VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY



Website : www.vssut.ac.in, E-mail: registrar@vssut.ac.in,Ph:(0663)2430573,Fax-2430592

No. VSSUT/ CHEM/ 119 2017

Date: 01/03/2017

TENDER CALL NOTICE

Sealed Tenders are invited from the intending reputed Original Equipment Manufacturers/authorized distributors/ Registered Authorized Dealers for supply of scientific equipment for a DST sponsored research project of Department of Chemistry, VSSUT. Detailed information and the tender document are available in the University website www.vssut.ac.in.

REGISTR

Dated:01/03/2017

Memo No. VSSUT/CHEM/ 120 (9) 2017

Copy to:

1) M/s Display lines, 219, Saheed Nagar, Bhubaneswar-751007 with a request to publish the above advertisement in one issue of the Odisha daily edition (ALL ODISHA EDITION) of THE SAMAJ and The Indian Express (All India Edition) using minimum space at I & PR approved/lowest rates. The bills in TRIPLICATE along with copies of the paper in which the publication is made, for necessary payment.

2) The University/Department Notice Board for publicity.

3) Dr. M Mohapatra, PI of the project for information and necessary action.

4) Dean F&P, with a request to hoist the tender call notice in the University web site www.vssut.ac.in for wide publicity.

5) HOD, Chemistry for kind information

6) COF, VSSUT, for information and necessary action. This is chargeable to the equipment head of DST project File No: ECR/2016/000692, Dated. 13.12.2016.

7) Registrar for information

8) Dean, SRIC for kind information and necessary action.

9) PA to VC for kind information of Hon'ble Vice-Chancellor

REGISTRA

SECTION I: INVITATION FOR BIDS (IFB)

Sealed Bids (properly stitched separately) in two separate covers (Technical Bid and Price Bid) are invited by the "The Registrar, Veer Surendra Sai University of Technology, Odisha" from the manufacturers/authorized distributors/ dealers for supply of scientific equipment of reputed make (National/International) for the Department of Chemistry, VSSUT Burla, Odisha.

The Bidders may download the **Tender Documents** directly from the website available at **http://www.vssut.ac.in.**The EMD amount should be submitted in demand draft. In case of any bid clarification, responsibility lies with the bidders to collect the same from the website and the purchaser shall have no responsibility for any delay/ omission on part of the bidder.

TIME SCHEDULE:

a) Date of commencement of downloading bidding document 02.03.2017 at 11.00 AM

b) Last date and time for Receipt of bids 17.03.2017 up to 5.00 PM

c) Time and date of opening of Tender & technical bid 20.03.2017 at 11.30 A.M

d) PLACE OF OPENING OF TENDER AND ADDRESS FOR COMMUNICATION AND RECEIPT OF BID DOCUMENTS:

THE REGISTRAR

VEER SURENDRA SAI UNIVERSITY OF TECHNLOGY, ODISHA At- Burla, Po-Burla Engineering College, Dist-Sambalpur-768018, Tel. No-0663-2430211 Fax No-0663–2430204

REGISTRAR VSSUT Burla

SECTION-II: GENERAL TERMS AND CONDITIONS

GENERAL TERMS & CONDITIONS OF CONTRACT FOR SUPPLY, INSTALLATION AND DEMONSTRATION OF THE INSTRUMENTREQUIRED FOR DEPARTMENT OF CHEMISTRY, VSSUT, BURLA, ODISHA.

1. Document Establishing Bidder's Eligibility & Qualification

The Bidders shall furnish as part of the Bid the following Documents establishing Bidder's eligibility and qualification to the Purchaser's satisfaction. Non-compliance of any of these conditions shall disqualify the eligibility.

