

Short Urgent Tender Notice 01 / 2015 – 2016 / Pharma / IGIMS / Store

INDIRA GANDHI INSTITUTE OF MEDICAL SCIENCES, SHEIKHPURA, PATNA - 14.

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# **IMPORTANT DATES**

Last date for submission of Bidding Document	25/ 05/2015 Till 2.00 P.M. by
	Registered/Speed/Courier only
Opening of Technical bid	25/05/2015 at 3.30PM in conference hall
	IGIMS, Patna

# **CHAPTER – 1**

# **INSTRUCTION TO BIDDER**

# **INSTRUCTION TO BIDDER**

# **TENDER FORMS & DOCUMENTS**

01.	Last Date & Time of opening of Tender is25 / 05.2015 till 2.00 P.M.Cost of Tender Document: Rs. 1, 000/-and will be open on same day at 3.30PMCost of Tender Document: Rs. 1, 000/-					
02.	Name & Address of tenderer(s):					
03.	Registration No of the following: -					
	a. Shop & Establishment/Registration No.(Desirable)					
	c Sale Tax clearance certificate Un to date					
	d. DGS & D Registration Certificate, if rate quoted on DGS D Rate contract.					
	Earnest Money:- Rs.10, 000/( Rs. Ten Thousand for each Group) in favour of Director, I.G.I.M.S., Patna payable at					
04.	Patna in way of Demand Draft. Nodatedand Amount					
	Period of validity of quoted price:- One Year					
05	<u>Tenderer will not be allowed to mention any kinds of discount in quotation/terms and conditions. He will quote</u> the rate only as per column in SL No - 12 given below only. Other wise his tender will stand cancelled and no					
05.	further correspondence will be entertained in this regard.					
00	Clearly mention the Guarantee period & after sale services to be provided, if applicable.					
06.	General terms & conditions & tender document are mentioned in Chapter 2.					
07.	This Tender document is Non-transferable.					
08.	Please mention "Name of Group" at the left top corner of envelope.					
09.	Separate Tender Document is required for each group.					
10.						
11.	The quotation for items in the Tender Notice should be in the following format. Otherwise tender shall not be considered and rejected outright.					
12.	Note: Overwriting / Fluiding / Cutting in price will not be allowed. Rates/Prices must be mentioned both in figure and words.					

Name of the Item	Packing size	Offer price per Unit with specification.	CST	Surcharge	BST	VAT	тот	Net Unit Price	ls it DGS & D rate / Approved rate for Hospital / General Market rate
1	2	3	4	5	6	7	8	9	10

Signature of tenderer with date

#### **INSTRUCTION TO BIDDER**

- 2. The "Bidding Document" can be downloaded from institute website <u>www.igims.org</u> only.
- 3. Last date for submission of bidding document 25./ 05/2015 till 2.00 P.M. by registered post / speed post/ Courier only. Bidders are requested to send the bid well in advance so as to ensure that bid reaches in time. Institute will not be responsible for any postal delay. Bids received after due date and time shall be summarily rejected.
- Earnest Money 10,000/-( Rs. Ten thousand ) only for each Group is required to be submitted along with tender by Demand Draft only along with the tender favoring Director, I.G.I.M.S. – Patna (payable at Patna). No interest is payable on EMD/ Bid security.
- 5. Non- submission of sufficient EMD along with the Technical Bid shall be one of the primary reasons for rejection of the offer in the first round.
- 6. **Part Supply** :- No part supply or wrong supply will be accepted, However in the intertest of the patient care, part Supply may be accepted with the approval of the competent authority but payment will be released only after full supply.
- 7. Following certificates are required with the **Technical Bid**:

SI.	Require Certificate	Attached at Page		
No		No.: of		
		Technical Bid		
1	Name and full address of the Bidder with Office telephone Number.			
2	Status of the Bidder whether manufacturer or authorized dealer/ agent/stockiest etc.			
3	Authorization letter of company (if authorized agency) in favour of			
	bidder valid for not less than three prospective years.			
4	VAT Registration No. of bidder, if applicable.			
5	Sales Tax Clearance Certificate			
6	Pan Card of the bidder			
7	Income Tax return of bidder for the last three successive years up to			
	financial year 2014-15.			
8	An affidavit from bidder that the company/firm has not been blacklisted			
	/De- registered/ De- Barred by any govt. Institutions / organization			
9	An affidavit from bidder that the quoted rate in this financial bid is not			
	more than the rate quoted in any other government,			
	organization/Institution by them.			
10	An affidavit that Quoted rate is not higher than MRP.			
11	All documents must be attested by the bidder with signature, date seal.			
12	Technical specification of the items quoted in the light of the			
	specification given in the bidding document (submit a check list).			

13	List of Institutions/Hospitals where supply has been made in the last three years	
14	Sample of the Items (Must for the clothes of all types, Cotton, Gauge,	
	Disposable Syringe, etc where ever applicable as mentioned in the document)	
15	Total turnover year wise in the preceding last three years. Manufacturers/Supplier having large turnover shall be preferred. (Attach audited Balance sheet & P/L A/C).	

#### PRICE BID:

- (1) Price of all the items quoted should be mentioned separately for each item. The price should be per unit basis.
- (ii) Standardization certificate for the items used shall have to be submitted, if required.
- (iii) All taxes applicable must be quoted wherever applicable. The exact amount of the tax at the prevailing should be clearly quoted. Simply writing tax as applicable shall not be sufficient and accepted & bid will be rejected.

# <u>CHAPTER – 2</u>

# **CONDITIONS OF THE CONTRACT**

#### CONDITIONS OF THE CONTRACT

01. **Destination of Delivery**: Central Store Section, I.G.I.M.S., Sheikhpura , Patna -14

#### 02. Acknowledgement and Discrepancies :

On receipt of the supply orders any discrepancies should be pointed out within 10 days of the issue of the order. In case, no intimation to the contrary is received from the firm within 10 days, it will be assumed that order has been accepted in full even though it may have been placed after the lapse of the validity period of the quotation.

