Bihar Medical Services & Infrastructure Corporation Limited, 2nd & 3rd Floor, Swasthya Bhawan, Behind IGIMS, Sheikhpura, Adjacent to State Health Society, Patna 800023, Phone/Fax: +91612 2283287,+ 91612 2283288

Corrigendum-II

Bihar Medical Services and Infrastructure Corporation Limited (BMSICL) had invited E-Bids from the interested parties for the procurement, rate contract and the supply of medical equipment for different Govt. Institutions of Bihar vide Notice Inviting Tender No.- BMSICL/2023-24/ME-321. During and after Pre-bid meeting various suggestions were received from different prospective bidders regarding amendment in technical specification of equipment which were discussed and deliberated on by the experts, who after due deliberation recommended certain amendments in the technical specification of the equipment, which are annexed as Annexure-I of this corrigendum. In order to facilitate maximum participation of bidders the tender schedule is being revised as follows:-

Tender Reference No.	**BMSICL/2023-24/ME-321**
Last date and time of submission of online bids	**20th December 2023 till 17:00 Hrs.**
Last date and time of submission of original documents of EMD, Tender Fee and Document	**22nd December 2023 till 14:00 Hrs.**
Date, Time and Place of opening of Technical Bid	**22nd December 2023 (at 15:00 Hrs.) on the website of https:/eproc2.bihar.gov.in in the office of BMSICL**
Date and time of opening of financial Bids	**To be announced later on https:/eproc2.bihar.gov.in**

Note:-

1. **Bidders are advised to refer to the Annexure-I of this corrigendum before submission of bid.**
2. **Those who have submitted their bids are requested to re-submit their bids in accordance with this corrigendum.**

Annexed:- as above

Sd/-
GM (Procurement)
BMSICL

Annexure-I			
Name of Equipment :- A. List of things required to start a Arthroscopy specialty Centre (For Medical College & Hospital and Super Specialty)			
SI. No	**Equipment**	**Technical Specification as per tender**	**Final Amendment**
1	**Arthroscopic Tower Central Unit**	The video Cart should have Shockproof powder-coating	No Change
		Should have Anti-Static roller set with cable guards Ø 125mm	Should have Anti-Static roller set with cable guards
		Should have Detachable cable guards	No Change
		Should have minimum 4 lockable castors	No Change
		Should have Isolating transformer 2000VA with earth leakage guard	No Change
		Should have a minimum of 5 storage shelves	Should have a minimum of 4-5 storage shelves
		Should also have an option extendable storage shelf	No Change
		Should have provision of Drawer with lock	No Change
		Should allow Mounting position for central-monitor-mount	Should Mounting position for central-monitor-mount
		Should also allow Mounting position for articulation-monitor-arm	Should Mounting position for articulation-monitor-arm
		Should also have additional Mounting position for tablet-arm	No Change
		Should have Cable winding aid	No Change
		Should also have Foot Pedal Holder, Camera Holder & Fluid Bag Holder	No Change
			Should be US FDA/European CE approved
2	**High Definition camera, Light Source and image management system 30° & 70° arthroscopes**	**4K/UHD Camera Console**	No Change
		The Console should combine the latest technology, 4Kvision (2160p), 4K 3-Chip CMOS camera with up to 10-bit for 1 billion colorizations	The Console should combine the latest technology, 4Kvision (2160p), 4K 3-Chip CMOS camera
		Should have Built in Wi-Fi router for wireless connectivity& transmission	Deleted

		Should have preferably One Console and One Unique Tablet Interface to simplify use, and programmable individual surgeon preferences to enhance the user experience.	Deleted
		Camera Rear Panel should have numerous Input & Display Port/DVI Outputs/3G SDI Outputs.	Camera Rear Panel should have inputs/outputs like Display port or 12G SDI/3G SDI or HDMI 2.0 for 4K and DVI or HDMI for FULL HD output".
		Camera should have resolution of 3840X2160 lines with Progressive Scan Technology.	No Change
		The system should give Surgical display (Heads-up display) in the monitor showing current values for Pump, Shaver, RF settings	Deleted
		LED Light Source	**LED Light Source (300 watt or more)**
		The LED light source should have minimum 30,000-hour Life span (14 years at 40 hours per week)	The LED light source should have minimum 30,000 hour life span and it should be covered under 03 years warranty period
		XE light source should have at least 500-hour Life span.	Deleted
		Power consumption: 100 W (light output equivalent to approx. 400 W Xenon)	Deleted
		Light output/light flux: minimum of 1,800 lumen or more (typical)	Light output/light flux: minimum of 1400 lumen or more (typical)
		Should be Compatible with Light Cables of Different Manufactures	No Change
		Should have Light guide port turret with ACMI™ Standard, Storz™, Wolf™, and Olympus™ light cable options	No Change
		Integrated Image Management	No Change

		· Should have DICOM Capability -Pictures should be Exported to hospital PACS	No Change
		· Should have just HD 1920 X 1080 Recorder	4K UHD Recorder
		· Should have provision to Export data to Network (Shared Folder)	Should have provision to Export data to Network
		· Export of Images/Video to USB, I-Pad, Desktop, Laptop through Networking/Wi-Fi connectivity.	No Change
		· Should have network based Live video streaming.	No Change
		· Should have minimum 500 GB Storage or more space in console.	No Change
		· Surgeons should review, edit, annotate and tag stills and video recordings, as well as create and instantly transmit images, videos and educational postoperative reports to patients with help of IPad/wireless tab through a pre-installed surgeon software	Surgeons should review, edit, annotate and tag stills and video recordings, as well as create and instantly transmit images, videos and educational postoperative reports to patients with help of I Pad/wireless tab/ Wireless/LAN through a pre-installed surgeon software
		UHD 4K Camera Head	No Change
		The 4K Camera head should have resolution of minimum 3840 x 2160 Pixel (8.3 Million Pixels)	The 4K Camera head should have resolution of minimum 3840 x 2160 Pixel
		Camera Head should be of Titanium Housing and Hermetically Sealed for Autoclaving	Camera Head should have metal housing and should be plasma or ETO or Autoclavable
		Camera Head should have Programmable Buttons to Set Surgeon Preferences.	No Change
		Titanium housing with 2 programmable buttons for 5 functions (4 individual presets + White Balance)	Metal housing with 2 programmable buttons for 4 functions or more
		Inbuilt zoom facility should be available regardless of telescope used	No Change
		The camera head should have minimum 1.5x digital zoom or more	No Change

