



JIWAJI UNIVERSITY, GWALIOR

No. JU/BC/UGC/2013-14/01

Dated: 07-03-2014

SHORT TENDER NOTICE

Sealed Tenders are invited from the manufacturers/ authorized dealers only for import /supply of laboratory equipments listed below. Only reputed firms having sales / income tax registration numbers are eligible to apply.

1. Walk in cold room,
2. Sonicator
3. Western blotting system
4. Horizontal Electrophoresis Units with Power pack
5. Weighing balances
6. Minor lab equipments (Colorimeters, pH meters, Magnetic stirrer)

Tender documents containing terms, conditions, specifications of the equipment can be obtained from the Head, SOS Biochemistry, Jiwaji University, Gwalior - 474011 up to 5.00 PM of 5th April 2014. The last date for submitting tenders is 5:00 PM on 7th April, 2014. Alternatively, the tender form may be downloaded from the website www.jiwaji.edu. The tender fee is Rs. 1000/- (D.D drawn in favour of Registrar, Jiwaji University Gwalior) for each Item. Tender will not be considered if it is not accompanied by tender fees.

REGISTRAR



जीवाजी विश्वविद्यालय, ग्वालियर

No. JU/BC/UGC/2013-14/01

Date 07/03/2014

निविदा आमंत्रण

खुली निविदा के अंतर्गत उपकरण क्रय करने हेतु प्रमुख उपकरण निर्माता कंपनियों या उनकी अधिकृत भारतीय एजेंसियों से खुली निविदा आमंत्रित की जा रही है। 1. वॉल्क इन कोल्डरूम 2. सोनीकेटर 3. वेस्टर्न ब्लोटिंग सिस्टम 4. होरिजेंटल इलेक्ट्रोफोरेसिस यूनिट्स विथ पावर पैक 5. वेइंग बैलेंस 6. मिनर लेब इक्यूपमेंट्स (कोलोरिमीटर्स, पीएच मीटर्स, मैग्नेटिक स्टीरर)। इच्छुक कंपनियों/फर्म, निविदा आवेदन पत्र (उपकरणों की तकनीकी विशेषताएँ, नियम एवं शर्तों की प्रति सहित) राशि रु. 1,000/- का डीडी जो की कुलसचिव, जीवाजी विश्वविद्यालय, ग्वालियर के नाम से देय हो एवं अदा कर विश्वविद्यालय स्टोर शाखा से दिनांक 05 अप्रैल, 2014 तक प्राप्त किया जा सकता है। या निविदा आवेदन पत्र विश्वविद्यालय की वेबसाइट www.jiwaji.edu से डाउनलोड कर कुलसचिव, जीवाजी विश्वविद्यालय, ग्वालियर को देय रु. 1,000/-के डी डी के साथ भी भेजा जा सकता है। सभी निविदा आमंत्रण पत्र केवल रजिस्टर्ड पोस्ट/स्पीड पोस्ट एवं ड्रॉप बॉक्स से मान्य होंगे।

निविदा आवेदन पत्र कुलसचिव कार्यालय भेजने की अंतिम तिथि 07 अप्रैल 2014 (सायं 05:00 बजे) रहेगी।

कुलसचिव

JIWAJI UNIVERSITY, GWALIOR 474 011

School of Studies in Biochemistry

Tender Form No.

Name of work : Supply of Walk in cold room, Sonicator, Western blotting system, Horizontal Electrophoresis Units with Power pack, Weighing balances and other Minor lab equipments (Colorimeters, pH meters, Magnetic stirrer)

Last date for submission of Tender form : 07.04.2014

Tender Opening Date : 09.04.2014 (at 3.30 P.M.)