- 03. **Prices:** As mention in supply orders.
- 04. <u>Taxes:</u> Inclusive / Exclusive .If taxes are extra please specifying the rate of tax applicable on the items.
- 05. **Payment:** After receipt of goods and submission of satisfactory Inspection Report issued by officials as authorized by the competent authority.
- 06. **Price Variation Clause:** The institute shall accept the price rates as mentioned in the quotation only. The claim for price increase over the quoted price shall not be accepted by the institute within the validity period of the quotation. However, where the firm has quoted on price list basis the institute may accept the increased price applicable at the time of actual supply on production of valid and current price list.
- 07. **Validity of Price:** one year from the date of opening of technical bids..(Extendable as per requirement).
- 08. **Delivery Period: 30** days from the date of issuance of supply order. However, shorter delivery period will be preferred.
- 09. **Penalty Clause:** If the firm supplies after expiry of 30 days and within 45 days of the order a penalty of 2% of the total ordered value will be imposed/charged. If the firms fail to supply the ordered goods even after 45 days, the following action shall be taken against them.
  - a. Cancellation of the supply order.
  - b. Forfeiture of EMD.
  - c. Black listing of firm for any future participation.
  - d. Legal action, if necessary. Legal jurisdiction court of Judicature at Patna
- 10. **Supply**: Normally Stores pertaining to the Supply Order should be dispatched in one lot. Part supply may be allowed upon written request by the supplier and permission granted by the officials authorized by the Institute. However, payment shall be made only after full ordered quantity of the ordered items.
- 11. **Delivery Extension:** Under special circumstances if valid reason for extension to the satisfaction of the Institute is provided, the Institute may consider giving further extension **of time without penalty.**
- 12. **Payment**: Payment will normally be made when the full supplies is made against a supply order, except when part supply has been allowed in supply order or when supplier has been asked to supply in installment. Or in any other special circumstance by order of competent authority. In such a situation payment may be released upon part supply after completing established procedures
- **13. Replacement of defective / expired supplies:** Shall be the responsibility of the firm on their cost, who has executed the supply.
- **14. Expiry date of item supplied:** No supply of items having expiry date less than one year on the date of supply shall be accepted by the Institute. Supplier having expiry date more than one year shall be preferred.

#### 15. Discrepancy or Omission:

The payments are made strictly on the basis of the supply order and firms are advised not to deviate from supply orders instruction in all respect. In the event of there being any discrepancy, the matter should first be referred to the institute for necessary amendment in the supply order before making actual supply and submission of the bill.

#### 16. Challan:

The suppliers should submit the challan in triplicate alongwith the supplies to the Central Store, IGIMS, Patna-14.

17. The bills should be submitted to the office of the Officer under whose signature supply order has been issued.

#### 18. Excise Surcharge:

Following certificate should also be endorsed on each copy of the bill at the time of charging the Excise Duty, if admissible.

"It is certified that the Excise Duty included in the bill is in accordance with the Excise Duty Rules and that the stores on which the Excise Duty has been charged are not exempted from the Excise Duty under the Rules framed by the Government of India for this purpose and the Excise Duty so charged /collected has been remitted accordingly to provision of the relevant rules."

19. The Institute is not covered under Form 'B' and as such Sales Tax as stipulated may be billed at the rates applicable at the time of supply.

#### 20. Items available in different packing, size/quantities:

For the items available in different packing sizes/quantities the gross rate as well as unit price (In terms of relevant net quantity) should be mentioned for each packing size/quantity.

#### 21. Items with different net and gross weight:

For items with different net weight and gross weight, e.g., COTTON ROLL- for each packing size, both net as well as gross weight must be mentioned alongwith corresponding rates.

#### 22 Items with different specification for same item:

For items with different specifications, if mentioned in tender paper separate rate with details specification must be mentioned.

#### 23 Stamping / Numbering of Items:

For items having longer life e.g. funrnitures, fans, almirah and certain linen, manufacturer / supplier may be required to put a number s / stamping with paint or any other suitable materials at the discretion of the institute. Tenders should mention the separate rates for this work.

## 24 Items with certain specified Half – Life:

For items with specified half-life e.g. radioisotopes half-life of the items quoted must be mentioned. Unless otherwise, the quantity in such cases accepted for payment will be the quantity received at I.G.I.M.S. store and not at dispatched.

#### 25 Warranty / Guarantee on the items to be supplied:

Wherever applicable, supplier is required to mention warrantee/guarantee available on specified items (with duration of warrantee/guarantee applicable). Manufacturer/authorised dealer/supplier offering warrantee/guarantee on item supplied will be given due weight age. in case where warranty/guarantee is mentioned on the packing material/item itself /catalogue of the manufacturer, it will be applicable and it will be mandatory for the supplier to extend the same to the institute.

#### 26 D. G. S. & d. Rate Contract:

Manufacturers/dealer/supplier having D.G.S. & D. Rate Contract should attach necessary certificate with validity along with rate and specification for relevant items.

27. Supplier is required to give under taking to the effect that they have not supplied the Items quoted to any Govt./ Semi Govt. institution / organization at prices lower than the price being quoted. Further, in case of price going down in future, it will pass on the benefit to IGIMS, Patna.

Tenderer must submit a certificate that the quoted price is not higher than the MRP or market price of the same make of the quoted items.

28. The Institute if so desire may ask any tenderer to furnish their turn- over of the quoted items for previous two to three years with a list of users of those items

#### IMPORTANT

The procedures for rendering of bills are prescribed in clauses 7,8 and 9 above. It is essential that the bills should be in accordance with these clauses: -

- 1. The bills should be prepared in triplicate.
- 2. It should be accompanied by the Inspection Note to be obtained from the department concerned of the Institute.
- 3. The Bills should be pre-receipted and affixed with Revenue stamps, where necessary.
- 4. In bills B.S.T. / VAT registration number must be mentioned on each copy of the bill.
- 5. The bills should be supported by a certificate for Excise Duty as stated in the above clause.

#### 29. **Postage and Freight:**

Where payable in terms of supply order and is claimed in the bills, the original receipt granted by the post office and/ or the Railways should be attached with the bill.