		Should be Waterproof and disinfectant-proof	No Change
		UHD 4K Monitor	No Change
		Should be minimum 31" to 41" 4K monitor with Resolution of 3840 x 2160 (4 times HD)	Should be minimum 31" or more 4K monitor with Resolution of 3840 x 2160 (4 times HD)
		Should have Picture-in-Picture and Side-by-Side Display Modes	No Change
		Monitor should support 10 bits (1.073 billion colors)	Monitor should support 4K camera System
		Should have Versatile Multi-Format Signal Support	No Change
		Should have Wide Screen and aspect ratio of 16:9	No Change
		The Contrast Ratio should be 1400:1 or more	No Change
		The Video Input should have 1 Display Port, 1 DVI port & 1 3G-SDI	No Change
		Video Output: 1 DVI port & 1 3G-SDI	Video Output: 1 DVI port/HDMI/4K compatible/ 3G-SDI
		4K Arthroscopes – 30 Degree	No Change
		4K Arthroscopes 30° should have diameter of 4mm ± 10% diameter with minimum of 152mm length with its corresponding sheath and obturator.	4K Arthroscopes 30° should have diameter of 4mm ± 10% diameter with minimum of 140 mm or more length with its corresponding sheath and obturator.
		Scope Should be a Wide Angle, Direct View 4K Arthroscope	No Change
		The scope should be fully Autoclavable.	No Change
		The 4K scope should offer High depth of field focus with high resolution all the way to the edge of picture	No Change
		Should have Anti-reflective coated, high-quality glass cone (insight light post)	No Change
		Should be Scratch resistant sapphire lens on proximal and distal tip	No Change
		4K Arthroscopes – 70 Degree	No Change

		4K Arthroscopes 70° should have 4.0mm ± 10% diameter and minimum 155mm±5% length with its corresponding sheath and obturator	4K Arthroscopes 70° should have 4.0mm ± 10% diameter and minimum 155mm±5% length with its corresponding sheath and obturator
		Scope Should be a Wide Angle, Direct View 4K Arthroscope	No Change
		The scope should be fully Autoclavable	No Change
		Should offer High depth of field focus with high resolution all the way to the edge of picture	No Change
		Should have Anti-reflective coated, high-quality glass cone (insight light post)	No Change
		Should be Scratch resistant sapphire lens on proximal and distal tip	No Change
		Fibre-Optic Light Cable	No Change
		Should have Light Guide Cable fused at proximal end to maximize light transmission having diameter of minimum 4.5 mm & length not less than 2.5mm	No Change
3	**Arthroscopic Shaver System**	**Shaver Console**	No Change
		The system should have to 2 independent ports for Handpiece attachments and 2 independent ports for Foot Switch	No Change
		The Motor should offer Forward, Reverse and Oscillation Mode for Resection	No Change
		Should have different modes of Oscillation like Standard; Efficient; Aggressive.	Should have different modes of Oscillation
		Should have intuitive touchscreen control	No Change
		Should be able to operate 2 handpieces simultaneously if required	No Change
		The system should have automatic handpiece recognition	No Change
		The system should be controlled via footswitch and/or touchscreen.	No Change
		Should have an option of integration with arthroscopic pump if required	Deleted
		Shaver Handpiece	No Change
		The handpiece should have variable RPM upto 8000 or more	No Change

		The autoclavable shaver hand piece, which should be compact, lightweight and ergonomically designed, should be available with & without hand control options.	No Change
		The connecting cable should be autoclavable and replaceable with length of approx. 10Ft or more	No Change
		The shaver handpiece should be lightweight and should have detachable suction lever.	No Change
		The shaver handpiece should be compatible with both shaver blade, burr and special blades (if any)	No Change
		Handpiece should be compatible with microblades of minimum size 1.9mm or less	Handpiece should be compatible with microblade/small blades of minimum size 1.9 +/- 10% mm or less
		Input voltage of 100 to 240V, 50/60 Hz power consumption not more than 350VA	Input voltage of 100 to 240V, 50/60 Hz
		Shaver Footswitch	No Change
		Should be water resistant	No Change
		The variable speed foot pedal should be sturdy with a long connecting cable.	No Change
		The foot pedal controls should include three standard operating modes, i.e. Forward, Reverse and Oscillation.	No Change
		Should have speed control & toggle options	No Change
4	**Arthroscopic radio-frequency ablation system**	System should have intuitive touchscreen control	No Change
		RF should be controlled via hand-control buttons on probes, foot pedal or touchscreen.	No Change
		Should have hand control also available with foot pedal connected.	No Change
		Should have optional foot pedal override functionality.	No Change
		System should have 3 button controls with Ablation, Coagulation and Ablation-Power-Setting.	System should have 2 or more button controls with Ablation,Coagulation and Ablation-Power-Setting.
		Should have Metal proximity detection should be available for Scope saver.	No Change
		Probes can get unplugged and replugged during surgical time and system can therefore withstand power-interruptions	No Change