Tender fees :Rs 1,000.00

Earnest Money : Rs. 4500/- **per item.**

Address for Tender Submission : Registrar, Jiwaji University, Gwalior -474011
Attention: Head, School of Studies in Biochemistry

Important:

1. Order will be placed only to Manufacturer/ Authorized dealer/ Sole distributor of the equipment and the price should include the cost of suitable stabilizer/ UPS to run the equipment.
2. Each technical bid should also be accompanied by the questionnaire filled by the bidder.

Signature of the Bidder with seal

TERMS AND CONDITIONS OF JIWAJI UNIVERSITY, GWALIOR

Sealed tenders are invited from manufacturer/ Authorised dealer/ sole distributor for the supply of (Walk in cold room, Sonicator, Western blotting system, Horizontal Electrophoresis Units with Power pack, Weighing balances and other minor lab equipments (Colorimeters, pH meters, Magnetic stirrer)). Tenders will be considered subject to following terms and conditions.

1. Tenderers can obtain tender documents separately for each item against payment of Rs 1000.00 by demand draft in favor of the Registrar, Jiwaji University, Gwalior, on or before 05.04.2014 on any working day. Tenders downloaded from the website should be accompanied by a DD of Rs. 1000/- (drawn in favour of Registrar, Jiwaji University, Gwalior) as tender fee, without which tender would not be considered.
2. **Separate tender should be submitted for each item** (Walk in cold room, Sonicator, Western blotting system, Horizontal Electrophoresis Units with Power pack, Weighing balances and other minor lab equipments (Colorimeters, pH meters, Magnetic stirrer))
3. Each tender must be accompanied by a bank draft drawn in favor of the Registrar, Jiwaji University, Gwalior for **Rs. 4500/- (per item)** as earnest money. Tenders received without earnest money will be liable to be rejected and may not be considered.
4. The last date for submission of Tender is 07.04.2014 at the office of Registrar, Jiwaji University, Gwalior and at the top of the envelope, mention equipment for SOS Biochemistry, Jiwaji University, Gwalior.
5. The Tenderer should agree to execute an agreement for proper supply, installation and satisfactory working of the equipment exactly to the satisfaction mentioned.
6. The rates should be for Gwalior. The prices should be inclusive of sales tax and other charges. The exact details of taxes should be given separately.
7. Being an educational Institution it is entitled to issue concessional sales tax certificate. No other sales tax form is issued. If concessional sales tax certificate is not acceptable to the supplier, the actual rate of sales tax to be charged must be clearly mentioned.
8. This institution is exempted from payment of Central Excise duty in terms of Govt. Notification No. 1097-Central Excise dated 01.03.1997. Necessary copy to be provided by the University.
9. **For imported equipments the price should be without any custom duty. The institution is registered with Department of Science and Industrial Research (DSIR) Govt. of India vide Government Notification No. TU/V/RG-CDE(56)/2009 dated 26.11.2009 is exempted from payment of custom duty. Necessary certificate copy to be provided by the University.**
10. If the rates are quoted Ex-Go down or FOR railway Station of dispatch then the tenders must also indicate charges towards packing and forwarding, railway freight etc. so as to compare these rates with those of others who have quoted FOR destination failing which such offer will be ignored.
11. Manufacturer name, their trademark and brand should invariably be mentioned in the tender and illustrated leaflets giving technical particulars / details etc. should be attached with the quotation to facilitate consideration of the offer.

