ALL INDIA INSTITUTE OF MEDICAL SCIENCES DEOGHAR
(स्वास्थ्य एवं परिवार कल्याण मंत्रालय, भारत सरकार केअधीन राष्ट्रीय महत्व का संस्थान)
(An Institution of National Importance under Ministry of Health & Family Welfare)
भारत सरकार/ Government of India

MINUTES OF MEETING

The decision of pre-bid meeting held on 26.12.2025 is appended below:

1. The queries submitted by M/s Life Safe Medical were taken up for discussion. The details are as follows:

Sl. No.	Pg. No. NIT Cl. Ref. No.	NIT Clause	Life Space	AIIMS Deoghar Reply
1	69, Sl. No. 30 Item Description: Witness System	Reader Size: 20.9 × 4.2 × 26.5 cm (±10%)	27.6 × 23.4 × 14.85 cm	Reader Size: 20.9 × 4.2 × 26.5 cm (±10%) (as per site condition)
2	Sperm Operation Station – 3D Reader Kit.	Tablet PC: Windows 10, 10-inch, 4GB/64GB	windows 11 Available	windows 11 is also acceptable
3	70 , Sl. No. 30 Item Description: Witness System Operating Room Workstation – Card Reader	Tablet PC: Windows 10, 10-inch, 4GB/64GB	Not required	As per NIT
4	72, Sl. No. 32 Item Description: High end color doppler ultrasound system	It should be robust state of art, fully digital high end latest Color Doppler Ultrasound System with C-Sound / N-Site / Crystal-live / similar architecture capable of precision beam forming, capable of performing imaging applications in abdominal, obs/gynae, Fetal Heart,	Core Architecture should be added.	As per NIT

		musculoskeletal, small parts, Urology, Breast, Pediatric etc.		
5		System should have broad band beam former capable of processing signals from 1-22 MHz.	Frequency should be 1-18MHz	As per NIT
6		System processing channels must be more than 75,00,000.	Processing channels should be 17 Lakh.	As per NIT
7		Frame rates more than 5000 frames/sec preferred.	Frame Rate should be 2800FPS.	As per NIT
8		System should incorporate facility for high resolution 2D, M-mode, PW, Color Flow Imaging, Color Power Angio imaging, Power Pulse Inversion Harmonics, Directional Color Power angio imaging modes, Auto IMT, CAD Based Automatic Breast Lesion evaluation features & Elastography and Comprehensive 4D Package.	CAD based Automatic Breast Lesion evaluation should be removed as it is company specific.	As per NIT
9		The Endocavity probe should have viewing angle of more than 200 Degree, to visualize entire Uterus from cervix to fundus.	FOV of TVS probe should be 178 Deg.	As per NIT
10		Linear probe for MSK and Breast Imaging, with automated quantification for easier identification of breast Neoplasm and 2D Real time Shearwave Elastography	Shearwave should be removed from Linear Probe.	Deleted from the scope of work
11		System should have more than 14" wide LED Touch Screen Control.	Touch Panel should be 10"	As per NIT
12	46, Indicative BOQ of Electrical items for Setting up of IVF Centre at AIIMS Deoghar on Turnkey Basis Wall & Ceiling Panelling System Antimicrobial Coating (Factory finished) with Substructure.	Providing SS modular wall panel with minimum 0.8 - 1 mm thick SS sheet (material no. DIN 1.4301) backed with 12mm high quality plasterboard at the back of SS panel, complete with antimicrobial powder coating, complete. The fire resistance for the wall panel should be minimum 25 min. • SS wall panels with anti-microbial pre-powder	SS 304 is not recommended for IVF because panels are painted and while cleaning of surface paint will be removed after few cleaning applications. Solution - Hygiene wall cladding is best option for IVF as no paint is required also having 25 years of	As per NIT

		coating • One piece corner panel for inside corners • Base Profile for SS wall panel system • Powder coated Ceiling edge angles for SS Ceiling panel system. • Electrical outlets -open able panels	warranty for any damage. Cost of Panel and cladding remain the same so no cost difference.	
13		The pre-powder coating shall be maintained at a minimum deposit thickness of 80 - 120 microns. The SS wall & ceiling panels shall be reinforced with 12mm non-flammable, high quality plaster board glued on the back of wall panels to make a total thickness of around 13-14 mm (1mm+12mm). Wall and Ceiling panels shall be easily open able / closable for quick resumption of operations after repair / maintenance and for future expansion and up-gradation. The wall panels on both sides of the substructure shall be open able except where there is an unavoidable brick. / RCC structure. The wall panels shall be firmly fixed on the GI vertical substructure with the help of screws. The vertical joints between fill the gap between two wall panels to ensure a 100% hermetically sealed vertical, flush with all panels mounted joint. Finished Floor to False Ceiling Height inside OTs shall be. 2900 to 3000 mm Approx. Two wall panels shall be equivalent to 8mm -10 mm. Full height silicon rubber seal gasket of Medical Grade shall be used to	SS 304 is not recommended for IVF because panels are painted and while cleaning of surface paint will be removed after few cleaning applications. Solution - Hygiene wall cladding is best option for IVF as no paint is required also having 25 years of warranty for any damage. Cost of Panel and cladding remain the same so no cost difference.	As per NIT
14	47, Sl. No. 6 LED Dimmable X-Ray (2 Plate)	Two Plate Viewing screen for non-dazzling diagnostic use with flicker free and variable control range of luminous density control range approx. 90%	Not required as this for IVF Centre,	Deleted from the scope of work

		viewing size. Each bank will be with individual dimming. LED Dimmable X- Ray will be CE certified and in compliance under Class 1 Medical devices		
15	47, Sl. No. 7 **Pressure Relief Dampers**	Pressure Relief Dampers having multi 304 graded stainless-steel blades for maintaining the positive pressure inside the operation theatre. Pressure Relief Dampers will be CE certified and in compliance under Class 1 Medical devices	Not required - as this for IVF Centre as bacteria may inter because of opening in passage	As per NIT
16	47, Sl. No. 9 **Integrated Storage Unit-Stainless Steel**	Storage Unit of size (1050 x 2100 x 350). The storage unit cabinet will be made of SS 304 Material. The unit will be divided into 2 equal parts and each part will have individual glass doors with locking system. Each part will have racks to keep surgical medicines etc. Storage Unit will be CE certified and in compliance under Class 1 Medical devices	Not required - as need to avoid corners and 90 degree bends	As per NIT
17	48, Sl. No. 11 **Single Arm Moveable Pendant for Anaesthesia**	Single Arm Pendant will have (1000mm) arms with Horizontal movement having load Carrying capacity minimum 180 kgs. The arm will be rotated up to 330 degrees to 340 degrees. The Pendant will have electromagnetic / pneumatic brakes system will be adaptable to various safety requirements and construction facilities. The Pendant Service Heads shall be modular with minimum 800mm head	Not Required - As electrical point and gas points can be placed on OT Wall	As per NIT
18	48, Sl. No. 12 **Double Arm Moveable Pendant for Surgeon**	Double Arm Pendant will have (1800mm) arms with Horizontal movement having load Carrying capacity minimum 150 kgs. The arm will be rotated up to 330 degrees to 340 degrees. The Pendant will have electromagnetic /. pneumatic brakes system will be adaptable to various safety requirements and construction facilities. The	Not Required - As electrical point and gas points can be placed on OT Wall	As per NIT

		Pendant Service Heads shall be modular with minimum 800mm head.		

