

**LOT 8 - CSSD**

<b>S/No.</b>	<b>LOT NO.</b>	<b>EXPECTED EQUIPMENT</b>	<b>QTY</b>	<b>Estimated Units Price</b>	<b>Estimated Total Price</b>
		<b>STERILIZATION UNIT</b>			
1.	11-1	Autoclave	2		
2.	11-2	Tubes washing machine	1		
3.	11-3	Washer Disinfection	1		
4.	11-4	Ultrasonic washer unit	1		
5.	11-5	Disassembling and sorting Table	1		
6.	11-6	Water Jet SYSTEM	1		
7.	11-7	Gas Plasma Sterilizer	1		
8.	11-8	Double stainless-steel sinks	1		
9.	11-9	Tubes drying cabinet	1		
10.	11-10	Pass through washing machine	1		
11.	11-11	Working table (stainless steel)	1		
12.	11-12	Packaging and sorting Table	1		
13.	11-13	Cart/ Cabinet for storage and excreting sets	1		
14.	11-14	Package sealing machine	1		
15.	11-14	Pressure steam gun/ Water for cart washing	1		
16.	11-15	Carrying Carts and shelves (stainless steel) for storage.	1		

**LOT 8: CENTRAL STERILIZATION SUPPLIES DEPARTMENT (CSSD)**

**LOT 11-1 Autoclave**

Item Code No.	Department	Section	Item Description
LOT 11-1	CSSD	CSSD	Autoclave
1. General Description			
High Speed Horizontal Autoclave 450L with double door			
2. Composition			
2.1.	Main unit		
3. Technical Specification			
3.1.	Should be a fully automatic microprocessor based High pressure, high vacuum autoclave for sterilizing material including agars, sterilization of solution in open & closed bottles, disinfection of materials and waste decontamination.		
3.2.	Should be front loading and rear offloading, have Rectangular, horizontal chamber with well insulated jacket, Chamber Volume minimum 450 liters or more.		
3.3.	Should have single vertical sliding door on either side to have a pass-through system. Doors should be electrically controlled having fully automatic function with multiple safety arrangements. Sealing system should be based on silicone seal.		
3.4.	Should have at least 50mm thick insulation materials on jacket and in doors to ensure low thermal losses. Working temp. of the door should be less than 45deg. C.		
3.5.	Should be high grade Stainless steel.		
3.6.	Should have a built in Color touch screen.		
3.7.	Should have audio visual alarms in case of undesired situations.		
3.8.	Should have programmable Operators access level.		
3.9.	Should have at least 8 pre-programmed standard cycles plus 5 or more user programmable cycles and provision of chip card port for loading of new programs through chip cards or any other latest technology.		
3.10.	Should have temperature adjustable from 121Deg. to 135 Deg. C.		
3.11.	Safe Working pressure range should be from 15 to 32 PHI (1.1 bar – 2-2 bar)		
3.12.	Should have complete monitoring of cycle operation and provided with at least two pressure sensors and two Temp. Sensors (PT -100) in addition to analog for chamber pressure, jacket pressure and steam generator pressure indication.		
3.13.	The unit should be equipped with multiple safety mechanisms for Emergency Stop over pressure safety valves for chamber and jacket, over temp safety, steam traps and electrical safety.		
3.14.	The unit should include Non fade built in thermo-recorder for step progress values during the cycle with time and date and alarm condition if any.		
3.15.	Should have built in feature of Water Saving System for water conservation.		
3.16.	Should be supplied complete with high-quality stainless-steel trolleys and sterilization baskets:		
	a. External trolley = 02 nos.		

Item Code No.	Department	Section	Item Description
LOT 11-1	CSSD	CSSD	Autoclave
b. Internal trolley with steel roller c. Shelves = 02 nos. and d. 2 sets of Sterilization baskets. 3.17. All accessories & electric fitting to be included 3.18. The unit should be equipped with both internal steam generator and external steam source connection from external boiler. 3.19. The steam Generator should also be made of AISI 316 Ti steel & the steam generator should be equipped with automatic cleaning facility. 3.20. Integrated wastewater cooling, integrated water saving device. Touch screen display, chipcard reader and RS 232 /USB interface. 3.21. Should be US FDA/European CE certified and should comply with EN 285 standard. The system should have pressure directives 97/23/EC.			

