

51-20-12

LIST OF GENERAL EQUIPMENT

Annexure-1 L (i)

Sl. No	NAME OF THE EQUIPMENT	IS IT AVAILABLE IN PET (AS PER 100 BEDDED). IF YES THEN MENTIONED SL.NO. OF PET	QRS AVAILABLE OR NOT
1	Human Dummy	Yes (859- Resuscitation Manikin adult full body)	YES
2	Air Mattress Electric Operated	Yes (887- Air Mattress)	YES
3	Pharmacy Freezer	Yes (1569 to 1572 and 1575- freezer, refrigerator)	YES
4	Interpretative ECG Machine	YES (S.NO 1)	YES
5	Semi Fowlers Bed	YES (S.NO 20)	YES
6	Electro Operated Programmable Auto Tuning Hi-Lo ICU Bed	YES (S.NO 21)	YES
7	CRASH CART TROLLEY	Yes at Sl. No. 830	Yes
8	Vacuum suction apparatus with vacuum cup	Yes (824 to 827)	YES
9	Embalming Machine		YES















Member-I	Member-II	Member-III	Member-IV	Member-V	Member-VI	Member-VII	Member-VIII	Member-IX	Member-X	Member-X	Member-XI	Member-XII	P.O.
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Recommendation of ADG (Med)


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1. QRS AND TDS of HUMAN DUMMY:

SPECIFICATIONS	Procedure suggested for trial for Board of Officers	Result expected/ desired
1. The manikin should be realistic in appearance, and easy to clean to prevent cross-infections.	Board should check physically during demonstration.	As per specification.
2. The manikin should have a soft nose which can be occluded using the nose pinch technique, to teach proper CPR techniques by simulating the anatomical and physiological conditions present during CPR.	OEM should submit an undertaking and documents in this regard.	
3. The manikin should be supplied with a removable full facemask.		
4. The manikin should have an open oral and nasal passage which leads to the lower airway.		
5. The manikin should have an articulating jaw to facilitate a modified jaw thrust maneuver to open the airway.		
6. The manikin should be able to facilitate a head tilt/chin lift maneuver.		
7. The manikin should have compliance similar to human body for ventilation and compressions with a visible chest rise during ventilation.		
8. The manikin should have a disposable lower airway with an integral one way valve.		
9. The manikin should have a completely removable chest cover.		
10. The manikin should have a one piece rib/stomach plate which can facilitate abdominal thrusts.		
11. The manikin should have a removable compression spring.		
12. The manikin should have a compression clicker which provides audible feedback, which can be turned on and off without dismantling the manikin.		
13. The face mask shall be easily changed and suitable for individual student use.		

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Recommendation of ADG/med



Annexure-1 L (xviii)

SPECIFICATIONS		Procedure suggested for trial for Board of Officers	Result expected/ desired
14.	Manikin should be supplied with a soft padded training mat.	Board should check physically during demonstration.	As per specification.
15.	The manikin should be realistic in appearance, Infant full body manikin.		
16.	The manikin should be supplied with a full facemask.		
17.	The head should be rotatable and extendable.		
18.	The manikin should be able to withstand high temperature(50°C).		
19.	The Manikin should have natural obstruction of the airway that allow students to learn the technique of opening the airway	OEM should submit an undertaking and documents in this regard.	
20.	Head tilt, chin lift and jaw thrust should be possible on manikin.		
21.	The Manikin should have realistic chest compliance for students to experience the proper technique of chest compressions in infants		
22.	The manikin should have visible chest raise during ventilation.		
23.	The Manikin should allow foreign-body airway obstruction feature to practice the release of a foreign-body obstruction through back blows and chest-thrust techniques		
24.	The Manikin should have removable and reusable faces for convenient cleaning and maintenance.		
STANDARD, SAFETY AND TRAINING :			
1.	Should be supplied with: 6 Airways, 10 FBAO pieces..	OEM should submit an undertaking and documents in this regard.	As per specification.

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Recommendation of ADS (med)

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2. QRS AND TDS of AIR MATTRESS ELECTRIC OPERATED:

Annexure-1 L (xix)