		The System should work on low voltage 100 kHz square wave (~100- 240 V) and should produce only less temperature for more patient safety	No Change
		The System should be based on low temperature Bi-Polar Radio frequency technology. They should not have any need for the secondary patient grounding pad.	No Change
		The RF probe should have Multi Electrode Technology that will allow a uniform production of plasma	No Change
	Note- Equipment Serial No. 1,2,3 and 4 should be compatible to each othe. L-1 will be decided on the basis of unit cost of above equipment from Serial no. 1,2,3 and 4. Price of each equipment should be quoted separately. Equipment Serial No. 1,2,3 and 4 will be consider as single equipment.		
5	**Arthroscopic Instruments: Meniscal Punches, graspers, scissors, shavers,probes.**	a. Probe Hook with Metal Handle 5.4mm tip	a. Probe Hook with Metal Handle 5-5.5mm tip
		b. Straight Punch Bakset Type	No Change
		c. Left Punch Basket Type	No Change
		d. Right Punch Basket Type	No Change
		e. Crocodile Type Grasper with Hook and serrations on Jaw	Grasper with Hook and serrations on Jaw
		f. Low Profile Suture Retriever Straight Jaw	No Change
		g. Arthroscopic Scissors 3.4mm Diameter	No Change
		h. Knot Pusher Closed End with Ring Hook	Knot Pusher Closed End
		i. Suture Cutter for #2-0, #2, #5 sutures	No Change
6	**ACL, PCL, Knee, Shoulder Instrumentation set.**	**ACL, PCL and Knee Instrumentation System**	No Change
		1. ACL Transportal offset	No Change
		a. 6mm, 7mm, 8mm	No Change
		b. Handle should be colour coded for easy identification	No Change
		c. Markings to be graduated on shaft of Offset for evaluation under scope	No Change
		d. Finger point type design should be there for easier reach	No Change
		2. Tendon Stripper Closed	No Change
		a. Should be at least 300mm in length	No Change
		b. 7mm Dia	No Change
		c. Markings to be graduated at 10 mm interval	No Change
		3. Tendon Stripper Open	No Change
		a. Pigtail Design	Standard Design
		b. Markings to be graduated at 10 mm interval	No Change

		c. Should be 300mm in length	No Change
		4. 4.5 Endoscopic Drill	No Change
		a. Markings to be Graduated at every 10 mm	No Change
		b. 2.4mm cannulation	No Change
		5. Cannulated Headed Reamer (Flower tip)	No Change
		a. 6mm, 7mm, 8mm, 9mm, 10mm, 11mm	No Change
		b. Marking to be Graduated every 5mm	No Change
		c. 2.4mm cannulation	No Change
		6. Tibial Reamer	No Change
		a. 6mm, 7mm, 8mm, 9mm, 10mm, 11mm	No Change
		b. Markings to be Graduated every 10mm	No Change
		c. 2.4mm cannulation	No Change
		7. Tibial Zig and Femoral zig with Marking Hook and Bullet	No Change
		a. Should have side Release Zig Handle	No Change
		b. Tibial Marking Zig should Have Finger Tip Design	No Change
		c. 5mm marking for angle calculation on ACL marking Hook	No Change
		d. 2.4mm cannulation in bullet with Ratcheting Sleeve	No Change
		e. 10 mm markings lo be graduated for the Identification of tibial length	No Change
		f. Femoral Zig with at least 4mm increments! marking on tip and 5mm on handle	No Change
		8. Screw Driver interference screw with slap device	Screw Driver for interference
		a. Ratcheting Handle Screw driver for convenient operation	Deleted
		b. Markings to graduated for determination of screw length	Deleted
		c. 1.1 mm cannulation in Shaft	Deleted
		9. Graft Preparation System	No Change
		a. Graft Master Board with multiple attachments compatibility	No Change
		b. Master board with Scale Function	No Change
		c. Graft Sizing Block with 4.5mm-12mm holes in 0.5mm increments	No Change
		10. PCL Zig handle	No Change
		a. Femoral PCL zig handle with 2mm markings graduated on Tip	No Change
		b. 5mm markings graduated on Handle	No Change
		c. Finger Tip Design With Pin for Stabile placement	No Change

		d. Tibial PCL Zig handle with 2nm markings graduated on Tip	No Change
		e. 5mm markings graduated on Handle	No Change
		f. Finger Tip Design With Pin for Stable Placement	No Change
		11. PCL Instruments	No Change
		a. PCL Suture Pusher	No Change
		b. PCL Rasp with Curved Shaft	No Change
		c. PCL Poplileteal Curette	PCL Poplileteal Curette/retractor
		d. PCL Curved Curette Closed End	Deleted
		12. Master Case with Silicon Mat for Safe Storage	Master Case for Safe Storage
		Shoulder Instruments Set	No Change
		1. Cannula Instrument	No Change
		a.Short and Thin Orbutrator for 6mm Cannula	No Change
		b.Long and Thin Orbutrator for 6mm Cannula	No Change
		c. Short and Thick Orbutrator for 8.25mm Cannula	No Change
		d. Long and Thick Orbutrator for 8.25mm Cannula	No Change
		e. Extra Long Switching Stick, 4 mm x 12 in - 2 Pc	No Change
		f. 8 mm PassPort Inserter Cannula	8 mm silicon/ Inserter Cannula
		2. Suture management Instruments	No Change
		a. Probe, Hook 5.4 mm, Tip w/5 mm Markings	No Change
		b. Suture Retriever, ø3.4 mm, Straight	No Change
		c. BirdBeak, 2.75 mm, 22° Up Tip	No Change
		d. BirdBeak, 2.75 mm, 45° Up Tip	No Change
		e. Suture Hook	Suture/Crochet Hook
		f. Knot Pusher, closed end	No Change
		g. FastPass Scorpion SL, Suture Passer Reusable Type with Disposable Needle	Suture Passer Reusable Type with Disposable Needle
		h. Labral Scorpion QL Suture Passer	Deleted
		i.Knee Scorpion - AR-12990	Deleted
		j. Penetrator Suture Retriever, 15°	No Change
		k. Suture Cutter, 4.2 mm, Straight, closed end	No Change
		l. FiberTape Suture Cutter	No Change
		m. FiberWire Grasper w/SR Handle	grasper and retriver
		3. Tissue Management Instruments	No Change
		a. Rotator Cuff Grasper, 4.2 mm Straight Shaft w/SR Handle	No Change
		b. KingFisher Suture Retriever/Tissue Grasper with SR Handle	Suture Retriever/Tissue Grasper
		c. Curette, Both Sides Cut, 5.4 mm Ring	Curette