12. The tender should quote their best willing price.
13. The minimum period of delivery of the material should be quoted.
14. The quantities of each item to be purchased may vary according to actual requirement at the time of placing order.
15. If there is any DGS &D rate contract of Government approved rates the same should be quoted enclosing the copy of the rate contract, which will get preference.
16. The tender should avoid the use of vague terms such as "extra as applicable". Such tenders will be rejected.
17. Printed conditions on the back of the offer submitted will not be binding unless separately mentioned.
18. Quotations for each item (as per serial number in the specification sheet) along with terms and conditions must be submitted separately in separate cover so that for individual item separate comparative chart could be prepared. This is very important.
19. Advance payment either direct or through bank will not be accepted in any case. As per rule, full payment will be made after receipt of material, inspection there of and after satisfactory installation and working of the entire equipment.
20. The Tenders should clearly state regarding charges for installation, maintenance etc. of the equipment if any.
21. Offers received not according to our terms and conditions within the time prescribed shall be rejected. Delay due to postal service of any kind will not be considered for acceptance of the order.
22. In all matters of dispute the decision of the Registrar, Jiwaji University, Gwalior shall be final and binding on the tenderers.
23. The address of local office at Gwalior for the maintenance along with the list of well reputed organizations who have purchased the same equipment should be provided.
24. List of spare parts must be supplied.
25. The test report of the equipment quoted from reputed Government organizations/ academic institutions must be submitted along with the offer.
26. Preference will be given to the companies having service center at Gwalior. Companies with ISO-9000 certificates will also be given preference.
27. Date and time of opening is 09.04.2014 at 3:30 P.M. in the presence of intending Tenderers or their representatives who may like to be present in the University office, Jiwaji University, Gwalior.
28. If any of the dates of the receipt opening the tender happen to be declared as holiday, the schedule will be shifted to the next working day automatically.
29. The sealed tender envelope should contain three sealed envelopes. First superscribed as Technical Bid. This should contain the specifications of the equipment & terms and conditions of supply. The second should be super scribed as commercial Bid.

30. The third should contain the EMD. These three separately sealed envelopes should be placed in one sealed envelope and should be super scribed as Serial No. vide Tender no. to be opened on 09.04.2014 (Wednesday) at 3:30 P.M. Only those who fulfill the technical specifications shall be considered for opening the commercial bid.
31. Canvassing for support in any form for the acceptance of any tender is strictly prohibited. Any tenderer doing so will render himself liable to the penalties which may include removing of his name from the register of approved suppliers.
32. Separate tender to be submitted for each item and the price should include cost of suitable stabilizer / UPS needed for the equipment.
33. Tender, duly sealed, should reach the Registrar, Jiwaji University, Gwalior by speed post/registered post or at the 'drop box' meant specifically for 'Tenders' at the store of Jiwaji University, Gwalior, on any working day before or on the last date.
34. The bidder shall forfeit the EMD if we find the bidder providing any false information and no further communication in this respect shall be entertained.
35. Order will be placed only to the manufacturer or authorized dealer or sole distributor Certificate from Manufacturer must be attached as proof.
36. Any item or offer may increase in number or even might not be purchased without assigning any reason. Registrar, Jiwaji University, Gwalior reserves the right to accept or reject any or all tenders without assigning any reason thereof.
37. If the equipment supplied is not as per the specifications or not performing as claimed or not supplied within the stipulated time, the university shall impose penalty as per the decision of the Registrar, Jiwaji University.
38. In case any legal dispute arises, the jurisdiction shall be Gwalior Court.
39. Jiwaji University requires the bidder to observe the laws against fraud and corruption enforced in India viz, Prevention of Corruption ACT 1998.

Important Note:

Quotations along with terms and conditions must be submitted in duplicate separately in separate cover **(with Rs. 4500/- (for each item separately) earnest money through DD)** so that for individual set of equipment separate comparative statement could be prepared.

