S/No.-05

Appendix-'1E(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.	PARAFFIN WAX BATH UNIT	YES (Sl. No. 1013)	YES
2.	SHOULDER WHEEL WITH MAGNETIC RESISTANCE UNIT"	YES (Sl. No. 1014)	YES
3.	INFRARED RADIATION UNIT	YES (Sl. No. 996)	YES
4.	HYDROCOLLATER UNIT	YES (Sl. No. 1009)	YES
5.	COMPUTERIZED ERGOMETER CYCLE	YES (Sl. No. 1000)	YES
6.	ULTRASOUND THERAPY UNIT	YES (Sl. No. 999)	YES
7.	COMPLETE ELECTROTHERAPY UNIT	YES (Sl. No. 1042)	YES
8.	ELECTRONIC CERVICAL AND LUMBAR TRACTION UNIT	YES (Sl. No. 1011)	YES
9.	SHORTWAVE DIATHERMY	YES (Sl. No. 994)	YES
10.	TENS & STIMULATOR	YES (Sl. No. 1010)	YES
11.	QRs and TDs of "CONTRAST BATH UNIT	YES (Sl. No. 1047)	YES
12.	MICROWAVE DIATHERMY UNIT	YES (Sl. No. 1027)	YES
13.	REHABILITATION TREADMILL	YES (Sl. No. 1004)	YES
14.	CPM SHOULDER AND ELBOW	YES (Sl. No. 1005)	YES
15.	CPM LOWER LIMB	YES (Sl. No. 1025)	YES
16.	CHILLING UNIT/COLD THERAPY UNIT	YES (Sl. No. 1025)	YES
17.	ADVANCED ELECTROTHERAPY UNIT/ COMBINATION THERAPY UNIT	YES (Sl. No. 1039)	YES
18.	INFRA RED LASER THERAPY UNIT	YES (Sl. No. 1044)	YES
19.	EMG BIOFEEDBACK UNIT	YES (Sl. No. 1003)	YES
20.	INFLATABLE SPLINTS	NO	YES
21.	THOMAS SPLINTS	YES (Sl. No. 959)	YES
22.	ORTHOPAEDIC TABLE	YES (Sl. No. 920)	YES
23.	TRAUMA KIT	NO	YES
24.	ASSORTED PRE-FAB SPLINTS	YES (Sl. No. 965, 964, 966)	YES
25.	ARTHROSCOPE	YES (Sl. No. 945, 946, 947, 948, 949, 950)	YES

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.

Recommendation of ADs (medl)

Recommended/~~Not Recommended~~

QRs/SPECIFICATIONS AND TRIAL DIRECTIVES OF MEDICAL EQUIPMENTS (ORTHOPEDIC DEPTT.)

1. "PARAFFIN WAX BATH UNIT"

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
1.	• Should have stainless steel inner tank. • Wax chamber size should be atleast 50cm x 30cm x 20cm • Should have a thermostat with auto cut off to control temperature of the wax. • Edges of wax bath should be covered with wood.	Product must be physically examined	Must be as per specifications
2.	• Should have CE (European Union compliance certified)/ BIS and the same should be central pollution control board (CPCB) certified. • Manufacturer should have IOS certification, where Indian standards are not available. • Comprehensive warranty for Daily, Weekly, Monthly maintenance. • Comprehensive training for technical staff and proper support services till familiarity with system.	Documentation must be checked	Must be as per specifications

2. "SHOULDER WHEEL WITH MAGNETIC RESISTANCE UNIT"

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
1.	Tube constructed, 100cm diameter wheel. Resistance: zero to maximum. A 360 deg scale is provided on the drum to measure and record the degree of revolution from either direction. Arc of motion can be varied from 30cm to 80 cm dia. Wheel is mounted on three laminated wall boards of which two boards are fitted with two stainless steel channels to give wheel 50 cm height adjustment.	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications
2.	1.Should have CE (European Union compliance certified)/ BIS and the same should be central pollution control board (CPCB) certified. 2. Manufacturer should have IOS certification, where Indian standards are not available. 3. Comprehensive warranty for Daily, Weekly, Monthly maintenance. 4. Comprehensive training for technical staff and proper support services till familiarity with system.	Documentation must be checked	

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 ADG(Med)
Recommended / Not Recommended

3. "INFRARED RADIATION UNIT"

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
1.	Floor stand model lamp for IR radiation. 3bulbs of 150 w with wire guard, auto-cut timer and intensity control with adjustable arms and height adjustment	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications.
2.	1. Should have CE (European Union compliance certified)/ BIS and the same should be central pollution control board (CPCB) certified. 2. Manufacturer should have IOS certification, where Indian standards are not available. 3. Comprehensive warranty for Daily, Weekly, Monthly maintenance. 4. Comprehensive training for technical staff and proper support services till familiarity with system.	Documentation must be checked.	As per specifications.

4. "HYDROCOLLATER UNIT"

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
1.	1. The unit should be able to run at least 8 hours/day with a temperature range from at least 50 deg to 60 deg centigrade or more 2. Unit should be with fiberglass insulation to prevent heat loss. 3. Unit should be made up of high grade stainless steel 4. Unit should have simple arrangement to fill in water, No plumbing required. 5. Temp of pack should be maintained 6. Unit should supply with castor facility 7. Tank capacity should be 50 litres 8. Temp range should be from 72 to 75deg C 9. Should have additional Thermal cut out at temp 82 to 85 deg C 10. Should provide min 8 packs of 25 cms* 30 cms 11. Should be USFDA /European CE/equivalent approved.	Board should physically check the machine for aforementioned parameters during demonstration.	As per specifications
2.	1. Should have CE (European Union compliance certified)/ BIS and the same should be central pollution control board (CPCB) certified. 2. Manufacturer should have IOS certification, where Indian standards are not available. 3. Comprehensive warranty for Daily, Weekly, Monthly maintenance. 4. Comprehensive training for technical staff and proper support services till familiarity with system.	Documentation must be checked	As per specifications

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 ADG(Med)
Recommended / Not Recommended

5. "COMPUTERIZED ERGOMETER CYCLE"

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
1.	Capacity to bear load should be approx 150kgs	Manufacturer must submit an undertaking and supportive documents in this regard	As per specifications.
2.	1. Tubular steel frame on properly balanced legs with four rubber tips 2. Fitted with one hard rubber tyre wheel, standard chain and a socket 3. Seat should be adjustable 4.Should be fitted with a ball bearing resistance roller which permits controlled movement in riding 5. Should supplied with all standard accessories	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications.
3.	• Should be FDA/ CE/UL / BIS approved product • Manufacturer should have ISO certification for quality standards	Manufacturer must submit an undertaking and supportive documents in this regard	As per specifications.
4.	1. Should have CE (European Union compliance certified)/ BIS and the same should be central pollution control board (CPCB) certified. 2. Manufacturer should have IOS certification, where Indian standards are not available. 3. Comprehensive warranty for Daily, Weekly, Monthly maintenance. 4. Comprehensive training for technical staff and proper support services till familiarity with system`.	Documentation must be checked	As per specifications.

6. "ULTRASOUND THERAPY UNIT"

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
1.	Microprocessor based continuous &pulsed modes, adjustable digital timer, with buzzer easy to use &sturdy machine.	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications
2.	Frequency of 1 &3 MHz Intensity of 0-3 w/Cm2 with display of output parameters along with timer Two water proof treatment heads.		
3.	All standard accessories desired for proper functioning of the machine.		