2. The queries submitted by M/s Ma Durga Enterprises were taken up for discussion. The details are as follows:

Sl. No.	Pg. No. NIT Cl. Ref. No.	NIT Clause	Ma Durga	AIIMS Deoghar Reply
1	55, Sr. No: 1 Item: In-Vitro Laminar air flow Workstation with Integrated Stereo zoom Microscope with Accessories	The external Dimensions of Workstation should be 690mm x 1930mm x 1245mm.	Width (W): 1930 mm(1.93 m), Depth (D): 679 mm (0.68 m), Height (H): 2022 mm (2.02 m)	The external Dimensions of Workstation should be 690mm x 1930mm x 1245mm with tolerance of ±15% (as per site condition)
2		The working dimensions of workstation should be 560mm x 1865mm x 635mm.	Workspace width = 1875 mm Workspace depth = 526 – 558 mm Workspace Height: 647 mm (front opening / Work area height)	The working dimensions of workstation should be 560mm x 1865mm x 635mm. (±15%) (as per site condition)
3		Front opening fixed of 350mm.	647 mm (front opening/work area height)	350 mm mm (±10%) (as per site condition)
4		Flow Rate should be 1450 m3/h.	Flow rate should be subject to vertical flow which can be changed. This point is not required as vertical flow already matched the criteria	Flow Rate should be 1450 m3/h (± 20%) (as per site condition)
5			ADD Working chamber tabletop should be made up of stainless steel. SS table should be integrated with two RFID based Witnessing system with heated platform and glass heating RFID reader	As per NIT
6		The Stereozoom microscope should have a zoom ratio of 10:1.	It can be in between 10:1 to 12.7:1.	The Stereozoom microscope should have

				a zoom ratio of 10:1 to 12.7:1
7		The Magnification range should be 6.3x to 63x.	The Magnification range miminum should be 6.3x to 63x.	The Magnification range miminum should be 6.3x to 63x
8		The Observational tube to be inclined at 30°C and should also have observational trinocular port for camera mounting.	The Observational tube to be inclined at 30° to 45° and should also have observational trinocular port for camera mounting.	The Observational tube to be inclined at 30° to 45° and should also have observational trinocular port for camera mounting.
9	56, Sr. No: 2 Item: CO2 Incubator	Must have an ergonomic external door with electromagnetic locking.	Not Required & it must be people dependent process	Must have an ergonomic external door with locking system as per internationally accepted norms.
10	56, Sr. No: 3 Item: Tri-Gas Benchtop Incubator for Human Embryo Culture with independent humidification for each chamber	The Incubator should be a humidified incubator with minimum of 2 chamber's with independent humidification source.	Compact dry tri gas incubator with gas mixer. Designed for human IVF culture for optimum environment for development of human embryo and oocyte with 2 to 10 Chamber.	The Incubator should be a humidified or Compact dry tri gas incubator with gas mixer with 2 -10 chamber's preferably independent humidification source.
11		International Certifications: Device must be manufactured & tested as per IEC60601-1, IEC60601-1-2, IEC61010-1, IEC61010-2-010, UL61010-1, CSA C22.2 No. 61010 standards (all listed are mandatory).	CE and FDA Approved	International Certifications (CE or FDA): Device must be manufactured & tested as per IEC60601-1, IEC60601-1-2, IEC61010-1, IEC61010-2-010, UL61010-1, CSA

				C22.2 No. 61010 standards.
12		Dimensions: Door closed approx. 550-570 mm (W) × 190-210 mm (H) × 440-460 mm (D); Door open approx. 550-570mm (W) × 520-540 mm (H) × 440-460 mm (D)	Standard Dimension for 10 chamber incubator -860mm (L) x 550mm (W) x 180mm (H)	Dimensions: Door closed approx. 550-570 mm (W) × 190-210 mm (H) × 440-460 mm (D); Door open approx. 550-570mm (W) × 520-540 mm (H) × 440-460 mm (D) (± 10%) (as per site condition)
13		Weight: Approximately 23 – 30 Kg	Weight: Approximately 30– 60 Kg	Weight: Approximately 30 – 50 Kg (± 10%) (as per site condition)
14		Media Warmer: Integrated warming area: 35°C to 40°C, accuracy ±1°C.	Its brand specific	Media Warmer: Integrated or in built warming area: 35°C to 40°C, accuracy ±1°C.
15		Humidification: Independent Humidification Source for each chamber.	As per above specs, it's not required	Humidification: Independent Humidification Source for each chamber if required
16		Dish Capacity per chamber: Minimum: 6 × 4-well dishes, 6 × centre-well dishes, 6 × 60 mm dishes, 15 × 35 mm dishes.	Between 8-10 chambers for placing Petri Dishes. And one chamber at least can accommodate 2 60mm or 4 Well dishes at a time.	2-10 chambers for placing Petri Dishes. Each chamber should accommodate the dishes as per manufacturer norms.
17			Add 24 hours digital recording of temperature and gas flow	As per NIT
18			Add	As per NIT

			Non inductive heating system to provide no electromagnetic fields around the embryos	
19			Add Must have a chamber for Media incubation with gas and temperature control.	As per NIT
20	58, Sr. No: 5 Item Description: Aspiration Pump Qty: 02	Should adhere IEC 60601-1, protection against electric shock of Class I Equipment with Type B degree of protection	Its brand specific	Should adhere preferably IEC 60601-1, protection against electric shock of Class I Equipment with Type B degree of protection
21		The vacuum tube used in this Aspiration unit should have a hydrophobic filter to prevent suction into the machine.	Its brand specific	The vacuum tube used in this Aspiration unit preferably should have a hydrophobic filter to prevent suction into the machine.
22	59, Pg. No. 59 Item Description: Inverted Microscope with Micromanipulator and heating system for ICSI with Camera and Monitor	Front operation knob for condenser focus, focus stopper for reproduce position. Halogen and LED light source	LED option available	Front operation knob for condenser focus, focus stopper for reproduce position. Halogen or LED light source
23		Lamp house for 100W halogen with long connection cord	2-U uses modern LED epi/transmitted sources as standard; halogen lamphouse (100 W) is possible via legacy accessories but is becoming optional. Confirm need for genuine 100 W halogen lamphouse and cabling.	Lamp house 100W or equivalent LED with long connection cord
24		Halogen bulb	Its brand specific	If Halogen

25		Frost filer having Diameter of 45mm.	i2 accepts 45 mm filter sets with appropriate lamphouse or filter cube; verify exact diameters and holder.	Frost filer having Diameter of 45mm. (If Halogen)
26		Interference light balance daylight filter, 45mm dia.	Not Required because of LED Light	Interference light balance daylight filter, 45mm dia. (If Halogen)
27		Neutral density filter, 45mm dia.	Not Required because of LED Light	Neutral density filter, 45mm dia.(If Halogen)
28		Neutral density filter, 45mm dia.	Not Required because of LED Light	Deleted
29			ADD Micromanipulator should have a software for imaging & video.	As per NIT
30			ADD Micromanipulator should have 3D control from single lever	As per NIT
31			ADD Micromanipulator should have additional 4X spacer objective to align pipettes in Air to avoid breakage	As per NIT
32			ADD Micromanipulator should have warm metal stage with heating option at the Metal Plate Hole as well	As per NIT
33			ADD Micromanipulator should have shortcut keys for imaging, video & ICSI/Oocyte count.	As per NIT
34	61, Sr. No: 13 Item Description: Trinocular Compound Microscope for Andrology Lab	The body should be made of Aluminum die cast with critical movement based on ball bearing and wire guides for smooth and precise manipulation.	No	As per NIT

35		The observation head should be inclined to 45° and rotatable through 360°	Its brand specific	As per NIT
36		Eyepiece should be WF 10x (FN18) to provide relief from eye fatigue.	No	Eyepiece should be WF 10x (FN18 or FN 20 or FN 22) to provide relief from eye fatigue.
37		The Objective should be present with the Microscope which are 4x, 10x, 40x (Spring loaded), 100x (Oil, Spring Loaded) having the W.D of 29.0 mm, 63.0 mm, 0.53mm and 0.20mm respectively	**FN18** is not standard (they commonly specify FN20 or FN22)	As per NIT
38	61, Sr. No: 15 Item Description: Vertical Laminar Air flow for Andrology Lab		ADD US FDA OR CE APPROVED	ADD: US FDA OR CE APPROVED
39	64, Sr. No: 19 Item Description: Digital Temperature Thermometer	Must have automatic re-calibration / self-calibration capability.	Its brand specific	As per NIT
40		Must provide 0.1°C resolution across the entire range	Its brand specific	As pe NIT
41		Built-in microprocessor for automatic re-calibration.	Its brand specific	As per NIT
42	65, Sr. No: 24 Item Description: Smart Monitoring System (CO_2, O_2 and Temperature)	Consumables (RFID Tags & Labels)	Its brand specific	Consumables (RFID Tags / Bar Code / QR Code & Labels)
43	68, Sr. No: 29 Item Description: Laser System for Embryo Hatching in ICSI	Wavelength: 1460 nm	Wavelength: 1460-1480 nm	Wavelength: 1460 nm (±10%) (as per site condition)
44		Laser Power: 300 mW	Laser Power: 300-400mW	Laser Power: 300 mW (±30%) (as per site condition)