SPECIFICATIONS		Procedure suggested for trial for Board of Officers	Result expected/ desired
1.	Specification of Mattress with Cover:-	OEM should submit an undertaking and documents in this regard.	As per specification.
2.	<ul style="list-style-type: none"> Dimension Of Mattress: 230 cm x 100cm, 130 Bubble Cells Approx. 		
3.	<ul style="list-style-type: none"> PVC Thickness :0.3mm 		
4.	<ul style="list-style-type: none"> Material : EN-71, Non Toxic PVC Medical Grade 		
5.	<ul style="list-style-type: none"> Weight Bearing Capacity : Approx. 130kg 		
6.	<ul style="list-style-type: none"> Repair Kit : 2 Patches with Glue with each mattress 		
7.	Specification of PUMP:-		
8.	<ul style="list-style-type: none"> Power Supply 200-240 Volts/50Hz 		
9.	<ul style="list-style-type: none"> Air Output Capacity : 5-7litre/min 		
10.	<ul style="list-style-type: none"> Cycle Time : 5Min 		
11.	<ul style="list-style-type: none"> Pressure Range : 70-120mmHg 		
STANDARD, SAFETY AND TRAINING :			
1.	Should have CE (European Union compliance certified)	OEM should submit an undertaking and documents in this regard.	As per specification.
2.	Power Cord Length : 1.5-2m		

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Recommendation of ADS (med)



3. QRs AND TDS of 'PHARMACY FREEZER':

Annexure-1 L (xx)

Sl. No.	SPECIFICATIONS	Procedure suggested for trial for Board of Officers	Result expected/ desired
1.	Upright Freezer with capacity minimum 400 liters or more with Polyurethane foam insulation (130 mm thick).	Board should check physically during demonstration.	As per specification.
2.	System should have Programmable operating temperature from -50°C up to -86°C with 1°C increment.	OEM should submit an undertaking and documents in this regard.	
3.	Fully programmable microprocessor controlled with membrane keypad and eye level control panel.		
4.	System should have 304L grade stainless steel interior and tough, powder coated exterior finish constructed on steel gauge of 18g ZINTEC 1.2 mm thick.		
5.	Freezer with least power consumption will be preferred <11 kWh/day & noise level <56Db.		
6.	Freezer should have least pull down time from ambient to -85 deg C < 6Hrs.		
7.	Freezer should have the sample (2" vials) capacity of 24,000 or more.		
8.	Freezer should have minimum five insulated inner doors with 4 adjustable shelves.		
9.	Freezers should have heated air vent and front panel air filter.		
10.	Heavy duty lockable castors and lockable outer doors and lids.		
11.	Freezer must have battery back-up and 4 PIN security lock for unauthorized tempering		
12.	Freezer must have provision for RS 232 interface data logging port with on board SMART Plus diagnostic software.		
13.	It should have Audible and visible alarms for temperature, power failure, system failure, battery low etc.		
14.	Freezer must have dual compressor with CFC-FREE, HCFC-FREE non flammable refrigerants.		

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Recommendation of ADG (Med)

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Annexure-1 L (xxi)















Sl. No.	SPECIFICATIONS	Procedure suggested for trial for Board of Officers	Result expected/ desired
15.	Freezer must have ISO 9001 - safety requirements and IEC 61010 Electrical safety, CE & UL certified.	OEM should submit an undertaking and documents in this regard.	As per specification.
16.	Freezer must have washable condenser filter indication which should keep fins free of dust to maintain peak cooling efficiency.		
17.	Freezer must have capacity to hold at least 15 racks and 240 boxes of 2" height vials.		
18.	System should be quoted along with suitable 5KVA servo voltage stabilizer, 2" Vertical racks, 2" cryo boxes with dividers,		
19.	Freezer should have CO2 backup system as optional.		
20.	Upright Freezer with capacity minimum 400 liters or more with Polyurethane foam insulation (130 mm thick).		
21.	Fully programmable microprocessor controlled with membrane keypad and eye level control panel.		
22.	System should have 304L grade stainless steel interior and tough, powder coated exterior finish constructed on steel gauge of 18g ZINTEC 1.2 mm thick.		
23.	Freezer with least power consumption will be preferred <11 KWh/day & noise level<56Db.		
24.	Freezer should have least pull down time from ambient to - 85 deg C < 6Hrs.		
25.	Freezer should have the sample (2" vials) capacity of 24,000 or more.		
26.	Freezer should have minimum five insulated inner doors with 4 adjustable shelves.		
27.	Freezers should have heated air vent and front panel air filter.		
28.	Heavy duty lockable castors and lockable outer doors and lids.		

