Bidding Document
Open Tender

FOR SUPPLY, INSTALLATION, TESTING & COMMISSIONING OF MEDICAL EQUIPMENT

For & on behalf of

ALL INDIA INSTITUTE OF AYURVEDA (AIIA)
UNDER MINISTRY OF AYUSH, GOVT. OF INDIA
Gautampuri, Sarita Vihar, Mathura Road, New Delhi

Bidding Document No.: HSCC/PUR/AIIA- Sarita Vihar/LV/2014 Dated 23.12.2014

HSCC (INDIA) LTD

(A GOVERNMENT OF INDIA ENTERPRISE)
Plot No. 6-A, Block-E,
Sector-1,
NOIDA (U.P.) – 201 301
PHONE: 0120-2540153
FAX: 0120-2542447
URL: www.hsccltd.com

Note:

- **All Bidder are requested submit their offer/ bid as per to draft bid.**
- **In case of any clarification feel free to call on 9891281703/amarhscc@gmail.com**
- **Additional scan copy of Form A to H is to be email to a_singh@hsccltd.co.in/ amarhscc@gmail.com immediately after opening of bid.**

NOTICE INVITING TENDERS (NIT)

Open Tender

FOR

ALL INDIA INSTITUTE OF AYURVEDA (AIIA)

NEW DELHI

Bidding Document No.: HSCC/PUR/AIIA- Sarita Vihar/LV/2014 **Dated 23.12.2014**

NOTICE INVITING TENDERS (NIT)

All India Institute of Ayurveda (AIIA), India under Ministry of Ayush, Government of India, Gautampuri, Sarita Vihar, New Delhi through its consultant HSCC (India) Ltd invites sealed bids from eligible bidders, in Single stage two bid system, for Supply, Installation, Testing & Commissioning and handing over of various **Equipments** at All India Institute of Ayurveda, Sarita Vihar, New Delhi.

S.NO	NAME OF THE EQUIPMENT/ INSTRUMENT	NO.	Department	Estimated total amount (Rs.)	EMD Amount Rs.	Remark
1	Digital IR moisture balance	1	QC	75,000.00	1,500.00	II
2	Water Distillation Apparatus	1	QC	20,000.00	400.00	II
3	Boiling point determination	1	QC	15,000.00	300.00	II
4	Limit test apparatus	1	QC	10,000.00	200.00	II
5	Refrigerator	1	QC	20,000.00	400.00	II
6	Chemical balance	1	Pharmacognosy	30,000.00	600.00	II
7	Refrigerator	1	Pharmacognosy	20,000.00	400.00	II
8	Balance	1	Microbiology	30,000.00	600.00	II
9	Microscope	1	Microbiology	25,000.00	500.00	II
10	Refrigerator	1	Microbiology	20,000.00	400.00	II
11	Zone reader (antibiotic)	1	Microbiology	30,000.00	600.00	II
12	Double distillation apparatus	1	ENT	60,000.00	1,200.00	II
13	Syringe Infusion Pump	2	Paediatric	1,00,000.00	2,000.00	II
14	Nebuliser	5	Paediatric	75,000.00	1,500.00	II
15	Weighing Machine with Height Measuring Scale	2	Paediatric	80,000.00	1,600.00	II
16	Weighing Scale Infant.	2	Paediatric	40,000.00	800.00	II
17	Whirl Pool Bath (For arm, Foot & Leg)	1	PMR	60,000.00	1,200.00	II
18	Ophthalmoscope	5	OPD	1,00,000.00	2,000.00	II
19	Ophthalmoscope- Direct	2	OPD	1,00,000.00	2,000.00	II
20	Syringe Infusion Pump	5	OPD	2,50,000.00	5,000.00	II
21	Electronic Weighing Balance	2	Chemistry	2,50,000.00	5,000.00	III
22	Digital ABBE's Refractometer	1	Chemistry	1,50,000.00	3,000.00	III
23	Sigma balance	1	Chemistry	1,00,000.00	2,000.00	III
24	Digital Viscometer	1	Chemistry	2,00,000.00	4,000.00	III
25	Melting point apparatus (Digital type)	1	Chemistry	60,000.00	1,200.00	III
26	Sieves 10 to 120 with sieve shaker	1	Chemistry	1,25,000.00	2,500.00	III
27	Binocular microscope with camera	1	Pharmacognosy	1,00,000.00	2,000.00	III

28	SLR Camera	1	Pharmacognosy	1,00,000.00	2,000.00	III
29	Binocular microscope with camera	1	Microbiology	1,25,000.00	2,500.00	III

i.	Dates of sale of Bidding Document.	**23.12.2014 to 22.01.2015** **10:00 hrs to 17:30 hrs IST**
ii.	Place of Sale of Bidding Document	HSCC (India) Ltd, Plot No. 6-A, Block-E, Sector-1, Noida (U.P)-201301
iii	Pre Tender Meeting Date & Time	05.01.2015, 14:00 hrs IST
iv.	Pre Tender Meeting Venue	Same as (ii)
v.	Closing date & time for receipt of bid.	**23.01.2015**, 14:00 hrs IST
vi.	Time and date of opening of Techno – Commercial bid.	**23.01.2015,** 14:30 hrs IST
vii.	Venue of Opening of Techno Commercial Bid.	Same as (ii)

1. Bidding Document fee Rs. **200/- per** set in the form of account payee Demand Draft/Pay Order/Cashier's Cheque/Banker's Cheque drawn on a scheduled Bank in India/ cash in favour of **"HSCC (India) Ltd"** payable at New Delhi/ Noida**.**
2. Bidder shall download the Bidding documents from the web site http://eprocure.gov.in/cppp, www.hsccltd.com, www.indianmedicine.nic.in and submit its tender by utilizing the downloaded document, along with the required non-refundable fee as mentioned in Para 1 above.
3. All prospective bidders may attend the Pre Tender meeting. The venue, date and time indicated in above.
4. Bidder shall ensure that their bid, complete in all respects, are dropped in the Tender Box located at **HSCC (India) Ltd, Plot No. 6-A, Block-E, Sector-1, NOIDA (U.P.) – 201 301** on or before the closing date and time, failing which the bid will be treated as late and rejected.
5. In the event of any of the above mentioned dates being declared as a holiday / closed day for the purchase organisation, the tenders will be sold/received/opened on the next working day at the appointed time.
6. The Bidding Document is not transferable.
7. Sealing of bid:

   Envelop I: Sealed in Original Bid Security (EMD) and Tender Document fee @ Rs. 200/-
   Envelop II: Sealed in original Techno-commercial bid i.e. FORM "A" to "H" (refer draft bid)
   Envelop III: Sealed in original Priced Bid (Financial Bid) i.e. FORM "I" (refer draft bid)

   These above envelopes I, II & III shall be further sealed in one outer envelope super scribing "Bid for item no. " and Tender No. …… and address to Director, AIIA- Sarita Vihar and due date ……., Bidding Document Number.