45		Laser Unit Dimensions: 42 mm × 34 mm × 34 mm	*physical control unit larger* than your 42×34×34 mm spec.	Laser Unit Dimensions: 42 mm × 34 mm × 34 mm (±10%) (as per site condition)
46	69, Sr. No: 30 Item Description: Witness System	**A. Nurses Station – Desktop RFID Reader System** Reading Orientation: Must read tags placed parallel to the reader	Reading Orientation: Must read tags placed parallel to or on Top of the reader	**A. Nurses Station – Desktop RFID Reader System** Reading Orientation: Must read tags placed parallel to or on top of the reader
47		B. Sperm Operation Station – 3D Reader Kit. Signal Processor: Must include 4-channel SMA sensor interface, RS232 communication	NOT Required to operate this system	B. Sperm Operation Station – Preferably 3D Reader Kit. Signal Processor: Preferably include 4-channel SMA sensor interface, RS232 communication
48		B. Sperm Operation Station – 3D Reader Kit. Reader Size: 20.9 × 4.2 × 26.5 cm (±10%)	Reader size can be - 27.6 × 23.4 × 14.85 cm	20.9 × 4.2 × 26.5 cm (±10%) (as per site condition)
49	72, Sr. No: 31 Item Description: Web-based AI medical-device software for embryo assessment.	Web-based AI medical-device software for embryo assessment	As Time lapse incubator is not in list of equipment's	Clause deleted
50	72. Sl. No. 32. High end color doppler ultrasound system	It should be robust state of art, fully digital high end latest Color Doppler Ultrasound System with C-Sound / N-Site / Crystal-live / similar architecture capable of precision beam forming, capable of performing imaging	Core Architecture should be added.	As per NIT

		applications in abdominal, obs/gynae, Fetal Heart, musculoskeletal, small parts, Urology, Breast, Pediatric etc		
51		System should have broad band beam former capable of processing signals from 1-22 MHz.	Frequency should be 1-18MHz	As per NIT
52		System processing channels must be more than 75,00,000.	Processing channels should be 17 Lakh.	As per NIT
53		Frame rates more than 5000 frames/sec preferred.	Frame Rate should be 2800FPS.	As per NIT
54		System should incorporate facility for high resolution 2D, M-mode, PW, Color Flow Imaging, Color Power Angio imaging, Power Pulse Inversion Harmonics, Directional Color Power angio imaging modes, Auto IMT, CAD Based Automatic Breast Lesion evaluation features & Elastography and Comprehensive 4D Package.	CAD based Automatic Breast Lesion evaluation should be removed as it is company specific.	System should incorporate facility for high resolution 2D, M-mode, PW, Color Flow Imaging, Color Power Angio imaging, Power Pulse Inversion Harmonics, Directional Color Power angio imaging modes, Auto IMT,& Elastography and Comprehensive 4D Package.
55		The Endocavity probe should have viewing angle of more than 200 Degree, to visualize entire Uterus from cervix to fundus.	FOV of TVS probe should be 178 Deg.	As per NIT clause
56		Linear probe for MSK and Breast Imaging, with automated quantification for easier identification of breast Neoplasm and 2D Real time Shearwave Elastography	Shearwave should be removed from Linear Probe.	As per NIT clause

57		Convex Probe with Single Crystal will be accepted for higher frame rate and deep penetration. This probe should have 2D Real time Shearwave liver elastography with quantification.	Shearwave should be removed from Convex Probe.	As per NIT clause
58		System should have more than 14" wide LED Touch Screen Control.	Touch Panel should be 10"	As per NIT clause
59	46, Indicative BOQ of Electrical items for Setting up of IVF Centre at AIIMS Deoghar on Turnkey Basis Wall & Ceiling Panelling System Antimicrobial Coating (Factory finished) with Substructure.	Providing SS modular wall panel with minimum 0.8 - 1 mm thick SS sheet (material no. DIN 1.4301) backed with 12mm high quality plasterboard at the back of SS panel, complete with antimicrobial powder coating, complete. The fire resistance for the wall panel should be minimum 25 min. • SS wall panels with anti-microbial pre-powder coating • One piece corner panel for inside corners • Base Profile for SS wall panel system • Powder coated Ceiling edge angles for SS Ceiling panel system. • Electrical outlets -open able panels	SS 304 is not recommended for IVF because panels are painted and whule cleaning of surface paint will be removed after few cleaning applications. Solution - Hygiene wall cladding is best option for IVF as no paint is required also having 25 years of warranty for any damage. Cost of Panel and cladding remain the same so no cost difference.	As per NIT clause
60		The pre-powder coating shall be maintained at a minimum deposit thickness of 80 - 120 microns. The SS wall & ceiling panels shall be reinforced with 12mm non-flammable, high quality plaster board glued on the back of wall panels to make a total thickness of around 13-14 mm (1mm+12mm). Wall and Ceiling panels shall be easily open able / closable for quick resumption of operations after repair / maintenance and for future expansion and up-gradation. The wall panels on	SS 304 is not recommended for IVF because panels are painted and while cleaning of surface paint will be removed after few cleaning applications. Solution - Hygiene wall cladding is best option for IVF as no paint is required also having 25 years of warranty for any damage. Cost of Panel and cladding remain the same so no cost difference.	As per NIT clause

		both sides of the substructure shall be open able except where there is an unavoidable brick. / RCC structure. The wall panels shall be firmly fixed on the GI vertical substructure with the help of screws. The vertical joints between fill the gap between two wall panels to ensure a 100% hermetically sealed vertical, flush with all panels mounted joint. Finished Floor to False Ceiling Height inside OTs shall be. 2900 to 3000 mm Approx. Two wall panels shall be equivalent to 8mm -10 mm. Full height silicon rubber seal gasket of Medical Grade shall be used to		
61	**47, Sl. No. 6** **LED Dimmable X-Ray (2 Plate)**	Two Plate Viewing screen for non-dazzling diagnostic use with flicker free and variable control range of luminous density control range approx. 90% viewing size. Each bank will be with individual dimming. LED Dimmable X- Ray will be CE certified and in compliance under Class 1 Medical devices	Not required as this for IVF Centre,	Deleted
62	47, Sl. No. 7 **Pressure Relief Dampers**	Pressure Relief Dampers having multi 304 graded stainless-steel blades for maintaining the positive pressure inside the operation theatre. Pressure Relief Dampers will be CE certified and in compliance under Class 1 Medical devices	Not required - as this for IVF Centre as bacteria may inter because of opening in passage	As per NIT clause
63	**47, Sl. No. 9** **Integrated Storage Unit-Stainless Steel**	Storage Unit of size (1050 x 2100 x 350). The storage unit cabinet will be made of SS 304 Material. The unit will be divided into 2 equal parts and each part will have individual glass doors with locking system. Each part will have racks to keep surgical medicines etc. Storage Unit will be CE certified and in compliance under Class 1 Medical devices	Not required - as need to avoid corners and 90 degree bends	As per NIT clause
64	**48, Sl. No. 11**	Single Arm Pendant will have (1000mm) arms with Horizontal movement having load Carrying	Not Required - As electrical point and gas points can be placed on OT Wall	As per NIT clause

	Single Arm Moveable Pendant for Anaesthesia	capacity minimum 180 kgs. The arm will be rotated up to 330 degrees to 340 degrees. The Pendant will have electromagnetic / pneumatic brakes system will be adaptable to various safety requirements and construction facilities. The Pendant Service Heads shall be modular with minimum 800mm head		
65	**48, Sl. No. 12 Double Arm Moveable Pendant for Surgeon**	Double Arm Pendant will have (1800mm) arms with Horizontal movement having load Carrying capacity minimum 150 kgs. The arm will be rotated up to 330 degrees to 340 degrees. The Pendant will have electromagnetic / pneumatic brakes system will be adaptable to various safety requirements and construction facilities. The Pendant Service Heads shall be modular with minimum 800mm head.	Not Required - As electrical point and gas points can be placed on OT Wall	As per NIT

3. The queries submitted by M/s Vardhman Medicare Pvt. Ltd. were taken up for discussion. The details are as follows

S.No.	Page Number	NIT Clause	M/s Verdhman Medicare Pvt. Ltd.	AIIMS Deoghar Reply
1	9, Eligibility Criteria, Point Number (d)	The bidder must comply all statuary rules with regards to PF/ESIC/minimum labour wages as per respective rules and must submit EPF and ESIC registration certificate.	To be deleted. (It's a works contract not operation and maintenance pertain to hiring of man power on contractual basis)	As per NIT Clause. However an undertaking may be submitted for compliance of EPF ESIC as per GOI.
2	39, Clause 4	The successful tenderer shall provide the service of the embryologist and Infertility specialist for a period of one year from the date of commissioning of the ART Setup. Awarded firm will provide a payment for embryologist and infertility specialist as per their term and condition.	Embryologist support shall be available as required by the department for the first 100 cases or one year, whichever is earlier.	The successful tenderer shall provide the service of the embryologist and Infertility specialist support as required by the department for first 100 cases. Awarded firm will provide a payment for embryologist and infertility specialist as per their term and condition.

