Appendix-1J (i)

9 BODY COMPOSITION MONITOR 10 DIGITAL STETHOSCOPE WITH INTEGRATED ECG	0			8. STRESS DETECTING MACHINE	FUNCTION TEST MACHINE	SPIROMETER/ PULMONARY	6. DIALYSIS UNIT MACHINE	5. HUMAN MORTURIES	4. FIBRE OPTIC ENDOSCOPE	3. BMI MACHINE	STORE/ KEEP 2 DEAD BODIES	DEEP FREEZER WITH FACILITIES TO	1. ALCOHOL BREATH ANALYZER	S.N NAME OF THE EQUIPMENT	
		No	No	No		Yes (15)	Yes (17)	Yes (1364)	No	No		TO Yes (1373)	Yes (1482)	IS IT AVAILABLE IN PET (AS PER 100 BADED). IF YES THEN MENTIONED SL.NO. OF PET	
		Yes	Yes	Yes		Yes	Yes	Yes	Yes	Yes	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Yes	Yes	QRs AVAILABLE OR NOT	

Member-II Member-III Member-IV Member-VI Member-VII Member-VIII Member-VIII Member-X Member-X Member-X Member-X Member-X Member-X Member-X Member-X Member-X Member-XIII

Recommended Not Recommended of Recommended of Recommendation of Recommendati

QRS/SPECIFICATIONS AND TRIAL DIRECTIVES OF "ALCOHOL BREATH ANALYZER"

Recommenlation of ADS (Med)

A. 1. Dimensions 2. No. of cabinets 2. No. of cabinets 3. Input Volt 4. Locking system 6. Refrigeration system 6. Separate control 7. Front opening door 7. Front opening door 8. Temperature Range 9. Compressor 10. Defrosting system 11. Internal lightening 12. Alarms 13. Evaporator 14. Internal drainage 15. Wall type 16. Construction 17. Evaporator 18. Internal system 19. Low and high alarm 19. Low and high alarm 19. Evaporator 19. Low and high alarm 19. Evaporator 19. Construction 10. Defrosting system 11. Internal drainage 12. Alarms 13. Evaporator 14. Internal drainage 15. Wall type 16. Construction 17. Compressor 18. Evaporator 19. Evaporator 19. Evaporator 19. Evaporator 19. Evaporator 19. Compressor 10. Defrosting system 11. Internal drainage 12. Should provide maintenance support for minimum 10 years and warranty for minimum 10 years and warranty for minimum 10 years and warranty for more available. 2. Should provide live demonstration of equipment to the end users. 3. Should provide live demonstration of equipment to the end users. 4. Comprehensive training for technical staff and proper support services till familiarity with system. 5. Should provide live demonstration of equipment to the end users. DOCUMENTATION: C. 1. User/ Technical/ Maintenance manuals to be supplied in English/Hindi. 2. Log book with instructions for Daily, Weekly, Monthly maintenance. 3. The job description of the hospital Technician, service engineer should clearly spelt out.	STA DOC 5. 4. 3. 2. 1. 10. 11. 11. 11. 12. 12. 12. 12. 12. 12. 13. 13. 13. 13. 13. 13. 13. 13. 13. 13		Spe	Specifications		Procedure suggested for trial by board of officers
STA 100 00 5. 4 3. 2. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	STA DOC 5. 4. 3. 2. 1. 10. 10. 10. 10. 10. 10. 10. 10. 10.	Ą	_	Dimensions		
STA DOG 5. 4 3 2 1 15. 1	STA DOC 5. 4. 3. 2. 1. 15. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.		2	No. of cabinets		
STA DOC 5. 4. 3. 2. 1. 15. 1. 15. 1. 15. 1. 15. 1. 15. 1. 15. 15	STA BOO 5 4 3 2 1 16 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		ω.	Input Volt	220 volts/ 50 Hz	2
5. DOC 5. 4. 3. 2. 1. 15. 15. 15. 15. 15. 15. 15. 15. 15.	STA BOO 5 4 3 2 1 16 5 17 16 5 1 18 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		4	Locking system	External key locks	
5. A.	STA 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		5.	Refrigeration system	Air cooled hemetically sealed	
5. A 4 3 2 1 16. STA 3 11. U 22. U 23. U 25. U 2	STA 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		6.	Separate control	Temperature / Alarm / power control	
8. 9 9 9 11. 12. 13. 14. 15. 16. 17. 17. 17. 17. 17. 17. 17. 17. 17. 17	8. 8. 9. 9. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.		7.	Front opening door	Stainless steel with external locks	
9. 11. 12. 13. 14. 15. 16. 17. 17. 17. 17. 17. 17. 17. 17. 17. 17	9. 10. 10. 11. 11. 11. 11. 11. 11. 11. 11		.8	Temperature Range	2°C to 8°C / -10°C to -20°C	
10. 11. 12. 13. 14. 15. 16. 16. 17. 17. 18. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19	10. 11. 11. 11. 11. 11. 11. 11. 11. 11.		9.	Compressor	ISI marked & CFC free Noiseless	534
11. 12. 13. 14. 15. 16. 16. 17. 17. 18. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19	STA 1. U DOC 2. L C 2.		10.	Defrosting system	Automatic	
12. 13. 14. 15. 16. 17. 17. 18. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19	12. 13. 13. 13. 13. 13. 13. 13. 13. 13. 13		11.	Internal lightening	Waterproof fluorescent light	1
13 14, 15, 16, 16, 17, 18, 11, 18, 19, 10, 11, 11, 11, 11, 11, 11, 11, 11, 11	STA 13 13 14 15 15 15 15 15 15 15 15 15 15 15 15 15		12.	Alarms	Low and high alarm	1
11. 15. 3. 3. 3. 11. U 22. L 0. 23. L 0. 3. 11. U 24. L 0. 3. 11. U 25. L 0. 3. 11. U 26. L 0. 3. 11. U 26. L 0. 3. 11. U 27. L 0. 2. U 27. L 0. U 27. L	14. 15. 16. 16. 17. 17. 17. 17. 17. 17. 17. 17. 17. 17		13	Evaporator	Internal evaporator system	20
1. U 2. L. G. 3. TI	5. DOC 2. L. O. DOC 3. TI U. DO		14.	Internal drainage	Yes	
5. DOC 2. L. Q. 3. 11. Q.	16. STA 3. 3. 17. U.S. 3. U.S.		15.	Wall type	Double wall	
STA 1. 2. 3. 4. 4. 5. DOC 2. L. C. 3. TI	STA 3. 3. 3. 11. U. 2. L. C. 2		16.	Construction	Corrosion resistant stainless steel	
7 C C S	3.1.00 3.1.00 3.1.00	1	UIA	NUARU, SAFEIT AND	RAINING	
3. 1. C 2. C C 2. C C 2. C C C C C C C C C C	3.7.000 3.7.000	۳.		Chemically stable, Shou Should provide mainten	l be CFC free and environmentally safe refrigerant. nce support for minimum 10 years and warranty for minimus	ท 5
5. DOC 1. U 2. L 3. T	3. T. OO			years Should be ISO certified	compatible with European standards where Indian standards	are
5. DOC 1. U 2. L C 3. T 1	3. TI U			not available. Comprehensive training	or technical staff and proper support services till familiarity wi	=
1. 2. 3.	1. User/ Technical/ Maintenance manuals to be supplied in English/Hindi. 2. Log book with instructions for Daily, Weekly, Monthly maintenance. 3. The job description of the hospital Technician, service engineer should clearly spelt			system. Should provide live demo	nstration of equipment to the end users.	
ω N .1	1. User/ Technical/ Maintenance manuals to be supplied in English/Hindi. 2. Log book with instructions for Daily, Weekly, Monthly maintenance. 3. The job description of the hospital Technician, service engineer should clearly spelt. Application of the hospital Technician, service engineer should clearly spelt.		DOC	:UMENTATION:		- H. 130
	The limbert of the second	Ç		ser/ Technical/ Maintenang book with instructions je job description of the h	ce manuals to be supplied in English/Hindi. or Daily, Weekly, Monthly maintenance. ospital Technician, service engineer should clearly spelt out.	
Member-A Member-All Member-All— Member-All	5			NJenibei-III	V) Member-V Member-VII Member-VIII Wember-VIII	× /

Recommendation of ADO(Med) or

3. QRS/SPECIFICATIONS AND TRIAL DIRECTIVES OF "BMI MACHINE"

	Specifications	Procedure suggested for trial by board of officers	Desired
À	1. Weighing capacity : 200 kg	Board should check physically As per specifications	As per specifications
		during demonstration.	
	Power supply: 230 V	OEM should submit an	
	4. Display: LED type	taking and documents	
	Height, Weight, BMI, Date, Time	this regard.	
		1	
	7. Result unit: In Kg/m2		
	8. Result mode: Led display + printed result		
	9. Weight accuracy: +/- 100 gm		
	10. Height Accuracy: +/- 0.5 cm		
	11. Display inference of results: Overweight / Underweight/ Normal: needed: Yes		
	12. Time & Date to be displayed on result slip: Yes		
	STANDARD, SAFETY AND TRAINING		
æ	 Should provide live demonstration of equipment to the end users. Should provide maintenance support for minimum 10 years and warranty for minimum 5 years 	OEM should submit an undertaking and documents in this regard.	As per specifications
	 Comprehensive training for technical staff. Should be IS certified or compatible with European standards where Indian standards are not available. 		
	DOCUMENTATION:		
Ç	 User/ Technical/ Maintenance manuals to be supplied in English/Hindi. Log book with instructions for Daily, Weekly, Monthly maintenance. The job description of the hospital Technician. 	OEM should submit an undertaking and documents in this regard.	an As per specifications in

Member-II Member-III Member-V Member-VI Member-VIII Member-VIII Member-X Me

4. QRS/SPECIFICATIONS AND TRIAL DIRECTIVES OF "FIBRE OPTIC ENDOSCOPE"

Member-I	,m	D.		Ċ	В			≯	
Member-II Member-IV Member-V Member-VI Member-VIII Member-IX Member-X Member-X	 User/ Technical/ Maintenance manuals to be supplied in English/Hindi. Log book with instructions for Daily, Weekly, Monthly maintenance. The job description of the hospital Technician. Advanced maintenance tasks required shall be documented User, technical and maintenance manuals to be supplied in English language 	 Training of users in basic handling and basic maintenances 5 year warranty & 5 year comprehensive maintenance should be provided and availability of spares for the next 10 years All spare parts should be BIS approved 	STANDARD, SAFETY AND TRAINING	Camera Specifications: 1. Image resolution – minimum 640 x 480 mm 2. Focus of the camera should be 8 times or more.	Insertion probe specifications: 1. Built in light source should enable illumination of minute details. 2. Real 3.5 inch or bigger screen. 3. Minimal image loss 4. Video probe length minimum 3 metres 5. Water, oil, scratch resistant tempered glass to protect the camera as well as maintain high resolution. 6. Cable to maintain fixed adjustment until moved 7. Should provide access diameter between 2 mm to 10 mm 8. Viewing angle -45 degree and more 9. Insertion probe lens should be water and oil proof	.40	 Should have suitable light source Continuous battery running life – minimum 2 hours. Simple one hand operation. Suitable commercial rechargeable battery. Battery should work at -10 to +50 degree C 		Specifications
Member-X Member-XI	OEM should submit an undertaking and documents in this regard.	OEM should submit an undertaking and documents in this regard.					OEM should submit an undertaking and documents in this regard.	Board should check physically during demonstration.	Procedure suggested for trial by board of officers
Member-XII P.O.	As per specifications	As per specifications						As per specifications	Results expected/ Desired