Registrar
Jiwaji University

Signature of the Bidder with seal

QUESTIONNAIRE TO BE FILLED BY THE BIDDER AND SUBMITTED ALONG WITH THE TECHNICAL BID

1	Reputed manufactures of equipment (specified in the tender notice) or their authorized agents with well established sales and services facilities only need to respond to the tender notice.	Confirm / do not confirm to requirement
2	Separate quotations must be submitted for each item specified in the tender notice. Taxes, duties, packing & forwarding charge, transport and insurance charge may be separately indicated where applicable.	Complied / not complied
3	The make, model no., detailed specifications, illustrative pamphlets must accompany the quotations without which the quotations are liable to be rejected.	Complied / not complied
4	In case the bidder is an authorized agent, documentary proof to this effect must be enclosed with the quotation.	Enclosed / not enclosed
5	Bidder detailed company profile, information on after sale / service and test facilities available along with address and telephone no. of sale office and service centre catering to Gwalior must be given along with the quotation. Details of product & applications support available may also be indicated.	Information enclosed / not enclosed
6	The supplier must indicate whether he is willing to supply complete circuit diagram, wiring diagram component layout diagram, service manual and component identification catalogue along with the equipment free of charge in case an order is placed with him. The supply of this literature will be considered as part of supply of equipment offered.	Will be supplied/ Cannot supply
7	The bidder must furnish a list of costumers to whom the equipment quoted has been supplied preferably in Central or Northern India. Name and contact telephone no. of the customer may be furnished.	Enclosed / not enclosed
8	The name of the item quoted and tender notice particularly should be clearly indicated in the top of the envelop.	Complied / not complied
9	Bidders are requested to carefully go through the specifications given in the tender and quote only when they are sure they have product specified to offer. In case of any doubt, the bidder can contact the Registrar, Jiwaji University, Gwalior on any working day with prior appointment.	Complied / not complied
10	Warranty details and terms and conditions of warranty must be given. If any component of the equipment quoted is not covered by the warranty, the same must be specified.	Complied / not complied
11	Bidder must indicate the year in which the model quoted by him was introduced in the market. Bidder must indicate whether he is willing to give an undertaking that all spare parts of the equipment quoted will be supplied as and when ordered for at least a period of 10 years from the date of supply and inability of supply the spares due to the obsolescence of the equipment will not be pleaded.	Complied / not complied
12	Where the equipment offered is controlled by a personal computer and it is possible to use an indigenous PC, the same should be quoted instead of an imported PC. The same would apply to a printer or any compiled other accessory or subsystem of good quality available in India.	Complied / not complied
13	Where the equipment offered is modular, the price break-up of individual modules/accessories/parts must be given. The bidder may not be given a change to indicate the price backup at a later date.	Complied / not complied
14	The bidder will furnish a test certificate along with complete test result and the test conditions for the equipment specifications offered in case an order is placed.	Agreeable / Not agreeable

15	Bidders must indicate whether he can arrange for comprehensive service training to staff of the instrumentation department on the model offered at his expense.	Yes / No
16	a) If an order is placed with the bidder, the bidder will install and test the equipment to its specifications at site of installation free of charge.	Agreeable / Not agreeable
	b) If it is not possible to test some specifications, the same may be indicated.	Agreeable / Not agreeable
17	The bidder is agreeable to install and test the equipment and undertake after-sales-service only through a factory trained certified engineer.	Yes / No
18	Bidder will carry out validation of the instrument offered at the time of installation at his cost.	Yes / No
19	Agency commission (percentage) payable in Indian Rupees should be mentioned in the quotation i.e. in “Commercial Bid”.	Complied / not complied / not applicable
20.	Performance guarantee: In case the Purchase Order is placed, 10% of the equipment value has to be submitted as performance security deposit in the form of bank Guarantee till the completion of warranty period. a) On behalf of our Principal, we will submit the Bank Guarantee from the date of installation. b) Our Principals will submit Bank Guarantee (an undertaking should be submitted along with Quotation from your Principal)	
21	The bidders must ensure that GLP principles are complied with. He must ensure that qualified and well-trained personnel are available to install the equipment and test the functions. The bidders must ensure that GLP compliance programmes are built in to the system and all these tests are carried out at the site of installation. Wherever required, the standards required to carry out such tests, must be provided by bidder with all the particulars of the standards like composition, weight, particulars and operating conditions etc. specified.	Specified / not specified
22	The bidders must be a member of the National Or International GLP Compliance Agencies.	Complied / not complied / not applicable
23	The bidders must carry validation test at the site of installation at his own cost.	Yes / No
24	The bidders must also mention the frequency at which the validation test are to be carried out and if so that cost of such analyses.	Information provided / not provided / not applicable

Note: 1) Unless the questionnaire is completely filled in and detailed information provided as required, your offer is liable to be rejected.
2) Complete questionnaire should be signed by the bidder and sent along with the quotation in Technical Bid.