- 1.1 Manufacturers/authorized distributors/ dealers having valid license / certificates for the quoted item and the direct Importers holding valid Import License Manufacturer / Authorized Distributor / Dealer of the product are eligible to participate in the Bid.
- 1.2 The Bidder whether manufacturer/ distributor/ dealer must have experience of supply and installation of the quoted items in **different IITs/ NITs/ Institutes of national repute** during last preceding 3(Three) years reckoned from the date of bid opening and the details must be submitted along with documentary proof.
- 1.3 The Bidders shall have to produce document in support of their service associates
- 1.4 Bidder shall have to provide operational Training for **Machineries** to one Official of each consignee at Suppliers Plant or Consignee site **at least for 7 days whichever is suitable to Purchaser.**
- 1.5 The Bidder shall quote item of one reputed Brand/model with all accessories in complete to perform functionality of Equipment/Machinery.

2. Document Establishing Goods Eligibility

The instruments and equipment offered against the schedule of requirement of instruments, equipment and Machineries should be in accordance with the stipulated specifications and of one reputed brand/model (**N.B: Variation in specification is allowed upto±5% in case of Equipment)**

- 2.1 The documentary evidence establishing the brand and the model may be in the form of literature, pamphlets, manuals, drawing, circuit diagram etc.
- 2.2 Detailed description of instruments and equipment with essential technical and performance characteristics may also be furnished.

3. Technical Bid (COVER - A)

The following document should be submitted in cover-A.

- 3.1 Technical details of the equipment as per Annexure-V.
- 3.2 Copy of the manufacturing license/ import license/ Authorized Distributor/ Dealer certificates

- 3.3 Copy of the authorization from the Manufacturing Company in case of Authorized Distributor /Dealer.in Annexure-III along with Manufacturer Industry Registration and Tax Registration Certificate.
- 3.4 VAT/ST clearance certificate up to **date** where applicable.
- 3.5 Copy of the IT PAN Card.
- 3.6 Detail name, address, telephone no. fax, and e-mail of the firm and of the Director / Managing Director / Proprietor of the firm (As per **Annexure IV**)
- 3.7 Address, Telephone No., e-mail, Fax of the Branch Office/ Contact Person/ Liaisoning Office in Odisha.
- 3.8 Power of Attorney/ Authorization to a person for liaisoning and monitoring the business on behalf of the manufacturer / bidder but not entitled to raise the bills.
- 3.9The original bid document signed & sealed by authorized person in each page as a token of acceptance of all terms and conditions of the tender with original receipt.
- 3.10 Any deviation in the specification of the item including standard accessories / optional accessories in complete for functionality of Machine should be marked in **bold letters. (N.B:** Variation in specification is allowed upto±5% in case of Machineries/Equipment)
- 4. Price Bid (COVER B)
- 4.1 The hard copy of price bid giving the rates for various instruments & equipment and other items should be submitted along with sealed soft copy of price bid in Excel format through CD/Pen drive both in separate sealed cover hereinafter called Cover B (Price Bid). Price Bid (Cover B) of the bidders who qualify in Technical Bid (Cover A) will only be opened and will be communicated through E-mail/Fax.
- 4.2 The price of each item shall be quoted as per the prescribed Price Schedule Format at Annexure-I along with price break up. The bidders are required to submit the individual price of each instrument(s) and equipment(s) as indicated in the schedule of requirements.
- 4.3 TheCover B of the technically qualifying bidders shall be only opened at the Office of the "The Registrar, Veer Surendra Sai University of Technology, Burla" on the date and time to be communicated to them after technical evaluation of Cover A by E-mail/Fax.

5 BID CONDITIONS

5.1 The bidders should verify the sites of existing laboratories of Department of Chemistry, VSSUT, Burla and the proposed layout Plan indicating the location of each unit for necessary Technical Evaluation. The scope of Supply as mentioned in the schedule of requirements if not sufficient for full function of the Equipment/Machinery should be intimated in writing with the technical bid.

