

INVITATION FOR QUOTATION

HSCC/PUR/KCGMC/Low Value/Medical College /2017/MC-Pharma & Derma dt. 10th Aug, 2017

To,

All Bidders

Subject: Invitation for Quotations for supply of Low Value Items for below mentioned dept.
1. Dept. of Pharmacology,
2. Dept. of Dermatology
3. Dept. of Physiotherapy for Kalpana Chawla Medical College, Karnal, Haryana.

Dear Sirs,

1. Director General, Medical Education & Research, Panchkula, Govt. Of Haryana through its Consultant HSCC (India) Ltd. Invites most competitive quotation for the following goods of the respective Departments as detailed below:

Annexure – (Including name of items, Specification and Quantity)

- (I) Dept. of Pharmacology,
- (II) Dept. of Dermatology
- (III) Dept. of Physiotherapy

III 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 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 tender. Rates /Prices quoted shall be Inclusive of all taxes, duties, forwarding, and insurance & transportation up to the destination, Kalpana Chawla Medical College – Karnal. Annexure-A is enclosed for price bid quotation format.

III Each bidder shall submit only one quotation.

III 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.

III The Quotations would be evaluated item wise.

6. Award of contract:

- 6.1 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 quality of the items during demonstration / inspection.
- 6.2 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, without assigning any reason.

7. Delivery period shall be within **07** days from date of placement of order.

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

Satisfactory Acceptance and delivery – 100% of total cost

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

- Copy of Purchase order.
- Consignee Acceptance Certificate in original issued by KCGMC/HSCC
- Invoice in favour of consignee/Director, KCGMC, Karnal through HSCC (I) Ltd
- Warranty Certificate in original.

9. All supplied items shall be under warranty of **12** months from the date of delivery/successful acceptance.

10. You are requested to provide your offer as follows:

Sr. No.	DESCRIPTION	Closing date & time for submission & receipt of tender	Date and time of Opening of Techno – Commercial Tenders
I.	Department of Pharmacology	21 st August 2017at 14:00	21 st August 2017at 14:30
II.	Department of Dermatology	21 st August 2017at 14:00	21 st August 2017at 14:30
III	Department of Physiotherapy	21 st August 2017at 14:00	21 st August 2017at 14:30

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 quotations will be opened in HSCC office, NOIDA as mentioned above in the presence of tenderer or their authorised representative 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. Sealed quotation to be submitted/ delivered at the address mentioned below:

General Manager (Procurement)
HSCC (India) Ltd.
E- 6 (A), Sector -1.
NOIDA – 201 301.

THE COVER SHOULD BE SUPERSCRIBED WITH THE FOLLOWING:

Reference to letter of enquiry.
Due date of opening.
Serial No of the Items with Deaprtment.

13. Quoted amount should be in Indian Rupees only.
14. For all items, the Technical Evaluation Committee may opt for Demonstration of the items. The Committee may also ask for Demonstration / Inspection before supply / delivery of the items for quality assurance.
15. Insurance shall be arranged/borne by supplier.

Note: Please indicate the quotation reference no. (Given at the top of page 1 of this letter) and Serial No of the Items on the top of the envelope.

The details of various medical equipment shall be also made available at www.hsccltd.co.in, and modification/amendments etc, if any, shall only be notified on website only.

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

General Manager (Procurement)

Price bid

Sl No.	Name of Item	Qty(Nos)	Unit Price (Rs.) (Incl. Of forwarding, packing, insurance, transportation up to destination)	Tax (if any)	Unit Price (Incl. Tax)	Total Price(Incl. Tax) Rs.

