# INVITATION FOR QUOTATION ONLINE

# AIIMS, RAEBARELI UNDER MINISTRY OF HEALTH & FAMILY WELFARE, GOVT. OF INDIA



# 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

HSCC/PUR/LOW VALUE/AIIMS-RAEBARELI/PHYSIOLOGY

### **INVITATION FOR QUOTATION ON LINE**

#### HSCC/PUR/Low Value/ Physiology/ Quot/02

Dated: 09.07.2019

То

#### **All Bidders**

**Subject:** Invitation for **on line** Quotations for supply of Low Value Equipment For **Physiology** for Medical College AIIMS, Raebareli

Dear Sirs,

- 1. HSCC (India) Ltd. for and on behalf of AIIMS, Raebareli, Autonomous Body under Ministry of Health & Family Welfare, Government of India invites your on line most competitive quotation for the following goods of the respective departments quantity mentioned the **section I** and technical specification mentioned in the **section II**.
- 2. Quotation:
  - 2.1 The contract shall be for the full quantity as described above.
  - 2.2 Corrections, if any, shall be made by crossing out, initialling, dating and rewriting.
  - 2.3 The **on line** prices quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
  - 2.4 The unit price/ rate of the item should be clearly indicated in the quotation. Rates/Prices quoted shall be including of forwarding, and insurance & transportation, warranty, including **GST** up to the consignee **AIIMS Raebareli, Uttar Pradesh.**
- 3. Each bidder may quote one item or more than one item as per section IV (Price format) with equipment technical literature as per Section III.
- 4. Evaluation of Quotations:

The Purchaser shall evaluate and compare the quotations determined to be substantially responsive i.e. which;

- 4.1 are properly signed; and
- 4.2 confirm to the terms and conditions, and specifications.
- 4.3 final considerations of equipments shall be based on the quality of equipments during demonstration / inspection.
- 4.4 The quotation will be evaluated and compared separately for each item.
- 4.5 The Purchaser reserves the right to ask for a free demonstration/ sample approval of the quoted equipment at a pre determined place acceptable to the purchaser for technical acceptability as per the tender specifications during Technical evaluation process, failing which bid may not be consider further.
- 5. The Quotations would be evaluated item wise.
- 6. Award of contract:

The Purchaser will award the contract to the bidder whose quotation has been determined to be substantially responsive and who has offered the lowest rate for the item subject to technical acceptance of the items during demonstration / inspection.

- 6.1 Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and cancel the bidding process and reject all quotations at any time prior to the issue of Purchase Order/contract, without assigning any reason.
- 6.2 At the time of awarding the contract, the purchaser reserves the right to increase or decrease the quantity of goods and services mentioned in the schedule (s) in the "List of Requirements without any change in the unit price and other terms & conditions quoted by the tenderer.
- 7. Delivery period shall be within **8 days** from date of placement of order at Consignee i.e. **AIIMS Raebareli**, Uttar Pradesh.

8. Payment shall be made only in Indian Rupees as follows:

On Delivery & Satisfactory Acceptance - 100% of total cost

100% Payment on submission of following documents (Duly signed & stamped at your end):-

- Copy of Purchase order.
- Consignee Receipt Certificate / Final acceptance certificate issued by Consignee / Client/HSCC
- Invoice in favour of consignee i. e AIIMS RAEBARELI through HSCC (I) Ltd
- Warranty Certificate in original.
- Copy of Insurance Certificate.
- **9.** All supplied items shall be under **one year warranty** from the date of successful acceptance by **AIIMS RAEBARELI**.
- 10. You are requested to provide your lowest offer as follows:

Sr. No.	Item no	Name of items	Closing date & time for submission	Date and time of Opening of Techno
1.	Dept. of Physiology	As per list	17.07.2019 at 15:00	17.07.2019 At 15:30

NOTE: (Under any unforeseen circumstances if the due date for submission of Tender is declared as holiday then the tender shall be submitted & opened on the next working day at the scheduled time).

The Online quotations will be opened in HSCC office, NOIDA as mentioned above in the presence of bidders or their authorized agents as they may choose to attend.

- 11. Information brochures/ Product catalogue, if any, must be accompanied with the quotation clearly indicating the model quoted for.
- 12. Online quotation to be uploaded along with the mentioned below:

#### I. PRODUCT SPECIFICATIONS: (As per Section – III)

- □ Brand/model name and type of Product being offered by the Firm must be clearly mentioned in the offer.
- □ Tenderer should confirm that the stores offered conform to relevant specifications asked in this Tender Enquiry Document at **Section-III**. The firms are advised to submit the compliance statement with respect to technical specification asked in the tender enquiry in the following format as per **Section III** along with Technical bid failing which their offer will <u>be treated as incomplete and are liable to be ignored.</u>
- Deviations, if any, are to be clearly mentioned. Complete product specifications, technical details, illustrations, literature, printed pamphlets/leaflets etc. must accompany the Online quotation.
- 13. Quoted amount should be in Indian Rupees only and as per section –IV price Schedule format.
- 14. For all items, the Technical Evaluation Committee may opt for Demonstration of the items. The expenditure incurred for demonstrating the items will be borne by the supplier. The Committee may also ask for Demonstration / Inspection before supply / during delivery of the items at site for quality assurance.