- 5.2 The quoted rate shall not vary with the quantum of order placed or destination point.
- 5.3 A copy of the original bid conditions and the schedules should be signed by the bidder at the bottom of each page with the office seal duly affixed and returned along with the bid. Bid schedule should be duly filled in with an **index** and **page number** for the documents, enclosures & EMD etc. **Paging** must be done for all the documents submitted.
- 5.4 Bids should be type written or Computerized and every correction/ over writing in the bid should invariably be attested with signature of the bidder with date before submission of the bids to the authorities concerned. No revision of price upward or downward will be allowed once the bid is opened. However the purchaser shall have the right for considering the exchange rate of foreign currencies on verification of documents.

5.5 Language of Bid

The Bid prepared by the bidders and all correspondence and document relating to the bid exchanged by the Bidders and the *Purchaser*, shall be written in the English language. Supporting document and printed literature furnished by the Bidders may be written in another language provided they are accompanied by an accurate translation of the relevant passages in the English language in which case, for purposes of interpretation of the Bid, the English translation shall govern.

5.6 Bid Price

- The contract shall be for the full quantity as described above. Corrections, if any, shall be made by crossing out, initialling, dating and re-writing.
- All duties, taxes, and other levies payable on the raw materials and components, job contract shall be included in the total price.
- VAT in connection with the sale shall be shown separately.
- The rates quoted by the bidders shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
- The price shall be quoted in Indian Rupees only.

5.7 VAT/ST clearance

Copies of valid VAT clearance Certificates shall be furnished by the Bidders and the originals of the above certificates shall be produced to the purchaser before placement of notification of award if asked for by the Purchaser.

5.8 **EMD**

All bidders are required to submit EMD not less than 2 % of the quoted amount in shape of Demand draft drawn in favour of "The Registrar, Veer Surendra Sai University of Technology, Burla" payable at SBI, Burla only. The EMD shall be in Indian Rupees. **NOTE:** Non-submission of EMD or submission of less EMD than the desired one shall result in rejection of Bid.The EMD deposited against other Bids cannot be adjusted or considered for this Bid. No interest is payable on EMD.

5.9 SUBMISSION OF BIDS

Sealing and Marking of Bids

Bid should be submitted in two Bid system containing two parts as detailed below.

Sealed Cover-A: Technical Bid.

Sealed Cover-B: Price Bid (hardcopy & sealed soft copy in CD/pen drive)

Both the sealed envelopes should then be put in one outer cover and each cover should have the following indication:

i) Reference No of Bid _____

ii) Bid regarding

iii) Due date & time for submission of the Bid _____

iv) Due date & time for opening of the Bid _____

v) Name of the Firm _____

NOTE:

A. Bids submitted without following two Bid system procedures as mentioned above will be summarily rejected.

B. Please Note that **prices should not be indicated in the Technical Bid**. The Prequalification document including EMD as required in the Bid document should invariable be accompanied with the Technical Bid (**Cover A**).

The outer envelope shall indicate the name and address of the bidders to enable the bid to be returned unopened in case it is declared "**late**". If the cover containing the outer envelope is not sealed and marked as required, *Purchaser* will assume no responsibility for the bid's misplacement or premature opening.

The above procedure shall be adopted both for the Technical bid and price bid separately. Telex, cable, email or facsimile bids will be rejected.

5.10 Deadline for Submission of Bids

Bids must be received by the *Purchaser* at the address specified not later than the time and date specified in the Invitation of Bids. In the event of the specified date for the submission of bids being declared a holiday for the *Purchaser*, the bids will be received up to the appointed time on the next working day.

The *Purchaser* may, at its discretion, extend this deadline for submission of bids by amending the bid document, in which case all previous rights and obligations of the purchasers and bidders will remain same till the extended date.

5.11 Modification and Withdrawal of Bids

No Modification and Withdrawal of Bids is allowed between the interval of time of submission and the last date and time of the bids.

No bid may be withdrawn in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the bidders on the bid form.