We accept all terms and conditions of the above Invitation of Quotation

Authorized signatory
Name , designation and sealed

DEPARTMENT OF DERMATOLOGY

CRYOTHERAPY UNITS

1. Liquid nitrogen Cryo Maxi/Mini:

Features required:

- High quality Dewar flask
- Elegant and stable base
- Light weight, easy to use
- Finger tip trigger
- Safety autovent
- Stainless steel and brass construction

Technical specifications:

- Capacity 300ml/500ml
- Height :8.5 in(approx)
- Weight:715g
- Static holding time: 10 to 12 hours

2. Liquid nitrogen storage tank (BA-3): 3.7 litres

DEPARTMENT OF PHYSIOTHERAPY

INFRA RED LAMP**----Qty 2 Nos.**

- It should consist of 3 IR radiators.
- It should have wave length approx. 1000 nm.
- It should be mobile.
- It should have power of each radiator of 150W.
- It should have time adjustment upto 30 minutes.
- It should be portable of 10-13 Kg.
- It should have IEC/CE Certified.
- IT should work on 230 Volt/50 Hz.
- The height of the mounting stand should be adjustable to ensure the application to the patient in sitting, standing or in supine position.

No. of Equipment required : - Two (2)

PARAFFIN WAX-BATH MACHINEQty 1 No.

Paraffin wax- bath, used for paraffin Treatments for symptomatic relief of pain & stiffness due to Arthritis etc. The low temperature paraffin permits the immersion of the limb directly into the wax-bath or to apply with brush.

Specifications:-

- Construction:- Double walled body, well insulated. Wax tank of 20 gauge stainless steel sheet is mounted on ball bearing castors, for easy mobility.
- Fitted with laminated-wooden rim & Aluminium cover.
- Wax Inner chamber size, Appox. 48cm×30cm×20cm or more.
- Heater Two, 1KW each, special wax heaters.
- Heat control: Thermostat control temperature from 0 to 90deg C .
- Indicator Lamps,two for mains & Thermostat.
- External Dimensions: Appox. 60×40×38 (+ -) .
- Main Voltage: 220-240V (50-60 Hz).
- Power Consumption: 2000 watts (Appox)
- Tank Capacity: 30 Liters.
- Company has ISO & CE Certified.
- Accessories: Power plug , one brush for wax application , one mug , one spatula & aluminium sheet for beaters.

Equipment should be supplied with

- With 50 KG paraffin wax.

No. of Equipment required : - one (1)

DEPARTMENT OF PHARMACOLOGY

Enclosure 1 ①

INCO PHARMACOLOGY CHARTS

Thick Laminated & Framed on NU-Wood board

S.no	Name of chart	Quantity
1.	Pharmacology of Central Nervous System A. Neurohumoral transmission in the C.N.S B. General Anaesthetics C. Anti-epileptic drugs D. Analgesic, Antipyretic and Anti-gout drugs	1
2.	Pharmacology of Cardiovascular System A. Antihypertensive drugs B. Antianginal and Vasodilator drugs C. Antihyperlipidemic drugs	1
3.	Drugs acting on the Haemopoietic System A. Anticoagulants, Vitamin K and haemostatic agents B. Fibrinolytic and anti-platelet drugs	1
4.	Drugs acting on urinary system A. Fluid and electrolyte balance	1
5.	Autacoids A. Histamine, 5-HT and their antagonists B. Prostaglandins, thromboxane and leukotrienes	1
6.	Pharmacology of Endocrine System A. Hypothalamic and pituitary hormones B. Thyroid hormones and anti-thyroid drugs C. Insulin, oral hypoglycaemic agents and glucagon D. ACTH and corticosteroid E. Androgens and anabolic steroids F. Oestrogens, progesterone and oral contraceptives	1
7.	Malaria parasites	1
8.	Antiretroviral Drugs	1
9.	Types of action of drugs used to treat peptic ulcer disease	1
10.	Mechanism of action of drugs cyclosporine and tacrolimus	1
11.	Biosynthesis of thyroid hormones	1
12.	Sites of action of diuretic drugs in the nephron	1
13.	Drug administration from application to distribution in the body	1
14.	Drug administration dosage forms for parenteral, pulmonary, rectal or vaginal and cutaneous application	1
15.	Drug administration dosage forms for oral, ocular and nasal applications	1
16.	Pharmacokinetics A. Routes of drug administration B. Absorption of drugs, bioavailability and drug distribution C. Binding of drugs to plasma protein and drug metabolism & drug elimination	1
17.	Drug-receptor interactions and pharmacodynamics	1
18.	The autonomic nervous system A. Introduction, efferent neurons, action of sympathetic and parasympathetic nervous system on effector organs B. Function of parasympathetic nervous system, chemical signalling between cells and second messenger systems in intracellular response	1
19.	Cholinergic agonists A. Overview, the cholinergic neuron B. Cholinergic receptors, direct acting cholinergic agonist, anticholinesterases (reversible and irreversible)	1
20.	Cholinergic Antagonists A. Cholinergic antagonists, site of actions of cholinergic Antagonists B. Onset and duration of action of Neuromuscular blocking agents, mechanism of action of depolarizing neuromuscular blocking drugs	1
21.	Adrenergic agonist	1