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Recommendation of AdComed

Annexure-1 L (xxii)

Sl. No.	SPECIFICATIONS	Procedure suggested for trial for Board of Officers	Result expected/ desired
29.	Freezer must have battery back-up and 4 PIN security lock for unauthorized tempering		
30.	Freezer must have provision for RS 232 interface data logging port with on board SMART Plus diagnostic software.		
31.	It should have Audible and visible alarms for temperature, power failure, system failure, battery low, etc.	OEM should submit an undertaking and documents in this regard.	As per specification.
32.	Freezer must have dual compressor with CFC-FREE, HCFC-FREE non flammable refrigerants.		
STANDARD, SAFETY AND TRAINING :			
1.	Freezer must have ISO 9001- safety requirements and IEC 61010 Electrical safety, CE & UL certified.	OEM should submit an undertaking and documents in this regard.	As per specification.
2.	Freezer must have washable condenser filter indication which should keep fins free of dust to maintain peak cooling efficiency.		
3.	Freezer must have capacity to hold at least 15 racks and 240 boxes of 2" height vials.		
4.	System should be quoted along with suitable 5KVA servo voltage stabilizer, 2" Vertical racks, 2" cryo boxes with dividers,		
5.	Freezer should have CO2 backup system as optional.		
6.	All vendors are requested to attach original technical literature/catalogue in support of the mentioned specifications & highlight the above features.		
7.	The vendor should enclosed user list of minimum 75 users of the same machine supplied to various reputed institutes/research labs/CAR/CSIR institutes throughout India in last 3years.		
8.	Freezer should have at least 5-year warranty on compressor		

Member-I  Member-II  Member-III  Member-IV  Member-V  Member-VI  Member-VII  Member-VIII  Member-IX  Member-X  Member-X  Member-XI  Member-XII  P.O. 

Recommendation of ADOS (Medical)

4. **QRS/SPECIFICATIONS&TRIALDIRECTIVES OF“INTERPRETATIVE ECG MACHINE”**

Annexure-1 L (xxiii)

SI. No.	SPECIFICATIONS	Procedure suggested for trial for Board of Officers	Result expected/ desired
A.	<ol style="list-style-type: none"> 1. Simultaneously lead acquisition and display of up to 12 leads. 2. Upto 12 Configurable Rhythm Leads 3. Full disclosure of each leads for 5 min with complete ECG report of ANY 0 seconds with continuous patients' hear rate display. 4. Storage of 200 ECG for all 12 leads in XML/PDF format on USB. 	<p>Board should check physically during demonstration.</p> <p>OEM should submit an undertaking and documents in this regard.</p>	As per specification.
B.	<p>ALGORITHM:</p> <ol style="list-style-type: none"> 1. >600 interpretative statements. 2. Standard measurements of intervals, durations and axis. 3. Selectable in terpretations. 4. STEMI clinical support. 5. Five ECG reports, ST Segment Analysis with graphical ST Vector, frontal and transverse. 6. Gender specific criteria that suggest any of 4 probable sites of occlusion with critical values requiring immediate clinical attention. 7. Right heat statements from right chest leads. 8. Culprit Art erylcrteriathatsuggestanyof04probabablesitesof occlusion with critical values requiring immediate clinical attention. 		
C.	<p>SIGNAL QUALITY, DATEACQUISITION&PROCESSING:</p> <ol style="list-style-type: none"> 1. Leads off advisory for disconnected leads. 2. Four colour to indicate levels of wave from quality. 3. Detection of Lead reversals. 4. 8000 samples of second per lead wire. 5. Wide filter selection: 0.05 Hz to 150 Hz selectable as per applications. 6. Should have micro process or controlled digital processing facility. 	OEM should submit an undertaking and documents in this regard.	As per specification

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Recommendation of Board

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Sl. NO.	SPECIFICATION	Procedure suggested for trail for board of officers	Resulted expected/desired
	<p>DISPLAY&DATE INPUT:</p> <ol style="list-style-type: none"> 1. Highre solution colour 6.4" TFTdisplay, with touch screen for quick use. 2. Continuous display of Patient Heard Rate. 3. Full Screen Preview of complete 12 lead reports prior to printing. 4. Integrated graphical help screen for primary function. 5. Full alphanumeric key board for quick patient data entry. 6. Storage, Recording & printout. 7. Built in high- resolution thermal array printer (200x500dpi). 8. A4 size recording with rhythm for 12 LEKG on single sheet. 9. 200 EVGs internal storage and additional storage of 200 ECG with optional USB device. 	<p>OEM should submit an undertaking and documents in this regard.</p>	<p>As per specification.</p>

5. QRS/SPECIFICATIONS & TRIAL DIRECTIVES OF "SEMI FOWLER BEDS"















Sl. No.	SPECIFICATION	Procedure suggested for trail for board of officers	Resulted expected/desired
A.	<ol style="list-style-type: none"> 1. Over all size: Approx 2100 mm to 2160 Lx 1000 mm to 1020 mm Wx 500 to 600 mm 2. Mattress Platform size: 950 mm Lx 850mmW 3. Two section carbon steel to pitted on bed frame. 4. Manual adjustments: Backrest through one crank system with thrust bearing individually maneuvered by a single handle. 5. Back rest shall retract as they are individually raised. Provision for I.V. Rod at four or more locations 		

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Recommendation of ADSCMED

Annexure-1 L (xxv)