- 30 **Replacement:** Replacement of defective supplies shall be the responsibility of supplier at their on cost.
- 31. Special Clause may be added if necessary in the Supply Order.
- 32. If manufacturer shall submit their quotation directly and authorizes any local agent / distributor to supply and raise the invoice for payment on the rates quoted by them, after approval of the rate/quotation by the competent authority of the institute, their authorized agent/ distributors can supply the items and raise the bill for payment. However, responsibility shall be of manufacturer. A proper authorization certificate in favour of local agent / distributors is to be submitted by the manufacturer along with their bid.

# 33. (Quantity of items as per requirement of deptt. and avaibility of fund. Items may increase or decrease.

Sd/-Director I.G.I.M.S. - Patna.

# CHAPTER – 3

# SCHEDULE OF THE REQUIREMENTS AND OTHER DETAILS

# GROUP-\_A

# Instruments for Department of Pharmacology,

Sl. No.	Name of equipment	Specification	Quantity
1.	Actophotometer (Digital)	Acto Photometer with digital read out for evaluation of spontaneous activity in small animals. The Cage is provided with top cover & a sliding tray at the bottom to clean the excrete of the animals. 4 Digit Electronic Activity counter start reset and stop functions 12 (6 Pairs) photoelectric activity sensors. 4 digit seconds	01
2.	Analgesiometer	Tail Flick Unit Research Analgesiometer- Radient Heat Type Incorporates Digital PID Temperature controller, Digital current or Ampere controller, special variable safety device to automatically cut heating off at preset 10 to 60 Secs. Interval to prevent tissue damage. Quick heating for rapid repetition of experiment. with photoelectric tail flick sensor and digital timer. Flick of tail cuts heat off and holds displayed time till reset. Supplied with rat holder	01
3.	Assembly for mammalian classes	<ul> <li>A versatile assembly serving both for heart perfusion and as on all-purpose thermostatic organ bath. The transparent perspex bath is 12" x9" x 8" and rests on a metal stand: a 1" x 3 / 8" thick edge at the top makes clamps etc. carrying the uprights and Temperature of the bath is regulated (Constant). Thermostatic sensitivity ±2°C. The stirrer unit is completely independent, and dips into the bath in one corner, and fixes on its special stainless steel upright. A perspex connection box is fitted to the bath frame, and carries all the electric leads and connections. Two pilot lamps indicate the thermostat and stirrer operation. Extra accessories to enable the unit to be used as an all-purpose organ bath (2 unit) are:-</li> <li>Double set of glass inner vessels, Oxygen tubes, Warming coils, Levers with stainless steel capillary, Four uprights with boss heads, X blocks, Complete assembly with upright stand, double reservoir, mercury manometer</li> </ul>	
4.	Assembly perfusion apparatus for mammalian heart	Thermostatic Assembly for perfusion of excised mammalian heart. Serving both for heart perfusion and all purpose two unit thermostatic bath. Complete assembly with stainless upright stand, double reservoir, mercury manometer & with special accessories.	01
5.	Automatic electric recording drums	New Super Ten Electrical Kymograph: For Pharmacology and Drug Assay; close mesh gear train; 10 speeds; 1 rev. in 1 min. to 1 rev. in 12 hours 30 minutes. Speed selection through a convenient dial knob; Special heavy duty motor; no backlash no slow starting on slow speeds; jerk free movement; stainless steel spindle with screw lift 15x15cm cylinder with leveling screws, pilot lamp, plug and cord	01
6.	Bell jars Assorted	Knobbed -Ht. 22.5Cm x Dia 15cm	01
7.	Bright/dark box-Rat (Automated)	The Light/Dark Box is a characteristic tool used in the assessment of anxiety. The basic measure is the animal's preference for dark, enclosed places over bright, exposed places. Time spent in the lit (light) half of the arena, and the related exploratory behaviors, are reliable parameters for assessing anxiolytic effects that may be useful in identifying and/or screening of anxiolytic and anxiogenic agents. Dimension- width (100cm), Depth (50cm), Height (35cm)	01
8.	Brodi's operation tables	Modern Exptl. Operating table. Now with all steel frame designed for greater stability. Stainless steel top 127x45 cm. in two halves slopping towards the central drain, warming chamber, castors, moving handles, with animal holder, stainless steel tray and 2 uprights.	01
9.	Carbon-di-oxide cylinder		01
10.	Centrifuge.	Centrifuge clinical doctor model round body 3000 RPM Circular basic Centrifuge	01
11.	Chemical Balance- Sensitive (Micro) digital.		01
12.	Colorimeters	Digital Photo Colorimeter 8 Filters mains operated with optical density in $2\frac{1}{2}$ Digit LED Display, 1ml solution measurement.	01
13.	Cook's Pole Climbing Appartus	Cook's Pole Climbing response app. -The experimental chamber has a grid floor and a sliding door with a clear Perspex front. -An electric buzzer and chamber light	01