NR
01/04/17

AB
10/08/17

of
01/11/17

ck,
10/11/17

	<p>A. Overview, site of action of adrenergic agonists, synthesis and release of norepinephrine from the adrenergic neuron</p> <p>B. Types of adrenergic receptors, major effects by α and β adrenoceptors, structures of important adrenergic agonists.</p> <p>C. Cardiovascular effects of IV. Of low doses of epinephrine norepinephrine isoproterenol, effects of inhaled adrenergic agonists</p>	
22.	<p>Adrenergic Antagonists</p> <p>A. Adrenergic blockers, covalent inactivation of a adrenoceptor by phenoxy benzamine, actions of propranolol and other β-blockers</p> <p>B. Comparison of agonists antagonists and partial agonists of β-adrenoceptors, some clinical applications of β-blockers, summary of β-adrenergic antagonists</p>	1
23.	<p>Treatment of Neurodegenerative Diseases</p> <p>A. Summary of anti-Parkinson & anti-Alzheimer drugs, summary of some neurotransmitters of CNS Synaptic potentials (Excitatory and inhibitory pathways)</p> <p>B. Overview of Parkinson disease, Drugs used in Parkinson disease effects of entacapone on dopa concentration in the CNS.</p>	1
24.	<p>Anxiolytic and hypnotic drugs</p> <p>A. Summary of anxiolytic and hypnotic drugs, benzodiazepine GABA chloride ion channel complex therapeutic disadvantages and advantages of anxiolytic and hypnotic agents</p>	1
25.	<p>Central Nervous System Stimulants</p> <p>A. CNS stimulants mechanism of action of cocaine, amphetamine and cannabinoid receptor</p>	1
26.	<p>Antidepressant Drugs</p> <p>A. Summary of antidepressants, mechanism of action of SSRI and TCA drugs, mechanism of action of monoamine oxidase inhibitors</p>	1
27.	<p>Neuroleptic Drugs</p> <p>A. Summary of neuroleptic drugs, dopamine blocking actions of neuroleptic drugs, mechanism of action of neuroleptic drugs</p>	1
28.	<p>Opioid Analgesics and Antagonists</p> <p>A. Summary of opioid analgesics, mechanism of action of μ-opioid receptor agonists competition of naloxone with opioid agonists</p>	1
29.	<p>Treatment of Heart Failure</p> <p>A. Summary of Drugs used to treat Heart Failure Physiology of Muscle Contraction action potential of a Purkinje fiber.</p> <p>B. Ion movements during the contraction of cardiac muscle cardiovascular consequences of heart failure, effects of angiotensin converting enzyme inhibitors.</p> <p>C. Mechanism of action of cardiac glycosides ventricular function curves in the normal heart in heart failure, and in HF treated with digitalis, sites of action by β-adrenergic agonists on heart muscle.</p>	1
30.	<p>Antiarrhythmic Drugs</p> <p>A. Summary of antiarrhythmic drugs Therapeutic indications for some commonly encountered arrhythmias, Schematic representation of reentry.</p> <p>B. Action of antiarrhythmic drugs, schematic diagram for the effects of class IA, IB, IC agents</p> <p>C. Schematic diagram of the effects of class III & class IV agents</p>	1