5.12 BID OPENING

- 5.13 The *Purchaser* will open all bids, in the presence of bidder's representatives who choose to attend at **11.30 AM on dated 20.03.2017** at the Office of the **"The Registrar, Veer Surendra Sai University of Technology, Burla"**.
- 5.14 The bidder's representatives who are present shall sign a register evidencing their attendance. In the event of the specified date of bid opening being declared a holiday for the *Purchaser*, the bids shall be opened at the appointed time and location on the next working day.
- 5.15 The bidder's names, and the presence or absence of the requisite EMD and such other details as the *Purchaser*, at its discretion, may consider appropriate will be announced at the opening. No bid shall be rejected at bid opening, except for late bids, which shall be returned unopened to the bidders.

5.16 Acceptance of the Bid

- Bidders submitting bids would be considered who have considered and accepted all terms and conditions. No enquiries, verbal or written, shall be entertained in respect of acceptance or rejection of the bid.
- Genuine equipment and instrument etc. should be supplied. Bidders should indicate the source of supply i.e. name and address of the manufacturers from whom the items are to be sourced.
- Supply of equipment means Installation and Commissioning (except civil works), Demonstration as well as Training at site. No separate charges will be paid on this account.

5.17 Rejection of the Bid

The Bid document shall be out-rightly rejected under following stipulation and no correspondence will be entertained whatsoever.

- If the Bidders has not furnished the required **EMD** or EMD exemption certificate from competent authority.
- If the Bidders has not submitted the Price as per the prescribed format Annexure-I.
- Manufacturing Authorization Annexure-III and in case of Authorized Distributor / Dealer/Suppliers have to submit Manufacture authorization along with copy of above documents of Manufacture Industry.
- If the bid is not supplemented with breakup of standard accessories / Optional accessories.
- Photo copy of the up-to-date valid manufacturing license/ import license (if it is imported) /dealership certificate/Distributor certificate of the product along with Tax registration Certificate of Manufacturer issued from competent authority.
- If the bidders, whether manufacturer or authorized distributor/ dealer have not supplied the required quantity for qualification as per the eligibility criteria and not submitted the performance statement at **Annexure-IV with supporting documents**.
- If the quoted product of the bidders not confirms to technical specification with complete accessories for functional Equipment/Machinery and standard of workmanship required by the Purchaser.
- If the bidder has not furnished technical details of the equipment and machinery with one make & model as per Annexure-V.
- If bidder will quote items of more than one make/model.
- If the bidder has not furnished detailed mandatory drawings, **catalogue**/, Foundation drawings & schedule of supply of items, if required.
- If the bidders have not agreed to give **bid validity**.
- If Bidder is not willing to provide operational Training for Machineries to one Official of each consignee at Suppliers Plant or Consignee site at least for 7 days in case of major machineries whichever is suitable to Purchaser.

5.18 Purchaser's Right to accept any Bid and to Reject any Bid

The Purchaser reserves the right to accept or reject any bid and to annul the bidding process and reject all the bids without assigning any reason thereof at any time prior to award of Contract, without thereby incurring any liability to the affected Bidders or Bidders on the grounds of such action of the purchaser. In case no bidder qualifies as per qualifying criteria and standards, purchaser may at his discretion relax qualification criteria for award of contract.

5.19 Evaluation and Comparison of Bids

The comparison shall be of FOR destination price basis including the price of all costs wherever applicable as well as duties and taxes (**but excluding VAT**) paid or payable on Machineries, instruments & equipment incorporated or to be incorporated in the items including the warrantee/guarantee period from the date of installation.