3	39, clause 5	Hand on training for a period of one year on IUI, IVF, ICSI procedures and IVF handling to 7-9 faculty members 2 embryologist two Nurses....	Onsite training shall be provided to all deputed faculty, embryologists, nurses, and other supporting staff for a period of 15 days or as and when required by the department.	The equipment, furniture and consumables required for the ART center shall also be supplied by awarded firm. They shall provide the service of the infertility specialist and the embryologist and consumable required for 100 cycle IVF. Awarded firm will provide hands on training to all deputed faculty, embryologists, nurses & other supporting staff for a period of 30 days and as and when required by the department for one year
4	54, Indicative Equipment for setting up of IVF Centre	21- Liquid Nitrogen pouring Device- 01	Qty difference in Indicative-01 and specification -04. Kindly correct it.	Item Description: Liquid Nitrogen Pouring Device Qty: 01
5	55, Sr. No: 1 Item: In-Vitro Laminar air flow Workstation with Integrated Stereo zoom Microscope with Accessories	Noise Level should be <51 Decibel.	Noise Level should be <51-54 Decibel. (It's a standard permissible limit)	Noise Level should be <51-54 Decibel.
6		The external Dimensions of Workstation should be 690mm x 1930mm x 1245mm.	The external Dimensions of Workstation should be approx 1950mm x 640mm x 1300mm. (It's a Standard size)	The external Dimensions of Workstation should be 690mm x 1930mm x 1245mm with tolerance of ±15% (as per site condition)
7		The working dimensions of workstation should be 560mm x 1865mm x 635mm.	The working dimensions of workstation should be 1870mm x 500mm x 710mm. (It's a standard size)	The working dimensions of workstation should be 560mm x 1865mm x 635mm with tolerance of +15% (as per site condition)
8	57, Sr. No: 3 Item: Tri-Gas Benchtop Incubator for Human Embryo	Gas Pressure Requirement: Inlet gas pressure 150 kPa ± 15 kPa (21.8 psi ± 2.2 psi)	Gas Pressure Requirement: Inlet gas pressure 80-106 kPa ± 15 kPa (5.80 to 8.70 psi ± 2.2 psi)	As per NIT clause
9		Dish Capacity per chamber: Minimum: 6 × 4-well dishes, 6 × centre-well dishes, 6 × 60 mm dishes, 15 × 35 mm dishes.	Dish Capacity per chamber: Minimum: 4 × 4-well dishes, 6 × centre-well dishes, 6 × 60 mm dishes, 8 × 35 mm dishes.	As per NIT clause

	Culture with independent humidification for each chamber			
10	64, Sr. No: 21 Item Description: Liquid Nitrogen Pouring Device	CE/FDA/BIS Certificate	Should be deleted. (It's a customised manufacturing)	As per NIT clause
11	65, Sr. No: 24 Item Description: Smart Monitoring System (CO2, O2 and Temperature)	Consumables (RFID Tags & Labels)	Should be deleted. Due to it is a part of Witness system.	Consumables (RFID Tags or Bar code or QR Code & Labels)
12	67, Sr. No: 27 Item Description: Refrigerator for Media (Pharmaceutical Refrigerator)	Capacity Approx. 650 L (23 cu. ft) usable volume	Capacity Approx. 500-550 L usable Volume. Single door available with this size only.	Capacity Approx. 500-550 L usable Volume.
	68, Sr. No: 28 Item Description: Lab Purification System	Air Purification Process Four-step process: 1. Adsorption of toxic chemicals & gases via activated carbon (zeolite + potassium permanganate) 2. HEPA filtration 3. Photocatalytic oxidation 4. UV irradiation (UVC)	Air Purification Process Adsorption of toxic chemicals & gases via activated carbon (zeolite + potassium permanganate) and HEPA filtration.	As per NIT Clause
13	68, Sr. No: 28 Item Description: Lab Purification System	UV Light / Lamp UVC lamp with wavelength 254 nm (does not produce ozone)	Should be deleted.	As per NIT Clause

14	33. Autoclave (Vertical): Page Number 74-75	System should be able to show hemodynamic color flow (Alpha blending). System should be DICOM ready. System should have built in Image Management Software, for off line application when patient has gone after examination, such as Image Manipulation, Multi Planner reformatting, surface & volume rendering etc. It should have hard disk memory of 512 GB or more. System should have Micro Vascular Flow to detect very low intensity vascularization. System should have BIRADS based breast lesion classification tool. System should have TIRADS based thyroid lesion classification tool. System should have automatic tool to derive 9 planes of fetal heart (as per AIUM recommendation) from one volume sweep. System should have automatic tool for deriving 9 planes for Fetal Central Nervous System. System should have 2D real time Shearwave Imaging with Convex and Linear Probe. The quoted model should be US FDA approved. Please respond to each specification in the same format and order and support it with Product Data Sheet. System should be provided with following transducer:	The specs over lapped from High end colour Doppler ultrasound system and should be deleted from the Autoclave head.	Deleted the following from NIT: System should be able to show hemodynamic color flow (Alpha blending). System should be DICOM ready. System should have built in Image Management Software, for off line application when patient has gone after examination, such as Image Manipulation, Multi Planner reformatting, surface & volume rendering etc. It should have hard disk memory of 512 GB or more. System should have Micro Vascular Flow to detect very low intensity vascularization. System should have BIRADS based breast lesion classification tool. System should have TIRADS based thyroid lesion classification tool. System should have automatic tool to derive 9 planes of fetal heart (as per AIUM recommendation) from one volume sweep. System should have automatic tool for deriving 9 planes for Fetal Central Nervous System. System should have 2D real time Shearwave Imaging with Convex and Linear Probe.

		75 Single Crystal Convex Abdominal probe with frequency range from 1 to 7 MHz. (Single Crystal Probe will be required for higher frame rate and deep penetration, also capable of doing Shearwave Elastography). +/-1 MHz Frequency Acceptable Endocavity (TV/TR) 2-11 MHZ approx. with more than 200 Degree Angle. +/-1 MHz Frequency Acceptable Single Crystal Convex Volume (4D) Probe, with frequency range from 1 to 8 MHz to ensure deep penetration.(Single Crystal Technology Probe will be required for higher frame rate and deep penetration) +/-1 MHz Frequency Acceptable TVS Volume (4D) Probe, with frequency range from 2 to 10 MHz. +/-1 MHz Frequency Acceptable		The quoted model should be US FDA approved. Please respond to each specification in the same format and order and support it with Product Data Sheet. System should be provided with following transducer: 75 Single Crystal Convex Abdominal probe with frequency range from 1 to 7 MHz. (Single Crystal Probe will be required for higher frame rate and deep penetration, also capable of doing Shearwave Elastography). +/-1 MHz Frequency Acceptable Endocavity (TV/TR) 2-11 MHZ approx. with more than 200 Degree Angle. +/-1 MHz Frequency Acceptable Single Crystal Convex Volume (4D) Probe, with frequency range from 1 to 8 MHz to ensure deep penetration. (Single Crystal Technology Probe will be required for higher frame rate and deep penetration) +/-1 MHz Frequency Acceptable TVS Volume (4D) Probe, with frequency range from 2 to 10 MHz. +/-1 MHz Frequency Acceptable