A
01/09/17

AS
10/08/17

ck, G
01/04/17

CS
10/08/17

Enclosure (2)

DEPARTMENT OF PHARMACOLOGY (LIST OF PENDING INSTRUMENTS)			
Sr. No.	Name of item	Specification	Quantity
1.	Starling's Long Extension kymographs with time markers	Superior quality metal gears, accurate mill cut ratio 40, 10, 2.5 & 0.625 mm per sec. speed change clutch with immediate change position. Cylinder 6x11" with crown metal engaging shaft; turning by hand if necessary. Moving in slot in bed allowing variation in paper length for 60" to 66". Rigid cast iron stand which should work up down by large screws with fine adjustment facility. To be supplied with accessories e.g., double time marker, mercury manometer, separate smoking varnishing apparatus and smoking burner.	3
2.	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. DOUBLE UNIT	4
3.	Colorimeters	<ol style="list-style-type: none"> 1. Photoelectric colorimeter with 8 filter digital (490, 520, 540, 570, 600, 700 nm) 2. Digital colorimeter should be highly stable and accurate ideal clinical instruments for blood and chemical analysis. 3. Should have 5 / 8 filters with battery option. 4. Range: 400mm to 700mm filters 5 high standard filters, Accuracy: +/-0.010.Abs 5. Output Optional, Density 0 to 1.99, display 2.5 digit LED display, detector selenium photo cell light. 6. Source 6.2V 0.3 Amp. Tungsten filament Lamp, 7. Min volume 1 ml 8. Power 230V+/- 10 50Hz Ac. 9. Size (LxBxH) 225 x 230 x 150mm (Approx), 10. Weight: 4 kg. (Approx) 11. ISI certified 12. 2 year warranty Accessories: Test Tubes 5 Nos. Light Source Bulb Dust Cover Instruction Manual	3
4.	Cautery machine, electric blendsone	250-300 watts model with bipolar and unipolar modes (lower model for animal experiments)	1
5.	Apparatus for isolated rabbit intestine etc	Complete on a base board with uprights, organs and oxygen tubes, capillary tubing, frontal lever. Temperature to be controlled by a working heater with control by a thermostat.	100
6.	Chemical balance- ordinary Apothecary's	Chemical balance in double door glass panelled wooden case with wt. Box. (200gm.)	2
7.	Chemical balance- sensitive	Digital, capacity- 100gms, sensitivity-0.1 mg)	2
8.	Operating lamps-Phillips	--	4
9.	Animal trolley with 12 cages	Animal trolley with cages- SS rack on castor's with PP Modulded Mice, Rat, Guinear Pig, Rabbit cages. (12 cages on each trolley, racks as per size of cages)	4 trolleys (1 for each animal)
10.	Electrodes	Ordinary	3
11.	Water bath metal	Water Bath Rectangular - Double Wall, size inside (Stainless Steel) : 300x250x100 mm.6 holes of 75 mm. dia. Capacity 8 ltrs. - Thermstatic Control.	10
12.	Glass rod	Glass Rod size: Dia 5mm, Length 200 mm.	100
13.	Funnel	Funnel filtering 60 degree angle with stem with filter paper 100 nos.	50
14.	Spectrophotometer Model Du-Bachman (UV visible range)	Range 340 to 960 nm with facility of automatic concentration, transmission and absorbance measurements. Data display & LED display for wavelength in nm and equipped with extra sets of test tubes.	1
15.	Water bath 4 hole electrically heated	Water Bath Rectangular - Double Wall, size inside (Stainless Steel) : 300x250x100 mm. 6 holes of 75 mm. dia. Capacity 8 ltrs. - Thermstatic Control.	12
16.	Physiographs	Single channel with transducers and all relevant accessories (Student Physiograph Single channel with time & event channel main console with 9 speed (100, 50, 25, 10, 5, 2.5, 1, .5, .25 mm/sec.) chart drive and stimulator.	40