		-A solid state stimulator with built in timer provides electrical shocks of 440 v.	
		0.2 ma at a frequency of 5 per second.	
		- The duration of stimulus may be controlled manually also.	
		manual.	
14.	Digital pH meter	Digital, with auto Temp. Compensation, Combination PH Electrode and RTD Probe 3 digit LED Display Table Model	01
15.	Digital	Digital Pletysmograph with LCD Display for Volume Displacement. Computer	01
	Plethysmograph	based graphical and Digital Display, option for storing data upto 10 readings	
16		Supplied with software but without computer.	01
10.		OR Eddy's Hot Plate-	01
	Edy's Hot Plate	Consists of a heating surface with perspex enclosure and solid state temperature	
		controller with indicating galvanometer to set surface temperature between 30	
17	Flectro	degree and 80 degree C Electro Convulsioneter Provides 50 Hz, stimulus current variable from 0.25 Ma	01
17.	Convlusiometer	to 360 mA. A solid state timer controls the stimulus duration from 0.1 to 1 sec. in	01
		steps of 0.1 sec. A stimulus pilot indicates when the stimulus is applied. Three	
		pairs of corneal electrodes of 4,6 & 8 mm. & a pair of eye clips are supplied as	
18	Flevated Plus	Std. accessories with instruction manual Utilized to test anxiety-related behavior, the Elevated Plus Maze centers on	01
10.	Maze- Automated	rodents' fear of open and elevated spaces. Arranged in a "+" shape, SDI's	01
		Elevated Plus Maze has two closed and two open arms, as well as an open	
10		center.	01
19.	Flame photometer	Figure Chinical Flame Protometer dual channel single aspiration (Na,K, Li & Ca filters). Final result in med/L, 2 ½ digit dual LED Display for simultaneous result	01
	r lune photometer	along with compressor and accessories.	
20.	Four Unit isolated		01
	THERMOSTATIC		
21.	Histamine Chamber	Histamine Chamber for Guinea Pigs Large Chamber with special perforated	01
		partition, with inbuilt pressurised air delivery pump and fine nebulizer eliminates	
- 22	<b>T</b> 1	need for oxygen or manual effort. Size 14x12x9 inch.	01
22.	Jackson_s Enterograph		01
23.	Jacquets graphic	Jacquests Graphy Chronometer / Stop Watch Metal Body,fly back	01
	chronometer	Action, Dial type, Table Model	
24.	LC/MS Mass	Mass range : upto 3000 amu	01
	spectrometry	and APCI probe. The ESI and APCI should handle flow rate from 0.2 µl to 2000	
		µl per minute without flow splitting	
		The mass detector uses self cleaning, conewash technology as an automated	
		means of cleaning the entrance cone and surrounding area, increasing uptime and	
		The mass detectors API source uses a titanium entrance cone to minimize	
		corrosion and a tripleorthogonal (60, 90, 90) MPath optics to maintain sensitivity	
		and , it is completely toolfree, using wipeclean"Teflon surfaces to simplify	
		maintenance procedures Scan rate : upto 5000 amu per second both in centroid scan	
		<b>Sensitivity</b> : In ESI positive ion mode 10 pg/ $\mu$ l of reserpine should produce	
		$S/N> 200:1$ and in APCI + ion mode $10pg/\mu l$ reservine should produce	
		S/N>10:1	
		<b>Quauruple mass analyzer</b> : The mass detector is triple quadruple mass spectrometer which occupies $\leq 30$ cm of horizontal bench space. Analyzer and	
		detector on a single flange for quick and easy access to all components	
		Automatic system check : The system should have automatic system QC check	
		tacility and auto calibration facility. The mass detector permits acquisition of	
		and selected ion monitoring (SIM) functions for ions- within a single	
		chromatographic injection	
		Software and Hardware : Single point control software to control, acquire and	
		process data from LC, Detector and Mass Detector. It should have features like	
		analysis.	
25.	Metabolic Cages	Metabolic cage consists of an animal molded housing having S.S. grid floor &	(a) 01
	(Diuretic Study)	clampable roof with arrangement of solid feed & water. The Cage is mounted on	(b) 01
	(a) For Rats	a regulation of the angle of the second of t	

	(b) For Mice	the base	04
26.	Microscopes	Magnification form 100x-1000x) with Wide field eyepiece NWF10x, Parafocal	
	ordinary	achromatic objectives 10x,40 & 100x(spring oil immersion) attachable graduated	
		mechanical stage (120x125mm), Sub-Stage abbe condenser (N.A. 1.25)	
		Supplied with plano concave mirror for light source.	
27.	Open field test-	The apparatus consists of a square arena 96 x 96 cm $^2$ with 60 cm high walls. The	01
	Automated	walls and the floor are painted white. The floor is divided into 25 squares.	
28.	Operating lamps-		01
29.	Oxygen Cylinders		014
	with Trolleys 20		
	cu.ft		
30.	Piston Recorder	18 mm. dia, 4 c.c. cap.Pyrex tube	01
31.	Pithing needle	Frog nithing needle	10
32.	Pneumograph	PNEUMOGRAPH OR STETHOGRAPH Corrugated rubber tube, with	01
	Palmer E	side clips & open link chain, For use with any tambour	
33.	Polygraph (Analog	Up to 16 channel Acquisition	01
	PC Based)	Parameters: ECG, EEG, EOG, EMG, ENG, Nurve Conduction, PFT	
		• Wave over-lap facility	
		Pulse analysis	
		Heart rate variability analysis	
		• Identify frequency component of EEG signal delta, theta, alpha and beta with	
		FF1 function	
34	Refrigerators	• PC Connectivity Refrigerator: - 165 Ltr. With Stabilizer	01or
57.	Refingerators	Refrigerator: - 310 Ltr. With Stabilizer	more
			01 or
25			more
35.	Rotarod apparatus-2	Digital Rota Rod App. incorporating electronic stepless variable speeds from 3 RPM to 25 RPM of a common service 50 mm shaft. Transparent Perspect	01
	compartments	compartments with independent electronic digital timers and contactless	
		pohotoelectric time recording operation- 2 compartments	
36.	Rotary Evaporator,	• consists of motorised lift with provision of automatic lift in case of	01
	Diagonal	electricity failure.	
	Glasswale	• Vertical condenser	
		• Rotation speed : Rotation speed 20 to 280 rpm or better	
		• Integrated/ non-integrated Digital display of all parameter i.e. rotation	
		actual) etc. Control unit should be inbuilt / separate	
		• Evaporating flask: 500ml 1000ml 2000ml should be supplied	
		• Receiving flask: 1000ml	
		• Heating bath capacity: 4.5 lit or above	
		•Heating (maximum)180 deg C or above	
		• Automatic over heat cut-off protection	
		• Must have USB Interface for data management with software	
		• Must be supplied along with woulff bottle.	
		•AUTO easy Function should have capability to find boiling point and	
		perform distillation automatically/Integrated solvent database of	
		• Should be able to program the required vector conditions.	
		• Must have 'timer function' which can allow unattended operations	
37.	Soxhlet apparatus	Completely automated. Stirrer bar. Still pot. Distillation path. Thimble. Solid	01
		Siphon top, Siphon exit, Expansion adapter, Condenser, Cooling water out, Temperature range:- $50^{\circ}$ C to $350^{\circ}$ C	
38.	Starling's long	Starling's Long extension kymograph with time markers / Super speed Large Extension	
	extension	Kymograph- with 3 uprights, manometer & double lever Time Marker	
	kymographs with		
39.	Student	The system should have:-	01
	Physiograph	-A high speed USB 2.0 interfaced 4 channel data recorder with inbuilt bio-	
		amplifier & isolated stimulator with a recording range of 2mV to 10V & a	
		sampling rate of 100KHz on each channel.	