15	72, (32. High end color doppler ultrasound system)	System processing channels must be more than 75,00,000.	System processing capability must be more than 75,00,000.	As per NIT
16	73, (32. High end color doppler ultrasound system)	System should have more than 14" wide LED Touch Screen Control.	System should have more than 13" wide LED Touch Screen Control.	As per NIT
17	46, CL. No. 1 Wall & Ceiling Panelling System Antimicrobial Coating (Factory finished) with Substructure.	Providing SS modular wall panel with minimum 0.8 - 1 mm thick SS sheet (material no. DIN 1.4301) backed with 12mm high quality plasterboard at the back of SS panel, complete with antimicrobial powder coating, complete. The fire resistance for the wall panel should be minimum 25 min. • SS wall panels with anti-microbial pre-powder coating • One piece corner panel for inside corners • Base Profile for SS wall panel system • Powder coated Ceiling edge angles for SS Ceiling panel system. Electrical outlets -open able panels The pre-powder coating shall be maintained at a minimum deposit thickness of 80 - 120 microns. The SS wall & ceiling panels shall be reinforced with 12mm non-flammable, high quality plaster board glued on the back of wall panels to make a total thickness of around 13-14 mm (1mm+12mm). Wall and Ceiling panels shall be easily open able / closable for quick resumption of operations after repair /	Ceiling and Wall Puff Panel:- Supply and installation of double skin modular wall Panels made of 0.8 mm thick powder coated GI on both the sides, with40plus or minus 2 kg/m3 density PUF as infill, GI profiles all along the periphery, flush on both sides with maximum allowable gap of 3- 4mm filled with food grade silicon sealant and placed on cold rolled galvanized bottom tracks with a recess to provide floor to wall coving flush with the wall panel. This includes all required hardware for completion Panels to be covered with a protective film to avoid any damages during transportation and installation. **(For IVF OT and Embryology Lab)** 80 MM thick to be provided across the walls. 50 MM thick to be provided across the Ceiling	As per NIT

		maintenance and for future expansion and up-gradation. The wall panels on both sides of the substructure shall be open able except where there is an unavoidable brick. / RCC structure. The wall panels shall be firmly fixed on the GI vertical substructure with the help of screws. The vertical joints between two wall panels shall be equivalent to 8mm - 10 mm. Full height silicon rubber seal gasket of Medical Grade shall be used to fill the gap between two wall panels to ensure a 100% hermetically sealed vertical, flush with wall panels mounted joint. Finished Floor to False Ceiling Height inside OTs shall be 2900 to 3000 mm Approx.		
18	46, Sl. No. 2, Laminar Air Flow Ceiling System (1800 x 1800mm)	The Plenum will have Unidirectional flow which is needed to guarantee a continuous and effective air quality level below the ceiling, where surgeons and patients care. PLENUM UNIT: Plenum structure will be made in aluminum. The complete unit shall have factory prepared fine sealing system. HEPA FILTERS: These absolute filters will be Mini pleat HEPA filters of 99.995% MPPS efficiency grade. The filter section is made of Hepa Filters class H14 (EN 1822 class). The plenum diffuser grills will be of stainless steel 304 Grade material. Laminar Air Flow Ceiling System will be CE certified and in compliance under Class 1 Medical devices	**Hepa Filter Module:-** SITC of filter module made out of heavy duty Aluminum powder coated extrusion with minimum and to house 610 mm X 610 mm HEPA Filter at the rate 0.3 microns , 99.9997, H-14Grade, Filter loading from clean room side with bevel gear arrangement damper with access from clean room suitable to house the following filter sizes pressure drop and IntegritytestingportsintoroomIncludesSScapsuleperforateddiffuser.Thisincludesallrequiredsupportsand accessories etc as required. **(For IVF OT and Embryology Lab)**	As per NIT

19	46, Sl. No. 3, Dimmable Peripheral Lights	Peripheral Lights non hygroscopic peripheral lights peripheral lights for clean room application, low power consumption with dimmer control (suitable for clean room application). The luminaries to be provided in such a way to achieve light intensity of 500 Lux at 1m from floor. 8 Nos. per OT. Dimmable Peripheral Lights will be CE certified and in compliance under Class 1 Medical devices.	Peripheral LED Light:- Supply and Transportation 42W Clean room Light fixture as required size of LED luminary CRCA powder coated white after phosphocreatine treatment provided as standard. With high efficiency acrylic wide diffuser, with wide operating voltage range, Power factor greater than0.9, Surge protection greater than 2KV, System efficacy of greater than100lumens/watt,CCT:3000K-6500Kasdesiredbythedepartment,CRIgreater than80, and THD is less than 15percentage etc., complete. As per list of approved MAKE **(For IVF OT and Embryology Lab)**	As per NIT
20	46, Sl. No. 4 ***Automatic Hermetically Sealing, Sliding Doors (1500 x 2100mm***	Single Leaf Automatic Sliding Door in HPL laminate with Touchless Sensor, Foot Switch. *The Door leaf made of extruded aluminum profiles. The door leaf panel will be finished in Antibacterial HPL. The Door Panel will not have any vertical joints on both sides. For smooth sliding the door moves on nylon wheels within a single piece aluminum extruded track. The Door leaf will have one view window of size 500 x 700mm. Door controller will be microprocessor based electronic automation unit (CE Marked) for controlling door movement, the acceleration	Automatic Hermetically Sealed sliding door:- Clean room Doors:-46mm thick flush doors made of 0.8 mm thick SS-304 on both sides, 90 plus or minus 2 kg/m3 density Honeycomb with stand up to 220Deg. C Temperature, and compressible strength up to 400 Kg/Sqm, 1.2 mm thick GPSP .door frames, double glazed vision panel with necessary adhesive tapes and silicon sealant, necessary hardware like SS304 ball bearing butt hinges, D- handles, push plates, Dorma make door closure, concealed tower bolt, drop seals for the double leaf door and provision for fixing	As per NIT

		and speed of the door. Features such as full opening, half opening, permanent opening. It includes photocell for user's safety. Door opening and closing will be through Touchless Hand Sensor & Foot Switch. In case of power failure door should be manually openable. Automatic Hermetically Sealing, Sliding Doors will be CE certified and in compliance under Class 1 Medical devices. All the buttons & conductive push strip should be mounted on SS door frame and should come pre-wired internally from factory	magnetic type door interlocking system and automatic door bottoms, Both side lock and keys etc with 300mm X 300mm double glazed view panels. **(For IVF OT and Embryology Lab)** **Double leaf door of soze-1500mmX2100mm** **Single leaf door of size-1000mmx2100mm**	
21	48, Item No. 11 & 12	**Single Arm Moveable Pendant for Anesthesia** Single Arm Pendant will have (1000mm) arms with Horizontal movement having load Carrying capacity minimum 180 kgs. The arm will be rotated up to 330 degrees to 340 degrees. The Pendant will have electromagnetic / pneumatic brakes system will be adaptable to various safety requirements and construction facilities. The Pendant Service Heads shall be modular with minimum 800mm head. The Pendant Service Heads shall be supplied with 8 Nos. medical gas terminal units and 5A/15A or 6A/16 A hybrid sockets & RJ 45 Jack • Adjustable shelf with two rails one on each side: 2 number • IV Fluid Pole with 4 hooks: 1 number (Pole shall be capable of stacking 4 syringe pumps) • Cut-outs for Patch Panels in Integrated OTs	Single and double Arm Moveable pendant are **not required** for the proposed IVF OT and may be **deleted** from the scope of supply.	As per NIT

		NIST connection for all gases **Double Arm Moveable Pendant for Surgeon:** Double Arm Pendant will have (1800mm) arms with Horizontal movement having load Carrying capacity minimum 150 kgs. The arm will be rotated up to 330 degrees to 340 degrees. The Pendant will have electromagnetic / pneumatic brakes system will be adaptable to various safety requirements and construction facilities. The Pendant Service Heads shall be modular with minimum 800mm head. The Pendant Service Heads shall be supplied with 10 Nos. medical gas terminal units and 5A/15A or 6A/16 A hybrid sockets & RJ 45 Jack • Adjustable shelf with two rails one on each side: 2 number • IV Fluid Pole with 4 hooks: 1 number (Pole shall be capable of stacking 4 syringe pumps) • Cut-outs for Patch Panels in Integrated OTs NIST connection for all gases		
22	**49, Item No. 18 Medical Gas Pipeline Works inside OT**	Laying of Medical Gas Pipeline Works inside OT as per EN 13348 and Llyod's Tested pipes with fittings from existing main line of hospital up to Pendant Locations in OT	**Medical gas Pipe Line system:-** SITC ofC02 and Pre-mix gas cylinder two each and Out lets with matching probes as required, Automatic gas change over system, Touch type LCD Area Alarm and Zonal Valve box, complete with medical grade copper pipes as required for embryology lab and IVF OT equipment's.	**Medical gas Pipe Line system:-** SITC ofC02 and Pre-mix gas cylinder two each and Out lets with matching probes as required, Automatic gas change over system, Touch type LCD Area Alarm and Zonal Valve box, complete with medical grade

