope of work.*
6. **Undertaking** as per the attached format. (Annexure-II)





Registrar

**I.K.GUJRAL PUNJAB TECHNICAL UNIVERSITY
Technical Bid Documents**

S.No.	Description	Yes/No	Mark the page no.
1	Name of the Tenderer/Concern (i.e. Sole Proprietor or Partnership firm or a Company etc.		
2	Address E-Mail		
3	Mobile No.		
4	PAN Number of Tenderer/Concern (Self attested copy should be attached)		
5	GST registration certificate (Self attested copy should be attached)		
6	Annual financial turnover of firm with reference to Sr. No. 1 of pre-qualification criteria (Attach Proof.) 2022-23, 2023-24 and 2024-25		
7	Details of relevant experience self (Attested photocopies of work orders for 03 years as per tender document) and proof of satisfactory completion of Supplying, Installation, Commissioning and Engg. Equipment to be attached. F/Y 2022-23, 2023-24 and 2024-25		
8	Whether each page of Tender have been signed and stamped (Yes/No)		
9	Undertaking as per format (Annexure-II)		

(Handwritten signatures and marks)

MANUFACTURER AUTHORIZATION FORM

No. _____ dated _____

To

Dear Sir:

Bid No. _____

We _____ who are established and reputed manufacturer of _____ (name and description of goods offered) having factory at _____ (address of factory) with factory registration no. _____ do hereby authorize M/s _____ (Name and address of Agent) to submit a bid, and sign the contract with you for the goods manufactured by us against the above bid.

We hereby extend our full warranty as per Clause 3 of the Conditions of Contracts, for the goods and services offered for supply by the above firm against this Invitation for Bid. We further certify that we shall support vendor with all related spares and maintenance during the entire contract period including the period of 02 years warranty followed by AMC for 03 years for the date of commission.

Yours faithfully,

(Name): _____

(Name of manufacturers):

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



UNDERTAKING

1. I/We undertake that I/we have carefully studied all the terms and conditions and understood the parameters of the proposed work of the IKGPTU and shall abide by them.
2. I/We also undertake that I/we have understood "Parameters and Technical specifications for Supplying, Installation and commissioning of UV-VISIBLE SPECTROPHOTOMETER for Department of Chemistry mentioned in Pre-Qualification criteria and shall execute the work strictly as per the parameters.
3. I/We further undertake that the information given in this tender are true and correct in all respects and I/We hold responsibility for the same.
4. I/We undertake that I/We neither blacklisted by any government department/ PSU/Autonomous Body nor any criminal case is registered against the firm of sister concerned.
- 5.

Dated:.....

Place:.....

**(Signature of tenderer)
With stamp of the firm**

Handwritten signatures in blue ink, including a large signature and a smaller one below it.

UNDERTAKING

1. I/We undertake that I/we have carefully studied all the terms and conditions and understood the parameters of the proposed work of the IKGPTU and shall abide by them.
2. I/We also undertake that I/we have understood "Parameters and Technical Specifications for **Supplying, Installation, and Commissioning of UV-VISIBLE SPECTROPHOTOMETER for Department of Chemistry** mentioned in **Pre-Qualification Criteria** and shall execute the work strictly as per the parameters.
3. I/We further undertake that the information given in this tender are true and correct in all respect and I/we hold the responsibility for the same.
4. I/We undertake that I/We neither blacklisted by any government department/PSU/Autonomous Body nor any criminal case is registered against the firm or sister concerned.

Dated:
Place :

**(Signature of Tenderer
With stamp of the firm)**

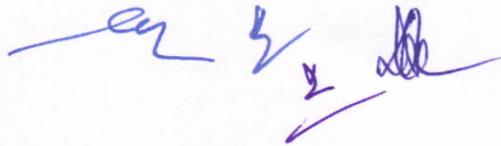



I.K. Gujral Punjab Technical University

Proper Specifications of Required Item

Sr. No.	Name of Equipment	Technical Specification(required) Equipment/Item with specifications	Quantity	Specifications (offered)	Whether comply (Yes/No)
1.	UV-Visible Spectrophotometer	<p>Photometric System: Double beam optics Photometric range: Absorbance: -4 to +4.0 Abs, Transmittance: 0.0 to 400% Photometric accuracy: +/- 0.0015 Abs. at 0.5 Abs or better Wavelength Range: 190 nm to 1100 nm or better Wavelength Accuracy: +/- 0.05 nm at D2 peak 656.1 nm ± 0.3 nm or less in entire range Wavelength Repeatability: +/- 0.025 nm or better Photometric Repeatability: < +/- 0.00005 Abs at 0.5 Abs or lesser < +/- 0.00005 Abs at 1 Abs or lesser < +/- 0.00008 Abs at 2 Abs or lesser Scanning speed: 20,000 nm/min or better Spectral Bandwidth: 1 nm or better Stray light: < 0.005 % at 220 nm (NaI) or lesser < 0.005 % at 340 nm (NaNO₂) or lesser < 0.2% at 198 nm (KCl) or lesser Baseline Stability: less than 0.0002 Abs/H Baseline Flatness: less than 0.0003 Abs/H Noise Level: Less than 0.00001 Abs Monochromator: Czerny Turner blazed holographic grating Detector: Silicone photodiode USB Port connectivity: 2-3 USB ports for data Transfer, PC, Printer Light source: Tungsten and Deuterium lamp Life time (Tungsten lamp)-5000 hrs Life time (Deuterium lamp)-2000 hrs Quartz Cuvette: Path length of 10 mm (04 Pairs) Temperature Controller with stirrer: Temperature range 7 to 60 Deg C or better for sample as well as reference (Peltier based temperature controller). Software: 1. The system should be complete in all respects to make it operational. It should be supplied with instruction manuals, pre-loaded softwares, necessary cables, power extensions, and other required accessories. The transfer of digital data files (For eg. ASCII files) to Excel/Origin and processing should be possible. 2. The system should have built in features like real time concentration display, Photometric mode Single /multi-wavelength, Enzyme Kinetics calculation, event recording such as Addition of reagents during measurement, DNA/protein quantification etc. 3. Spectrophotometer should have built-in color touch screen display so that it can be used without PC/Laptop also.</p>	1		