### 15. LIQUIDATED DAMAGES:

In the event of placement of an order, if the Supplier fails to deliver, install and commission the stores in full or part thereof with in the delivery period as stipulated time i.e 8 days, the Purchaser reserves the right to levy Liquidated Damages @ 1% per week of the amount of the undelivered stores for delay in supplies subject to maximum 10% of value of the supply Order. Once the maximum is reached, the purchaser may consider termination of the contract and purchase the same from elsewhere, at the risk and cost of the Supplier.

The details of Online Invitation for Quotation has been made available at www.hsccltd.co.in, <u>www.tenderwizard.com/HSCC</u>, CPPP Portal and prospective bidders are advised to reguraly scan through HSCC E-tender portal <u>www.tenderwizard.com/HSCC</u>, www.hsccltd.co.in, CPPP Portal as corrigendum/modification/amendments, if any, will be notified on these portal only.

We look forward to receiving your quotation and thank you for your interest in this project.

General Manager (Proc) On behalf of AIIMS, Raebareli, Ministry of Health & Family Welfare

# <u>SECTION - III</u>

# Format of compliance statement:

Sr. No.	Para of Tender Enquiry specification	Make	Model	Compliance to Tender enquiry Specification Yes/ No	In case of non Compliance deviation From T/E Specification to be indicated in Unambiguous terms
1.					
2.					
3.					
4.					

# Section -I

# **2. PHYSIOLOGY DEPARTMENT**

Sl.No.	Name of the Article	Quantity
1	Sherrington Starling kymograph (electrically driven)	2
2	Myograph stand	2
3	Inductorium	2
4	Simple key	2
5	Short circuiting key	2
7	Vibrating interrupter	2
8	Muscle trough	2
9	Muscle lever	2
10	Muscle grip of femur clamp	2
11	Hook and Weight set	2
12	Heart lever (simple &Starling)	2
13	Frog board for dissection	2
14	Enamel tray	2
15	Frog board cork lined with boss head	2
16	Low voltage unit for tapping 2 and 4 volts for stimulation	2
17	Electromagnetic time marker	2
18	Tuning fork time marker 100/sec	2
19	Electrodes	2
22	Marey's tambour	2
24	Demonstration eye piece	3
25	Double demonstration eye piece	3
26	Stage incubator	1
27	Westergren's pipette for E.S.R. on stand(with space pipette)	20
28	Wintrobe's pipette for ESR and PCV with stand	20
29	Perimeter Pristely Smith S/LP.984 B & T	10
30	Hemoglobin-meter Sahli's or Hellige (with spaces)	50
31	Hemocytometer	50
32	Sphygmomanometer (digital) (Mercury based instruments to be replaced withsuitable alternatives)	50
33	Stethoscopes	50
34	Stethoscopes, demonstration with multiple ear pieces	5

35	Polygraphs	1
37	Spirometer, ordinary	15
38	Gas analysis apparatus, Halden's student type	1
39	Van Slyko's apparatus manometric	1
41	Elsevier Computerized Simulation Practicals	1
43	Douglas bag, complete	1
44	Basal metabolism apparatus	1
45	Mosso'sErgograph	8
46	Clinical thermometer (Mercury based instruments to be replaced with suitable alternatives)	40
47	Compass aesthesiometer	20
48	Thermo-aesthesiometer	20
49	Algometer	15
50	Apparatus for passive movement	1
51	Knee hammer	30
52	Stethograph	15
53	Bicycle Ergometer	1
54	Olfactometer	1
55	Ophthalmoscope	1
56	Schematic eye	1
58	Perimeter with charts (Lister's)	2
59	Color perception lantern Edridge green	1
60	Maddox rod	1
61	Newtons color wheel	1
62	Tuning fork to test hearing 32-10000 cps(sets-100, 256, 512 hz)	15
63	Dynamometer	10
64	Otorhinolaryngoscope	1
66	Instrument trolley	1
67	Stop watch	15
70	Centrifuge, high speed with technometer	1
71	Colorimeter, photoelectric	1
72	pH meter electric	1
73	Refrigerator	1
74	Oxygen cylinder with trolley	1
75	CO2 cylinder with trolley	1
76	Electronic stimulator	1
77	Water distillation steel with spare heating elements	1
78	All glass distillation apparatus double stage	1
79	Voltage stabilizer	1

80	Thermometers, balances, microslides and glassware	As required(Quote
		for Single Qty)
81	Digital Physiograph	1
82	Models and Charts	15 each
83	ECG Machine	2
85	Shellen's Chart	1
86	Jagger's Chart	1
89	Multimedia Projector with screen	2

### Section II Technical Specification of Equipments

### ITEM No. 1 SHERRINGTON STARLING KYMOGRAPH

### Sherrington Starling kymograph (electrically driven)

Should run on electric motor,

Speed should be adjustable with the minimum 2.5 mm/sec to maximum 640 mm/sec, Shaft with the groove on one side and screw lift at the top,

Gear for adjusting the speed, Clutch to change the gear,

Contact button with the striker or contact arms, Drum  $15 \times 15$  cm,

Levelling screw.