			However vendor will take care of to provide Gas outlets with medical grade copper piping with in IVF facility and to connect with the existing MGPS of the hospital.	copper pipes as required for embryology lab and IVF OT equipment's. However vendor will take care of to provide Gas outlets with medical grade copper piping with in IVF facility and to connect with the existing MGPS of the hospital.
23	**49, Item No. 19** **Electrical Conduiting and Wiring inside Operating Theatres**	Electrical conduiting and wiring inside OT. All wires will run within PVC conduits of 25mm size. Electrical wiring with FRLS wires of reputed brands such as Bonton / KEI / Polycab/ Havells etc. Electrical Switch sockets of 6/16amp of approved make min 4 nos on each walls of MOT. Individual Distribution board to be provided outside each OT Note: Hospital will charge Main DB in OT Corridors and provide dedicated earthing in each OT from where MOT vendors will take the supply for Individual OTs.	**Electrical conduiting and wiring inside the IVF OT and Embryology Lab:-** Providing and laying of electrical power wiring complete with modular switch and sockets including the MCB boxes/DB for IVF lab and OT equipment's, including modifications in the existing wiring set up as required at site for the IVF set up. **Electrical Panel:-** SITC of IVF Center Main Panel Indoor IP-42 wall/free standing floor mounted dust and vermin proof compartmentalized cubical panel made out of CRCA sheet, required hardware, duly treated for de-rusting in 7 tank process with de-phosphate and with powder coating on both side of panel in desired shade. The panel having PU/ Neoprene rubber gasket of not less than3mm thickness, separate detachable gland plate M.S. base channel, hinged door with locking arrangement for equipment/switchgear. Thickness of	As per NIT

			sheetshallnotbelessthan1.6mmupto600mm length/widthofanycompartment and be of 2.0 mm above 600 mm. Load bearing structure shall be of 2.0 mm thick sheet supported by base M.S. channel if required. Sidewalls and cable alley compartments having bolted type doors with /without detachable extension type structure with all type of suitable witch in accessories and bus-bar as per load requirement of respective IVF equipment's. Which is including main in comer, all out going MCCB for Lighting, power DBs and UPS, 1nos AHU's starter with VFD along with by pass, ODU system.	
24	49 Item No. 21	**Air Handling Unit**	Modular Double skin floor mounted EUROVENT Certified Air Handling Unit 120mm SP made out of 45 plus or minus 2mm thick PUF insulated panels Thermal break, aluminium profile frame work with 0.8mm thick pre-painted/powder coated inner and outer skins comprising of mixing box with fresh air and return air dampers, pre filters with10 and 5 microns combination filters in single frame, Interlaced/Inter twin DX Cooling Coil with refrigerant distributors suitable for connecting 2 Nos (1W + 1S) outdoor condensing units, SS-304 drain pan with blower section with Nicotra / Kruger make	As per NIT

			direct drive/ Plug type fan, vibration isolators, EFF1 motor and blower section with on/off switches to operate from outside, limit switch for the fan section access door with a viewport, fine filter section with 3 microns filters inspection doors for all filter and fan sections and damper at the outlet of unit. Ports for differential pressure gauges across all filters and blower to measure differential pressure as per list of approved Make : **(For IVF OT and Embryology Lab)** It will be responsibility of the vendor for the selection of the AHU capacity as per the area specified in the attached drawing. **Aluminium Ducting with insulation:-** SITC of Design/Drawing/ fabricated of ducting using Aluminum Sheets /coils, should be fabricated as per required IS specifications and standard, Galvanized hardware and supports, silicon sealant at all longitudinal joints, Galvanized/GI Electro plated iron angle flanges for all the joints, bracing angles and minimum 5mm thick neoprene rubber gasket along with the required fire dampers, volume control dampers and supply and return risers grills as required. Supplying and fixing 13 mm thick aluminum foil faced vinyl nitrile	

			rubber insulation (on duct) of thermal conductivity 40 deg C after applying two coats of suitable adhesive sealing all joints with self adhesive tape covering complete as per specifications and as required and as per the direction of Engineer in Charge.(for indoor applications). **(For IVF OT and Embryology Lab)**	
25	51, Item No. 23 **HD Camera for LED OT Light**	Integrated In-Light Camera System should be integrated at the centre of one of the domes of this lighting system/ third arm in order to capture images & video sequences of the open cases. It shall have freeze function such an autofocus – Lockable camera should have the following specifications – a. Signal to Noise Ratio (S/N Ratio) :>50 dB. b. CCD/CMOS : 1/3" c. Optical Zoom : 10X d. Digital Zoom : 32X e. Video Output : 2 HD-SDI from the wireless receiver f. White Balance &Gain : Automatic or manual Light and Integrated Camera shall have a control through Touch Panel of the control equipment placed inside the operating room & remote control.	**HD camera for LED OT light** **HD Flat Head panel monitor on other on arm of LED OT Light or on separate arm..** **Recording system.** The listed items are not required for the **IVF OT** and Embryology lab and may be **deleted**	As per NIT
26	52, Item No. 26	**OT Table:** 1. Shall be Electro hydraulic OT table	**Multipurpose electro hydraulic with manual override mobile OT Table with divided leg**	As per NIT

		suitable for all major surgical procedures 2. Shall have radiolucent table top 3. Shall be C-Arm compatible. 4. Table shall have load carrying capacity of more than 180 kg. 5. Table shall have removable head section, upper back section, lower back section, seat plate with perineal cut out & leg plates. 6. Table shall have batterybackupof minimum 40 hrs. 7. Shall have remote control for various positions. 8. The remote shall offer controls of Trendelenburg / reverse Trendelenburg, lateral tilt, longitudinal shift, height adjustment, antiflex and flex position and back plate up / down. Remote unit shall also have zero position 10. shall have following :- a) Table length at least 2000mm b) Table width (without side rail) 500-550mm c) Minimum height adjustment up to720mm d) Maximum height adjustment upto1050 mm e) Trendelenburg and reverse Trendelenburg at least 250 f) Lateral tilt (left and right) at least 200 g) Back plate up 800 (max) h) Back plate down 20-400 i) Head plate up up to 450 j) Head plate down to 900 k) Leg plate up max 200	**section suitable for all Gynecological surgical procedures, complete with 5cm mattress and corded handset :-** Should be a Electro Mechanical controlled operating table, working range from floor level: 640-1040mm Should be adjustable to all essential positions. Should be equipped with movement controls at side of the table. Should providewired remote control handset. Should have Frame and bottom made of Stainless Steel 304 material. Should have reinforced three section stainless steel top/radiolucent top. All movements should be adjustable easily. There should be an internal batterybackup in the table with auto charging cut off, with batten- charge level indicator. Should have detachable head rest which can be easily adjustable to any desired position, above or below table top. Table top can be rotated 360°	

		l) Leg plate down to900 11. Shall have embedded backup control unit in table 12. Both arm board shall have up and down and rotation function 13. Shall have foot brake for ease of use 14. Shall provide kidney elevator / bridge 60-70 mm 15. Mattress Shall beantistatic, waterproof and thickness shall be 75-80 mm Shall be ISO and European CE / US FDA approved 17. Each OT table Shall be supplied with following accessories: - a) Arm board with two pieces of fasten belt and clamp - 2 no b) Anesthetic screen with clamp - 1 no c) Split leg section - 1 no d) Body strap with clamp - 1 no e) Large and small side body support with clamp -1each f) Leg support/ lithotomy pole with clamp and fasten belt -2 no g) Right and left foot plate support - 1 no h) Right and left Shaller plate support - 1each i) Lateral support front and back -1 each 18. Shall be able to provide a comfortable padded lithotomy position Shall be suitable for obstetric/ gynaecological / perianal procedures	through base, Trendelenburg: ≥25°-30°, Reversed Trendelenburg: ≥30° Head Section tilting up from the Horizontal: ≥20°-30°, Head Section tilting downfrom the Horizontal: ≥28°-30° Back Section Raised from the Horizontal: ≥60°-70 ° Leg Section Lowered from the Horizontal: ≥40°-50° Kidney Position should be achievable by breaking the table. Table-top should be radio-lucent. User's interface: Automatic by remote control. Physical Characteristics • Dimensions (metric): Table top dimension (1900 mm x 525 mm) ± 15% Tableelevation: (640mm -1040 mm) ± 10% • Weight (lbs, kg) : Should be able to bear patient having weight upto 160 kg • Heat dissipation: Should maintain nominal temp and the heat should be disbursedthrough an cooling mechanism • Energy Source: Protection: Should have	