#### **LOT 11-2 Tubes Washing Machine**

Item Code No.	Department	Section	Item Description
LOT 11-2	CSSD	CSSD	Tube Washing Machine
1. General Description			
Washer cum Disinfector Unit			
2. Composition			
2.1.	Main unit		
3. Detailed Specifications			
3.1. The Washer Disinfection will be equipped with all accessories suitable for washing, disinfecting, and drying of all kinds of surgical instruments, respiratory tubing, suction devices, bottles and other glassware 3.1.1. Double door Unit. 3.1.2. Chamber made of stainless-steel S.S.304 3.1.3. Microprocessor control for all services, programming and statistic functions-at least three pre-set programs. 3.1.4. Equipped with powerful water circulation pump (capacity). 3.1.5. Equipped with four spray arms for good penetration. 3.1.6. Dosage of detergent can be pre-set with dosing pump. 3.1.7. Sensor to detect level in soap tank and easy refilling system 3.1.8. Sensor for water in chamber to avoid dry run. 3.1.9. Double wall with insulation to run with minimum sound and heat emission. 3.1.10. Air particle filter to ensure the drying air is free from particles. 3.1.11. Size of chamber: Approx. 600mmx700mmx700mm.(Approx.)			

Item Code No.	Department	Section	Item Description
LOT 11-2	CSSD	CSSD	<b>Tube Washing Machine</b>
3.1.12. Chamber volume: 250 - 275liters. 3.1.13. Overall dimension: Approx. 815mmW x730mmLx1890mmH. 3.1.14. Electrical Connected Load: 20Kw on 3phases, 400V, AC supply. 3.1.15. Frontloading and rear offloading 3.1.16. The warranty of equipment will be at least 2 years			

### **LOT 11-3 Ultrasonic Washer Unit**

Item Code No.	Department	Section	Item Description
LOT 11-3	CSSD	CSSD	Ultrasonic Washer Unit
1. General Description			
2. Composition			
2.1.	Main unit		
<b>3. Detailed Specifications</b>			
3.1. The body made of stainless steel 3.2. All exterior panels should be of type 304 stainless steel with a polished finish 3.3. The sonic cleaning chamber should be constructed of type 316L mirror finish stainless steel for increased corrosion resistance. 3.4. Overall size of the cleaning chamber at least 29" L x 12" W x 8" (73cm X 36cm X 23cm) 3.5. Liquid volume of the ultrasonic tank: at least 45 litres. 3.6. Effective liquid depth of ultrasonic tank: at least 6.5" (16.5cm) 3.7. The ultrasonic tank should be covered by a well-fitting stainless-steel lid 3.8. Should be provided with a well-fitting tray with holes for immersing instruments in the above-mentioned tank. 3.9. The inner tray should be of such dimension that it can accommodate and completely immerse the instruments. 3.10. Must have a cycle timer with automatic stop after washing cycle of the particular time is over. 3.11. Suitable stand to be provided if it is tabletop unit. 3.12. Electronic display that indicates set time, start of cycle and end of cycle 3.13. Ultrasonic generator output 1000Watts Average. 3.14. User selectable dual ultrasonic frequency (38±3) or greater 3.15. Should be provided with fill port and drain port 3.16. Power cord of at least 3 m with plug compatible with UK socket 3.17. Should be provided with essential spares and fuses			

Item Code No.	Department	Section	Item Description
LOT 11-3	CSSD	CSSD	Ultrasonic Washer Unit
<p>3.18. Should be FDA /CE certified</p> <p><b>4. Standards and Safety</b></p> <p>4.1. Manufacturer and supplier must have ISO certificate to Quality Standard</p> <p>4.2. Must be compliant with IEC 61010-1(or any international equivalent e.g. EN/UL61010) covering safety requirements for electrical equipment for measurement control and laboratory use.</p> <p>4.3. Comprehensive training of the users and support team will be provided till they are fully familiar with the system.</p> <p><b>5. Warranty and Annual Maintenance Contracts.</b></p> <p>5.1. Comprehensive warranty for at least 2 years. Guarantee of Comprehensive maintenance contract (CMC) to be provided with a quotation for CMC post warranty being provided with the tender,. The rates will only be used for evaluation purposes but not to be part of the quote.</p> <p>5.2. Back-to-back warranty should be taken buy the suppliers from the Principals if principals are not the suppliers and there must be a guarantee for supply of spare parts for at least 10 years from the date of installation.</p> <p><b>6. Documentation</b></p> <p>6.1. User/Technical manuals to be supplied in English n both hard and soft copies.</p> <p>6.2. Certificate of calibration and inspection to be provided</p> <p>6.3. List of equipment available with the service centre for providing calibration and routine maintenance support as per manufacturers' documentation in service/technical manual must be provided.</p> <p>6.4. List of important spare parts and accessories with their part numbers and costing must be provided with the bid</p> <p>6.5. Logbook with instructions for daily, weekly, monthly and quarterly maintenance checklist must be provided, the job description of the hospital technical team and company service engineer should be clearly spelt out.</p>			