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 ADG(Med)
Recommended / ~~Not Recommended~~

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
4.	Environmental factors to be complied Shall meet IEC 606-1-1-2 : 2001/ (or equivalent BIS) General Requirement of safety for Electromagnetic compatibility or should comply with 89/366 EEC, EMCdi The unit shall be can able of being stored continuously in ambient temperature of 0-50 deg C and relative humidity of 15-90% The unit shall be capable of operating continuously in ambient temperature of 10-40 deg C and relative humidity of 15-90%	Manufacturer must submit an undertaking and supportive documents in this regard	
5.	Power input to be 220-240 VAC, 50Hz fitted with Indian Plug		
6.	Should be FDA,CE,UL or BIS approved Manufacturer should have ISO certificate 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		
7.	1. User/Technical/Maintenance manuals to be supplied in English 2. Certificate of calibration and inspection 3. List of Equipments available for providing calibration and routine Preventive maintenance support as per manufacture. 4. List of important spare parts and accessories with their part number and costing. 5. Log book with instruction for daily weekly monthly and quarterly maintenance checklist. The job description of hospital technician and company service engineer should be clearly spelt out. 6. Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/Para number with authenticated catalogue/manual, without which it will not be considered	Manufacturer must submit an undertaking and supportive documents in this regard	

7. "COMPLETE ELECTROTHERAPY UNIT"

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
1.	1. A single unit consist of Electrotherapy Current and 1&3 Mhz Ultrasound. 2. Should have inbuilt Clinical Library for Electro Therapy and Ultrasound Modalities 3. Should have facility to run three treatment simultaneously with individual parameters 4. In combination mode, it should deliver selected current from the ultrasound applicator along with ultrasound waves 5. Equipment should have Graphic LCD screen with minimum of 5.7 inch diagonal length 6. Equipment should have S-D curve facility where all reading should appear in tabulation Unit should have following minimum current with given specifications of the parameters : • 4 Pole with Vector • 2-Pole	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications

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 ADGs (Med)

Recommended / Not Recommended

Appendix-1E (XLIII)

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
	• I-Galvanic with frequency upto 100 Hz and width from 0.01 to 300 mSec • Russian with Ramp ON / OFF • TENS with selection of Symmetrical and Asymmetrical biphasic output • Iontophoresis NMES with Single , Reciprocal and Co-Contraction modes • Ultrasound Therapy should deliver 1 Mhz or 3 Mhz from the single applicator • Ultrasound should have facility to adjust following parameters Timer.....1 - 90 min Duty Cycles : Pulsed.....10%, 20%, 50% Continuous.....100% Rate ..... 16, 48, and 100 Hz Frequency.....1MHz, 3MHz Intensity .....0 to 2.5 W/cm2 System should supply with two set of output cable, 4 rubber electrodes, 1 packet of pregelled sticking electrode, point electrode. Should be USFDA/European CE certified.		
	1.Should have CE (European Union compliance certified)/ BIS and the same should be central pollution control board (CPCB) certified. 2. Manufacturer should have IOS certification, where Indian standards are not available. 3. Comprehensive warranty for Daily, Weekly, Monthly maintenance. 4. Comprehensive training for technical staff and proper support services till familiarity with system.	Documentation must be checked	As per specifications

8. "ELECTRONIC CERVICAL AND LUMBAR TRACTION UNIT"

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
1.	**TRACTION UNIT** 1. Should be microprocessor controlled user friendly traction system. 2. Should have possibility for both cervical and lumbar traction. 3. Should have treatment time from 0 to 60 minutes 4. Should have at least three modes of operation. 5. Should have possibility for hold and rest time set. 6. Should have facility to set traction force from 5 to 45 kgs. 7. Should operate in mains supply 200 to 240 Vac, 50Hz.	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications

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 ADG (Med)
Recommended / Not Recommended

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
	8. Should be supplied with the following accessories. a. Spreader bar b. Patient stop switch c. Cervical collar		
2.	**TRACTION TABLE** 1. Should have facility to fit any traction unit. 2. Should be a two section table. 3. Should have armpit for counter traction 4. Should have facility to adjust the height of the traction unit. 5. Should have powder coated mild steel body. 6. Should be supplied with soft mattress. 7. Should be supplied with foot rest.	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications
3.	1. Should have CE (European Union compliance certified)/ BIS and the same should be central pollution control board (CPCB) certified. 2. Manufacturer should have IOS certification, where Indian standards are not available. 3. Comprehensive warranty for Daily, Weekly, Monthly maintenance. 4. Comprehensive training for technical staff and proper support services till familiarity with system.	Documentation must be checked for compliance	As per specifications

9. "SHORTWAVE DIATHERMY"

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
1.	Short wave diathermy produces high frequency alternating current. The heat energy obtained from the wave is used for giving pain relief to the patient.	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications
2.	A device using electromagnetic energy in the shortwave frequency range for therapeutic purposes. The unit include selectrodes, the shortwave generator and all associated electronics controls and enclosure.	Board should physically check the machine for aforementioned parameters during demonstration	

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 ADLs (med)
Recommended / ~~Not Recommended~~

Appendix-1E (XLV)

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
3.	Output of 500w in continuous mode and 1100 w in pulse mode pulse repetition frequency of 20 to 200 Hz adjustable in 10 steps LCD Screen display of parameter Treatment timer with all standard accessories condenser pad with cables and electrodes with arms and cables. Patient safety switch	Board should physically check the machine for aforementioned parameters during demonstration	
4.	Enviromental factors to be complied 1. Shall meet IEC-606-1-1-:2001 (or Equivalent BIS) General Requirements of safety for Electromagnetic compatibility or should comply with 89/366 EEC, EMCdi 2. The unit shall be can able of being stored continuously in ambient temperature of 0-50 deg C and relative humidity of 15-90% 3. The unit shall be capable of operating continuously in ambient temperature of 10-40 deg C and relative humidity of 15-90%	Manufacturer must submit an undertaking and supportive documents in this regard	
5.	1. Power input to be 220-240 VAC, 50Hz fitted with Indian Plug 2. UPS of suitable rating with voltage regulation and spike protection for 60 minutes back up.	Manufacturer must submit an undertaking and supportive documents in this regard	
6.	1. Should be FDA,CE,UL of BIS approved 2. Manufacture should have ISO certificate for quality standards 3. Comprehensive training for lab staff and support services till familiarity with the system on site 4.Comprehensive warranty for 2 years and 5 years CMC after warranty including UPS	Manufacturer must submit an undertaking and supportive documents in this regard	
7.	1. User/Technical/Maintenance manuals to be supplied in English 2. Certificate of calibration and inspection 3. List of Equipment's available for providing calibration and routine Preventive maintenance support as per manufacture. 4. List of important spare parts and accessories with their part number and costing. 5. Log book with instruction for daily weekly monthly and quarterly maintenance checklist. The job description of hospital technician and company service engineer should be clearly spelt out. 6. Compliance Report to be submitted in a tabulated and point wise manner clearly mentioning the page/Para number with authenticated catalogue/manual, without which it will not be considered	Manufacturer must submit an undertaking and supportive documents in this regard	

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 ADLs (med)

Recommended / Not Recommended

Appendix-1E (XLVI)

10. "TENS & STIMULATOR"