SL. NO.	SPECIFICATION	Procedure suggested for trail for board of officers	Resulted expected/ desired
	<p>6. The base frame shall be mounted on 125mm dia. Non-rusting high grade castor wheels two with brakes and two without brake. (if possible, all with brakes).</p> <p>7. Cast or wheels made from high grade non floor-staining synthetic materials with integrated thread guards. Wheel center having precision ball bearing to run smoothly.</p> <p>8. The bed shall have easily detachable and lockable mounted head and foot side panels.</p> <p>9. Four corner rubber/suitable buffers to be provided for bed safety.</p> <p>10. There shall be four locations on the bed near corners of the betohold stainless steel telescopicaline rod.</p> <p>11. Finishing & workmanship in the medical furniture is of prime importance and must be of high standard. All corners shall be rounded off so that there shall be no sharp corners and holes should be burr free.</p> <p>12. All process Parameters to be aper documented IMS procedures for Quality</p> <p>13. Assurance (European CE, ISO 9001: 2008, ISO 400:2004 & ISO 13485 : 2003).</p>	<p>Board should check physically during demonstration.</p> <p>OEM should submit an undertaking and documents in this regard.</p>	<p>As per specification.</p>
	<p>ESSENTIAL ACCESSORIES:</p> <ol style="list-style-type: none"> 1. Urine Bag Holder/Hook4no. (Two on each side). 2. Two Section Mattress-1no. 3. Stainless steel Vrod—1no. 	<p>OEM should submit an undertaking and documents in this regard.</p>	<p>As per specification.</p>

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Recommendation of ADDS (med)

SL. NO.	SPECIFICATION	Procedure suggested for trail for board of officers	Resulted expected/ desired
C.	<p><u>POWERSUPPLY:</u></p> <ol style="list-style-type: none"> Li-Ion battery for printing at least 25 ECG on full charge battery. Option for second Li-Ion battery for additional extended back-up. Line power 100-240V, 50/60 Hz with consumption less than 70W. 	OEM should submit an undertaking and documents in this regard.	As per specification.
D.	<p><u>CERTIFICATE:</u> Should be USFDA approved and European CE Certified.</p>		
E.	<p><u>WARRANTY:</u> Minimum 1 year.</p>		
	<p><u>NOTE:</u></p> <ol style="list-style-type: none"> Supplier must submit manufacture authorization certification. The supplier may be asked to arrange demonstration of their equipment for which rates have been quoted, at the consignee, if required. The expenditure incurred for demonstrating the Equipment will be borne by the supplier. 		

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Recommendation of ASB Council

Annexure-1 L (xxvii)

6. QRS/SPECIFICATIONS & TRIAL DIRECTIVES OF "ELECTRO OPERATED PROGRAMMABLE AUTOTUNINGHI-LO ICU BED"

S.No.	SPECIFICATION	Procedure suggested for trail for board of officers	Resulted expected/ desired
	<ol style="list-style-type: none"> 1. Fully automatic wire remote control intensive care unit bed with back rest up down, knee rest up-down, trendelen burg position and reserve trendelen burg position, hi-low position controlled through noiseless electro mechanical actuators operated by soft touch electro mechanical actuators operated by soft touch attendant (nurses) control panel. 2. The over all dimension should be 2200 mm (+/- 10mm) (L) x 1005 mm (+/- 10mm) (W) x height adjusted from 450mm to 825mm (+/- 00mm) without mattress. 3. Base frame should made of 30mm x 60mm, 200 thick CRCA rectangular tube with the bed frame of 50 mm x 25 mm and 40 mm x 20 mm, 2mm thick rectangular tube. 4. The fully automatic wire remote controlled intensive care unit emergency bed should have four section lying surface with ABS vacuum from with antimicrobial property which should be easily removable, washable to maintain hygiene with integrated mattress retainer. 5. The bed should have four numbers of poly propylene (PP) moulded side board with drop down mechanism, completely collapsible to maintain zero transfer gap. 6. There should be 4 nos of bumpers given at the four corners made up of neoprene with excellent shock absorbing property. 7. There should be two nos of Cardio pulmonary Resuscitation(CPR) lever, one at either side of the bed for quick release of the back rest. 8. In order achieve the Deep Vein Thrombosis (DVT) position, the lower leg portion of the bed frame should have the provision of amszinc plated ratchet (preferably Hettich/Equivalent make), the ratchet should be adjustable in eight different positions. 	<p>Board should check physically during demonstration.</p> <p>OEM should submit an undertaking and documents in this regard.</p>	<p>As per specification.</p>

Recommendation of ADG (mca)

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Annexure-1 L (xxix)