8. If Bidder submit bid security / performance security amount **(i)** in the form of Demand Draft (i.e. DD), the DD shall be in favour of **HSCC (India) Ltd"** payable at New Delhi/ Noida **or (ii)** in the form of Bank guarantee shall be in favour of **Director, All India Institute of Ayurveda (AIIA), Gautampuri**, **Mathura Road, Sarita Vihar, New Delhi** as per bidding document format.

9. Rejection of bid:

- If bid security, tender document fee as mentioned in the tender document not found in envelop-I, their bid will be rejected and Envelop –II & III will not open by the committee.
- Bid form not submitted.

Director, AIIA

Terms & conditions for submission of bid for supply of stores:

1. **Rate:** The Prices should be quoted in Indian Rupees only. The rates quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account. All duties, taxes and other levies payable by the contractor under the contract shall be included in the total price. The rate quoted must be inclusive of Excise Duty, Packing & Forwarding charges, Sales Tax, Freight charges and Insurance charges. The risk of damage or loss in transit if any will be rest on the suppliers only.

2. **Sales Tax/ Vat**: Should be mentioned on price format.

3. **Name of Consignee**: All India Institute of Ayurveda (AIIA),
   Gautampuri, Sarita Vihar Mathura Road,
   New Delhi- 110 076

1. **Delivery, installation & commissioning Period:** The stores are required to be delivered, installation & commissioning at consignee within **45days** from date of placement of supply order/ purchase order. In case, the delay in supply installation & commissioning at consignee of goods by more than 2 weeks beyond scheduled period, AIIA/ HSCC may cancel the supply order/ purchase order and forfeit their performance security.

2. **Period of Validity:** A bid shall remain valid for **120 days** from the date of submission to HSCC. The bid security should be valid **45 days** beyond the bid validity.

3. **Warranty:** Warranty of equipments will be **two years** from date of commissioning & handing over to AIIA/ Client. Supplier engineer shall visit every six month at AIIA in order to keep all equipment in satisfactory working condition or as and when required by AIIA. The quoted price is inclusive of two years warranty with all spare parts cost, service charge etc.

4. Bidder shall submit performance security 5% of the contract value in the form of DD or bank guarantee within 2weeks from date of placement of supply order/purchase order. The performance security in favour of All India Institute of Ayurveda (AIIA) and valid upto 27 months from the date of installation & commissioning. In case supplier fail to submit their performance security within 2 weeks from date of placement of supply order / purchase order, their bid security may be forfeited and cancelled the supply order /purchase order.

5. Payment Terms:

(i) 75% payment within 30days on submission of following document:
- Copy of Purchase order.
- Consignee receipt in original issued by AIIA/ Client.
- Invoice in favour of consignee through HSCC for 75% claim
- Internal Factory Inspection report in original.
- Warranty Certificate.
- Insurance certificate in original.
- 3rd party Inspection report.

(ii) 25% payment within 30days on submission of following document:
- Copy of Purchase order.
- Copy Consignee receipt issued by AIIA/ Client.
- Installation & commissioning certificate in original issued by AIIA/ Client.
- Invoice in favour of consignee through HSCC for 25% claim.

6. Purchaser reserves the right to accept or reject any bids and to cancel the bidding process and reject all bids at any time prior to the award of contract.

7. If during such inspections and tests the contracted goods fail to conform to the required specifications and standards, the purchaser's inspector may reject them and the supplier shall either replace the rejected goods or make all alterations necessary to meet the specifications and standards, as required, free of cost to the purchaser and resubmit the same to the purchaser's inspector for conducting the inspections and tests again.

8. The purchaser's/consignee's contractual right to inspect, test and, if necessary, reject the goods after the goods' arrival at the final destination shall have no bearing of the fact that the goods have previously been inspected and cleared by purchaser's inspector during pre-despatch inspection mentioned above.

   "On rejection, the supplier shall remove such stores within 14 days of the date of intimation of such rejection from the consignee's premises. If such goods are not removed by the supplier within the period mentioned above, the purchaser / consignee may remove the rejected stores and either return the same to the supplier at his risk and cost by such mode of transport as purchaser / consignee may decide or dispose of such goods at the suppliers risk to recover any expense incurred in connection with such disposals and also the cost of the rejected stores if already paid for."

   The pre delivery inspection carried out by **third party Inspection agency viz LLOYDS/SGS**. The suppler shall arrange third party Inspection agency approved by HSCC. All charges for third party inspection shall be borne by the supplier. Therefore same charges shall take into consideration in its bid.

   The stores (both Indian & Import origin goods) should be despatched only after ensuring prudent inspection carried out by third party Inspection Agencies viz. LLOYDS/SGS and proof of such documents submitted to HSCC for the goods inspected. Inspection Agency shall carry-out testing of equipment and submit test reports along with confirmation of technical compliance of the equipment with respect to tender specifications. HSCC on receipt of such documents shall issue **Dispatch note**. The inference of the test report shall be as "the inspected quoted model meets tendered specification in all respect"

9. Goods shall be despatch at consignee by the supplier after inspected clearance by HSCC/AIIA. Purchaser's / consignee's contractual right to inspect, **demo equipment** before issue despatch note.

   The Purchaser reserves the right to ask for a free demonstration of the quoted equipment at a pre determined place acceptable to the purchaser for technical acceptability as per the tender specifications, before the opening of the Price Tender.

   HSCC to issue Despatch note, supplier/manufacture is to furnish the following documents in two sets:

   1. Country of Origin Certificate.
   2. Quality & Quantity Certificate.
   3. Packing list as per tender terms.
   4. Internal factory Inspection report of manufacturer.
   5. Warranty Certificate as per tender terms.
   6. Third Party Inspection report confirming the inspected equipments & accessories meets tendered specification.
   7. Insurance certificate as per tender.