10/08/17
 95
 10/8/17

		Main Console :Made up of non magnetic material aluminium. Couplers :- Strain Gauge, Pulse Respiration, temperature, EKG and Bio-Potential Transducers :- muscle activity/ force respiration belt, pulse, respiration & temperature. Accessories :- EKG electrode, EEG & EMG paste, V-pin junction box, III Pin junction box action potential electrode, 2 Pkts of chart paper Z-fold and fuse. Supplied with Mono bath, X-Block and Plain Stand.	
17.	Physiographs	Double channel with transducers and all relevant accessories (Student Physiograph Two channel with time & event channel main console with 9 speed (100, 50, 25, 10, 5, 2.5, 1, .5, .25 mm/sec.) chart drive and stimulator. Main Console :Made up of non magnetic material aluminium. Couplers :- Strain Gauge, Pulse Respiration, temperature, EKG and Bio-Potential Transducers :- Pressure, muscle activity/ force respiration belt, pulse, respiration & temperature. Accessories :- EKG electrode, EEG & EMG paste, V-pin junction box, III Pin junction box action potential electrode, 2 Pkts of chart paper Z-fold and fuse. Supplied with two unit organ bath, micromotion attachment and plain stand.)	2
18.	Refrigerators	300 L	2
19.	Standard power tables	with gear system. Height : 36" Width : 24" Length : 40" Motor : 1 H.P. With 2 shaft and pulleys and belts. Voltage : 220 V AC 50 Hz.	3
20.	Assembly for mammalian classes	Assembly for Mammalian Classes :- a) Kymograph (slow speed recording drum - Super ten electrical kymograph For Pharmacology & Drug Assay; close mesh gear train; 10 speeds; 1 rev. in 1 min. to 1 rev. in 12 hours, 30 mts. 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 15x15 cm. cylinder, with levelling screws, pilot lamp, plug & cord.= (1) b) Long paper extension twin bed with 15 cm. high cylinder. = (1) c) Adjustable Stand, with quick tangential adjustment, 38 cm. high stainless upright. = (1) d) Standard Mercury Manometer, without stop cock; with adjustable scale & 9 mm. dia. stem. (without mercury) = (1) e) Time Marker with power supply = (1) f) Dale,s Mono Bath for internal organs thermostatic controlled with stirrer, glass inner vessel, oxygen tube & frontal lever from stainless steel capillary.= (1) g) Standard X Block, machined from solid brass rod not cast to hold 9 mm. & 6 mm. dia. Rods. = (1)	4
21.	Hot air oven	Size 14"x14"x14"(Digital) Hot Air Oven temperature upto 250 degree C accuracy +/- 1 degree C, Double walled, inner chamber of Stainless Steel, Elements of three Sides. Chamber Size : 350x350x350 mm. No. of Shelves 2, Capacity 45 ltrs. With Air Circulation Fan.	1
22.	Incubator	Size 14"x14"x14"(Digital) automatic, complete with connecting cord & plug to work on 220 V AC, laboratory type) Incubator Bacteriological temp. range from room to 90 degee C. Double Door, with glass window. Inner chamber of Stainless Steel Sheet. Chamber Size : 350x350x350 mm. (No. of Shelves 2, Capacity 45 ltrs. With Air Circulation Fan.	2
23.	Autoclave	Autoclave Electric Double drum vertical (12"x15") 300x500mm All SS. With pressure gauge, safety Valve, water level indicator, Max.15 PSI. With SS perforated Basket.	1
24.	Ideal respiratory pump	Variable rate, variable stock (V.R.V.S.) Respiration Pump with variable calibrated stroke arm. Respiration rate is in finitely, variable through, speed controlled by a knob which can be effected during the course of experiment. Mounted all metal platform with castors. Capacity 500cc	3(1: for large animal like Dog and Cat etc,2:small animals)
25.	Copper tray	10"x8"x1" :- Material- Copper Size 10"x8"x1" ,Thickness 0.6mm	100

10/08/17
S. S. S. S. S.