		d. Shoulder Debridement Rasp	No Change
		e. SLAP Rasp	No Change
		f. Glenoid Rasp	No Change
		g. Bankart Rasp 90 Degree Profile	No Change
		h. Shoulder Tissue Elevator, 15° Smooth with Hohmann Type End	Deleted
		i. Shoulder Tissue Elevator, 30° Smooth with Hohmann Type End	Deleted
		4. Instruments for Implantation	
		a. Punch for 5.5 mm Corkscrew FT, 4.75 mm and 5.5 mm SwiveLock Anchor	Deleted
		b. Punch/Tap for 4.75 mm SwiveLock Anchor	Deleted
		c. Spear, Trocar and Blunt Obturator for 3 mm SutureTak, 2.4 mm and 2.9 mm PushLocks	Deleted
		d. Circumferential Teeth Curved Spear w/ Flexible Sharp Obturator for FiberTak and Knotless FiberTak Anchors, Reusable	Deleted
		e. Circumferential Teeth Tight Curved Spear w/ Flexible Sharp Obturator for FiberTak and Knotless FiberTak Anchors, Reusable	Deleted
		f. Fishmouth Spear for FiberTak and Knotless FiberTak Anchors, Reusable	Deleted
		g. 1.6 mm Drill for FiberTak, Sterile	Deleted
		h. 1.8 mm Rigid Drill for FiberTak, Sterile	Deleted
		i. 1.6 mm Flexible Drill with Sharp Obturator for FiberTak	Deleted
		j. 1.8 mm Flexible Drill with Sharp Obturator for FiberTak	Deleted
		5. Shoulder Instrument Case with Holes and silicon Slots for instruments storage	Shoulder Instrument Case for storage
		6. Flip Cutter- one set (all sizes)	Deleted
7	**Arthroscopic Implants: Include anchors, sutures, screws, and other devices used for repairing and stabilizing joints.**	Deleted	Deleted
8	**Arthroscopic Fluid**	Pump System should have intuitive touchscreen control	No Change

	Management System	Should have Presets for various joints like (Shoulder, Knee, Small Joint, Hip)	No Change
		The Flowrate: ≥ 1500 ml/min should be automatically adjusted	No Change
		The max flowrate setting should be adjustable from 50% to 100% (increments of 10%)	No Change
		Flow rate should be change as per operating cannula connection	No Change
		The pressure setting should be adjustable between 10 and 120. (Increments of 5).	No Change
		Should have automatic Joint pressure maintenance up-to 120 mmHg	No Change
		Should have the real time flow rate monitoring	No Change
		The estimated fluid usage information should be available.	No Change
		Should have interface with Shaver System if required	No Change
		Should have shaver boost functionality: automated pressure increases when shaver is utilized; 0 to 50% (10% increment steps)	No Change
		Should have Lavage mode – increases pressure when utilized	No Change
		Should have 2 tubing options: One-piece tubing or 2-piece tubing (day tubing + patient-end tubing)	should be multiple tubing option
		The overpressure control should be 300 mmHg ± 5	No Change
9	**Arthroscopic leg holder and traction system**	a. 3-Point Shoulder Distraction System	No Change
		b. Atraumatic Hand Held System	No Change
10	**Surgical Power Tools: Electric drills and saws and Reamer Attachment**	**Power System** **GENERAL INFORMATION** **Intended Use**	No Change
		The intended use of the Power System is for cutting, shaping, and preparing bone and bone-related tissues in a variety of surgical procedures. The system is usable for performing numerous operations such as sawing, reaming and drilling as well as driving wires, pins and various instruments.	No Change
		PRODUCT CHARACTERISTICS **Double Trigger Handpiece**	No Change
		Type: Double Trigger Handpiece	No Change
		Max. drill speed: 1’500 rpm	No Change
		Max. saw speed: 12’500 cpm	No Change
		Max. torque: 20 Nm	No Change

		Mode: Forward/Reverse/Oscillating	No Change
		Speed Trigger: Variable	No Change
		Toggle Switch: On/Off	No Change
		Cannulation: 4.0 mm	No Change
		Dimensions (HxWxD): 152 x 127 x 52 mm± 10%	No Change
		Weight: Not more than 800 gm	No Change
		Material: Aluminum	No Change
		Compatibility: Battery and AC Power Supply	No Change
		Drill Attachments	No Change
		Max. Speed: 1’500 rpm	No Change
		Max. Torque: 3.8 Nm	No Change
		Color Code: Blue	No Change
		Shank Styles: Small AO, Hudson, Trinkle, Zimmer/ Hudson, 1/4in Key Hybrid Chuck, 5/32in Key Hybrid Chuck	No Change
		Material: Stainless Steel	No Change
		Standard Reamer Attachments	No Change
		Max. Speed: 600 rpm	No Change
		Max. Torque: 9.5 Nm	No Change
		Color Code: Yellow	No Change
		Shank Styles: AO, Small AO, Hudson, Trinkle, Zimmer/ Hudson, Harris, DCS/DHS, 1/4in Key Hybrid Chuck	No Change
		Material: Stainless Steel	No Change
		High Torque Reamer Attachments	No Change
		Max. Speed: 270 rpm	No Change
		Max. Torque: 20.0 Nm	No Change
		Color Code: Red	No Change
		Shank Styles: AO, Hudson, Trinkle, Harris, Zimmer/Hudson, DCS/DHS, 1/4in Key Hybrid Chuck	No Change
		Material: Stainless Steel	No Change
		Pin Driver Max. Speed: 1’500 rpm	No Change
		Max. Torque: 3.8 Nm	No Change
		Clamping Range: 2.0 – 4.0 mm	No Change
		Material: Stainless Steel	No Change
		Special Feature: No pin diameter adjustment needed	No Change
		Wire Driver	No Change
		Max. Speed: 1’500 rpm	No Change
		Max. Torque: 3.8 Nm	No Change
		Clamping Range: 0.6 – 2.2 mm	No Change
		Material: Stainless Steel	No Change