   After scrutiny, if the documents found in order, **Dispatch note** shall be issued to the supplier.
   No goods (both Indians & Import origin goods) shall be despatched before issue of Despatch note issued by purchaser / consignee.

10. The Time lapse on the part of HSCC approval/ AIIA approval / local statutory approval / Despatch Clearance/ in case of site not ready for installation will not be count for delivery period.

11. Bidder must take into consideration in its bid, costs to be incurred for any additional work pertaining to civil, Electrical, Plumbing, sanitary, Radiation protection as per Govt. regulation/or equivalent as

per local statutory conditions **,** servo stabilisers, U.P.S. etc. if required for successful installation testing and commissioning of the system/ equipment in the "All inclusive lump sum price"/ turnkey work.

The contract will be turnkey work, bidder must take into consideration in its bid, costs to be incurred for supply of equipment from **ware house to consignee AIIA- sarita vihar,** installation, commissioning testing, training, third part inspection cost, packing & forwarding cost, all taxes, all duties, custom clearance charges, loading & unloading charges, site visit charges, two year warranty cost including all spare , Indian agent charges, any other required for successful installation & commissioning of system/ equipment.

12. **Insurance:** For delivery of goods at site, the insurance including transit and installation & commissioning insurance shall be obtained by the supplier in an amount equal to **110%** of the value of the goods from "warehouse to warehouse" (final destination – designated consignee place) on "all risks" basis including war, risks, strikes, erection, storage etc. In any event the Goods are at the Supplier's risk until delivery and installation & commissioning at site.

13. Manufacturer quote directly or their agent.

Director, AIIA

Format -1
BID FORM

To,

Director,
All India Institute of Ayurveda (AIIA)
Gautampuri, Mathura Road
Sarita Vihar
New Delhi

Ref. Your TE document No. _____dated _____
Item no. .....

We, the undersigned have examined the above mentioned bidding document, including all amendment/corrigendum issued till opening of bid (*if any*), the receipt of which is hereby confirmed with acceptance of all the terms & conditions of bidding document including all amendment/ corrigendum issued till opening of bid. We now offer to supply and deliver_____ *(Description of goods and services)* in conformity with your above referred document for the sum as shown in the price schedules attached herewith and made part of this tender. If our tender is accepted, we undertake to supply the goods and perform the services as mentioned above, in accordance with the delivery. We further confirm that, if our tender is accepted, we shall provide you with a performance security as per bidding document. We agree to keep our tender valid as bidding document terms.

We also accordingly confirm to abide by this tender up to the aforesaid period and this tender may be accepted any time before the expiry of the aforesaid period. We further confirm that, until a formal contract is executed, this tender read with your written acceptance thereof within the aforesaid period shall constitute a binding contract between us. We further understand that you are not bound to accept the lowest or any tender you may receive against your above-referred tender enquiry. We confirm that we do not stand deregistered/banned/blacklisted by any Govt. Authorities. We fully agreed to the all terms and conditions specified in above mentioned TE document, including amendment/ corrigendum issued till opening of bid and withdrawn all conditional terms if anywhere mentioned in the our bid. Whenever there is a conflict, the tender form acceptance shall prevail.

We hereby certify that all information and documents submitted by us in this tender are true to the best of our knowledge and belief and that nothing material has been concealed. We are solely responsible for its accuracy. In case, at any stage, any of the information/ document is found to be false, the Purchaser shall have full right to reject my bid/ cancel the purchase order and / or stop payment / recover the liabilities, if any from our balance payment / performance security etc.

Signature:

Name

Designation

Seal :

(On the letter head of the company)

- **If Bid Form not submitted by bidder, bid will be rejected.**

Commercial Compliance (Format -2)

Sr. No.		Compliance
1.	Payment tender terms.	
2.	Delivery & Installation & commissioning terms.	
3.	Warranty tender Terms.	
4.	Packing & forwarding, freight charges, insurance duties, two years warranty, VAT/ taxes tender terms.	
5.	Inspection tender terms	

Authorised Signatory

Technical compliance (Format -3)

Sr. No.	Technical specification	Compliance	Deviation if any
1.			
2.			
3.			
4.			
5.			
6.			
11.			
12.			

Authorised Signatory

Price Format-4

Sr no.	Description of Goods	Make	Model no.	Qty.	# Quoted Unit Price Rs.	Total Amount Rs.	VAT/Sales Tax
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8							
9							

Note: 1. Sales tax should be mentioned separately.

2. Quoted price shall be included of all packing & forwarding, freight charges, insurance duties, two years warranty, VAT/ taxes and other levies payable by the supplier under the contract.

We agree to supply the above goods in accordance with the technical specifications within the period specified in the Invitation for Bids.

We also confirm that we are accepting all the terms and conditions of Invitation for Bids.

Authorised Signatory

CONSIGNEE RECEIPT CERTIFICATE

(To be given by consignee's authorised representatives)

The following Goods (Quantity mentioned against each) has/have been received in good conditions along with a copy of inspection report & warranty certificate.

Name of items supplied .....

Model no. Sr. no. Name of manufacturer

Against P.O. ref. dated.....

Invoice no.

Suppliers Name

Name of Consignee and Address
with telephone No. & Fax No.

Description of the Item:

Packing list reference no. with date

Quantity:

Date of receipt:

Date:
Place:

Signature:----------

Name:----------

Designation:----------

Name of supplier:----------

Seal

Signature:----------

Name:----------

Designation:----------

AIIA, Sarita Vihar

Seal

INSTALLATION, COMMISSIONING CERTIFICATE

(to be filled jointly by the supplier, consignee authorities)

1. Name of Hospital:
2. Name of Supplier:
3. Name of Equipment:
4. Model No.
5. Serial No.
6. Name of Manufacturer:
7. Installed by:
8. Name of Service Engineer
9. Purchase order number with date:
10. Installation location / department /Room no.
11. Date of Installation & Commissioning:

The Equipment is installed and running satisfactorily.