			over charging cut off, • Accessories, Spare Parts, Consumables a) S. S. Arm Rest 1 No b) Anaesthetic Screen 1 No. c) Lithotomy Leg Holders with Stirr-Ups 1 Set d) Leather Wristlets 1 Set e) Padded Leg Rest (Gutter Type)-2 nos f) Anti static mattress-2 nos g) Additional Poly-urathrene mattress 50mm thick with velcro attchment. Environmental And Departmental Considerations • Atmosphere / Ambiance conditioning, humidity, dust ...) • Operating condition : Capable of operating continuously in ambient temperatureof 10 to 40 deg c and relative humidity of 15 to 90% in ideal circumstances Storage condition : capable of being stored continuously in ambient temperatureof 0 to 50 deg C and relative humidity of 15 to 90% • User's care, Cleaning, Disinfection & Sterility issues 1. Parts of the device that are	

			designed to come into contact with the patient orthe operator should either be capable of easy disinfection or be protected by a single use / disposable cover. 2. Sterilization not required. Standards And Safety • Certificates : FDA(US) /CE(EU) and BIS/ CDSCO /ISO 13485:2003; IEC60601-1 Pre-installation requirements nature, values, quality, tolerance Availability of 5amp socket Safety and operation check before handover Requirements for sign-off: Certificate of calibration and inspection from themanufacturer Training And Installation • Pre-installation requirements nature, values, quality, tolerance • Availability of 5amp socket • Safety and operation check before handover • Requirements for sign-off: Certificate of calibration and inspection from themanufacturer • Training of staff (medical,	

			paramedical, technicians) OPTIONAL (Dependingupon scope of work order) • Training of users on operation and basic maintenance • Advanced maintenance tasks required shall be documented. Additional Points • Remote control for all the movements • Battery backup for 50-60 movements	
27	Additional item		**ODU (Condensing Unit for AHU)** SITC of air cooled condensing units (1W+1S) of suitable capacity with scroll compressors, air cooled condenser, power panel, and vibration isolating pads, stand for ODU, thermostat, etc. of the following capacities. Air cooled condensing unit shall have horizontal discharge .All refrigerant piping accessories, sight glass, drier, expansion valve, UPVC drain pipe etc. shall be supplied with the condensing units and suitable to connect above AHUs. Refrigerant shall be R 407C / R 410A. Necessary thermostat, control wiring, etc. shall be included of Blue Star/Daikin/Mitsubishi make. **(For Embryology Lab and IVF OT)**	As per NIT
28	Additional item		**Pass box**	As per NIT

			Supply, installation, Testing and Commissioning of Static Pass Boxes of Size 450X450mm with1.2mm thick SS 304 Mat finish, with inter lock doors, UV light On when doors closed condition. As per clean room standard and requirement and as required as per floor plan attached.	
29	Additional item		**Magnehelic gauges:-** measure the room differential pressures in operation theatres and IVF lab with SS mounting box, SS nozzles, food grade PVC tubing as required	As per NIT
30	Additional item		**Coving:-** Supply and installation of Extruded Aluminum Coving for Embryology Lab and IVF OT.	As per NIT
31	Additional item		**Mobile LED Light for ET and pickup** Mobile OT light LED: 16–20 W LED portable OT light: **50,000 lux** at 30 cm, 6,000 K color temperature, 50,000 hour LED life	As per NIT
32	Additional item		**Civil/Electrical/HVAC work** Civil Work comprising of all modifications like making & breaking of openings and Wall, Sand cement Plaster, Wash Room creation/Alteration , White Washing and panting of modified areas and Closing and opening of Windows/Doors where ever required , false ceiling alignments and providing of new tiles if required, MS angle iron built up section for the placement of	As per NIT

			AHU/ODU and ducting support, Main board at entrance and signages and shifting of malba as Required as per attached drawing of area 2200 sq. feet. **It shall be the responsibility of the vendor to prepare the design and drawings of the final layout plan and to complete the facility in all respects, including civil, electrical, and HVAC works, in accordance with the recommendations of the ICMR guidelines. The items specified under the civil works head are indicative and provided for reference only. It shall be the responsibility of the bidders to carry out a site visit to familiarize themselves with the nature and scope of work prior to the bidding process**	

3.The queries received from M/s PES Installations Pvt. Ltd. were taken up for discussion. The details are as follows

Sl. No.	M/s PES Installations Pvt. Ltd.	AIIMS Deoghar reply
1	In Eligibility Criteria, Page no.9 written A similar work means "Setting up of IVF Centre on Turnkey basis". Please amend as "The bidder should have successfully executed IVF/Truly Modular OT with same technology of wall & ceiling panels as given in technical specifications"	As per tender clause
2	Also we request you to please incorporate CE & CDSCO certification of all critical component such as - a. Wall & Ceiling Paneling System b. Laminar Air Flow Ceiling System c. Dimmable Peripheral Lights d. Automatic Hermetically Scaling, Sliding Doors (1500x2100 and 1000x2100) e. Wall mounted Surgeon Control Panel Touch screen (24 inch) Type	As per tender clause.

	f. LED Dimmable X-Ray (2 Plate) g. Pressure Relief Dampers h. Operating Writing List Board i. Integrated Storage Unit-Stainless Steel j. Single Arm Moveable Pendant for Anesthesia k. Double Arm Moveable Pendant for Surgeon l. One Bay Scrub Station	

4. The queries received from M/s Inter Medics were taken up for discussion. The details are as follows:

Sl. No.	Pg. No. NIT Cl. Ref. No.	NIT Clause	Inter Medics	AIIMS Deoghar Reply
1	8, Clause m Information & instruction to bidder	The successful bidder must submit a performance guarantee (P.G.) of 5% of the tender amount within 10 days from the date of issue or letter of Acceptance (LOA).	The Performance Guarantee of 5% of the tender amount within 10 days to be amended to 15 days	The successful bidder must submit a performance guarantee (P.G.) of 5% of the tender amount within 15 days from the date of issue or letter of Acceptance (LOA).
2			Payment Schedule which is mentioned in the Tender document to be changed, as at least some advance to get the work started.	As per NIT
3			Extension Period: As the extension period is not mentioned in the Tender a one-time extension for the Completion of the Order to be given of about 45 days. After this extension you can impose a penalty of 0.5% per week.	As per NIT

4	77 Indicative consumables for setting up of IVF Centre	MEDIA FOR IVF LAB (FOR 100 PATIENTS ONLY)	Media for IVF Lab (for 100 Patients Only)

S.NO.	CONSUMABLE	QTY.
1	SPERM MEDIUM –	50 ML
2	SPERM GRADIENT KIT (UPPER & LOWER LAYER) –	KIT (2X20 ML)
3	SPERM CRYOPRESERVATION BUFFER -	20 ML
4	FOLLICLE FLUSH BUFFER –	100 ML
5	GAMETE BUFFER –	50 ML
6	CLEVAGE MEDIUM –	50 ML
7	FERTILISATION MEDIUM –	50 ML
8	BLASTOCYST MEDIUM –	20 ML
9	BLASTOCYST FREEZING -	KIT 3 X 20ML
10	BLASTOCYST THAWING -	KIT 4X20 ML
11	CRYOPRESERVATION –	KIT 1X20 ML, 2X10 ML
12	THAWING -	KIT 4X10 ML
13	EMBRYO BIOPSY MEDIA -	20 ML
14	PVP (5X200 UL) –	200 UL
15	HYLASE	5X1ML TUBE

Sr.No.	Consumable	Qty (for 1 Patient)	Qty (For 100 Patient)
1	Fertilization Media	2 ml	200 ml
2	Sperm Wash Media	5 ml	500 ml
3	Single Step Media	1 ml	100 ml
4	Oocyte Retrival/ Flushing Media	12 ml	1200 ml
5	Culture Oil	3 ml	300 ml
6	PVP media	0.015 ml	1.5 ml
7	Hydase Media	0.1 ml	10 ml
8	Embryo Freezing Kit	0.2 ml	20 ml
9	Embryo Thawing Warming Kit	1 ml/ straw	100 ml/ straw

The consumable shall be provided as per the demand within the provisioned quantity.