The product should be CE or FDA or BIS Certified

### Item No. 2 Myograph stand & Muscle stand: Myograph stand For the study of the velocity and intensity of muscular contraction Muscle stand Heavy triangular base of iron , Iron stand rod, Sliding plate with groove and handle, Screw and handle to fix the plate shaft

### **Item 3 Induction coil**

Fixed primary coil two end connected to two terminals on the top of the vertical platform sliding secondary coil with pointer at base

Tow terminals of secondary coil

Base may be of wood or heavy metallic bar with scale Electromagnet with central brass pillar with screw

Tall brass pillar bearing the Neef's hammers.

Tall brass pillar with terminal at base

The upper make and break screw planted on metal

base Hammer strip attached to tall brass pillar

### Item No. 4 simple key & Primary key Mercury key

### Item No. 5 short circulating key & DuBoisReymond Key

#### Item No 7. Vibrating interrupter

Clamping plate Thumb screw Vibration scale Mercury cup

Base board

#### Item No. 8 Muscle trough Lucas

Made of non conductive material Can be mounted on stand Bottom with two holes closed with corks one for fixing tissue other for drawing fluid with rubber tube and clamp Sliding strip or socket with lever mounted on it Two screw to fix copper wire and two electrode

### Item 9 Muscle lever

#### Item 10 Muscle grip of femur clamp

### Item No. 11 Hook and weight set

### Item No. 12 Heart lever (simple & Starling)

A holder and screw to fix the lever on a stand Two bars at right angle to each other Horizontal with socket to which lever is attached vertical bar to hold spring The other end of spring is attached to lever Arrangement to change tension in spring

# Item No. 13 Frog board for dissection

Heavy base

Central rod

Board, lever and electromagnet fixed on rod

#### Item No. 14 Enamel tray

#### Item No. 15 Frog board cork lined with boss head

### Item No. 16 Low voltage unit for tapping 2 and 4 volts for stimulation

Low voltage unit for tapping 2 and 4 volts for stimulation

#### Item No.17 Electromagnetic time marker

Coil wound round soft iron bar

Coil connected to screw

Soft iron plate with spring

Tension of screw can be regulated by screw

Writing lever attached to plate

Bar and holder to fix the instrument on stand

#### 18 Tuning fork, time marker, 100/sec

Tuning fork, time marker, 100/sec.

#### 19 Electrodes

Copper wire placed in holder made of non conductive material (cork, Plastic ect) With screw Shielded electrode two wire parallel to each other in layer of non conductive material Polarizable or non Polarizable electrode

### ITEM No. 22. MAREY's TAMBOUR

- This device should convert changes in air pressure into movements of a stylus that scribes a kymograph.
- I Should have Dia. 22mm or 28mm (Approx)
- Should have Stainless Steel capillary lever
- Should have ¼ " hollow stem
- <sup>2</sup> Should have sliding adjustment to writing point
- Should have tie-on Diaphragm

### Documentation

<sup>2</sup> Manufacturer should have ISO certification for quality standards

24	Demonstrations eye piece (Standard Type)	3	Demonstrations eye piece (Standard Type)
	piece (Standard Type)		
25	Double	3	Double Demonstration eye piece
	Demonstration eye		

#### Item No. 26. Stage Incubator - Electric CO2 Microscope Stage Incubator

Temperature range should be 3°C above room temperature to 50°C Temperature control accuracy should be as follows:

 $\pm 0.3$  °C (Chamber temperature feedback)

 $\pm 0.2^{\circ}$ C (Specimen temperature feedback)

Should have Electric Heating Technology

Should have Chamber temperature feedback and Specimen temperature feedback

CO2 range should be 0 to 100% Manufacturer should have ISO certification for quality standards

### ITEM No. 27. Westerngreen pipettes for ESR on stand (with space pipettes)

### ITEM No. 28. Wintrobe's Pipetter for ESR on Stand (With Space Pipette)

Item	Perimeter Priestly	Perimeter Priestly Smith S/LP.984 B&T
No.	Smith	Charting the field of vision; with stand, metal arc; chin rest
29		and chart paper etc

### Item No. 31. Haemocvtometer

Technical Specifications Hemocytometer counting chamber should be able to determine the number of particles per volume of blood.