26.	Frog Board Palmer C 20	Frog board 15x10 cm. Hard wood board. Cork topped with clamp and fork.	100
27.	Stop watch jacquets	Steel body	12
28.	Pill tiles with standard scale	Pill tiles with standard scale	30
29.	Measuring cylinder glass	10 ml	10
		50 ml	15
		100 ml	05
		250 ml	50
		500 ml	3
30.	Bell jars	2 Ltr	18
31.	Glass mortar & pestles, 200cc	200cc	12
32.	Mechanical Stromuhr	Ludwig's "Stromuhr" consist of a XJ shaped glass tube dialted at a and a', the ends of which, h and l, are known caliber. The bulbs can be filled by a common opening at k. The instruments is so contrived that b and b', the glass part is firmly fixed into metal cylinders, attached to a circular horizontal table.	2
33.	Animal weighing machine for small animal	Particularly flat design, alongwith removable animal cages of appropriate size for easy and hygienic cleaning. Display type: digital display, Configuration: bench-top Weighing capacity: Min.: 100 g (3.53 oz) Max.: 6000 g (211.64 oz) Readability: 0.001 g (0 oz), 0.01 g (0 oz), 0.1 g (0 oz), 1 g (0.04 oz), 5 g (0.18 oz)	3
34.	Lancet spring disposable	-2.8mm depth spring-loaded lancet with 21-gauge metal tip that punctures the skin to draw up to 40ul of blood	110
35.	Skin and rectal thermometer	-Should be able to measures actual temperature in degC and degF. Calibration: (Starts with the display showing "L" in Celsius or Fahrenheit on the item. Actual measurement, display in 0.1 degree increment) -Should be water resistant for easy cleaning. - Should have Memory function which recalls last reading -Should have Buzzer function which beeps when measurement is completed	1
36.	Plethysmograph Digital	Digital Plethysmomgraph with LCD display for direct volume displacement, readout permitting simple off line functioning with inbuilt computer base graphical and numerical mode upto 10 experimental data storage per experiment. Supplied with software having facility to save experimental subject data. Unique normal tap water based transducer. No special fluid or conductivity control needed. Simple user friendly operation without pc and printer.	1

AB
10/08/17
ds. AB.
10/08/17

DEPARTMENT OF PHARMACOLOGY

Enclosure (3)

List of items for Museum

S.no	Name of item	Specification	Qty
1.	Dermojet-SC needles	-Should have a portable injector and auto disabling disposable syringe. Suitable for subcutaneous and intramuscular use. -Should be able to inject a volume range from 0.05 mL to 0.5 mL.	02
2.	Thin Film drug delivery	-Thin-film dissolving film or oral drug strip to administer drugs via absorption in the mouth (buccally or sublingually) and/or via the small intestines.	02
3.	Insulin pen	-Can accommodate 3ml (300 units) insulin cartridges (100 units per ml). -Doses can be set from 1 to 80 units in steps of 1 unit.	02
4.	Glucometer	-Blood sample size: 1 to 2 microlitres -Time for result with test strip in the meter: 5 seconds -Memory: 500 results with date and time.	02
5.	Metered dose inhaler	-Should be able to deliver Metered dose of medication to the lungs in the form of a dry powder.	02
6.	Dry powder inhaler	-Should be able to deliver medication to the lungs in the form of a dry powder.	02
7.	Nebulizer	-Compressor Nebulizer Rating: AC 220-240V, 50Hz Tank Capacity: 7ml maximum Appropriate Medication Quantities: 2ml minimum - 7ml maximum Contents: Compressor, Nebulizer Kit, Air Tube (PVC, 200cm), Mouthpiece, Adult Mask (PVC), Child Mask (PVC), 5 pcs Spare Air Filters.	02
8.	Transdermal patches	-Each opaque or transparent rectangular 22 cm ² patch (ingredients: ethylene vinyl acetate copolymer, polyisobutylene, and high density polyethylene between polyester backings.) has appropriate amount of drug that delivers through a rate-controlled system over 24 hours.	02
9.	Nasal Spray	-Should be able to deliver medication at a Strength of 50 mcg x 1 puff x 100 metered dose	02
10.	Macy cathetar	-Should consist of small flexible silicone shaft and an inflatable retention balloon. -A separate medication valve for delivering medication and liquids through the catheter and into the distal third of the rectum.	02
11.	Rectal enema tube	-78 cm rectal tubes with wide open end for administration of enema solutions, drainage and irrigation.	02
12.	Suppository	-Should be a solid dosage form that is inserted into the rectum (rectal suppository), vagina (vaginal suppository) or urethra (urethral suppository), where it dissolves or melts and exerts local or systemic effects.	02