Signature of the Bidder with seal

Further Instructions

1. Technical bid and price bid should be submitted separately under sealed covers and both the envelopes put together in another cover which should be sealed. This is to ensure that if the technical bid qualifies with the laid down specifications and configurations, only then price bid will be opened. Otherwise the price bid will automatically get rejected along with the technical bid not fulfilling the specifications/ configurations. The envelope should be super-scribed as "Technical bid for _____(Name of the equipment)". "Quotations for price bid for (Name of the equipment)", envelope super-scribing "Quotations for _____(name of the equipment) & Tender document No. _____" respectively.
2. EMD: EMD SHOULD BE KEPT IN SEPARATE SEALED COVER
3. The technical bid must have the following enclosures:
 - a. True copy of the commercial bid but with the prices omitted. All items quoted must be clearly indicated.
 - b. The original D.D. of the EMD and tender cost should be kept in a separate sealed cover.
 - c. Photocopy of the EMD should be enclosed with the Technical bid without showing the amount.
 - d. Detailed literature, illustrative pamphlets, company profile, customers list & questionnaire duly filled.
4. The three sealed envelopes (i. Technical bid ii. Commercial bid iii. EMD) should be kept in outer sealed cover.
5. Income tax return for the assessment year 2013-14 and sales tax (VAT) registration certificate must accompany the technical bid.
6. Authorized dealers should submit a copy of valid dealership certificate and authorized distributorships certificate along with quotation.
7. Last date for the receipt of the sealed quotation shall be on or before 07.04.2014 at office hours.
8. Late/ delayed offers will not be accepted.
9. Conditional, telegraphic, tenders by hand or by courier shall not be accepted.
10. In event of any date indicated above is a declared holiday the next working day shall become operative for the respective purpose mentioned therein.
11. The technical bids will be opened in the presence of the bidders or their authorized representatives on 09.04.2014 at 3.30 P.M. in the University Office, Jiwaji University, Gwalior. It is the responsibility of the bidders to present themselves at the time of opening of the technical bids.

12.The Registrar of Jiwaji University reserves the right to accept or reject any offer in part or whole without assigning any reasons whatsoever.

13.The tender document can be downloaded from the website of the university. The Downloaded tenders should accompany a draft of Rs 1000.00 towards the tender fee.

List of items

1. Walk in cold room,
2. Sonicator
3. Western blotting system
4. Horizontal Electrophoresis Units with Power pack
5. Weighing balances
6. Minor lab equipments (Colorimeters, pH meters, Magnetic stirrer)

Registrar

Jiwaji University, Gwalior

i/ We accept all the terms and conditions of the tender and understand that the decision of the University shall be final and acceptable to me/us.

Signature and seal of the Tenderer

Date:

Signature of the Bidder with seal

TECHNICAL SPECIFICATION FOR ITEM NO - 1

Walk in cold room (qty-1)

A General Details

- External Room Size in mts 2.95 x 2.95 x 2.44(ht)
- Room Temperature required 2 to 8⁰ C
- Max Ambient Temperature 45°C

B. Cold room should work on the following conditions

- Incoming Product Temperature 25°C
- Cooling Time 24 hours
- Door Openings 5- 10 times a day
- Human Occupancy 1-2 people
- Lighting Load 2 Watts/sqmt

C Panel Details

- Material Of Insulation Polyurethane Foam (PUF)
- Density of panels 40 +/- 2 Kg/cubic meter
- Thickness Of Insulation for walls/Ceiling 60 mm
- Thickness Of Insulation for floor 60 mm
- Lamination for walls/Ceiling PP G.I. Sheet on both sides
- Lamination for floor PUF Slabs with Tarfelt Sheet On top