5. QRS/SPECIFICATIONS AND TRIAL DIRECTIVES OF "HUMAN MORTURIES"

	200	D. 5.4.3.2.1	ST,	d)	9.		7.	. ი :	4, 72	٥	A 22.1	Specifi
User/ Technical/ Maintenance manuals to be supplied in English/Hindi.	DOCUMENTATION:	Should provide live demonstration of equipment to the end users. Should provide maintenance support for minimum 10 years and warranty for minimum 5 years Comprehensive training for technical staff. Should be CE or USFDA approved. CFC free refrigerant.	STANDARD, SAFETY AND TRAINING	 a) Lamp – Vapor proof incandescent lamp – 40 W b) Temperature indicator plus controller: Electronic with digital display c) Audio visual alarm to indicate variation in temperature Refrigerating system: a) Refrigeration to be CFC free b) Voltage stabilizer of sufficient load rating c) Temperature to be maintained between 2-6 degrees C d) Power supply – 230 V/50 Hz 	Standard accessories:	gasket handle and lock arrangement with keys in duplicate for individual dead bodies. Embedded drainage system for cleaning of cabinet.	polyurethance foam (PUF sandwiched panels at least 60 mm thick. Opening and locking mechanism: front opening hinged insulated doors lined with magnetic	Walls of columns/ cabinet should be prefabricated with pre painted galvanized steel sheet and	To be rat proof All the columns should have stainless steel finish	Each column to nave minimum internal dimensions - voidth 3163 mm, Depth: 2400 mm and Height (mm) : 1786 mm	To be divided into columns Should provide sufficient air condition to maintain temperature between 2-6 degrees	Specifications
OEM should submit an undertaking and documents in		OEM should submit an undertaking and documents in this regard.						i i i i i i i i i i i i i i i i i i i	undertaking and documents in this regard.	OEM should submit an	Board should check physically during demonstration.	Procedure suggested for trial by board of officers
As per specifications		As per specifications					•		*		As per specifications	Results expected/ Desired

Member-II Member-III Member-IV Member-V Member-VI Member-VIII Member-VIII Member-X Member-X Member-X Member-XI

Recommendation of ADD (Med)

6. QRS/SPECIFICATIONS AND TRIAL DIRECTIVES OF "DIALYSIS UNIT MACHINE"

1. The structure of the machine should be of modular design. 2. It should have Control & Monitoring Screen with minimum 10" colored TFT/LCD Display (Screen). 3. Display should have Acetate & Bicarbonate dialysis facility. 5. It should have Arterial Venous & Transmembrane pressure monitoring facility. 6. It should have Volumetric Ultrafiltration System. 7. Blood pump flow rate should be from 30 ml/min to 600 ml/min. 8. It should have Volumetric Ultrafiltration System. 9. In-line Bicarbonate mixing and solution preparation facility during dialysis 10. It should have Air bubble detector with Optical Sensor (to check the presence of blood in extracorporeal blood circuit) at Venous clamp. 11. It should have Blood leak Sensor which can differentiate between impurities and real blood. 12. Should accept different concentrate formulation, different Dialyzers and blood tubing sets. 13. It should have self-test facility during treatment. 14. It should have self-test facility during treatment. 15. Ultra filtration rate should be from 0 to 4,00L/Hr. 16. In house potable water supply is available &minimum 10micro/m size water filter assembly with cartridge shall be supplied with necessary attachments to make a functional unit. 17. Auto priming and rinsing of dialyzer and blood lines 18. It should have Hot Rinsing and Hot Chemical Disinfection facility (Temp. upto 80 deg. Celsius) with recirculation system. Also it should have various chemo Thermal cleansing and disinfection programs. Disinfection shall be open system 19. Facility for disinfection and Sodium Profiling facility. 21. Should work on AC mains without batteries.	specifications Procedure suggested for trial Results expected by board of officers 1. The structure of the machine should be of modular design. 2. It should have Control & Monitoring Screen with minimum 10° colored TFT/LCD Display board of officers Screen). 3. Display should have Screen with high clarity & easily readable 4. It should have Screen with high clarity & easily readable 5. It should have Acetale & Bicarbonate displaysis facility. 6. It should have Acetale & Brantonate displaysis facility. 7. Blood pump flow rate should be from 30 ml/min to 600 ml/min. 8. It should have Volumeric Ultrafiltation System. 9. In-line Bicarbonate mixing and solution preparation facility during displaysis 10. It should have blood dircuit) at Venous clamp. 11. It should have Blood leak Sensor which can different Dialyzers and blood thave bloyset flow rate range from 300ml/min. to 700ml/min. 14. It should have self-test facility during teatment. 15. Ultra filtration rate should be from 10 to 4 00U-Hr. 16. In house potable water supply is available & Animinum 10micro/m size water filter assembly with recirculation system. Also it should have another supply is available & Animinum 10micro/m size water filter assembly with recirculation system. Also it should have water and blood lines 18. It should have brown to to 4 00U-Hr. 19. Thouse potable water supply is available & Animinum 10micro/m size water filter assembly with recirculation system. Also it should have various chemo Thermal cleansing and disinfection programs. Disinfection shall be open shall be open shall be open shall be appeared with necessary attachments to make a functional unit. 19. Facility for disinfection shall be possible with any disinfection there are found in such cases i.e. the system shall be open shall be appeared.

Member-II Member-III Member-IV Member-V Member-VI Member-VIII Member-VIII Member-IX Member-X Member-X

Member-XII

Recommentation of ADG (pel)

		Recommendation of ADO(Med)
Member-XII P.O	Member-X Member-X Member-XI	Member-II Member-IV Member-VI Member-VIII Member-VIII Member-IX
		the system shall be open system 41. It should have Ultrafiltration and Sodium Profiling facility. 42. It should have in-built Battery backup of 15 to 20 minutes for complete Extra corporeal blood system during power failure.
	-	40. It should have Hot Rinsing and Hot Chemical Disinfection facility (Temp. upto 80 deg. Celsius) with recirculation system. Also it should have various chemo Thermal cleansing and disinfection programs. Disinfection shall be possible with any disinfectant universally used in such cases i.e.
•		
	OEM should submit an undertaking and documents in this regard.	 Display should have screen with high clarity & easily readable. It should have Acetate & Bicarbonate dialysis facility. It should have Sequential Ultra filtration facility. It should have Arterial Venous & Transmembrane pressure monitoring facility.
As per specifications	during demonstration.	 It should have Control & Monitoring Screen with minimum 10" colored TFT/LCD Display (Screen).

Member-I Member-II

C. Dialyze i 1. Made	6. Equi		3. Aları 4. Aları	2. Oper	B. Alarm S	47. On li	aa) (€ ≤	_	+ s)	7) (1	9		0) 2	45. Powe	44. Must
Dialyzer specifications: 1. Made of biocompatible, synthetic (e.g., polysulfone, polyacrilonitrile, polymethylmethacrylate) or modified cellulose membrane (e.g., cellulose acetate).	thus isolating the patient. Equipment should be programmed to automatically switch to "safe mode," thus isolating the patient from the HD machine.	All blood alarms (air detector, arterial, venous, blood leak, transmembrane pressure, blood pump torque) should automatically shut off the blood pump, clamp the venous return line, and stop UF,	settings, especially while HD is in progress. Alarms should be visible from at least 2 meters Alarms should be easily audible (70 dB).	Operator should only be able to operate within the set range without being able to alter these	Alarm Specifications: 1	bb) Optical detector (online monitoring of dialysis) 47. On line clearance monitoring & Kt/V to assess adequacy of dialysis.	Sodium and ultratilitration profiling. Single needle dialysis.	On-line urea clearance.	On-line blood volume monitor.	Safety devices: alarms, venous blood clamp. UPS backup of up to 30 min is suggested for each machine.	Volumetric adjustable ultrafiltration (UF) control.	Blood leak detector. Dialysate temperature regulator with a range of 35–39°C.	Conductivity meter.		Air bubble detector. Niving proportion unit with biggshongte dialysis facility rate of dialysate delivery from 300 to	Arterial and venous line pressure monitors.	45. Power supply- 220VAC + 15%, 50Hz.	44. Must have the facility to up gradating to latest technology in future.
			undertaking and documents this regard.		Board should check physically As per specifications during demonstration.										i i i i i i i i i i i i i i i i i i i	undertaking and documents in	OEM should submit an	during demonstration.
>					As per specifications													

Member-III Member-IV Member-VI Member-VIII Member-VIII Member-IX Member-X Member-X Member-XI Member-XII P.O.

im					ш	Ď
DOCUMENTATION: 1. Operating, Maintenance& Service manual with detail circuit diagram should be provided in English/Hindi. 2. Log book with instructions for Daily, Weekly, Monthly maintenance.	 OEM should quote the cost of the frequently used consumables such as 1) Dialyzers of different sizes. 2) AV Tubing set (universal). 3) AV Needles. 4) Disinfectant solution. and any other consumable to run the machine, in Price Schedule. Demonstration compulsory. 	over. 6. The Dialysis machine should be "Open system". The machine should run on the consumables from other make as well	5. Comprehensive dailing of recrimed start. 4. Should be CE or USFDA approved. 5. OEM should quoted CMC charges separately for the next five years, after warranty period is	minimum 5 years and also required support for spares and consumable for 5 years after warranty period is over. Comprehensive training for technical staff	STANDARD, SAFETY AND TRAINING: 1. Should provide Training to End Users. 2. Should provide maintenance support for minimum 10 years and comprehensive warranty for	Pressure specifications: 1. Inflow (prepump) pressure monitor: Inflow pressure is 80 to -200 mmHg 2. Outflow (venous) pressure monitor: +50 to +250 mmHg. 3. Temperature: automatically limited between 35°C and 39°C
OEM should submit an undertaking and documents in this regard.					OEM should submit an undertaking and documents in this regard.	
submit an documents in					submit an documents in	
an As per specifications in				2	As per specifications	