#### LOT 11-4 Disassembling and sorting Table

Item Code No.	Department	Section	Item Description
LOT 11-4	CSSD	CSSD	Disassembling and sorting Table
1. General Description			
2. Composition			
2.1.	Main unit		

Item Code No.	Department	Section	Item Description
LOT 11-4	CSSD	CSSD	Disassembling and sorting Table
3. Detailed Specifications			
3.1. Complete stainless steel CSSD sterile packing table form machine pressed made of acid-proof stainless steel; grade - S.S.304 grade, 1.5mm thickness laser cut 3.2. Sturdy tubular framework 3.3. Lightened tabletop 3.4. Adjustable stumps. 3.5. Size: Approx. 1400mm x w 900mm x h 850mm			

#### **LOT 11-5 Water Jet SYSTEM**

Item Code No.	Department	Section	Item Description
LOT 11-5	CSSD	CSSD	Water Jet System
1. General Description			
1.1. Water jet Sluicing table			
2. Composition			
2.1.	Main unit		
3. Detailed specifications			
3.1. Complete stainless steel CSSD instrument sluicing table with hand water jet table form machine pressed made of acid-proof stainless steel.S.S.304; 1.5mm thickness laser cut with hot and cold water faucets. 3.2. Should have sturdy tubular framework 3.3. Should have twin bay sink with drain out water connection. 3.4. Adjustable stumps. 3.5. Size should be 1200mm x w 600mm x h 850mm			

**LOT 11-6 Gas Plasma Sterilizer**

Item Code No.	Department	Section	Item Description
LOT 11-6	CSSD	Sterilization Area	Gas Plasma Sterilizer
1. General Description			
Low Temperature based H2O2 Gas plasma sterilizer,			
2. Composition			
2.1.	Main unit		
3. Description of the medical supply unit design type			
3.1.	Should provide simple & fast sterilization of surgical instruments at low temperature using H2O2 Gas Plasma technology for effective removal of H2O2 from sterilized items and to compliment the process.		
3.2.	Should be suitable for sterilization of medical items like rigid endoscopes, lumen & non lumen , metal , non-metal, heat & moisture sensitive instruments		
3.3.	Chamber should have usable volume of around 50 liters		
3.4.	The sterilization temperature inside the chamber should be less than 55°C		
3.5.	Cycle time should be 35 to 60 mins		
3.6.	The sterilant should be in a cassette/ bottle with H2O2 concentration more than 55%		
3.7.	Should be endorsed by leading instruments and scopes makers like Karl Storz, Olympus, Stryker, Medtronic and Johnson & Johnson		
3.8.	The system should use minimum quantity of sterilant which should be less than 6-8 ml per injection to deliver dry terminal sterilization to ensure safety of Instruments against corrosion.		
3.9.	The unit should be equipped with all the safety features		
3.10.	Sterilizer should have storage of cycle records data.		
3.11.	Should be environment friendly and have no toxic products or harmful residues in the sterilized items in the chamber.		
3.12.	Sterilizer should be approved by USFDA and CE		
3.13.	Please specify list and cost of consumables/ consumable spares (i.e spares need to be replaced at regular intervals, may be quarterly/half yearly/ yearly such as annual maintenance kit etc.) if any.		
3.14.	Please specify pre installation requirements (electrical, HVAC etc.)		
3.15.	Please specify footprint size & its weight.		
3.16.	Demo of the quoted model will be mandatory at the cost of bidder if so desired by the user, after the opening of the technical bid and prior to opening of financial bid. This is for technical evaluation.		