Particles are counted under the microscope It should contain improved neubauer chamber mercury coated cover slips, RBC & WBC pipette Documentation

• Manufacturer should have ISO certification for quality standards

Item No. 33	Stethoscopes (Traditional)	50	Stethoscopes (Traditional)
Item No.	Stethoscopes, Demonstration with	2	Stethoscopes, Demonstration with
34	Multiplear pieces		Multiplear pieces

### ITEM No. 30 HAEMOGLOBINOME TER SAHLI's

The Haemoglobinometer Sahli's type, should be square tube type and the kit should consist of the following:-

### Comparator Holder -

1. It should be black in colour and the windows should have the following dimensions :-

- a. Height : 3 cms (Minimum)
- b. Width : 0.5. cms (Minimum)
- 2. Colour comparator

3. Square Hb Tube  $\,$  graduated on both sides for measurement of haemoglobin in percentage and  $\,$  gram %

4. 20 Micolitre Hb – Pipette

- 5. Amber coloured acid vial
- 6. Glass Stirrer
- 7. Dropper with Teat
- 8. Cleaning Brush

### The kit should also be supplied with the following standard accessories:

i. Square Hb
tubes: 01 no. ii.
Hb pipettes: 01
no.
iii. HCL
N/10:
500ml iv.
Dropper: 01
no.
v. Glass stirrer: 01 no.

### The manufacturer should be ISO certified /or the product should be ISI marked ITEM NO. 32.Sphygmamometer- (Specification received)

### **ITEM NO. 37. SPIROMETER SIMPLE**

Consist of metallic vessel inverted on jacket of water A wide air passage going through center of jacket connected to tube with mouth piece Other end is connected to mouth piece by corrugated impervious tubing Counter weight attached to chain running over pulley balancing weight of bell Capacity 6 Liters. Pointer or scale marked on wheel fixed over pulley.

### **39. VAN SLYKO'S APPARATUS MANOMETRIC**

Apparatus for analyzing gases inmicrolitre samples of blood or othersolutions

- □ Based on vacuum extraction principle
- □ Should be accurate and reproducible
- □ Product should be CE/BIS/US FDA/ISO certified
- □ Bidder has to give demonstration of the product if required.

### **ITEM No. 41. Elsevier Computerized Simulation Practicals**

### ITEM No. 43. DOUGLAS BAG

### **Technical Specifications**

- A receptacle for collecting expired air to determine oxygen consumption in humans under various work conditions
- Should be able to measure

a)Metabolic rate before, during and after exercise b)Effects of humidity and temperature on ventilation c) Calculation of oxygen consumption

d)Effects of breathing high and low CO2 concentrations on ventilation, respiratory rate and O2 consumption

- Should be Soft, flexible, ethylene vinyl acetate copolymer tubing
- Should have 30 mm ID tubing has greater cross-sectional area
- Tubing should be low profile annular rings resulting in minimum distortion on bending so that maximum cross-sectional area is maintained
- One-way air valve with mica discs
- Absorbent indicator canister can be set directly in the circuit at any point
- Should measure the MBC ability to collect 200L of gas
- It should be available in different sizes and should supplied with a plug and spring clip
- Should be supplied with all accessories like mouthpiece and nose clip

System Configuration Accessories, spares and consumables

- Tubings
- Mask
- Valves
- mouthpiece
- Nose clip

### Documentation

• Manufacturer should have ISO certification for quality standards

### **44. BASAL METABOLISM APPARATUS**

Should be able to determine the oxygen consumption, respiratory rate and physical activity of Human, weighing upto 120g.

• The method should be based on the principle that oxygen consumption is proportional to the decrease in pressure in a closed system

- Spiro meter should have 2 or 4 speed electrical recording unit with gravity writing ink pen.
- Should be double walled with water seal.

• Should have easily accessible valves and a cock to connect the patient to spirometer or to the atmosphere

Soda lime container located in the central chamber should be present.

• A portable frame should be provided.

System Configuration Accessories, spares and consumables

- Thermometers
- Stopwatches
- Charts
- Mouth piece
- Nose clip
- Valve tubes Documentation
- Manufacturer should have ISO certification for quality standards

### 45. MOSSO'S ERGOGRAPH

- 1. Should have wooden board fitted with two pair of clamp for fixing forearm on armrest and a pair of steel finger holder.
- 2. It should have sliding plate over the board.
- 3. The plate should be fitted with chart holder and a vertically fitted spring loaded writing device for recording.
- 4. Hook with weights (1 kg each 10 nos)
- 5. Standards, Safety and Training
  - a. Should have ISO certification and copy of the same should be submitted along with the technical bid.
  - b. The quoted model should be FDA/CE/BIS certificate and the copy of the same should be submitted along with the technical bid.
- 6. Documentation
  - a. Two numbers of complete user/technical maintenance manuals to be supplied in English (Soft copy and hard copy).

#### Item No. 46. Clinical Thermometer

### **ITEM No. 47.COMPASS AESTHESIOMETER**

Stainless-steel body

• It should have well-formed points, and adjusting screw giving movement of approximate: 1 mm per half turn.Manufacturer should have ISO certification for quality standards

### ITEM No. 48. Thermal aesthesiometer

Should be MMicroprocessor Controller

Should have computer connectivity for data logging.