Signature:----------

Name:----------

Designation:----------

Name of supplier:----------

Signature:----------

Name:----------

Designation:----------

AIIA, Sarita Vihar

BANK GUARANTEE FORM FOR EMD

To,
Director,
All India Institute of Ayurveda (AIIA)
Gautampuri, Mathura Road
Sarita Vihar
New Delhi

Whereas _____ (hereinafter called the "Tenderer") has submitted its quotation dated _____ for the supply of _____ (hereinafter called the "tender") against the purchaser's tender enquiry No. _____ Know all persons by these presents that we _____ of _____ (Hereinafter called the "Bank") having our registered office at _____ are bound unto _____ (hereinafter called the "Purchaser) in the sum of _____ for which* payment will and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this _____ day of _____ 20___. The conditions of this obligation are:

(1) If the Tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.

(2) If the Tenderer having been notified of the acceptance of his tender by the Purchaser during the period of its validity:-

a) fails or refuses to furnish the performance security for the due performance of the contract.
or
b) fails or refuses to accept/execute the contract.
or
c) if it comes to notice that the information/documents furnished in its tender is incorrect, false, misleading or forged

We undertake to pay the Purchaser up to the above amount upon receipt of its first written demand, without the Purchaser having to substantiate its demand, provided that in its demand the Purchaser will note that the amount claimed by it is due to it owing to the occurrence of one or both the two conditions, specifying the occurred condition(s).

This guarantee will remain in force for a period of forty-five days after the period of tender validity and any demand in respect thereof should reach the Bank not later than the above date.

(Signature of the authorised officer of the Bank)

Name and designation of the officer

Seal, name & address of the Bank and address of the Branch

S.NO	EQUIPMENT/ INSTRUMENT	SPECIFICATION
1	Digital IR moisture balance, Qty- 1	• (GMP/GLP Compliance model) • Based on latest available technology & widely accepted by pharma testing house • Capacity 10 gm • Directly calibrated in percentage of moisture between 0% and 100%. • Infrared lamp of 250 watts is used for heating the sample. • Temperature. controlled by regavolt, • Complete with six disposable pans, thermometer, wire and plug, ready to switch on 230 volts.
2	WATER DISTILLATION APPARTUS Qty. 1	• GMP/GLP Compliance model • Based on latest available technology & widely accepted by pharma testing house • Double distillation assembly • Distillation units, quartz double, demountable boiler panel series, Borosil catalogue no. 3366, out put capacity ltr./hr. 2.5. Electronic relay unit for use along with above distiller to switch off heater in case of water level flowing below heating coil to avoid frequent burn out. Quantity
3	Boiling point determination, Qty-1	• GMP/GLP Compliance model • Based on latest available technology & widely accepted by pharma testing house
4	Limit test apparatus, Qty. 1	• GMP/GLP Compliance model • Based on latest available technology & widely accepted by pharma testing house • Limit test laboratory apparatus observe(As, Pb, heavy metals etc.), detection apparatus boxes & bottles etc.
5	Refrigerator , Qty- 1	• Capacity: 215 litres • Double Door • Auto Defrost • Works without Stabilizer • 5 Star rating (BEE level) • Any other perquisite required if any with specifications should be included to run and installation of the instrument # Separate quote may be for various other available capacity
6	Chemical balance, Qty-1	• GMP/GLP Compliance model • Based on latest available technology & widely accepted by pharma testing house for Pharmacognosy section
7	Refrigerator , Qty-1	• Capacity: 215 litres • Double Door • Auto Defrost • Works without Stabilizer • 5 Star rating (BEE level) • Any other perquisite required if any with specifications should be included to run and installation of the instrument # Separate quote may be for various other available capacity

8	Balance , Qty-1	• GMP/GLP COMPLIANCE, PILOT SIZE, STANDARD MAKE & QUALITY • Based on latest available technology & widely accepted by pharma testing hous for Microbiology section section • Readability: 0.1 mg • Capacity: 200 gm • Optical Range:1000 mg • Scale Division: 10 mg • Built-in Mechanical Weight: 1-199 gm • Accuracy of optical range:±0.1 mg • Weighing principle: Substitution • Power Connection: 220/230 volt Ac
9	Microscope, Qty-1	• GMP/GLP COMPLIANCE, PILOT SIZE, STANDARD MAKE & QUALITY • Based on latest available technology & widely accepted by Pharma testing hours for Microbiology section
10	Refrigerator, Qty-1	• Capacity:215 litres • Double Door • Auto Defrost • Works without Stabilizer • 5 Star rating (BEE level) • Any other perquisite required if any with specifications should be included to run and installation of the instrument
11	Zone reader (antibiotic), Qty-1	• GMP/GLP COMPLIANCE, PILOT SIZE, STANDARD MAKE & QUALITY • Based on latest available technology & widely accepted by pharma testing hous for Microbiology section section • Microprocessor based design. • Average of vertical diameter & horizontal diameter of inhibited Zone. • Calibration facility. • IQ/OQ documentation. • An accurate method of determining the strength of antibiotic materials. • Magnified Image of the inhibition zone is clearly visible on the Prism • Less time consuming for measuring the accurate diameter of an inhibited zone (± 0.1 mm) • Display shows direct reading. • Any other perquisite required if any with specifications should be included to run and installation of the instrument

Item no.12 , Qty- 1 Nos,

DOUBLE DISTILLATION APPARATUS

- Double distillation plant with stand not wall mounted and approx. 5 – 10 litres/ hour output.
- Instant distilled water flow should be there
- Easy to operate, durable, safe for routine use.
- Quartz distiller, Demountable boiler
- Panel box and stand to accommodate regulator and electrical supply, clamps etc
- Quality of distillate – pyrogen free, PH- 6.9- 7.0.High purity, low conductivity.
- Distilled water should be heavy metal, salts, pyrogon and iron free.
- Specific Conductivity at 25 deg C less than 0.4 x 10-6S/cm
- Glass material (or chemical inert material)
- Equipment should be thermal shock proof.
- Gas vent should be there to remove volatile impurities leaving the condensate free from gaseous impurities

- Automatic low water cut off.
- Tubing should be made up of good quality rubber (heat resistant).
- Wiring of the equipment should be enclosed in Case.
- It should have deconcentrator that constantly removes a part of the boiling water from it so that the cumulative concentration of non volatile impurities in the water is prevented
- All consumables required for installation and standardization of system to be given free of cost.
- The unit shall be capable of being stored continuously in ambient temperature of 0 -50deg C and relative humidity of 15-90%
- The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%
- Power input to be 220-240VAC, 50Hz fitted with Indian plug
- Suitable voltage corrector/stabilizer.
- Suitable UPS with maintenance free batteries for minimum one-hour back-up should be supplied with the system.
- Should be US FDA or CE or ISI or equivalent approved product
- Warranty as per bid.
- Should be compliant to ISO 13485: Quality systems - Medical devices - Particular requirements for the application of ISO 9001 applicable to manufacturers and service providers that perform their own design activities.
- User/Technical/Maintenance manuals to be supplied
- Certificate of calibration and inspection from factory.
- List of important spare parts and accessories with their part number and costing.