D Door Details

- Door Clear Opening 34” x 78”
- Insulation Thickness 60 mm
- Type Of Door Manual Swing
- Number of doors 1 No.
- Lamination for door PP G.I. Sheet on both sides

E Refrigeration System Details

- Split system with air cooled condenser
- Type of compressor Hermetic – Reciprocating
- No. of Refrigeration Units 2 No.with Capacity of 10000BTU/Hr
- Refrigerant R 22
- Compressor Run Time 16 – 18 hrs.
- Electricity Power Supply 230 V/ 1 phase/ 50hz
- Temperature indicator Digital Temperature indicator cum controller
- Defrost Cycle Air Defrost
- One door , lamination in PP G.I. Sheet on bothside

TECHNICAL SPECIFICATION FOR ITEM NO - 2

Ultrasonicator [QTY - 1]	
Maximum Power Output	0- 300 Watts
Operating Frequency	20 kHz and above
Input	220 - 240V, 50 - 60Hz
Programmability	Microprocessor based
Working volume	200 µl to 30000 µl
Programmable Timer	1 second to 10 hours
Adjustable Pulse On/Off	1 seconds – 1 hour
Display	Real time LCD
Dimensions	11" wide x 20" long x 5.5" high
Probe Tips	Detachable type stainless steel Size 10- 20mm diameter.
Sound enclosure	The water resistant interior with dimension of 13Wide X 22 Hight X 11 deep
Assosary	Jack stand

TECHNICAL SPECIFICATION FOR ITEM NO - 3

Western blotting system (Qty-2)

(integrated Vertical electrophoresis & Western Blotting system)

- The system should Provides the capability of running 2 gels or 2 blots simultaneously under identical temperature controlled buffer conditions using freezer blocks.
- The System should have Combo Cell can accomodate Western Blotting or SDS PAGE with temperature control.
- Fits glass plate dimensions of either 10cm x 10cm or 10cm x 9cm(h).
- The system should have Hinged core design allows easy loading and removal of gel or blotting cassettes
- The system should Freezer blocks fit into receptacles inside of unit for optional cooling
- Electrophoretic transfers do not require the purchase of separate transfer modules
- Color-coded anode and cathode safety features on all components
- Clear tank allows for monitoring of sample progress
- Electrophoretic transfers do NOT require the purchase of special transfer modules.
- The System should come complete with Lower buffer reservoir, 2 dual-capacity cores with contrasting color loading background, 4 blotting cassettes with sponge pads & Safety cover with power leads.

TECHNICAL SPECIFICATION FOR ITEM NO - 4

Mini Horizontal Electrophoresis System (Qty-2)

The System should have following features :

- HORIZONTAL MINI GEL Electrophoresis System with tapered gates
- Gel Bed dimension : 7.5 cm X 10 cm
- Buffer Volume : 250 ml
- Gel Tray : 7.2 cm X 10 cm
- Tapered baffles allow easy in situ gel formation with or without gel tray
- Run up to 32 samples per gel.
- Choice of double-sided adjustable height combs.
- Combs should printed with catalog number and thickness for easy identification.
- Dimension : 17 W X 19.7 L X 12.7 H (cm)
- The System should includes Electrophoresis unit with molded tapered baffles, 1 UV transparent winged gel tray with 2 comb position slots, UV transparent acrylic gel bed, 1 dual-sided orstandard adjustable height comb, Safety cover with power leads, Platinum electrodes.