- The Purchaser's evaluation of a bid will take into account, in addition to the bid price and the price of incidental services.
- The purpose of bid evaluation is to determine substantially responsive bid with the lowest evaluated cost, but not necessarily the lowest submitted price, which should be recommended for award.
- Evaluation of bids should be made strictly in terms of the provisions in the bid document to ensure compliance with the commercial and technical aspects.
- The past performance of the suppliers will be taken into account while evaluating the bids.
- Cost of the inland transportation, insurance and other costs within the Purchaser's Country incidental to delivery of the goods to their final destination;
- Alternative options of offer shall not be allowed.
- Each Bidder shall submit only one quotation with one make & model.
- The quotation would be evaluated separately for each item
- Sales Tax in connection with sale of goods shall not be taken into account in evaluation.
- Willingness to provide operational Training to one Official of each consignee at consignee site for at least **7 days whichever is suitable to Purchaser.**

6.0 Supply Conditions

6.1 Delivery of Goods

The delivery of goods shall be made by the supplier to the Consignee in accordance to the order placed as shall be detailed in the Schedule of requirements & technical specifications.

6.2Inspection/ Test/Training

The inspection/examination/ test may be conducted in the premises of the Supplier or at the goods final destination or at the premises of the consignee, as will be decided by the Purchaser.

The purchaser's right to inspect/ examine/test & where necessary to reject the instruments & equipment after the arrival of the goods at the final destination, shall in no way be limited or waived by the reason of the goods having been inspected and tested by the manufacturer previously. In case of rejection of the goods at the final destination after inspection and test as stipulated above and in case any inspected/ tested goods fail to confirm to the

specification/ working condition, the purchaser may reject them and the supplier shall replace/ repair the same free of cost.

6.3Warrantee Period (comprehensive)

The Bidders must quote the period of comprehensive **warranty** from the date of completion of the satisfactory commissioning as per (**Annexure-II**). This also includes all accessories related to instruments & equipment quoted for.

6.4Up time Warrantee

The Bidders should provide uptime guarantee of 95%.

6.5 Downtime Penalty Clause

During the warranty period, desired uptime of 95% of 365 days (24 hours) if downtime exceeds 5%, penalty in the form of extended warranty, double the number of days or more will be applied for which the equipment goes out of service.

In no case the machineries should remain in non-working condition for more than 30 days beyond which a penalty of 0.2% of machine cost will be charged per day.

6.6Payment Terms

No advance payment will be made by the Purchaser to the supplier for performance of the contract. 100% of the contract price shall be paid within 30 (thirty) days after satisfactory supply, installation, demonstration, Commissioning & training and stock entry of bills of the goods within due date of delivery.

6.7Transportation

The Supplier shall be required to meet all transport and storage expenses until commissioning of the instrument(s) / equipment covered in the contract.

6.8Taxes and Duties

The Supplier shall be entirely responsible for payment of all Taxes, Duties etc. incurred until delivery of the contract goods to the Consignee subject to recovery afterwards in the bill as claimed in the Bid offer.

VAT as applicable is payable, to the suppliers of the State of Odisha if claimed in the Bid offer.

VAT/ CST will be paid to the Suppliers of the outside State other than Odisha, if claimed in the Bid offer. Any revision of VAT/ CST shall automatically be taken into account.

Entry Tax, if paid by the Supplier, at the local (destination head) Corporation/ Municipality/ NAC is allowed once only on production of money receipt for such payment, if claimed in the Bid offer. Any other statutory levy imposed by the Govt. of India/ Govt. of Odisha from time to time will be considered extra on demand with adequate proof thereof The service tax and the work contract tax shall be levied (Wherever applicable). Income Tax as applicable shall be deducted at source.

6.10Period of Validity of Bids

- The bid rates should be kept open/ valid for a period of **180** days from the date the Bids are opened.
- A bid valid for a shorter period i.e less than **180** days shall be rejected, as nonresponsive.
- In absence of any indication of the date of validity in the bid, it will be presumed that the offer will remain valid for the minimum period i.e. **180** days as prescribed above.

6.11Commissioning Period

Maximum commissioning period is **30 days** from the date of supply OR **120 days from the date of issue of Purchase Order** failing which the purchaser will have the right to impose penalty for the delay period @ **0.5% per week of the contract value of item/items excluding taxes from the bill amount subject to maximum of 10%**. However Registrar has right to extend the delivery period/commissioning period in special cases.