Item No. 13, Qty- 2, EQUIPMENT SPECIFICATIONS FOR SYRINGE INFUSION PUMP

1.1 The Syringe Infusion Pump provides uniform flow of fluid by precisely driving the plunger of a syringe down its barrel. It provides accurate and continuous flow rate for precise delivery of I.V. medication in critical medical care.

2.0 **Operational Requirements**

2.1 The syringe pump should be programmable, user friendly , safe to use and should have battery backup and comprehensive alarm system. This should be able to integrate in the HIS.

2.2 Demonstration of the equipment is a must

3 Technical Specifications

3.1 SAVE last infusion rate even when the AC power is switched OFF.

3.2 Bolus rate should be programmable to 400 – 500 ml/hr or more with infused volume display. SAVE last Bolus rate even when the AC power is switched OFF.

3.3 Display of Drug Name with a provision of memorizing 10~15 names by the operator.

3.4 Keep Vein Open (KVO) must be available 1.0 ml/hr or set rate if lower than 1.0 ml. User should have choice to disable KVO whenever desired.

3.5 Selectable Occlusion pressure trigger levels selectable from 300/500/900 mmHg.

3.6 Must Work on commonly available ISI/CE/FDA APPROAVED/CERTIFIED 20, 50/60 ml Syringes with accuracy of minimum of +/-2% or better.

3.7 10, 20, 50 ml Syringe.

3.8 Rate adjustable 1-999ml/hr, steps of 1ml/hr accuracy 1% of total volume delivered.

3.9 Automatic detection of syringe size & proper fixing. Must provide alarm for wrong loading of syringe such as flanges out of slot; disengaged plunger, unsecured barrel etc.

4.0 Anti bolus system to reduce pressure on sudden release of occlusion

4.1 Should have comprehensive alarm package including: Occlusion limit exceed alarm ,Near end of infusion pre-alarm & alarm, Volume limit pre-alarm & alarm, KVO rate flow, Low battery pre-alarm and alarm, AC power failure, Drive disengaged and preventive maintenance.

4.2 Rechargeable Battery having at least 5~6 hour backup for about 5ml/hr flow rate with 50ml syringes. Larger battery life and indication of residual life will be preferred.

4.3 Audi video alarm.

4.0 System Configuration Accessories, spares and consumables:

4.1 Syringe Infusion Pump -01

4.2 Mounting device/ Docking Station for two or four pumps as per requirement so as to enable to power up to 2-4 pumps with one power cord when mounted on IV pole. -01.

5.0 Environmental factors:

5.1 Shall meet IEC-60601-1-2:2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.

5.2 The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%.

5.3 The unit shall be capable of being stored continuously in ambient temperature of 0 -50 deg. C and relative humidity of 15-90% .

6.0 Power Supply:

6.1 Power input to be 220-240VAC, 50Hz

7.0 Standards, Safety and Training:

7.1 Should be US FDA or CE approved product

7.2 Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements

7.3 Manufacturer should be ISO certified for quality standards.

7.4 Certified for meting IEC60601-2-24:Particular requirements for the safety of infusion pumps and controllers

7.5 Should meet IEC 529 Level 3 (IP3X)(spraying water) for enclosure protection , water ingress.

7.6 Electrical Safety Classification Class I/II, Type CF and Internally powered equipment.

7.7 Certified for meeting IEC 60601-1-4 Medical electrical equipment - Part 1-4: General requirements for safety - Collateral Standard: Programmable electrical medical systems

7.8 Comprehensive warranty as per bid..

7.9 Should have local service facility .The service provider should have the necessary equipments recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.

8.0 Documentation

8.1 Certificate of calibration and inspection from factory

8.2 List of Equipments available for providing calibration and routine maintenance support as per manufacturer documentation in service / technical manual.

8.3 User Manual in English

8.4 Service manual in English

8.5 Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.

8.6 List of important spare parts and accessories with their part number and costing.

8.7 User list to be provided with performance certificate.

8.8 Performance report as per bid.

Item No. 14, Qty. 5

EQUIPMENT SPECIFICATIONS FOR NEBULISER

1.0 Description of Function:

1.1 Nebulizer is a device used to administer medication to people in forms of a liquid mist to the airways. It is commonly used in treating cystic fibrosis, asthma, and other respiratory diseases.

2.0 Operational Requirements:

2.1 Heavy duty compact Nebuliser is required.

3.0 Technical Specifications:-

3.1 Technical Specifications Nebuliser

1. Compact, light weight, low noise
2. Durable long life compressor. Suitable for heavy duty/ institutional (hospital) use, should be able to run uninterruptedly for one hour, Max Press= 2.0-2.5 bars
3. Should produce particle of size 1-5 micron
4. Aluminium cabinet painted with epoxy powder.
5. Piston-type electric aspirator that offers high performance and great durability.
6. Protective thermal cut out relay
7. Air delivery rate app.15 L/min.
8. 24 hours continuous work for hospital use

4.0 System Configuration Accessories, spares and consumables:-

None

5.0 Environmental factors:-

5.1 Shall meet IEC-60601-1-2:2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility or should comply with 89/366/EEC; EMC-directive.

5.2 The unit shall be capable of being stored continuously in ambient temperature of 0-50deg C and relative humidity of 15-90%

5.3 The unit shall be capable of operating continuously in ambient temperature of 20-30 deg C and relative humidity of 15-90%

6.0 Power Supply:-

6.1 Power input to be 220-240VAC, 50Hz fitted with Indian plug

6.2 UPS of suitable rating with voltage regulation, spike protection and maintenance free batteries for 60 minutes back up

7.0 Standards, Safety and Training:-

7.1 Should be US FDA, CE, UL or BIS approved product

7.2 Manufacturer should have ISO certification for quality standards.

7.3 DELETED since training is not required.

7.4 Comprehensive warranty as per bid document.

8.0 Documentation:

8.1 User/Technical/Maintenance manuals to be supplied in English.

8.2 List of important spare parts and accessories with their part number and costing

8.3 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.