S.No.	SPECIFICATION	Procedure suggested for trail for board of officers	Resulted expected/desired
B	<p>Important common Technical Specification/Technical compliance condition needed to be added in the Tender document in the schedule of requirement for compliance (whereas applicable should be strictly followed during fully and semi motorized ICU bed site ms manufacturing by the Manufacturer):</p> <ol style="list-style-type: none"> 1. All the stainless steel should be seamless conforming to 304/16 gauge and polished finished. 2. Powder coating is to be Bacteriostatic and thermosetting epoxy polyester, formulated to fulfill the requirements for bacterial protection, the fully and semi-motorized ICU Beds items where as applicable. 3. Anti-rust, thermosetting epoxy polyester power coating should be used. All powder coating should be in Raal white. 4. All powder coating parts must be in preferably raal white/equivalent & plastic, rub bed parts in Grey. 	<p>Board should check physically during demonstration. OEM should submit an undertaking and documents in this regard.</p>	<p>As per specification.</p> <p style="text-align: right;"><i>Recommendation of AD (Med)</i></p>

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8. QRS AND TDS of 'VACCUM SUCTION APPARATUS WITH VACCUM CUP':

SPECIFICATIONS		Procedure suggested for trial for Board of Officers	Result expected/ desired
1.	Noiseless Suction Machine less than <45db	Board should check physically during demonstration.	As per specification.
2.	It should have maximum vacuum -90 kpa with flow rate 60 litres per min.		
3.	It should be oil less and Maintenance free suction machine.		
4.	It should have 2 different outlets to connect 2 jars which can be operated one by one by touch button.		
5.	It should be supply with 2 jars (Reusable) of 3litres.	OEM should submit an undertaking and documents in this regard.	
6.	It should have display dial for showing vacuum and Knob to control Vacuum.		
7.	It should come with on /off foot switch for easy operating.		
8.	Should be made with high quality material		
STANDARD, SAFETY AND TRAINING :			
1.	It should have European CE/USFDA.	OEM should submit an undertaking and documents in this regard.	As per specification.
2.	Should have mobility with antistatic castor with brake or provide with steel trolley		

Recommendation of Adm/med

9. QRS/SPECIFICATIONS AND TRIAL DIRECTIVES OF "EMBALMING MACHINE"

S.No.	SPECIFICATIONS	Procedure suggested for trial for Board of Officers	Result expected/ desired
A.	<ol style="list-style-type: none"> Fluid delivery rate should be 10 Liters/hr Inner tank should capacity to store embalming fluid should be 5-10 liters and should be made of stainless steel Pump: Pump should be of Electromagnetic Dosing pump with capacity of 0-5 liters per hour and with pressure 3kg/cm² The equipment should be mounted on castors for easy movement and the grip should be provided for easy lifting I.V stand fixed for monitoring cannulatubing and main cable Indicators for mains on & in use should be present The outer body should be of complete stainless steel 	<p>Board should check physically during demonstration.</p> <p>OEM should submit an undertaking and documents in this regard.</p>	As per specification.

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Annexure-1 L (xxxii)

B.	<p>Standard, Safety and Training:</p> <ol style="list-style-type: none"> All instruments should be USFDA or European CE approved. Manufacturer should have IOS certification, where Indian standard dsare not available Comprehensivewarrantyfordaily, weekly, monthlyandyearlymaintenance Comprehensivetrainingfortechncialstaffandproppersupportserviceuntilfamiliaritywiththesystem 	<p>Board should physically demonstrate.</p> <p>OEM should submit an undertaking and documents in this regard.</p>	<p>As per specification.</p>
C.	<p>Documentation:</p> <ol style="list-style-type: none"> User/Technical/Maintenance manuals to be supplied in English Logbook with instructions for Daily, Weekly, Monthly and Yearly maintenance The job description of the hospital technician, service engineer should clearly spelt out 	<p>Board should check physically during demonstration.</p> <p>OEM should submit an undertaking and documents in this regard.</p>	<p>As per specification.</p>

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(Dr. Chandrima Kar)
Comdt./Spl. Gr.I &
(Obs Gyn), CRPF
Member-V</p> | <p><i>[Signature]</i>
(Dr. Anurag Jain)
Contractual, Spl
(Orthopaedics),
CRPF
Member-VI</p> |
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ITBP
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(Dr. Rajkamal Nimesh)
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Recommendation of ASB/med

[Signature]
(Dr. A C Bhardwajan)
IG (Med.), RH, ITBP, Gr. Noida
Presiding Officer