7. QRS/SPECIFICATIONS AND TRIAL DIRECTIVES OF "SPIROMETER/ PULMONARY FUNCTION TEST MACHINE"

A. 1. Storage capacity 1000+ studies 2. Keyboard Alphanumeric LCD touch screen 3. Communication USB to printer and PC, RS232, Optional: Bluetooth to PC 4. Dimensions 5.75" x 3.25" x 4.0" +/-2" 5. Power supply least 2 hours Member-II Member-III Member-III Member-V Member-VI Member-VI Member-VIII Member-VIIII Member-VIIIIII Member-VIIIII Member-VIIII Member-VIIII Member-VIIIII Member-VIIIII Member-VIIIII Member-VIIIII Member-VIIIIIIII Member-VIIIII Member-VIIIIIIIII Member-VIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Spec	Specifications		Procedure suggested for trial Results expected/ by board of officers Desired
2. Keyboard Alphanumeric LCD touch screen 3. Communication USB to printer and PC, RS232, Optional: Bluetooth to PC 4. Dimensions 5.75" x 3.25" x 4.0" +/-2" 5. Power supply 2 x 1.5 DC Alkaline or NiMH batteries. With battery backup for at least 2 hours Member-II Member-III Member-IV Member-VI Member-VIII Member-VIII Member-VIII Member-VIII Member-VIIII Member-VIIIII Member-VIIII Member-VIIIIII Member-VIIII Member-VIIII Member-VIIIII Member-VIIII Member-VIIII Member-VIIII Member-VIIII Member-VIIII Member-VIIIII Member-VIIIII Member-VIIIII Member-VIIIII Member-VIIII Member-VIIIII Member-VIIIII Member-VIIIII Member-VIIIII Member-VIIIIIII Member-VIIIII Member-VIIIIIIIIII Member-VIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	-	Storage capacity	1000+ studies	Board should check physical
3. Communication USB to printer and PC, RS232, Optional: Bluetooth to PC 4. Dimensions 5.75" x 3.25" x 4.0" +/-2" 5. Power supply 2 x 1.5 DC Alkaline or NiMH batteries. With battery backup for at least 2 hours Member-II Member-III Member-II Member-VI Member-VI Member-VIII Member-VIII Member-VIII Member-VIII Member-VIII Member-VIIII Member-VIIIII Member-VIIII Member-VIIIII Member-VIIIII Member-VIIII Member-VIIIII Member-VIIII Member-VIIIIIII Member-VIIIII Member-VIIIIIIIII Member-VIIIIIIIIIIIIIIIIIIII Member-VIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	2	Keyboard	Alphanumeric LCD touch screen	during demonstration.
4. Dimensions 5.75" x 3.25" x 4.0" +/-2 `` 5. Power supply 2 x 1.5 DC Alkaline or NiMH batteries. With battery backup for at least 2 hours Member-II Member-III Member-II Member-VI Member-VI Member-VIII Member-VIII Member-VIII Member-VIII Member-VIIII Member-VIIIII Member-VIIII Member-VIIIII Member-VIIII Member-VIIIII Member-VIIII Member-VIIII Member-VIIIII Member-VIIII Member-VIIIII Member-VIIIII Member-VIIIII Member-VIIIIIII Member-VIIIII Member-VIIII Member-VIIIII Member-VIIIII Member-VIIIIIII Member-VIIIIIIIIII Member-VIIIIIIIIII Member-VIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	ω	Communication	USB to printer and PC, RS232, Optional: Bluetooth to PC	should submit
5. Power supply 2 x 1.5 DC Alkaline or NiMH batteries. With battery backup for at least 2 hours Member-II Member-III Member-IV Member-VI Member-VIII Member-VIIII Member-III M	4	Dimensions	5.75" x 3.25" x 4.0" +/-2 ``	Octor should sability of
Member-II Member-IV Member-V Member-VI Member-VIII Member-VIII Member-VIII Member-VIII	Ņ	Power supply	2 x 1.5 DC Alkaline or NiMH batteries. With battery backup for at least 2 hours	this regard.
\		Member-III Mandi	Member-VII Member-VIII Member-IX	

			Accuracy Error less than 3%		T
		this regard.	Volume 0-10 L	2.	
	documents in	g and	Flow range 0-16 L/sec	1.	-33
As per specifications		OEM should	Measurement Scale :	leasur	2
· · · · · · · · · · · · · · · · · · ·			Additional accessories : Pneumotach screens (miliminum ob 1905), Fundam filters(minimum 50), Disposal mouth piece (minimum 250 nos) and nose clips.	22.	
			· · · · · · · · · · · · · · · · · · ·	-	T
		tnis regard.	syringe as per requirement of the instrument, standard accessories and strong carrying		
	documents in	undertaking and documents in	Should be supplied with computer interfacing package cables, software, 2/3 litre, calibration		
As per specifications		OEM should	Assembled with good quality deskjet/laserjet printer and UPS	20.	
in the second			Disc Drive (1x320 GB)		
			Laptop Computer (@ GB RAM, at least 14 inchTFT Screen, USB Ports, DVD R/W Hard	q)	
			The assemblage should be portable.	p) :	
			Language Selectable - English	0)	
			Ethnic correction Selectable – % Actual, Caucasian, Hispanic, Afro-American	<u></u>	
			System software should be based on the latest Micro Soft windows operating system	Э)	
			Facility to interface for desktop/Laptop computer	_	T
			Capability to select and modify predicted equations	<u>ح</u>	
			Should facilitate overlaying of previous test curves for comparison	(j)	-
			Should incorporate Electronic barometer and temperature sensor.	i) (i	
			effected with humidity, moisture and water droplets		
			Parameters should be measured with high accuracy and reproducibility and accuracy not		12
			Should meet criteria of ATS standards	g) :	10
			Should include precision pneumatograph	f) S	
			e) Real time flow volume and volume traces on computer screen.	•	
			d) Pre and Post bronchodilator comparisons	0	
			c) Lung Volumes and subdivisions	_	-
			135		1
			a) Spirometry and flow volume parameters		
			Parameters Measured should include	7. F	-
			weight a oz (500 a)	0.	-

Member-ix Member-x Member-xI Member-XII (P.O.)

Member-I Member-III Member-IV Member-V Member-VI Member-VIII Member-VIIII

Recommendation of ADG (Med)

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.D	ω 4	2 1	C. S	
DOCUMENTATION: 1. User/ Technical/ Maintenance manuals to be supplied in English/Hindi. 2. Log book with instructions for Daily, Weekly, Monthly maintenance.	minimum 5 years after completion of warranty period. 3. Comprehensive training for technical staff. 4. Should conform with ISO/CE /USFDA.	 Should provide live demonstration of equipment to the and users. Should provide warranty for minimum 5 years and comprehensive annual maintenance support for 	STANDARD, SAFETY AND TRAINING	
		this regard.	OEM should	
		i document	submit	
		=	an B	1
			should submit an As per specification:	

8. QRS/SPECIFICATIONS AND TRIAL DIRECTIVES OF "STRESS DETECTING MACHINE"

C. Us		ËΒ								255
S									Ą	
User/ Technical/ Maintenance manuals to be supplied in English/Hindi.	DOCUMENTATION:	 Should provide live demonstration of equipment to the end users. Should provide maintenance support for minimum 5 years and warranty for minimum 3 years Comprehensive training for technical staff. Should be ISO, CE or USFDA approved. 	STANDARD, SAFETY AND TRAINING	 Should have USB to RS 232 cables to connect software and hardware Should have power adapter with range of 100-240 V, 0.4 A and 50-60 Hz 	7. It should have integrated photo plethysmography probe to connect to patient and to process		variation in heart rate. A Should have data storage and preloaded software with digital monitor output	respiratory rate along with pulse waveforms. 3. Device to be able to measure autonomic nervous system and stress status as per minute	 Should have accuracy with authorized algorithm Should be able to measure minute to minute variation in heart rate, peripheral perfusion, 	Specifications
OEM should submit an undertaking and documents in this regard.		OEM should submit an undertaking and documents in this regard.				100000000000000000000000000000000000000	undertaking and documents in	OEM should submit an	Board should check physically As per specifications during demonstration.	Procedure suggested for trial Results expected/ by board of officers Desired
an As per specifications s in		an As per specifications in							As per specifications	Results expected/ Desired

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Member-III Member-V Member-VI Member-VIII Member-VIII Member-IX Member-X Member-X Member-XI Member-XII

Recommendation of Adrical

9. QRS/SPECIFICATIONS AND TRIAL DIRECTIVES OF "BODY COMPOSITION MONITOR"

Ö	'n										Þ	
ō	3. 2. 1. S	r con	9.0	232	<u>ಶ</u> ೮೮	<u> </u>				2	ح.	S
DOCUMENTATION:	 STANDARD, SAFETY AND TRAINING 1. Demonstration to the users along with training of Staff (Medical, Paramedical, Technicians) 2. Minimum 5 years warranty with quotation of rates for next 5 years to be provided 3. Should be ISO, CE or USFDA approved. 	Testing weight range - 6 years to 99 Testing year range - 6 years to 99 Operating Temperature - + 10 degree C to +50 degree C Data Storage (Measurement Record) — 100000 Voltage - 100 - 240V	Number of Impedance Measurements – 30 Testing height range - = 250 centimeters.</td <td>Weight of equipment - Approx 12 kilogram. Connectivity interface - USG , Bluetooth, Wi-Fi Measurement Type: Reactance, Whole body Phase Angle, Segmental Phase Angle (Right Arm, Left Arm, Trunk, Bight Leg, Left Leg), Impedance</td> <td>Resolution of Display - 800 × 480 pixel Applied rating current (micro ampere) - 250 Measurement Frequency used - 5kHz, 50kHz, 250kHz</td> <td>g) Visceral Fat Display - TFT LCD Touchpad</td> <td>d) Body fat e) Resting metabolism n Rody age</td> <td>b) BMI (Body Mass Index) c) Skeletal Muscles</td> <td>a) Body Weight.</td> <td>Measuring Parameter (For Adult/Child) Measurement Parameters:</td> <td>s) - Bio Impedance Analysis), DSM (Direct Segmental</td> <td>Specifications</td>	Weight of equipment - Approx 12 kilogram. Connectivity interface - USG , Bluetooth, Wi-Fi Measurement Type: Reactance, Whole body Phase Angle, Segmental Phase Angle (Right Arm, Left Arm, Trunk, Bight Leg, Left Leg), Impedance	Resolution of Display - 800 × 480 pixel Applied rating current (micro ampere) - 250 Measurement Frequency used - 5kHz, 50kHz, 250kHz	g) Visceral Fat Display - TFT LCD Touchpad	d) Body fat e) Resting metabolism n Rody age	b) BMI (Body Mass Index) c) Skeletal Muscles	a) Body Weight.	Measuring Parameter (For Adult/Child) Measurement Parameters:	s) - Bio Impedance Analysis), DSM (Direct Segmental	Specifications
	OEM should submit an undertaking and documents in this regard.						ř	•		OEM should submit an undertaking and documents in	Board should check physically during demonstration.	board of officers Desired
7	As per specifications						•				As per specifications	Desired

Member-II Member-III Member-IV Member-VI Member-VI Member-VIII Member-IX Member-X Member-X Member-XII Member-XIII RQ. X