		<ul> <li>The software should have a pre-configured, ready to use experiments with background information and step-by-step instructions for a wide range of experiments including human, animal physiology, pharmacology, exercise physiology, psychophysiology and medical case laboratories studies.</li> <li>-Must upgrade experiment free of cost for 5yrs</li> <li>-only software controlled filtering for pre and post data recording/analysis</li> <li>-Transducers and accessories:- Pulse Transducer, Respiratory Belt Transducer, Sphygmomanometer, Push button switch, Cardio Microphone, Hand Dynamometer, Dry earth strap, EEG Flat electrodes, Reusable ECG/Electrodes Disposable ECG Electrodes, Temp &amp; wireless heart rate kit.</li> <li>-The system should be supplied with single channel Isolated tissue setup including peristaltic pump based organ bath with isometric force transducer and Nerve and muscle bath.</li> <li>The unit must be approved to the IEC 60601-1 patient safety standards, making them safe for use with human subjects and should comply with other safety standards.</li> <li>-Desktop computer with 17" TFT Monitor, 4GB RAM, 380 GB HDD, DVDR/W, Laser printer &amp; UPS.</li> </ul>	
40.			
41.	Tambours mareys Palmer C.5 & C.11	stainless steel capillary lever, 22 mm. dia.	01
42.	Tetanus Set Palmer H2O	having two ' X' blocks & two plain stands and one floating lever	01
43.	TheidealRespirationPump(500 cc. CAP.)	VARIABLE RATE, VARIABLE STROKE (V.R.V.S.) RESPIRATION PUMP with variable calibrated stroke arm and with geared motor (crompton) through a four speed gear box,(speed ratios of 2:3:4:6. Speed change can be effected during the course of experiment by just manipulating the gear change knob. Mounted on metal platfrom with castors. Cap. 500 c.c. with crompton motor	01
44.	Vacuum & Pressure Pump	Vacuum pump FHP Monoblock with oil.	01
45.	Varnishing Tray with foot lever	Varnishing Tray SS with foot lever, wall fixing.	02
46.	Vortex mixer	A variable speed mixer that accommodates a variety of tubes for various analyses to eliminate time consuming hand mixing. Continuously variable speed regulator controls the degree of vibration. A new unique touch feature operates the unit as soon as the tube is slightly pressed. Adopter CM-01/01 for 6x0.5 ml, 6x0.4ml, 6x1.5 ml Micro tubes, CM-01/02 for tubes Flasks.	01

# List of Instruments for Clinical Pharma

# Pulse Oximeter

Pulse Oximeter	Patient Range: Adult, Pediatrics and neonatal patients	02
	• Digital SpO2:-	
	• Range 0 - 100%	
	• Resolution 1%	
	• Accuracy 70% to 100%: ±2%	
	• Refreshing rate < 13 seconds	
	• Pitch Tone Yes	
	Pulse Rate	
	• Range 25 - 250 bpm	
	Resolution 1 bpm	
	• Accuracy $\pm 2\%$ or $\pm 1$ bpm, whichever is the greater	
	• Refreshing rate < 13 seconds	
	• Display Type 2.4" color display 320 x 240 pixels Parameter Digital SpO2, Pulse	
	Rate, Pleth bar & SpO2 waveform	
	Alarm Audible alarm, audible button tone Supports Pitch Tone and multi-level	
	volume Alarm tones meet the requirement of IEC 60601-1-8	
	• Appearance Dimension 123mm (H) x 58.5mm (W) x 28mm (D) Weight < 200g	
	Data Storage	
	• Display - Trend table	
	• Trend interval 2 seconds to 30 minutes	
	• Trend parameter PR, SpO2	
	• Trend data spot-check mode: ID from 1 to 99, 300 records for each ID	
	Battery	

	• Type 3 AA Alkaline batteries or NI-MH rechargeable battery (optional) or
	Lithium ion rechargeable battery (option)
	Runtime 14 hours standard use
	Nellcor SpO2 probe-compatible
	Safety Standards
	• CE classification: IIb
	• Type of protection against electric shock: II, with internal power device
	Degree of protection against electric shock: CF
	Degree of protection against ingress of liquid: IPX1
L	

## Electrocardiograph (12 channel & tracer paper)

Electrocardiograph (12 channel & tracer paper)	<ul> <li>Compact in size, easy and direct operation, portable</li> <li>Accurate pace pulse identification and automatic analysis function</li> <li>Four working modes: Manual / Auto / Physical Examination / Storage</li> <li>12 leads simultaneous waveforms display</li> <li>800 x 480 graphic 7 inch color screen with Alphabet keyboard for input (only for 12-CK)</li> <li>800 x 480 graphic 10 inch color touch screen (only for 12-CT)</li> </ul>	01
	<ul> <li>215mm, 12 channel format recording</li> <li>Built-in USB, RS232 interface, ECGNET software optional</li> <li>Adapt to 110-230V, 50/60Hz AC power supply</li> <li>Advanced [Freeze] function</li> <li>Built-in rechargeable Li-ion battery</li> <li>250 patients information storage (Extendable)</li> <li>USB interface allows net transmission, USB flash disk and USB printer connected</li> <li>High accuracy thermal printing, adapt to 215mm roll paper and 210x140mm Z-fold paper</li> </ul>	