APPROVED / NOT APPROVED

DIRECTOR GENERAL
BORDER SECURITY FORCE

LIST OF GENERAL EQUIPMENT

S.N	NAME OF THE EQUIPMENT	IS IT AVAILABLE IN PET (AS PER 100 BEDDED). IF YES THEN MENTIONED SL.NO. OF PET	QRS AVAILABLE OR NOT
1	ASP STERRAD 76 TO 100LITRE CYLINDRICAL LOW TEMPERATURE HYDROGEN PEROXIDE GAS STERILISER	NO	NA
2	Automated Torniquet System	No	No
3	INSTRUMENT TROLLEY MEDIUM	YES (863 & 1318)	NO
4	SS TROLLEY SMALL FOR EQUIPMENTS	YES (863 & 1318)	NO
5	FLASH STERILIZER	NO	NO
6	STRAIGHT CABINET	NO	NO

Member-I	Member-II	Member-III	Member-IV	Member-V	Member-VI	Member-VII	Member-VIII	Member-IX	Member-X	Member-X	Member-XI	Member-XII	P.O.
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Recommendation of ADG (Med)

[Signature]

1. QRS/SPECIFICATIONS & TRIAL DIRECTIVES OF "AS PSTERRO 76 TO 100 LITRE CYLINDRICAL LOW TEMPERATURE HYDROGEN PEROXIDE GAS STERILIZER"

Annexure-2 L (ii)

S.No.	SPECIFICATION	Procedure suggested for trail for board of officers	Resulted expected/ desired
A.	<ol style="list-style-type: none"> 1. Allow temperature hydrogen per oxide plasma/gas technology bases high speed sterilization system. 2. The sterilizer should use low temperature H2Oz (Hydrogen Peroxide) plasma/gas sterilizer technology. 3. Should have cycle temperature of less than 55 degree Celsius. 4. Should be environment friendly and have notoxic by—products. 5. Should have sterilization chamber more than 100 litres usable volume with removable shelf. 6. Should have Microprocessor controlled system with clear user interface for control and display of cycle phases & parameters. 7. Should have in built printer and touch screen LCD control panel. 8. Should not have a need for to have additional Dryer Machine. 9. Should have facility to store/upload data on Ethernet/USB port for sterilization cuclerrec all and printing. 10. Should be easy to install without and civil/plumbing work and should be mobile on wheels for easy movement. 11. Should completely monitorits operations with clean LCD display and alarms. 12. Total cycle time should not be more than 40-50 minutes. 	<p>Board should check physically during demonstration.</p> <p>OEM should submit an undertaking and documents in this regard.</p>	As per specification.

Member-I *[Signature]* Member-II *[Signature]* Member-III *[Signature]* Member-IV *[Signature]* Member-V *[Signature]* Member-VI *[Signature]* Member-VII *[Signature]* Member-VIII *[Signature]* Member-IX *[Signature]* Member-X *[Signature]* Member-X *[Signature]* Member-XI *[Signature]* Member-XII *[Signature]* P.O. *[Signature]*

Recommendation of AS System

S.No. SPECIFICATION	Procedure suggested for trail for board of officers	Resulted expected/ desired
<p>13. The concentration of hydrogen peroxide should to exceed 50% to 60%.</p> <p>14. Must be able to sterilize flexible lumened instruments with inside diameter of 1 mm and length of 1000 mm or more without any additional accessories like booster/adapter, proof of lumen claim should be attached with the bid.</p> <p>15. Should be able to sterilize rigid stainless steel lumened instruments with inside diameter of 1 mm and length of 500 mm.</p> <p>16. The system should operate on single/three phase supply with no additional requirement for civil work plumbing, water and drainage etc.</p> <p>17. There should be minimum 10 installations with performance Certificates for quoted model in India preferably in government institutes.</p> <p>18. Should be supplied with all accessories i.e incubator, sealing machine. The machine should be provided with all the consumables needed to make the machine fully function The machine should be supplied with all consumables required to run for minimum of 200 cycles.</p> <p>19. Should be supplied with printer paper and printer ink cartridge-10each.</p> <p>20. Should be supplied with minimum of six instrument tray and matching instrument tray mats (silicon)of three different sizes and lids.</p> <p>21. Should also quote he prices for tender bill for consumables:-</p> <ol style="list-style-type: none"> i. HOZ Liquid Sterilant. ii. Chemical indicators trips. iii. Chemical indicator Market record keeper(Card/Stickers) iv. Biological indicator vials. iv. Packag in grolls in various sizes. <p>Should be ISO,USFCMA/European CE approved. The process of sterilizer has to be certified with EN ISO13937 (certificate should be attached).</p>	<p>Board should check physically during demonstration.</p> <p>OEM should submit an undertaking and documents in this regard.</p>	<p>As per specification.</p>

Recommendation of ADG (med)














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2. QRS/SPECIFICATIONS AND TRIAL DIRECTIVES OF "AUTOMATED TOURNIQUET SYSTEM"