		Special Feature: No pin diameter adjustment needed	No Change
		Sagittal Saw Attachment	No Change
		Max. Speed: 12’500 cpm	No Change
		Arc of Deflection: 4.5° (+/- 2.25°)	No Change
		Material: Stainless Steel	No Change
		Special Feature: Single blade can be adjusted +/- 10mm from nominal position within the attachment	No Change
		Reciprocating Saw Attachment	No Change
		Max. Speed: 12’500 cpm	No Change
		Stroke: 3.8 mm± 5%	No Change
		Material: Stainless Steel	No Change
		Special Feature: Reciprocating Saw attachment can be converted into a Sternum saw by connecting a Sternum Guard (Standard or Large)	No Change
		Aseptic and Sterilisable Battery	No Change
		Battery Type: Li-Ion, 14.4 VDC, 2000 mAh	No Change
		Battery Capacity: 28.8 Wh±10 %	No Change
		Charging type: max. 60min (in average: 40 min)	No Change
		Special Feature: Equipped with real-time power gauge that indicates remaining battery capacity during the procedure	No Change
		Battery Charger	No Change
		Charging Bays: 6	No Change
		Electrical Requirements: 100–240 V ~ (AC), 50/60 Hz.	No Change
		Special Feature: Visual indicator for real-time charging status and advanced battery error detection.	No Change
		Sterilization Case	No Change
		1 HP Basket with Housing Slot	No Change
Note- Equipment/ Instrument should be USFDA/European CE Approved (Sl. No. 1 to 10)			**Note- Equipment/ Instrument should be USFDA/European CE Approved (Sl. No. 2 to 10)**
Name of Equipment :-Arthroscope System (For District Hospital/SDH/CHC/PHC)			
SI. No	**Technical Specification as per tender**		**Final Amendment**
	<u>Full High Definition Digital Camera Head.</u>		
	Digital, Triple chip, full high definition, micro lens CCD Camera (Charged Couple device).		Digital Triple chip CCD/ CMOS full high definition camera system

	· Pixels Quantity: 1920 x 1080i · Scanning Pattern: 1920x1080 interlaced (1080i) x3 CCD = 6220800 Pixels	Pixels Quantity: 1920 x 1080p Scanning Pattern: 1920x1080 Progressive Scan (1080p) x3 CCD/CMOS
	· Aspect Ratio: Capable of displaying wide screen 16:9 format. Standard definition television (SDTV) has a 4:3 aspect ratio.	Aspect Ratio: Capable of displaying wide screen 16:9
	· Compatible with Video Arthroscopes as well as direct view scopes.	Deleted
	· 3 buttons for remote control of the CCU and accessories. Able to control 6 functions on the menu using these 3 buttons · inbuilt zoom facility, regardless of telescope used.	02 or more buttons for remote control of the CCU and accessories. Able to control 5 or more functions on the menu using these buttons · inbuilt zoom facilities, regardless of telescope used.
	· Automatic optimization of all settings.	No Change
	· Digital signals processing, modes of operation automatic and manual, PAL compatible.	Digital signals processing, modes of operation automatic and manual,NTSC/ PAL compatible.
	· White balancing possible from the CCU as well as from the sterile field.	No Change
	· Minimum Signal to Noise ratio of 60 decibels (dB).	No Change
	· SDI Output, BNC, S-VHS and RGB outputs.	SDI/HDMI/DVI / BNC/S-VHS/ RGB output
	· Leakage current not more than 25 microamps in control unit and not more than 10 microampsin camera head	Deleted
	· Weight not exceeding 165 grams, Camera head cable minimum 12ft.	Light weight camera head
	· C-Mount Zoom coupler 19.5 mm.	C-Mount Zoom coupler between 15-32 mm
	Full High Definition Camera Control Unit	No Change
	· ACG Microprocessor controlled	No Change
	· Video Inputs : S-Video, (Y/C), Composite, HD-SDI, IEEE-1394	Deleted

	· Video Outputs : S-Video, (Y/C), Composite, HD-SDI, DVI	Video Outputs: HDMI/SDI/ DVI / S-Video, (Y/C), Composite/ HD-SDI
	· Video Formats : NTSC and PAL	Video Formats: NTSC/ PAL
	· USB 2.0 Ports : Type A receptacle, software compatible with NS16C550	Deleted
	· Video recording: on pendrive through USB port	Deleted
	· Parallel Port : Bidirectional Input / output with female DB-25 Receptacle	Deleted
	· Serial Port : UART Port with male DB- 9 receptacle	Deleted
	· VGA Port : 15-Pin female · Ethernet Ports : Auto select 10Base-T/100 Base-TX	Deleted
	·Storage : Supports read/ write of USB flash media of different sizes; CD-R/RW; 650 MB or700MB.	Deleted
	· Still Image File Formats : 24-bit RGB bitmap, 24-bit JPEG	Deleted
	· Still Image Resolution NTSC/PAL.	No Change
	· 1920 x 1080i@ 24 bit color depth 16.77 million True Colour	1920 x 1080p HD True Colour
	· Motion Video File Format : MPED1, MPEG2, MPEG4	Deleted
	· Power Requirements : Input Voltage: 100-240 VAC, 50/60 Hz @ 90VA	Deleted
	·Processor : Intel® Pentium® M 1.6 GHz	Deleted
	· Operating System : Microsoft® embedded Windows® XP or advanced.	Deleted
		USFDA/European CE (Issued by notified body/Declaration of conformity according to the EU MDR 2017)
	<u>High Definition Medical Grade Monitor</u>	High Definition Medical Grade Monitor (26" or more)
	· Medical grade LCD monitor, flat screen	No Change
	· Ability to display High Definition Resolution of 1920 X 1080i	Ability to display High Definition Resolution of 1920 X 1080p
	· Wide Screen and aspect ratio of 16:9	No Change
	· Compact control buttons on the sides of the panel	No Change
	· Screen diagonal 24”	· Screen diagonal 26” or more