Power Supply for electerophrosis (Qty-2)

The System should have following features:

- Four sets of output terminals
- Easy to control: Constant V/A with automatic crossover, monitor V/A/T while running, adjust V/A while running
- Timer
- Safety features: no-load and over-load detection, sudden load change, short circuit, etc.
- Beep sound for every step, at finish and as warning
- Current differential alarm and power failure detection
- Light, compact and stackable
- Output: 10-300V in 1v steps, 4-500mA in 1mA steps, 90W max
- Constant V/A with auto crossover
- Type of output: constant voltage or constant current with automatic cross over
- Monitor V/A/T when running
- Adjustable V/A when running
- Power Failure Detection with Automatic Restart
- Weight: less than 2.5 kg

TECHNICAL SPECIFICATION FOR ITEM NO - 5

Electronic balance Model - 1 [QTY - 1]	
Capacity	210 g
Accuracy	0.0001g
Pan Size	Φ 90-100 mm
Display	LCD Display
Power	AC/DC dual powered Rechargeable battery powered for back up
Calibration	Auto-calibration through key pad

Electronic balance Model - 2 [QTY - 2]	
Capacity	100 g
Accuracy	0.001g
Pan Size	Φ 80-90 mm
Display	LCD Display
Power	AC/DC dual powered Rechargeable battery powered for back up
Calibration	Auto-calibration through key pad

Electronic balance Model - 3 [QTY - 2]	
Capacity	300 g
Accuracy	0.005g
Pan Size	Φ 116-120 mm
Display	LCD Display
Power	AC/DC dual powered Rechargeable battery powered for back up
Calibration	Auto-calibration through key pad

TECHNICAL SPECIFICATIONS FOR ITEM NO - 6

colorimeter model -1 [Qty – 1]	
Wavelength range	320 to 1100nm
Optical system	Single beam , grating 12000 lines/mm
Wavelength Accuracy	± 2.0 nm
Bandwidth	4 nm
Measuring modes	% Transmittance, Absorbance, Concentration , K- factor .
Resolution	1% T, 0.01 Abs
Photometric Accuracy	± 0.005 Abs
Detector	Silicon photodiode
Display	LCD display
Stability	± 0.00A/h @500 nm
Light source	Tungsten filament lamp
Output	USB port
Power	230V, 50Hz
Accessories	2 glass cuvettes (10 mm)

colorimeter model -2 [Qty - 2]	
Wavelength range	400 to 710nm
Wavelength selection	8 in-built gelatin filters:
Measurement ranges	0-100%T, 0-1.50Abs, 0.1 to 1000 Concentration
Resolution	1%T, 0.01Abs, 0.1 to 1 Concentration
Sample holder	Hold 10 mm glass tubes
Photometric linearity	1% T
Light source	Tungsten filament lamp
Output	Analogue, 10mV per digit
Power	230V, 50Hz

pH meter Model-1 [Qty -1]		
Range	pH Reading:	0 to 14
	mV Reading:	- 1250mV to 1250mV
Accuracy	pH Reading:	0.01 pH ¹
	mV Reading:	1mV
Electrodes	Temperature sensor	Integrated
	Electrode material	Plastic body
	Electrolyte filling solution	KCl 3 mol/l fluid
Display :	Digit LED Display	
Power Supply	230V AC \pm 10%, 50 Hz	
Others	Standard Buffer Tablets, Electrode Stand with Clamp, Dust Cover , Power Cord, Operational & Instruction Manual	

pH meter Model-2 [Qty -2]		
Range	pH Reading:	0 to 14
Accuracy	pH Reading:	0.1 pH ¹
Display :	Digit LED Display	
Power Supply	230V AC \pm 10%, 50 Hz	
Others	Standard Buffer Tablets, Electrode Stand with Clamp, Dust Cover , Power Cord, Operational & Instruction Manual	

Magnetic stirrer [Qty -2]	
Maximum Stirring capacity .	5 L
Motor rating input	15 W
Motor rating output	1.5 W
Speed / Temp display	LCD displays
Speed range	100 - 1500 rpm
Dimensions (WxDxH)	280x160x85 mm
Temperature Range	Upto 100 ⁰ C
Control accuracy of heating temperature	1°C
Weight	Less than 3 kg
Power supply	220/240 Volts, 50 Hz