Annexure-2 L (iv)

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/ Desired
1.	<p>SPECIFICATION FOR AUTOMATED TOURNIQUET SYSTEM :</p> <p>Automatic Tourniquet System should be dual-port, dual-cuff system with microprocessor controls and dedicated ports for supplying and measuring pressure independently, so that it can be used for bilateral joint replacement procedures. With the innovative Limb Occlusion Pressure (LOP) feature. The Tourniquet should combine the latest in advanced tourniquet technology with the well-established tradition of safety, reliability, and convenience. It should have the following Features:-</p> <ul style="list-style-type: none"> <input type="checkbox"/> Ability to provide a specific Recommended Tourniquet Pressure (RTP) for each patient based on physiological characteristics. <input type="checkbox"/> Limb Occlusion Pressure (LOP) feature, • Dual cuffs: Dual port, colour coded • Dual displays • Should use ambient air • Microprocessor Controlled • Self-check calibration • Audible and Visual Alarms • Internal Pump for Fast Inflation Time • Positive locking connectors • Should automatically checks the accuracy of machine calibration every time the system is powered up • Should alert the user of the cuff status when attempt is made to power down the machine • Cuff Lockout Safety Feature • Dual compressors to allow for independent control over cuffs "one" and cuff "two", addressing the potential physiological differences in the patient • Dedicated pressure line and pressure measurement line for cuff "one" and cuff "two" which should be designed to provide most accurate readings. 	<p>Board should physically demonstrate.</p> <p>OEM should submit an undertaking in documents in this regard.</p>	<p>As per specifications</p>

Recommendation of ADS (M&H)

Member-I  Member-II  Member-III  Member-IV  Member-V  Member-VI  Member-VII  Member-VIII  Member-IX  Member-X  Member-XI  Member-XII  P.O. 

Annexure-2 L (V)

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/ Desired
	<ul style="list-style-type: none"> • Utilization of two independent cuffs during one surgical procedure to allow bilateral knee procedures • Battery backup of 4 hrs, so that it can be used during patient transport and to be used during a power failure. No interruption in the procedure while the cuff is inflated - Automatically transfers power to the battery. Should sense, calculate and report the cuff pressure necessary to achieve complete blood occlusion in the operative limb. • Carrying Handle <p>5 yr warranty & 5 yr CMC should be included with provision of supply of spare parts of the model supplied for next 10years</p> <p>Standards, Safety and Training:</p> <ol style="list-style-type: none"> 1. Should have a European CE or US FDA approved certification. 2. May preferably be compliant with IEC: 61010 -1 / or any international equivalent viz. EN/UL 61010 covering safety requirements for electrical equipment for measurement control and laboratory use. 3. The unit shall be capable of being stored continuously in ambient temperature of 0-50deg C and relative humidity of 15 - 90% 4. The unit shall be capable of operating in ambient temperature of 20-30 deg C and relative humidity of less than 70%. 5. User/Technical/Maintenance manuals to be supplied in English. 6. Certificate of calibration and inspection. 7. Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/ paragraph number of original catalogue/data sheet. Any point, if not substantiated with authenticated catalogue/manual, will not be considered. 8. List of important spare parts and accessories with their part number and costing. 	<p>Board should physically demonstrate.</p> <p>OEM should submit an undertaking documents in this regard.</p>	<p>As per specifications</p>

Recommendation of Adb (mer)

Member-I *[Signature]* Member-II *[Signature]* Member-III *[Signature]* Member-IV *[Signature]* Member-V *[Signature]* Member-VI *[Signature]* Member-VII *[Signature]* Member-VIII *[Signature]* Member-IX *[Signature]* Member-X *[Signature]* Member-XI *[Signature]* Member-XII *[Signature]* P.O. *[Signature]*

5. QRS/SPECIFICATIONS AND TRIAL DIRECTIVES OF "FLASH STERILIZER"

Annexure-2 L (viii)

Sl. No.	SPECIFICATIONS	Procedure suggested for Trial for board of officers	Result expected/ Desired
A.	<ol style="list-style-type: none"> 1. It should be a fully automatic table top high pressure steam sterilizer with Chamber volume of 20 L for sterilization of wrapped, unwrapped, hollow and porous materials and should have cycles for prions also, 2. It should have integrated steam generator and vacuum pump. 3. It should be a B class sterilizer with cycle time for wrapped instrument should be less than 25 minutes and 10-15 minutes cycle time for unwrapped cycles. 4. The sterilization chamber, jacket and steam generator should be made of high quality stainless steel. 5. Should have a robust doorable to with stand up to a ton of pressure. 6. It should have an integrated water purification system. 7. It should have fully microprocessor control system for fully independent checking and control of the sterilization system. Should be complete auto diagnostic system providing error codes on display in case of failure. 8. It should have thermal fuse protection against overheating of chamber and jacket and again stop ration of the steam generator without water. 9. It should have LCD display and RS 232 inter face. Should have automatic door locking mechanism. 10. Sterilization to be achieved at 134 degrees and 121 degrees. It should also have preloaded test programs for Bowie-Dick test and Vacuum test. 11. The Sterilizer should come with standard accessories like sterilization trays, holders, start up kit, traps of different sizes, Deionizer for connections to water, support for bags, Tray handles etc. 12. It should be CE (European) and FDA (US) certified and should comply with EN 13060 standard for small sterilizers. 13. The company should have installation in India. 	<p>Board should check physically during demonstration.</p> <p>OEM should submit an undertaking documents in this regard.</p>	