# Bicycle Ergometer (Digital)

Diavala Ergomator	• Tuno	• 1000 Sports
Dicycle Ergometer	• Type	• 1000 spons
(Digital)	• workload range	• 10-999 watt
	Independent rpm	• 20-130 rpm
	Workload range	• 10-999 Watt
	Dependent rpm	• 20-130 rpm
	Lap time	• 9h 59 min 59 sec
	<ul> <li>Load steps Time steps</li> </ul>	• 1-99 Watt 1-99 min
	Load programs	<ul> <li>Manual 5 load/step PWC 170, 150, 130 Hr Steady state Interval Wingate</li> </ul>
	<ul> <li>Safety protection</li> </ul>	Heart rate
	Automatic Load reduction	Blood pressure S
		Blood pressure D
		• ECG alarm signal
	Acoustic signal	By STOP button
	Manual	Calibration - Dynamic - Static
	Check	• 83 cm 110 cm
		• $68 \text{ cm} = 108 \text{ cm}$
	<ul> <li>Adjustments (height)</li> </ul>	Oo ciii - 100 ciii     Smorta dagian
	- Saddle	• Sports design
	- Handlebars	• 2% 01 5 Wall
	Accuracy of load	• KS-252
	<ul> <li>Input/Output External</li> </ul>	
	Control	Analogue control Start signal Heart rate Blood pressure S Blood
	Inputs	pressure D ECG Alarm
	- inputs	Weddeed Dedeline mod Stor worker
		• Workload Pedaling speed Step marker
		• 110-240 V, 50-60 Hz
		• 100VA
		• Class I, CE
	Outputs	• Base plate 79x48
	Power supply	• Approx. 46 Kg
	Power consumption	
	Safety Standard	
	<ul> <li>Safety Standard</li> </ul>	

•	Dimensions (cm)	
•	Weight	

TMT Machine	PC Based Stress Test System with Optional Bluetooth Capability	1
	PC based cardiac workstation combines Resting & Exercise ECG	
	in one unit.	
	Digital Signal Acquisition Module eliminates noise & gives	
	distortion free ECG signal.	
	• Full disclosure of all 12 leads for beat-to-beat analysis &	
	extended documentation.	
	User configured Multiple Report Format for Resting & Exercise	
	ECG.	
	• The final report includes information on Blood Pressure, Heart	
	Rate, Treadmill Speed/Grade, ST Trends relating to stage wise &	
	recovery phase.	
	• Simultaneous acquisition & display of 12 lead Raw ECG during	
	the resting & exercise ECG mode.	
	• Time based METS calculation.	
	• Online Linked Median printing.	
	• F1 to F8 shortcut keys for important functions.	
	Treadmill Soft Stop option for stopping the treadmill after 20     seconds in Recovery Mode.	
	Customized Lead Sequence for Display.	
	• 6 Choice of displaying Lead with Maximum ST Level	
	Depression or Elevation in the Average Complex.	
	Identity Card ECG printout.	
	• Choice of 4 fonts for printouts.	
	• Web enabled software allows sending images via email.	
	• Facility to get system generated Auto Statement Report.	
Digital Spirometer	PC Based Spirometer	1
	Directly connected to a USB port turns any PC into a spirometer	
	• Full Spirometry testing (FVC, SVC, MVV, Pre-Post).	
	• Bronchial Challenge test (Metacholine and bronchial dilator).	

# TMT Machine

	Directly connected to a USB port turns any PC into a spirometer	
	<ul> <li>Full Spirometry testing (FVC, SVC, MVV, Pre-Post).</li> <li>Bronchial Challenge test (Metacholine and bronchial dilator).</li> <li>Automatic diagnosis according to ERS/ATS standards and COPD diagnosis (GOLD).</li> <li>Advanced software, patient database, diagnosis, real-time tests, professional prints, trends.</li> <li>Digital turbine flowmeter validated by LDS Hospital (ATS Standards)</li> </ul>	
Cardiac monitor	14.4cm (5.7") STN Blue LCD with backlit display Non fade soild traces of graphical ECG waveform on the LCD Screen Real time ECG on the fist channel and frozen / delayed ECG on the Second channel Auto ECG freeze on alarm condition ImV calibration pulse indicator LED blinking for every delected QRS complex Standared frequency response and high common mode rejection ratio Built-in rechargeable battery	1
	•	

## Digital Spiro meter

Digital Spiro meter	PC Based Spirometer	1
	Directly connected to a USB port turns any PC into a spirometer	
	• Full Spirometry testing (FVC, SVC, MVV, Pre-Post).	
	• Bronchial Challenge test (Metacholine and bronchial dilator).	
	<ul> <li>Automatic diagnosis according to ERS/ATS standards and</li> </ul>	
	COPD diagnosis (GOLD).	
	• Advanced software, patient database, diagnosis, real-time tests,	

professional prints, trends.	
• Digital turbine flowmeter validated by LDS Hospital (ATS	
Standards).	

#### Peak Flow Meter

Peak Flow Meter	Performance Dat	Performance Data		
	Accuracy:	+/- 10% or 20 L/min		
	Reproducibility:	Less than 5% or 10 L/min		
	Interdevice Variability:	Less than 10% or 20 L/min		
	• Dimensions			
	Length:	6.5 inches		
	Width:	2.0 inches		
	Height:	.8 inches		
	Weight:	3.0 ounces		
	• Materials			
	Main Body:	Impact-resistant ABS plastic		
	Cover and Handle:	High-density polypropylene		
	Scale	Hot-stamped, alcohol-resistar	nt	
	• Calibration Data	ı		
		Full Range	Low Range	
	Measurement Range	e: 60-810 L/min	50-390 L/min	
	Resolution:	10 L/min	5 L/min	

# <u>Nebulizer</u>

NE	BULISER –DIAPHRAM TYPE	1
•	Should be lightweight, portable and compact.	
•	Should have a dust filter.	
•	Should be able to deliver a flow rate $\geq 7$ lpm	
•	Should h ave air pressure $\geq 35$ psi.	
•	Should have a check valve to protect the device against contamination due to backward	
	inhalation	
•	Should be compatible for continuous use	
•	Should works on 200-240Vac/50Hz.	
•	Should be supplied with nebulization accessory kit with mask for adult and paediatric – 2	
	nos. each	
•	Nebulization mask for adult and paediatric – 10 nos. each	