10. QRS/SPECIFICATIONS AND TRIAL DIRECTIVES OF "DIGITAL STETHOSCOPE WITH INTEGRATED ECG"

Specifications A. 1. Should able to convert an acoustic sound to electronic signals. A. 2. Electronic Signals can be further processed and digitalized to transmit to a personal computer/ during demonstration. Laptop. 3. Should have ability to hear record and transmit. 4. Records clearer sounds through patients clothes. 7. Marke - Stainless steel chest piece single sided. 8. Retlance on technology by eliminating superfluous testis quality, dimensional accuracy, durability and many more qualitative features. The clip stored in the cloud can be transferred anywhere in the world for 2 rd opinion. 9. Model inclusions: a) Electronic Stethoscope and Digital ECG, b) Earpiece, Tubing etc. 10. Portable easy to use 11. Instantaneous evidence-based detection at the point-of-care 13. Instantaneous evidence-based detection at the point-of-care 14. Mobile App displays PCG & ECG waveforms on any smart device. 15. Smart amplification & noise cancellation for crystal clear heart sounds. 16. Eliminates wires, gets and conductive pads 17. Inables superior auscultation even in noise earnicellation for crystal clear heart sounds. 18. Available for Android and IOS smart devices. Free download from the App Store. 21. Hold fieldly sounds are shown as real-time waveforms on any smart device. 22. High fieldly sounds are shown as real-time waveforms on any smart device. 23. Records waveforms and palient data which can be easily: a) Print as an Auscultation Report b) Email to a specialist to Tele-medicine consultation.
Procedure suggested board of officers Board should check during demonstration OEM should su undertaking and do this regard. cccuracy, durability ferred anywhere in ing etc. re.
Procedure suggested board of officers Board should check during demonstration OEM should suundertaking and doo this regard.
Results expected/ Desired As per specification

Member-II Member-III Member-IV Member-V Member-VI Member-VIII Member-VIII Member-IX Member-X Member-X Member-XII Member-XIII

Re Common contaction of ADS (Med)

		DOCUMENTATION: User/ Technical/ Maintenance manuals to be supplied in English/Hindi.	C.
As per specifications	OEM should submit an undertaking and documents in this regard.	STANDARD, SAFETY AND TRAINING 1. Should have minimum 5 year warranty. 2. Should provide maintenance support for minimum 5 years. 3. Comprehensive training for technical staff. 4. Should be ISO, CE or USFDA approved.	'n
		33. Speaker and headphones (as per requirement).	
		31. Amplified for optimal listening. 32. All weather friendly.	
		29. Proper package case 30. Frequency - 36.52 LUF (Lowest used frequency) in D mode (Diaphram mode) to -39.02 in B Mode (Bell mode) or as per latest technology & also Extended Range mode as per specification	
	this regard.	Background & Blue display 28. Battery slot should be properly placed.	
	OEM should submit an undertaking and documents in	26. Display will be LED and approx1.5 inch X 1 inch (Preferably) 27. Display will be contrast for easy readability with white background & Black display or Black	
To per operation	during demonstration.	 All the standards requirements of a stethoscope. Back of chest piece should contain monitor, display, menu, slot for USB, Bluetooth, Sound control system, Power Button etc 	

Recommendation of ADG (med).

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11. QRS/SPECIFICATIONS AND TRIAL DIRECTIVES OF "BIOFEED BACK MACHINE-"

		Specifications	Procedure suggested for trial by board of officers	Desired
. 1	,>	monitor-EEG (alpha), EMG, Pulse, Temperature, Respiration, GSR, ECG & HRV	Board should check physically As per specifications during demonstration.	As per specifications
		 (optional) It should have continuous graphical display of all above parameters. It should have Simultaneous and Singular Visual feedback through Digital Display and colour 	OEM should submit an	
			taking and	
		4. It should have Audio feedback through Head Phone or Speakers.	this regard.	
_		9. It should have User definable event marker.		
-		10. It should have Facility for Video & Audio recording.		
		11. It should have Number of Channels:6		
		12. It should have A/D Conversion: 14-bit A/D		
	T.			
		14. Sensitivity: 1 to 1500 µV/mm		
-		15. It should have Low Pass Filter: 0.1.0.3, 0.5, 1,3,5,7 Hz		
		16. It should have High Pass Filter: 0.1,0.3, 0.5, 2, 10, 15,35, 70, 99Hz		
		18. It should have Notch Filter: 50 HZ		
		19. It should have Input Impendence: >10 M ohm		
		20. It should have CMRR: > 80-85 db		
	SALS OF	21. It should have Power: 220V AC/12V, 2.2AH		
		22. It should have Battery Backup: Approx 3 Hrs		
	ъ	D	OEM should submit an undertaking and documents in	As per specifications
		 Should be FDA, CE, or BIS approved product. Manufacturer should have ISO certification for quality standards 	this regard.	
		 Comprehensive warranty for 2 years and 5 years CMC after warranty Continue to be compliant with Electrical Safety Standard for Medical Equipment- IEC-60601-1-1 		>
		6. Should be ISO, CE or USFDA approved.		
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Member-I Member-II

Member-III Member-IV Member-VI Member-VI Member-VIII Member-IX Member-X Member-X Member-XII Member-XII

Recommendation of ADG (Mpl)

0 Dr. J Chatopadhayay) (Dr. Rakesh Tiwari) DOCUMENTATION: ITBP Member-VII (Anaesthesia), Keranmendation of ADG(mcd) IG (Med.), RH, ITBP Gr. Noida CMO (SG) The job description of technician clearly spelt out. Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist Support. as per manufacturer service/ maintenance manual. List of Equipment available for providing calibration and routine Preventive Maintenance Certificate of calibration and inspection. User/Technical/Maintenance manuals to be supplied in English List of important spare parts and accessories with their part number and costing. Member-I (Dr. Rohit Shyam Bobil) (Ophthalmology), ITBP RH, ITBP, Gr. Noida (Dr. Shaifali Gupta) CMO(SG) (ENT) Comdt /Spl. Gr.I Member-VIII Member-12 (Dr: Saquib Khan) CMO (Dr. Rajkamál Nimesh) (Radiology) CRPF, Comdt /Spl. Gr-I (Surgery), ITBP Member-IX Member-III (Dr. A/C Bhandwajar Presiding Officer CDS (SG), (Dental) (Dr. ₹ Kuppu Samy) (Paediatrics) CRPF (Dr. Gaitri Devi) Member-IV CMO(SG) Member-X this regard. undertaking and documents in OEM should submit an (Dr. Chandrima Kar) (Dr. Neera Kumar) Comdt /Spl. Gr.I & CMO, (Medicine), (Obs Gyn), CRPF APPROVED Member-XI Member-V DIRECTOR ITBP As per specifications (Dr. Soumyesh Ghosh) GENERAL (Pathology), ITBP CRPF Member-VI Not APPROVED Comdt./Spl. Gr.I (Dr. Anurag Jain) Contractual, Spl (Orthopaedics), Member-XII

BORDER SECURITY FORCE

	No	ASSESSMENT & TESTING TOOLS/SCLAES KIT	13
No	4	POWER LIFT & INFINITE POSITION	
No	No	PSYCHOTHERAPY RECLINER CHAIR-	12
N)	でははいかなり、はないできています。	PSYCHO-EDUCATION SESSIONS	
No	No	AUDIO-VEDIO LED PANEL/SCREEN FOR	
		PATIENT SAFETY & SECURITY	
		SURVEILLANCE SYSTEM FOR PSYCHIATRIC	
NO	No	COMPREHENSIVE MONITORING &	6
No	No	4 Polysmnography (Sleep Study)	9
		MAGNETIC STIMULATION MACHINE-"	
No	No	RTMS: REPEATITIVE TRANSCRANIAL	8
No	Yes (2)	CARDIAC MONITOR	7
No	Yes (412)	STANDING BP APPARATUS	6
No		MILL)	
200	Yes (1)	TMT MACHINE (COMPURERIZED TREAD	5
N		MACHINE	
No	Yes (6)	HOLTER ECG MACHINE / AMBULATORY ECG	4
NO	Yes (1055)	BRIEF PULSE ELECTRO CONVULSIVE THERAPY	ω
		SYSTEM / AMBULATORY	2
No	No (=00)	ELECTROENCEPHALOGRAM EEG MACHINE	
No	Yes (200)	ELECTROCKICEDUAL OCOAM/ EEG MACHINE	
QRS AVAILABLE ON NOT	IS IT AVAILABLE IN PET (AS PER 100 BADED). IF YES THEN MENTIONED SL.NO. OF PET	NAME OF THE EQUIPMENT	S.N
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Appendix-2J (ii)

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Software Specifications: Software installed should have following outputs and applications 1. EEG record and review' 2. Brain mapping 3. Real time seizure detection' 4. Real time spike detection 5. Source localization 6. Source localization	21. Online impedance check with display of numeric values of all 22. electrodes 23. Split screen facility to study and event/montage carefully during and event/montage and event/montage and event/montage and event/montage and event/montage and event/montage and		12. External battery pack for ambulatory use.13. Various options for EEG Scrolling14. Resolution independent user interface				 Should have at least 32 bit resolution with montage bar 24 EEG, 8 Bipolar (2 EKG & 6 DC Channels) Real time acquisition and monitoring 	Specifications
OEM should submit an A undertaking and documents in this regard.						OEM should submit an undertaking and documents in this regard.	Board should check physically Aduring demonstration.	Procedure suggested for trial by board of officers
As per specifications							As per specifications	Results expected/ Desired

Member-II Member-III Member-IV Member-VI Member-VI Member-VIII Member-IX Member-X Member-X Member-XII Member-XIII

Recommendation of ADG (med)

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DOCUMENTATION: 1. User/ Technical/ Maintenance manuals to be supplied in English/Hindi. 2. Maintenance manual detailing complete maintaining schedule	support for minimum 5 years and warranty for minimum 3 years Comprehensive training for technical staff. FDA / CE; approved The company should be ISO certified and products should be ISI mark.	STANDARD, SAFETY AND TRAINING 1. Training of users in operation and basic maintenance shall be provided. 2. Advanced maintenance tasks required shall be documented. Should provide maintenance	11. Noicelevel :< 1 uv	10. Input Impedance: >20 M Ohm	Flash Rate: 1 to 60 Hz	CMRR: > 110 db	Sweep speed: 7.5, 15, 60 & 60 mm/sec.	Notch Filter: 50/60 Hz ON/OFF	High Pass Filter : 15,30,70 Hz & user definable	Low Pass Filter: 0.1,0.3 & 5 Hz	Sensitivity: 1 uV/mm and 1000 uV/mm & user definable	ND Conversion : 16 bit	No of channels : 32	Technical Specifications:
		undertaking and documents in this regard.										this regard.	undertaking and documents in	OEM should
		documents in											documents in	submit ar
		1 As per specifications	-											an As per specifications

Member-II Member-III Member-IV Member-V Member-VI Member-VIII Member-IX Member-X Member-X Member-XII Member-XIII

RECOMMENDATION OF ADG (MEM)

2. QPS/SPECIFICATIONS AND TRIAL DIRECTIVES OF "COMTINUOUS BLOOD PRESSURE MONITORING SYSTEM / AMBULATORY"

Accuracy a) Press b) Pulse c) Weigl d) Data e) Micro	B. Technical 1. Allows b 2. Measure	11. Programı data tran	9. Backlit gr 10. Easy me	7. Suitable 8. Monitor:	 USB connectors Laserjet Black a 		2. 320 GB H	1. A compu	A. To be supplied with:	Specifications
Accuracy Accuracy Accuracy Pressure ±3mmHg or ±2% measurement, whichever is greater Pulse Rate ±5/per min Weight 0.5lbs (215g) Data Output RS-232C (direct) Micro Pump Display Range 0 - 320mmHg	Technical Specifications: 1. Allows both in clinic and home BP monitoring. 2. Measurement Range Systolic 60 - 280mmHg (min. division: 1mmHg) Diastolic 40	11. Programming and storage upto four individual measurement programs 6.8. USB interface for data transmission to a PC 9. Light weight-upto 250gms (Including battery)	 Backlit graphical LCD with multi-language men Easy menu guidance with two control buttons 	Suitable Trolley for Mounting Monitor: 17" TFT Monitor colour	USB connectors Laserjet Black and White Printer	Multimedia keyboard	320 GB Hard Disk (SATA) DVD Writer Combo	A computer system with a minimum of 16 GB RAM (DDR2) 3	blied with:	S
	OEM should submit an undertaking and documents in this regard.					this regard.	OEM should submit an	during demonstration.	Board should check physically As per specifications	Procedure suggested for trial by board of officers
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	As per spec								As per specification	Results expected/ Desired