- Should work on the temperature range of 5 Deg to 55 Deg
- Should have sampling rate of 18 samples/sec
- Should have a starting temperature  $25^{\circ}$  to  $40^{\circ}$
- Temperature increment rate 0.2 deg/s to 2.5 deg/s
- Temperature decrement rate 0.2 deg/s to 2.5 deg/s
- Delay between the repeats should be 3 to 30 secs
- Power supply 220v 50Hz
- The product should be CE or FDA or BIS Certified

### 49. Algometer:

- 1. Accuracy should be  $\pm 3\%$  of reading
- 2. LCD Display should be 5 digits,
- 3. Display Update should be 8 per second
- 4. Power: 220 VAC charger
- 5. Should have rechargeable battery
- 6. Battery backup should be up to 50 hours
- 7. Tip Size should be  $1 \text{ cm}^2$
- 8. Should have Bi-Directional RS232 (include RS232-USB convertor) communication with the computer
- 9. Should have auto calibration facility
- 10. Should have internal memory of 500 data
- 11. Should have USB patient response unit to record patient response during stimulation
- 12. The product should be CE or FDA or BIS Certified

### Item No. 50. Apparatus for passive movement

CPM is used to treat joints of the lower limb after an injury, disease or following surgery. Based on a

concept originated by SALTER IN 1970, this device has varied applications namely treatment of intra

articular fractures, septic arthritis, ligaments tendon healing and also following total joint replacement

to ensure a sufficient range of motion.

To prevent stiffening, the jouint have to be moved continuously which results in the following.

· Minimize swelling and pain after operation

• Ensures faster recovery and shortened hospital stay

 $\cdot$  Prevents extra articular contractures and adhesions. Ext/Flex Angle indicator at knee position

- · Compact and elegant construction
- Electronic controls enable all adjustment of angle to be made on the front panel.
- · Smooth and silent movement
- · Digital timer with alarm
- · Patient safety switch for stopping and reversing the motion. Specifications
- Treatment time 0 99 minutes Reset time 1 to 5 seconds Angle

Extension 0

Power 230V/AC/50Hz, 75VA

### Item No. 51. Knee Hammer

Item No. 53. Bicycle Ergometer (Specification already received)

### ITEM No. 54. OLFACTOMETER

Detection Technique: Human Nose

Discrete Dilution Ratios: 2, 4, 7, 15, 30, 60 D/T's

- (Standard Dilution-to-Threshold Ratios)
- Response Time: As fast as 10-seconds or better(2 inhalations)
- Accuracy: +/- 10% of D/T
- Repeatability: +/- 2%
- Inhalation Rate: 16-20 liters per minute
- Operating Temperature Range: 32° to 104°F, 0° to 40°C
- Odor Filter Cartridge of suitable size
- Nasal Mask of suitable size
  - Provision for 9 inlet and outlet port

Power supply - 220V,50Hz

The product should be CE or FDA or BIS Certified

### ITEM No. 55. OPHTHALMOSCOPE

- · Turret Type
- Illumination: 3.5V, 2.8W Mini Halogen Bulb
- Recharging unit: Input Voltage:  $220V \pm 10\%V$
- Input Frequency should be 50 Hz  $\pm$  1Hz
- Input Power should be around 8VA
- Battery should be rechargeable
- Viewing Lenses:  $0, \pm 1, \pm 2, \pm 3, \pm 4, \pm 5, \pm 6, \pm 8, \pm 10, \pm 12, \pm 16, \pm 20, -25, -35$
- Apertures: Large Spot, Small Spot, Slit, Central Net, and Red-free

The product should be CE or FDA or BIS Certified

Item No. 56. Schematic eye

### ITEM No. 58 Perimeters, with charts (Priestly Smith model)

1. Should have a calibrated arc, revolving chart holder.

2. Should be able to rotate in any direction and fix at any position with a tightening screw. The arc should be graduated from  $0^{\circ}$  to  $90^{\circ}$  with a movable test object.

3. At the back of the arc arrangement should be provided for fixing of chart which has concentric circles corresponding to the degrees of arc.

- 4. Adjustable chin rest.
- 5. The above mentioned should be fitted over a sturdy base with receptacle for keeping charts.
- 6. Should be supplied with 20 packets each containing consist of 100 charts

7. Accessories – Objects should be of minimum 2 sizes, round and square shaped and of 5 different colors.

The product should be CE or FDA or BIS Certified

Item No. 59. Colour perception lantern Edridge Green

### Item No. 60. Maddox Rod

Maddox rod for screen test;

- Maddox rod lens; red/white/green rim and amp; handle material: copper handle; length: 70mm,

Item No. 61. Newtons colour wheel

Item No. 62. Tuning Forks to test hearing 32 - 10,000 cps (sets)

Tuning Forks to test hearing 32 - 10,000 cps (sets)

### Item No. 63 **Dynamometer**

Especially suitable for use in rehabilitation centers/physiology labs;