## Ambu bag and mask

<ul> <li>Allibu bag -Ault</li> <li>Should have silicon rubber deg. C</li> <li>Should provide with autoc connecting tube.</li> <li>Should be supplied with a</li> <li>It should have a bag volum 100ml. will be accepted.</li> <li>Should have an expiratory</li> <li>Should have an inspiratory</li> <li>It should have controlled f reduced airway pressure.</li> <li>Should have a port in the t bag</li> </ul>		<ul> <li>Ambu Bag –Adult</li> <li>Should have silicon rubberdeg. C</li> <li>Should provide with autoc connecting tube.</li> <li>Should be supplied with a</li> <li>It should have a bag volun 100ml. will be accepted.</li> <li>Should have an expiratory</li> <li>Should have an inspiratory</li> <li>It should have an inspiratory</li> <li>It should have a port in the bag</li> </ul>	r bellow to withstand autoclave at 134 clavable face mask & Oxygen carry pouch. ne of 1700 ml. and a variation of ± resistance of 2.2cms of water y resistance of 3.3cms of water. low rates and ventilation, and with pag to connect oxygen with reservoir	01
Sl. No.	Name		Specifications	Quantity
1.	Blood Pressu	re Training Arm	Blood Pressure Training Arm	01
2.	Adult Vein	Puncture and Injection	Adult Vein Puncture and	01
	Training Arr	n	Injection Training Arm	

3.	Child IV Training Arm			Child IV	Training	Arm		01	
4.	Sympathetic Nerv	ous System		Sympathe	etic Nerv	ous Syste	em	01	
5;-									
Resear	rch Lab Table	Lab Table 7'	x $2^{1/2}$	<sup>2</sup> one s	sided w	vithout	Rack,		

Research Lab Table	Lab Table / X 2 <sup>1</sup> / <sub>2</sub> one sided without Rack,	
	Granite top 15mm, Thick, without sink but with	
	two electrical points consisting of socket and	08
	switch. Fully modular design. Fitted with one	
	under table storage bin having one drawer and	
	one closable shutter.	

## Group-B

## BIOMETRIC ATTENDANCE SYSTEM: (Qty. 04)

#### **Technical Specification**

- 1. TECHNICAL SPECIFICATIONS FOR BIOMETRIC ATTENDANCE SYSTEM: -
- The System should be:
- . Fingerprint reader with durable and highly accurate optical sensor
- . 1 -touch 1-second employee recognition
- . Capacity to store 2200 templates and 50000 transactions
- . No need to enter PINs
- . Supports 50 time zones, 5 groups and 10 unlock combinations
- . Tamper-proof switch and alarm outputs
- . Request-to-exit and alarm contacts
- . Operates stand-alone without a computer
- . TCP/IP, serial and Wiegand interfaces
- . Real time 1 -touch data export to 3rd party hosted & non-hosted applications
- . Audio-visual indications for acceptance & rejection of valid and invalid fingerprints

#### Time and attendance Software feature

- . Company/Department/Designation/Creation
- . To support Multiple Time Attendance Devices (Fingerprint/RFID/FDBC etc
- . Holiday assignment and Calculation
- . Attendance views
- . Annual leave assignment and calculation
- . Manual attendance entry option
- . Access control feature with scheduler and movement report
- . Grace period for work Start /End times
- . User defined leave types
- . Attendance data re-processing
- . Automated Late-in/Early-Out calculations
- . Monthly leave Entitlement and Balance
- . Complex and Rotating shifts
- . Overlapping shifts

- . Customizable attendance Report
- . Daily, Monthly and yearly reports
- . Automatic downloading of Data feature
- . History of edited data by the user
- . Color coded report
- . Recycle Bin
- . It should be a server client application with required tire technology
- . Should support multiple database
- . User creation with roles and permission
- . Supports USB
- . Reporting by E mail to the authorized personnel
- . Centralized database system
- . Enhancement capability to accommodate Payroll and HR software as an future option
- . A separate open date base needs to be provided with the table containing user ID,
- . punching date and punching time

#### Note:

- . Before implementation, vendor should visit the Institute and understand the requirement.
- . The system should work through the existing network. The compatibility of the hardware and software should be ensured with the existing network in the Institute.
- . A centralized control of all the machines should be created in the Computer Center and IT Park.

Local control at each location should also be provided where the data can be downloaded on a PC.

. It is anticipated that the cable requirement may vary depending upon the location and the same may quoted separately per 'm'.

#### **Technical Features**

Particulars	Technical Specifications (Minimum)
1. PROCESSOR	- 64 Bits
2. Templates	- 2200
3. Transaction capacity	50,000 -
4. Sensor Optical sensor	530 DPI
5. Operation Modes	Finger /Card-(optional)
6. Scanner (Sensor)	High quality optical /Chip Sensor

7. Wiegand signal	Input and output
8. In-built Reader (Optional)	-Proximity Card
9. External Reader Port-	1 Reader port (26 Bits wiegand ) for Exit
10. Communication Port -	RS-485,TCP/IP, USB host
11. Baud rate-	9600 bps (Default)
12. Facility Code -	8 (3 digit code)
13. Power supply-	12 volts DC
14. I/P Voltage range -	9 to 24V DC
15. Peak current at 12 V DC	1 400 ma
16. Operating temperature -	Up to 50 degrees Celcius
17. Operating humidity -	20% to 95%
18. Access control Interface for -3rd party electronic sector -3rd party e	ric lock, door sensor, exit
button	
19. Alarm and door bell in access control-	Yes
20. Standard function-	1 SMS, DLST, Web server, Work code
21. GPRS-	Optional and provision should be there to
	Integrate with external GPRS module
22. Anti-Pass Book-	Local (Controller wise)
23. No of fingers that can be enrolled in More the	nan - 2 fingers the machine per employee
24. Verification Speed-	- < 1 Second
25. Quality standard -	CE
26. LCD -	16x2 Alphanumeric
27. Keypad -	12 Key Numeric Keypad
28. Access/Remote Management System-	Yes
29. Reporting/Attendance Software -	Should be available.
30. LCD Messaging -	User defined Local/Global/Banner
31. LED/Buzzer-	Bicolor LED bar,Multi Bone Buzzer O/P
32. Battery Backup Power Supply-	minimum 4-5 hours