Member-I Member-III Member-IV Member-VI Member-VIII Member-VIII Member-X Member-X Member-X Member-X Member-XII Member-XIII Member-X Member-X Member-X Member-X Member-XIII Member-XIII

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 User/ Technical/ Maintenance manuals to be supplied in English/Hindi. OEM should provide log book for monthly and annual maintenance Documents endorsing clause by clause commentary on all technical details to be provided 	 STANDARD, SAFETY AND TRAINING US certification if IS standards not available US certification if IS standards not available Manufacturer must quote for 05 years comprehensive warranty Including all Spares, Accessories and Labour) from the date of completion of the satisfactory installation OEM should arrange to provide demonstration of the instrument. 	 4. Pressurization Internal 5. Temperature & Humidity Range Operation 50°F to 104°F (10°C to 40°C), less than 85%RH 6. Recording and storage of upto 400 measurement 7. Facility for the patient to take additional measurements at any time 8. Storage &Transportation:,-4°F to 131°F (-20°C to 55°C), less than 95%RH 9. Clock Display 24 hour (1997-2096 and auto leap year setting 10. Recording over 48 hours 11. Memory Capacity minimum 300 measurement 12. Maximum Power Source Three AA Alkaline or NiCd 13. Dimensions 2.8"W x 1.1"H x 3.9"D
	OEM should submit an undertaking and documents in this regard.	undertaking and documents in this regard.
	an As per specifications s in	5

Member-I Member-III Member-IV Member-V Member-VI Member-VIII Member-VIII Member-IX Member-X Member-X Member-X Member-XII Member-XIII Recommendation of ADG (med)

3. QRS/SPECIFICATIONS AND TRIAL DIRECTIVES OF "BRIEF PULSE ELECTRO CONVULSIVE THERAPY"

	7	1. User/Technical/Maintenance manuals to be supplied in English 2. Certificate of calibration and inspection. 3. List of Equipment available for providing calibration and routine Preventive Maintenance 4. Support. as per manufacturer service/ maintenance manual. 5. List of important spare parts and accessories with their part number and costing. 6. Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist 7. The job description of technician clearly spelt out.	C. 1 1 2 2 3 3 5 5
As per specifications	OEM should submit an undertaking and documents in this regard.	 STANDARD, SAFETY AND TRAINING Should be FDA, CE, or BIS approved product. Manufacturer should have ISO certification for quality standards Comprehensive training for lab staff and support services till familiarity with the system on site. Comprehensive warranty for 2 years and 5 years CMC after warranty Certified to be compliant with Electrical Safety Standard for Medical Equipment- IEC-60601-1-1 13R equivalent BIS OX international standard for electrical safety Should be ISO, CE or USFDA approved. 	B. 5.4.3.2.1.5
As per specifications	should check llly during stration. nould submit an king and ents in this	 Should have AUTO Stimulus Voltage Should have Auto Impedance Check The unit should have Parameter Display on LCD/LED Should provide Output Display in joules & millicoulomb and EEG-ECG Monitoring on Thermal paper LCD /LED Display for stimulus voltage & Time Output voltage 90 to 190 V Manual, timer &Ectonus Modes Fitted in brief case Timer 0.1 to 5.9 sec. in step of 0.1 sec Cerebral Stimulation 0 to 40 volts Ultra isolation transformer for patient safety. All the accessories to make equipment functional as per specifications should be supplied The unit shall be capable of being stored continuously in ambient temperature of 0 -50 degree C arid relative humidity of 15-90% Power Supply: Power input to be 220-240VAC, 50Hz fitted with Indian plug UPS of suitable rating with voltage regulation and spike protection for 60 minutes back Up. 	, A
Results expected/ Desired	Procedure suggested for trial by board of officers	Specifications	S

Member-II Member-III Member-IV Member-V Member-VI Member-VII Member-VII Member-X Member-X Member-X Member-X Member-XII Member-XIII

Appendix-2J (vii) 4. QRS/SPECIFICATIONS AND TRIAL DIRECTIVES OF "HOLTER ECG MACHINE / AMBULATORY ECG MACHINE"

DOCUMENTATION:	The state of the s	B. 1. Should provide liv 2. Should provide m minimum 3 years 3. Comprehensive tr 4. Should be ISO, C	STANDARD, SAFETY AND TRAINING	A. 1. Recorder should be compact and 2. Weight should not be more than 3. Should have sampling frequency 4. Should record realtime 12 channed 5. Should record 3 Channels with lead patient cable. 6. Should have 1 GB removable Chours of ECG. 7. Data should be transferred /anal 8. Should have LCD display to che 9. Should have an option of selecti 10. The maximum resolution of the rate of 1024 Hz: 12 bit. 11. Should have Event Marker / Pati 12. Should be defibrillator protected. 14. System should print all the Holpaper & not on Thermal Chart paper & not on Thermal Chart paper & not on Thermal Chart paper & should be supplied we leads	Specifications
User/ Technical/ Maintenance manuals to be supplied in English/Hindi.		Should provide live demonstration of equipment to the end users. Should provide maintenance support for minimum 5 years and warranty for undertaking and documents in minimum 3 years Comprehensive training for technical staff. Should be ISO, CE or USFDA approved.	AND TRAINING	Recorder should be compact and lightweight. Weight should not be more than 250gms including battery. Should have sampling frequency of 8000 Hz Should record realtime 12 channel ECG. Should record 3 Channels with 5/7 lead patient cable or 12 channels with 10 lead patient cable. Should have 1 GB removable Compact flash card & capable of storing 24/48 hours of ECG. Data should be transferred /analyzed via SD card reader. Should have LCD display to check pre hook –up ECG quality. Should have an option of selecting the resolution of recording. The maximum resolution of the recording should be 1024 Hz with storage rate of 1024 Hz: 12 bit. Should have Event Marker / Patient Marker button on the recorder Should use single AA battery to record upto 48 hrs of ECG. System should print all the Holter Test Report on Laser Printer on ordinary paper & not on Thermal Chart paper. Recorder should be supplied with 10 Lead patient cable to measure all 12 leads	
OEM should submit an undertaking and documents in		OEM should submit an undertaking and documents in this regard.		Board she during de OEM undertaki	Procedure suggested for trial by board of officers
As per specifications		As per specifications		As per specifications	Results expected/Desired

Member-I Member-III Member-IV Member-VI Member-VII Member-VIII Member-IX Member-X Member-X Member-X Member-XIII Member-XIII

5. QRS/SPECIFICATIONS AND TRIAL DIRECTIVES OF "TMT MACHINE (COMPURERIZED TREAD MILL)"

	Specifications	Procedure suggested for trial by board of officers
P.	a) Configuration 12 lead ECG. b) Number of leads: minimum of 12 leads ECG. Protocols	Board should check physically As per specifications during demonstration.
	c) Computerized Display	(
	Simultaneous display of 12 lead ECG and heart rate	OEM should submit an
	> BP stage by stage time	taking and documents
	> Recovery time	this regard
	> Tread mill speed	
	➤ Grade	
	d) System: Should be computer based.	
	e) Protocols: Standard programmable protocols	
	f) Analysis: S- T level, slope, trend and arrhythmia	
	g) Printer: Laser-jet printer and built in thermal printer.	
	h) Treadmill	
	AC/DC motor driven with at least 2-2.5hp	
	Emergency stop button	
	Speed range:0.5-12mile/hr	
	Elevation range:0-25%	
	> Drive system	
	At least 22'x63", shock absorbing, lubricated, low-profile, self-aligned	
	running belt Safety handrails	
	Display of speed and grade in treadmill also	
	NIBP measurement included	
	e) Standard accessories: Patient harness	
	f) Additional accessories	
	 ECG data export by modem & fax 9. 	
	g) Power Supply: 230V/50HZ	



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6. QRS/SPECIFICATIONS AND TRIAL DIRECTIVES OF "STANDING BP APPARATUS"

P	ح.	Should be portable type, stand model.	Board should check physically As per specifications	As per specifications
	2	0 to 300 mm Hg.	during demonstration.	
	ω	Should be provided with adult arm cuffs of size medium, large and pediatric		
			OEM should submit an	
	4		undertaking and documents in	
	5	hould be engraved or	this regard.	
			(
		test		
	<u></u> 6	The internal diameter of the manometer glass tube should be 4.1 ±0.1mm		
		and the thickness not less than 2mm		
	7.	Plastic parts, if any used should not crack, flake, peel or disintegrate during		
		normal use.		
	,00	The inflating rubber bag should be capable of withstanding an internal		
		pressure of 450mmhg without leaking.		
	9.	The inflating bulb should be soft and should not have any joints or ridges.		
	10	The fastening arrangements of the cuff should be of hook and loop type		
	<u></u>	The threading and fastening arrangement of the cuff should show no sign of		
		slip or failure when subjected to the maximum test conditions.		>
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C,	В.	
 User/ Technical/ Maintenance manuals to be supplied in English. Including do s and don's in English/Hindi. Validity of Calibration: Valid Calibration certificate to be provided by the transmufacturer Log book with instructions for Daily, Weekly, Monthly maintenance. The job description of the hospital Technician, service engineer should clearly spelt out. 	 Should provide live demonstration of equipment to the end users. Should provide maintenance support for minimum 10 years and warranty for minimum 5 years Should be ISI certified or compatible with European standards where Indian standards are not available. Should provide 5 year replacement warranty for plastic parts. DOCUMENTATION:	the external diameter should not be less than 8mm. 13. The housing case should be of robust design. It should have press to release lock. 14. It should have metal hinges. The tube should be secured with metal screws and clamps. 15. It should have mechanism to hold the lid in right angles and should prevent accidental dropping. 16. All parts should be replaceable in case of breakage. 17. A cleaning brush to clean the manometer tube and a set of spare washers may be provided with each unit. 18. Should be mounted on good quality wheels. STANDARD, SAFETY AND TRAINING
OEM should submit an undertaking and documents in this regard.	OEM should submit an undertaking and documents in this regard.	
submit an documents in	submit an documents in	
As per specifications	As per specifications	

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Recommendation of ADG(med)