Real time mode: immediately shows the patients current strength

Peak/Max Mode: shows the maximum strength of a patient's

grip

Average Mode: calculates the average strength from two grips

Counting mode: counts the numbers of presses which exceed a previously defined strength limit;

integrated AUTO – OFF function after 1 minute to preserve the batteries; as part of a rehabilitation

program, this permits medical staff to monitor the fitness of the patients hands and carry out controlled

training exchangeable springs facilitate fast switching of the capacity (Additional spring sets for 20Kg

and 40Kg are included with delivery); safe, comfortable use thanks to non slip rubber grips Stable case for safe, easy transport and for storage of the additional spring sets as standard, WXDXH:

350X265X85mm

### Item No. 65. Sterilizer Electric, (Medium Size) 300X150X100mm

#### Item NO. 66. Instrument trolley

Instrument Trolley of stainless steel with three shelves with guard rails on three side -With swivel castors

Small:- 66x44x87cm (LxWxH) Large:- 91x45x82cm (LxWxH

#### Item No. 67. Stop watches

Stop watches reading at 1/5 second with LED/LCD display reading at 1/5 display

#### 70. CENTRIFUGE HIGH SPEED WITH TACHOMETER

1. Should be able to separate various components of blood and any other liquid sample for analysis 2. Should be vibration free

- 3. Should be table top version
- 4. Tube Capacity : No. 24 36 : Size: 5 15 ml
- 5. Should have a digital timer

6. Body should be made of strong fabricated & corrosion resistant steel

7. Control panel – for start/stop switch, dynamic brakes, step less speed regulator with zero start switch & speed indicator with timer and protective fuses.

- 8. Should have door interlock facility
- 9. Maintenance-free brushless drive motor with exact speed pre selection and display.

10. Speed range 100 to 6000 rpm and above, accuracy 1 rpm.

11. RPM : Up to 6500-7000

System Configuration Accessories, spares and consumables

1. Centrifuge complete with Swig and basic rotors and four buckets- 01 set.

2. Tube Holders as appropriate Power Supply 1. Power input to be 220-240VAC, 50Hz as appropriate fitted with Indian plug 2. Input 160-260 V and output 220-240 V and 50 Hz Standards, Safety and Training

1. The supplier should be ISO certified for quality standards.

2. Should be FDA/CE or BIS approved product.

### Item No. 71. Colorimeters photoelectric

Filter : Seven Glass filter Photometric Range : 0-100%T(Transmittance) 0-2.0Abs(Absorbance) Should be with digital readout Sample Container : Square cuvette 10x10x45(mm) Round cuvette 10(ID),12(OD),105(L)mm Should work on 230V,50 Hz Acessories Filter case-1 pc Filter-7 Pc Analog output cable-1 Pc Power cord-1 Pc Operation manual -1 copy Bulbs-3 nos Extra Cuvettes -10 nos

The supplier should be ISO certified for quality standards. Should be FDA/CE or BIS approved product

### Item No. 72 . pH Meter

Should be microprocessor based for fast and accurate pH measurement with splash/water proof keyboard

- Should have 3 point calibration.
- pH range should be 0-14 with resolution 0.01 pH and Accuracy +/- 0.02 pH
- pH and temperature on LCD display
- Calibration Points 4.00 , 7.00 , 9.20
- mV Range 0 to +/- 1999.9 mV, resolution +/- 0.1 mV , Accuracy : +/- 0.2 mV
- Should have Probe check mode to check Electrode Aging.
- Should have built in ATV with PT 100 Sensor (Range 0 100 deg C)

• Should have Temperature range – 0 – 99.9 deg C with resolution 0.1 deg and accuracy +/- 0.2 deg )

- Should have Temperature compensation Auto/Manual
- Should have Data Storage Should have Glass pH Electrode
- Should be ISO and CE certified Accessories:
- Standard buffers 1 set
- Electrode 1 set extra
- electrode cleaning solution

### ITEM 73. LAB REFRIGERATORS

Capacity range 9-10 cft..

- □ Temperature 2-8
- □ Preferably roller or caster mounted
- □ Adjustable shelves
- □ Battery backup for display and alarms.
- □ Durable rust free exterior

□ Durable interior.

Control panel with temperature alarm, on/off switch and digital thermometer, Interior lighting, auto or manual defrosting arrangement.

□ Adequate circulation of air to ensure even cooling.

 $\Box$  Door with lock.

□ Control panel with temperature alarm, ON /OFF switch with power on indicator, digital thermometer, temperature display.

□ Electronic automatic temperature control,

□ Operable at 220 V, 50 Hz, single phase AC supply.

□ Compressor unit to be hermetically sealed with guarantee for at least five years.

□ Training of laboratory staff for the purchased equipment

□ Availability of spares/ disposables for at least 10 years.

□ List of users and satisfactory report of quoted model from reputed institute preferably Government institute/ hospitals

□ Should have all the accessories required for the functioning of the equipment.