8.4 List of Equipments available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.

8.5 Certificate of calibration and inspection.

8.6 Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist. The job description of the hospital technician and company service engineer should be clearly spelt out.

Item No. 15, Qty. 2
Equipment Specifications for WEIGHING MACHINE WITH HEIGHT MEASURING SCALE

1.0 Description of Function:-

1.1 Used for routine height and weight measurements of patients.

2.0 Operational Requirements:-

2.1 It should be a platform type of weight and height measuring scale on which the patient can stand for measurement of weight and height.

3.0 Technical Specifications:-

3.1:- **1.** It should be a robust model for day to day rough use in wards and OPD.
2. It should measure the weight in kilogram.
3. There should be LCD display of weight.
4. It should measure the height in centimeter.
5. It should be equipped with tare function to allow a baby to be weighed in its mother's arms.
6. The graduation of measuring weight should be 50 gm.
7. The height measuring rod should be attached with it.
8. The scale should also have BMI function.
9. It should measure the height from 60 cm onwards. In other words, the minimum height which it can measure should be 60 cm.
10. It should be mounted on transport castors to allow free mobility from one place to other.

4.0 System Configuration Accessories, spares and consumables:-

None

5.0 Environmental factors:

5.1 Shall meet IEC-60601-1-2:2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility or should comply with 89/366/EEC; EMC-directive.

5.2 The unit shall be capable of being stored continuously in ambient temperature of 0-50deg C and relative humidity of 15-90%

5.3 The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%

6.0 Power Supply:

6.1 Should work on 220-240V AC as well as rechargeable batteries. Mains adaptor to be supplied

6.2 UPS unit shall be capable of operating continuously in ambient temperature of 20-30 deg C and relative humidity of 15-90%.

7.0 **Standards, Safety and Training:-**

7.1 Should be US FDA , CE,UL or BIS approved product

7.2 Manufacturer should be ISO certified for quality standards

7.3 Comprehensive warranty as per bid.

8.0 Documentation:-

8.1 User/Technical/Maintenance manuals to be supplied in English.

8.2 List of important spare parts and accessories with their part number and costing

8.3 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.

8.4 List of Equipments available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.

Item No. 16, Qty. 2

Equipment Specifications for ELECTRONIC WEIGHING SCALE (Infant)

1.0 Description of Function:-

1.1 Required for routine measurements of infant, neonates and premature babies weight.

2.0 Operational Requirements

2.1 Microprocessor based electronic weighing with facility to weight lying down as well as standing babies.

3.0 Technical Specifications:-

1. Weight range 0-20 kg (minimum weight to be weigh 20 gm).
2. Accuracy +/- 5gms, resolution 5 gms.
3. Unit should have facility accurately weighs the hectic / active baby and retain the digital display for 30 sec. Even baby is removed from the scale.
4. Zeroing facility (when disposable sheets are used above the tray). Display should show negative reading when linen is removed.
5. Unit should have facility to “Freeze” display to show reading even whom baby is removed.
6. Durable HIP moulded baby tray, it should be detachable, to weigh standing babies. Baby construction do not allow baby to be injured or slip from the scale.
7. Large bright red display for strain free reading.
8. Reading time max 5 sec.

4.0 System Configuration Accessories, spares and consumables:-

None

5.0Environmental factors:

5.1 Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility or should comply with 89/366/EEC; EMC-directive.

5.2 The unit shall be capable of being stored continuously in ambient temperature of 0-50deg C and relative humidity of 15-90%

5.3 The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%

6.0 Power Supply:

6.1 Should work on 220-240V AC as well as rechargeable batteries. Mains adaptor to be supplied

6.2 UPS unit shall be capable of operating continuously in ambient temperature of 20-30 deg C and relative humidity of 15-90%.

7.0 **Standards, Safety and Training:-**

7.1 Should be US FDA , CE,UL or BIS approved product

7.2 Manufacturer should be ISO certified for quality standards

7.3 Comprehensive warranty as per bid.

8.0 Documentation:-

8.1 User/Technical/Maintenance manuals to be supplied in English.

8.2 List of important spare parts and accessories with their part number and costing

8.3 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.

8.4 List of Equipments available for providing calibration and routine Preventive Maintenance Support. as per manufacturer documentation in service/technical manual.

Item No. 17, Qty. 1
(Equipment Specifications for WHIRL POOL BATH (for arm, foot and leg)

1.0Description of Function:-

1.0 Immersion of a body part into water with small "agitators" to provide a gentle massaging motion. A warm whirlpool provides relief from pain and muscle spasm and is often preparatory to stretching or exercise. Cold whirlpool is used to decrease inflammation and swelling.

2.0 Operational Requirements:

2.1 Made of 20 gauge SS 304, should have complete accessories with removable inside aluminium Seat & Arm rest. Size approx. 90cm x 50cm x 70 cm (L x W x D).

3.0

3.1 Heavy gauge stain less steel tank Fitted with one motorized turbine ejector and aereator Digital thermomete , thermostat and heater Mounted on heavy duty 10 cm wheels.

4.0 System Configuration Accessories, spares and consumables.

4.1 All standard accessories desired for proper functioning of the machine.

5.0 **Environmental factors:**

5.1 Shall meet IEC-60601-1-2 :2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility or should comply with 89/366/EEC; EMC-directive.

5.2 The unit shall be capable of being stored continuously in ambient temperature of 0-50deg C and relative humidity of 15-90%

5.3 The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%

6.0 Power Supply:

6.1 Should work on 220-240V AC as well as rechargeable batteries. Mains adaptor to be supplied

7.0 Standards, Safety and Training:-

7.1 Should be US FDA, CE, UL or BIS approved product

7.2 Manufacturer should be ISO certified for quality standards

7.3 Comprehensive warranty as per bid.

8.0 Documentation:-

8.1 User/Technical/Maintenance manuals to be supplied in English.

8.2 List of important spare parts and accessories with their part number and costing

8.3 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.