	· Monitor stand compatible with monitor	No Change
		USFDA/European CE (Issued by notified body/Declaration of conformity according to the EU MDR 2017)
	LED Light Source Specs	No Change
	· Light Source Type LED (Light Emitting Diode)	No Change
	· Color Temperature 7000˚ K	Color Temperature 6000-7000˚ K
	· LED Life 30,000 hours (typical)	LED Life 30,000 hours or more
	· Light Guide Adaptor Turret type to fit your choice of light cable	No Change
	· Brightness Control 0-100% Dimming	No Change
	· Input Voltage 100-240V AC, 50/60 Hz	No Change
	· Rated Power 90 watt	Deleted
	· Dimensions 11.22" W x 4.49" H x 13.23" D	Deleted
	· Weight 8.05 lbs / 3.42 kg	Deleted
	Fiber Optic Light Cable	No Change
	· Universal fibre optic cable with adapters. Not less than 5mm thick and 10 ft long.	Universal fibre optic cable with adapters. Not less than 4.5mm thick and 7-10 ft long.
	Arthroscopy Set(Arthroscopic, Sheath and Obturator)	No Change
	· Wide Angle, Direct View High Definition Arthroscopic	No Change
	· Light Guide insertion on opposite side of the direction of view with a J-lock fixation for cannula.	No Change
	· Working Length of Not more than 160mm	· Working Length of Not more than 180mm
	· Optimal centre-to-edge resolution for enhanced picture quality	No Change
	· Angle of view: 70 degree	No Change
	· Diameter 4mm	No Change
	· Fiber optic light transmission incorporated	No Change
	· Standard ocular window for coupling the camera head	No Change
	· Scratch resistance sapphire quoted tip lens	No Change
	· Advanced Rod lens system for optimum brightness, contrast and definition	No Change
	· Arthroscopies should be supplied with compatible cannulas high flow, double valve, fully rotatable with fenestrated tip & conical and blunt tip obturator.	No Change

	· Sheath- 5.95 to 6.0mm, high flow diagnostic cannula, double valve, fully rotatable cannula with fenestrated tip.	No Change
	· Trocar-4.5mm conical obturator to fit with cannula	No Change
	Arthroscopy Set (Arthroscopic, Sheath and Obturator)	No Change
	· Wide Angle, Direct View High Definition Arthroscopic	No Change
	· Light Guide insertion on opposite side of the direction of view with a J-lock fixation for cannula.	No Change
	· Working Length of Not more than 120mm	No Change
	· Optimal centre-to-edge resolution for enhanced picture quality	No Change
	· Angle of view: 30 degree	No Change
	· Diameter 2.7	No Change
	· Fiber optic light transmission incorporated	No Change
	· Standard ocular window for coupling the camera head	No Change
	· Scratch resistance sapphire quoted tip lens	No Change
	· Advanced Rod lens system for optimum brightness, contrast and definition	No Change
	· Arthroscopies should be supplied with compatible cannulas high flow, double valve, fully rotatable with fenestrated tip & conical and blunt tip obturator.	No Change
	· Sheath- 3mm to 4mm, high flow diagnostic cannula, double valve, fully rotatable cannula with fenestrated tip.	No Change
	Trocar-3mm to 4mm conical obturator to fit with cannula.	No Change
	Arthroscopy Set (Arthroscopic, Sheath and Obturator)	No Change
	· Wide Angle, Direct View High Definition Arthroscopic	No Change
	· Light Guide insertion on opposite side of the direction of view with a J-lock fixation for cannula.	No Change
	· Working Length of Not more than 160mm	No Change
	· Optimal centre-to-edge resolution for enhanced picture quality	No Change
	· Angle of view: 30 degree	No Change
	· Diameter 4mm	No Change
	· Fiber optic light transmission incorporated	No Change
	· Standard ocular window for coupling the camera head	No Change
	· Scratch resistance sapphire quoted tip lens	No Change
	· Advanced Rod lens system for optimum brightness, contrast and definition	No Change
	· Arthroscopies should be supplied with compatible cannulas high flow, double valve, fully rotatable with fenestrated tip & conical and blunt tip obturator.	No Change
	· Sheath- 5.95 to 6.0mm, high flow diagnostic cannula, double valve, fully rotatable cannula with fenestrated tip.	Sheath- 5.50 to 6.0mm, high flow diagnostic cannula, double valve, fully rotatable cannula with fenestrated tip.

	· Trocar-4.5mm conical obturator to fit with cannula.	No Change
		Good quality Trolly compatible with Equipments should be supplied
	USFDA/European CE (Issued by Notified body) approved model should be offered.	USFDA & European CE (Issued by Notified Body)
	External fixator (For District Hospital/SDH/CHC/PHC)	No Change
1	Leg Set- consisting of commonly used tubular rod – 02 Nos., Schanz Screw 4.5mm -06 Nos and Polyaxial Clamps for above screw and rods – 12 Nos.	No Change
2	Femur Set – consisting of commonly used Tubular Rods -02 Nos, Schanz Screw 4.5mm, 5mm -03 Nos. each and Polyaxial Clamps for above Screw and Rods -12 Nos.	No Change
3	Forearm Set: Femur Set – consisting of commonly used solid rods for Forearm Fixator -02 Nos, Schanz Screw 3.5mm, 2.5mm - 03 Nos. each and Polyaxial Clamps for above screws and rods -12 Nos.	No Change
4	USFDA/European CE (Issued by Notified body) /BIS Approved model should be offered.	No Change
	Pneumatic drill (For District Hospital/SDH/CHC/PHC)	No Change
1	**The Cannulated Pneumatic Drill handpiece - Compatible with existing attachments**	No Change
a.	Cannulation with 3.2 mm diameter	No Change
b.	Operating pressure : 6 - 7 bars (maximum 10 bars)	No Change
c.	Weight of handpiece 600-800grams without any attachments	No Change
d.	Power 120 w	No Change
e.	Variable Speed from 0-900 rpm	No Change
f.	Noise Level of max 75 db	No Change
g.	Separate forward and reverse triggers	No Change
h.	Safety Device to cut off air supply to drill on handpiece	No Change
i.	Handpiece is compatible with radiolucent drive	No Change
j.	Instant change between clockwise and counterclockwise rotation	No Change
k.	Offers reliable protection of soft tissues with oscillating drill attachment	No Change
l.	Fully Autoclavable	No Change
m.	Fully machine washable	No Change
n.	All Attachments can be fitted on single handpiece	No Change
o.	The reverse trigger automatically locks when the oscillating saw and the reduction drive attachments are attached to handpiece	No Change
2	**Adapter for Lubrication**	No Change
a.	For oiling of hand piece &Autoclavable	No Change
b.	Should be made of Stainless Steel	No Change
3	**Double Air Hose**	No Change