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
1.	• Clinical Requirement: Used for pain relief and treatment. TENS stands for • (Transcutaneous Electrical Nerve Stimulation). Which are predominately used for nerve related pain conditions (acute and chronic conditions), muscle spasm, TENS machines works by sending stimulating pulses across the surface of the skin and along the nerves to close pain gates to reduce pain & spasm	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications
2.	• A micro controller based multi programmable transcutaneous electric nerve stimulator. • The unit should be a table top model. • The unit should have dual Independent Channels. • The unit should have Adjustable Timer ranging from 0-90 sec. • Adjustable Frequency and Pulse Duration parameters. • Therapy mode: Continuous, burst, linear, trapezoidal, triangular and non-linear. • Tens Frequency: 2 Hz to 150 Hz Adjustable • Pulse Amplitude: 0-80 Ma • Pulse width 50 msec- 300 msec, variable • Therapy mode: Continuous, burst, linear, trapezoidal and non– linear • Parameter selection: Manual and programmed. • Treatment timer: Digital timer • Output display: Display for CH1 &CH 2. • With attached trolley	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications
3.	• The unit should work on 230 volt &50HZ supply • The unit should have inbuilt over voltage protection.	Manufacturer must submit an undertaking and supportive documents in this regard	As per specifications
4.	• Comprehensive warranty for 2 years • The model should be USFDA/ CE/ BIS certified • The manufacturer should be ISO 13485 certified • The model should be compliance to electrical safety standards of IEC 60601-1	Manufacturer must submit an undertaking and supportive documents in this regard	As per specifications

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 ADG (med)

Recommended / Not Recommended

Appendix-1E (XLVII)

11. QRs and TDs of "CONTRAST BATH UNIT"

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
1.	* **Construction:** Double walled body, well insulated Water tanks of 16 gauge Stainless steel sheet are placed side by side in a heavy tubular steel frame covered with painted steel sheet. Tanks are covered with laminated wooden rim & covers. * **Water Tanks:** Two, Size: 50cm x 38cm x 40cm deep. * **Hot-Bath Tank:** Fitted with One, 2kw special heating element. * **Cold-Bath Tank:** Fitted with heavy duty cooling compressure unit * **Tempreture Control:** Each tank is provided with Digital Thermometer, Thermostat for Temperature Control, & Pilot lights. * **Mounting:** Mounted on 10cm dia. Four casters. * **Drainage:** Drainage system for emptying. * **Finish:** Externally Powder Coated finish. * **Power:** 220-240 V AC. Accessories: UNIT SUPPLIED WITH 4 kv. VOLTAGE STABILISER.	Board should physically check the machine for aforementioned para meters during demonstration.	As per specifications.
2.	1.Should have CE (European Union compliance certified)/ BIS and the same should be central pollution control board (CPCB) certified. 2. Manufacturer should have IOS certification, where Indian standards are not available. 3. Comprehensive warranty for Daily, Weekly, Monthly maintenance. 4. Comprehensive training for technical staff and proper support services till familiarity with system.	Documentation must be checked	As per specifications

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 ADGs (MED)

Recommended / ~~Not Recommended~~

Appendix-1E (XLVIII)

12. "MICROWAVE DIATHERMY UNIT"

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/ Desired
1.	i) It should have more than 80 clinical protocols. ii) It should have more than 100 user memory slots. iii) It should have supplied with circular Radiator. iv) It should have large colored touch screen display LED/LCD user interface. v) It should have continuous 250 W for optimal application possibilities. vi) It should have 1600 Watts pulsed modes. vii) It should have overheating alarm. viii) It should have Double protection system to guarantee extended magnetron life. ix) It should be supplied with complete Accessories- Power cable, Instruction manual, Fuses.	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications
2.	The main supply should be 220-240V. It should be supplied with High frequency Co-Axial Cable (350 W at 2.45 GHz).	Manufacturer must submit an undertaking and supportive documents in this regard	As per specifications
3.	1. Should have CE (European Union compliance certified)/ BIS and the same should be central pollution control board (CPCB) certified. 2. Manufacturer should have IOS certification, where Indian standards are not available. 3. Comprehensive warranty for Daily, Weekly, Monthly maintenance. 4. Comprehensive training for technical staff and proper support services till familiarity with system.		

13. "REHABILITATION TREADMILL"

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
1.	A Treadmill runs continuously in a circular pattern. It has multiple uses in exercise training, adult fitness program and obesity control management.	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications
2.	TREADMILL □ Should be heavy duty medical treadmill. □ Should have stop/ start button for emergency stop. □ Should have zero start. □ Should have running surface of 56× 160 cm or above. □ Should have elevation range of 0% to 25 % □ Should have speed range of 0.1 to 19 km/h	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications

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 ADLs (med)
Recommended/ ~~Not Recommended~~

Appendix-1E (XLIX)

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/ Desired
	□ Should have user weight capacity of 40 to 200 kg or higher. □ Walking surface must be a double sided polished for prolonged product life span. □ hand rails must be available as standard feature.		
3.	The display screen should display following parameters: □ Exercise time □ Heart rate □ Speed of treadmill	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications
4.	ELECTRICAL SAFETY □ Safety class :1 □ Type protection: CF □ ANSI/AAMI EC11-1991, Diagnostic Electrocardiograph Devices □ IEC 60601-1:1988, Medical Electrical equipment. Part 1: General requirements for safety. Including amendment 1:1991-11 and amendment2:1995-03. □ IEC 60601-2-25:1993, Medical Electrical equipment. Part 2: particular requirements for safety of Electrocardiographs, including amendment 1:1995-05. □ Council Directive 93/42/EEC of 14 June 1993 concerning medical devices.(Medical Device Directive) □ IEC 60601-1-2:202001-09, Medical Electrical Equipment – Part 1: General requirements for safety. □ Sub part 2. Collateral Standard: Electromagnetic Compatibility- Requirements and tests.	Manufacturer must submit an undertaking and supportive documents in this regard	As per specifications
5.	ENVIRONMENTAL □ Operating temperature : + 10 to +40 deg. C(+50 to + 104 Deg F) □ Storage temperature : - 40 to +70 deg.C(-40 to +158 deg F) □ Operating relative humidity : 10 % to 95 % , non condensing. □ Storage relative humidity : 10 % to 95 % , non condensing. □ Operation/ Storage atmospheric pressure : 500 hPa to 1060 HpA.	Manufacturer must submit an undertaking and supportive documents in this regard	As per specifications
6.	The product should be US-FDA/ European CE/ BIS approved 5 Years warranty and 5 years CMC. CMC Rates should be quoted in price bid.	Manufacturer must submit an undertaking and supportive documents in this regard	As per specifications
7.	DOCUMENTATION: □ User/Technical/ Maintenance manuals to be supplied in English. □ Certificate of calibration and inspection from the manufacturer. □ List of equipments available for providing calibration and routine preventivemaintenance support as per manufacturer service/ maintenance manual bysupplier. □ List of important spare parts and accessories with their part number andcosting of information only. □ Compliance report to be submitted in a tabulated with point wise mannerclearly mentioning the page/para number with authenticated catalogue/manual, without which it will not be considered	Manufacturer must submit an undertaking and supportive documents in this regard	As per specifications

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 ADG (med)

Recommended / ~~Not Recommended~~

Appendix-1E (L)

14. "CPM SHOULDER AND ELBOW"

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
1.	Solid state circuitry control panel with highly visual LED Digital read puts. Unit fitted on mobile electrical Jack to adjust height according to patients' requirement. With all accessories. Technical Specification • Therapy Modes: Mobilization Modes for continuous, Intermittent and Progressive passive movements. Displays : Digital display of ROM settings Pause Time, Treatment Time and Graphic display of Mobilization.	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications
2.	The items should be USA FDA/European CE approved / ISO certified 1. Warranty for 1 year with full maintenance from day of installation. 2. Certificate for insuring availability of spare parts and services, by principle company, for the said life period of the equipment, from the date of installation otherwise company will provide good working standby set for remaining period.	Manufacturer must submit an undertaking and supportive documents in this regard	As per specifications

15. "CPM LOWER LIMB"