7. QRS/SPECIFICATIONS AND TRIAL DIRECTIVES OF "CARDIAC MONITOR"

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Non Invasive Blood Pressure Monitoring:- 1. of systolic, diastolic & Mean pressures 2. Modes: Manual, STAT & automatic (delay 2min-90min) 3. Range: 20-255 mm of Hg 4. Accuracy of ±5 mm of Hg 5. Selectable adult, paediatric and Neonatal functions with separate inflation and alarm settings	 Respiratory Gas Monitoring / Inhalational Anesthetic Agent Monitoring:- It should automatically identify the inhalational gas / agent / Numeric display of fractional inspiratory and expiratory concentrations of O2, CO2, N20 and anaesthetic agents — halothane, enflurane, isoflurane, sevoflurane, desflurane It should have facility for MAC monitoring and MAC age correction 	 Side Stredill, MicroStredill ETCO2 range: 0-99 mm Hg, 0-10% Capnogram display Averaging: breath to breath, 4 breaths or 8 breaths Accuracy: ± 3 mmHg in 00 to 40 mmHg range & ±8-10% in higher range Reaction time: <500 ms 150 ml/min 	D	 It must use Nellcor /Masimo technology to measure oxygen saturation for accuracy during motion artifacts, low perfusion states like shock, bradycardia and hypothermia. Display of pulse strength, plethysmograph & SPO2 values Pitch variation with change in oxygen saturation. SPO2 range 50-100% Accuracy 100-80% (± 2 digits); 79-50% (±digits)
				during demonstration. OEM should submit an undertaking and documents in this regard.
\				cifications

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18.	17.	16.	15.	14.	13.		12.
TREND FACILITY:- 1. Should have 24 hours graphical and numerical trend with split screen facility of all parameters with at least 15 critical alarms summary. 2. Should be able to monitor and display all parameters in single screen. 3. NIBP trend: 240 Readings tabular 4. Facility to store snapshots during critical events for waveform review at a later stage.	Facility for upgradation with separate modules for-Minimally Invasive Continuous Cardiac Output, thermodilution technique Cardiac Outpur, and EEG by just adding the Interchangeable Modules.	NMT Monitoring:- 1. Neuromuscular Transmission Monitoring in the primary monitor with all accessories. Display should be in the primary monitor with required accessories.	Depth of Anaesthesia Monitoring module:- 1. BIS/Entropy with all accessories & 50 sensors (40 adult, 10 paediatric)	Temperature:- 1. Simultaneous monitoring of 2 channels 2. Dual Temperature Display (T1 & T2) 3. Temperature range: 12°C to 43°C	RESPIRATION:- 1. Through impedance pneumography method for Adult, Pediatric & Neonatal patients	2 Display of systolic, diastolic & mean pressures with waveforms3. Zeroing4. IBP range from 10-300 mmHg	1. Simultaneous two IBP channels
						OEM should submit an undertaking and documents in this regard.	during demonstration.
							As per specification



Member-II Member-III Member-IV Member-V Member-VI Member-VIII Member-IX Member-X Member-X Member-X Member-XI Member-XIII Member-X Member-X Member-X Member-XIII Member-XIII

>	neuromuscular transmission monitor-01 set	
	monitoring X 50 10. Temperature Probes (Core & Skin) one each. 12. Accessories for	
	8. IBP pressure Transducers (six disposable) 9. Filter cartridges (Water traps) x 20 & Sampling tubings for respiratory gas	
	7. IBP cable X 2	
•	average, extra large). (wide range of sizes from 2,5 to 16 cm widths) x 2 each	
	5. Sp02 Probes (Neonatal, Paediatric & Adult) two each. (Total of 6 probes)	
	3. ECG 5 lead Cable X 2 4. Sp02 interconnecting cable x2 numbers	
	2. ECG 3 lead Cable X 2	
	1. The necessary accessories to make it functional on Neonates, Pediatric and Adult patients should be quoted as "Standard Accessories."	
	ACCESSORIES :-	22.
	Power input to be 220-240 VAC, 50Hz fitted with Indian plug	
	Power Supply:-	21.
	10- 40 deg C and relative humidity of 15-90%.	
	Environmental Factors:-	20.
	only alarm with no diagnostic message	
	essential that unit should prompt user for corrective action rather than giving	
	 Should have graded and colour coded audio-visual alarm for all parameters. It should have clear alarms and user information as text messages. It is 	
	ALARMS:-	19.

Member-II Member-II Member-IV Member-V Member-VI Member-VIII Member-X Member-X Member-X Member-X Member-X Member-XIII

Re commendation of ADG (MC)

C. 1. User/ Technical/ Maintenance manuals to be supplied in English. Including do OEM s and don's in English/Hindi. 2. Validity of Calibration: Valid Calibration certificate to be provided by the this re	3. Should be ISI certified or CE certified or compatible with European standards where Indian standards are not available. DOCUMENTATION:		total 8 years (warranty 3 years and CMC 5 years) irrespective of whether	CMC shall cover the list of the spare parts and the rate of which valid for		STANDARD, SAFETY AND TRAINING	necessary protective relaying / circuitry shall be there with the machines. The mains supply voltage variation may be max.±10% and frequency variation maximum ±3 %.
should submit taking and documents gard.	3	Ф (or this regard.	OEM should submit		
an As per specifications in					an As per specifications		

Member-I Member-II Member-IV Member-V Member-VI Member-VIII Member-VIII Member-X Mem Recommendation of Assigned

James (mes)

8. QRS/SPECIFICATIONS AND TRIAL DIRECTIVES OF "RTMS: REPEATITIVE TRANSCRANIAL MAGNETIC STIMULATION MACHINE-"

Sr.No.	Specifications	Procedure suggested for Results expected/ trial by board of officers Desired	Results expected/ Desired
A.	Instrument should have multiprocessor technology and programmable stimulation morphology	Board should check physically As per specifications	As per specifications
	2. It Should have TFT 8,4"Display for an easy functions' selection with 5	daining definitions and in.	
	buttons and a multifunctional knob.	OEM should submit an	
	It should have upgrade capabilities to advanced versions.	Undertaking and documents in	
		this regard	
	5. It should have Biphasic, Monophasic and Sinusoidal (only UltraFast model)	and regard.	
	waveforms.		
	It should have Stimulation frequency up to 100 pulses per second.	•	
	8. It should have Double stimulation function (BI option)		
	9. It should have Coils with integrated controls to use the unit with just one		
	hand.		
	10. It should have Pneumatic stimulation footswitch		
	11. It should have Trigger IN / OUT capabilities for connecting the unit to all		
	EMG amplifiers on the market.		
	12. It should come with options with-MEP Module (according to unit version),		
	Ergonomic trolley with coils' support, Wide range of available Coils, UPS,		
	Patient Robotic Chair, Galileo PMS with Protocol Management System (for		
	protocol customization, archiving and patient treatment management with		
	13. It should have functions of MRI Import with automatic classification of scalp,		
	white matter and grey matter volumes for 3D image creation.		
	14. It should have High spatial resolution optic tracking system (max error		
	0.25mm). 15. It should have Easy calibration sequence for a fast calibration of both head		
	and coil.		
	16. It should to displays the type of stimulus and MEP response for each stimulation carried out through highly expressive display in the 3D scene.		

Recommendation of ADS (Med)

Member-I Member-II

						C.									В.	- Co. Co.							
7. The job description of technician clearly spelt out.	6. Log book with instructions for daily, weekly, monthly and quarterly	 Support, as per manufacturer service/ maintenance manual. List of important spare parts and accessories with their part number and 			 User/Technical/Maintenance manuals to be supplied in English 	DOCUMENTATION	6. Should be ISO, CE or USFDA approved.	for electrical safety		 Comprehensive warranty for 2 years and 5 years CMC after warranty 	with the system on site.	Comprehensive training for lab staff and support services till familiarity	Manufacturer should have ISO certification for quality standards	 Should be FDA, CE, or BIS approved product. 	STANDARD, SAFETY AND TRAINING	User selectable transparency degree for both coil and scalp.	positioning error.	coil ina desired position carried out through highly expressive display of	19. It should have Repositioning Tool that helps the user to bring back the	patient's arrival and without having to activate the optical tracking.	18. It should have allows to schedule offline the stimulation before the	exams for each patient	1/. It should allow the management of IMS/rIMS/tIMS sessions and IMS
			in this regard.	undertaking and documents	OEM should submit an							in this regard.	undertaking and documents	OEM should submit an				*					
		Matrice Co. Estable Manda of the con-			As per specifications									As per specifications									

Member-II Member-III Member-IV Member-VI Member-VI Member-VIII Member-VIIII Member-X Member-X Member-X Member-X Member-XIII

Recommendation of ADS (med)

	Specifications Procedure suggeste by board of officers	Procedure suggested for trial by board of officers	Results expected/Desired
À	1. Total Number of Channels should be : More than 60	Board should check physically As per specifications during demonstration.	As per specifications
	a) EEG input should be : 32	<u> </u>	
	b) The machine should have EMG input of: 5	undertaking and documents in	
	c) The machine should have EOG of : 2	this regard.	
	d) The machine should have ECG: 7 (3 Physical and 4		
	derived) e) Nasal /oral/Airflow: 1		
	f) Flow (Thermal): 1		
	g) Respiratory Effort ,Zrip : 2		
	h) Snoring, Microphone: 1		
	i) Body Position: 1		
	j) CPAP Pressure : 1		
	k) Limb Movement : 2		
	I) SaO2 [Masimo/Nonin/Nellcor/FAST]: 1		
	m) Pulse rate: 1		Statement of the Price of the Statement
	 n) Light sensor: 1 o) Sensors: 2. Sensor- pediatric and adult, microphone, pulse Oximeter sensor and leads) of ECG, EEG, Leg & chin EMG, EOG 	neter	
	capnography, PH, blood pressure Monitor etc.	like	
			The state of the s

Member-II Member-IV Member-V Member-VI Member-VIII Member-IX Member-X Member-X Member-X Member-XIII Member-X Member-X Member-X Member-XIII Member-XIII

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n) Screen resolution from 800 X 600 to 1200 X 1600	anywhere/on standalone basis.	m) Portable recording workstations can operate	hospital network.	1) Computer interface through LAN for integration into	Printer.	RAM with 1024 GB hard drive with colour laser	Microsoft windows professional. Computer with 8 GB	k) Data replay with software operates on latest	review/recording station.	currently being recorded from the	j) Real time Access to studies for analysis	i) Video camera should be networked	patient video recording and monitoring.	h) Facility for fully synchronized and integrated	g) Full compressed raw data stored on all channels.	f) Adjustable gain and notch filter.	e) Pulse transit time (PTT)	d) on screen impedance check	b) Automatic chin EMG referencing c) Integrated Pulse Oximeter.	a) Pressure transducer for nasal air flow	4 .Other Technical Specifications
>																					

Member-II Member-III Member-V Member-VI Member-VIII Member-VIII Member-IX Member-X Member-X Member-XII No.