a.	Length 5 meters.	No Change
b.	It should be Autoclavable	No Change
c.	Should have concentric inlet and outlet pipes	No Change
4	Radiolucent Drive Precise aiming and drilling under image intensifier control for lockingintramedullary nails	No Change
	Drill Bit diameter 2.0 to 4.5 mm,	No Change
	Length 100 to 150 mm,	No Change
	Usable length 80 to 120 mm	No Change
	Reduced exposure to x-rays	No Change
5	Jacob's Chuck attachment	No Change
	Chuck capacity up to 0 to 6.5 mm	No Change
	Cannulation of 3.2 mm diameter	No Change
	Maximum Speed of 900rpm	No Change
	Torque of 4-5 Nm	No Change
6	Quick Coupling attachment	No Change
	Cannulation 3.2 mm	No Change
	Maximum Speed: 900 rpm	No Change
	Torque of 4-5 Nm	No Change
7	Reduction Drive for Intramedullary / Acetabular Reaming with reverse option	No Change
	Reaming Speed of 300-350 rpm	No Change
	Reaming Torque of 12-14 Nm	No Change
	Option of attachment with reverse rotation	No Change
8	Quick Coupling for K-wire	No Change
	Continous adjustment facility for wire diameter from 0.6 to 3.2 mm	No Change
	Speed up to 900 rpm	No Change
9	Oscillating Saw attachment with key	No Change
	It can operate on an oscillating frequency of 0 to 14,000 osc/min.	No Change
	Attachment can be locked in 8 different positions	No Change
10	Quick Coupling for drill bits	No Change
	Speed: 0–900 rpm	No Change
	Torque: 0–4.7 Nm	No Change
	Cannulation: 1.3 mm	No Change
11	Quick coupling for DHS / DCS triple reamers	No Change
12	Oscillating Saw Blades (All Sizes)	No Change
	For Trauma 6 For Joint replacement	No Change
13	6 Aluminium case for Pneumatic Drill system, Perforated, Autoclavable 1	No Change
14	Aluminium Box for accessory attachment, Perforated, Autoclavable 1 Technical Specifications for Pneumatic Drill Set – 1. Company should have relevant experience in successful execution of similar work at least in five Institutes of national importance and central government Institutes	No Change
3	Bidder must enclose original literatures & technical data sheet in the support of the technical bid.	No Change

4	Physical demo may preferably be arranged at the time of requirement.	No Change
5	Instruments quality should meet the international standard.	No Change
5	USFDA/European CE (Issued by Notified body) Approved model should be offered	No Change
	Reamer (For District Hospital/SDH/CHC/PHC)	No Change
1	Should be supplied with a driving unit including motor, stand, foot control, flexible shaft, tool kit and container.	No Change
2	Should have a cannulated drill hand piece of maximum speed 1200rpm with Non-corrosive Jacob chuck (0-1/4"). Autoclavable.	No Change
3	Should have a cannulated reaming hand piece with maximum speed 400rpm with AO type quick coupling. Autoclavable.	No Change
4	Should have a pistol grip sagital saw with a set of 5 blades. Autoclavable.	No Change
5	Should have a flexible reamer shaft 8mm diameter fixed head.	No Change
6	Should have a flexible reamer shaft for detachable heads up to 12mm.	No Change
7	Should have reamer heads from 8mm to 12 mm (set of 9).	No Change
8	Should have reamer heads from 12.5mm to 15mm (set of 6).	No Change
9	Should have flexible reamer shaft for detachable heads up to 15mm. Autoclavable.	No Change
10	Should have an extra flexible shaft for driving unit autoclavable.	No Change
11	Should work with input 200 to 240Vac 50 Hz supply.	No Change
12	USFDA/European CE (Issued by Notified body) /BIS Approved model should be offered.	No Change

Name of Equipment :-B. List of Equipment required for Sports Physiotherapy			
SI. No	**Equipment**	**Technical Specification as per tender**	**Final Amendment**
1	**High End Ultrasound Therapy unit-UTS**	The system should give therapeutic ultrasound which stimulates the repair of soft tissues injuries & also relieve pain.	No Change
		The system should have 1 and 3 MHz dual frequency ultrasound therapy unit with touch panel screen.	No Change
		It should have 7 inch TFT colour touch screen Display	No Change
		It should have contact recognition with visual indication.	No Change
		The Beam Non-uniformity Ration (BNR) should be less than 4 (IEC/FDA standard) to prevent hotspots and tissue damage.	No Change
		The Effective Radiating Area (ERA) should be min.5 cm. sq. for large probe & max.1 cm. sq. for small probe.	No Change
		It should have separate connector to connect second optional probe.	No Change

		Mode: Continuous & pulsed; duty cycle 5, 10, 20,30,40,50 and 100%.	No Change
		Max. Intensity 3 w/cm2 in pulsed mode & 2 w/cm2 in continuous mode.	No Change
		The unit should have inbuilt keyboard for easy program storage.	No Change
		It should have more than 40 preprogramed protocols	No Change
		It should have selectable coupling sensitivity.	No Change
		The digital timer unit should ranges from 1-30 mins.	No Change
		It should be supplied with 2 probes- 1 large and 1 small size	No Change
		It should be European CE\ FDA certified with safety class I, type BF.	European CE\ US-FDA certified
2	**Interferential Therapy Unit (with 120 Programme Memory)**	The dual channel electrotherapy unit having IFT-4, IFT-2, TENS, EMS, HV, Russian, Micro currents, Galvanic, Faradic, I/T Curve, etc.	No Change
		It should have 7 inch colored touchscreen.	No Change
		It should have IF current with variable frequencies between 1-250 Hz and should have at least 4 different carrier frequencies between 2-5 kHz.	No Change
		It should have TENS current with variable frequencies between 0.5-250 Hz with peak current amplitude up to 100 mA.	No Change
		The Hi-volt current should have variable frequency ranges from 0.5 – 200 Hz with peak current amplitude up to 300 mA.	No Change
		The Micro current should have frequency ranges up to 400 Hz with peak current amplitude up to 700 µA.	No Change
		It should have application library containing approximately 25 pathologies with 3D pictures for easy use by the user.	No Change
		It should have vector sweep orientation at every 15˚ up to 45˚ in 4 steps.	No Change
		The system should have 120 free program memories.	No Change
		The system should be connectable to optional vacuum unit.	No Change
		It should have digital timer of 60 minutes duration.	No Change
		Delivery Contents:	No Change
		Main unit should be supplied with:	No Change