8.4 List of Equipments available for providing calibration and routine Preventive Maintenance Support as per manufacturer documentation in service/technical manual.

Item no. 18, Qty-5
OPTHALMOSCOPE

Ophthalmoscope with superior asherical optics for viewing whole illuminated section of retina. Separation of illumination & observation beam by spherical optical system to avoid corneal & iris reflex. It should have following specifications.

Specifications

- Lens Range :+ in 1D steps 1 to 10, 15D to 25 D
- Apertures : 6, slit, fixation stars with polar coordinates, cobalt blue filter, large spot, small spot, hemi spot and with red – free filter with all apertures.
- Superior apherical optics.
- Mounted in metal frame.
- Electrically rechargeable handle containing 3.5V Ni-Cd battery with Charger.
- Dust proof housing.
- Ergomic shape.
- Self orbital support.
- Complete set in box with spare bulbs 3.5v Halogen (6 Nos.).
- An equivalent or better equipment of proven design & performance which meets the technical & functional requirements shall also be considered.

The equipment offered should be brand new.

Item No. 19, Qty- 2 Nos.
DIRECT OPHTHALMOSCOPE

- Ophthalmoscope, head, monocular with 3.5V krypton bulb, with the following features: Hemi spot, full circular spot, red-free interference filter, test mark with fixation star and polar coordinates, slit.
- Battery handle, for above e3.5V nominal voltage. Rechargeable Ni-Ca cell. Brightness control Rheostat.
- Battery charger, for 3.5V handle, microprocessor control, boost charge/trickle charge modes. Charges 2 handles. Should be combined with Retinoscope

Item No. 20, Total Qty- 5
Equipment Specifications for Syringe Infusion Pump

1 Description of Function:

1.1The Syringe Infusion Pump provides uniform flow of fluid by precisely driving the plunger of a syringe down its barrel. It provides accurate and continuous flow rate for precise delivery of I.V. medication in critical medical care.

2. **Operational Requirement**:

2.1 The syringe pupm should be programmable, user friendly, safe to use and should have battery back up and comprehensive alarm system. This should be able to integrate in the HIS

2.2 Demonstration of the equipment is essential.

3 Technical Specifications:

3.1 Flow rate programmable from 0.1 to 1000 ml/hr or more in steps of 0.1 ml/hr with user selectable flow set rate option. SAVE last infusion rate even when the AC power is switched OFF.

3.2 Bolus rate should be programmable to 40 – 500 ml/hr or more with infused volume display. Reminder audio after every 0.5 ml delivered bolus. SAVE last Bolus rate even when the AC power is switched OFF.

3.3 Display of Drug Name with a provision of memorizing 10~15 names by the operator

3.4 Keep Vein Open (KVO) must be available 1.0 ml/hr or set rate if lower than 1.0 ml. User should have choice to disable KVO whenever desired.

3.5 Selectable Occlusion pressure trigger levels selectable from 300/500/900 mmHg

3.6 Must Work on commonly available ISI/CE/FDA APPROAVED/CERTIFIED 20, 50/60 ml Syringes with accuracy of minimum of +/-2% or better.

3.7 Automatic detection of syringe size & proper fixing. Must provide alarm for wrong loading of syringe such as flanges out of slot; disengaged plunger, unsecured barrel etc.

3.8 Anti bolus system to reduce pressure on sudden release of occlusion

3.9 Should have comprehensive alarm package including :Occlusion limit exceed alarm ,Near end

of infusion pre-alarm & alarm, Volume limit pre-alarm & alarm, KVO rate flow, Low battery pre-alarm and alarm, AC power failure, Drive disengaged and preventive maintenance.

3.10 Rechargeable Battery having at least 5~6 hour backup for about 5ml/hr flow rate with 50ml syringes. Larger battery life and indication of residual life will be preferred.

4.0System Configuration Accessories, spares and consumables

4.1 Syringe Infusion Pump -01

4.2 Mounting device/ Docking Station for two or four pumps as per requirement so as to enable to power up to 2-4 pumps with one power cord when mounted on IV pole. -01

5.0 **Environmental factors:**

5.1 Shall meet IEC-60601-1-2: 2001(Or Equivalent BIS) General Requirements of Safety for Electromagnetic Compatibility.

5.2 The unit shall be capable of being stored continuously in ambient temperature of 0-50deg C and relative humidity of 15-90%

5.3 The unit shall be capable of operating continuously in ambient temperature of 10 -40deg C and relative humidity of 15-90%

6.0 Power Supply:

6.1 Should work on 220-240V AC as well as rechargeable batteries. Mains adaptor to be supplied

7 **Standards, Safety and Training:**

7.1 Should be US FDA or CE approved product.

7.2 Electrical safety conforms to standards for electrical safety IEC-60601-1 General Requirements

7.3 Manufacturer should be ISO ertified for quality standards.

7.4 Certified for meting IEC60601-2-24:Particular requirements for the safety of infusion pumps and controllers

7.5 Should meet IEC 529 Level 3 (IP3X)(spraying water) for enclosure protection , water ingress.

7.6 Electrical Safety Classification Class I/II, Type CF and Internally powered equipment.

7.7 Certified for meeting IEC 60601-1-4 Medical electrical equipment – Part 1-4: General requirements for safety – Collateral Standard: Programmable electrical medical systems

7.8 Comprehensive warranty for 2 years.

7.9 Should have local service facility .The service provider should have the necessary equipments recommended by the manufacturer to carry out preventive maintenance test as per guidelines provided in the service/maintenance manual.

8.0 Documentation:

8.1 User/Technical/Maintenance manuals to be supplied in English.

8.2 List of important spare parts and accessories with their part number and costing

8.3 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.

8.4 List of Equipments available for providing calibration and routine Preventive Maintenance Support as per manufacturer documentation in service/technical manual.