CE / ISI/US FDA mark or other equivalent quality certification.

□ All electrical peripherals required for smooth functioning e.g. voltage stabilizer provided with the equipment

Demonstration of the product is must

### Item No. 74. OXYGEN CYLINDER "B" TYPE

### OXYGEN CYLINDER "B" TYPE

A container designed as a refillable cylinder used to hold compressed medical oxygen (O2) under safe conditions at

high pressure (e.g., 50 - 200 Bar).

It is typically filled with O2 when delivered from the gas supplier and includes a valve stem, an opening/closing

valve, and will be graded according to size (capacity) and colour-coded to denote O2 content.

The cylinder may be made of steel, aluminium (Al) or other ferrous or non-ferrous materials and must be used

together with a pressure regulator in order to release the O2 at the correct working pressure. O2 is used as an essential life support gas, for anaesthesia, and for therapeutic purposes.

### GENERAL

### USE Clinical purpose

A container designed as a refillable cylinder used to hold compressed medical oxygen (O2) under safe conditions at

high pressure; O2 is used as an essential life support gas, for anaesthesia, and for therapeutic purposes.

### Used by clinical department/ward

#### All

### **TECHNICAL CHARACTERISTICS**

Technical characteristics (speciic to this type of device)

Color coded, light weight. The cylinder may be made of steel, aluminium (Al) or other ferrous or non-ferrous

materials oxygen cylinder for providing oxygen therapy Mounted with pressure reducer and low-meter provision of

capacity upto 15 Litters per minutes and outlet for secretion aspiration.

Should have membrane pressure reducer with

Should be seamless cylinder of water capacity 10 litres.

#### Settings

Flowmeter for controlling unlow of oxygen. Mobility, portability - yes; on its trolley; for Ambulances - to be supplied bare without trolley.

Accessories & Spares - humidifier, key and low meter

#### Certifications

Cylinder should have ISI mark and ISO certificate for quality standard or BIS equivalent; IS 3224. Cylinder should

have explosive safety certificate and should be provided along with each cylinder during installation.

#### Item No. 75. CO2 Cylinder with Trolley

#### Item No. 76. Electronic stimulator

Channel: Dual, isolated between channels Pulse intensity: Adjustable 0-80 mA peak into 500  $\Omega$  load each channel,

constant current Pulse Rate: 1Hz-160 Hz (adjustable), 1Hz/step (1-20 Hz), 5Hz/step (20-160 Hz) Pulse Width: 50 µs – 260 µs (adjustable),

 $10 \ \mu s / step$ 

Patient Compliance meter: Shows the treatment times in hours.

Timer: 15, 30, 60 minutes and continuous mode.

#### Item No. 77. Water Distillation Apparatus still

Water Distillation Apparatus still Electric  $\cdot$  Automatic sensors made available to keep the system in standby mode, when system is not in

Operation

· Output Ltrs/Hr: 10 lt /hr double distilled

- · Quality of distillate: grade 1
- · Conductivity us/cm: < 0.2 us/cm, On line conductivity provided to monitor quality of output water.
- · Cooling water input for condemnation: 2ltrs/min X 2 inputs ,Water recycling available, no

wastage of water

• Power: 230v, 50/60Hz, 2 phase, 12KW approximately Water distillation still, with spare heating elements

#### Item No. 78. ALL GLASS DISTILLATION APPARATUS

#### **Technical specifications:**

The glassware should be made of high quality borosilicate glass to withstand high heat. Apparatus capacity should be of 4 litres/Hr.

Should be double stage. Should have metallic stand and other accessories.

Stand should be made of rust free material.

Standards heating elements of 2.5-3KW to be used.

An automatic cut off device should be attached.

Heater should be of quartz for immediate output of distilled water. Apparatus should consist of high quality Borosilicate Boiler with built in water leveller.

Output water should be pyrogen-free with conductivity less than 1 micro siemen, ph 6.9-7, distillate temp 65-75 deg

C.

Metal stand.

Automatic cut off device or safety control module.

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

Manufacturer should have ISO & CE certification for quality standards.

### Item No. 78. ALL GLASS DISTILLATION APPARATUS DOUBLE STAGE

**Application**: General laboratory purpose water distillation plant **Specification**:

1. The complete outer and inner jacket, condenser tubes are made of Stainless steel.

- 2. The apparatus capable of producing pyrogen free distilled water as per IP/BP standards.
- 3. The instrument should have low water cut off device, water level indicator and control panel.