# Group-C

# Items for the deptt. of Physiology

# Sl NO-1:- Desktop Spirometer

### **Specification**

- FVC, VC with breathing pattern plus MVV tests with real time curves
- Stand alone or PC online operation
- Spirometer with 6000 test memory
- High resolution color screen
- Fast but silent thermal printer
- Records best 3 trials.
- Up to 8 blow on one screen
- Digital turbine flow meter with guaranteed accuracy in all environmental conditions
- Optional Oxymeter with 1000 hours of recording
- F/V or V/T curves in online Display.
- PRE-POST Bronchodilator Comparison
- Internal temperature sensor for BTPS conversion
- USB and Bluetooth (optional) data transmission
- Spirometry Tests available-FVC, SVC, MVV (Pre and Post)

## Measured parameters:

- FVC, FEV1, FEV1/FVC%, FEV6, FEV1/FEV6%, PEF, FEF25%, FEF50%, FEF75%, FEF25-75%, FET, FIV1, FIVC, FIV1/FIVC%, MVV, VT, ERV, IVC, VC and many more
- Short or long term (overnight) SpO2 and Pulse Rate measurements
- ODI, NOD, T90%, T89%, T88, T87%
- Sleep oximetry with desaturation events.
- Oximetry during exercise test

#### Sl No;-2: -PC Based Physiograph

#### **Specification**

- Up to 16 channel Acquisition
- Parameters: ECG, EEG, EOG, EMG, ENG, Nurve Conduction, PFT
- Wave over-lap facility
- Pulse analysis
- Heart rate variability analysis
- Identify frequency component of EEG signal delta, theta, alpha and beta with FFT function
- PC Connectivity

# Sl NO:-3: 32 Channels EEG

## **Specification**

- 32 Channel simultaneous acquisition of raw data
- User programmable acquisition and photic sequences protocols
- Online true AC impedance check
- Automatic paging facility for quick review and analysis
- Brain mapping color coding as per international standard
- EEG synchronous Video Recording

# SI NO-4:- Bio-Feedback System

## **Specification**

- EEG (alpha), EMG, Pulse, Temperature, Respiration, GSR
- ECG & HRV (optional)
- Continuous graphical display of all parameters Simultaneous and Singular
- Visual feedback through Digital Display and color bargraph
- Audio feedback through Head Phone or Speakers
- Facility to play Audio of your choice for relaxation
- Facility to play visual of your choice on the monitor screen for relaxation
- Storage of Patient data for review
- Plotting of graph depicting patient's progress for every parameter
- User definable event marker

# Sl NO-5 - AEP System

### **Specification**

- BERA, MLR, LLR, P300 & 40-Hz. Electrical BERA
- VEMP, ECochG, ASSR, Blink Reflex & Facial Nerve Studies, ENG
- Quick Automatic Threshold Evaluation
- Automatic Calculation of Latency difference between Left & Right sides
- Left/ Right comparison on single screen

# Sl NO-6 -12 Lead Stress Test System

## **Specification**

- PC Based Cardiac workstation combines Resting and Exercise ECG
- Bluetooth enabled Wireless ECG Transmission module
- Rechargeable battery with 10 hrs. battery backup up
- Battery status indicators
- Standard and user programmable treadmill protocols
- Risk predicting Duke Treadmill score
- Detection of leads off and arrhythmias
- User configured multiple display and reports format
- Heavy duty Treadmill
- Upgradable to Automatic NIBP (optional)

## SI NO-7:- Single Channel ECG

## **Specification**

- One Touch Operation for all 12 leads
- Automatic and Manual Modes
- Last Patient's ECG Storage
- Indication for Battery Status, Charging and AC/DC operation
- Auto Baseline control to optimize ECG lead printing
- Paper out indication
- Auto Measurements

- HR (bpm) - RR, PR, QRS, QT & QTC (Intervals)

- QT/QTC, QT /RR% - P, QRS, T Axis

# SI NO-8

# 24 Hour Ambulatory BP monitor should based on Oscillometry method (Specification)

- Should be able to measure the BP b/w 25 260 mmHg and HR b/w 40 200 bpm
- Should have atleast 3 adjustable time periods and time intervals b/w 5 mins to 120 mins
- Should be supplied with Windows based Software to provide the following:
  - Statistics
  - Histogram
  - Nocturnal dipping
  - White coat analysis
  - Automatic interpretive summary based on JNC7/ESH
  - Hourly averages
- Should be provided with pouch, belt and USB cable to connect to computer
- Should be light weight and compact, not more than 300 gms (including batteries)
- Should work with not more than 2 AA size batteries and should be capable of indicating the battery voltage when inserting

- Should have flash memory to keep the data unaffected even without the battery and should store atleast 250 measurements
- Should be supplied with cuff (non 'D' ring type) which will be in the position for 24 hours or even more to provide comfort and accuracy
- Should have atleast 4 cuff sizes from 18 46 cm arm circumference and should be easily washable
- Cuff should be easily or self wearable by the patient with artery marker
- Should have Independent hardware over-pressure circuit and redundant software overpressure algorithm to limit cuff pressure to less than 280 mmHg
- Should have Independent hardware timing circuit and redundant software timer algorithm to limit the duration of a blood pressure cycle to less than 180 seconds
- Should have option to upgrade the software in future (if available)
- Should be certified by FDA and CE
- Should be Clinically validated by ANSI/AAMI SP10:2002, British Hypertension Society (A/A rating) & European Society for Hypertension
- Should have option to customize the report from single page to detailed report
- Should have option to provide the stats for user defined time windows (E.g. early morning hours, driving hours etc.)
- Should have option to analyse data upto 52 hours
- Should have option to compare the studies
- Should have option to get the report in PDF format
- Should be user friendly for the patients with one touch operation
- Should have option to calculate the paediatric threshold automatically
- Should have option to disable the keys and display
- Should have option for the patient to initiate BP if any event is occurred

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