6.12Penalty against Non Supply

In case of non-supply of Stores within the due date i.e. within the date of delivery the EMD deposited by the bidder shall be forfeited.

6.13Jurisdiction of the Court

The Purchaser and the Supplier shall agree that the competent Court at Sambalpur shall have the jurisdiction to try and decide anything between the parties and they may approach the Competent Court at Sambalpur if required at any time.

REGISTRAR VSSUT, Burla

SECTION – III: FORMS AND ANNEXURES

ANNEXURE-I

PRICE SCHEDULE (ITEM WISE) FOR EQUIPMENT

ltem Serial No	Item Descrip tion	Countr y of origin with make & model	Quantity & Unit	Price for each unit							
				Exware house/ Ex- showro om/ Off-the- shelf (a)	Excise duty/Costu me duty, if any (b)	Packing & Forward ing (c)	Inland transportat ion, insurance and other local costs incidental to delivery (d)	CST/ Entry tax, if any (e)	Unit price (a+b+c+d+e)	VAT (f) If any	Total Price (a+b+c+ d+e+f)

Note- (i) Price Bid proforma should be provided individually for all equipment.

(ii) Taxes like VAT, Freight and or other taxes/ Charges, if any applicable must be explicitly mentioned in this price bid. Any type of correction/ addition in price schedule shall not be permissible. **Taxes** mentioned elsewhere except this price bid will not be taken into consideration.

<u> ANNEXURE - II</u>

WARRANTY MAINTENANCE CONTRACT AGREEMENT.

Name of the Equipment & machineries Qty

(To be filled in as per details of goods in the award of Contract)

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. Maintenance Services shall consist of Preventive and Corrective maintenance of equipment specified above & will include repair and replacement of parts free of cost.

2. Preventive maintenance, monthly once, which includes:

2.1 Check-up to ensure that device connection is proper, cabling is at proper condition etc.

2.2 Cleaning of the above instruments &equipment and checking the System Performance.

3. The Supplier is to furnish the tentative schedule of the preventive maintenance of Warranty Maintenance Contract (WMC) to be carried out.

4 The parts replaced must be new parts or equivalent in performance to new parts.

5. The Supplier will also provide the same maintenance service in case of the movement of equipment from the place of original installation to a different place or location, if the equipment is shifted by the Purchaser to another place or location at the cost and risk of the purchaser.

6. Any complaint informed through telephone must be acknowledged with a Complaint No. by the Supplier which will be noted by Consignee. All further contact with the Supplier on such complaint will be initiated through that Complaint No. Once rectification done, that No. will be cancelled by both parties. A register is to be maintained by the Supplier where complaints are to be noted along with Complaint No.

7. The maintenance shall normally be done at the earliest.

8. The Service Engineer of the Supplier will be allowed to handle the respective plant & machineries only in presence of the officer in charge at the Consignee site.

9. The Supplier should ensure that maintenance job is not hampered/delayed due to paucity of spares/inadequate manpower etc.

10. The Supplier should submit the services call report, to the Consignee for each and every service call without fail.

11. The Supplier evaluation data format for the WMC of Consignee systems may be filled up for necessary action.

12. All formats after filled up should be signed at the end of each page by the Supplier.

13. After completion of the work/repair/maintenance, the Purchaser shall issue a certificate of completion to the supplier to that effect.

Signature	Signature
For the Purchaser	For the Supplier
Name:	Name:
Designation:	Designation:
Address:	Address:
Telephone No:	Telephone No:

(Signature of Authorized signatory of Bidder with seal)

ANNEXURE-III

MANUFACTURES' AUTHORISATION FORM

No.	/ D	ate	/		
То					
The Registrar,					
VSSUT Odisha					
Burla, Sambalpur.					
Dear Sir, Bid No					
We			who are	established	and
reputable manufacturers o	f				
	_having factories	s at	(Addre	ss of Factor	y) do
thereby authorize M/s.				(Name	and
address of Agent) to subm	it a bid and sign	the contract wi	th you agains	t the above b	oid.