	<p>Computer: Branded PC Core i7, 16 GB RAM, 512 GB SSD, 24 LED Monitor, optical mouse, keyboard, Licensed Windows 10 Professional</p> <p>Laserjet Printer: 1. A4 Black and White Laser Multifunction Printer 2. Print Copy, Scan, Duplex, ADF</p> <p>3. Print speed up to 21 ppm (black)</p> <p>4. USB, Ethernet networking</p> <p>5. Duplex printing-Automatic</p> <p>6. Automatic paper sensor-Yes</p> <p>UPS: Compatible online UPS (3KVA) with 60 minutes back up</p> <p>Warranty: Comprehensive Three Years followed by two years comprehensive annual maintenance on Spectrophotometer, PC , UPS and Printer</p> <p>Except computer and UPS, all components should be from original Equipment Manufacturer</p>			
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TENDER DOCUMENT

FOR

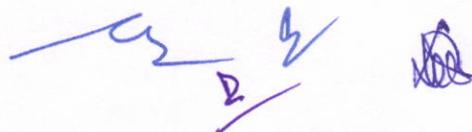
**Supplying, Installation and Commissioning
of Applied Thermodynamics Lab Equipment**

FINANCIAL BID

PART - II

Year -2025

**I.K.GUJRAL PUNJAB TECHNICAL UNIVERSITY
JALANDHAR-KAPURTHALA HIGHWAY,
KAPURTHALA (PIN 144603)
PUNJAB**



(Financial Bid Document should be Upload online on .xls)

Sr. No.	Name of Equipment	Technical Specification(required) Equipment/Item with specifications	Qty	Rate Inclusive of GST, FOR IKGPTU, Kapurthala
1.	UV-Visible Spectrophotometer	<p>Photometric System: Double beam optics Photometric range: Absorbance: -4 to +4.0 Abs, Transmittance: 0.0 to 400% Photometric accuracy: +/- 0.0015 Abs. at 0.5 Abs or better Wavelength Range: 190 nm to 1100 nm or better Wavelength Accuracy: +/- 0.05 nm at D2 peak 656.1 nm ± 0.3 nm or less in entire range Wavelength Repeatability: +/- 0.025 nm or better Photometric Repeatability: < +/- 0.00005 Abs at 0.5 Abs or lesser < +/- 0.00005 Abs at 1 Abs or lesser < +/- 0.00008 Abs at 2 Abs or lesser Scanning speed: 20,000 nm/min or better Spectral Bandwidth: 1 nm or better Stray light: < 0.005 % at 220 nm (NaI) or lesser < 0.005 % at 340 nm (NaNO2) or lesser < 0.2% at 198 nm (KCl) or lesser Baseline Stability: less than 0.0002 Abs/H Baseline Flatness: less than 0.0003 Abs/H Noise Level: Less than 0.00001 Abs Monochromator: Czerny Turner blazed holographic grating Detector: Silicone photodiode USB Port connectivity: 2-3 USB ports for data Transfer, PC, Printer Light source: Tungsten and Deuterium lamp Life time (Tungsten lamp)-5000 hrs Life time (Deuterium lamp)-2000 hrs Quartz Cuvette: Path length of 10 mm (04 Pairs) Temperature Controller with stirrer: Temperature range 7 to 60 Deg C or better for sample as well as reference (Peltier based temperature controller). Software: 1. The system should be complete in all respects to make it operational. It should be supplied with instruction manuals, pre-loaded softwares, necessary cables, power extensions, and other required accessories. The transfer of digital data files (For eg. ASCII files) to Excel/Origin and processing should be possible. 2. The system should have built in features like real time concentration display, Photometric mode Single /multi-wavelength, Enzyme Kinetics calculation, event recording such as Addition of reagents during measurement, DNA/protein quantification etc. 3. Spectrophotometer should have built-in color touch screen display so that it can be used without PC/Laptop also. Computer: Branded PC Core i7, 16 GB RAM, 512 GB SSD, 24 LED Monitor, optical mouse, keyboard, Licensed Windows 10 Professional</p>	1	

	<p>Laserjet Printer: 1. A4 Black and White Laser Multifunction Printer 2. Print Copy, Scan, Duplex, ADF</p> <p>3. Print speed up to 21 ppm (black)</p> <p>4. USB, Ethernet networking</p> <p>5. Duplex printing-Automatic</p> <p>6. Automatic paper sensor-Yes</p> <p>UPS: Compatible online UPS (3KVA) with 60 minutes back up</p> <p>Warranty: Comprehensive Three Years followed by two years comprehensive annual maintenance on Spectrophotometer, PC , UPS and Printer</p> <p>Except computer and UPS, all components should be from original Equipment Manufacturer</p>	
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