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
1.	1. The unit should have digital keyboard with LCD display. 2. Knee and Hip mobilization in the same unit. 3. Ankle Mobilization is must in the same unit. 4. Use of Memory Card 5. Speed control during Flexion / Extension 6. Force control 7. Work time control 8. Automatic increase in Extension range 9. Pause during flexion/ Extension 10. Automatic increase in Flexion range 11. Warm up Cycles. 12. The unit should have got functional panel on the unit only, but not on the patient stop switch or remote control for patient safety. 13. Knee movement breadth : 0deg – 110deg 14. Ankle movement breadth: 20deg to (-)40deg 15. Hip movement breadth (mid limb) : 10deg – 70deg 16. Speed: 0.80/sec – 4.60/sec 17. Force : 0 – 40 kg 18. Power supply: 85 – 260 V / 50-60 Hz 19. Electrical safety: Class 1 B Standard EN 60601-1 20.USFDA/European CE ce	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications

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 ADS (med)

Recommended / ~~Not Recommended~~

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/ Desired
2.	1. Should have CE (European Union compliance certified)/ BIS and the same should be central pollution control board (CPCB) certified. 2. Manufacturer should have IOS certification, where Indian standards are not available. 3. Comprehensive warranty for Daily, Weekly, Monthly maintenance. 4. Comprehensive training for technical staff and proper support services till familiarity with system.	Documentation must be checked	As per specifications

16. "CHILLING UNIT/COLD THERAPY UNIT"

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
1.	• Unit should have chilling coils. • Unit should be equipped with heavy duty compressor for fast cooling and it should cool faster even if lid will be open frequently. • Unit must have Closed-cell foam insulation for energy efficiency. • Should have facility for easy cleaning and defrosting. • Unit should be made up of stainless steel • Unit should provide casters facility • Unit should provide Temperature Range from -12 degree C to –6 degree C • Safety Class : Type B • Safety Tests : Safety Tests: EN 60601-1 should provide certificate. • Unit should provide with 6 Standard size (28 cm x 36 cm) and 6 Half size (19 cm x 28 cm) cold packs with non-toxic gel and should be latex free. It should be USFDA/ European CE/ BIS certified	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications
2.	1. Should have CE (European Union compliance certified)/ BIS and the same should be central pollution control board (CPCB) certified. 2. Manufacturer should have IOS certification, where Indian standards are not available. 3. Comprehensive warranty for Daily, Weekly, Monthly maintenance. 4. Comprehensive training for technical staff and proper support services till familiarity with system.	Documentation must be checked by the board.	As per specifications

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 ADs (Med)

Recommended / Not Recommended

Appendix-1E (LII)

17. "ADVANCED ELECTROTHERAPY UNIT/ COMBINATION THERAPY UNIT"

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
1.	Should have multi-frequency Ultrasound 1, 2, 3 MHz Should have duty cycles: 10%, 20%, 50%, continuous Should have option to add any size sound heads: 2 cm2, 5 cm2, 10 cm2 Should have ultrasound settings: up to 2 watts/cm2 Should able to display both in watts and watts/cm2 Should able to produce head warming and Coupling Should able to deliver combination therapy with all the available currents through the Sound Head Should have stim input for electrotherapy Should have 5 channels with 1 number of dedicated High Volt channels Should able to deliver 7 wave forms: such as Interferential , Premodulated ,Russian Biphasic ,High Volt ,Microcurrent ,Direct Current ,Target and Target Sweep feature for Interferential with touch pad technology Should have internal power supply and conversion capabilities Must be durable and sturdy with aluminum casing Should have modifiable frequency ranges , single, reciprocal, co-contraction modes in Russian, Biphasic Must able to have selectable and customizable on/off times for High Volt, Biphasic and Russian Able to modify pulse rate, pulse width in Biphasic, Russian Must able to deliver Microcurrent and High Volt therapy delivered with either electrodes or probes Must have the option to select Microcurrent and High Volt polarity (positive, negative, or bipolar) Must have microcurrent conductance indicator and Electrode conductance meter Should able to deliver Direct Current through MultiStim probe with toggle switch for control Should have a Infrared cluster probe with 660 nm and 880 nm SLDS and have Laser point probe available as an optional unit for attachment. Must also provide a Blue light 405 nm and 660 nm cluster probe. Must provide a certified Protocol Reference Manual for Electrotherapy &Ultrasound Must provide a Light Therapy Applications Manual (included with probe order)	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications
2.	Must be US-FDA/ European CE/ BIS approved	Manufacturer must submit an undertaking and supportive documents in this regard	As per specifications
3.	Warranty for 1 year followed by 5 years CMC		

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 ADG (Med)

Recommended / Not Recommended

Appendix-1E (LIII)

18. "INFRA RED LASER THERAPY UNIT"

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
1.	1. LASER Output Visible Red through Scanner- 650 nm, 40mw (Continuous), Infra Red Probe - 808 nm, 200 mw (Continuous) 2. Modes of Operation Continuous &Pulsed 3. Pulse Frequency 0 - 99 HZ 4. Laser Beam Width X - Axis - Upto 2 Feet Y - Axis - Upto 2 Feet 5. Treatment Time 0 - 99 Min 6. Operating Voltage 220 V AC , 50 HZ 7. Power Consumption 50 Watts 8. Online therapeutic suggestion and scientific information 9. Automatic calculation of energy in function of the area and time of treatment. 10. Smart Card to store and update software Standard Accessories - Protective Goggles – 2 Nos - Meridian Point Detector - Inactive Electrode - Infra Red Probe - Visible Red and Infra Red Probes	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications
2.	Must be US-FDA/ European CE/ BIS certificate	Manufacturer must submit an undertaking and supportive documents in this regard	As per specifications
3.	Warranty for 2 years followed by 5 years CMC		

19. "EMG BIOFEEDBACK UNIT"

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
1.	Should be used for the application like Amputees, Orthopaedic, Neurologic, Spinal Cord, Stroke, Vestibular and older adult patients, joint replacement patients etc. System should be useful for Pressure and GAIT analysis during Standing , Running and walking	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications

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 ADG(med)

Recommended / Not Recommended

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/ Desired
2.	Pre calibrated pressure sensors (Minimum 3000) should be inbuilt in the treadmill deck . □ Treadmill walking belt should be more than 20 X 60 inches □ Should have capacity to measure patient of 150 Kg □ Treadmill should be of a Medical Grade and necessary certificates should be provided. □ Treadmill should have forward speed from 0.1 to 12mph □ Treadmill should have reverse speed of up to 4mph. □ System should generate auto report for pressure, Spatial, and Temporal Parameters with comparison of left and right. □ Report should cover minimum following parameters : Foot rotation, Step width, length and time, Stance phase Swing phase, Stride length &time, Cadence Velocity, Butterfly parameters Average Pressure and Force □ System should be upgradeable with attachment of EMG , Motion and Video analysis so that all the data are seen simultaneously on one screen and synchronized with each other and one comprehensive report should be generated .	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications
3.	1. Should have CE (European Union compliance certified)/ BIS and the same should be central pollution control board (CPCB) certified. 2. Manufacturer should have IOS certification, where Indian standards are not available. 3. Comprehensive warranty for Daily, Weekly, Monthly maintenance. 4. Comprehensive training for technical staff and proper support services till familiarity with system.	Documentation must be checked.	As per specifications

20. "INFLATABLE SPLINTS"

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
1.	Material radiolucent, Light quality plastic with inflation valve and closing clamps Fixing by radiolucent zipper Set of six sizes – hand and wrist half arm, full arm, foot and ankle, half leg and full leg reusable with carry bags	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications.
2.	1. Should have CE (European Union compliance certified)/ BIS and the same should be central pollution control board (CPCB) certified. 2. Manufacturer should have IOS certification, where Indian standards are not available.	Documentation must be checked.	As per specifications.