		4 rubber electrode	No Change
		4 electrode sponge	No Change
		2 electrode cable	No Change
		4 straps (2 large and 2 small)	No Change
		Power supply cord	No Change
		User manual	No Change
3	**LASER THERAPY UNIT (Hand held)**	It should be based on Wavelength of range 810 nm + 980 nm	No Change
		It should have Guide Light of 650 nm - 3 mW.	No Change
		It should have power upto 7 W benefiting tissues at greater depth.	No Change
		Laser should be of class IV.	No Change
		It should work on Emission Continuous (CW), Pulsed, Super pulsed, and E2C	No Change
		It should have different Operation mode like Manual, Single Pulse, Burst and Custom mode	No Change
		It should also have special modes like Joule mode, Timer mode, Trigger point Mode	No Change
		Effect mode 5 specific emission modes to maximize the 5 main effects of laser therapy:	No Change
		Bio-stimulant, Analgesic, Anti-inflammatory, Anti-edema, and Tension Relief.	No Change
		It should have over 60 pathologies with interactive illustrations and protocols sub-divided by phase Pathologies	No Change
		It should Calibration Normative Graphic and acoustic control system for laser emission at handpiece exit in accordance with norm. CE/ EN 60825-1	No Change
		It should have Display "Color TFT 5.7" Touch – screen	No Change
		Equipment should be based on 100-240V 50-60Hz	No Change
		Dimensions of equipment should be approximately 320(W) x 245(D) x 130(H) mm	No Change
		It should not weigh more than 3 kg for easy portability.	No Change
		Should have operating frequency: 10 to 100 Hz.	No Change
		The unit should have 7 Emission Mode: Pulsed, Single Pulse, Continuous Wave, Custom, Anti Inflammatory, Burst and E2C.	No Change
		It should also have special modes like Joule mode, Timer mode, Trigger point Mode	No Change
		It Should be US FDA/ European CE Approved Model.	No Change

		Should be supplied with following accessories:	No Change
		Laser hand piece	No Change
		Footswitch	No Change
		Laser warning sign	No Change
		Carry bag	No Change
		Safety glasses	No Change
		3 pole interlock	No Change
		Power cable	No Change
		Ø 30 mm Applicator	No Change
		Ø 40 mm Applicator	No Change
4	**CRYOTHERAPY Compression Unit (Game Ready)**	The unit should be based on latest air flow technology.	No Change
		Air current flow should be able to regulate accordingly.	No Change
		The unit should have customized and preset treatment mode.	No Change
		It should have intelligent air flow control system with temperature up to -22°C.	No Change
		It should have auto self-detection controlling system.	No Change
		It should have provision of self-defrosting system for the best cooling performance.	No Change
		It should have touch buttons and the LED display for easy and practical operation.	No Change
		It should have adjustable treatment time upto 1-99 min.	No Change
		It should have airflow output 1-10 levels adjustable, 30L/min-120L/min, Range 10L/min.	No Change
		It should have standby and defrost mode.	No Change
		The external surfaces of unit must have an A-biotic layer which continuously reduce the bacteria and microbes by 95% to prevent spread of diseases, without repeated use of chemicals.	No Change
		A-biotic surfaces should be based on technology that does not use any chemical sterilization process the process for sterilization of surfaces must be a mechanical one.	No Change
		All solutions required for maintaining the efficacy of the A-biotic Layer of the unit's surfaces must be supplied along with equipment for the warranty period.	No Change
		The A-biotic surface must have a layer of micro mechanical surfaces capable of mechanically killing microbes and viruses.	No Change

		The OEM must state that the solution used by it will not lead to mututation at surfaces and that the method to neutralize bacteria and fungus is a micro mechanical killing.	No Change
		There should be a digitized user manual available 24*7 with the equipment.	No Change
		OEM should have ISO 9001:2015 & ISO 13485 certifications.	No Change
		OEM Should have GMP certifications.	No Change
		The unit should be European CE certified.	No Change
		It should have power supply of 230 V - 50/60 Hz.	No Change
		It Should be US FDA/ European CE Approved Model	No Change
5	**Knee Continuous Passive Motion unit- CPM**	The unit should have the following features:	No Change
		CPM is useful to prevent joint stiffness in the knee, postoperative recovery of ROM, maintaining quality of articular surface, reducing pain and oedema etc.	No Change
		Should be useful for Knee, HIP and Ankle mobilization.	No Change
		The external surfaces of equipment must have a A-biotic layer which continuously reduce the bacteria and microbes by 95% to prevent spread of diseases, without repeated use of chemicals.	No Change
		A-biotic surfaces should be based on technology that does not use any chemical sterilization process the process for sterilization of surfaces must be a mechanical one.	No Change
		All solutions required for maintaining the efficacy of the A-biotic Layer of the equipment's surfaces must be supplied along with equipment for the warranty period.	No Change
		The A-biotic surface must have a layer of micro mechanical surfaces capable of mechanically killing microbes and viruses.	No Change
		The OEM must state that the solution used by it will not lead to mututation at surfaces and that the method to neutralize bacteria and fungus is a micro mechanical killing.	No Change
		There should be a digitized user manual available 24* with the system	No Change
		The digital user manual must be accessible 24*7 to those in close proximity to machine.	No Change
		It should have digital operating panel with LCD display.	No Change

		The unit should have Automatic overload reverse protection.	No Change
		The unit should have patient stop switch or remote control for patient safety.	No Change
		It should have the following ROM:	No Change
		Motion range of the knee: 0°—125°	No Change
		Motion range of the hip: 25°—100°	No Change
		Motion range of the ankle: 0°—40°	No Change
		Angle speed range: 1.5°—3.6°/s	No Change
		Total time: 0-240 min	No Change
		It should be adjustable to accommodate various size of patients.	No Change
		It Should be US FDA/ European CE Approved Model	No Change