10/08/17
ds, [Signature]
10/8/17

LIST-1 OF MEDICINAL HERBAL PHOTOGRAPHS
(Thick Laminated & Framed on NU-Wood Board)

Enclosure (YA)

S.NO	NAME OF CHART	QUANTITY	Specification (L X W)
1.	BAHERA	1	30X20 inches (Framed laminated board.)
2.	ARCHI OIL	1	
3.	PAPAIN	1	
4.	SHANKHPUSHPI	1	
5.	SHARK LIVER OIL	1	
6.	COTTON	1	
7.	ASWAGANDHA	1	
8.	TAMARINDS	1	
9.	SENNA LEAVES	1	
10.	BRAHMI	1	
11.	PUNARNAVA	1	
12.	NEEM OIL	1	
13.	RHUBARB	1	
14.	STROPHANTHUS	1	
15.	AJOWAN	1	
16.	ACACIA (INDIAN GUM)	1	
17.	COCOA	1	
18.	TURMERIC	1	
19.	BITTER ORANGE PEEL	1	
20.	NUX-VOMICA	1	
21.	JATAMANSI	1	
22.	CANNABIS	1	
23.	BLACK PEPPER	1	
24.	OPIUM	1	
25.	VINCA	1	
26.	BAEL	1	
27.	ISAPGOL (ISPAGHULA)	1	
28.	GINGER	1	
29.	CINNAMON	1	
30.	VASAKA	1	
31.	CELERY	1	
32.	ARJUNA BARK	1	
33.	VALERIAN	1	
34.	CLOVE BUD	1	
35.	LINSEED OIL	1	
36.	NUTMEG	1	
37.	GYMNEMA	1	
38.	DIGITALIS	1	
39.	CHAULMOOGRA	1	
40.	GINSENG ROOTS	1	
41.	EUCALYPTUS	1	
42.	BLACK CATECHU	1	

P 3/5/17

10/05/17

10/05/17

43.	GARLIC	1
44.	PEPPERMINT	1
45.	PYRETHRUM	1
46.	TULSI	1
47.	AMLA	1
48.	MOMORDICA	1
49.	CUMMIN	1
50.	HYOSCYAMUS	1
51.	SAGE	1
52.	DIOSCOREA	1
53.	L.H.ERGOT	1
54.	ALOE	1
55.	ALMONDS	1
56.	LEMON PEELS	1
57.	PICRORRHIZA	1
58.	THEVETIA	1
59.	YEAST	1
60.	VIDANG	1

AS 08/05/17

AS 10/08/17

c/s,

AS 10/8/17

LIST-2 OF FAMOUS PHARMACOLOGY PIONEERS

Enclosure 4B

(Thick Laminated & Framed on NU-Wood Board)