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 ADG(Med)
Recommended / Not Recommended

21. "THOMAS SPLINTS"

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
1.	Thomas splint, Well padded thigh ring, small, medium and large	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications

22. "ORTHOPAEDIC TABLE"

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Resuits expected/Desired
1.	1. The five section table top is X-ray translucent and is equipped with removable, antistatic 50mm thick mattresses. 2. The base &column of the table is made of high quality medical stainless steel (Grade – 304). 3. Non- reflecting surface, antibacterial &is easy to clean. 4. The table can provided with a top sliding of 250 mm, Dual Leg Section & Battery backup 5. Hanging Orthopedic Attachment including pelvic Support, Tibia Nailing enables the limbs to perform strain free. 6. Top dimension L 2032 x W550mm 7. Height adjustment Adjustment by electro-hydraulic moment should be from 715mm – to highest possible label 8. Table Top Sliding 250mm (optional) 9. Trendelenburg /Reverse 30°/ 25° 10. Lateral tilt 20°/ 20° 11. Kidney elevator 150mm 12. Back Rest (up/ down) 80°/ 25° 13. Leg Rest (up / down) 15°/ 90° 14. Head Rest (up/ down) 20°/ 60° 15. Power Supply 24V DC 16. Battery Backup for atleast 2 -3 hours 17. Attachments for spine surgery 18. Height adjustment, lateral Tiles, Trendelenburg, and Flex – Reflex, Chair Position and Longitudinal 19. Sliding top should be operated by Remote control. 20. Head and Leg sections are detachable &interchangeable 21. Orthopedic traction system with boot and thigh support. 22. Accessories for Hand Surgery. 23. Attachment for shoulder surgery. 24. Arm rest 01 pair. 25. Anesthesia screen. 26. Lithotomy/knee crutches 01 pair.	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications

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 ADGs (Med)

Recommended/ ~~Not Recommended~~

21. "THOMAS SPLINTS"

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
2.	Must be US-FDA/ European CE/ BIS approved	Manufacturer must submit an undertaking and supportive documents in this regard	As per specifications
3.	Warranty for 2 years followed by CMC for 5 years		

23. "TRAUMA KIT"

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
1.	1. Heavy-Duty "TRAUMA KIT"Duffel Bag 1 2. Instant Ice Pack - 4"x 5" 6 3. Cervical Collar 1 4. Cardboard Splint - 9"x 18" 2 5. Multi Trauma Dressing - 12"x 30" 10 6. Triangle Bandage - 38"x 52" 5 7. Blood Stopper 15 8. Burn Care Kit (15 Piece) 1 9. Penlight 1 10. Bandage Shears 2 11. Emergency Survival Blanket 10 12. Paramedic Blanket - 54"x 80" 2 13. Ace Bandages 3"x 5 Yards 4 14. Plastic Bandages - 1"x 3" 100 15. Plastic Bandages - 3/4"x 3" 100 16. Adhesive Tape - 1"x 5 Yards 5 17. Sterile Gauze Pads - 2"x 2" 100 18. Non-Sterile Kling Gauze Rolls - 2" 12 19. Eye Wash - 4oz 1 20. Hydrogen Peroxide - 4oz 1 21. Nitrile Gloves - Medium 100	Board should physically check the machine for aforementioned parameters during demonstration	As per specification
2.	1. Should have CE (European Union compliance certified)/ BIS and the same should be central pollution control board (CPCB) certified. 2. Manufacturer should have IOS certification, where Indian standards are not available.	Documentation must be checked.	As per specification

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 ADG(Med)
Recommended/ ~~Not Recommended~~

Appendix-1E (LVII)

24. "ASSORTED PRE-FAB SPLINTS"

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
	Cervical Collar soft with eyelets –Contour to accommodate chin, Double layered foam, S/M/L Cervical Collar soft with eyelets –Contour to accommodate chin, Double layered foam, XL Cervical Collar hard (adjustable type) - Contour to accommodate chin, S/M/L Cervical Collar hard (adjustable type) - Contour to accommodate chin, XL Philadelphia Collar , S/M/L Somi Brace ,Universal Size Dorso lumber spinal orthosis Taylor's Spinal Brace, Small Dorso lumber spinal orthosis Taylor's Spinal Brace, Medium Dorso lumber spinal orthosis Taylor's Spinal Brace, Large A.S.H Brace(Hyper extension brace adaptable to fit all sizes Halovestbrace,S/M/L (To be made patient specific) L.S. Brace with four mouldablealluminiumstrip,Small L.S. Brace with four mouldablealluminiumstrip,Medium L.S. Brace with four mouldablealluminiumstrip,Large L.S. Brace with four mouldablealluminium strip, Xtra Large Humerous Brace, S/M/L Fore arm Brace (Functional Brace) Femur brace with waist support for abduction of Hip Tibia Brace,S/M/L Ankle foot orthosis (AFO) ,Small Ankle foot orthosis (AFO) ,Medium Ankle foot orthosis (AFO) ,Large Ankle foot orthosis (AFO) ,Xtra Large Clavicular Brace (Children) ,S/M/L Clavicular Brace (Adult) ,S/M/L Rib Belt Male- Breathable 6"width elastic band, velcro closure, S/M/L Rib Belt Male- Breathable 6"width elastic band, velcro closure, XL Rib Belt Female- Breathable 6"width elastic band, velcro closure, design to fit properly to female patient, S/M/L	Board should physically check the machine for aforementioned parameters during demonstration	As per specification

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 ADG (Med)

Recommended / ~~Not Recommended~~

Appendix-1E (LVIII)

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
	Rib Belt Female- Breathable 6"width elastic band, velcro closure, design to fit properly to female patient, XL Knee Cap(multi directional stretch)-Should be made of high quality elastic band of minimum10"width, Tubular design, S/M/L Knee Cap(multi directional stretch)-Should be made of high quality elastic band of minimum10"width, Tubular design, XL Knee Cap with patellar hole Neoprene material, Universal size Elastic Knee support without hinges, S/M/L Elastic Knee support without hinges, XL Elastic Knee support with hinges - should have minimum 9"elastic panel as base material, Rigid metallic hinge splints(2No's),Multi panel velcro buckle closure for proper fitting, S/M/L Elastic Knee support with hinges - should have minimum 9"elastic panel as base material, Rigid metallic hinge splints(2No's),Multi panel velcro buckle closure for proper fitting, XL Post -operative Knee immobilizer - Should be made of breathable, foam fused fabric, lateral &posterior light-metal stays, pre contoured for easy walking, splint should be flexible so that it can be bent or straightened, buckle and velcro closure above &below knee for proper fitting, S/M/L Post -operative Knee immobilizer - Should be made of breathable, foam fused fabric, lateral &posterior light-metal stays, pre contoured for easy walking, splint should be flexible so that it can be bent or straightened, buckle and velcro closure above &below knee for proper fitting, XL Knee brace with hinges with patellar cushion, S/M/L Knee brace with hinges with patellar cushion, Xtra Large Knee brace without hinges with patellar cushion, Small Knee brace without hinges with patellar cushion, Medium Knee brace without hinges with patellar cushion, Large Knee brace without hinges with patellar cushion, Xtra Large Range of motion Knee Brace, S/M/L Range of motion Knee Brace, Xtra Large physiotherapy Paraffin wax,1kg physio therapy Paraffin wax,5kg Gymnasium ball,75 cm Physiotherapy clay,1 kg Slings &Supports Stockinette (Disposable),2"x 5 meter(cotton). Stockinette (Disposable) ,3"x 5 meter(cotton). Stockinette (Disposable),4"x 5 meter(cotton).		