Media for IVF Lab (for 100 Patients Only)

Sr.No.	Consumable	Qty (for 1 Patient)	Qty (For 100 Patient)
1	Fertilization Media	2 ml	200 ml
2	Sperm Wash Media	5 ml	500 ml
3	Single Step Media	1 ml	100 ml
4	Oocyte Retrival/ Flushing Media	12 ml	1200 ml
5	Culture Oil	3 ml	300 ml
6	PVP media	0.015 ml	1.5 ml
7	Hydase Media	0.1 ml	10 ml
8	Embryo Freezing Kit	0.2 ml	20 ml
9	Embryo Thawing Warming Kit	1 ml/ straw	100 ml/ straw
10	Cleavage Media	0.7 ml	70 ml
11	Blastocyst Media	0.7 ml	70 ml

16	IVF CULTURE OIL 100 ML (2X50 ML) -	2X50 ML	

10	Cleavage Media	0.7 ml	70 ml
11	Blastocyst Media	0.7 ml	70 ml

5

Color Canes and Printed Tags (For 100 Patients Only)

S.NO.	CONSUMABLE	QTY.
1	COLOR CANE FOR 13 MM GOBLET HOLDS	2 PCS
2	COLOR CANE FOR 10 MM GOBLET HOLDS	2 PCS
3	COLOR CANE FOR 7 MM GOBLET HOLDS	2 PCS
4	COLOR CANE FOR 7 MM GOBLET HOLDS	

Color Canes and Printed Tags (For 100 Patients Only)

Sr.No.	Consumable	Qty (for 1 Patient)	Qty (For 100 Patient)
1	Color Cane for 13 mm Goblet Holds-	1 Pcs	100 pcs
2	Color Cane for 10 mm Goblet Holds-	2 Pcs	200 pcs
3	Color Cane for 7 mm Goblet Holds-	1 Pcs	100 Pcs
4	Color Cane for 7 mm Goblet	1 Pcs	100 Pcs

The consumable shall be provided as per the demand within the provisioned quantity.

Color Canes and Printed Tags (For 100 Patients Only)

Sr.No.	Consumable	Qty (for 1 Patient)	Qty (For 100 Patient)
1	Color Cane for 13 mm Goblet Holds-	1 Pcs	100 pcs
2	Color Cane for 10 mm Goblet Holds-	2 Pcs	200 pcs
3	Color Cane for 7 mm Goblet Holds-	1 Pcs	100 Pcs
4	Color Cane for 7 mm Goblet	1 Pcs	100 Pcs

	Holds- 1 Pcs			

	Holds- 1 Pcs			

6		Pipettes, Catheter and Cyrotubes **S.NO. / CONSUMABLE / QTY.** 1 — FLEXIPETS (BOX OF 10 PIPETTES) - 170 MICRON — 100 Pack 2 — FLEXIPETS (BOX OF 10 PIPETTES) - 140 MICRON — 100 Pack 3 — FLEXIPETS (BOX OF 10 PIPETTES) - 300 MICRON — 100 Pack 4 — FLEXIPETS (BOX OF 10 PIPETTES) -130 MICRON — 100 Pack	Pipettes, Catheter and Cyrotubes Sr .No. / Consumable / Qty (for 1 Patient) / Qty (For 100 Patient) 1 — Flexipet (Box of 10 Pipettes) – 170 Microns — 2 Pcs — 200 Pcs 2 — Flexipet (Box of 10 Pipettes) – 140 Microns — 2 Pcs — 200 Pcs 3 — Flexipet (Box of 10 Pipettes) – 300 Microns — 1 Pcs — 100 Pcs 4 — Flexipet (Box of 10 Pipettes) – 130 Microns — 1 Pcs — 100 Pcs 5 — Tapered Micron Injection Pipettes — 1 Pcs — 100 Pcs 6 — Tapered Holding Pipettes — 1 Pcs — 100 Pcs 8 — Single Lumen-Ovum Pick-up — 1 Pcs — 100 Pcs	The consumable shall be provided as per the demand within the provisioned quantity. Pipettes, Catheter and Cyrotubes Sr .No. / Consumable / Qty (for 1 Patient) / Qty (For 100 Patient) 1 — Flexipet (Box of 10 Pipettes) – 170 Microns — 2 Pcs — 200 Pcs 2 — Flexipet (Box of 10 Pipettes) – 140 Microns — 2 Pcs — 200 Pcs 3 — Flexipet (Box of 10 Pipettes) – 300 Microns — 1 Pcs — 100 Pcs 4 — Flexipet (Box of 10 Pipettes) – 130 Microns — 1 Pcs — 100 Pcs 5 — Tapered Micron Injection Pipettes — 1 Pcs — 100 Pcs

5	TAPERED MICRO· INJECTION PIPETTES	100 Pack
6	TAPERED HOLDING PIPETTES	100 Pack
7	NON TOXIC SYRINGE 1 ML	1000 Pcs
8	SINGLE LUMEN OVUM PICKUP NEEDLE 17 GA-35 CM	200 Pcs
9	DOUBLE LUMEN OVUM PICKUP NEEDLE 16 GA-35 CM	200 Pcs
10	DOUBLE LUMEN OVUM PICKUP NEEDLE 17 GA-35 CM	200 Pcs
11	EMBRYO TRANSFER	200 Pcs

	Needle 17 GA-35 cm		

6	Tapered Holding Pipettes	1 Pcs	100 Pcs
8	Single Lumen Ovum Pick-up Needle 17 GA-35 cm	1 Pcs	100 Pcs

	CATHETER	
12	EMBRYO TRANSFER CATHETER WITH GUIDE CATHETER	200 Pcs
13	ET CURVED EMBRYO TRANSFER CATHETER WITH ECHOGENIC TIP	100 Pcs
14	INSEMINATION CATHETER	500 Pcs
15	DISP VACCUM LINE WITH HYDROPHOBIC FILTER	50 Pcs
16	CRYOLOCK FOR VITRIFICATION (FOR 100 PATIENTS)	500 Pcs
17	CRYOTUBE FOR SPERM FREEZING (FOR 100 PATIENTS)	300 Pcs

		18	DISPOSABLE HUMIDIFICATION FLASK FOR TRI GAS	10 Pcs		

5. Following clause are amended in AIIMS Deoghar NIT

Sl. No.	NIT Pg. No. & Clause	Amended NIT Clause
1	Pg. 55, Sl. No. 1 Item: Item: In-Vitro Laminar air flow Workstation with Integrated Stereo zoom Microscope with Accessories *The Workstation should be made of Stainless-Steel material*	Pg. 55, Sl. No. 1 Item: Item: In-Vitro Laminar air flow Workstation with Integrated Stereo zoom Microscope with Accessories The Workstation should be made of Stainless-Steel material with dual stereozoom microscope fitting featuring double heating plate.
2	*Pg. NO. 67 Sr. No: 27* *Item Description: Refrigerator for Media (Pharmaceutical Refrigerator)* *Qty: 01*	Sr. No: 27 Item Description: Refrigerator for Media (Pharmaceutical Refrigerator) Qty: 02
3	*Pg. No. 64, Sr. No: 22* *Item Description: Andrology Box Incubator with Accessories* *Qty: 01*	Pg. No. 64, Sr. No: 22 Item Description: Andrology Box Incubator with Accessories Qty: 02
4	Pg. NO. 60 Sr. No: 12 Item Description: Centrifuge Qty: 01	Pg. NO. 60 Sr. No: 12 Item Description: Centrifuge Qty: 02
5	Pg. No. 61 Sr. No: 13 Item Description: Trinocular Compound Microscope for Andrology Lab	Pg. No. 61 Sr. No: 13 Item Description: *Trinocular Compound Microscope for* Andrology Lab

	Qty: 01	Qty: 02
6	Pg. No. 65, Sr. No: 24 Item Description: Smart Monitoring System (CO2, O2 and Temperature) Qty: 01 • System must be stand-alone and connect directly to IT network without PC/server/software installation.	Pg. No. 65, Sr. No: 24 Item Description: Smart Monitoring System (CO2, O2 and Temperature) Qty: 01 • System must be stand-alone, self calibrating and connect directly to IT network without PC/server/software installation.

Any items or works not mentioned above but required for intended output is included in the scope.

All queries raised during the pre-bid meeting were duly discussed and clarified. No further modifications to the tender conditions were agreed upon.

(KUMOD KUMAR SINGH)
EXECUTIVE EGNINEER (C)
AIIMS DEOGHAR