* No company or firm or individual other than M/s._____ are authorized to bid and conclude the contract in regard to this business against this specific invitation for bid.

We hereby extend our full guaranty and warranty as per general conditions of contract for the goods and services offered by the above firm against this bid.

Yours faithfully, (Signature for and on behalf of Manufacturers)

Note: This letter of authority should be on the letterhead of the manufacturer and should be signed by a person, competent and having the power of attorney to bind the manufacturer. It should be included original by the Bidders in its bid.

• This para should be deleted for simple items where manufacturers sell the product through different stockiest.

(Signature of Authorized signatory of Bidder with seal)

ANNEXURE-IV

DETAILS OF THE BIDDERS

Bid Reference No. Name and address of the Bidder:

- 01 Name of the bidder
 - a) Full postal address
 - b) Full address of the premises
 - c) Telegraphic address
 - d) Telephone number
 - e) Fax number
 - f) E mail:
 - g) PAN No
 - h) TIN No
- 02 Total annual turn-over (value in Rupees)
- 03 Quality control arrangement details
- 04 Test certificate held
 - a) Type test
 - b) BIS/ISO certification
 - c) Any other
- 05 Details of staff
 - a) Technical
 - b) Skilled
 - c) Unskilled

06 Branch Office/ Contact Person/ Liaisoning Office in Odisha.

- a) Address
- b) Telephone No.
- c) e-mail,
- d) Fax

Signature and seal of the Bidder

ANNEXURE-V

Technical details of the Equipment to be supplied by the bidder

Bid SI No. of the item	Tender specification	Bidders Specification with make and model no (Enclose manufactures catalogue / brochure for each item)	Deviation if any With university specification	

Signature and seal of the Bidder

SECTION-IV: SCHEDULE OF REQUIREMENTS AND TECHNICAL SPECIFICATIONS

Sl	Name of the	Specification
No.	equipment	
01	Fluorescence Spectrophotometer	 Excitation source: 150 Watt Xenon lamp Photometric system: Photometric ratio system: utilizing monochromatic light to monitor Xe lamp intensity output Automatic cut filter for high order diffraction: Standard Sensitivity*1(RMS): Peak *² Minimum 650: 1 or better (*² : Noise is measured on the Raman peak) Base *³ Minimum 2500: 1 or better (*³ : Noise is measured on the baseline) Excitation range: min. 200-900 nm or better Emission range: min. 200-900 nm or better Resolution Ex/Em: 1.0 nm (at 546.1 nm) or better Band width: Ex/Em: 1, 2.5, 5, 10, 20 nm Wavelength scan speed: Ex and Em: 20, 50, 100, 200, 500, 1000, 2000, 5000, 10, 000, 20,000 nm/min Wavelength accuracy Ex: ±1.5 nm or better Em: ±1.5 nm or better Sensitivity selection: High, Medium, Low, Very Low, Manual, Auto-SCS Auto-Gain: Standard Software Measurement programs: Spectra measurement, Quantitative measurement, Fixed wavelength measurement, Time course measurement, anisotropy measurement, Phosphorescence measurement with spectra correction program as standard
02	Accessories for Fluorescence Spectrophotometer	 Water Thermostatted Cell holder with Stirrer Manual Polarizer for anisotropy measurement Compatible computer with Intel Core i3 processor, 1 TB HDD, 4 GB RAM, Windows 10 Home 64 bit operating system, DVDRW Optical drive, minimum 19" LED monitor, Key Board, Optical Mouse Laser Jet Printer Online UPS of 2 KVA with minimum 30 mints back up Quartz Cuvette: 1Pair