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 ADs(med)
Recommended/Not Recommended

Appendix-1E (LIX)

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
	Stockinette (Disposable) ,5"x 5 meter(cotton). Stockinette (Disposable),6"x 5 meter(cotton). **Arm Sling Pouch** -should be made up of Soft quality fabric,should have Non stretching strap,Adjustable,closure with velcro plastic buckles, S/M/L **Arm Sling Pouch** -should be made up of Soft quality fabric,should have Non stretching strap,Adjustable,closure with velcro plastic buckles, XL Ankle Wrap,3"elastic band with valcroclosure,S/M/L Ankle Wrap,3"elastic band with valcroclosure,XL Ankle brace-Should be made up of foam fused fabric, should have semi-rigid plastic splints on both side of brace,Velcro-closure and plastic buckles for locking, Sizes- S/M/L Ankle brace-Should be made up of foam fused fabric, should have semi-rigid plastic splints on both side of brace,Velcro-closure and plastic buckles for locking, Sizes- XL Tennis elbow band(High strength foam padded strap),S/M/L Tennis elbow band(High strength foam padded strap),Xtra Large Wrist binder with thumb support Shoulder Immobilizer, S/M/L Shoulder Immobilizer, XL Cot Finger Splint(U-Shaped to keep finger in straight position),S/M/L Frog Splint (Four leg construction allow) Self closing for immobilization of DIP Joint in extension &PIP joint in flexion), S/M/L Spoon Splint (To keep finger tip in extension),S/M/L Protector Splint for finger tip injury ('+ ' mark design to protect finger tip from all around),S/M/L Base Ball Splint for distal phalanx injury (finger tip fold over design),S/M/L Mallet finger Splint (Splint to keep DIP Joint in 10° hyper extension),S/M/L Finger extension splint(spring wire construction for keeping finger in extension),S/M/L Finger flexion splint (spring wire construction for keeping finger in flexion),S/M/L Thumb Spica Splint Knuckle Bender splint Carpel Tunnel Splint Day Time Carpel Tunnel Splint Night Time Arm Sling Strap-heavy duty strap with two way buckle system Wrist &fore arm splint(Right &Left) Static wrist cock-up splint(Right & Left),S/M/L Dynamic wrist cock-up splint(Right & Left)		

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 ADG (med)

Recommended / Not Recommended

Appendix-1E (LX)

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
	Foot drop splint, S/M/L Foot drop splint, XL Boot and Derotation Bar Splint Compression stockings (Above Knee) (Latex free) with moderate compression, S/M/L Compression stockings(Below Knee) (Latex free) with moderate compression, S/M/L Resistance Band for stage 1 to stage 6 (For resistance rehabilitation exercise), Various thickness Bolster, S/M/L Triangular pillow for abduction of Hip Silicon Heel Cushion (Right & Left),S/M/L Silicon insole, S/M/L Silicon arch pad, S/M/L Silicon metatarsal pad, S/M/L Silicon toe spacer Cast Shoe, S/M/L Cast Shoe, XL Splints Kramer wire splint ,Width 7.5cm,L 100cm Kramer wire splint ,Width 10cm, L 100cm Thomas splint (well padded thigh ring), Small Thomas splint (well padded thigh ring),Medium Thomas splint (well padded thigh ring), Large Bohler brown splint , Small Bohler brown splint, Medium Bohler brown splint, Large Bohlers stirrup, Small Bohlersstirrup,Medium Bohlersstirrup,Large Screws for Bohler stirrup Auxillary crutches(adjustable height), Aluminium Elbow crutches(adjustable height), Aluminium Walking stick, Aluminium mono-pod with handle grip and rubber tip. Walking stick,Aluminium tri-pod with handle grip and rubber tip. Walking stick,Aluminium tetra-pod with handle grip and rubber tip.		

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 ADs (med)

Recommended / Not Recommended

Appendix-1E (LXI)

25. "ADVANCED ELECTROTHERAPY UNIT/ COMBINATION THERAPY UNIT" (ARTHROSCOPE)

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
1.	High definition digital camera head - • Digital Triple chip, full high definition, microlens CCD Camera (Charged Couple device). • Pixels Quantity: 1920 x 1080i • Scanning Pattern: 1920x1080 interlaced (1080i) x3 CCD = 6220800 Pixels | • Aspect Ratio: Capable of displaying wide screen 16:9 format. Standard definition television(SDTV) has a 4:3 aspect ratio. • Compatible with Video Arthroscopes as well as direct view scopes. • 3 buttons for remote control of the CCU and accessories. Able to control 6 functions on the menu using these 3 buttonsinbuilt zoom facility, regardless of telescope used. • Automatic optimization of all settings. • Digital signals processing, modes of operation automatic and manual, PAL compatible. • White balancing possible from the CCU as well as from the sterile field. • Minimum Signal to Noise ratio of 60 decibels (dB). • SDI Output, BNC, S-VHS and RGB outputs. • Leakage current not more than 25 microamps in control unit and not more than 10 microampsin camera head • Weight not exceeding 165 grams, Camera head cable minimum 12ft. • C-Mount Zoom coupler 19.5 mm.	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications
2.	High definition camera control unit • ACG Microprocessor controlled • Video Inputs : S-Video, (Y/C), Composite, HD-SDI, IEEE-1394 • Video Outputs : S-Video, (Y/C), Composite, HD-SDI, DVI • Video Formats : NTSC and PAL • USB 2.0 Ports : Type A receptacle, software compatible with NS16C550 • Video recording: on pendrive through USB port • Parallel Port : Bidirectional Input / output with female DB-25 Receptacle • Serial Port : UART Port with male DB- 9 receptacle • VGA Port : 15-Pin female • Ethernet Ports : Auto select 10Base-T/100 Base-TX • Storage : Supports read/ write of USB flash media of different sizes; CD-R/RW; 650 MB or700 MB. • Still Image File Formats : 24-bit RGB bitmap, 24-bit JPEG	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications

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 ADGs (med)

Recommended / Not recommended

Appendix-1E (LXII)

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
	• Still Image Resolution : NTSC / PAL • 1920 x 1080i@ 24 bit color depth 16.77 million True Colour • Motion Video File Format : MPED1, MPEG2, MPEG4 • Power Requirements : Input Voltage: 100-240 VAC, 50/60 Hz @ 90VA • Processor : Intel® Pentium® M 1.6 GHz • Operating System : Microsoft® embedded Windows® XP or advanced		
3.	High definition medical grade monitor • The system should have: • Medical grade LCD monitor, flat screen • Ability to display High Definition Resolution of 1920 X 1080i • Wide Screen and aspect ratio of 16:9 • Compact control buttons on the sides of the panel • Screen diagonal 24" • Monitor stand compatible with monitor	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications
4.	LED light source specs • Light Source Type LED (Light Emitting Diode) • Color Temperature 7000˚K • LED Life 30,000 hours (typical) • Light GuideAdaptorTurret type to fit your choice of light cable • Brightness Control 0-100% • DimmingInput Voltage 100-240V AC, 50/60 Hz • Rated Power 90 watt • Dimensions 11.22" W x 4.49" H x 13.23" D • Weight 8.05 lbs / 3.42 kg	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications
5.	Fiber Optic Light Cable Qty-2 Universal fibre optic cable with adapters. Not less than 5mm thick and 10 ft long		
6.	Arthroscopy Set(Arthroscopic, Sheath and Obturator) • Wide Angle, Direct View High Definition Arthroscopic • Light Guide insertion on opposite side of the direction of view with a J-lock fixation for cannula. • Working Length of Not more than 160mm • Optimal centre-to-edge resolution for enhanced picture quality • Angle of view: 70 degree • Diameter 4mm •	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications

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 ADs (med)
Recommanded / Not Recommended

Appendix-1E (LXIII)