Recommendation of AD/Secretary

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 Member III: *[Signature]*
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 Member XXX: *[Signature]*

6. QRS/SPECIFICATIONS AND TRIAL DIRECTIVES OF "STRAIGHT CABINET"

Annexure-2 L (ix)

Sl. No.	SPECIFICATIONS	Procedure suggested for Trial for board of officers	Result expected/ Desired
A.	<ol style="list-style-type: none"> 1. Should be built using a light weight aluminum composite base & frame 2. Aluminum finish, counter balanced, locking tambour doors 3. Durable flex cell interior providing a modular storage system that accepts a wide range of trays, baskets and other exterior accessories 4. Easy grip push/pull stainless steel handle 5. Side mounted accessory rail system with full line of height adjustable exterior accessories 6. Minimum 5inch medical grade castors 7. Options should be available with left or right centre column removed to fit double wide shelves 8. Carts should come with standard key lock, key less entry available 9. Frames: light weight aluminum 10. Base: durable high density polyethylene 11. BUMPER : durable high density polyethylene 12. Corner extrusions: light weight aluminum 13. Cell panels: Durable ABS plastic 14. Hinges: Dull chrome plated steel 15. Door pulls: Dull chrome plated metal 16. Push handles: stainless steel 17. Doors: Tambour door counterbalanced, aluminum finish 18. Casters: Metal 5 inch medical grade plate caster 19. Locking system: Central locking system with key lock 20. Dimensions: Minimum 28 inch D x 57 inch Wx 80 inch H 	<p>Board should physically demonstrate.</p> <p>OEM should submit an undertaking and documents in this regard.</p>	

Member-I	Member-II	Member-III	Member-IV	Member-V	Member-VI	Member-VII	Member-VIII	Member-IX	Member-X	Member-X	Member-XI	Member-XII	P.O.
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Recommendation of ADGM

[Signature]

Annexure-2 L (X)

S.No.	SPECIFICATIONS	Procedure suggested for trial for board of officers	Result expected/ Desired
	21. Interior dimensions: 23 inch Dx48 inch Wx 64 inch H 22. Number of cells: Minimum 75 usable flex cell 23. Cart should be optimized for product specific storage 24. Interior and side accessories should be available		

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|---|--|---|--|---|--|
| (Dr. J Chitopadhyay)
BSF
Member-I | (Dr. Rohit Shyam Bobil)
CMO(SG) (ENT)
RH, ITBP, Gr. Noida
Member-II | (Dr. Saquib Khan)
CMO
(OG)
(Radiology) CRPF,
Member-III | (Dr. R Kuppuppu Sammy)
CMO(SG)
(Paediatrics) CRPF
Member-IV | (Dr. Chandrima Kar)
Comdt /Spl. Gr. I &
(Obs Gyn), CRPF
Member-V | (Dr. Anurag Jain)
Contractual, Spl
(Orthopaedics),
CRPF Member-VI |
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|--|--|--|--|---|--|
| (Dr. Rakesh Tiwari)
CMO (SG)
(Anaesthesia),
ITBP Member-VII | (Dr. Shaifali Gupta)
Comdt /Spl. Gr. I
(Ophthalmology), ITBP,
Member-VIII | (Dr. Rajkamal Nimesh)
Comdt /Spl. Gr-I
(Surgery), ITBP,
Member-IX | (Dr. Ph Gairi Devi)
Comdt./CDS (SG),
(Dental), SSB
Member-X | (Dr. Neeraj Kumar)
CMO, (Medicine),
ITBP
Member-XI | (Dr. Soumyesh Ghosh)
Comdt./Spl. Gr. I
(Pathology), ITBP
Member-XII |
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Recommendation of ADS (Med)

(Dr. A C Bhardwajan)
IG (Med.), RH, ITBP, Gr. Noida
Presiding Officer

APPROVED / NOT APPROVED

DIRECTOR GENERAL
BORDER SECURITY FORCE