Item no.21	ELECTRONIC WEIGHING BALANCE:-	• Readability- 0.1 mg • Weighing Range- 0 to 220g • Taring Range- 0 to 220g • Repeatability- 0.07mg • Linearity- +0.2 • Stabilization - Time-<2 Sec • Temp. Drift- 0.00015%/^{0}C • Long-Term Stability- 0.0002%/a • Pan Size (Appx.) - 2.75x3in. (73x78mm) • Dimensions (L x W x H) (Apx.) - 45x25x30 cm

Item no. 22	Digital ABBE's refractometer	• (GMP/GLP Compliance model) • Based on latest available technology & widely accepted by pharma testing house • Digital Abbe's refractometer are Designed for accurate and quick examination of the Refractive index and Mean dispersion of liquids, solids and powder • ND Range: ND 1.300 to ND 1.700 In step of 0.001, Accuracy ± 0.0002 • Sugar (Percentage) 0 to 95% in steps of 1 division, Accuracy 0.5% • Temperature 0 - 100ºC • The body of the instrument fixed having a leaning of 60 º, • Correct refractive index and sugar percentage can be read directly in the field. • Must consist of a ABBE double prism compensator, telescope mirror limb, graduated, sector, reading, magnifier and a radial arm which carries a Vernier. • Abbe's double prisms should leave a narrow space (about 0.1 mm) between the adjoining faces of prisms and compensator should consist of the amici prisms which serves for rendering the line of achromatic separation. • thermometer is fitted on the double prism.
Item no. 23	Sigma balance	• GMP/GLP Compliance model • Based on latest available technology & widely accepted by pharma testing house
Item no. 24	Digital Viscometer	VISCOMETER (Programmable & digital): • GMP/GLP Compliance model • Based on latest available technology & widely accepted by pharma testing house • Digital model SPECIFICATION DETAILS: PRO Digital Viscometer combines accuracy, reliability and versatility with the advantages of continuous sensing, temperature measurement and data output to PC or printer. When controlled by PC, the PRO becomes a Rheometer with variable speed capability from 0.01 to 200rpm. Viscosity Range Cp(mPa.s): Minimum Viscosity- 100 ††(†† is achieved with op onal RV spindle) Maximum Viscosity- 40M(M=1 million) Viscometer RMP Speed range: .01 to 200 Number of increments: 54 Continuous display: Viscosity(Cp or mPa's), Temperature(°C or °F), ShearRate, Shear Stress, Torque, Spindle Torque measurement accuracy : 1% of full scale range Repeatability : 0.2% of full scale range Automate program controlSoftware : Latest Automatic program control software by PC Running optional; speed control from 0.01 to 200 rpm. & Download customer programs with DV Loader software (included). Automatic data collection and :Latest version software Automatic data collection and Historical comparison Historical comparison as optional software. Sample monitoring probe:Built-in RTD. temperature probe for sample monitoring.

		• Easy-to-use keypad for simple selection of test parameters • Auto-Zero function to ensure precision torque measurement • Customizable options Spares, Accessories: 1. Parallel printer, serial RS-232 and online UPS with 30 min. backup. 2. NIST traceable viscosity standards available 3. Compatible with all accessories. Where term mention : cP = Centipoise, mPa.s = Millipascal seconds ,†† = is achieved with op onal RV spindle, M=1 million
Item no. 25.	Melting point apparatus (digital type)	• Control: Microprocessor temperature controlled based ramping, provides fast and repeatable warm-up and cool-down cycling. Programmable ramp rates from 0.1 º C/min to 20 º C/min, in 0.1 º C/min increments, provide measurement flexibility. • Furnace construction: Round removable aluminum block. • Temperature sensor: Pt RTD (built-in) • Temperature Range :-10ºC to 400ºC • Temperature Reproducibility:- 0.2ºC • Temperature Resolution: -0.2ºC • Heating Rate: 0.1ºC to 20ºC per min. (0.1ºC increments) • Heat-up time: approx. 10 min. (50ºC to 350ºC • Cool -down time: approx. 10 min. (350ºC to 50ºC • Temperature accuracy: ± 0.3ºC (up to 100ºC) ± 0.5ºC (up to 250ºC) ± 0.8ºC (up to 400ºC) • Oven control:Closed-loop PID • Sampling: a) Sample Size-5 mg (Approx) b) Glass Capillary tube with one end sealed (optional accessory). • Capillaries: Dimensions-1.4 mm to 2.0 mm outside dia,100 mm length. • Capacity: - Up to 3 tubes simultaneously. • Fill height: 2 mm to 3 mm. • Melt View Software:- Melt view software allow to display live, High resolution • Image of samples during analysis time with three screen-captured images below were collected during a typical melt. Selection of formats including result report, graphics, and calibration reports etc. • Display-Back-lit, touch screen LCD (5.8'') • Printer interface-RS-232 serial port, Supports Epson compatible dot-matrix printers. • Computer interface-USB. All instrument function can be queried and controlled through a high-level command set. • Power: 230 VAC ± 10 %, 50 Hz.
Item no. 26.	Sieves 10 to 120 with sieve shaker	• GMP/GLP Compliance model • Based on latest available technology & widely accepted by pharma testing house • Digital type, auto shaking timer with all size sieve set

Item no. 27	Binocular microscope with camera	• Binocular observation head model, inclination 45 degree, interpupillary distance adjustment range • 53-75 mm, diopter adjustment on the left. • Achromatic objectives: 4x, 10x, 40x (spring), 100x (spring, oil). All antifungal coated. • Eyepiece: 10x LB wide field, antifungal coated. • Focusing by coaxial coarse and fine roller guide (rack and pinion type). Coarse movement stroke 20 mm. Tension adjustment on right. Quadruple revolving nosepiece (fixed). Plane stage 120 x 132 mm. With mechanical stage right hand coaxial drive. Abe condenser 1.25 (oil immersion), vertical adjustment range 10 mm, with aperture iris diaphragm. Blue filter
Item no. 28	SLR Camera	• Optimal balance of three performance factors High Image Quality • New TruePicV+ Image Processing Engine • 12.3-megapixel High-Speed Live MOS Sensor • 3.0-Inch, 920,000-dot Flexible-Angle LCD • Live View Shooting • Level Gauge • HDMI output/stereo microphone input terminals • Three-Way Controls • Built-in Flash with Commander Function • Light Metering • Underwater White Balance Control Face Detection & Shadow Adjustment

MICROBIOLOGY SECTION

Item no. 29	Binocular microscope with camera	• GMP/GLP COMPLIANCE, PILOT SIZE, STANDARD MAKE & QUALITY • Based on latest available technology & widely accepted by pharma testing house for Microbiology section

Note: The purchaser reserves the right to ask for a free demonstration of the quoted equipment during technical evaluation of all above items i.e. 1 to 29.