4. Capacity : 5-6 ltrs/hr
5. Chamber -: Stainless Steel 304 quality
6. Air Heater: should have ISI Mark
7. Heat up Time: 20- 30 min. from Ambient
8. Mounting: Clamp for wall mounting
9. Top Lid: Stainless Steel
10. It should have BIS/CE/ISO/US FDA certified
11. Demonstration of the equipment is must

Item No. 79. Voltage Stabilizer

Item No. 80. Microslides and glassware

**Microslides :- 1000** 

#### **Glass wares:**

Glass wares of following capacity as required by standard lab. All items should be made of Heat resistant Borosilicate Glass Pipettes-1ml - 10 Nos

Pipettes-2ml - 10Nos

Pipettes-5ml - 200 Nos Pipettes-10ml - 200 Nos

Beakers-100ml - 100 Nos

Beakers-250ml - 200 Nos

Beakers-500ml - 50 Nos

Beakers-1000ml - 10 Nos Conical Flask-100ml - 50 Nos Conical Flask-250ml - 200 Nos

Conical Flask-500ml - 50 Nos

Conical Flask-1000ml - 20 Nos

Conical Flask-2000ml - 10 No.

Test Tube (glass) -10ml - 500 Nos

Test Tube (glass) -15ml - 500 Nos Test Tube (glass) -20ml - 200 Nos

Centrifuge tubes - 15ml - 500 Nos Centrifuge tubes (graduated) - 15ml - 500 Nos

Reagents Bottles - 100ml - 100 Nos( AmberColour and white colour each)

Reagents Bottles - 250ml - 100 Nos

Reagents Bottles - 500ml - 50 Nos

Dropping Bottles- 100ml- 50 Nos.

Measuring Cylinder - 100ml - 20 Nos Measuring Cylinder - 500ml - 10 Nos

Measuring Cylinder - 1000ml - 5 No.

#### Item No. 81 Digital Physiograph

### ITEM No. 82. Charts (CHARTS ON Physiology)

- 1. The Muscular System
- 2. The Skeletal Systems
- 5. The Nervous System
- 6. The Brain
- 11. The Heart
- 12. The Lymphatic System
- 13. The Human Skull
- 16. The Respiratory System
- 17. The Eye
- 19. The Eye. Anterior & Posterior chambers
- 21. The Ear Organs of hearing & Balance
- 23. Anatomy of the inner ear

### 25. The Skin

- 26. The Female Reproductive System
- 27. The Male Reproductive System
- 28. Pregnancy & Birth
- 29. Female Reproductive Systems (Ant. &Patho)
- 35. The Endocrine System
- 44. The Digestive System
- 45. The liver
- 46. The Urinary Tract
- 47. The Kidney
- 48. The Prostate
- 49. The portal System

56. (a) External Morphological Features in Male Female (b) Sex Differentiating Features in Skull (One Chart)

#### Item No. 83. ECG Machine (Specification already Received)

### Item No. 85 VISION CHART (Shellen's Chart)

Technical specification Snellen Eye Chart Should have printed eleven lines of block letters The first line consists of one very large letter, an E. Wall-Mounted

- Non -reflective material Matte Finish Durable Plastic
- 20 ft. Test distance
- Size: 22" x 11"
- Traditional Snellen Eye Chart uses the English Alphabet
- Illiterate Snellen Eye Chart uses different facing Es
- Should be made using high contrast letters on washable polystyrene
- The progression of letter height is that any line is 1.2589 times greater than the line below.

This multiplier is the root of ten or 0.1 log unit. Therefore, a three line worsening of visual acuity is equal to a doubling of the visual angle regardless of the initial acuity

• The charts are designed for use at 4 metres which helps with smaller examining rooms

Item No..86 Jagger's Chart

\_\*

#### Section -IV

#### Price Bid

Sr no.	Name of item	Make	Model	Qty	Unit cost (Rs.)	GST		Unit cost	Total cost including GST (Rs.)
						%	Amount (Rs.)	includin g GST (Rs.)	
				a	b		с	D= b+c	D X a
	Please quote separate prices for all line items including Charts, Model as in List of requirement/         Technical Specification         1								
2									

Note:

- 1. Total cost of all items shall be included of all packing & forwarding, freight charges & insurance from ware house to consignee site at **AIIMS Raebareli**, and will include local tax, entry tax, duties, GST and other levies payable by the supplier under the contract. It will also include all charges towards installation, testing & commissioning of Equipment.
- 2. Bidder shall fill all cost i.e. a.b,c... failing which it will presumed that the same is inclusive in the total price and nothing will be paid extra on any account.
- 3. Bidder shall mention present rate of GST, failing which it will be presumed that the same is inclusive in the total price and nothing will be paid extra on this account extra.
- 4. If there is a discrepancy between the unit price and total price THE UNIT PRICE shall prevail.
- 5. The equipment will have one year warranty from the date of Satisfactory Installation & Commissioning.

#### <u>Final Acceptance Certificate Handing over</u>] (To be given by consignee's authorized representative)

The following store (s) has/have been installed & commissioned in good working satisfactory condition:

:

1.	Contract No. & date	:	
2.	Supplier's Name	:	
3.	Consignee's Name & Address	:	
4.	Name of the item supplied	:	
5.	Date of Handed over to consignee	:	
6.	Name consignee /HSCC Representative	:	
7.	Signature of consignee/HSCC Representativ	ve	:

8. Seal of the Consignee