Member-I Member-II

Member-III Member-IV Member-VI Member-VII Member-VIII Member-IX Member-X Member-X Member-XI Member-XI

Recommendation of ADGCMEN

	STANDARD, SAFETY AND TRAINING		
œ	 Should provide live demonstration of equipment to the end users. Should provide maintenance support for minimum 10 years and warranty for undertaking and documents in minimum 5 years 	OEM should submit an As undertaking and documents in this regard	an As per specifications in
	Should provide test results compatible to NABL/ILAC laboratories.	G	
	4. Comprehensive training for technical staff and proper support services till		
	familiarity with system.		
	5. Should be IS certified or compatible with European standards where Indian		
	ממוועמועט מוכ ווער מעמוומטוכ.		
	6. Comprehensive warranty for Daily, Weekly, Monthly maintenance.		
	DOCUMENTATION:		
C.	1. User/ Technical/ Maintenance manuals to be supplied in English. Including do		
	s and don's in English/Hindi and test results from NABL/ILAC accredited		
	2. Validity of Calibration: Valid Calibration certificate to be provided by the		
	manufacturer		
	3. Log book with instructions for Daily, Weekly, Monthly maintenance.		
,	4. The job description of the hospital Technician, service engineer should clearly		

SYSTEM FOR PSYCHIATRIC PATIENT SAFETY & SECURITY": 10. QRs/SPECIFICATIONS AND TRIAL DIRECTIVES OF "COMPREHENSIVE MONITORING & SURVEILLANCE

	Sp	Specifications	Procedure suggested for trial by board of officers
Þ	-	It should have 2.4 MP Combo camera set with adequate no. of Bullet, 16-Channel DVR 2 TR HDD 16-Channel SMPS Cable roll and RNC DC HDMI	
	2	D	physically during
			ation.
			OEM should submit an
			taking and docume
			in this regard.
	ω	It should have adequate no. of IP based CCTV cameras of 2.4 MP. Number of	
		cameras should be as per the need of all sensitive areas to be monitored.	
	4	It should have adequate no. of fixed bullet/dome CCTV IP camera fixed at the	
		outdoor.	
	5	It should easily connected with mobile thru the internet and watch live cameras	
		& recorded clips from anywhere, also work on AHD, HDCVI, HDTVI, CVBS, and IP Video Signal Input, DVR Has VGA & HDMI Output, One Audio Input	
	0	and Output, One LAN/Network RJ45 Port and 2 USB Port.	
	ç	Lite Non-Real Time Recording, Support AHD, TVI, CVI, CVBS, IP Video input.	
		HDMI / VGA simultaneous video output. Support 1 SATA Port up to 8TB, 2	
	7.	It should have 16 channels PoE NVR with at least 8 surveillance 2tb HDD	
		supported.	
	.00	It should have 43" or appropriate size LED panel/screen/monitor protected in	
	9.	It should have adequate no. of 6U wall mount rack with accessories.	
	10	10. It should have adequate length of CAT-6 UTP cable for CCTV network	

Member-II Member-III Member-IV Member-V Member-VI Member-VIII

Member-IX Member-X Member-XI Member-XII

Recommensation of ADS (med)

Ö	B	
 DOCUMENTATION: User/Technical/Maintenance manuals to be supplied in English Certificate of calibration and inspection. List of Equipment available for providing calibration and routine Preventive Maintenance Support as per manufacturer service/ maintenance manual. List of important spare parts and accessories with their part number and costing. Log book with instructions for daily, weekly, monthly and quarterly maintenance checklist The job description of technician clearly spelt out. 	 STANDARD, SAFETY AND TRAINING Manufacturer should have ISO certification for quality standards. Comprehensive training for staff and support services till familiarity with the system on site. Comprehensive warranty for 2 years and 5 years CMC after warranty. Certified to be compliant with Electrical Safety Standard for Medical Equipment- IEC-60601-1-1 13R equivalent BIS OX international standard for electrical safety. 	 12. It should have adequate no. of 24 Port CA1-6 Patch Panel. 12. It should have adequate no. of Cat-6 patch cord. 13. It should have adequate length of 1.5 inches PVC conduit. 14. WARRANTY: 2-Years Warranty on all products and HDD & 1 Year Warranty on other products.
OEM should submit an undertaking and documents in this regard.	OEM should submit an undertaking and documents in this regard.	
As per specifications	As per specifications	

Member-II Member-IV Member-V Member-VI Member-VIII Member-VIII Member-X Member-X Member-X Member-X Member-X Member-XIII Member-XIII

11. QRs/SPECIFICATIONS AND TRIAL DIRECTIVES OF "AUDIO-VEDIO LED PANEL/SCREEN FOR PSYCHO-EDUCATION SESSIONS-"

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	.4 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1											4		U
	Ma Sys lt s	<u>د</u> ه	1 =	TI	ם ם	,2 D P			•		•		1. P	pecific
	STANDARD, SAFETY AND TRAINING 1. Manufacturer should have ISO cert 2. Comprehensive training for staff ar system on site. 3. It should haws1 year warranty prov purchase. 4. Its service center should allot a con	egree, Pro Mode, Pro	ow XR, HDCP 2.3 (HD	lexible Content Layou)irect_LED, Dynamic)RO,TRILUMINOS_PR	roduct Description: 4K		Ports	Mount Type	Display Type	Resolution	Screen Size	Product Specification	Specifications
	NDARD, SAFETY AND TRAINING Manufacturer should have ISO certification for quality standards. Comprehensive training for staff and support services till familiarity with the system on site. It should haws1 year warranty provided by the manufacture from the date of purchase. Its service center should allot a convenient slot for the service.	Bluetooth / 20W Speakers / Android™ OS system, Viewing angle 178 degree, Pro Mode, Pro Display using Apple Air Play & Chrome cast.	flow XR, HDCP 2.3 (HDMI) / RS232 / USB / RJ45 / Wi-Fi with In-Built	Flexible Content Layout with HTML5, 16GB On Board Storage, Motion	Direct LED, Dynamic contrast ratio upto 400,000:1,4K X-Reality PRO,TRILUMINOS PRO technology. 24/7 Portrait Tilt functionality	Product Description: 4K (3,840 x 2,160), Professional Slim Blade Stand Display with 4K HDR Processor X1,HDR (HDR10, HLG, Dolby Vision),	Speakers	XR, HDCP 2.3 (HDMI) / RS232 / USB / R.145 / Wi-Fi with In-Built Bluetooth / 200/	Wall Mount as well as Stand able	Professional Display Panel	4K Resolution	43"		
	OEM should submit an undertaking and documents in this regard.							this regard.	OEM should submit an	daming demonstration.				Procedure suggested for trial by board of officers
>	As per specifications									As per specifications				Results expected/ Desired

Member-I Member-III Member-IV Member-V Member-VI Member-VI Member-VIII Member-IX Member-X Mem

Recommendation of ADS (Mes) Mill

The second			TANK TO VIVI
C.	DOCUMENTATION:		
	1. User/Technical/Maintenance manuals to be supplied in English		
	2. Certificate of calibration and inspection.	OEM should submit an	As por sposificati
	3. List of Equipment available for providing calibration and routine Preventive	Orivi Silodia Sabiliit ali	As her sherringing
	Maintenance	undertaking and documents in	
	4. Support. as per manufacturer service/ maintenance manual.	this regard.	
	5. List of important spare parts and accessories with their part number and		
a	 costing. Log book with instructions for daily, weekly, monthly and quarterly 		
	maintenance checklist		
	7. The job description of technician clearly spelt out.		

INFINITE POSITION-" 12. QRs/SPECIFICATIONS AND TRIAL DIRECTIVES OF "PSYCHOTHERAPY RECLINER CHAIR- POWER LIFT &

FEATURES
 It should be multi-functional power lift recliner chair to help the patient stand up effortlessly. It should have enough power motors to allow
adjusting the chair's reclining, tilting, and footboard individually to suit patient's needs.
It should Go into a zero-gravity position by elevating the feet higher than head and heart, effectively alleviate the pressure on the vertebrae,
 It should have overstuffed padding and headrest, back with an unexpected sense of the support, built-in springs in both of back and seat, pillow top
arms, to provide max comfort. 4. It should have all-in-one remote design to make it easy to operate the
chair. The remote should have a USB outlet that keep the devices charging and dual side pockets for small items within reach, two cup holders on both
sides of armrests best meets patients needs. 5. It should be easy to install and does not require any tools. Should take only

,	æ
 User/Technical/Maintenance manuals to be supplied in English User/Technical/Maintenance manuals to be supplied in English Certificate of calibration and inspection. List of Equipment available for providing calibration and routine Preventive Maintenance Support as per manufacturer service/ maintenance manual. List of important spare parts and accessories with their part number and costing. The job description of technician clearly spelt out. 	 STANDARD, SAFETY AND TRAINING It should be approved by various safety & regulatory bodies. The manufacturer should have ISO certification for quality standards Comprehensive training for lab staff and support services till familiarity with the system on site. Comprehensive warranty for 1yr against manufacturing defects. Certified to be compliant with Safety Standard for Medical Equipment. Should be ISO certified and approved.
OEM should submit an undertaking and documents in this regard.	OEM should submit an undertaking and documents in this regard.
As per specifications	an As per specifications nts in

Member-II Member-III Member-IV Member-VI Member-VIII Member-VIII Member-VIII Member-X Member-Recommendation of ADG (Med)

13. QRs/SPECIFICATIONS AND TRIAL DIRECTIVES OF "COMPREHENSIVE PSYCHOLOGICAL ASSESSMENT & TESTING TOOLS/SCLAES KIT".

	Spe	Specifications	Procedure suggested for trial by board of officers
A.	-	DEVELOPMENTAL & PEDIATRIC EDUCATIONAL & LEARNING RELATED	
	ဥ၀၀ခ	₁ -FFPI-C ^d ed& Indian Adaptations. dren-2 nd Ed-DAYC-2.	Board should check physically during demonstration.
	(d	Child Symptoms Inventory-CSI-4-Kenneth.	
	⊅ @	Diagnostic Test for Learning Disabilities. Autism Diagnosis Interview-Revised Version.	OEM should submit an
	(0)		undertaking and documents in this regard
		Assessment Tool for Learning Disability.	
	F	BEHAVIOR & ATTITUDE STUDY RELATED TOOLS	
	<u>р</u> а	Conduct Disorder Scale. Parent Adolescent Relationship Questionnaire.	
	c)	Substance Use Subtle Screening Inventory.	
	e <u>a</u>	Clinical Assessment Of Depression-Bruce. Mobile Phone Addiction Scale.	
	J	Internet/Social Media Addiction Screening And Diagnostic Test Tools.	
	<u></u> 59	Resilience Scale. Stress Coping Technique Questionnaire.	
	_ , ≡	CLINICAL & PERSONALITY RELATED TOOLS 16PF Questionnaires-All A/B/C/D/E types/forms & including Indian adaptations.	
	ω N	TAT-ThemeticAperception Test-Original & Indian adaption. Rorsarch's Ink Blot test-all versions with complete kit (Guiding manual + plates+	
		forms + record sheets+ scoring +interpretation assistance program version- 5+sheets) + forensic version + computerized versions & software	
	4, 1	Personality Inventory for Youth.	