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
	• Fiber optic light transmission incorporated • Standard ocular window for coupling the camera head • Scratch resistance sapphire quoted tip lens • Advanced Rod lens system for optimum brightness, contrast and definition • Arthroscopies should be supplied with compatible cannulas high flow, double valve, fully rotatable with fenestrated tip & conical and blunt tip obturator. • Sheath- 5.95 to 6.0mm, high flow diagnostic cannula, double valve, fully rotatable cannula with fenestrated tip. • Trocar-4.5mm conical obturator to fit with cannula.		
7.	Arthroscopy Set(Arthroscopic, Sheath and Obturator) • Wide Angle, Direct View High Definition Arthroscopic • Light Guide insertion on opposite side of the direction of view with a J-lock fixation for cannula. • Working Length of Not more than 120mm • Optimal centre-to-edge resolution for enhanced picture quality • Angle of view: 30 degree • Diameter 2.7 • Fiber optic light transmission incorporated • Standard ocular window for coupling the camera head • Scratch resistance sapphire quoted tip lens • Advanced Rod lens system for optimum brightness, contrast and definition • Arthroscopies should be supplied with compatible cannulas high flow, double valve, fully rotatablewith fenestrated tip & conical and blunt tip obturator. • Sheath- 3mm to 4mm, high flow diagnostic cannula, double valve, fully rotatable cannulawith fenestrated tip. • Trocar-3mm to 4mm conical obturator to fit with cannula.	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications
8.	Arthroscopy Set(Arthroscopic, Sheath and Obturator) Qty- 2 Each • Wide Angle, Direct View High Definition Arthroscopic • Light Guide insertion on opposite side of the direction of view with a J-lock fixation for cannula. • Working Length of Not more than 160mm • Optimal centre-to-edge resolution for enhanced picture quality • Angle of view: 30 degree • Diameter 4mm • Fiber optic light transmission incorporated •	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications

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 ADG (med)
Recommended / ~~Not Recommended~~

Appendix-1E (LXIV)

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
	• Standard ocular window for coupling the camera head • Scratch resistance sapphire quoted tip lens • Advanced Rod lens system for optimum brightness, contrast and definition • Arthroscopies should be supplied with compatible cannulas high flow, double valve, fully rotatablewith fenestrated tip & conical and blunt tip obturator. • Sheath- 5.95 to 6.0mm, high flow diagnostic cannula, double valve, fully rotatable cannula withfenestrated tip. • Trocar-4.5mm conical obturator to fit with cannula.		
9.	Arthroscopic Resection Shaver System Qty-1Each The Shaver system should comprise of Controller Console, Shaver Hand-piece, and Foot pedal Controller Unit • The Controller console should have receptacles for both Shaver hand-piece, Foot Pedal and also otherpowered instrumentation • The console screen should capture all information pertaining to minimum, maximum and set speedsforinstalled blade type; horizontal bar graph of bladespeed relative to range; blade direction;diagnosticinformation. • Should provide control for momentary push switches for increasing and decreasing speed setting. • The Unit should have 2 Modes for Normal and Aggressive Resection so as to balance efficacy withsafety. • The Console should provide variable rpm ranging between 100rpm to 10,000 rpm as per the blade orburs used. • The Motor should offer Forward, Reverse and Oscillation Mode for Resection Shaver Hand Piece • The autoclavable shaver hand piece, which is compact, lightweight and ergonomically designed, withhand control. • The connecting cable should be autoclavable and replaceable with length of approx. 10Ft. • The hand piece should be not more than 8 Inches length and 460gms. • The hand piece should have suction control lever. • The Shaver Hand piece should have safety mechanism of Blade Window Lock to avoid any unintentional tissue damages on pull out. • The Safety feature for window locking should be accessible and controllable from shaver hand piece. • The Shaver hand piece should have push-button motor controls: Forward, Reverse Oscillate, and • Blade and Window Lock.	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications

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 ADG (Med)
Recommended / Not Recommended

Appendix-1E (LXV)

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
	• The Shaver should offer Maximum torque not be less than 32oz.in • The shaver should be supplied with compatible shaver sterilization case. • The Shaver should be able to use any electro Blades, if desired. • Input voltage of 100 to 240V, 50/60 Hz power consumption not more than 350VA. Foot Pedal • The variable speed foot pedal should be sturdy with a long connecting cable. • The foot pedal controls should include three standard operating modes, i.e. Forward, Reverse and Oscillation. • The foot pedal should offer a blade window locking mode for enhanced safety during withdrawal ofhand piece from joint space with blade mounted. Optional Items: Powered Instrumentation • Power drill with cable and drill hand piece, Jacobs chuck with key • Sagittal Saw hand piece and wire driver Consumables-Blades & Burs • Shaver System Should be supplied with 2 pieces of single use shaver blades of each of the diameterfor knee and shoulder		
10.	Arthroscopy Fluid Management System Qty-1 • The Fluid management System offers to maintain& control intra-articular pressure regardless ofvarying outflow rates. The system can also be used with any arthroscopic inflow cannula and shouldinclude main control unit, disposable tubing sets, a wireless remote control, two Fluid Level Sensors • The control unit should not require the user to increase distension pressure to achieve high flowrates. Outflow may be adjusted while maintaining the lowest distension pressure needed • Flow rate should be change as per operating cannula connection • The Unit should have a LCD Display and should clearly depict High flow, Medium floe and Low Flows. • Maximum flow rate of not less than 2.5 ltr/min for procedural speed and efficiency • Automatic Joint pressure maintenance up-to 150 mmHg • The unit should have receptacles for Remote and Irrigation Set Insertions. • Should be supplied with remote foot pedal for easy operation of wash function. • Must be supplied with Disposable tube sets for inflow only (30pcs). • Must be supplied with Disposable Tube sets for inflow and outflow (30pcs.). • Wireless remote control for full system control from the sterile field. Should be stop, start, lavagestart/Stop, increase & decrease flow limit, increase & decrease pressure. • Operating System: Microsoft® embedded Windows® XP	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications

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 ADG (Med)
Recommended / Not Recommended

Appendix-1E (LXVI)

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
11.	Hand Instruments **All Hand Instruments should have single piece construction outer shaft and pin-less hinge designfor distal tip, ensuring unsurpassed strength and cutting efficiency.** • **Punches:** - All purpose, low profile with a large square bite • Basket Punch Duckbill straight Tip Profile – 2.52mm, Bite Width-3.17mm, Tip Width-5.05mm • Basket punch Duckbill upbiter Tip Profile – 2.52mm, Bite Width-3.17mm, Tip Width-5.05mm • Basket punch Duckbill upbiter curved right – 2.52mm, Bite Width-3.17mm, Tip Width- 5.05mm • Basket punch Duckbill upbiter curved left – 2.52mm, Bite Width-3.17mm, Tip Width-5.05mm • Basket Punch Narrowline Straight 1.9mm, Bite width- 1.67mm, Tip width-2.89mm • Posterior Punch Upbiter Tip Profile -2.46mm, Bite width-2.18mm, Tip width-4.0mm • Posterior Punch Straight 2.46mm, Bite width-2.18mm, Tip width-4.0mm • Basket Punch - scoop 1.5mm Upbiter Tip profile-2.28mm,Bite width-1.59mm, Tip Width-3.88mm • Basket Punches,90 deg. Rotary,cigar handle with a 3.4mm bite in left and Right. • Basket Punch – Stingrey backbiter Left – Tip profile – 3.93mm, Bite width-2.38mm, Tip width-5.58mm • Basket Punch – Stingray backbiter Right – Tip profile – 3.93mm, Bite width-2.38mm, Tip width-5.58mm • Suction Punch – 2.5mm, straight with long handle **Grasper** All grasper should have an infinite position sliding lock mechanism that hold tissue firmly withouttearing and slipping – even in the tightest area. Pitbull Loose body Grasper with sliding lock mechanism **Scissors** Scissor Punches should be straight ,loop handle Scissor Punches Should be 20deg. Hooked Left Scissor Punches should be 20deg. Hooked Right **Others** Probe Straight 3.0mm Heavy hook with handle Linear Instruments Fifteen-Unit Sterilization Tray	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications
12	• The generator should have a feature of Automatic scope saver, i.e. when the probe comes too close to endoscope the controller pauses radiofrequency output and resumes radiofrequency • output when the probe is returned to safe distance. • The generator should have facility to use a foot control or a wireless footswitch for convenienceand ease of use.	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications

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 ADs (med)
Recommended / Not Recommended

Appendix-1E (LXVII)

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
	• The generator should also have the facility to use a finger switch controlled probes. • There should be facility to adjust ablation as well as coagulation with different settings • There should be compatibility for probes that are used for minimally invasive treatments of • Tendons and Fascia as well as probes used for sculpting articular cartilage • The generator should be able to take over 40 different types of probes for open and minimallyinvasive arthroscopic procedures • The controller should be have the ability to tell the ambient temperature of the arthroscopicfluid (in the range of 20ºC to 60ºC) when connected with probes that have a thermocouplepresent near their tip.		
13.	Technical Specifications of 90º ablation probe • The probes should be a bipolar radiofrequency probe capable of producing plasma in presenceof a saline conductive medium • They should have multi-electrode technology for even and continuous plasma formation forvolumetric tissue removal • The probes should have capability for volumetric tissue ablation as well as coagulation • They should be able to operate at different settings to increase and decrease both the ablationand coagulation effects • They should be recognised by the RF generator and default settings should be appliedautomatically on detecting the probe • The probes should have suction capability as well and atleast one probe with a star shapedsuction port for increased suction capacity • The probes should automatically stop ablating if it gets too close to the arthroscope and startablating again when a safe distance is attained (intelligent scope saver feature) • The probes should have a tip angle of 90º, maximum tip diameter of 5.5mm and a shaftdiameter of 3.75mm • They should be capable of ablating at 1.5g/minute	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications
14.	Technical Specifications of 50º ablation probe • The probes should be a bipolar radiofrequency probe capable of producing plasma in presenceof a saline conductive medium • They should have multi-electrode technology for even and continuous plasma formation forvolumetric tissue removal • The probes should have capability for volumetric tissue ablation as well as coagulation	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications

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 ADG(Med)

Recommended / Not Recommended

Appendix-1E (LXVIII)

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
14.	Technical Specifications of 50° ablation probe • They should be able to operate at different settings to increase and decrease both the ablationand coagulation effects • They should be recognised by the RF generator and default settings should be appliedautomatically on detecting the probe • The probes should have suction capability as well and at least one probe with a star shapedsuction port for increased suction capacity • The probes should automatically stop ablating if it gets too close to the arthroscope and startablating again when a safe distance is attained (intelligent scope saver feature) • The probes should have a tip angle of 50°, maximum tip diameter of 5.5mm and a shaftdiameter of 3.75mm • They should be capable of ablating at 1.5g/minute	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications
15.	Technical Specifications of 90° ablation probe • The probes should be a bipolar radiofrequency probe capable of producing plasma in presenceof a saline conductive medium • They should have multi-electrode technology for even and continuous plasma formation forvolumetric tissue removal • The probes should have capability for volumetric tissue ablation as well as coagulation • They should be able to operate at different settings to increase and decrease both the ablationand coagulation effects • They should be recognised by the RF generator and default settings should be appliedautomatically on detecting the probe • The probes should have suction capability as well and at least one probe with a star shapedsuction port for increased suction capacity • The probes should automatically stop ablating if it gets too close to the arthroscope and startablating again when a safe distance is attained (intelligent scope saver feature) • The probes should have a tip angle of 90°, maximum tip diameter of 5.5mm and a shaftdiameter of 3.75mm • They should be capable of ablating at 1.5g/minute	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications

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 ADs (med)

Recommended/Not Recommended

Appendix-1E (LXIX)

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
16.	Technical Specifications of hooked dissection probe • The probe should be a bipolar radiofrequency probe capable of producing plasma in presence ofa saline conductive medium • It should be capable of producing an even and continuous plasma formation • The probe should have capability for precise targeted tissue cutting as well as coagulation • It should be able to operate at different settings to increase and decrease both the ablation andcoagulation effects • It should be recognized by the RF generator and default settings should be applied automaticallyon detecting the probe • The probe should automatically stop ablating if it gets too close to the arthroscope and startablating again when a safe distance is attained (intelligent scope saver feature) • The probe should have 30° angle at the distal end for easy access and should have a hook likeelectrode for cutting and coagulation purposes	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications
17.	Technical Specifications of articular cartilage debridement probe • The probe should be a bipolar radiofrequency probe capable of producing plasma in presence ofa saline conductive medium • They should have multi-electrode technology for even and continuous plasma formation forvolumetric tissue removal • The probes should have capability for volumetric tissue ablation as well as coagulation • They should be able to operate at different settings to increase and decrease both the ablationand coagulation effects • They should be recognized by the RF generator and default settings should be appliedautomatically on detecting the probe • The probes should automatically stop ablating if it gets too close to the arthroscope and startablating again when a safe distance is attained (intelligent scope saver feature) • The probes should have a recessed ring electrode for controlled gentle ablation and a annulusshape to allow flow of saline through the middle to decrease the temperature • The probe should have a dye around the tip that changes color at 50°C with a 10% error margin • The probe should have a shaft diameter of 3mm, a 2.3mm circular annulated tip and a 15° angle	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications

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 ADG (Med)

Recommended / Not Recommended

Appendix-1E (LXX)

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
18	Technical Specifications of probes used for tendon & fascia treatments • The probes should be a bipolar radiofrequency probe capable of producing plasma in presenceof a saline conductive medium • They should be capable of producing an even and continuous plasma formation • The probes should have capability for creating plasma for precisely 500ms on depressing thefoot pedal and must work with the RF generator to cut-off plasma formation after 500ms • They should be able to operate at different settings to increase and decrease both the ablationand coagulation effects • They should be recognized by the RF generator and default settings should be appliedautomatically on detecting the probe • The probes should automatically stop ablating if it gets too close to the arthroscope and startablating again when a safe distance is attained (intelligent scope saver feature) • The probes should not be more than 0.8mm tip • There should be two probes with two different lengths of 3 inches & 5 inches for open tendon& fascia surgeries and arthroscopic tendon surgeries respectively • The probe used for open surgeries must come with built in saline delivery mechanism	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications
19	Technical Specifications of probe used for separation of soft tissue from bone • The probe should be a bipolar radiofrequency probe capable of producing plasma in presence ofa saline conductive medium • It should be capable of producing an even and continuous plasma formation • The probe should have capability for precise targeted tissue cutting as well as coagulation • It should be able to operate at different settings to increase and decrease both the ablation andcoagulation effects • It should be recognized by the RF generator and default settings should be applied automaticallyon detecting the probe • The probe should automatically stop ablating if it gets too close to the arthroscope and startablating again when a safe distance is attained (intelligent scope saver feature) • The probe should have 20° angle at the distal end for easy access and should have a hook likeelectrode for cutting and coagulation purposes	Board should physically check the machine for aforementioned parameters during demonstration	As per specifications

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 ADGs (med)

Recommended / Not Recommended

Appendix-1E (LXXI)

Sl. No.	Specifications	Procedure suggested for trial by board of officers	Results expected/Desired
20	Must be US-FDA/ European CE/ BIS approved	Manufacturer must submit an undertaking and supportive documents in this regard	As per specification
21	Warranty for 2 year followed by 5 years CMC		

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