**LOT 11-7 Working table (stainless steel)**

Item Code No.	Department	Section	Item Description
LOT 11-7	CSSD	CSSD	Working Table
1. General Description			
2. Composition			
2.1.	Main unit		
Complete stainless steel CSSD sterile packing table form machine pressed made of acid-proof stainless steel; grade - S.S.304 grade, 1.5mm thickness laser cut Sturdy tubular framework			
Lightened tabletop			
Adjustable stumps.			
Size: Approx. 1400mm x w 900mm x h 850mm			

**LOT 11-8 Packaging and sorting Table**

Item Code No.	Department	Section	Item Description
LOT 11-8	CSSD	CSSD	Parking and sorting Table
1. General Description			
2. Composition			
2.1.	Main unit		
Complete stainless steel CSSD sterile packing table form machine pressed made of acid-proof stainless steel; grade - S.S.304 grade, 1.5mm thickness laser cut Sturdy tubular framework			
Lightened tabletop			
Adjustable stumps.			
Size: Approx. 1400mm x w 900mm x h 850mm			



**LOT 11-9 Cart/ Cabinet for storage and execrating sets**

Item Code No.	Department	Section	Item Description
LOT 11-9	CSSD	CSSD	Cart Cabinet for storage and execrating sets
1. General Description			
2. Composition			
2.1.	Main unit		
3. Detailed Specs			
3.1. Complete S.S Sterile Storage Mesh Units With Tubular Frame			
3.2. Should Have Mono Steered, Antistatic 5” Castors			
3.3. Should Have 5 Shelves App. 2~3” Depth			
3.4. Size Of The Mesh Basket App. 2’X 3’ Overall Size: App 6’			

**LOT 11-10 Package sealing machine**

Item Code No.	Department	Section	Item Description
LOT 11-10	CSSD	CSSD	Package sealing Machine
1. General Description			
CSSD Package Heat Sealing Machine			
2. Composition			
2.1.	Main unit		
3. Detailed Specifications			
3.1. The continuous band heat-sealing machine with conveyer is suitable for hospital sterile packing.			
3.2. It adapts electronic constant temp control system (temp control).			
3.3. It has speed adjusting transmission mechanism. (Speed control)			
3.4. It can emboss upto 15 interchangeable characters for batch recording, date etc. (embossing mechanism)			
3.5. It can seal plastic film of various materials such as PE, PP, Aluminium foil etc.			
3.6. It has height adjustments as well as sealing width adjustments.			
<b>Specifications</b>			
<ul style="list-style-type: none"> <li>Temperature Range: 0-250deg.</li> </ul>			

Item Code No.	Department	Section	Item Description
LOT 11-10	CSSD	CSSD	Package sealing Machine
<ul style="list-style-type: none"> <li>• Current Supply: 220-240 „Volts, 50 Hz, Single Phase</li> <li>• Current Consumption: 500 watts</li> <li>• Sealing speed: 1-12m/min</li> <li>• Cutting size: 200 mm (8")</li> <li>• Sealing width: 6 – 15 mm</li> <li>• Sealing film thickness: 0.02 –0.80mm</li> <li>• Conveyor loading: up to 5 kgs</li> <li>• System should be FDA/CE certified</li> </ul>			

#### **LOT 11-11 Pressure steam gun/ Water for cart washing**

Item Code No.	Department	Section	Item Description
LOT 11-11	CSSD	CSSD	Pressure Steam Gun/ Water for cart washing
1. General Description			
2. Composition			
2.1.	Main unit		
3. Detailed Specifications			
3.1. Complete stainless steel CSSD instrument sluicing table with hand water jet table form machine pressed made of acid-proof stainless steel.S.S.304; 1.5mm thickness laser cut with hot and cold-water faucets. 3.2. Should have sturdy tubular framework 3.3. Should have twin bay sink with drain out water connection. 3.4. Adjustable stumps. 3.5. Size should be 1200mm x w 600mm x h 850mm			

**LOT 11-12 Carrying Carts and shelves (stainless steel) for storage.**

Item Code No.	Department	Section	Item Description			
LOT 11-12	CSSD	CSSD	Carrying Carts and Shelve			
1. General Description						
2. Composition						
2.1.	Main unit					
3. Detailed Specifications						
3.1.	Complete S.S Sterile Storage Mesh Units With Tubular Frame					
3.2.	Should Have Mono Steered, Antistatic 5” Castors					
3.3.	Should Have 5 Shelves App. 2~3” Depth					
3.4.	Size Of The Mesh Basket App. 2’X 3’ Overall Size: App 6’					

**Drawn by:**

Name: ..... Signature .....Date: .....

**Reviewed by:**

Name..... Signature .....Date .....

Name..... Signature .....Date .....

Name..... Signature .....Date .....

**Confirmed by:**

1. Name: Signature.....Date .....

2. Name: ..... Signature..... Date.....

3. Name.....Signature.....Date.....