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Re common endettan at ADG (mel)

Board should check physically during As per specifications demonstration. OEM should submit an undertaking and documents in this regard. RELATED Board should check physically during demonstration. OEM should submit an undertaking and documents in this regard.	 i) Miller torensic Assessment of Symptoms Test i) SIMS- Structured Inventory of Malingered Symptomatology.
Board should physically demonstration. OEM should submundertaking and docu in this regard. Board should submundertaking and docu in this regard. Board should physically demonstration. OEM should submundertaking and docu in this regard.	Contract of the contract of th
Board should physically demonstration. OEM should submundertaking and docu in this regard. Board should submundertaking and docu in this regard. Board should physically demonstration. OEM should submundertaking and docu in this regard.	
Board should physically demonstration. OEM should submundertaking and docu in this regard. Deming tool- both Board should submundertaking and docu in this regard. OEM should physically demonstration. OEM should submundertaking and docu in this regard.	
Board should physically demonstration. OEM should submundertaking and docu in this regard. Bearing tool- both Board should physically demonstration. OEM should submundertaking and docu in this regard.	
Board should physically demonstration. OEM should submundertaking and docu in this regard. Board should submundertaking and docu in this regard. Board should physically demonstration. OEM should submundertaking and docu in this regard.	
Board should physically demonstration. OEM should submundertaking and docu in this regard. Bearing tool- both Board should physically demonstration. OEM should submundertaking and docu in this regard.) Structured interview for repeated symptoms-z Ed.
Board should physically demonstration. OEM should submundertaking and docu in this regard. Board should submundertaking and docu in this regard. Board should physically demonstration. OEM should submundertaking and docu in this regard.	
Board should physically demonstration. OEM should submundertaking and docu in this regard. Dening tool- both Board should physically demonstration. OEM should submundertaking and docu in this regard.	e) Evaluation for Competency to stand trial
Board should physically demonstration. OEM should submundertaking and docu in this regard. Board should submundertaking and docu in this regard. Board should physically demonstration. OEM should submundertaking and docu in this regard.	a) i of one personally inventory increase version.
Board should physically demonstration. OEM should submundertaking and docu in this regard. Dening tool- both Board should physically demonstration. OEM should submundertaking and docu in this regard.	d) Psychonathic personality inventory-Revised version
Board should physically demonstration. OEM should submundertaking and docu in this regard. Board should submundertaking and docu in this regard. Board should physically demonstration. OEM should submundertaking and docu in this regard.	c) Of O-Odicide Floorability scale.
Board should physically demonstration. OEM should submundertaking and docu in this regard. Dening tool- both Board should submundertaking and docu in this regard. OEM should physically demonstration. OEM should submundertaking and docu in this regard.	
Board should physically demonstration. OEM should submundertaking and docu in this regard. Board should submundertaking and docu in this regard. Board should physically demonstration. OEM should submundertaking and docu in this regard.	b) or - original regular constraints for young and addit-both versions
Board should physically demonstration. OEM should submundertaking and docu in this regard. Board should physically demonstration. OEM should submundertaking and docu in this regard.	b) SIO Suicidal idention Office for words and adult both was
Board should physically demonstration. OEM should submundertaking and docu in this regard. Board should physically demonstration. OEM should submundertaking and docu in this regard.	a) Walingering probability test.
Board should physically demonstration. OEM should submundertaking and docu in this regard. Board should physically demonstration. OEM should submundertaking and docu in this regard.	
Board should physically demonstration. OEM should submundertaking and docu in this regard. Board should physically demonstration. OEM should submundertaking and docu in this regard.	VII. FORENSIC PSYCHIALRY RELATED TOOLS
Board should physically demonstration. OEM should submundertaking and docu in this regard. Board should physically demonstration. OEM should submundertaking and docu in this regard.	
Board should physically demonstration. OEM should submundertaking and docu in this regard. Board should should physically demonstration. OEM should submundertaking and docu in this regard.	
Board should physically demonstration. OEM should submundertaking and docu in this regard. Board should physically demonstration. OEM should submundertaking and docu undertaking and docu undertaking and docu	Mental status checklist for adult and children.
Board should physically demonstration. OEM should submundertaking and docuin this regard. Board should physically demonstration. OEM should submundertaking and docuundertaking and docuundertaking and docu	1) Recognition of the second control of the
Board should physically demonstration. OEM should submundertaking and docu in this regard. Board should physically demonstration. OEM should submundertaking and docu in this regard.	i) Adolescent Anger Rating Scale
Board should physically demonstration. OEM should submundertaking and docu in this regard. Board should physically demonstration. OEM should submundertaking and docu in this regard.	ii) way-waii aiiieisiala alixiety questiolilaire.
Board should physically demonstration. OEM should submundertaking and docu in this regard. Board should physically demonstration.	
Board should physically demonstration. OEM should submundertaking and docuin this regard. Board should physically demonstration.	g) Marital evaluation checklist.
Board should physically demonstration. OEM should submundertaking and docu in this regard. Board should physically demonstration.	
Board should physically demonstration. OEM should submundertaking and docu in this regard. Board should physically demonstration.	f) Marital Satisfaction Inventory
Board should physically demonstration. OEM should submundertaking and docu in this regard. Board should physically demonstration	
Board should physically demonstration. OEM should submundertaking and docu in this regard. Board should physically	
Board should physically demonstration. OEM should submundertaking and docuin this regard. Board should should	a) Esychiatric diagnostic screening questionnaire.
Board should physically demonstration. OEM should submundertaking and docu in this regard. Board should	
Board should physically demonstration. OEM should submundertaking and docuin this regard.	 c) SCAN-Schedule for Clinical Assessment in Neuro-Psychiatry.
Board should physically demonstration. OEM should submundertaking and docu in this regard.	
Board should physically demonstration. OEM should submundertaking and docuin this regard.	b) SADS-Schedule for Affective disorder & Schizophrenia
Board should physically demonstration. OEM should submundertaking and docu in this regard.	
Board should physically demonstration. OEM should submundertaking and docu in this regard.	a) PSF-9-Present Status Examination-9thEd
Board should physically demonstration. OEM should submundertaking and docu in this regard.	
Board should physically demonstration. OEM should submundertaking and docu in this regard.	VI MENTAL HEALTH STRESS & ANXIETY RELATED TOOL
Board should physically demonstration. OEM should submundertaking and docu in this regard.	
Board should physically demonstration. OEM should submundertaking and docu in this regard.	g) scale for assessment of emotional disturbance-z Ed.
Board should physically demonstration. OEM should submundertaking and docuin this regard.	
Board should physically demonstration. OEM should submundertaking and docu in this regard.	with introductory kit
Board should physically demonstration. OEM should submundertaking and docuin this regard.	i) Nico-z a Nio i-z-regition s intellection disability assessment and screening tool- both
Board should physically demonstration. OEM should submundertaking and docuin this regard.	Ę
Board should physically demonstration. OEM should submundertaking and docuin this regard.	e) IDS-Intellectual disability scale.
Board should physically demonstration. OEM should submundertaking and docuin this regard.	
Board should physically demonstration. OEM should submundertaking and docuin this regard.	d) Raven's Progressive Materices test for intelligence.
Board should physically demonstration. OEM should submundertaking and docuin this regard.	
Board should physically demonstration. OEM should submundertaking and docuin this regard.	c) Stanford Binet intelligence scale-5" Ed
Board should physically demonstration. OEM should submundertaking and docuin this regard.	*
Board should physically demonstration. OEM should submundertaking and docuin this regard.	b) Stanford Binet intelligence Test-4" Ed
Board should physically demonstration. OEM should submundertaking and docuin this regard.	
Board should physically demonstration. OEM should submundertaking and docuin this regard.	 Wechsler's Intelligence Test for Adults And Children-Both Versions
Board should physically demonstration. OEM should submundertaking and docuin this regard.	
Board should physically demonstration. OEM should submundertaking and docuin this regard.	TOO
Board should physically demonstration. OEM should submundertaking and docuin this regard	V. INTELLECTUAL, APTITUDE, ABILITY & COGNITIVE FUNCTIONS RELATED
Board should physically demonstration. OEM should submundertaking and docu	
Board should physically demonstration. OEM should submitted and door.	
Board should physically demonstration. OEM should subm	
Board should physically demonstration. OFM should subm	h) Comprehensive Test for Non-Verbal Intelligence.
Board should physically demonstration.	
Board should physically demonstration.	a) Brief Test for Head Injury-Nancy
Board should physically demonstration.	8
Board should physically demonstration.	f) Stroop Neuro-Psychological Impairment Scale
Board should physically demonstration	c) incuropayoriological impairment ocale.
Board should physically	
Board should	a) vvC31-C4-vvIsconsin Card Sorting Test-C4 -Card version and computer version
should	
should	c) Lu;a Nebreskaneuro Esychological Lest Battery.
	b) Bhatia Neugro-psychological test Battery
	MEDICAL OF CHOCKOGICAL AGGEGGIMENT TOOLS
	IV NEI IBOBSYCHOLOGICAL ASSESSMENT TOOLS

Member-II Member-II Member-IV Member-V Member-VI Member-VIII Member-VIII Member-X Member-X Member-X Member-XIII Member-XIII

(P.O.V)

(Dr. Rakesh Tiwari) CMO (SG) (Anaesthesia), ITBP Member-VII	(Dr. J Chatopadhayay) BSF Member-I	C. DC 1. 4. 3.2.1.	B. ST 1.1.3.1
(Dr. Shaifali Gupta) Comdt /Spl. Gr.I (Ophthalmology), ITBP, Member-VIII	(Dr. Rohit Shyam Bobil) CMO(SG) (ENT) RH, ITBP, Gr. Noida Member-J	1. User/Technical/Maintenance manuals to be supp 2. Support. as per manufacturer service/ maintenan 3. List of important spare parts and accessories with costing. 4. The job description of technician clearly spelt out.	STANDARD, SAFETY AND TRAINING 1. All the tool should be in original version. 2. All test or tools mentioned above must include-all adaptation, manual book, all blank forms, cards, all so answer sheets, computerised version, in English a wherever available revised version/all age version computer softwares/disk/CD etc. 3. Publisher should have certification for quality standards
(Dr. Rajkamar Nimesh) Comdt /Spl. Gr-I (Surgery), ITBP, Member-IX	(Dr. Saquib Khan) CMO (OG) (Radiology) CRPF, Member-III	UMENTATION: User/Technical/Maintenance manuals to be supplied in English. Support. as per manufacturer service/ maintenance manual. List of important spare parts and accessories with their part number and costing. The job description of technician clearly spelt out.	NDARD, SAFETY AND TRAINING All the tool should be in original version. All test or tools mentioned above must include-all the version, Indian adaptation, manual book, all blank forms, cards, all scoring sheets, keys, answer sheets, computerised version, in English and Hindi versions, wherever available revised version/all age versions, with supporting computer softwares/disk/CD etc. Publisher should have certification for quality standards.
(Dr. Gaitri Devi) CDS (SG), (Dental), SSB Member-X	(Dr. RlKuppu Samy) CMO(SG) (Paediatrics) CRPF Member-IV		
(Dr. Neeral Kumar) I), CMO, (Medicine), ITBP Member-XI	(Dr. Chandrima Kar) Comdt /Spl. Gr.I & (Obs Gyn), CRPF Member-V	OEM should submit an undertaking and documents in this regard.	OEM should submit an undertaking and documents in this regard.
(Dr. Soumyesh Ghosi Comdt./Spl. Gr.I (Pathology), ITBP	(Dr. Anurag Jain) Contractual, Spl (Orthopaedics), CRPF Member-VI	As per specifications	Appendix-2J (xxx) an As per specifications in

Ke comon en latin of Aximes (Dr. A C Bherdwajan)

(Br. A C Bherdwajan)

(Br. A C Bherdwajan) Presiding Officer

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BORDER SECURITY FORCE DIRECTOR GENERAL