S.NO	NAME OF CHART	QUANTITY	Specification (L X W)
1.	Rudolf Buchheim	1	30X24 inches (Framed laminated board.)
2.	Paul Greengard	1	
3.	Robert F. Furchgott	1	
4.	Louis J. Ignarro	1	
5.	Ferid Murad	1	
6.	Alfred G. Gilman	1	
7.	Edwin G. Krebs	1	
8.	Sir James W. Black	1	
9.	Gertrude B. Elion	1	
10.	Earl W. Sutherland JR	1	
11.	Julius Axelrod	1	
12.	Linus Carl Pauling	1	
13.	Herbert Spencer Gasser	1	
14.	Cornelle J.F. Heymans	1	
15.	Otto Loewi	1	
16.	Sir Henry Hallett Dale	1	
17.	Frederick Grant Banting	1	
18.	Oswald Schmiedeberg	1	
19.	Dr. Naranjan Dhalla	1	
20.	Gerhard Johannes Paul Domagk	1	
21.	Col. Ramnath Chopra	1	
22.	Albert niemann	1	
23.	ARWID CARLSSON	1	
24.	Crawford Long	1	
25.	Friedrich Wilhelm Sertmer	1	
26.	George Hitchings (Nobilest)	1	
27.	James Parkinson	1	
28.	John-Gaddum	1	
29.	Howard Walter Florey	1	
30.	Sir John Vane	1	
31.	Karl Koller	1	
32.	Ludwig Laqueur	1	
33.	Sir James Whyte Black	1	
34.	Wzilliam T. G. Morton	1	
35.	William Withering	1	
36.	Ulf von Euler	1	
37.	Richard Willstatter	1	
38.	Giuseppe Brotzu	1	
39.	Alexander Fleming	1	
40.	Paul Ehrlich	1	
41.	Ronald Ross	1	
42.	Selman A. Waksman	1	
43.	Felix Hoffman	1	
44.	Henrik Dam	1	
45.	Maharshi Sushruta	1	

AS 08/05/17

AS 10/08/17

ds, AS 10/08/17

46.	Maharshi Charaka	1	
47.	Barry J. Marshall	1	
48.	Dr. V.V Kelkar	1	
49.	Dr. Om Dutt Gulati	1	
50.	C. Robin Ganellin	1	
51.	Jean Delay	1	
52.	Dr. Ramesh K. Goyal	1	
53.	Sir John Robert Vane	1	
54.	Rushi Dhanvantari	1	
55.	Paul Janssen	1	
56.	John Jacob Abel	1	
57.	E.V. McCollum	1	
58.	Marie Curie	1	
59.	Heinz Otto Schild	1	
60.	Jay Mecklen	1	
61.	Horace Wells	1	
62.	James Young Simpson	1	
63.	Houston Merrit	1	
64.	J. Hughlings Jackson	1	
65.	Ascanio Sobrero	1	
66.	Miguel Angel Ondetti	1	
67.	John Cade	1	
68.	Alfred Joseph Clark	1	
69.	Edward C. Kendall	1	
70.	Edward A. Doisy	1	
71.	Rudolf Magnus	1	
72.	Upendranath Brahmachari	1	
73.	Yellapragada subbarao	1	
74.	ADR ASSESSMENT SCALES WHO CAUSALITY ASSESSMENT OF SUSPECTED ADVERSE DRUG REACTIONS	1	40X52 inches (Laminated sheet with strips on both sides)
75.	CRITERIA FOR DETERMINING CAUSATIVE DRUG RELATIONSHIP TO ADVERSE DRUG REACTION.	1	
76.	Rushi Dhanvantari	4	48X20 inches (Framed laminated board.)
77.	Maharshi Charak Shapath	6	

R
08/05/17

AD
10/08/17

als,
10/08/17

Specification for Computerized Simulator Software in Pharmacology Department for Computer Assisted (CAL) Lab as per MCI Guidelines.

- **Computerized Simulator Software in Pharmacology Department for Computer Assisted (CAL) Lab**